



18th General Assembly

PROCEEDINGS

18th Session of the General Assembly of
IUCN - The World Conservation Union
Perth, Australia
28 November-5 December 1990

These Proceedings have been assembled by Hugh Synge, Chief Rapporteur to the General Assembly. Rapportage of individual sessions was provided by Steve Davis, Patrick Dugan, Lothar Gundling, Mark Halle, Vernon Heywood, Aban Kabraji, Rob Malpas, Jeff McNeely, Cameron Sanders, Jeff Sayer, Simoii Stuart and Jim Thorsell, of the IUCN staff. Rapportage of the 12 workshops was organized and coordinated by George Greene. Hugh Synge thanks them all for their painstaking work and also thanks Dr Martin Holdgate, Delmar Blasco, Sheila Millar, Nicky Powell, Estelle Viguet, Morag White and in particular Fiona Hanson for their continual courtesy and help.

The presentation of material in this book and the geographical designations employed do not imply expression of any opinion whatsoever on the part of IUCN concerning the legal status of any country, territory or area, or concerning the delineation of its frontiers or boundaries.

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International Union for Conservation of Nature and Natural Resources
1991

Foreword

The General Assembly of IUCN is the principal forum in which delegates from all member organizations decide the policy of the World Conservation Union. As such, it is a unique parliament for the world conservation movement. It allows governments, government agencies, and non-governmental organizations to debate the actions that should be taken to solve the world's grave and growing environmental problems. And because individual members of IUCN Commissions and representatives of partner international organizations and non-member bodies are all free to participate as observers, the breadth of vision and expertise in the Assembly is extremely wide, lending authority to its conclusions.

Since the inaugural meeting at Fontainebleau, France, in 1948, the General Assembly has met in Brussels, Belgium (1950); Caracas, Venezuela (1952); Copenhagen, Denmark (1954); Edinburgh, Scotland, United Kingdom (1956); Athens, Greece (1958); Warsaw, Poland (1960); Nairobi, Kenya (1963); Lucerne, Switzerland (1966); New Delhi, India (1969); Banff, Canada (1972); Kinshasa, Zaire (1975); Ashkhabad, USSR, (1978); Christchurch, New Zealand (1981); Madrid, Spain (1984) and San José, Costa Rica (1988). It met in extraordinary session in Geneva, Switzerland, in April 1977.

The 18th Session of the General Assembly was held from 28 November to 5 December in Perth, Australia, at the kind invitation of the Commonwealth Government of Australia and the State Government of Western Australia. The theme of the Assembly was "Conservation in a Changing World". It was attended by 1156 participants from 104 countries.

As these Proceedings indicate, the 18th Session of the General Assembly was particularly important. It reviewed and redefined the Mission of IUCN as the World Conservation Union, emphasizing that this must be the conservation of nature, for its own sake and as the essential foundation of human life. It stressed that where nature was used by the human community, this must be done in a way that was ecologically sound, ethically responsible,

and sustainable. It adopted a strategy for the work of the Union as a whole, linking the activities of the voluntary networks of the six Commissions with those of the permanent Secretariat. It endorsed a policy of decentralization for the Secretariat, building closer links with the members in countries around the world and ensuring that the programme of the Union met their needs, especially in conserving their natural environments and their resources, and using them sustainably. It emphasized that in a world where the conservation message was becoming increasingly blurred and confused, the central team in IUCN should be active advocates for the collective vision of the Union's membership. Through workshops, technical discussions and plenary debates, a detailed programme of action was developed and endorsed. Over 75 resolutions and recommendations on topics of global or national importance were adopted.

These Proceedings—available, like all the documentation of the General Assembly, in the three official languages, English, French and Spanish—are the first of its tangible products. But there is much more to come. Virtually all the 12 workshops held on 30 November and 1 December will produce books, programmes, strategies or other tangible outputs. The Secretariat will be publishing a revised statement of the Union's mission and strategy, and will also make available the Triennial Programme as it emerged from Perth.

These formal products are not all. A General Assembly is, first and foremost, a forum for human contact. Although there was far from unanimity of view among those who met in Perth, all delegates went away with new insights, new contacts and, I hope, a new sense of community and purpose. Certainly, all will have taken away a new understanding of Australia and its environment, so clearly and at times so passionately presented to us by our generous Australian hosts.

Martin W. Holdgate
Director General

A Note of Thanks to the Host Country

The 18th Session of the General Assembly in Perth was a memorable occasion. It was the best-attended session IUCN has ever held. It was highly productive, in terms of the volume of work done, the excellence of the workshops and special meetings held, and the spirit of unity and commitment that characterized the debates. The World Conservation Union left Perth with a clear mission, a vivid sense of purpose, unprecedented unity among its members, and a demanding programme for the future.

None of this would have been possible without the superb organization which characterized the whole event. Perth provided a magnificent setting for the General Assembly, both at the Burswood Convention Centre and on the campus of the University of Western Australia. The Host Country was generous in its financial support for the

meeting, and outstandingly efficient in the organization that it provided.

The Union was greatly honoured by the presence at the Opening Ceremony of the Prime Minister, The Hon. R.J.L. Hawke AC, MP, the Premier of Western Australia, The Hon. Dr Carmen Lawrence MLA, the Commonwealth Minister for the Arts, Sport, the Environment, Tourism and Territories, The Hon. Ros Kelly MP, and the Minister for the Environment in Western Australia, The Hon. Bob Pearce MLA. To them, to their Governments, and to the people of Australia who received us so warmly, we record our heartfelt thanks.

M.S. Swaminathan, President, 1984-1990
Shridath Ramphal, President, 1990-
Martin Holdgate, Director General

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* These two events form the 18th Technical Meeting of IUCN

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Australian International Development Assistance Bureau (AIDAB)

Canadian International Development Agency (CIDA)

Danish International Development Agency (DANIDA)

Departement federal des affaires etrangeres, Switzerland

Finnish International Development Agency (FINNIDA)

German Foundation for International Development

High Commission of the Netherlands, Pakistan

International Tropical Timber Organization (ITTO)

Ministere des Affaires Etrangeres, France

Ministry of Foreign Affairs, Netherlands

Overseas Development Administration (ODA), United Kingdom

Royal Ministry of Foreign Affairs, Norway

Service de la Recherche, des Etudes et du Traitement de l'Information sur l'Environnement, Ministere de l'Environnement, France

Swedish International Development Authority (SIDA)

Swedish Society for Conservation of Nature (SNF)

The Ford Foundation, India

Tinker Foundation

United Nations Development Programme (UNDP), Pakistan

United Nations Environment Programme (UNEP)

United Nations Population Fund (UNFPA)

United States Agency for International Development (USAID)

World Wide Fund for Nature - International

World Wildlife Fund and Conservation Foundation, United States

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The Union also wishes to express its thanks to the following organizations for their support:

Chicago Zoological Society

Commission of the European Communities

United Nations Educational, Scientific and Cultural Organization (UNESCO)

World Resources Institute

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Feature Tours
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Philips Components P/L
Protea Place - Maggie Edmonds
Rank Xerox (Australia) P/L Copy Service Division
Reeces Hire
Sheraton Perth Hotel
Stott and Hoare
Tour Hosts P/L
Transcontinental Coachlines
University of Western Australia
Wayne Stubbs
West Ocean Marketing

Minutes of the 18th Session of the General Assembly

Opening Ceremony (89th Sitting)

Delegates to the General Assembly were greeted by songs sung by the children of the Nedlands Primary School and welcomed by the Minister for the Arts, Sport, the Environment, Tourism and Territories, The Hon. Ros Kelly MP. After the Australian National Anthem and the showing of a short film about the work of IUCN, addresses were given by:

The President of the World Conservation Union, Dr M.S. Swaminathan FRS (Annex 3)

The Premier of Western Australia, The Hon. Dr Carmen Lawrence MLA (Annex 4)

The International President of WWF - World Wide Fund for Nature, HRH The Prince Philip, Duke of Edinburgh (Annex 5)

The Prime Minister of Australia, The Hon. R.J.L. Hawke AC, MP (Annex 6)

The Deputy Executive Director of the United Nations Environment Programme (UNEP), Mr William Mansfield, read a statement on behalf of Dr Mostafa K. Tolba, the Executive Director of UNEP (Annex 7).

Call to Order and Introduction to the Work of the General Assembly (90:1)*

The President, Dr Swaminathan, called the General Assembly to order at 11.30 hours. Ms Pam Eiser, IUCN Regional Councillor and Chair of the General Assembly Steering Committee, explained the arrangements and the proposed rules of procedure.

Adoption of the Agenda (90:2)

Agenda Paper GA/18/90/1

Decision 530 The Agenda for the General Assembly was adopted as outlined in Annex 1.

* Sitting and Agenda numbers are hereafter given in parentheses throughout. The Sitting Number is before the colon; the Agenda Number is after it.

Adoption of the Rules of Procedure (90:3)

Decision 531 The Rules of Procedure of the General Assembly were adopted.

Appointment of General Assembly Committees (90:4)

Decision 532 The following Committees were proposed by the President and appointed by the General Assembly. Delegates listed below were invited to serve on the Committees.

a) Credentials Committee

Ms JoAnne DiSano (Chair) (Australia)
Dr Nelson Andrade (Venezuela)
Dr Ranjen Fernando (Sri Lanka)
Mr Alain Gille (France)
Hon. Thenjiwe Lesabe (Zimbabwe)
Professor Velimir Pravdic (Yugoslavia)
Ms Julia Tucker (Committee Secretary, IUCN)

b) Resolutions Committee

Dr Don McMichael (Chair) (Australia)
Dr Pius Amaeze Anadu (Nigeria)
Mr Ken Brynaert (Canada)
Dr Wolfgang E. Burhenne (Germany)
Dr Parvez Hassan (Pakistan)
Mr Michael McCloskey (USA)
Professor Norma Crud Maciel (Brazil)
Dr Cosme Morillo (Spain)
Ms Isabelle Paillet (France)
Dr Duncan Poore (UK)
Ms Enik6 Szalay-Marzso (Hungary)
Dr Mark Collins (Committee Secretary, IUCN)

c) Finance and Audit Committee

Syed Babar Ali (Chair) (Pakistan)
Dr Martin Edwards (Canada)
Mr Henry Nsanjama (Malawi)
Dr Juan Sevilla (Ecuador)
Mr Samar Singh (India)
Mr Jorgen Wenderoth (Germany)
Ms Heather Morgans (Committee Secretary, IUCN)

d) Programme Committee

Dr Walter Lusigi (Chair) (Kenya)
Dr Eric Edroma (Uganda)
Dr Elsa Escobar (Colombia)

Dr Vladimir Flint (USSR)
Dr Jay Hair (USA)
Dr Ashok Khosla (India)
Dr Reuben Olembo (Kenya)
Mr Adrian Phillips (UK)
Professor Wang Sung (China)
Dr Danny Elder (IUCN)
Mr Jeffrey McNeely (Committee Secretary, IUCN)

Messages from Cooperating Organizations (90:5)

Dr Swaminathan reported that messages of goodwill had been received from UNESCO and FAO (Annexes 8 and 9 respectively; there are greetings from the President of Costa Rica and from two additional international organizations in Annex 10.)

Membership Admissions and Welcoming of New Members (90:6, 91, 94)

Agenda Paper GA/18/90/2

Dr Swaminathan welcomed the delegates of Honduras, Mali, Monaco, Nicaragua, Portugal and the United States of America, which had joined as State members during the triennium. Later, he was pleased to announce that Burkina Faso and Guatemala had joined as State members during the Assembly, bringing the total of State members to 65.

The Director General, Dr Martin W. Holdgate, introduced his report on membership. During the triennium IUCN had gained 141 new members but had sadly lost 64 members by withdrawal and suspension. Overall, dating from 1978, 84 members had been suspended and a further 37 were liable for suspension, in both cases due to non-payment of dues. He asked the General Assembly to consider the serious problem arising from the inability of many members, particularly in developing countries, to pay dues in Swiss francs. This hampered the expansion of the membership in regions where the Union most needed to strengthen its presence and to help the establishment of environmental institutions. He suggested that where IUCN ran externally funded projects, members might be permitted to pay locally, in national currency, the Union then retaining the Swiss franc equivalent from project funds. Another option would be to secure sponsors who would pay members' dues.

Decision 533 The Assembly authorized the Director General to pursue these and other solutions to the problem of the non-payment of dues.

Dr Holdgate reported that some members had objected to the admission to membership by the Council of two organizations, the Forestry Commission of Tasmania and the Fur Institute of Canada. Since these

objections were sustained, the issue would be decided by the General Assembly. A paper had been circulated to delegates (Addendum 1 to GA/18/90/2).*

The Wilderness Society (Australia), the Australian Conservation Foundation, the Asociacion Nacional para la Conservacion de la Naturaleza (ANCON, Panama) and Greenpeace International then explained their reasons for objecting to the admission of the Forestry Commission of Tasmania. These were on the grounds that the practices of the Commission were deeply damaging to the forests of Tasmania and that logging by the Commission was not sustainable. In reply the Commission stated their commitment to conservation, outlined their legal requirement to conserve flora and fauna, and summarized the status of forest protected areas in Tasmania. It was agreed to accept their suggestion to have a working group open to all participants to discuss the matter further. Dr Duncan Poore was appointed as Chair.

After the group had met, Dr Poore reported that there had been a frank exchange of views, but that major differences of opinion remained on the future policies of the Forestry Commission of Tasmania and on the interpretation of the IUCN mandate in this regard. Accordingly a vote was inevitable.

The Australian Conservation Foundation and the Wilderness Society (Australia) explained their objections to the admission of the Fur Institute of Canada, on the basis that they—the two objecting organizations—oppose the commercial utilization of wildlife. Defenders of Wildlife (USA) also objected, claiming that the primary purpose of the Fur Institute of Canada was to promote the exploitation of fur-bearing animals. The Institute argued that it was supported by indigenous peoples' trapping organizations, that animal populations were well managed and that in 300 years of trapping no species had become endangered. The International Association of Fish and Wildlife Agencies (USA) supported the admission of the Fur Institute, as did Ducks Unlimited Canada and, in a later sitting, the Canadian State member delegation.

The Director General reminded delegates that the World Conservation Strategy supported the sustainable utilization of wildlife provided that this did not endanger the species, or populations of the species, nor damage the ecosystem. He suggested the General Assembly had to resolve the issue of principle before addressing the admission of the Institute. The whole question of sustainable use of wildlife would be considered in a workshop (reported on pages 72-73). However, discussions in the workshop and informally did not lead to withdrawal of the objections, and so a vote was called. Written ballots were held on both contested admissions.

Decision 534 In the 97th Sitting, the Election Officer, Mr Richard Steele, announced that

* The actions described in this section of the proceedings were spread over several days but are all reported here for clarity.

neither the Tasmanian Forestry Commission nor the Fur Institute of Canada had achieved the two-thirds majority of votes in both Category A (States and Government Agencies) and Category B (Non-governmental organizations) that, under Article II of the Statutes, were required for them to be admitted as members.

Dr Swaminathan opened discussion on the suspension of the rights of members for non-payment of dues (Addendum 2 to GA/18/90/2).

Decision 535 It was agreed with regret that the 37 members which had arrears of two years or more (as listed in the paper) would have their remaining rights suspended after 31 March 1991 if they had not paid their outstanding dues by then or if the Director General had not been able to secure a sponsor or an offsetting contribution from project funds.

Special Presentations (91:1, 91:2)

A keynote address, Conservation in a Changing World, was delivered by Professor Ralph O. Slatyer AO, FRS, Chief Scientist at the Department of the Prime Minister and Cabinet of Australia (Annex 11).

An audio-visual presentation was made on nature and conservation in Western Australia and was followed by an address on conservation issues in the State by The Hon. Dr Carmen Lawrence MLA, Premier of Western Australia (Annex 12).

Reports of the Credentials Committee (91:3, 94:1, 96)

The Chair, Ms JoAnne DiSano, presented three reports. In each, she stated that all credentials received had been reviewed. Most were in order but by the end of the Assembly 21 had still not been accepted, due to lack of an official seal or letter, or to arrears of dues.

The final calculation of potential votes, presented in the third report, was as follows:

Category A (governmental) members:	144 votes (of the total possible 189 votes)
Category B (non-governmental) members:	2% votes (of the total possible 502 votes)

It was thus evident that in both categories the quorum (50 per cent of the total possible vote) was reached.

Of the Category B votes, 52 related to 26 international NGOs, as each of them is allocated two votes.

Under the Statutes, the votes of non-governmental organizations from any one country may not exceed 10 per cent of the total possible non-governmental vote. Accordingly, the vote for each of the 61 United

States non-governmental members was adjusted to 0.82. The Committee approved the credentials presented by 39 NGOs from the United States, so giving them 32 votes in all. This resulted in a corrected Category B vote of 289 in total.

The Director General's Report on the Work of IUCN since the 17th General Assembly (Costa Rica, February 1988) (91:4)

Agenda Papers GA/18/90/3, GA/18/90/4

The Director General introduced and reviewed the highlights of the Triennial Report 1988-1990. His short review is presented as Annex 13. (The paper on the follow-up to the resolutions of the 17th General Assembly was also considered at this time.)

Mr Adrian Phillips presented the critical review of IUCN's achievements in the triennium, prepared by Mr Anil Agarwal and himself (General Assembly Information Paper No. 2, reprinted here as Annex 14). In discussion, delegates expressed concern that the paper had only been circulated to them two days beforehand, making it very difficult to incorporate the conclusions into resolutions and other documents submitted to them for approval. They asked that this be redressed next time. Dr Holdgate confirmed that since the General Assembly papers had to be circulated well in advance, it had not been possible to take the review into account in preparing the draft Programme document now before the Assembly.

At the invitation of the President, Mr Carl Tham, Director General of the Swedish International Development Authority (SIDA), commented on the IUCN Programme from the perspective of an aid agency and outlined the conclusions of a study commissioned by SIDA on the structure and organization of IUCN (Annex 15). Dr Swaminathan recorded IUCN's warm thanks to SIDA, who were one of the largest single contributors to IUCN's work, to applause from the Assembly.

Many delegates complimented the Director General on the improvements in the structure, management and work of IUCN since the last General Assembly, but one member believed that IUCN had not maintained the same vigour of leadership in nature conservation as it had in the past. The following points were made in discussion:

- the Union should have a clear focus and should develop a reasonable definition of the outer limits of its activities;
- a continuous system of peer review was needed, in addition to the much valued critical reviews each triennium;
- the decentralization of IUCN was welcomed and more Regional and Country offices should be established, especially in Latin America;

- communication with the members should be improved, in ways that meet the needs of users and give more information but on less paper! Output in Spanish was most important, as a key to developing IUCN's work in Latin America. Regional newsletters would be especially appreciated;
- work on environmental law was especially important at present and the Environmental Law Centre was a unique resource that was much appreciated;
- the Union should do more to promote membership and to inform governments about its work. A new brochure was badly needed.

Decision 536 The General Assembly approved the Director General's report by acclamation and expressed their gratitude to him and to the staff for the work they had done.

Highlights of the achievements of the IUCN Commissions (92:1)

Introducing this item, the President drew attention to the published reports of the Commission Chairs that form Part II of the Triennial Report 1988-1990.

Dr George Rabb, Chair of the Species Survival Commission (SSC), introduced his report. He, and the President, thanked especially the Government of Oman for their generous gift of US\$ 1,000,000 to The Peter Scott Memorial Appeal, to be used to support the work of the Commission. The Zaire State member delegation thanked IUCN, and in particular SSC for their help in saving the northern white rhino in Garamba, and the Director General for visiting the Park and encouraging the project there.

WWF-Switzerland expressed concern about the relative role of *ex situ* as opposed to *in situ* conservation in the work of the Commission, and was critical of the proposed removal of some Javan rhinos from the wild for a captive breeding programme. Dr Rabb replied that a meeting involving all concerned parties, including WWF, would take place in 1991 to discuss options for the conservation of Asian rhinos.

Mr Harold Eidsvik, Chair of the Commission on National Parks and Protected Areas, introduced his report and drew attention to the forthcoming IV World Congress on National Parks and Protected Areas (Caracas, Venezuela, February 1992) for which the Commission had lead organizational responsibility. He emphasized that this was not just a Commission event, but a major gathering that would involve all of IUCN.

Dr Swaminathan drew attention to the Commission's report *Threatened Protected Areas of the World* and suggested that a task force could be set up to draw attention to this critical problem.

Dr José Furtado, Chair of the Commission on Ecology, introduced his

report. A delegate felt that the Commission had been playing a diminishing part in the work of the Union for the last decade, despite heroic efforts by the Chair, and argued that this be reversed.

Dr Wolfgang Burhenne, Chair of the Commission on Environmental Policy, Law and Administration, introduced his report and mentioned an update to it (for the period March 1990 to November 1990) that had been circulated to delegates. In reply to a question, Dr Burhenne said that the Commission now had funds to help ASEAN countries develop national legislation to implement the ASEAN Convention.

Professor Peter Jacobs, Chair of the Commission on Sustainable Development, introduced his report.

Mr M.A. Partha Sarathy, Chair of the Commission on Education and Training, introduced his report.

The following general points were made in the discussion:

- there should be more cross-sectoral work involving several Commissions. In reply, Dr Swaminathan and Professor Jacobs gave some examples, including the Inter-Commission Task Force that had laid the foundations for the IUCN Sahel Programme. Dr Holdgate mentioned new proposals in the paper on the structure and mandates of the IUCN Commissions (GA/18/90/10) and the numerous informal links between Commission members;
- the Commissions should be more involved in the regional work of IUCN (it was noted that some Commissions were organized on a regional basis);
- there should be better communications between the Commissions and IUCN members, and Commission newsletters should be circulated to members. Several Chairs replied that they would be happy to circulate newsletters to IUCN members who requested them, but that it would be wasteful to send all newsletters to all members automatically;
- the Commission Chairs should respond to the comments made on the Commissions in the critical review, in particular the comments about where the work of the Commissions had been least effective.

The Pakistan State member delegation suggested that the work of the Commission on Ecology, the Commission on Education and Training and the Commission on Sustainable Development needed to be strengthened in Pakistan.

Accounts and Auditors' Reports for 1987-1989 (92:2)

Agenda Paper GA/18/90/5

The Treasurer, Mr Richard Steele, introduced the report on the finances of IUCN 1988-1990, which he and the Director General had prepared. A

deficit of SFr 1.8 million on unrestricted funds at the beginning of the triennium had been turned into a position where income and expenditure were now in balance, the unrestricted reserve funds stood at nearly SFr 2 million, financial procedures were now adequate, and Council had agreed to a repayment schedule that would eliminate the internal debt by 19%. His remarks are given as Annex 16.

The Chair of the Finance and Audit Committee, Syed Babar AH, welcomed the great improvement in the finances, accounting and management of IUCN. He reported that the Committee was in favour of the General Assembly electing the Treasurer (a change to the Statutes accepted later, see page 26) and on behalf of the IUCN Council proposed the candidature of Mr Don Person as the next Treasurer. The full report of the Committee is attached as Annex 17.

In reply to a question on how the unpaid dues were estimated in the accounts, Mr Michael Cockerell, Assistant Director General, Management, explained that accruals accounting was used but only for membership dues; all other income was accounted for on a cash basis, i.e. as it was received.

Decision 537 Following a recommendation by the Finance and Audit Committee, the General Assembly approved the Financial Report 1988-1990, which included the accounts and auditors' reports for 1987-1989, and recorded its special appreciation to Mr Steele and Mr Cockerell.

New Headquarters for IUCN (92:3)

Dr Holdgate reported on progress in constructing a new Headquarters building for IUCN, in Gland, Switzerland (Annex 18). Thanks to most generous support from the Swiss Confederation, the Canton of Vaud and the Commune of Gland, a site and SFr 17.5 million had been made available for the Union and construction of the building would start in 1991, for occupation before the end of 1992.

He and the President appealed to members, especially State members, to consider financing the fitting out and furnishing of parts of the building, in such a way that their names could be associated with particular features and that national traditions of craftsmanship might be reflected. Donations of paintings and works of art would be particularly welcome.

The Swedish State member delegation announced that Sweden would donate 1 million Swedish Crowns to the furnishing of the new building. In a later sitting, the Royal Society for the Conservation of Nature (Jordan) announced that it would donate a range of traditional Jordanian handicrafts, the National Commission for Wildlife Conservation and Development (Saudi Arabia) that it would donate funds towards furnishing the building, the French State member delegation that France would like to help with the library and Archives, and the US Fish and Wildlife

Service that it would provide furnishing for the Ramsar Convention Secretariat, which shares offices with IUCN. State member delegations for the Netherlands, Denmark and Finland said that their Governments hoped to make donations. These generous offers were accepted with gratitude by the Director General and applauded loudly by the Assembly.

In concluding, to applause by the delegates, the President thanked the Swiss authorities most warmly and noted in particular the Union's gratitude to Professor Pierre Goeldlin, the representative of the Swiss Confederation and of the Canton of Vaud on the IUCN Council. He also thanked the President of WWF-International for WWF's agreement to pay SFr 1.75 million in consideration of IUCN's vacating the World Conservation Centre.

The Mission, Objectives and Approach; Governance; and Strategy for the World Conservation Union in the 1990s (92:4, continued in 93; 97:3a; 97:3b)

Agenda Papers GA/18/90/6, GA/18/90/7, GA/18/90/8, GA/18/90/9

The Director General introduced the Agenda Papers on these topics. His remarks are attached as Annex 19.

In a lengthy debate in which many members participated, the following broad points were made:

- the statement on IUCN's Mission was critically important. Some members emphasized that the Mission should refer to conserving nature for its own sake, not just for its value to humankind; they saw sustainable development as one of IUCN's Objectives, not as part of its Mission Statement. Others stressed the importance of not excluding sustainable development from IUCN's Mission Statement, arguing that not only was conservation near-impossible in developing countries without considering sustainable development at the same time, but that the omission would be an affront to human dignity in poverty-stricken countries;
- the proposed slogan—"To build harmony between humanity and nature"—would be inappropriate to followers of Islam, who believed humanity was part of nature. "Harmony within nature" was suggested as a shorter and better version;
- IUCN's Objectives, especially its proposed "World Objectives for 2000 AD" (GA/18/90/9, para 5), could be stated in a more challenging and visionary way;
- IUCN should take serious note of the results of the critical review, by Anil Agarwal and Adrian Phillips, and these results should be incorporated into the four Agenda Papers; the India State member

delegation suggested that a specific mechanism was needed by which the conclusions of the Review were endorsed and incorporated in draft resolutions;

- many delegates believed that IUCN should pay more attention to the needs of developing countries, especially those who have benefited less than others from IUCN's work; others argued that IUCN should not neglect the developed countries, where IUCN should provide political leadership on major issues;
- the policy of regionalization should be pressed forward, and aided by a voluntary fund, in part as a way of increasing the involvement of members in the work of IUCN. Where possible, the Secretariat should encourage the members to do the conservation work, rather than try to do it themselves;
- IUCN should work in harmony with all its members. Where it is involved in activities in a country, it should do so in a way that supports and enhances the work of all its members there. Consultation should always be the first step and IUCN should ensure that its policy of freedom of information should not be compromised. Regional Offices should work in partnership with both the NGOs and governments in their region;
- the policies of IUCN should be implemented on the ground, with practical field action. The Ethiopia State member delegation, for example, believed that IUCN's mandate should be broadened to cover the implementation of conservation strategies on the ground, and to include playing a catalytic role in mobilizing the funds required;
- as advocate for world conservation, IUCN should work to avoid overlap and duplication between different forums on world policy. A good example of where it had done so was on the proposed Biodiversity Convention, in which UNEP, and now governments, had taken up a draft series of Articles prepared by IUCN;
- IUCN must recognize the special role of indigenous peoples as guardians of natural areas and include them in its activities;
- IUCN should be better at monitoring how far it is achieving the objectives set by the General Assembly.

Two NGO members said that IUCN should place less emphasis on providing technical and scientific services, and concern itself more with political leadership, taking up strong positions of advocacy for the environment. Another suggested that IUCN should pay more attention to contacting politicians, perhaps by forming an extra Commission on political and public action, to be served by roving Ambassadors who could build contacts with political and business leaders.

Some French-speaking delegates expressed concern over the French version of IUCN's short title, "L'Alliance mondiale pour la Nature", which had different implications to the phrase "World Conservation Union". It was agreed that these delegations should consult and advise on the best form of words (subsequently adopted as "Union mondiale pour la Nature").

The Comisión Nacional del Medio Ambiente, Presidencia de la Republica (Guatemala) asked the General Assembly to take a stand over events in the Gulf and the possibility of war, which would have a devastating effect on the environment.

The conclusions of the General Assembly on these matters are set out in Resolutions 18.1 to 18.3.

Structure and Mandate of the IUCN Commissions 1991-93 (93:1, 94:2)

Agenda Paper GA/18/90/10

In opening the discussion of this item, Dr Swaminathan stressed the great importance of the Commissions to IUCN's work. It was proposed that the six existing Commissions should continue, though with changes of name and mandate in some cases. Two Inter-Commission Standing Committees were proposed—on conservation of biological diversity, and on the environmental implications of global change—with Advisory Committees on population and resources, and on the role of women in natural resource management.

Decision 538 Species Survival Commission (SSC). The General Assembly approved the mandate of this Commission, accepting the addition of a new Article to ensure that recommendations of Specialist Groups are reviewed by specialists and agencies involved before they are presented to governments and other agencies for implementation.

Decision 539 Commission on National Parks and Protected Areas (CNPPA). The General Assembly approved the mandate of this Commission, following the Commission's advice *not* to change its name by replacing the phrase "Protected Areas" with "Conservation Areas" (as had been proposed in the Agenda Paper). Approved amendments in the mandate included the important change in its objectives from promoting the consolidation of the world's protected area system to promoting its extension. One delegate disagreed with a remark by the CNPPA Chair that "by protecting habitats we can protect species"; he made the point that protected areas on their own did not necessarily save species, referring to predictions that many vertebrates would become extinct within protected areas due to genetic and demographic factors.

Decision 540 **Commission on Environmental Law (CEL).** The General Assembly approved the mandate of this Commission, accepting the proposed change in its name from Commission on Environmental Policy, Law and Administration. It was suggested that the Commission should initiate action in customary law, should continue its activities in the field of international law, while, however, strengthening its capacity to advise and assist with national legislation issues, and should, to the maximum extent possible, establish links with the rapidly increasing number of individuals and institutions active in environmental law worldwide.

In the 97th Session, the General Assembly approved a subsequent change in the new mandate. The change, proposed by the newly elected Chair, Dr Parvez Hassan, is that the Chair may nominate, subject to Council approval, up to six (as opposed to four) Vice-Chairs.

Decision 541 **Commission on Ecology (COE).** The General Assembly approved the mandate of this Commission, accepting minor amendments that had been proposed. Concern was expressed that this Commission did not have a sufficient representation of ecologists from developing countries.

Decision 542 **Commission on Environmental Strategy and Planning (CESP).** The General Assembly approved the mandate for this Commission, changing its name, which was previously Commission on Sustainable Development. A suggestion that the word "Strategy" in the name be replaced by "Policy" was not taken up; it was felt that every Commission should work on policy, but accepted that policy would be a particularly important element in the work of CESP.

Decision 543 **Commission on Education and Communication (CEC).** The General Assembly approved the mandate of this Commission, changing its name from Commission on Education and Training.

The approved mandates are given in full in Annex 20.

General points made in the debate included:

- the great need for the Commissions to have more members from developing countries (the Director General agreed, noting that Commissions should be worldwide networks of experts);
- the need for a mechanism to evaluate the performance of the Commissions; one delegate suggested an independent evaluation team reporting to Council. It was subsequently agreed (Resolution 18.4) that the work of all Commissions should be subject to mid-term reviews;
- the need for better links between the Commissions and the IUCN Programme, especially the work of the Regional Offices; for better communications between the Commissions and IUCN members; and for better links from one Commission to another;

- the need for more activities involving more than one Commission, such as on training and on conservation of species and their habitats.

Individual suggestions included:

- a proposal by the Royal Society for the Protection of Birds (UK) that IUCN set up an Inter-Commission Task Force to establish a better means of pricing natural resources;
- a proposal by Wildlife Conservation International (a division of the New York Zoological Society) that a key role for the Commissions be to identify and train tomorrow's conservation professionals in developing countries, often working in partnership with IUCN field projects in the countries concerned;
- a suggestion by Greenpeace International that some Commissions have an undue balance of research scientists in their membership, and that there should be more members from conservation NGOs (though accepting the important principle that members of Commissions serve in a personal capacity).

Decision 544 The General Assembly authorized the incoming Commission Chairs, in cooperation with the Director General and Chief Rapporteur, to make adjustments to the programmes of the Commissions in the light of the points made in this and other sessions.

Dr Holdgate and Dr Swaminathan both suggested that IUCN members should use their right to propose nominations for members of Commissions. Such proposals should be made to the respective Commission Chair, who had responsibility for drawing up a list of Commission members for approval by the Council. Six workshops were arranged for delegates to meet the incoming Chairs, not just to suggest members but also to influence the Commissions' programmes; their proceedings are summarized on pages 85-89.

The conclusions of the General Assembly on the role and mandates of the Commissions in general (as opposed to individual Commission mandates) are set out in Resolution 18.4.

Triennial Programme 1991-93 (93:2; 97:3c)

Agenda Paper GA/18/90/11

In the 93rd Sitting this Agenda Paper was introduced by the Director General but time did not permit any discussion. The Programme was considered in detail at a Technical Meeting on 1 December, the results of which are recorded on pages 55-57. A paper by Mr Ken Piddington, Director, Environment Department, World Bank, was distributed to delegates (Annex 21).

In the 97th Sitting, Dr Walter Lusigi (Chair of the Programme Committee) and Mr Adrian Phillips (Vice-Chair) presented the report of their Committee (Annex 22). The Committee had held four meetings and had considered the draft Programme prepared by the Director General (GA/18/90/11), the Review of IUCN's Programme 1988-1990 (GA Information Paper No. 2) and reports from the various workshops. They were very favourable to, the draft Programme presented and welcomed the cross-cutting approach. However, they felt more could be done to demonstrate the linkage between the Budget and the Programme. They also asked the Director General to establish a mechanism whereby members could be involved in the development of the Programme between Sessions of the General Assembly. The Committee supported the regionalization of the Union but was concerned that progress was uneven and recommended that the Director General give priority to strengthening IUCN's presence in areas that have not benefited so far.

One delegate emphasized the need for IUCN to evaluate its programmes against a fixed set of criteria set out by the General Assembly. Evaluation should be both internal and, where appropriate, external. The New Zealand State member delegation called for more work on gender issues and asked the Commission Chairs to redress the imbalance in the number of women on the various Commissions.

The Director General promised to prepare a revised version of the IUCN Programme document in the light of the discussions in the Technical Meeting and the General Assembly. He accepted the need for internal and, at times, external evaluation, and, following points made in this and in earlier sessions, would:

- seek to involve the membership more fully in the evolution of the Programme, especially through consultation at regional and national levels using IUCN's Regional and Country Offices;
- discuss with the Commission Chairs how the Union could pay more attention to environmental ethics and, in particular, how the work of the existing group on environmental ethics could best be continued;
- seek resources to carry forward a new programme on gender roles, and especially on the role of women in conservation and natural resource management, following the special evening meeting on this theme held during the General Assembly;
- continue to strengthen IUCN's regional presence as resources permit.

Decision 545 The General Assembly adopted the report of the Programme Committee (Annex 22).

Decision 546 The General Assembly approved the IUCN Triennial Programme for 1991-93, noting the remarks of the Director General.

Budget 1991-1993 (93:2; 97:3d)

Agenda Paper GA/18/90/12 (Rev.)

This paper was introduced briefly, but was not discussed, at the end of the 93rd Sitting. In the 97th Sitting, Dr Martin Edwards, on behalf of the Finance and Audit Committee, presented a Revised Estimate of Income and Expenditure (GA/18/90/12 Rev., 29 November 1990) and recommended that it be approved. He pointed out that some changes had been made, for example the omission of income from business sector entities since the proposal to admit them to a new category of associated membership had not been proceeded with at this Session of the General Assembly (see pages 25-26).

Mr M.J. Cockerell, Assistant Director General, Management, stressed that while estimating expenditure was not difficult, estimating income was much more problematical. IUCN rarely had more than nine months of funds or contracts in hand. Membership dues, in particular, often came in late. High growth was expected in 1991, but lower growth thereafter.

Decision 547 The General Assembly accepted the Report of the Finance and Audit Committee that had been presented earlier (Annex 17). This report includes the following two recommendations arising from a request from the German State member for a review of procedures:

- "That the Director General be asked to establish additional financial regulations based on the existing internal procedures, for submission to and approval by Council as a regulation under Article X of the Statutes."
- "That in addition to the current programme budget the Secretariat should prepare an Administrative Budget and make it available to members on request."

These recommendations were therefore automatically adopted.

Decision 548 The General Assembly then adopted the Revised Estimates of Income and Expenditure for 1991-93.

Amendments to the IUCN Statutes (93:3, 94:3; 97)

Agenda Paper GA/18/90/13

At an evening session continuing the 93rd Sitting, chaired by Dr Walter Lusigi (IUCN Vice-President), Mr Frank Nicholls, a member of the (then) Commission on Environmental Policy, Law and Administration (CEPLA), and Dr Wolfgang Burhenne, Chair of CEPLA, introduced the changes to the Statutes proposed by the Council. Dr Burhenne informed the meeting

that the quorum necessary for the adoption of amendments to the Statutes was present, and reminded delegates that in order to be adopted, each modification required a two-thirds majority of those present and voting, by members in both Categories A and B. Changes would come into force immediately after their adoption.

The discussions of the proposed amendments were continued, in some cases on the basis of alternative proposals, during the 94th Sitting and the 97th Sitting.

Decision 549 The General Assembly approved unanimously the amendments to the Statutes as set out in detail in the following section (pp. 49-51). The changes were agreed in the 94th Sitting, except those to Articles I and II, which were agreed in the 97th Sitting.

The main aspects of the changes are outlined below.

Article I (Objects). The General Assembly inserted the new mission statement for IUCN, identical to the one later approved in Resolution 18.1, and revised the Objects of IUCN.

Article II (Membership). The approved changes will allow political and/or economic integration organizations of States (to which its member States have transferred legal competence in respect of matters within the objects of IUCN) to become members of the Union. (The reason for this change is to allow the European Community to become a State member of IUCN.)*

The General Assembly also approved changes that clarify the procedure on suspensions from membership due to arrears of dues and on subsequent readmission to membership. The changes also define the voting rights of political and/or economic integration organizations of States when becoming members of IUCN.

The General Assembly did not approve two further sets of amendments to this Article proposed by the Council in the original Agenda Paper. The first would have permitted "business sector entities" to join IUCN as non-voting members, subject to certain conditions; many NGOs argued against this, one NGO making the point that the businesses that most want to join would be the ones with the most ambiguous environmental records, and that deciding whether their environmental credentials met IUCN's

* The Council subsequently added the following clause to the Regulation on the revised Article: "The notification of adherence to the Statutes by a political and/or economic integration organization shall be made by the executive head of the organization duly authorized by a decision of its member States and shall be accompanied by a Statement of its competence in respect of matters within the objects of IUCN which shall stand until amended". The purpose of the Statement of competence is to let IUCN members know on which issues the views of the newly-joined organization would prevail and on which issues the views of its State members would prevail. (*Ed.*)

criteria would be a very difficult task. In the light of this debate, the Council subsequently withdrew their proposal, for reconsideration by the incoming Council.

The second set of changes that was not approved would have permitted the inclusion of an extra class of Category A members, defined as "Federal States, Territories, Cantons, Provinces not falling into (a)", (a) being the category that covers sovereign States. On behalf of the Council, Dr Burhenne argued that this change was needed because in some countries competence for the environment, especially nature conservation, rests not with central government but with provincial and/or federal units. The US State member delegation argued against the change: States of the US could not join a body like IUCN for constitutional reasons, but the US also opposed the idea in principle, because in their view when a sovereign State participates in a body like IUCN it should represent its constituent States as well. This opinion was questioned. The New Zealand State member delegation did not support the change because of lack of documentation for it, the Mauritania State member delegation proposed it be withdrawn, and the Sri Lanka State member delegation proposed that it be postponed to the next General Assembly. Some NGOs expressed concern that this change would reduce their influence in the Union, but the Director General pointed out that it would not affect their voting rights, since IUCN members vote in two separate chambers, although the addition of many more government representatives could reduce the proportion of NGO speakers in IUCN meetings such as the General Assembly. Following an informal show of cards, the Chair ruled that there was a clear majority against this proposal, which would have been, in consequence, rejected. The Council subsequently withdrew the proposal at their next meeting.

Article IV (The General Assembly). The approved changes (1) require the General Assembly to elect the Treasurer of IUCN (formerly the Treasurer was appointed by the incoming Council); and (2) permit the President to be elected by acclamation (rather than a mandatory vote) if there is a consensus.

Article VI (The Council). The revised Article (1) includes a Councillor for the State in which IUCN has its seat, Switzerland, provided that one has not been elected as a Regional Councillor; (2) allows only one Regional Councillor from any one country to be elected (as opposed to two before); (3) requires the Council to make no more than two nominations for the posts of President and Treasurer; (4) does not allow any member of the Council, other than a co-opted member, to hold the same office for more than two full terms; and (5) creates the new post of Legal Adviser to IUCN, appointed by the Council.

Article VII (The Bureau). The members of the Bureau are now the President, the Treasurer, the Vice-Presidents and up to five members of Council, including one Commission Chair.

Article X (Finance). The amended Article requires that the Treasurer and Director General (rather than the Auditors, as before) submit to the General Assembly a consolidated report on the accounts. This change was introduced to conform with modern accounting practice.

Article XIV (Official Languages). The General Assembly made Spanish an official language of the Union (the other official languages being English and French). The Instituto Nacional de los Recursos Naturales Renovables y del Ambiente (Colombia) and the Peruvian Committee for IUCN expressed the pleasure of Spanish-speaking members at this momentous decision and their gratitude to the President, Director General, previous Director General Dr Kenton Miller and the Government of Spain for making this possible.

No changes were either proposed or made to any other Articles.

In the 97th Sitting, the Director General announced that the Council had taken advantage of the changes made to Article VI (above) and appointed Dr Wolfgang E. Burhenne to the newly-created position of Legal Adviser to IUCN. This decision was warmly greeted.

Elections of President, Regional Councillors, Commission Chairs and Treasurer (94:4, 96)

The Election Officer, Mr Richard Steele, explained the voting procedure, and then supervised the elections for Regional Councillors and Commission Chairs.

(a) President

Agenda Paper GA/18/90/14

The Australian members of IUCN jointly proposed Sir Shridath S. Ramphal for the Presidency of IUCN, following his nomination by the Council.

Decision 550 Taking advantage of the new change in the Statutes, the General Assembly unanimously elected Sir Shridath Ramphal as President by acclamation.

Sir Shridath's speech of acceptance, which was greeted with renewed applause, is given as Annex 23.

Dr Swaminathan expressed his great appreciation to Sir Shridath. He also said that the Council had asked Dr Martin W. Holdgate to serve another term as Director General and was very pleased to announce that Dr Holdgate had accepted. This too was greeted with acclamation.

(b) The Regional Councillors

Agenda Paper GA/18/90/15

Decision 551 In a ballot, the General Assembly elected the following as Regional Councillors for the triennium 1990-1992:

Africa

Dr Mankoto ma Mbaelele (Zaire)
Dr Liberty Mhlanga (Zimbabwe)
Dr Perez M. Olindo (Kenya)

Central and South America

Dr José Pedro de Oliveira Costa (Brazil)
Dr Juan José Montiel Rocha (Nicaragua)
Dr Juan Carlos Navarro (Panama)

North America and the Caribbean

Dr Jay D. Hair (USA)
Mr Yves Renard (St Lucia)
Dr J. David Runnalls (Canada)

East Asia

Mr Mohamed Khan bin Momin Khan (Malaysia)
Dr Ashok Khosla (India)
Dr Li Wenhua (China)

West Asia

Professor Kamel S. Abu Jaber (Jordan)
Syed Babar Ali (Pakistan)
Mr Abdulwahab M.J. Dakkak (Saudi Arabia)

Australia and Oceania

Ms Pamela J. Eiser (Australia)
Dr Vili Fuavao (Tonga)
Ms Catherine C. Wallace (New Zealand)

East Europe

Dr Jan Cerovsky (Czechoslovakia)
Dr Vladimir E. Flint (USSR)
Ms Eniko Szalay-Marzso (Hungary)

West Europe

Mr Veit Koester (Denmark)
Mr Antonio Machado (Spain)
Dr Jaap B. Pieters (Netherlands)

(c) The Commission Chairs

Agenda Paper GA/18/90/16

Decision 552 In a ballot, the General Assembly elected the following as Chairs of the six Commissions:

Species Survival Commission: Dr George Rabb (USA)
Commission on National Parks and Protected Areas: Mr P.H.C. Lucas (New Zealand)
Commission on Environmental Law: Dr Parvez Hassan (Pakistan)
Commission on Ecology: Professor François Doumenge (France)
Commission on Environmental Strategy and Planning: Dr Thaddeus Trzyna (USA)
Commission on Education and Communication: Mr M.A. Partha Sarathy (India)

(d) The Treasurer

Agenda Paper GA/18/90/17

Decision 553 The General Assembly waived the requirement for 90 days notice of nominations for Treasurer, as they had only just amended the Statutes to permit the Treasurer's election (instead of appointment by the Council).

Decision 554 The Council's nomination of Mr Don Person was reported. The General Assembly unanimously appointed Mr Person as Treasurer by acclamation.

The Draft World Conservation Strategy for the 1990s (95:1)

Agenda Paper GA/18/90/18 and "Caring for the World: A Strategy for Sustainability" (Second Draft, June 1990)

Dr David Munro, a former Director General of IUCN and now Project Director, outlined the history of this new Strategy. An IUCN conference in Ottawa in 1986 had reviewed the original World Conservation Strategy (published in 1980) and had decided that an extended and updated version should be prepared, a decision confirmed by the last General Assembly (Costa Rica, 1988). In partnership with UNEP and WWF, IUCN had made two drafts, both widely circulated; the second draft, "Caring for the World", was part of the documentation for the General Assembly. It was intended to publish the final version in October 1991, in good time for the UN Conference on Environment and Development.

Ms Yolanda Kakabadse then outlined the results of Workshop 1, on "The World Conservation Strategy for the 1990s", of which she had been Chair. Those attending the Workshop had spent two days discussing the draft Strategy, and so the report (pp. 59-60) could provide a summary of only the most important points that had been made. She stressed in

particular that the Strategy should be written in a way that would inspire people to act, that would recognize cultural diversity more consistently and that would note the failings of market economies. It should also cover four more issues—employment, health, ecological refugees and destabilizing factors such as drug trafficking. She said that many at the Workshop had felt that the publication of the original World Conservation Strategy had not been adequately followed up, and it was important to redress this with the second version. In the discussion that ensued, several delegates noted the significant relationship between the World Conservation Strategy (1980) and the new Strategy; it should be made clear that the principles of the first Strategy remained valid.

Mr Charles de Haes, Director General of WWF-International, expressed appreciation to all who had contributed to the Strategy. He called on each IUCN member to use it in stimulating action in those sectors that have most impact on natural resources; he told delegates that the Steering Committee for the project would establish a Task Force to help IUCN members do this and to promote the Strategy as widely as possible. He believed that the Strategy had to be ambitious, aiming for goals which might not be thought possible today. Dr Reuben Olembo, for UNEP, saw the Strategy as the way to implement the Brundtland Report and outlined UNEP's high expectations of what it could achieve.

Recognizing that the role of indigenous peoples as guardians of nature should receive greater emphasis, both in the draft Strategy and in the work of IUCN, Dr Swaminathan invited three representatives of indigenous peoples to make presentations (reproduced in Annex 24). Their papers included the proposal that IUCN should create an Inter-Commission Task Force to deal with issues relevant to indigenous people, a suggestion endorsed by the Denmark State member delegation.

Most of the other 11 workshops had submitted comments to the Strategy team. A number of individual delegates, however, also suggested specific points that they believed should be given greater weight. These included:

- a separate section on protected areas, emphasizing the values of protected areas other than in conserving biodiversity;
- more emphasis on the importance of environmental law, in particular of the value of custom and traditional law;
- more coverage on biodiversity issues;
- more emphasis on rangelands and the role of wild plants and animals as natural resources;
- more on the need to conserve mountain ecosystems and also islands;
- more on the need for improved information and databases on the environment.

A suggestion that was much appreciated was that the document should outline the contributions that children and youth can make to protect the environment, a point not covered in either the Workshop or the draft Strategy. The views of children on the future of the earth should be added too.

Several delegates expressed concern about how the Strategy would be implemented and wanted to see practical action. The UK State member suggested that as the Strategy will go far beyond what IUCN itself can achieve, IUCN should make a statement on the role the Union will play in its implementation. This should form the context in which the next three-year programme should be drawn up.

The conclusions of the Assembly are set out in Resolution 18.13.

A Strategy for Antarctic Conservation (95:2)

Agenda Paper GA/18/90/19.

Dr Holdgate introduced the draft of the IUCN Antarctic Conservation Strategy. He pointed out that Antarctica—the world's last great wilderness—was probably the most effectively conserved of all the continents. The present Treaty system had been a conservation success—for example, Antarctica is demilitarized, nuclear explosions and dumping of nuclear waste are forbidden, and the Treaty Powers have agreed measures to conserve flora and fauna, to protect Antarctic seals and to assess the environmental effect of the bases there. Yet conservation is not yet at the heart of the formal commitments by the Treaty Powers and many feel that the present levels of protection do not go far enough. Some IUCN members—States as well as NGOs—believe that Antarctica should be a World Park. Many would like to see a permanent ban on mining, in place of the present voluntary moratorium. The Workshop on Antarctica (No. 9, pages 76-77) was almost unanimous in calling for such a ban.

He explained that the IUCN document proposes objectives for Antarctic conservation, but does not favour any particular legal instrument for achieving these objectives. It points out that mining is incompatible with these objectives, and this is now common ground. He believed that the document now needed to be strengthened in the light of the deliberations of the Workshop and events at the Special Antarctic Treaty Consultative Meeting, held at Viña del Mar, Chile, at the same time as the General Assembly.

Professor George Knox, Chair of the Workshop, noted the substantial shift among the Treaty Powers towards a comprehensive environmental regime for Antarctica and reported on progress at the meeting in Chile. Since detailed negotiations would start in April 1991, it was urgent for IUCN to complete its Antarctic Strategy. The Workshop had welcomed the Director General's proposal to reconvene a core group of experts as a drafting committee to revise the document. There would then be a rapid

peer review by those specially qualified or interested in the issue—including those who had been active in the Workshop. Professor Knox sensed that the majority of IUCN members believed that a permanent ban on mining should be put in place immediately.

The UK State member delegation broadly supported the draft Strategy as a balanced document but claimed that the Strategy had "fallen apart" in the Workshop, where extreme positions had been advocated. The UK believed that the Strategy should not be made into a detailed prescription for action. The US State member delegation also supported the Strategy, but shared some of the concerns of the UK delegation. In contrast the Australian State member delegation welcomed the changes to the Strategy proposed by the Workshop and strongly supported the concept of a comprehensive, legally binding, environmental agreement with a permanent ban on mining. The Pakistan State member delegation said that their Government supported a permanent ban on mining and wanted to see the region become a global common.

Various NGOs attending the Workshop and the Workshop Rapporteur voiced their backing for the permanent ban on mining, feeling that it was not an "extreme position" for IUCN to express a view on this vital question. The Australian Conservation Foundation noted that the draft Strategy had fallen behind the tide of events, and so needed to be revised to keep up with progress by the Treaty Powers. Greenpeace International said that the Strategy should not be published in its present form and the Wilderness Society (Australia) believed that the Workshop had agreed to propose an immediate and permanent ban on mining and mineral exploration in Antarctica.

The conclusions of the General Assembly on this issue are set out in Resolution 18.74 and Recommendation 18.75, which should be read in conjunction with the note under this item on pages 41-43.

Determination of Membership Dues for 1992-1994 (97:1)

Agenda Paper GA/18/90/20

The Director General reminded delegates that the last General Assembly had decided to increase the dues substantially and had set the dues up to the end of Calendar Year 1991. The Council now proposed a 6.5 per cent increase in 1992, of which 4 per cent was due to predicted inflation in Switzerland and 2.5 per cent to the extra cost of financing Spanish as an official language. The Council also proposed increases of 4 per cent each in 1993 and 1994. In their report (Annex 17), the Finance and Audit Committee had recommended that these proposals be adopted in their entirety.

The Pakistan State member delegation understood the need for increases due to inflation but explained that it was difficult for countries like Pakistan to accept any increase. He asked the Director General to

explore the possibility of getting bilateral aid support for any shortfall. Dr Holdgate replied that the Assembly had already authorized him to pursue actively ways of helping members who could not pay their dues (Decision 533).

Decision 555 The General Assembly adopted the increase in membership dues proposed in the Agenda Paper.

Fund for IUCN's Network in the Developing World (97:2)

Agenda Paper GA/18/90/21

In an earlier session the US State member delegation had said that the United States supported the Voluntary Fund and planned to contribute to it, but believed that the use of the Fund should be clearly stated and not left solely to the judgement of the Council or the Director General. The United States also felt that it was inappropriate to fund the core costs of Regional Offices from the Voluntary Fund.

When the resolution on the Fund was being considered in a later session, many delegates supported its establishment. The US State member delegation said that the United States intended to contribute US\$ 150,000 to the Fund in 1991. Beyond that, the US Congress had provided US\$ 530,000 to support the work of the Union during 1991. US Government Agency members would continue to contribute to specific projects from their own funds, as before. This statement was greatly welcomed, especially by many US NGOs.

Dr Swaminathan thanked the United States delegation on behalf of the Union, to applause from the floor. The policy of the Union on the Fund is set out in Resolution 18.5.

Appointment of Auditors (97:4)

Agenda Paper GA/18/90/22

Decision 556 The General Assembly appointed Coopers & Lybrand as auditors to the Union for the 1991-93 triennium.

The 1992 UN Conference on Environment and Development (UNCED) (97:5)

Sir Shridath Ramphal, in the Chair as President Elect, said that in the 20 years since the Stockholm Conference, the environment had deteriorated and now human survival was even being doubted. The 1992 Conference, to be held in Rio de Janeiro, was a crucial opportunity for the world. It was being comprehensively prepared and Ambassador Tommy Koh, Chairman

of the UNCED Preparatory Committee, was present to answer questions. Sir Shridath introduced the following speakers, whose presentations are given in full in Annex 25:

- Ambassador Koh, on the work of the Preparatory Committee;
- Mr A.S. Blunn, Secretary, Department of the Arts, Sport, the Environment, Tourism and Territories, Government of Australia, speaking on behalf of Minister Ros Kelly on the perspective of Australia;
- Mr Morifing Kone, Ministre de l'Environnement et l'Elevage, Mali, on the perspectives of a developing country;
- Mr Celso Schenkel, Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), on the views of the Host Country;
- Ms Yolanda Kakabadse, NGO Liaison Officer, UNCED Secretariat, on the participation of NGOs at the Conference.

In his speech, Mr Schenkel said that Brazil intended to join IUCN as a State member in 1991, a decision that was much welcomed.

Delegates from a number of regions outlined the work their organizations and governments were putting into the preparation for UNCED. For example, the State member delegation of Kenya, in speaking of their Government's commitment, listed some issues the Conference should cover and looked to the IUCN Regional Office in Nairobi for cooperation in the preparatory work.

Delegates stressed the following themes that they believed UNCED should cover:

- that sustainable and equitable development should be the fundamental principle for the future of the world;
- that tropical forests should be effectively conserved;
- that developing countries should plan their populations;
- that people in developed countries should greatly reduce their consumption of the world's resources.

The State member delegation of Zaire asked that UNCED should establish a special fund to assist the contribution to the Conference from developing countries. Zaire supported the idea of a new Charter but reminded delegates not to forget existing agreements such as the World Charter for Nature, adopted by the United Nations in 1982.

The Fundacion Pro-Sierra Nevada de Santa Marta (Colombia) congratulated Brazil in holding the Conference, as did other delegates, and said that IUCN members in South America planned to hold a meeting in Santa Marta, Colombia, to discuss their involvement.

The delegate from the Inuit Circumpolar Conference asked whether the Preparatory Committee had considered the participation of indigenous

people in the Conference. Ambassador Koh explained that the Committee was governed by the UN General Assembly, who had ruled that only NGOs enjoying consultative status within ECOSOC may participate directly in the preparatory process. The Committee, however, had attempted to liberalize this situation and had agreed to a compromise, which was now subject to review by the UN General Assembly. Under this compromise any NGO may make representations to the Preparatory Committee and may ask to speak, but if the number of NGOs without ECOSOC consultative status is too large, the Committee will ask them to fall into constituencies and appoint speakers. However, this compromise applied only to the past meeting in Nairobi. Whether it could apply to future meetings would depend on the UN General Assembly.

Greenpeace International saw little vision in UNCED and little appreciation of the threats to the planet. In their view, States were protecting their national interest and treating UNCED as just another diplomatic negotiation. New global instruments were needed on marine pollution, especially from land, and on global fisheries. Greenpeace urged all States to reconsider who they sent to the next meeting of the Preparatory Committee. Ambassador Koh replied to Greenpeace by greatly welcoming an increased NGO involvement in the conference as a way to "nudge" governments forward. NGOs could mobilise public opinion in each country and persuade each government to establish a broadly based commission to participate in UNCED.

Other points made in the debate included the following:

- that young people all over the world should be involved in UNCED, and funding should be made available for their representatives to attend the Conference;
- that the Stockholm Conference had been dominated by the Northern Hemisphere, as was demonstrated by the fact that the World Environment Day is in June, at the height of winter in the Southern Hemisphere; UNCED should find a time that is suitable for all countries;
- that IUCN's IV World Congress on National Parks and Protected Areas (Caracas, February 1992) would be very significant to UNCED; it would seek to place protected areas in the widest possible context and in particular would address the conservation of biodiversity.

In summarizing the debate, Dr Holdgate said that with its North-South links and with its extensive governmental and non-governmental membership, IUCN could make a most valuable contribution to UNCED. He outlined the various ways in which this could be effected. In particular, IUCN would participate in the preparatory process, would deliver specific inputs to UNCED (such as "Caring for the World"), and would contribute through exchange of ideas among IUCN members in different regions. Dr Holdgate's speech is included as Annex 26.

Resolutions and Recommendations (96, 98)

Decision 557 The General Assembly adopted 12 resolutions (on action to be taken by IUCN) and 64 recommendations (on action to be taken by third parties, in some cases in conjunction with IUCN). These are reproduced separately. Copies are available from the Director General, IUCN, Avenue du Mont-Blanc, 11% Gland, Switzerland.

In the 96th Sitting, delegates debated the draft resolutions and recommendations proposed by the Resolutions Committee, and adopted a small number, to which no amendments had been proposed. In the 98th Sitting, delegates formally adopted the remainder, virtually all of which had by then been modified following points made in the previous Sitting. Most of the interventions in the earlier Sitting are not summarized below, since their substance has been incorporated into the individual resolutions and recommendations themselves.

All motions were adopted by consensus, unless stated otherwise below. Where a vote was taken, it was done by show of hands. The votes of IUCN members are divided into two categories—Category A, for State and Government Agency members; and Category B, for non-governmental members. A majority in both Categories is needed to amend a text or adopt a resolution or recommendation.

Since the General Assembly, the resolutions and recommendations passed have been arranged into a logical sequence and renumbered accordingly. The reports below follow this arrangement and numbering.

In a number of cases, notably resolutions calling for increased IUCN support for work in specific regions, the Director General pointed out that implementation would depend on the finances available to IUCN. He would greatly welcome any financial help in these and other cases.

18.1 Mission, Objectives and Approach of the World Conservation Union*. In the discussion of this resolution, some delegates argued that IUCN should avoid the use of gender-specific titles in oral and written language, a point accepted by the Director General.

18.11 Assistance for Environmental Restoration and Protection to Eastern and Central European Countries. In supporting this recommendation, the Netherlands State member delegation announced that the Dutch Ministry of Agriculture, Nature Management and Fisheries, would support the IUCN East European Programme with an initial amount of Dutch Guilders 130,000 (c. SFr 100,000) in 1991, earmarked for three named projects. The Dutch Government would also explore the possibility of having its bilateral and multilateral aid programmes benefit the IUCN East European Programme. The Dutch Government felt that IUCN had played an

* The full texts of the Resolutions and Recommendations are published separately. The following paragraphs record details of the debate on certain of them.

important role in ensuring that conservation and restoration of nature did not lag behind in bilateral and multilateral cooperation between Eastern and Western Europe, and felt that IUCN could help in particular to build up NGOs in Central and Eastern Europe.

18.13 The World Conservation Strategy for the 1990s provisionally entitled "Caring for the World: A Strategy for Sustainability". In adopting this resolution, two delegates drew attention to points on the text of the Strategy, and it was agreed that these should be minuted as their inclusion in the resolution would not be appropriate: the Wilderness Society (Australia) proposed that any mention of support for the timber industry be deleted, and the Environmental Law Institute (USA) and others wanted additional sections on environmental law.

18.22 Global Climate Change. Two alternative targets for limiting emissions of carbon dioxide and other greenhouse gases in operative sub-paragraph (c) were presented: the original version urging governments of all developed countries to adopt "a goal of reducing carbon dioxide emissions by at least 20 per cent by the year 2000"; and an amendment proposing that the phrase "by at least 20 per cent by the year 2000" be removed. This amendment was rejected on a vote by both categories of membership (Table 1) and the recommendation then adopted by consensus. The delegations of the State members Canada, Norway and the United States indicated that had there been a vote on the recommendation itself, they would have abstained, due to their inability to accept these figures at the present time because of forthcoming governmental negotiations on these issues. The Saudi Arabian State member delegation indicated that they would have voted against, for similar reasons. The State member representative of Denmark, speaking on behalf of IUCN State members which are members of the European Community, explained that they too would have abstained because the European Community was already committed to a different target.

18.25 Methods for Capturing and/or Killing of Terrestrial or Semi-aquatic Wild Animals. All sections of this recommendation were adopted by consensus except for operative paragraph 8. A proposal by certain members to make specific mention in this paragraph of steel-jawed leghold traps set on land as inhumane and needing substitution was not carried. The Assembly voted by a substantial majority (Table 1, p. 42) in favour of a second formulation which did not mention this type of trap specifically.

18.30 Legal Instruments for the Conservation of Forests. An amendment to this recommendation was tabled, proposing the addition of the phrase presented below in brackets, so that non-operative paragraph 7 would read:

"Recognizing that the maintenance of biodiversity requires the protection of complete series of protected areas and [representative parts of] remaining intact forests".

After discussion, this amendment was taken to a vote. Category A members voted in favour, Category B members against (Table 1), so that it was not carried.

The full recommendation was then voted on, and passed overwhelmingly (Table 1). The delegations of the State members Canada and the United States explained that they had voted against the recommendation because of their inability to accept operative paragraph 2, which called for protocols on forest protection and on reduction of greenhouse gas emission to the Framework Convention on Climate Change. While supporting the principles underlying the suggested protocols, the State member Canada felt that these principles could be better expressed in the form of a separate international convention on forests. In a statement submitted for the record, the US delegate commented, "Nevertheless we are committed to full participation in the process of negotiating the broad series of measures required to protect and conserve the forests of the world. The case is simply that at the present time the United States seeks a different route to this goal." Dr Burhenne, representing ten NGOs, explained that he had voted in favour of the recommendation because he believed that a comprehensive Forest Convention (as opposed to Forest Protocol(s) in the Framework Convention on Climate Change, as called for in the recommendation) would be in conflict with the proposed Convention on Conservation of Biological Diversity. The African Wildlife Foundation and Lincoln University (New Zealand) explained that they had abstained as there had not been enough time for the amendments to be considered.

18.34 Cetacean Conservation and the International Whaling Commission Moratorium. The Denmark State member delegation indicated that had there been a vote the delegation would have abstained, because the Danish Government had not taken any position on the content of operative paragraph 1, nor to the effect that the principle of sustainable utilization should not apply to whale stocks. The Norway State member delegation said that their delegation would have voted against the recommendation.

18.40 Appendix 1 Reservations within CITES. The Environment Agency of Japan, speaking on behalf of the Management and Scientific Agencies that implement CITES in Japan, said that Japan was preparing to withdraw some of its CITES Appendix 1 reservations that were the subject of this recommendation.

18.51 Protection of Mount Nimba, Guinea. The French State member delegation stated that had there been a vote, the delegation would have abstained. Dr Perez Olindo, an incoming IUCN Regional Councillor for Africa, pointed out that not all of the three countries that share Mt Nimba were present and promised that the Regional Councillors for Africa would consult with them on the implementation of this recommendation when the situation in Liberia had become more calm.

18.54 Radio Transmission Station in the Arava Valley, Israel. There was dissension over the factual accuracy of this recommendation, and this was not resolved during the course of the General Assembly. The United States State member delegation challenged the facts, stating that a 1500-page Environmental Impact Statement (EIS) had been prepared in accordance with the laws of Israel, and had not identified any threats to humans, animals or plants that could not be reduced to acceptable levels. They said that the US Department of State considered the erection of the transmitter was subject to neither the US National Environmental Policy Act (NEPA) and its associated Executive Order, nor to the US Endangered Species Act (ESA). In one case, it had been ruled that the ESA does apply abroad, but this had been challenged in the courts and had not yet been resolved. The Sierra Club said that it believed the NEPA did apply in this matter and that anyway the US Government should accept a moral responsibility to assess the impacts of projects it funds in other countries. The Society for the Protection of Nature in Israel upheld the text, reporting that the facts were derived from the Board of International Broadcasting (BIB) formal documents. The Society said that the Minister of Environment in Israel had admitted that the EIS had not yet been completed. The most important part of it, on the effect of the transmission station on migratory birds, had not been done. The matter was taken to a vote, and the text was adopted by a clear majority of Category A and Category B members (Table 1).

18.56 Narmada Valley Project, India. Ms Gloria Davis, the Environment Division Chief for the Asia/Pacific Region in the World Bank, said that the Bank would not argue against this recommendation if it expressed the views of concerned groups and helped to advance dialogue, but she wished to make a short statement (below):

"The World Bank shares the concerns of the authors of this recommendation about the scale of the proposed programme, its potential environmental impacts, and the use of forest areas for displaced people.

"I would like to offer two brief clarifications. First, the World Bank is currently supporting one dam and has been asked to consider a second. It does not necessarily support or endorse the entire programme, and could not do so unless environmental and resettlement issues can be adequately addressed. This is by no means certain.

"Second, it is important for you to know that the forest areas released for displaced people have been released for the resettlement of forest-dwelling tribal people who would accept no other compensation. Compensatory forest areas must be identified.

"I agree, however, that this decision should be reviewed and we would be glad to do so with the Government, NGOs and others."

The Bombay Natural History Society emphasized that all the dams are inter-related. The Society considered that the second dam would cause the

maximum environmental damage, and asked the World Bank to take this into account.

18.58 Shiraho Reef, Japan. In speaking on this recommendation, the Environment Agency of Japan said that it intended to designate the preserved area of the coral reef as a marine park. Had the recommendation been taken to a vote, the Environment Agency of Japan (a Government Agency member) indicated that it would have abstained.

18.60 Tropical Timbers from East Malaysia. The General Assembly was presented with two forms of wording for operative paragraph 6, the first reading:

"Calls on all States to cease the importation of tropical timbers from Sarawak and Sabah until these measures (i.e. in operative paragraphs 1-5) are implemented."

and an amendment to replace this paragraph with the sentence:

"Strongly urges that all timber-importing countries provide incentives for timbers from Sarawak, Sabah and the other States of Malaysia, that are produced in ways which fully conform to the findings of the ITTO Sarawak report and to the principles of IUCN, and discourage the import of timbers from unsustainable sources."

The General Assembly voted by a substantial majority (Table 1) to amend the text to the second version shown here. The recommendation as a whole was then adopted by consensus.

18.61 Support for the Creation of World Heritage Areas in Irian Jaya, Indonesia. Following the adoption of this recommendation, the Directorate General Forest Protection and Nature Conservation, Ministry of Forestry, Indonesia (Government Agency member) said that the Indonesian delegation would be happy to cooperate in promoting the addition of these areas to the World Heritage List.

18.63 Mining in the Fly River Catchment, Papua New Guinea. The facts in an earlier version of this recommendation had been disputed, but the Chair of the Resolutions Committee reported that the final wording had been accepted by a meeting of all delegates with an interest in the subject. He acknowledged help from the Australian Commonwealth Government and the Wilderness Society (Australia) in reaching this position.

18.65 Australian Resource Security Legislation. The Australian State member delegation indicated that had there been a vote the delegation would have abstained, since the matter was currently under consideration by the Government.

18.66 Mining in National Parks and Nature Reserves especially in Australia. The Western Australia State Government Environment Minister

made a statement about his Government's policy. He explained that his Government had recently adopted a new policy prohibiting mining in national parks, but that five of the 60 parks were nonetheless subject to existing legal agreements. By the end of three years, there would be no mining. In reply, the Australian Conservation Foundation said that aboriginal people were devastated by a decision to open up three areas for mining, and the Conservation Council of Western Australia considered that nature reserves would be opened up for mineral exploitation under present policy. The Australian State member delegation, the Australian Government Agency members and the Saudi Arabian State member delegation stated that had there been a vote they would have abstained.

18.67 Kakadu National Park, Australia. The Australian State member delegation indicated that had there been a vote the delegation would have abstained. The Government Agency member Conservation Commission of the Northern Territory (Australia) wished it to be recorded that it could not agree with certain clauses of this recommendation. Their delegate pointed out that Australia had well-established mechanisms for resolving conflicts in issues of this kind. Australian NGOs spoke in favour of the recommendation.

18.70 Wilderness and Forest Conservation in Tasmania. The Australian State member delegation and the National Parks and Wildlife Service of New South Wales, a Government Agency member, speaking on behalf of Australian Government Agency members, stated that had there been a vote they would have abstained.

18.71 Fraser Island, Australia. The non-operative part and first section of the operative paragraph of this recommendation were agreed by consensus. The Queensland National Parks and Wildlife Service (Government Agency member) sought the omission of the text of the operative paragraph after "Fraser Island". The recommendation was then taken to a vote and was passed unanimously, but with numerous abstentions in Category A (including the Australian State member delegation) and a small number of abstentions in Category B members (Table 1).

18.72 Mineral, including Oil, Exploration in or adjacent to Marine Parks and World Heritage Areas in Australia. The Australian State member delegation indicated that they could not support the words "immediately defer" in operative sub-paragraph (b) and so, had there been a vote, the delegation would have abstained.

18.75 Antarctica. This recommendation was adopted by consensus. The United Kingdom State member delegation made the following statement:

"We have not pressed the General Assembly to vote on this recommendation, either in part or in total. That is because we believe IUCN should, wherever possible, work through consensus, and

because we recognize that the Antarctic Treaty Consultative Parties meeting in Chile are still negotiating on this issue. As we have repeatedly stated in London, in Viña del Mar and here in Perth, the United Kingdom is willing to look at any proposals which will lead to our declared aim of a comprehensive regime for the protection of the Antarctic environment and remain open-minded on the detailed means of achieving this objective.

"We have consistently maintained throughout this General Assembly, both in the Workshop and in the Plenary Sessions, that it would be a mistake for IUCN to commit itself to supporting any particular *mechanism* for the comprehensive protection of the Antarctic environment. We firmly believe that IUCN should address itself instead to the objectives of such a protection regime. That is the reason why I explained yesterday evening that the United Kingdom, whilst welcoming the many improvements to the revised draft recommendation, could not accept operative paragraph 2b.

"Had a vote been necessary on this recommendation, I have to say that the United Kingdom State delegation would have abstained for the reason just given.

"I hope that the IUCN General Assembly will welcome this approach as a positive contribution to its proceedings. It is intended as such."

The United States State member delegation associated itself with the UK position and said that negotiations in Viña del Mar were moving forward rapidly and that the question of mineral resource activities in Antarctica, among other issues, was in a fluid state. He continued, "The United States

Table 1

Record of Voting on Resolutions and Recommendations

	Category A			Category B			Result
	In favour	Against	Abstain	In favour	Against	Abstain	
Amendment to 18.22	28	37	12	3	>100	8	Rejected
In favour of second formulation in 18.25	57	0	0	107	21	31	Passed
Amendment to 18.30	44	21	12	8	110	9	Rejected
For 18.30	49	12	10	150/156	8	5	Passed
For 18.54	30	10	25	80	5	25	Passed
Amendment to 18.60	60	3	4	118	42	6	Passed
For 18.71	23	0	43	112	0	10	Passed

and several other nations deeply concerned about the conservation of the Antarctic environment have tabled proposals in Chile which call for a comprehensive approach to environmental protection. These proposals are being considered and debated as we meet here, and the consultative parties ultimately are responsible for the formal adoption of appropriate regimes. For this reason the United States also would have abstained had it come to a vote, so as not in any way to prejudice unfolding events in Viña del Mar."

The Norway State member delegation also indicated that had a vote been taken it would have abstained for similar reasons.

At the close of the session, the Wilderness Society (Australia) drew attention to the fact that no mention had been made in the motions to the crisis in the Gulf region, which in their view posed the greatest immediate threat to the planet's environment, to humankind and to its fellow creatures. The Society urged the General Assembly to request that the Director General immediately convey to the United Nations the absolute urgency of finding a peaceful negotiated settlement to the crisis. This suggestion was loudly applauded and the Director General promised to comply.

The Chair of the Resolutions Committee, Dr Don McMichael, thanked his Committee, especially their Secretary, Dr Mark Collins, and paid tribute to the conference staff, especially typists, copiers, translators and interpreters for their hard work. Proterra (Peru), on behalf of the Latin Americans present, thanked Mr Delmar Blasco, Conference Coordinator. On behalf of the Assembly, Dr Swaminathan added his thanks, to loud applause.

Election of Patrons (99:1)

In recent years the General Assembly had elected a number of Patrons. The President explained that the Council had now decided to institutionalize the election of Patrons and so had agreed an amendment to this effect in the Regulation on Article IV, Para 3(iv) of the Statutes. This Regulation now reads:

"Eminent individuals able to contribute to advancing the mission of the Union may be nominated by the Council for election by the General Assembly as Patrons of the World Conservation Union. Those elected will serve during such time as they hold position or office by virtue of which they can advance the interests of IUCN."

He said that IUCN's existing Patrons—Dr Oscar Arias (Costa Rica), HM Queen Noor of Jordan, Dr Federico Mayor (Director General of UNESCO) and HRH The Duke of Edinburgh—would continue to serve as Patrons of the Union.

Decision 558 In addition the Council proposed to the General Assembly the election of Dr Mostafa K. Tolba, Executive Director of UNEP. The General Assembly elected Dr Tolba as a Patron of the Union by acclamation.

Conferral of Honorary Membership (99:1)

The following were named as Members of Honour of IUCN to recognize the significant contribution each had made to the work of the Union.

Professor Dr HRH Princess Chulabhorn, Thailand
Dr Wolfgang Burhenne, Germany
Professor François Ramade, France
Mr Thane Riney, USA
Mr Mats Segnestam, Sweden

The President presented the certificates of Honorary Membership and the Director General read out the citations (Annex 27).

Presentation of Awards (99:2)

The Awards were made in the presence of Professor Dr HRH Princess Chulabhorn of Thailand.

a) The John C. Phillips Memorial Medal

The John C. Phillips Memorial Medal for Distinguished Service in International Conservation was awarded to Professor Mohamed Kassas, former President and long-serving Board member of IUCN. As Professor Kassas was unable to attend the General Assembly, Dr Swaminathan announced that the medal would be presented to him at a ceremony in Geneva early in the New Year. The citation for the Award is included in Annex 28.

b) The Peter Scott Awards

The Peter Scott Awards for Conservation Merit of the Species Survival Commission were conferred upon:

Dr Didier Marchessaux, France
Mr Grenville Lucas, UK
The Jersey Wildlife Preservation Trust, UK
The Village of Shiraho, Japan

The citations for these Awards (Annex 29) were read out by Dr George Rabb, Chair of the Commission.

c) The Fred M. Packard Awards

The Fred M. Packard International Parks Valour and Merit Awards of the Commission on National Parks and Protected Areas were conferred upon:

Biocenosis A.C. and Lic Victor Manzanilla Schaffer, Mexico
Mr Harold K. Eidsvik, Canada
Mr Ponsiano Ssemwezi, Uganda
Dr Jiri Svoboda, Czechoslovakia

The citations for these Awards (Annex 30) were read out by Mr Harold Eidsvik, outgoing Chair of the Commission, except for the award to Mr Eidsvik himself, which was read out by the Director General on behalf of the incoming Chair, Mr P.H.C. Lucas. The General Assembly was informed that an Award had also been made to Citoyen Mankoto ma Mbaelele, Zaire, on the occasion of the 50th Anniversary of the Garamba National Park, and to Mr Samuel A. Cooke and The Nature Conservancy of Hawaii, at a ceremony in the Conservancy's new offices in Hawaii.

Mr Eidsvik also announced that the Council had appointed the following as Honorary Members of the Commission on National Parks and Protected Areas:

Dr Gerardo Budowski, Venezuela
Mr John Foster, UK
Dr Zafar Futehally, India
Dr Duncan Poore, UK

d) The Tree of Learning Awards

The Tree of Learning Awards of the Commission on Education and Communication were conferred upon:

Professor Dr HRH Princess Chulabhorn, Thailand
Ms Nancy W. Anderson, USA
Dr Michael Atchia, Mauritius
Dr Maria Luisa Cohen, Italy
Dr Victor A. Kolybine, USSR
Mr Yami Lester, Australia
Professor John C. Smyth, UK

The citations (Annex 31) were read out by Mr M.A. Partha Sarathy, Chair of the Commission.

e) Outgoing Council Members

On behalf of the General Assembly, the President expressed the Union's sincere thanks and appreciation to those members of the Council whose terms of office would come to an end at the close of the Assembly.

These officers were:

Vice Presidents

Dr Walter Lusigi, Kenya
Mr William Reilly, USA
Dr Alvaro Umaña, Costa Rica
Dr Yuri Yazan, USSR

Regional Councillors

Mr Kenneth Brynaert, Canada
Professor Carolyn Burns, New Zealand
Dr Graham Child, Zimbabwe
Dr Layth al-Kassab, Iraq
Dr Andrey Kaidala, USSR
Ms Yolanda Kakabadse, Ecuador
Professor Jean-Claude Lefeuvre, France
Mr Amadou Mamadou, Niger
Mr Roger Morales, Costa Rica
Mr Iosefatu Reti, Samoa
Dr Celso Roque, Philippines
Mr Richard Steele, UK

Commission Chairs

Dr Wolfgang Burhenne, Chair, Commission on Environmental
Policy, Law and Administration
Mr Harold Eidsvik, Chair, Commission on National Parks and
Protected Areas
Dr José Furtado, Chair, Commission on Ecology
Professor Peter Jacobs, Chair, Commission on Sustainable Develop-
ment

He presented each of the outgoing Councillors attending the Assembly with a certificate and a gilt lapel pin in recognition of their important contributions to the work of the Union.

f) World Conservation Fellowship

In order to maintain regular contact with former officers of the Union, the Council had decided in June 1989 to establish a World Conservation Fellowship. The Council subsequently enrolled 41 former officers of the Union in the Fellowship. Of them, eleven were present at the General Assembly:

Ms Cecilia de Blohm, Venezuela
Dr Marc Dourojeanni, Peru
Dr Martin Edwards, Canada
Mr Nalni Jayal, India
Dr Don McMichael, Australia
Dr Kenton Miller, USA

Dr David Munro, Canada
Professor François Ranvade, France
Mr Cameron Sanders, USA
Mr Mats Segnestam, Sweden
Mr Samar Singh, India

g) Outgoing President

The Director General thanked Dr Swaminathan for his outstanding service to the Union over two terms as President. He paid tribute to how Dr Swaminathan combined a great scientific eminence with the warmest and most caring of human personalities—an ideal combination for a President. Dr Holdgate explained that he was indebted to Dr Swaminathan for all the help he had provided when Dr Holdgate arrived at IUCN. Dr Holdgate and Sir Shridath Ramphal, incoming President, presented Dr Swaminathan with two gifts on behalf of the Union. Ms Cecilia de Blohm presented him with a gift from the Venezuelan members of IUCN and thanked him on behalf of the World Conservation Fellows.

Venue for the next General Assembly

Dr Swaminathan reported that IUCN had received a formal invitation from the Ministry of Foreign Affairs of Sri Lanka, expressing the readiness of Sri Lanka to host the next General Assembly of IUCN. The Government of Switzerland had also written to the Director General expressing an interest in hosting the next General Assembly in view of the fact that 1993 would see the IUCN Secretariat established in its new Headquarters in Gland.

Dr Swaminathan expressed IUCN's appreciation to the Governments of Sri Lanka and Switzerland for these invitations, which will be considered in detail at the Council meeting in June 1991. (Under the Statutes, the Council decides on the venue for the General Assembly.)

Closing Addresses (99:3; 99:4; 99:5, 99:6)

The President Elect, Sir Shridath Ramphal, gave his Presidential Address (Annex 32).

The Director General, Dr Martin W. Holdgate, in his closing remarks, summarized the results of the General Assembly (Annex 33).

Dr Swaminathan invited Mr Tony Blunn, Secretary of the Department of the Arts, Sport, the Environment, Tourism and Territories of the Commonwealth Government of Australia, to speak. Mr Blunn expressed the regrets of Minister Ros Kelly that she could not attend, due to duties in the National Parliament. He said that it had been a great experience, privilege and honour for Australia to have hosted the 18th General Assembly. The large number of resolutions negotiated and adopted

represented a remarkable achievement and reflected a commitment to working together. On behalf of Australia, he thanked the IUCN Secretariat, the organizers and the delegates for their commitment and work, and wished IUCN and its members every success in the next triennium.

Mr Bob Pearce, the Minister for Environment in Western Australia, and Mr Blunn, on behalf of the Commonwealth Government, presented IUCN with a painting as a gift for IUCN's new headquarters building. The painting, by Aboriginal artist Shane Pickett, depicts a symbolic landscape with waterholes and goanna lizards, painted in the dot patterns long associated with aboriginal art. The presentation was accompanied by traditional aboriginal music on the didgeridoo.

The outgoing President, Dr M.S. Swaminathan, thanked the two Governments for this most generous gift. He paid tribute to the efficiency of the National Organizing Committee and thanked all those who had made the General Assembly such a success. He then gave his Farewell Address (Annex 34) and closed the 18th Session of the General Assembly at 21.00 on Wednesday, 5 December 1990.

Decision 549: Amendments of 2 and 5 December 1990 to the IUCN Statutes of 5 October 1948 (as last amended on 4 October 1978)

The General Assembly at its 18th Session amended the Statutes of IUCN, in conformity with Article XVII of the Statutes, as follows:

1. In Article I:

(a) The following is inserted as a new para. 1:

"1. The International Union for Conservation of Nature and Natural Resources (also known as The World Conservation Union) shall have as its goal:

to provide leadership and promote a common approach for the world conservation movement in order to safeguard the integrity and diversity of the natural world, and to ensure that human use of natural resources is appropriate, sustainable and equitable."

(b) The existing para. 1 becomes para. 2; its introductory sentence and clause i) are replaced as follows:

"2. To attain this goal, IUCN shall have the following objects:

i) to initiate programmes of mutual interest at international, national, regional and local levels with governments, non-governmental organizations, international organizations, aid agencies and others."

(c) Clause ii) is deleted;

(d) Clauses iii), iv), and v) become clauses ii), iii) and iv) respectively;

(e) Clause vi) becomes clause v) and

(i) the words "governments to improve their" are replaced by the words "in the improvement of";

(ii) the word "and" is deleted;

(f) A new clause vi) is inserted as follows:

"vi) to demonstrate sound practices for conservation and sustainable use through co-operative field projects; and"

(g) Para. 2 becomes para. 3.

2. In Article II:

(a) Para. 2 shall become para. 2 a) and after the word "Justice" the words "and political and/or economic integration organizations of States" shall be inserted.

(b) A new para. 2 b) shall be added reading as follows:

"A political and/or economic integration organization means an organization constituted solely by States to which its member States have transferred legal competence in respect of matters within the objects of IUCN."

(c) In para. 8 after the word "States" the words "or political and/or economic integration organizations" shall be inserted.

Note: The regulation Re Article II, para. 8 shall be amended by adding at the end the following sentence:

"The notification of adherence to the Statutes by a political and/or economic integration organization shall be made by the executive head of the organization duly authorized by a decision of its member States and shall be accompanied by a Statement of its competence in respect of matters within the objects of IUCN which shall stand until amended."

(d) A new para. 13 shall be added reading as follows:

"Payment of membership dues

13. Membership dues for any year become due and payable on the first day of that year."

(e) The existing para. 13 shall become para. 14 a) and following the words "Suspension and rescission" in the sub-heading, the words "and withdrawal" shall be added;

(f) In para. 14

(i) the previous paras 14 a), b) and c) shall be renumbered to become paras 14 a) i), ii) and iii) respectively; and

(ii) a new para. 14 b) shall be added reading as follows:

"14 b) The rights of a member in connection with elections, voting and motions shall *ipso facto* be suspended when the dues of that member are one year in arrears. If the dues of a member are two years in arrears, the matter shall be referred to the General Assembly which may decide to rescind all the remaining rights of the member concerned."

(iii) a new para. 14 c) shall be added reading as follows:

"14 c) If, one year after the General Assembly decision to rescind the rights of a member pursuant to paragraph 14 b), the member in question has not paid any of its arrears owed up until the rescission, that member shall be considered as having withdrawn from IUCN."

(g) Para. 15 shall be deleted and replaced by a new paragraph as follows:

"Readmission

15. If a former member, which is considered to have withdrawn from IUCN pursuant to paragraph 14 c), seeks readmission to membership within three years of its withdrawal, all membership dues outstanding at the time the General Assembly rescinded membership rights shall be paid before the member is readmitted. Applications for admission three years or more after withdrawal shall be treated in the same way as new requests for membership."

(h) In para. 16 the last sentence shall be replaced by the following:

"The provisions of paragraph 15 will apply *mutatis mutandis* in this case."

(i) In para. 19 a new subparagraph c) shall be added reading as follows:

"c) Where one or more member States of an organization referred to in paragraph 2 b) of this Article are Category A members of IUCN, the organization and its member States shall decide on the mode of exercising their voting rights which shall not in total exceed those of the State members of IUCN belonging to that organization."

3. In Article IV:

(a) In para. 3 a new clause ii) is inserted with the following words and the other clauses renumbered accordingly: "ii) to elect the Treasurer of IUCN;"

(b) In para. 7:

(i) after the word "President," the words "the Treasurer," are inserted and

(ii) the following sentence added: "The President may be elected by acclamation if there is consensus."

4. In Article VI:

(a) In para. 1

(i) a new clause c) with the following text is inserted:

"c) a Councillor from the State in which IUCN has its seat, provided that one has not been elected as a Regional Councillor";

(ii) the previous clauses c) and d) become clauses d) and e);

(iii) a new clause f) is added as follows:

"f) the Treasurer of IUCN."

(b) In para. 2 in the last sentence the words "two Regional Councillors" are replaced by the words "one Regional Councillor".

(c) Para. 3 is reworded as follows:

"3. The elected members of the Council shall appoint as soon as practicable after the latter's election:

- a) five Co-opted Councillors, with due regard to the need to maintain an appropriate balance of diverse qualifications, interests and skills; and
- b) if a Regional Councillor referred to in paragraph 1 c) above has not been elected, an additional Councillor after consultation with the governmental authorities concerned."

(d) In para. 4:

- (i) the word "Nominations" in the first sentence is replaced with "No more than two nominations";
- (ii) after the word "President" the words "and for the Treasurer" are inserted;
- (iii) before the words "may also be made" the words "for the President" are inserted.

(e) In para. 8:

- (i) the first sentence shall be replaced as follows: "Members of Council shall not hold the same office consecutively for more than two full terms."
- (ii) in the third sentence, the words "paragraphs 1 c) and 3 above" are replaced by "paragraphs 1 d) and 3 a) above".
- (iii) the final sentence is replaced by the following: "This paragraph does not apply to a Councillor co-opted in accordance with paragraphs 1 c) and 3 b) above."

(f) Para. 12 is replaced by:

"12. The Council shall, in respect of each triennium, appoint:

- a) from amongst the Regional and Co-opted Councillors up to:
 - i) four Vice-Presidents of IUCN;
 - ii) four members of the Bureau;
- b) from amongst the Commission Chairs one member of the Bureau;
- c) the Legal Adviser to IUCN, who has the right to participate in IUCN meetings without the right to vote."

5. In Article VII

Para. 1 is replaced by:

"1. The Bureau shall be composed of the President of IUCN as Chair, the Treasurer, the Vice-Presidents and up to five members including one Commission Chair appointed by the Council in accordance with Article VI, paragraph 12."

6. In Article X

The last sentence of para. 5 is replaced by:

"The Treasurer and the Director General shall submit to each ordinary session of the General Assembly a consolidated report on the accounts of IUCN for the triennium together with the auditors' reports for the relevant years."

7. In Article XIV

After the word "English", the word "and" is replaced by a comma and after the word "French", the words "and Spanish" are added.

Presentation on Conservation Policy and Practice in Australia*

After a spectacular display of laser images of Australian plants and animals, accompanied by music from students of the Western Australian Conservatorium of Music, the Session was opened by the Hon. Ros Kelly, MP, Minister for the Arts, Sport, the Environment, Tourism and Territories. In a wide-ranging speech she announced that the composition and terms of reference for a national advisory committee on biodiversity had been completed. The Committee would bring together scientists, conservationists and state and territory representatives to advise her on a strategy to safeguard the nation's biological heritage, and would monitor its implementation.

Mr Robyn Williams, broadcaster and Chairman of the Commission for the Future, introduced a number of distinguished speakers, who made presentations on the following topics:

Dr Mike Archer, University of New South Wales: the evolutionary biogeography of Australia;

Ms Rachel Satour, Impaja Television, Alice Springs: the spiritual significance of Uluru (Ayers Rock) to Aboriginal culture;

Mr Phillip Toyne, Australian Conservation Foundation: the roles of government and society on environmental issues;

Dr John Young, University of Adelaide: how human settlement had affected the environment of Australia;

Dr Peter Newman, Murdoch University, Western Australia: environmental issues in Australian cities.

A short film, "State of the Environment", outlined a range of environmental problems in Australia, including the loss of soil and the past felling of rainforests. Three speakers then reviewed Australia's present efforts to address these issues:

Mr Don Henry, Australian Committee for IUCN and WWF-Australia, on Australia's response to international environmental issues;

Dr Tor Hundloe, Environment Institute of Australia, on action on national issues such as species loss, land degradation and pollution;

Dr Helen Ross, Australian National University, on how the techniques of conflict resolution were increasingly being used in solving environmental disputes in Australia.

Susannah Begg, Leader of the Australian Youth Delegation to the 1990 Montreal Convention meeting, then made a forceful appeal to the conference on behalf of Australian youth for a healthy environment to ensure the future of her generation and future generations.

A short audiovisual summarized the changing attitudes of Australians towards their natural environment with beautiful images from Australian art.

The concluding speaker, Mr Robyn Williams, outlined how Australia has adopted sustainable development as the basic principle for its environmental planning, following the World Conservation Strategy.

Minister Kelly closed the session and thanked all the contributors. The General Assembly expressed its appreciation with loud applause.

* This set of presentations formed the first part of the 18th Technical Meeting of IUCN.

Meeting on the IUCN Programme 1991-1993*

The intention of this meeting, which was chaired by the Director General, was to provide an opportunity for a wide-ranging debate on the draft IUCN Programme 1991-1993 (GA/18/90/11), before its adoption by the General Assembly in Plenary Session (reported on pp. 22-23).

The session considered Part II (Programme Activities) of the draft Programme document (pp. 19-52), chapter by chapter. Dr Holdgate invited the Chairs of those workshops that had considered activities falling within these chapters to present very short summaries of their principal conclusions, as these related to the proposed Programme. Since the workshops are reported at greater length elsewhere in this Proceedings volume (pp. 59-84), the points made by the various Chairs are not repeated here, although they occupied the major part of the meeting.

Chapter I, on Planning for Conservation and Sustainable Development (A1-A9)

The Assembly heard reports from the following:

Dr Julia Henderson, Chair, Workshop 2, on Human Population Dynamics and Resource Demand (in relation to Para AT);

Professor George Knox, Chair, Workshop 9, on the Conservation Strategy for Antarctica (in relation to Para A2);

Professor Hans Lundberg, Chair, Workshop 10, on the Environmental Implications of Global Change (in relation to Paras A8 and A9);

Dr Michael Royston, Chair, Workshop 12, on Harmonizing Environmental Conservation and Economic Development (in relation to Chapter I overall);

Dr Pietronella van den Oever, Chair, *Ad Hoc* Workshop on the Future Orientation of IUCN's Women and Natural Resources Management Programme.

The Queensland Conservation Council said that the speakers at Workshop 12 were predominantly from the corporate sector, and that there were no invited speakers from NGOs. They considered that the recommendations of the Workshop therefore reflected the views of business rather than of the IUCN membership. They asked that in future IUCN members be given priority over non-members in IUCN workshops. Dr Holdgate replied that this point would be considered carefully; as a general principle he considered that speakers from outside should not be excluded but that the workshops should be designed primarily for the benefit of the membership.

The India State member delegation drew attention to the recommendations on pages 5, 6 and 9 of the Review of IUCN's Programme 1988-1990 by Mr Anil Agarwal and Mr Adrian Phillips, stressing their importance to the IUCN Programme and noting in particular the conclusion that the benefits of IUCN had been unevenly spread geographically.

On Para A1 (Completing and Promoting the World Conservation Strategy for the 1990s), the Center for Environmental Legal Studies, Pace University (USA) proposed that IUCN give more attention to the debt burdens of the Third World. There was no sound environmental or ethical basis for diverting so much of developing countries' resources into servicing their loans, and the results were crippling economically and environmentally. Within a country, such situations were resolved by the process of bankruptcy; IUCN should adapt the concept of bankruptcy for use in the international arena.

The California Institute of Public Affairs proposed that responsibility for implementing Para A1 be transferred to an Inter-Commission Standing Committee, although the Commission on Environmental Strategy and Planning should be involved in particular parts of the work.

* This meeting formed the second part of the 18th Technical Meeting of IUCN.

The Australian Conservation Foundation suggested that on Antarctica (Para A2) IUCN should rapidly consult with its members and complete its Conservation Strategy (taken up further in Plenary, see pages 31-32 and 41-43), and that on global change (Para A8 and A9) IUCN should provide input to the formulation of a Global Climate Convention.

In response to a question about the future of the Union's work on the role of women in conservation and natural resource management, Dr Holdgate said that the Secretariat would now prepare a new proposal, so that this programme could be financed and resumed.

Chapter II, on Conserving Biological Diversity (A10-A36)

Dr Holdgate introduced reports by the following:

Dr Kenton Miller, Chair, Workshop 3, on Designing and Implementing the Biodiversity Conservation Strategy (in relation to the whole chapter);

Dr Tundi Agardy, Chair, Workshop 4, on Conservation of the Marine Environment (in relation to Paras A28-A30)

Dr Duncan Poore, Chair, Workshop 5, on Realistic Strategies for Tropical Forests (in relation to Para A27);

Mr Bing Lucas, Co-Chair, Workshop 6, on Critical Issues for Protected Areas (in relation to Paras A33-A36);

Mr Henry Nsanjama, Chair, Workshop 7, on Sustainable Use of Wildlife (in relation to Para A21)

Dr Pius Anadu, Co-Chair, Workshop 8, on a Global Strategy for Conserving Wetlands (in relation to Paras A24-A26)

The Hon. Mersie Ejigu, Chair, Workshop 11, on Conservation and Sustainable Development in the Sahel and other Arid Regions (in relation to Para A32 and in Chapter IV Para A52);

Delegates from the floor made a number of points. The following suggestions relate to the chapter overall:

- the Environment and Conservation Organizations of New Zealand expressed concern at the lack of emphasis given in the chapter to the priority of *in situ* conservation over *ex situ*

conservation. IUCN's role should be to concentrate on *in situ* conservation. (This was confirmed by the Director General, who emphasized that IUCN's primary goal was *in situ* conservation, but that *ex situ* conservation was a valid activity, especially when captive breeding was undertaken in order to permit reintroductions);

- one of the main threats to protected areas in Colombia, and a cause of loss of biodiversity, was the narcotics industry; IUCN should pay more attention to this in its Biodiversity Programme (Sociedad Colombiana de Ecología);
- the Biodiversity Programme should include the issue of introductions and the problems of introduced species; a Convention was needed on this topic (Oman State member delegation);
- more emphasis should be given to the problems of genetic engineering and of the introduction of new organisms (Nature Conservation Council of New South Wales);
- there should be more emphasis on work in the Indian Ocean (International Society of Naturalists, India), in the forests of Central Africa (Zaire) and in Asia (National Commission for Wildlife Conservation and Development, Saudi Arabia);
- conserving the Vavilov Centres of Diversity, sources of the origin of many crop plants, should not be neglected (International Society of Naturalists, India).

Delegates made the following points on specific paragraphs:

- A21 (Wildlife Utilization as a Component of Conservation). The word "wildlife" should be replaced by the phrase "terrestrial fauna", so as to exclude fish (Fundacion Chiapaneca "Miguel Alvarez del Toro" para la Protección de la Naturaleza, Mexico); the Programme should give more attention to populations with low numbers and small ranges (Societe Nationale de Protection de la Nature, France);
- A24 (Wetland Policy and Management Guidance). This paragraph includes the sentence, "Consideration will be given to an additional study of the impact of agricultural and industrial pollution on wetlands". IUCN should definitely do this study, not just consider it! (Fundacion Chiapaneca "Miguel Alvarez del Toro" para la Proteccion de la Naturaleza, Mexico);

- **A27 (Supporting Global Efforts to Conserve Tropical Forest Ecosystems).** More emphasis should be given to the role of IUCN in stimulating finance for the development of human resources, notably through training (Fundación Natura, Ecuador); the word "extractive", in the sentence where IUCN is proposing to establish projects to test approaches to extractive management of near-natural forest (p. 32, lines 12-15), should be replaced by "sustainable" (India);
- **A28 (Formulating Marine Policy).** Marine projects only total SFr 615,000, which is less than 1.5 per cent of the Union's budget, yet oceans cover 75 per cent of the surface of the world (Greenpeace International). Many at the Workshop felt that this expenditure was inadequate.

On the question of establishing an Arid Lands Programme (A32), the Workshop on this theme (No. 11) had recommended that the Sahel Programme be continued as a Regional Programme but that a separate, non-area-based thematic programme be established on Drylands. The National Commission for Wildlife Conservation and Development (Saudi Arabia) agreed with this proposal, and called on IUCN to develop a full programme on rangelands, as they cover 20-25 per cent of the earth.

Chapter III, on Providing Conservation Services and Tools for Conservation (A37-A44)

No substantive comments were made.

Chapter IV, on Building IUCN's Regional Presence (A45-A55)

The following points were made:

- IUCN should decentralize its expertise, developing multi-disciplinary teams in the regions, and not just have Regional Programmes (Queensland Conservation Council). (Dr Holdgate confirmed that this was happening, with links to the Commissions);

- the State delegation for Western Samoa, speaking on behalf of the 22 island nations of the South Pacific, said that the region had very poor membership of IUCN, amounting to one nation and two NGOs. IUCN should consider how to strengthen and expand its activities in the region, and when IUCN becomes more fully involved, providing a separate, independent programme;
- the Czech Institute for Nature Conservation noted the great changes in Eastern Europe and said that an IUCN East European Programme Liaison Group was being established to advise on the development of the activities described in Para A45. The transitions to market economies in the region posed risks for conservation;
- the Sierra Club (USA) pointed out that the North American programme (A47) included an activity to establish new alliances between IUCN members there, but this was not found in other regional programmes. This was an important role for *all* Regional Offices and for IUCN as a whole;
- the Jamaica Conservation and Development Trust felt that the wording on the proposed programme in the Caribbean was vague (A50). (In reply, Dr Holdgate said that IUCN was reviewing its operations in that region);
- Kenya thanked the Director General for the policy of regionalization. Its success was seen in the cooperation and concord of IUCN members. In East Africa (A53), the delegation drew attention to the major threat from an aphid that is destroying forests and stressed the need for a stronger network of IUCN members in the region. (Dr Holdgate said that a Regional Advisory Council is planned.)

Chapter V, on Programme Support and Services (A56-A71)

On A63 (Contributions to International Meetings), Greenpeace International said that they participate in many meetings, and would welcome an increased role by IUCN in this activity and offered to help the Director General in this regard.

Reports from the Workshops

Introduction

On 30 November and 1 December, the General Assembly divided into twelve workshops, each on a different topic of importance to world conservation in general and to the IUCN Programme in particular. The workshops were held on the campus of the University of Western Australia.

The workshops were an opportunity for delegates at the General Assembly to discuss and debate conservation issues in smaller groups than in the Plenary Sessions. The intention was that as many participants as possible would share their experience and knowledge. The aim of each workshop was to reach an understanding and consensus on the topic concerned and on the way ahead for the conservation movement.

The Director General had asked that each workshop provide IUCN with specific advice on the coverage of the topic concerned in two vital documents: the draft IUCN Triennial Programme 1991-1993 and the second draft of the World Conservation Strategy for the 1990s, provisionally titled "Caring for the World: A Strategy for Sustainability". The Chairs of each workshop made short presentations of their conclusions about the IUCN Programme to the Technical Meeting of the General Assembly (see pp. 55-57). The Rapporteurs of the workshops submitted written comments on "Caring for the World" to the team preparing the next draft and some of them spoke in the Plenary Session of the General Assembly on this item (pp. 29-31); the report on Workshop 1, below, includes the more important of the comments on "Caring for the World" from the other workshops.

The reports below are by the Workshop Rapporteur unless otherwise stated. Rapportage of the workshops was organized and coordinated by Mr George Greene, of Dalhousie University, Canada.

WORKSHOP 1

The World Conservation Strategy for the 1990s

Chair: Ms Yolanda Kakabadse

Convenors: Dr David Munro and Ms Margrith Kemp

Rapporteur: Mr Robert Prescott-Allen

The Workshop reviewed the second draft of "Caring for the World: A Strategy for Sustainability", in particular the chapters not considered by other workshops. It also discussed the Strategy's implementation. The principal conclusions were:

Title

The title and subtitle were widely but not unanimously approved. To show continuity with the World Conservation Strategy, the cover and title page should state that the document is an expansion of that document.

Organization and Style

Most comments confirmed the need for a new document, and supported the principles and strategic direction of the draft. But it was generally agreed that the document should be organized and written differently to win wide support and motivate implementation.

Many of the actions are too detailed and specific. This makes it difficult to follow the overall Strategy and also makes it less applicable globally. The main part of the document should focus on the strategic directions and key proposals for achieving them.

However, the many actions in the second draft

are an improvement over the World Conservation Strategy and should not be lost. Instead, detailed tactical actions should be placed in Annexes.

The document should be written in a way that will inspire people to act. It should be readable, with a strong narrative flow, and with examples from throughout the world to make the main points clearly understandable. It should vividly express human feeling and oneness with the earth.

Major Substantive Comments

A great many valuable substantive comments were made both in writing and at the other workshops. Most point out ways of improving the Strategy without changing its emphasis. However, four more issues should be included: employment; health; destabilizing factors such as drug trafficking; and ecological refugees. In addition, the coverage of some issues should be expanded or emphasized, in particular: environmental law; the contribution of indigenous peoples to conservation; institutional implications of sustainability; research; the role and status of women; technology; the Arctic; the ecosystem approach; the relationship between democracy and sustainability; coasts, seas and oceans; and ways of overcoming obstacles to the actions needed.

The Strategy should recognize the failings of both planned and market economies. Although the nature of sustainable economies has yet to be worked out, the development of new economic models should be a major challenge of the Strategy.

Development is perceived differently by different cultures. The importance of cultural diversity should be recognized throughout the document. All components of the community have a contribution to make. Disadvantaged groups lack access to resources; they have little say in the way resources are managed and scant share in the benefits of development. They are thus scarcely able to help themselves, and if they are to play their proper part in a diverse society, a commitment and conscious effort are required from those who have power.

It was noted that the treatment of several topics (for example, climatic change and the Tropical Forestry Action Plan) should be brought up to date.

Implementation

Many participants were distressed at the lack of follow-up to the World Conservation Strategy. They called for an ongoing commitment to

promote and (where appropriate) implement "Caring for the World" by IUCN and its members, WWF and its National Organizations, and UNEP. IUCN's national and regional committees and offices need to be energized for this task.

The Workshop proposed an amendment to Resolution 18.13 on "Caring for the World", to urge the Director General to work with the UNEP and WWF members of the Steering Committee to promote widespread publicity about and distribution of the final document. The publication should be easily available in many languages at an affordable price so that people throughout the world can read and use it.

Also, a wide range of target-specific audiovisual and written materials should be produced to motivate action. As many individuals and organizations as possible should be invited to participate in promoting and implementing the Strategy.

Governments should show leadership by committing the public sector to sustainable practices. By the same token, IUCN should set an example by undertaking an environmental audit of its office practices and operations, and modifying them accordingly.

Provision should be made to monitor and evaluate implementation of the Strategy.

(Report prepared by Yolanda Kakabadse, Graeme Kelleher, Mary Simon and Dilnavaz Variava, assisted by Margrith Kemp, David Munro and Robert Prescott-Allen.)

WORKSHOP 2

Human Population Dynamics and Resource Demand

Chair: Dr Julia Henderson

Convenors: Dr Pietronella van den Oever and Ms Anne Viscolo

Rapporteur: Ms Frances Dennis

The overall objective was to identify what IUCN should do in the next triennium on the issue of population and natural resources. The Workshop also examined the contribution that the population community and the IUCN Population and Natural Resources Programme could make to implementing "Caring for the World".

More than 60 people took part in each of the four sessions. About half the participants had backgrounds in population science or in population programmes, and about half were from an environmental field, though a few participants had experience in both subjects. There were also representatives of international and donor agencies, as well as participants from the media.

Recommendations on the IUCN Programme

The importance of relating human population dynamics to the central mission of IUCN is now widely recognized and approved. There had in fact been presentations on the interactions between population and resources in four other workshops.

This was a field in which IUCN needed to cooperate with many partners. The Workshop *recommended* that in the next triennium IUCN should cooperate especially:

- (a) at the international level, with the United Nations Population Fund (UNFPA) and the International Planned Parenthood Federation (IPPF);
- (b) at the national level, not only with governments, particularly in the development of National Conservation Strategies, but also with provincial and local authorities and people's organizations;
- (c) with universities to provide the research and analysis essential for sound policy-making and to educate the younger generation in the realities and the ethics of the links between population and natural resources;
- (d) with NGOs, taking advantage of IUCN's extensive membership to form partnerships with other NGOs as advocates and activists in implementing the Strategy.

There were thought-provoking presentations and stimulating discussions on the ambiguities of sustainable development. This underscored the complex relationships between population dynamics—especially growth, age structure and distribution of population—and the conservation and sustainable use of natural resources.

Several presentations and interventions provided insights into how different population variables influence the other themes of the IUCN Programme—such as forests, arid lands, parks and protected areas, wetlands, species survival, sustainable use of wildlife and global change. The Workshop *recommended* that IUCN should continue

investigations on these influences. Pioneer work is needed because these are new concepts on which little or no academic research has yet been done.

Case studies from Africa, Asia and Latin America showed what people are doing to help themselves. Participants emphasized how important it is for IUCN to carry out local field projects so as to constantly validate and, if necessary, modify the results of its intellectual analyses. Indeed, some participants would like IUCN's Population and Natural Resources Programme to be as active in projects at the community level in developing countries, as it is in the search for a theoretical understanding of the issue.

The Workshop *recommended* that IUCN continue to undertake case studies both in developing and developed countries, where interactions between population variables and resource consumption are still inadequately understood. These studies should be done in ecosystems and regions where IUCN is active, so that IUCN field projects can benefit and if necessary be modified. Promising studies could provide models for others to follow.

There was considerable discussion of the issue of over-consumption of resources. Small families consume more resources per head than large families. As family size decreases, so aspirations rise and more families enter into the high-consumption pattern. It is suggested, however, that resource consumption is not only a demographic problem. Economic and social policies and established patterns of human behaviour are also major influences. To reduce over-consumption, governments will have to consider a range of social, economic and political factors. Massive public education to create a genuine "conservation society" should be accompanied by a profound change from polluting to environment-friendly technologies. Reduction of population growth alone, while having a significant impact, cannot prevent over-consumption, as is demonstrated in countries which have already passed through the demographic transition to small families and stable populations.

Recommendation

With minor changes, the Workshop endorsed the draft recommendation on Human Population Dynamics and Resource Demand submitted to the General Assembly (subsequently approved as Recommendation 18.17). This recommendation urges that IUCN's Population and Natural Resources Programme be strengthened. It also urges that high priority be given to population issues at the UN Conference on Environment and

Development and to environment issues at the 1994 UN International Population Conference.

"Caring for the World"

The Workshop suggested a number of changes to Chapter 6 (Stabilizing Resource Demand and Population) in the draft document. Further comments were made on other chapters. The Workshop urged that a prominent box be added to describe the critical scarcity of water; because water is finite, water shortage is likely to be the most immediate and serious of the resource constraints to improving the quality of life for increasing numbers of people.

WORKSHOP 3

Designing and Implementing the Biodiversity Conservation Strategy

Chair: Dr Kenton Miller

Convenor: Mr Jeff McNeely

Rapporteur: Dr Charles Barber

The world is being impoverished by the loss and degradation of its genes, species, habitats and ecosystems. In response to this grave threat to the biotic foundation on which humanity depends, IUCN, in collaboration with UNEP and the World Resources Institute, has organized the Biodiversity Conservation Strategy Programme, formally launched in 1989. The Programme aims to develop, by 1992, a Biodiversity Strategy, a Biodiversity Action Programme and a Biodiversity Status Report as its main outputs.

This Workshop was the first of a series of international consultations within the Programme's framework. Its aims were:

- to discuss major issues in conserving biodiversity, in order to strengthen the science and policy basis for the Programme;
- to bring IUCN members fully into the process of preparing and implementing the Programme's major outputs and activities;
- to review progress in the preparation of a global

Convention on Biodiversity, and to enhance the contribution of the Programme and of IUCN members to that process;

- to agree on basic principles for the IUCN Programme 1991-1993 in the field of biodiversity conservation.

The Workshop was well attended, and participants represented virtually all the major regions of the globe and a wide range of governmental, inter-governmental, NGO and scientific institutions. The key issues raised are outlined below.

Biodiversity and its Importance

The importance of biodiversity is well known. The Workshop made the following points on this theme.

1. Biodiversity has already become the subject of widespread concern and action, but its conservation depends on sustainable development paths that have not yet been taken.
2. A great deal of work remains to be done in refining scientific understanding of biodiversity and tools for measuring its magnitude and loss.
3. The ethical and cultural aspects of biodiversity and its conservation are as important as any other element, but have received grossly inadequate attention and funding.
4. Local communities must be allowed to assume a major role in managing and benefiting from the resources on which their livelihoods and cultures depend.
5. Indigenous peoples are an integral part of the forests and other wild systems in which they live, and from which they draw their livelihood and culture; efforts to conserve biodiversity must work directly with these people and give their interests and insights special consideration.
6. Many of the concepts of property and sovereignty that dominate international discussions on biodiversity are inadequate and inappropriate for the task of slowing the loss of biodiversity.
7. There are many ways—formal and informal—of building a consensus for biodiversity conservation.
8. Biodiversity concerns have not yet been fully integrated into national economic planning processes or into the work of multilateral development banks, although some progress is being made.

National Systems for Conserving Biodiversity

The Workshop noted and endorsed the following elements in a successful national approach:

1. Government and development aid agencies are increasingly accepting biodiversity conservation as a legitimate objective, but are in need of concrete guidelines and strategies for action. One tool for action is the development and implementation of national biodiversity action plans. Such plans may include elaboration of: an ethical base; a system of information management; identification of priorities; economic and equity considerations; a variety of mechanisms to mobilize and integrate the whole range of relevant institutions and actions at local, national and international levels; needs for training, education and institutional strengthening; and strategies for implementation.
2. Biodiversity conservation may require the establishment of new institutions designed to respond to the diverse and complex set of issues involved. For example, while some countries are doing a reasonably good job in saving key habitats, little is being done to systematize the study of biodiversity and link the knowledge gained with current and potential users. Creation of an institution to bridge the gap between researchers and users can strengthen both and provide a better institutional basis for biodiversity conservation. Development of a National Biodiversity Institute, which unites efforts to save, study and use biodiversity within one institution, as has been done in Costa Rica, is one model which could be applied elsewhere.
3. In many countries, biodiversity conservation can be advanced through strategies and initiatives aimed at particular ecosystems or problems. The systematic approaches taken in Brazil to the conservation of the Amazonian forest is one good example, the attempts in India to link restoration of degraded lands with conservation of biodiversity is another.

International Approaches to Conserving Biodiversity

The Workshop also endorsed the following international actions:

1. Development of comprehensive, accurate and usable information on biodiversity. This is an essential prerequisite for its conservation and

sustainable utilization. The development of the Biodiversity Status Report by WCMC under the Strategy Programme is an important effort in this direction. Its objective is to develop a comprehensive database covering financial, legal and institutional data as well as biological conditions and trends. A number of other complementary approaches are also underway, including ICBP's project on Centres of Avian Endemism, IUCN's and WWF's Centres of Plant Diversity Project, WCMC's project to identify sites of high biodiversity in tropical forest ecosystems, and SSC's efforts to synthesize biodiversity data on a regional basis, now completed for sub-Saharan Africa and planned for other regions.

2. Marine biodiversity should receive increased emphasis, as efforts on marine conservation have lagged behind those for terrestrial systems. Major threats to marine biodiversity include over-harvesting, physical destruction of habitats (especially mangroves), chemical pollution, introduction of alien species, and global atmospheric and climatic change. The Strategy Programme must incorporate marine conservation as a high priority, with due recognition of the scientific and institutional differences between the marine and terrestrial contexts. Action must necessarily have a strong international focus.

Legal Measures for Supporting the Conservation of Biodiversity

The Workshop endorsed the substantial present legal efforts, noting the following points:

1. Work by IUCN (CEPLA) on the development of a Convention on Biodiversity has laid a strong foundation. The process has now moved into the political sphere, in inter-governmental meetings convened by UNEP. Many sensitive issues have arisen, including access to genetic resources, the place of biotechnology and the transfer of technology in the Convention, relative emphasis on *in situ* and *ex situ* elements, intellectual property rights, and the extent to which domestic species are to be covered. IUCN, the NGO community and technical experts should continue to play a role in the process, but must focus more on informing and influencing government delegations.
2. Legal approaches to biodiversity conservation must also proceed at national and regional levels. Such efforts in the developing countries must take into account the harsh realities of

poverty and political instability, and the concomitant low priority that the development of environmental law often receives. At the national level, development of laws, regulations and institutional capacities for environmental impact assessment is a key priority, as part of an integrated planning system that includes biodiversity conservation.

Conclusions

The Workshop reached six general conclusions.

1. Ethical, religious and cultural considerations in the conservation of biodiversity require much more serious attention, and work on this needs more support—intellectually, institutionally and financially.
2. Accurate, comprehensive, accessible and usable information on biodiversity is essential for conservation.
3. National biodiversity action plans should be prepared that integrate the whole range of interests, mechanisms and technologies concerned with biodiversity. This requires the development of field-tested methodologies for planning exercises.
4. The interests, skills, rights and capacities of local communities to manage biodiversity must be recognized and supported; this involves an adjustment of the balance of biotic resource control, access and ownership between the state and the community, and the development of partnerships between them.
5. Appropriate legal and institutional frameworks are a vital element for achieving biological diversity conservation and thus should be strengthened at national, regional and international level; in so doing, attention should be paid not only to instruments designed to provide various levels of protection to designated areas, but also to legal mechanisms favouring the integration of biological diversity conservation in land-use planning processes.
6. The global threat posed by biodiversity loss requires action at the international level, to complement national legal, institutional and scientific initiatives. The Convention on Biological Diversity presently being discussed is a potentially important tool for achieving action and mobilizing support at global level.
7. The Biodiversity Conservation Strategy Programme provides a flexible and wide-ranging way to develop and implement the diverse

initiatives required to slow the future loss of biodiversity. IUCN members form a critical mass of institutions and individuals with both the concern and the capacity to meet this challenge. Their participation in the Programme is urgently needed and strongly solicited.

WORKSHOP 4

Conservation of the Marine Environment

Chair: Dr Tundi Agardy

Convenor: Dr Danny Elder

Rapporteur: Mr Richard Kenchington

Over 120 people contributed to the Workshop, testimony to the fact that IUCN members view marine conservation as a pressing problem. The objectives of the Workshop were to:

- discuss how IUCN could be more effective in promoting action by its members on marine issues;
- provide advice on the Coastal and Marine Programme, in the draft IUCN Programme 1991-93.
- suggest how to make the chapter on oceans in "Caring for the World" reflect better the problems of marine conservation and how they could be solved.

The participants unanimously agreed that the world's oceans are imperilled by humankind using coastal areas and ocean space in unsustainable and irresponsible ways. They acknowledged that marine conservation has lagged behind conservation on land. This is partly because of an innate bias that sees the oceans as global commons, with each person as free as the next to overuse marine resources, and partly because of the common perception that the marine environment is an alien world, difficult for humans to enter, and so leading to the view "Out of sight, out of mind".

Effective solutions to many problems in marine conservation continue to be elusive. Examples of such problems include habitat destruction and alteration, pollution through eutrophication, siltation, dumping, toxic runoff and over-fishing. Conventional approaches to reduce these impacts

are often ineffective. Indeed, the close links between land and sea, which when undisturbed contribute to environmental stability, are one of the main reasons for the failure of sectoral management to address marine issues adequately.

The Workshop saw an urgent need for much more activity on marine issues in the work of the Commissions and in the IUCN Programme as a whole. Participants discussed, but saw no particular merit in, the idea of creating a separate Marine Commission. Instead the Workshop preferred to emphasize the pervasive linkages between marine, terrestrial and atmospheric processes through a deliberate process of incorporating marine conservation into all relevant activities. The Workshop thus stressed the importance of the IUCN Coastal and Marine Programme and the role of its Coordinator. It made a strong recommendation to the Director General that the Programme be strengthened and that it take on a more "horizontal" role, working with and through other thematic programmes and IUCN Commissions.

This general role being accepted, the Workshop then devoted most of its attention to the question of what priority issues should be addressed in the Coastal and Marine Programme. The following twelve issues were seen as the most important:

1. **Poor public understanding of marine conservation issues.** IUCN should mount a public education programme to target priority groups on marine issues, with the goal of making marine conservation as well understood as terrestrial conservation in the public's mind.
2. **Biodiversity.** In the marine environment, biodiversity losses at the community, population and habitat level are usually of more concern than the loss of individual species. IUCN should promote a better understanding of the threats to marine biodiversity, and should work with the CITES Secretariat to establish criteria of endangerment for marine species, communities and habitats threatened by international wildlife trade. One particular problem that should be addressed is the introduction of exotic or alien species from ballast waters, from fouling communities on ships or from mariculture.
3. **Global change issues in the oceans.** It is especially important to:
 - (a) identify changes in the seas that may be the result of global warming, such as changed patterns in ocean currents, altered distributions of species and communities, and phenomena such as coral bleaching;
 - (b) establish that pollution of the seas from sources on land is as important a driving force in global change as pollution of the air.
4. **Monitoring and collection of time series data.** Monitoring of the marine environment is generally inadequate and there is a consequent lack of good time series data from which to understand the underlying dynamics of the marine system and the impacts of human activity. IUCN should encourage scientists to see time series data as a scarce and precious resource.
5. **Communication and science.** It can be appallingly difficult for non-scientists to obtain the results of scientific research in a form they can understand. IUCN should present modern oceanographic and coastal science in a form that can be readily understood by the rest of the world.
6. **Regional communication and coordination.** Few marine ecosystems are confined to the jurisdiction of a single nation. There is therefore a great need for regional coordination between marine scientists, NGOs and government agencies. A good example of how to achieve this coordination is IUCN's work on marine protected areas. Other tasks for which IUCN could promote regional communication and coordination include public education, monitoring and training.
7. **Fisheries issues, in particular:**
 - (a) the impact of fishing on non-target species, habitats and communities. Fisheries science and management should rapidly move away from their focus on target stocks into understanding and conserving the ecosystems and processes that sustain fish populations;
 - (b) the need for caution and environmental impact assessment in the establishment of new fisheries or the expansion of effort in existing fisheries. Economic uses should be found for species previously discarded as "by-catch" and commercial fisheries should interact with subsistence fisheries, and with the expanding sport and recreational fishing.
8. **Mariculture issues, in particular:**
 - (a) the alienation of large areas of sensitive environments for mariculture;
 - (b) ecosystem and local fishery losses from loss of larval production and nursery areas or from mariculture pollution;
 - (c) the need to monitor environmental and economic performance.

IUCN should develop criteria for the design of ecologically sustainable mariculture, taking account of ecosystem needs.

9. Enforcement. Fisheries and other legislation which should protect the marine environment is often not enforced at all. IUCN should promote active enforcement. A good sign of success would be increased prosecutions and legal sanctions against infringements.

10. Indicators of environmental stress. The Workshop discussed the use of biological indicators (such as amphipods and hydroids) as simple ways to identify environmental stress. If such techniques can be developed for use by school-children and NGO volunteers, they could greatly advance the reduction of marine pollution.

11. Environmental Impact Assessment (EIA). Many environmental impact decisions are made on the basis of privately produced, unpublished and unreviewed studies. There is a clear possibility of conflict of interest leading to inadequate coverage. This would be reduced by an independent expert review of EIA proposals, and by open public review of the resulting documents and statements. IUCN should also design a model for EIA legislation on marine issues.

12. The need to extend the principles of conservation and ecologically sustainable use beyond the boundaries of protected areas. IUCN should seek to incorporate the principles of effectively coordinated, ecologically sustainable, multiple-use into the management of the territorial waters and the Exclusive Economic Zones (EEZ) of all nations.

"Caring for the World"

Substantial attention was given to the marine component of "Caring for the World", since the participants found the chapter to be seriously lacking. Written comments have been passed to the team preparing the Strategy.

WORKSHOP 5

Realistic Strategies for Tropical Forests

Chair: Dr Duncan Poore

Convenors: Mr Jeff Sayer and Ms Jill Blockhus

Rapporteur: Ms Jacqueline Sawyer

The objective of the Workshop was to build a consensus on several critical tropical forest issues, as a guide to the orientation of the IUCN Forest Conservation Programme for the next three years. The critical issues were:

- the role of industrial forestry in forest conservation and the strategy that the International Tropical Timber Organization (ITTO) should pursue to promote biodiversity conservation;
- the strategies for development in general that are most conducive to forest conservation;
- the optimal institutional arrangements for international support to forest conservation;
- the implications of forest loss and industrial forest use for biodiversity conservation;
- the adequacy of the coverage of these issues in Chapter 12 (Forest Lands) of "Caring for the World";
- the adequacy of IUCN's draft Triennial Programme in relation to the current situation of tropical rain forests.

The Workshop was divided into four sessions. In Session 1, speakers gave brief overviews of aspects of tropical forest conservation. Session 2 was divided into three sections, one for each tropical region. In these, summaries of the country papers produced under the ITTO project "Realistic Strategies for the Conservation of Biological Diversity in Tropical Moist Forests" were presented and discussed. Session 3 focused on deforestation rates and species extinctions; five speakers presented summaries of papers, which were then discussed. Session 4 debated the various draft tropical forest resolutions and the future work of the IUCN Forest Conservation Programme. About 200 people attended the Workshop and in all thirty presentations were made.

There was considerable debate, especially on the following topics:

1. Sustainable Management

Several participants proposed that sustainability should be taken to refer to sustainability in its widest sense, i.e. ecological, social and economic sustainability. They asked fundamental questions on how to define sustainability, how to achieve it and how to measure it. If nature conservation was a primary goal, it was clearly inappropriate to use timber production as the main index of success. A participant from a developing country pointed out that sustainability presupposes a stable political climate, a situation that does not exist at present in many tropical countries.

Many participants emphasized that sustainable forest management depends more upon solving social, economic and political problems than upon solving technological problems. But there were few specific suggestions on how to solve these problems. Within the Asia-Pacific region, for example, no single solution would be possible since countries in the region are so heterogeneous. For example, some are economically much more advanced than others. Universal solutions will not be appropriate. Instead solutions must be fine-tuned to suit the particular needs of each country. Forest use had to be placed within the context of overall land-use planning. More trained personnel are needed, and legal and fiscal institutions need strengthening.

2. Tropical Forestry Action Plan (TFAP)

Some participants suggested that in view of the relative youth of the plan and the immensity of the problems it is trying to tackle, it should be extended, perhaps for another 10 years. However, all agreed that it should be subject to improvements and modifications. For example, funding agencies must consult local populations and national governments more fully. Local people should be the initiators of policy. Governments must take care that they properly represent their forest peoples. Funding agencies should be encouraged to sustain their support for an extended period of time.

3. International Tropical Timber Organization (ITTO)

Frequent reference was made to the need to develop markets for low-volume, high-value timber and non-timber products if forests are to be managed sustainably. It was felt that this was an

area to which the ITTO could make a significant contribution. It could, for example, devise a labelling scheme for timber from sustainable sources. It was also felt that ITTO had a role to play in developing guidelines for timber extraction and the promotion of appropriate forest uses.

4. Indigenous Peoples

Throughout the Workshop speakers referred to the need to involve local peoples in managing tropical forests. Several participants stressed that traditional rights of indigenous peoples should be respected and incorporated into management planning. Europeans have tended to regard tropical forests as empty places when in fact they may have been the home of indigenous peoples. This is a root cause of a disregard of indigenous peoples when planning forest use.

Some participants felt that more money should be diverted into research to establish how indigenous peoples manage their forests. This would be relatively inexpensive in comparison to the vast sums spent on researching technology for industrial forestry.

5. Timber Boycotts

Many participants were of the view that timber boycotts would lead to further destruction of tropical forests. They argued that if forests do not have any monetary value, governments of tropical countries will feel less compelled to ensure that they survive. However, there is a considerable problem in ensuring markets for timber from sustainable sources. So long as the timber market is open and unconditional, non-sustainable timber operators will be able to undercut sustainable operators, as sustainable management is considerably more expensive. Some participants felt that it is necessary therefore to close the market to timber from unsustainable sources. Boycotts offer a means of doing this. There is a considerable role for the international community, including ITTO, to play in steering the market towards positive discrimination in favour of sustainable products.

One speaker felt that the terms of boycotts should be better defined—boycotts for what purpose, for how long and for whom. He pointed out that NGOs call for boycotts in order to focus the attention of people in Europe, USA and Japan on the currently extremely inequitable terms of trade between North and South.

A draft recommendation proposing a boycott of timber from East Malaysia caused much dissension.

Some participants felt that it was unfair to single out Malaysia for a boycott and that developed countries have no right to condemn people employed by the timber trade in Sarawak (one-fifth of the population) to unemployment. Others felt that in a crisis strong measures are called for, and pointed out that although people in Sarawak have a right to employment now, they also have a right to employment in the long term. Once the timber supply in Sarawak is exhausted, and this promises to be quite soon, they will cease to have this opportunity.

Other participants felt that perhaps the Sarawak Government should be given greater credit for the moves it is at present taking to try and achieve sustainable management, and that developed importing nations had a duty to help it in this task. They suggested that Sarawak could commit itself to exporting sustainably produced timber with the proviso that it receive adequate help from importing nations during the transition.

It was pointed out that logging may be a relatively temporary phenomenon. Most tropical timber is used for non-specialist purposes and it is likely that alternative materials will be found for these. Also, timber plantations in the South, for example in Brazil, Chile and New Zealand, are about to come on stream, so there will be less need to log primary forests. There is good reason therefore to concentrate on managing tropical forests for low-volume, high-value timber and non-timber products.

6. Protected Areas

The Workshop agreed on the need to devise the best plans and techniques for establishing appropriate and viable protected areas as a basis for the conservation of biological diversity in tropical forests and for the maintenance of essential ecological services. It also agreed that the recent decline in the rate at which new protected areas are being established should be reversed as far as possible. Nevertheless, it was recognized that options are running out in many tropical areas. Many existing protected areas are under considerable threat and new strategies for ensuring their survival will have to be devised and implemented. Many of the best Forest Reserves have actually been destroyed in recent years. Many participants agreed that it was unrealistic to advocate total protection of all tropical forests. Rather, much of the forest will have to be used.

Recommendations on the IUCN Forest Conservation Programme

The consensus was that IUCN's Forest Conservation Programme should focus on nature protection (IUCN's "heartland") and the application of ecological science in sustainable forest management. Specific recommendations are listed below:

1. The Programme should promote the use of non-timber products and very careful selective logging. Many participants felt that there is a need to diversify the types of products extracted from tropical forests and that IUCN could play a role in ensuring that the relevant research is undertaken. The Programme should also encourage studies on how local populations use their wild flora and fauna, and how this knowledge, once obtained, could be integrated into management plans.
2. Some participants thought that the Programme should pay more attention to examining the social and economic problems in managing tropical forests.
3. The Programme should promote only those forest management systems that respect the rights of indigenous peoples, do least damage to ecosystems and maximize biodiversity.
4. As ITTO is seeking to promote sustainability in its broadest sense, the Programme should encourage and assist ITTO's efforts as far as it can. For example, realistic strategies for conservation of biological diversity in production forests will require a substantial transfer of resources from developed to developing countries and the Programme could help ITTO in devising the mechanisms for this.
5. The Programme, in conjunction with ITTO, should consider devising a system of inventory that takes account of both timber and non-timber species.
6. The Programme should devise a methodology for ascertaining whether a proposed logging scheme is truly sustainable.
7. The Programme should proceed cautiously when devising strategies for the protection and/or use of tropical forests, given the certainty that considerable genetic erosion is taking place, even if there is debate over species extinction rates.
8. Since the amount of secondary forest is increasing rapidly, the Programme should develop research for its sustainable management and use. This would take some of the pressure off primary forests. In particular, the Programme

should promote research on how to enrich secondary forests and should emphasize the regeneration of commercial species. The Programme should also advocate minimum disturbance of primary forests.

9. It was suggested that disciplines such as anthropology and ethnobotany should have a place in the Programme.
10. The Programme should promote the expansion of existing protected areas and the establishment of new ones. In planning protected areas the Programme should make the fullest use of indigenous knowledge and skills. Precautions should always be taken to ensure that indigenous peoples receive benefits from any action taken.

WORKSHOP 6

Critical Issues for Protected Areas

Chairs: Mr P.H.C. (Bing) Lucas, Mr Harold Eidsvik, Dr Jim Thorsell, Mr Adrian Phillips

Convenor: Dr Jim Thorsell

Rapporteur: Mr John D. Waugh

123 people from 53 countries participated in the Workshop. They discussed three main issues, summarized below, and advised on the IV World Congress on National Parks and Protected Areas, the General Assembly resolutions, "Caring for the World" and the IUCN Protected Areas Programme.

1. The Status and Needs of Protected Areas

The 2990 *United Nations List* published by WCMC and CNPPA lists 6,940 areas covering 651 million hectares. A world directory of protected area systems is planned, including summaries of legislation, lists and maps of sites, and bibliographies. Other assessments and directories underway in cooperation with WCMC include regional protected areas directories and an assessment of managed areas in the tropics. WCMC is developing its computer system which will allow provision of data subsets and direct access. The CNPPA membership will be mobilized to collect better information for WCMC and to collaborate in producing

more succinct and useful products.

A discussion of the status and trends of protected areas in Eastern and Central Europe illustrated how changing political circumstances provide protected area managers with new challenges and opportunities. Discontent over the environmental situation has had a significant impact on the political landscape, and as a result many new protected areas have been gazetted. Trans-boundary parks now have a special significance as symbols of peace. Many more opportunities exist, but they will be short-lived; the political and economic transformation which provides this opportunity also has a price. A market economy may create new problems for managers, and as tendencies towards privatization become prevalent, managers will have to compete with other demands on land resources.

Protected Landscapes (IUCN Category V) were presented as a tool for expanding the world network of protected areas. Although not much used outside Europe, there are good examples of the concept in use in East Africa, Nepal, China, and Japan, integrating people and nature within the landscape, and fostering a partnership between managers and the community. Participants believed the time for the concept of Protected Landscapes has come, offering greater opportunities for the future expansion of the network than additional Category II parks, and setting guidelines for the sustainable use of natural resources. It is, however, a mistake to use this category for "unsuccessful" National Parks. Protected Landscapes are a category in their own right and are, in fact, more difficult to manage than Category II sites because of the complexities of human relations.

A presentation on Saudi Arabia's protected area system plan stressed the importance of meeting cultural principles and socio-economic considerations in protected area management. Saudi Arabia's system is based upon the 1400 year-old *hima* system of clan-managed resource reserves.

A presentation on the identification of priority sites for biodiversity conservation in Amazonia followed. In this international collaborative process, a number of IUCN members had developed a cartographic database to overlay biodiversity with land-use and protection. A departure point for more intensive work, its results are defining priorities for research and action.

Concern about the viability of protected areas and for the future of the 95 per cent of land not under strict protection led to a discussion on how to expand the influence of protected areas through management of buffer zones. Participants advocated shifting from a defensive to an offensive posture, averting the trend towards a carpet of monocultures in which only small islands of

biodiversity would be retained. Buffer zones, it was argued, are not merely mitigation tools, but opportunities to change attitudes and production systems, integrating IUCN's Biodiversity Programme with its Protected Area Programme. This is not a process of opening protected areas to production, but of scaling protection from the park outwards. Participants were reminded that a buffer zone need not be directly contiguous with the park boundary, but could include land away from the park from which threats to the integrity of a park ecosystem emanate.

Buffer zone management requires new technologies, training of managers in sustainable production, and integration with development forces. The community participation process has demonstrated laudatory effects well beyond the protected area boundary, highlighting the relevance of protected areas programmes to community interests.

2. Issues in Protected Area Management

A number of case studies and papers were presented on topics of current interest to protected area managers, including people and protected areas, protected areas as an instrument of regional planning, tourism and protected areas, financial support for management, and research.

The presentation on people in protected areas highlighted the fact that even in truly difficult cases, such as that of the Sierra Nevada de Santa Marta in Colombia, where protected area management is complicated by conflict between the government and narcotic traffickers, indigenous people, colonists and fishing communities, a powerful metaphor for conservation which unified people could be found—in this case the forests of the mountain range maintained the water supply to nearby towns.

There are too few case studies on tourism issues and park managers remain suspicious of ecotourism. IUCN should help park managers to form productive partnerships with this major growth industry, which can enhance protection while preventing abuse of the resource.

Debt swaps have not resulted in the trickle-down to the field anticipated by managers. The presentation on finance for protected areas argued for equitability and efficiency through a hierarchy of funding and support sources, simultaneously increasing locally generated support and strengthening institutions. CNPPA should help provide access to information and training about financial resources, do more work on user-fees and cost-effectiveness issues, and help park managers market the benefits of their parks.

Most protected areas have an inadequate research capability. To ensure that maximum benefits accrue from research, managers were urged to communicate with researchers, to clarify ground rules, to seek peer review, and, more than anything else, to encourage and commission the research they needed.

3. The World Heritage Convention

The Workshop devoted its attention to the the past, present and future of the World Heritage Convention. An overview of the Convention gave participants a sense of the political process in listing World Heritage Sites and of the salient issues, including the confusion and opportunities afforded by the joint listing of both cultural and natural sites. The main constraint to implementing World Heritage is the limited staff resources available in UNESCO and IUCN. As the list of sites grows, evaluation of nominations is increasingly overshadowed by the need to monitor existing sites, a task for which there is limited capacity at present.

1992, the 20th anniversary of the Convention, provides an opportunity for its assessment. A Task Force should be formed to undertake a "post-audit" of the Convention, focussing on:

- staffing for implementation;
- potential of the World Heritage Fund;
- comparing the Secretariat with that of other conventions, such as CITES, and recommending alternative administrative arrangements;
- strengthening the management of sites;
- improving communications and education;
- examining mixed-site criteria;
- developing criteria for protected natural landscapes and seascapes;
- reviewing the listing process to consider four categories of site: cultural heritage; protected cultural landscape; natural heritage; and protected natural landscape.

The Task Force should be funded independently of both UNESCO and the IUCN Secretariat, and should report to the Chair of CNPPA. It should be comprised of those who were initially involved in the World Heritage concept.

The Workshop was warned that the Convention was not an honours list, and may indeed be a constraint to certain forms of development. A

"Security Council" for the World's Heritage may be in order, as the principal threat to sites comes increasingly from governments themselves.

In Australia, a number of lessons have been learned in listing sites. The most important is that the selection criteria lack legal precision, containing many unquantifiable standards, such as "outstanding universal value", and even lacking total consistency with the definitions provided in the Convention. In addition, questions had been raised on the consistency with which the criteria are actually applied. One presentation urged that integrity of the ecosystem, rather than degrees of threat and protection, be considered in evaluating sites. Comparative, rather than absolute, standards of value should also be applied, suggesting that it is crucial that information be available about comparable sites elsewhere. A particular management consideration in Australia is the debate over appropriate use, especially in those areas with no protection except the World Heritage designation.

Various presentations outlined the prospects for potential sites in New Zealand, Australia, the Southern Ocean and Japan. Participants hoped that in Australia the World Heritage Convention would become less a way of preventing destruction and a tool for local battles, and more a recognition of universal value.

IV World Congress on National Parks and Protected Areas

The Draft Programme for the 1992 World Congress on National Parks and Protected Areas was received with acclaim; participants felt that there was a high degree of consistency between the issues highlighted in the Workshop and issues proposed for the Congress.

Resolutions

The draft General Assembly resolutions were reviewed. The principle of protecting the integrity of parks and World Heritage sites from incompatible activities, notably mining, was reaffirmed.

"Caring for the World"

Participants emphasized that protected areas are central to achieving sustainability, a concept that the Workshop felt was being lost in the draft of "Caring for the World". There was a unanimous view that protected areas merit a separate chapter. The Workshop specifically recommended that the

revised IUCN Protected Area categories be outlined in the document. The Workshop also hoped that there would be harmony between the conclusions of "Caring for the World" and the conclusions and recommendations of the IV World Congress on National Parks and Protected Areas.

Recommendations on the IUCN Protected Areas Programme

The IUCN Protected Areas Programme for the next triennium covers all the critical issues. The Workshop did, however, recommend that the Programme give some elements more priority. These are:

1. enhancing the effectiveness of management through institution-building and through developing financial and human resources, with training at all levels;
2. promoting expansion of the global network of protected areas.

Areas of second priority were:

1. applying science to monitoring incremental change, especially climatic change, and meeting challenges to management;
2. developing innovative approaches for creative financing in addition to existing mechanisms;
3. addressing social and economic concerns, in particular providing economic benefits to local people and increasing their involvement;
4. supporting international conventions, in particular the World Heritage Convention. The Workshop expressed concern at the low level of funding, and hence of security, for IUCN's vital evaluation and monitoring work;
5. fostering cooperation at all levels, but especially for the border park concept at present so relevant in Europe.

This programme is ambitious. The IV World Congress on National Parks and Protected Areas, in 1992, and its essential follow-up must provide a mechanism for achieving these tasks.

The ability to harness an enthusiastic network is crucial. This network is ready, willing and able—but requires assurance of a secretariat capacity to tap it. If IUCN can assure the parks network of that capacity, CNPPA will be further empowered to do its job.

(The information from the Workshop will be used in discussions on the Commission's work and the full proceedings will be available in 1991.)

Sustainable Use of Wildlife

Chair: Mr Henry Nsanjama

Convenor: Dr Stephen Edwards

Rapporteurs: Mr Alistair Gammell, Dr Anthony Hall Martin, Mr Effendy Sumardja, Mr Timothy Swanson

The objectives of the Workshop were:

- to review the policies and status of sustainable wildlife management programmes in representative countries;
- to identify the common conditions necessary for successful programmes on sustainable use of wildlife;
- to develop preliminary criteria and guidelines on how to evaluate sustainable wildlife use projects for developing countries and development assistance agencies;
- to determine IUCN's role in developing and implementing sustainable wildlife management programmes.

The Workshop was well attended with more than 130 participants, representing a very broad spectrum of the Union's membership and allowing for a full and detailed discussion of the issues. On the first day background papers were presented, including reviews of activities in eight countries. On the second day the participants divided into four working groups to develop preliminary criteria for the sustainable use of wildlife, from the perspective of rural communities, national governments, international bodies, and biological considerations.

Participants endorsed the principle that sustainable use of some species of wildlife can be a powerful tool for the conservation of both the species concerned and of their habitat. They noted that sustainable use could be either consumptive (i.e. harvesting the species) or non-consumptive (e.g. where wildlife is managed as a spectacle for tourists), and that the concept applied to both animals and plants. There was also agreement that wild animals should be protected from avoidable cruelty and suffering.

The major preliminary conclusions of the four working groups were:

Rural/Local Communities

- must be involved in the management of the wildlife resource and share in the responsibility for conserving it;
- are obliged to manage their wildlife resources according to their government's laws, policies and regulations;
- must establish mechanisms to share the benefits from using wildlife equitably within their community;
- should be encouraged to form "action groups" or "coordinating councils" to ensure that the wildlife resources are properly managed and that the benefits are equitably shared;
- may need to establish controls (e.g. seasons, quotas) to safeguard their wildlife resources;
- may need to organize extension and educational services to provide technical information about the species and its habitat to villagers.

National Governments

- in most developing countries, need to adopt policies and enact laws to allow rural communities access to, or ownership of, wildlife resources;
- need to provide economic incentives that favour management of native wildlife, to stop the escalating conversion of wildlands to agriculture or livestock grazing, which destroys the natural habitat and may not be sustainable;
- in many developing countries, need to improve their capacity to enforce legislation and provide the training necessary for field officers to protect wildlife resources from unsustainable exploitation;
- need to acquire base-line data on the status of wildlife populations (particularly those species being considered for utilization) and establish requirements and procedures for follow-up monitoring of the populations;
- must ensure, where appropriate, that the benefits from both consumptive and non-consumptive uses of wildlife are shared equitably with those rural communities responsible for managing and conserving the resources;

where possible, should support community use of wildlife in ways that are sustainable.

International Bodies

- should encourage and support only the wise and sustainable use of wildlife;
- should support the implementation of adequate control measures to avoid unsustainable exploitation of wildlife;
- should encourage both range states and consumer nations to fulfill their obligations under existing domestic and international laws governing the management and use of wildlife resources;
- should encourage developed countries to fulfill their responsibilities to exporting countries by providing technical and financial assistance to enhance their capacity to manage their wildlife resources;
- should recognize that importing countries share responsibility for controlling trade in wildlife products and that such controls should be designed to prevent unsustainable exploitation of wildlife resources.

Biological Factors

The following should be considered:

- adequate protected areas, where harvesting is excluded, should be established to ensure that a minimal viable population of the species is protected from exploitation;
- the target species, and those associated with it, should be evaluated to establish their abundance and distribution;
- as much understanding of the biological requirements of the species should be gained as time, technical capacity and finances permit;
- the continued harvest of wild populations should be made conditional on adequate monitoring, particularly if complete biological and ecological data are not available;
- some species can be adequately protected by an adaptive process in which annual harvest levels are set on the basis of annual population censuses;

ultimate success depends on the community's (or government's) ability to establish and enforce controls such as harvest quotas or seasons.

Conclusions and Proposals for IUCN Action

Participants agreed that the Workshop provided a very good starting point for assessing the concept of the wise and sustainable use of wildlife, but that more time was needed to prepare full guidelines on how to develop and implement activities on this theme. They also expressed strong support for IUCN's continued work in this field.

Many participants contributed to the drafting of the recommendation on this theme, which was adopted by the General Assembly without dissent (18.24).

The recommendation supports the principle of sustainable use of wildlife. In particular, it calls on the Director General, in consultation with the Chair of the Species Survival Commission, to:

- develop guidelines for the sustainable use of wildlife, based on scientific, socio-economic and traditional knowledge, and which would address the principle of equitable allocation of resources and distribution of benefits, as well as other matters proposed by participants in the General Assembly Workshop;
- work to achieve the agreement of IUCN members to endorse and implement these guidelines;
- undertake or sponsor field projects to research and test factors needed to ensure successful sustainable use of wildlife; and
- review as appropriate existing programmes and practices involving the use of wildlife and recommend modifications necessary in order to conform with the IUCN guidelines.

In conclusion, the Workshop affirmed that ethical, wise and sustainable use of some wildlife can provide an alternative or supplementary means of productive land-use, and can be consistent with and encourage conservation, where such use is in accordance with adequate safeguards.

A Global Strategy for Conserving Wetlands

Chair: Dr Pius Anadu, Dr Sanit Aksornkae, Dr Joe Larson, Dr Mike Moser

Convenors: Dr Patrick Dugan, Dr Jean-Yves Pirot

Rapporteurs: Dr Geoffrey Howard, Dr Enriquet Lahmann

The Workshop provided an opportunity for IUCN members and partners to suggest how best the activities of the IUCN Wetlands Programme should be developed in 1991-1993, following the recommendations of the strategy in *Wetland Conservation: a review of current issues and required actions*. The first session reviewed a series of papers examining the principal wetland conservation problems facing selected countries and regions. Building upon this introduction, the second session reviewed selected activities in the IUCN Wetlands Programme. The third session reviewed the impact of market forces and government policies on wetlands. The fourth examined activities of IUCN members and discussed IUCN's role in supporting members' efforts in this field. The Workshop concluded with a discussion of "Caring for the World" and of the draft recommendation on wetlands before the General Assembly.

The following themes emerged from the discussion of wetland conservation priorities and approaches.

1. IUCN's Wetland Conservation Goal

Clear policy goals such as the "No net loss" policy in the USA have been helpful in calling people's attention to the urgent need for wetland conservation. However, great care should be taken to ensure that the choice of such goals does not obscure the critical conservation issues. In the USA the "No net loss" goal has not prevented wetland loss and is felt to have distracted attention from the importance of maintaining wetland functions. The meeting therefore concluded that the central goal of IUCN's wetland work should be to maintain the functional values and biodiversity of wetland ecosystems.

2. The Programme's Approach

Wetland loss has been greatest in industrialized countries. As a result, many people in developing countries equate wetland destruction with development. While emphasizing that loss of wetlands has often led to long-term social and economic costs, IUCN's Wetlands Programme must adopt a constructive approach which seeks to demonstrate how to achieve sustainable use of these ecosystems while maintaining the ecosystem functions upon which people and wetland biodiversity depend.

3. Policy

Many politicians are aware of the need for a change in wetland management practices and policies. However, they do not always know the practical steps they would have to take to design and apply effective conservation policies.

One of the reasons for much wetland degradation and loss is the perception and management of wetlands as closed ecosystems. There is therefore a major need to promote a catchment-wide approach to wetland conservation planning and management.

Many policy instruments already exist. In many cases the challenge is to take these instruments and make them more effective. There is often little need for further research, but rather existing information should be used to develop tools that can be used to implement policies.

Research may, however, be needed in specific countries in order to adapt the scientific understanding acquired elsewhere to the national context and to ensure that detailed conservation arguments are technically sound.

4. Information

An improved flow of information is vital to ensuring effective conservation action. Existing information is often not used in the decision-making process, largely due to the sectoral organization of agencies responsible for wetland management. Even within agencies sectoral structures can often prevent effective exchange of information.

Information should also be provided to the local communities living in and using wetlands. They are most concerned about wetland conservation and management and many political forces are sensitive to their voice. In many developing countries the most effective form of intervention is to

provide these communities with information so that they can resolve their own conflicts.

The development assistance community, politicians, lawyers, teachers and the general public are other groups that should be made more aware of the real issues leading to wetland loss, and of the real benefit of wetland conservation.

5. Critical Ecosystems

While all wetlands yield some benefits to human society, the scale of these benefits varies from one ecosystem or region to another. Participants drew special attention to the importance of wetlands in arid and semi-arid zones and a recommendation on this theme was endorsed strongly (subsequently adopted by the General Assembly as 18.69). They gave similar emphasis to mangroves and other coastal wetlands. The Workshop also stressed the role of wetlands in climatic change, notably the function of peatlands in storing carbon, and the significance of methane emissions from other wetlands.

Recommendations on the IUCN Wetlands Programme

The discussion of these issues led to 10 points of guidance to the IUCN Wetlands Programme.

1. IUCN should continue to pursue field demonstration projects that develop practical solutions to wetland management problems. In doing this, the Union should promote a catchment-wide approach to wetland conservation planning and management. There should, however, be a careful balance between field activities and policy initiatives. To achieve this, the work on policy should be increased. Also, field projects should include a policy component, in order that the results of the project can feed back into government policy and so increase the probability of long-term impact.
2. While policy work and field projects must be based on science, the Programme needs to give greater attention to distilling existing information into a form useful for influencing policy, rather than conducting more research. IUCN should, therefore, encourage the development arm of R & D, and ensure that policies are adapted to local social and economic contexts.
3. To strengthen the flow of information on wetland management, IUCN should develop management and planning tools that promote a

cross-sectoral approach to wetland management. These should include manuals and training courses. To increase the catalytic effect of such work IUCN should, where possible, assist bilateral agencies in developing and applying such an integrated approach. IUCN Regional Programmes or national projects can play a major role in promoting this cross-sectoral approach.

4. In developing its policy work, the Programme should explore with the Environmental Law Centre the feasibility of developing regional models of wetland legislation and policy which may be readily applicable within those regions where the problems of wetland management are reasonably similar from country to country.
5. Also in developing its policy work, the Programme should seek ways of ensuring that the value of wetlands can be considered in national forums on sustainable development, in particular by providing scientific information and expertise to government and NGO members to use in discussions on sustainable development.
6. The Programme should strengthen its communication efforts further, so as to ensure that the media are more aware of the real wetland issues. It should prepare materials that members can use in this work.
7. To assist members and partners to learn from each other's experience in wetland conservation and management, the regional focus of the Programme should be strengthened further, with particular attention being given to developing regional programmes in East Africa, South America and Asia. These regional programmes should emphasize networking between members and partners.
8. The Programme should continue to work closely with the Ramsar Convention, assisting the Convention's Wise Use project and so playing a major role in the promotion of cross-sectoral and catchment-wide approaches to wetland management.
9. The Programme should strengthen its work on wetlands in arid regions, and on coastal wetlands, especially mangroves. For the latter close collaboration with the Marine Programme should be continued and, where possible, strengthened.
10. The Programme should seek to strengthen IUCN's understanding of the role of wetlands in climatic change.

The Conservation Strategy for Antarctica

Chair: Professor George Knox

Convenors: Dr Paul Dingwall and Dr Danny Elder

Rapporteurs: Ms Cassandra Phillips and Dr Paul Dingwall

The four objectives of the Workshop were:

1. to review and debate the content of IUCN's draft Antarctic Conservation Strategy (ACS), prepared during 1988-1990, and reach a consensus on finalizing and distributing it;
2. to review and debate the three draft motions on the Antarctic submitted to the 18th Session of the General Assembly (18/6, 18/7, 18/8);
3. to review and debate the section of the draft IUCN Programme 1991-1993 on Antarctica;
4. to review and debate the sections of "Caring for the World" on Antarctica.

The Workshop was attended by about 35 delegates, including representatives from SCAR (Scientific Committee for Antarctic Research), several governments (Australia, Belgium, Germany, France, New Zealand, UK, USA) and a variety of NGOs. The Director General attended a substantial part of the Workshop.

The attendance would have been higher if many potential participants had not been in Chile for the Antarctic Treaty Special Consultative Meeting (SCM), taking place on 19 November to 6 December 1990.

The Workshop was conducted entirely by discussion, with no formal presentations.

Antarctic Conservation Strategy

The Workshop began with reports on the progress being made at the government meeting in Chile. There seemed to be agreement among the Antarctic Treaty Parties that a new legal instrument should be added to the Antarctic Treaty System to provide comprehensive environmental protection to the whole of the Antarctic. The Workshop agreed that the IUCN Strategy would need considerable revision to take account of this development. Otherwise there was a danger that the IUCN

Strategy would be left behind by the Antarctic Treaty Powers in some important respects.

The major points to emerge from discussion were:

- (a) the document should concentrate on the principles and goals of Antarctic conservation and should make recommendations on the policies that would have to be put in place to accomplish these principles and goals;
- (b) the conservation objectives should be met by the development of a comprehensive environmental protection system for Antarctica as a whole, within which specially protected or reserved areas of different categories could be designated;
- (c) environmental monitoring programmes should be considerably strengthened and funding should be provided for this purpose;
- (d) Environmental Impact Assessment (EIA) procedures in Antarctica should be strengthened and an independent body established to review EIAs and to make recommendations;
- (e) strict guidelines for the conduct of Antarctic tourism should be developed;
- (f) the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) should urgently adopt a comprehensive plan for the rehabilitation of depleted fish stocks and for the management of krill stocks within the overall framework of the ecosystem objectives of the Convention;
- (g) on the question of the treatment in the IUCN Strategy of CRAMRA (the Mining Convention which has been negotiated but not ratified by any Party), it was agreed that a revised and abbreviated section analysing the Convention should be put in an Annex. On the mining question, a new section was drafted which concluded that IUCN considered that mineral resource activities were not compatible with the conservation of the Antarctic environment and that they should be permanently excluded by international agreement. However, the Workshop recognized that the Strategy would have to conform with resolutions and recommendations on Antarctica adopted by the General Assembly.

The Workshop recommended that IUCN revise its draft Strategy in the light of their discussions, of the decisions arising from the meeting in Chile, and of the resolutions on Antarctica subsequently adopted by the General Assembly. Because the drafting of the environmental protection measures

would be continued at the next Special Consultative Meeting, expected to be in April 1991, and because IUCN's Strategy should be available in time for it, IUCN should revise the document in early 1991 as a matter of urgency. Specific comments and suggestions for changes should be submitted by January 1991; a small group would then produce a new draft. This would be sent for review to IUCN members who were specially qualified or interested in Antarctic conservation, including those who had been active in the Workshop. The peer review would have to be rapid, because of the April 1991 deadline. The revised version would be published in English, French and Spanish.

Resolutions and Recommendations

The resolution on the IUCN Antarctic Conservation Strategy, from the IUCN Council, was endorsed and some amendments were suggested. (It was subsequently approved by the General Assembly as 18.74.)

The recommendation on Antarctica, from the Australian Conservation Foundation, was discussed and some amendments were suggested. These dealt especially with the minerals issue. (The recommendation was subsequently approved as 18.75, after considerable debate in the Plenary and statements of position by delegations of three IUCN State members.)

It was agreed that draft Resolution 18/8 did not need to go forward in the light of the decisions made on re-drafting the Antarctic Conservation Strategy.

The IUCN Programme 1991-1993

The Workshop approved Section A2 (Chapter I, Part II of the IUCN Programme 1991-1993) on completing and promoting the Antarctic Conservation Strategy.

"Caring for the World"

The Workshop advised that the changes being made to the IUCN Antarctic Conservation Strategy would have to be considered in the revision of "Caring for the World".

WORKSHOP 10

The Environmental Implications of Global Change

Chair: Professor Hans Lundberg

Convenor: Ms Elaine Dickinson

Rapporteur: Dr John Pernetta

Between 50 and 60 people attended the Workshop during the two days and participated in the debate and discussion of the proposed programme and of the various issues raised.

The Workshop discussed two major, interlinked sources of global environmental change—rapid population increase and movement causing non-sustainable transformation of natural ecosystems; and climate change induced by the increased accumulation of greenhouse gases in the atmosphere.

The Workshop began with 11 short review papers. These addressed key issues within the framework of global change and specific case studies of potential impacts from climate change on countries such as Bangladesh and the Republic of the Maldives.

General Conclusions

It was agreed that IUCN had a significant role to play in addressing planning for global change. It was also clear that the Union's contribution had to be broadly based, drawing on all thematic programmes and Commission networks.

The need for an integrated approach to assess the impact of global change was apparent from several case studies, while the further need for an intellectual framework within which to organize knowledge on such impacts was highlighted.

It was abundantly clear from the discussions that the whole approach of the Union to conservation and environmental management must take the implications of global change into account, since the distributions of species and whole ecosystems may be dramatically altered as a consequence of changes which have already started. One scenario presented to the Workshop suggested that as few as 30 per cent of existing national parks and protected areas may be suitable for the long-term maintenance of the systems and species that they were established to protect. Such

considerations will provide important inputs to the 1992 Parks Congress.

The need to monitor change was raised during discussions and it was suggested that IUCN could have a significant role to play in identifying key indicator species; in developing methodologies for monitoring biological systems; in identifying sensitive areas; and in assessing the relative vulnerability of particular communities and areas. Coastal zones are a critically important area for the examination of environmental impacts of global change given their high biological productivity, high population density and the potentially extensive impact resulting from global warming and sea-level rise.

The inadequacy of present knowledge concerning the magnitude and extent of the potential environmental impacts of global change received considerable attention during discussions. IUCN could make an important contribution to the synthesis of existing information and the application of existing databases on biological systems, thereby identifying key issues and areas for further detailed study. This information should be made more readily available to policy-makers. It would be particularly relevant to the development of National Conservation Strategies.

Participants agreed on the need for IUCN's global change programme to be integrated with the work of those other institutions that are currently addressing different aspects of the problem, notably the International Geosphere-Biosphere Programme (IGBP), WWF, WCMC and UNEP. IUCN should also take an active part in the process of drafting a framework Climate Convention and its various proposed protocols. The work of the Union on the environmental implications of global change should also contribute to preparations for the United Nations Conference on Environment and Development.

Programme Advice

The Workshop stressed the following issues as being of particular importance to the future development of the Union's global change programme:

- (a) a cross-sectoral, integrated approach to assessing the environmental implications of global change, as indicated in the draft IUCN Programme 1991-1993;
- (b) an emphasis on the development of guidelines for integrating the global change perspective into other IUCN programmes and into National Conservation Strategies. These strategies must

be applicable both to current and future environments;

- (c) assessments of the implications of global change for the design, establishment and management of protected areas;
- (d) the need to identify key plant and animal species that could be used as indicators of change and included in long-term monitoring programmes. The IUCN networks and Commissions should provide guidance in this area, in particular on the methodologies to be used in biological monitoring;
- (e) the active involvement of IUCN's networks in the process of synthesizing available information on the environmental impacts of global change, stimulating the generation of new knowledge and ensuring that such knowledge is made readily available to policy-makers;
- (f) the contribution of expertise to the identification of sensitive areas and ecosystems, and the assessment of their vulnerability.

"Caring for the World"

The Workshop discussed the chapter covering the atmosphere, climate and energy and noted with concern that it contained a number of technical errors and that the text was not clear and lacked a structured framework. Specific comments were provided by participants for forwarding to the authors of the document but essentially it was felt that the chapter should be rewritten.

Major points raised were:

- (a) the need for a clearer statement differentiating the relative importance of developed and developing countries in causing global change;
- (b) the need to include up-to-date information on greenhouse gas emissions and impacts based on the recently produced IPCC reports;
- (c) the need to consider the new data and approaches suggested by the Stockholm Environment Institute;
- (d) replacement throughout the chapter of the word "stabilize" by the phrase "stabilize and reduce";
- (e) more substantial consideration of technological solutions and alternatives for energy conservation and a more balanced discussion of the sources of atmospheric pollutants, in particular expanding the discussion on the contribution of transport systems to the problem.

The Workshop unanimously recommended that the chapter be rewritten by a small expert group and that the need for technical accuracy in a document sponsored by IUCN, WWF and UNEP overrides the need for meeting production schedules.

Recommendations

Two draft recommendations related to the subject of the Workshop were considered and discussed, one on Global Climate Change (subsequently adopted by the General Assembly as 18.22) and one that called for a Global Forest Protocol within the Climate Change Convention (subsequently adopted as 18.30, Legal Instruments for the Conservation of Forests).

The Workshop made some corrections of fact and improved the wording in several places. In particular it emphasized that developing countries could not be expected to reduce their present carbon dioxide emission levels and still achieve development, while it might be considered reasonable to call on industrialized countries to reduce their carbon dioxide emissions and all countries to eliminate the production and use of chlorofluorocarbons.

Also, specifying a level of reforestation without commenting on the form that this reforestation should take was felt to be a dangerous approach since expanding the areas under monocultures of fast-growing softwoods might not be acceptable for other conservation reasons.

WORKSHOP 11

Conservation and Sustainable Development in the Sahel and other Arid Regions

Chairs: The Hon. Mersie Ejigu, Mr Amadou Mamadou

Convenors: Mr Per Ryden, Mr Jip Ketel

Rapporteur: Mr Adrian Wood, Mr Chris Geerling

This Workshop set out to review the experience gained by the Sahel Programme since the last General Assembly and to compare this with work

being undertaken in other arid regions. The specific aims of the Workshop were:

- to provide guidance to IUCN on how best to develop the Programme further;
- to explore the similarities and differences both within the Sahel region and between this region and other arid areas;
- to review the extent to which experiences from within parts of the Sahel would apply to other parts of the region, and to which experiences from other arid areas would apply to the Sahel;
- to develop further and focus better the work of the multi-disciplinary network of scientists within and outside the programme region, and to catalyse enhanced cooperation between these scientists and their institutes;
- to provide comments on "Caring for the World", especially Chapter 11;
- to examine and revise the recommendation on the Sahel Programme proposed to the General Assembly by the Niger State member delegation.

Fifty people attended the Workshop. They included 9 research scientists, 18 officials of government agencies, 5 representatives of NGOs, 6 representatives of international agencies, 11 IUCN staff and one member of the media. The Workshop was divided into four sessions, summarized in the following sections.

1. Introduction to the Sahel Programme

The Sahel Programme seeks to have a catalytic impact upon existing institutions working in the Sahel and to deepen understanding of the interaction between environmental and socio-economic processes. The value of IUCN's approach is seen to be in supporting institution-building in both government and NGOs, so strengthening local initiatives.

2. Lessons Learned from Previous Work in the Sahel

The second session included presentations on the experiences of the UN Sahel Office (UNSO) and the World Bank, as well as a review of ecological work in the Sahel. The session was introduced by an

overview paper entitled "Sahelian Africa: Conservation and Development—Where does the future lie"? This stressed the virtual bankruptcy of the Sahelian region and asked what can be done before damage becomes irreversible. Poverty, and the contradictions between state policies and the environmental needs of people, were seen as major problems.

The World Bank's programme in dryland areas has shifted over the last two decades from large-scale to small-scale projects, and has increasingly recognized the need for adaptive technologies in natural resource management. The need to understand differences within dryland areas and within the communities they support has also been recognized over the years, as has the need to take a broad non-sectoral approach. UNSO also favours small-scale projects with an integrated approach. These do not require major management inputs and are more easily replicable. The need for building local structures was stressed together with the importance of projects producing immediate material benefits for participants.

The ecological review showed how the key constraints to development in the Sahel are the nutrient and resource limitations, and that present management of these resources cannot easily be improved. Under the present conditions in the Sahel and with lack of security, the population adopts a survival strategy comprising high reproduction and mobility.

These presentations raised a number of issues, including (a) the plethora of conservation and development strategies in the Sahel, which leaves governments wondering which one to follow; (b) the limited, or even negative, impact of some of these approaches at the village level; (c) the need, nonetheless, for more financial support from donor agencies to help the Sahel address its problems (a recent coordination attempt by donors was noted); (d) the need for a balance between general studies and projects by IUCN's Sahel Programme, due to a lack of understanding of the local issues faced; (e) the need to quantify the concept of carrying capacity, which can be done if land-use, land management and the characteristics of the area concerned are defined.

The resilience of the natural resource system in the Sahel was stressed, but the overall limit to biological productivity, even under favourable rainfall conditions, was noted. This led to a discussion on the extent to which technological innovations can increase output from the natural resource systems and to increase the efficiency of labour. Economic factors will probably constrain technological innovations, while fuller use of labour within the Sahel agricultural system during

the dry season is limited by alternative opportunities outside local agriculture. The possibilities for diversifying the Sahelian economies were discussed but the limited non-agricultural potential was noted. One exception may be wildlife management for tourism.

3. Examples of Current Approaches to Natural Resource Management in the Sahel

The third session included four papers on current experiences in Sahelian countries. The first explained how the rural code in Niger is being formulated in an attempt to improve natural resource use by providing security of access to resources. This code will be based on a synthesis of traditional and modern laws. Another paper reviewed Ethiopia's experiences in natural resource planning; here planning initiatives have culminated in a National Conservation Strategy (NCS) process, based in the Ministry of Planning. This process has been facilitated by a number of natural resource-based sectoral reviews. The NCS is seen as an overall coordinating strategy for these sectoral reviews and other resource-focused strategies on issues, such as food and nutrition, and disaster prevention.

A paper on participatory land-use planning and husbandry development outlined a number of principles which are increasingly recognized as important in natural resource management, notably local participation and use of the knowledge of indigenous people. This paper also stressed the importance of socio-economic influences including the policies of governments. The final presentation reviewed the demographic situation in the Sahel and looked at one project that is trying to develop a way of raising production through intensified use of land in the Niger River delta of Mali. The increasing rate of growth in the population of the Sahel will approach 3 per cent by the year 2000, even if the medium projection is achieved, so that the population will double in 24 years.

The discussion focused upon the importance of participation in many aspects of improved natural resource management, such as developing a rural code, an NCS process and land-use planning at the national as well as local levels. Linked to this, the importance of local knowledge and practice was stressed so that improved natural resource management is built upon this expertise. However, it was pointed out that such traditional knowledge and practice may often have to be adjusted to the changing situation and so a link with external scientific knowledge is needed.

The importance of socio-economic influences upon people's behaviour towards natural resources was noted and the need for appropriate government measures and policies was stressed. These include land tenure, crop pricing and national development policies. Decentralization and the local control over natural resources are prerequisites to the development of local responsibility.

The Workshop explored the way to address the demographic issue, and noted the importance of socio-economic elements and poverty, especially as traditional methods of balancing population and resources break down. Warnings were raised over the extent to which the Sahel's population growth will slow down along the model of the "Western" demographic transition. The importance of economic development in slowing population growth was noted, along with the problems of introducing explicit population control measures in the Sahel region. The Inner Niger Delta project in Mali also raised comments about the importance of building on local resources with appropriate technology, and of helping develop the productivity of the resource base. However, the importance of ensuring that innovations are attractive to farmers was stressed so that they can be spread by lateral (farmer to farmer) adoption.

4. Comparative Experience from other Arid Areas

The fourth session had three papers on the experiences in other arid regions and their relation to the situation in the Sahel. A paper on range management in Australia highlighted similarities and differences between Australia and the Sahel. Both ecological systems are unpredictable and long-term planning is therefore impossible. Hence, policies should be event-oriented. While there are ecological similarities, however, there are significant differences in the socio-economic context. Land-use in Australia is capitalistic, with very low population densities. Livestock husbandry in the Sahel is subsistence-oriented and has to support a higher density of population.

In Botswana, the redefinition of land-use is a major issue, especially concerning the relationship between wildlife and livestock. The availability of funds (from diamond mining, etc.) has not solved the problems of transition from traditional livestock husbandry to a more commercially orientated way of land-use, nor has it prevented increased pressure on the natural resources and the threats of degradation. The conditions in Botswana also apply to the situation in Namibia, Angola, Zambia and Zimbabwe. Consequently IUCN was requested to

support an initiative from the five countries concerned, the Namibia-Kalahari Action Plan, for the management of their dryland environments.

The Saudi Arabian experience in combatting environmental degradation showed the potential for cooperation between the Sahelian countries and Saudi Arabia. A point of discussion was the differences in attitude concerning hunting, within the Gulf States and between them and Sahelian countries. Discussion focused on the way in which IUCN could support cooperation on environmental matters between the Sahelian and the Arab countries.

Programme Recommendations

The Workshop concluded with a discussion of "Caring for the World" and of the Sahel Programme's work. It made eight recommendations on the Programme.

1. In view of the complexity of the economic, social and ecological problems in the Sahel, an integrated and multi-sectoral approach should be applied to natural resource management.
2. The Sahel has special characteristics which are different from those of other arid regions in the world. At the same time there are similarities between the Sahel and other arid regions in the functioning of ecosystems. Therefore, IUCN's Sahel Programme should continue as a distinct regional programme, but a thematic programme on drylands should also be established to provide scientific and technical support to the programme in the Sahel and to other regional programmes such as those in Asia/Pacific, Southern Africa and Pakistan.
3. Given the critical population situation in the Sahel, studies on population issues should be undertaken, so as to understand the inter-relationship between population and natural resources in order to formulate policies and take appropriate action.
4. The National Conservation Strategy process is an important vehicle for analysing socio-economic and ecological conditions at country level, and provides among other things an important framework for identifying and formulating programmes and projects.
5. Rangeland management in the Sahel should be based on flexibility. In order to respond to the highly variable climatic conditions, a monitoring system on the status of land should be established, using modern technology.

6. The IUCN programme in the Sahel should play a catalytic role in ensuring that the local community actively participates in the formulation and implementation of natural resource projects, and obtains a direct material benefit from them.
7. The IUCN programme should establish stronger partnership with local organizations in the region.
8. Close links should be established with thematic programmes within IUCN so as to draw upon the expertise of the whole IUCN network. In particular, the Workshop recognized the importance of population issues and wetlands in the region.

The Workshop considered and approved the text of a recommendation on IUCN's programme in the Sahel. This recommendation also proposed that a separate thematic programme on drylands be established. It was later adopted by the General Assembly as Recommendation 18.12.

WORKSHOP 12

Harmonizing Environmental Conservation and Economic Development

Chair: Dr Michael Royston

Convenor: Dr Paul Driver

Rapporteur: Dr Paul Driver

This Workshop was arranged to discuss the ways in which continued economic development might be harmonized with the goals of environmental conservation. It therefore revisited the "Conservation for Development" philosophy from a development point of departure. Inevitably, some of the participants challenged the sustainability of economic development in the long term, but most of the debate focused on the means of solving existing development-driven environmental problems. Much of the discussion was centred on the policies and activities of the two major agents of development, the international development aid agencies and the corporate sector.

The Workshop spanned two days and was well attended throughout. The mornings were devoted

to presentations by invited speakers and the afternoons were used for discussion within small working groups, which reported back to the full Workshop. Australian NGO participants made two additional presentations on ecologically sustainable development.

Assessment and Valuation of Natural Resources

The first day of the Workshop addressed the assessment and valuation of natural resources that are subject to development pressure.

Contrasting perspectives of agriculture were provided from Eastern and Western Europe. The former is struggling to improve productivity in the face of air, water and soil pollution, while the latter is attempting to retreat from a position of over-production. The Dutch experience of taking land out of agriculture solely for conservation purposes provided an interesting, if expensive, example of moves to harmonize conservation and agricultural development in Western Europe.

Presentations by delegates from the UK Overseas Development Administration (ODA), the Australian International Development Assistance Bureau (AIDAB) and the Australian Resource Assessment Commission (RAC) provided three different approaches to the assessment of development proposals at the planning stage. However, there was a convergence of various principles of assessment: for example, the need for early attention to environmental issues in the planning process, the need to strive for the design of ecologically sustainable development projects, and the need for public consultation and participation in the assessment process. This latter point received considerable support from participants, particularly in relation to ecological and cultural resources, which cannot be valued simply using the approach of cost-benefit analysis.

Costing and valuation were considered in more detail using two examples: the goods and services provided by wetlands, and the cost of withdrawing CFCs in India. The former showed that while the valuation of some natural resources is difficult, and may be impossible, a number of economic approaches can be used to demonstrate the worth of apparently unused wildlands, thus helping to improve the development decision-making process. The latter indicated that conservation is not just a matter of finding the right technical solution; the solution can only be applied within the economic and commercial framework, which will slow the pace of industrial reform.

A presentation on energy production and the

environment in Eastern Europe indicated that the reform of power production to reduce its impact on the environment will take a very long time. There is a willingness to reduce the production of both greenhouse gases and 'traditional' air pollutants. However, the harsh reality is that the locally available hydrocarbon energy sources are 'dirty', better quality imports would not be economically viable and alternative methods of power production could result in other undesirable environmental effects. The importance of further west-east transfer of technology in pollution control, environmental conservation and restoration was recognized.

Environmental Protection Policies of Industrial Corporations

Speakers from Australia, Pakistan, UK, USA and Zimbabwe spoke on this theme. They indicated that many companies are already technically advanced in the environmental assessment and management of their activities, and that the financial penalties of bad environmental management are beginning to bite. While harmonization between industrial development and conservation is making some progress, there appears to be less harmonization between the industrial sector and conservation interest groups, particularly in Australia. In the lively discussion of this topic, the value of National Conservation Strategies (NCS) was introduced. The NCS was described not only as a process of developing appropriate policies on natural resource utilization, but also as a means of bringing together apparently opposing views in order to develop a common approach. The experience of Botswana was particularly useful in demonstrating that if the NCS process is persisted with, then a way forward can be found, albeit involving compromise.

In a wide-ranging debate on the very broad subject of harmonization, IUCN was seen to have a potentially important role to play. There was a strong view that IUCN should concentrate on conservation within ecologically sustainable development and that this should be reflected in its Mission Statement. It was felt that IUCN should take a leadership role in the development of principles for sustainable development, and that its unique access to governments, government agencies, NGOs and development agencies would assist in applying such principles.

The IUCN Programme

The possibility of a link between IUCN and the corporate sector is inevitably a delicate issue, given that much of the environmental degradation which IUCN strives to prevent has been caused by the activities of corporate enterprises. It was felt, however, that some relationship between IUCN and business would be mutually beneficial. The consensus was that this relationship should not necessarily amount to membership by individual corporations, and certainly not membership with voting rights. Dialogue through specially formed industry associations could be one of the options worthy of further study.

It was felt that IUCN's activities would be made more effective by greater regionalization, which should be encouraged and supported. IUCN's services to its members were identified as of benefit in the drive to harmonize conservation and development. Services in the provision of information, appropriate technology transfer, environmental law, education, in-country training, EIA support and resource economics were considered to be of greatest potential value. The provision of existing services was endorsed, but it is clear that a greater effort is needed to inform members of the services that are available. In the provision of services, it is necessary to maintain a link between the technical and social science elements. For example, in providing help with the assessment of natural resources, traditional values and intangibles are not forgotten.

Finally, in briefly discussing "Caring for the World" participants returned to the initial comment in this report, that economic development *ad infinitum* should not be assumed. In harmonizing environmental conservation and economic development, ecologically sustainable development should be the goal.

AD HOC WORKSHOP

Future Orientation of IUCN's Women and Natural Resource Management Programme

Chair: Dr Pietronella van den Oever

The purpose of this well-attended evening meeting was to update participants on the progress of

IUCN's Women and Natural Resource Management Programme and consider what should be the direction of the programme in the future. The basis for discussion was a report by Ms Carolyn Hannan-Andersson, as a result of a short-term consultancy during which she had drawn up proposals for the future orientation of the programme.

Addressing the meeting, Ms Hannan-Andersson stressed the need for a social science focus in IUCN and for social group analyses, covering communities, households and individuals, in all IUCN programmes and projects. In this context, gender was one important social group variable among other equally important and valid parameters. It was in the course of gender analysis within communities and within households, that the role of women in natural resource management would be identified. She noted that the very existence of the programme at IUCN had already contributed to raising awareness of gender issues, but it appeared to have had little catalytic impact so far on existing programmes. She suggested that lack of clarity of IUCN's policy, the absence of a precise strategy and workplan, and the lack of a clear definition of the role of the programme were probably to blame.

Ms Hannan-Andersson suggested that the programme should be developed within a clearly defined policy for IUCN as a whole and in relation to IUCN's special areas of expertise. Professional competence at headquarters should be complemented by regional outreach, possibly to be achieved by the assignment of staff members to some or all of IUCN's Regional Offices. She proposed that priorities for the programme in the triennium 1991-1993 should be: (a) priority of action in the Third World; (b) development of field activities; (c) restructuring of National Conservation Strategy processes to include a gender dimension; (d) preparation for including a gender focus in the 1992 UN Conference on Environment and Development and in the 1992 IV World Congress on National Parks and Protected Areas.

Dr Martin Holdgate, Director General, briefly summarized his views on the evolution of the programme and its potential role within IUCN. He emphasized the importance of the role of women in the management of natural resources in much of the world and said this needed to be understood in all IUCN programmes and in the field. Environmental technology should take account of the social dimensions, which included the roles of individuals within communities and the social responses

and growth of those communities. He supported Ms Hannan-Andersson's recommendations, including the possibility that staff positions might be established at regional level to integrate gender issues in IUCN programmes.

Discussion on these presentations focused on the important, but often neglected, roles that women play in the management of natural resources and the linkages between population growth in certain parts of the world and the roles women can and do play.

A forum on Programme Applications in the Region gave IUCN staff a chance to offer perspectives based on their own work. Ms Aban Marker Kabraji, Head of the IUCN Office in Pakistan, said much progress had been made in Pakistan in integrating women in all activities, despite the difficulties presented by Pakistani cultural attitudes to the roles of women. Gender issues had been integrated into every sector of the National Conservation Strategy, as well as specific programme areas, including population. Affinities between the women's movement and the environmental movement were changing values in the Pakistani society.

Dr Patrick Dugan, Head of IUCN's Wetlands Programme, said a detailed socio-economic analysis of resources and resource users was required at the start of any project proposed for wetland ecosystems. This was the basis for restorative measures, which would subsequently need to be monitored and, if necessary, adjusted, to take into account a fuller understanding of the human dimension. It was this lack of understanding of human issues in general, he suggested, which had hampered IUCN's past performance on gender issues.

The question of how to achieve sustainable production in the context of sustainable development was raised by Mr Alejandro Imbach, Senior Technical Officer at the IUCN Regional Office for Central America. Women were not always a key element in the production system, as exemplified by a current IUCN project in Nicaragua. It was necessary to identify who were the main players and to target actions towards those social groups instrumental in production and in the use and management of natural resources.

The meeting concluded with encouragement from the participants to IUCN to continue further development of this important programme.

This report was written by Ms Dounia Loudiyi and Ms Frances Dennis.

Reports on Discussions with the Commission Chairs on the Composition and Activities of the Commissions in the Forthcoming Triennium

Introduction

A series of meetings was arranged on 3 December for delegates, in particular representatives of IUCN members, to meet with the Commission Chairs and to discuss the composition and activities of each of the six Commissions over the forthcoming triennium (1991-93). These meetings followed the election of the Commission Chairs and agreement on the structure and mandates of the Commissions in previous Plenary Sessions.

Each Chair was asked to give his view of likely priorities for his Commission arising out of the Commission's own meetings, to interpret its mandate, and to lead a discussion on its priorities of work for the next triennium. A senior member of IUCN staff attended each workshop as Rapporteur. Their reports follow.

Species Survival Commission (SSC)

Chair: Dr George Rabb

Rapporteur: Dr Simon Stuart

Dr Rabb gave an extended introduction with slides to illustrate the work of the Commission. Dr Simon Stuart, Programme Coordinator, Species Survival, outlined the Commission's Action Planning Programme.

During the forthcoming triennium, SSC will have over 3000 members in 150 countries. Of particular importance are the 96 Specialist Groups, 90 of which are organized on a taxonomic basis. SSC also has some "disciplinary" groups that provide guidance on thematic issues. The taxonomic Specialist Groups are encouraged to make use of the "disciplinary" Groups' assistance in their

work. The main work of the Specialist Groups consists of preparing and implementing Action Plans, producing newsletters, conducting meetings and workshops to address key issues, preparing interventions on behalf of SSC and IUCN, assigning IUCN Threatened Species Categories, and promoting projects.

The following points were made in the discussion:

1. the Commission should redouble its efforts to give more emphasis to plant conservation and to provide more support to the Plant Specialist Groups;
2. links with the Commission on Ecology might be established on wise use of species; fisheries management; the effect on species of possible global climatic change (SSC is using amphibians as a test case); the problems caused by introduced species; and policies for the reintroduction of species;
3. the Commission should give more emphasis to human factors relating to species conservation, such as the problems caused to species by increasing human populations, and the potential benefits that might be available to rural communities through the sustainable utilization of species; this will be a principal aim of the new Wise Use Specialist Group;
4. more effort is needed to assess the impact of Action Plans and their implementation; the Commission should devise implementation strategies for each Action Plan and monitor the effectiveness of each;
5. with the above in mind, careful thought should be given to the distribution of SSC publications to appropriate target audiences.

Commission on National Parks and Protected Areas (CNPPA)

Chair: Mr P.H.C. (Bing) Lucas

Rapporteur: Mr Jeff McNeely

In a general discussion, the following points emerged:

1. CNPPA will function on a regional basis in the coming triennium, with the Regional Vice-Chairs assuming considerable responsibility for the working of parts of the network in their respective regions. In beginning this effort, the first step will be to coordinate the preparation of reviews for each of the regions, to be presented at the IV World Congress on National Parks and Protected Areas, following the outline agreed by the Congress Steering Committee. The necessary data support will be provided by the World Conservation Monitoring Centre by the end of January, and Regional Vice-Chairs will meet in Washington, DC, in late February to discuss the regional overview reports; Dr Paul Dingwall, Regional Vice-Chair for Antarctica, will coordinate the effort.
2. It was agreed that future working sessions of the Commission should return to the regional structure that has been replaced in recent years by more specialized meetings; for example, CNPPA will be co-sponsoring meetings in 1991 on Research and Monitoring in Protected Areas, Protected Areas in Mountain Environments, and Heritage Interpretation and Education. The Government of Sweden offered to host a working session for the Baltic.
3. It was agreed that CNPPA Task Forces should be established on Marine Protected Areas, the World Heritage Convention, Training, Information Collection, and Financing.
4. Participants warmly welcomed the ambitious publications programme of CNPPA, pointing out that a shortage of information was a very serious limitation to better progress in the field. They called on IUCN to be more effective in ensuring that publications actually reach the people who need them, at a cost they can afford (which in the case of many protected area managers in developing countries means that publications must be provided free). Participants repeatedly and warmly supported the continued preparation and distribution of the CNPPA Newsletter. The resumed publication of Parks, the CNPPA journal, was also welcomed.

5. Terms of reference for CNPPA members were presented and adopted. It is expected that the Commission members will be far more active within CNPPA, with far higher expectations from the Secretariat, especially in regard to the IV World Parks Congress.

The participants paid tribute to outgoing Chair Mr Harold Eidsvik and warmly welcomed incoming Chair Mr Bing Lucas. The ambitious programme that the Commission had adopted would require 2.5 work-years from professional staff and 4 work-years from support staff in the IUCN Secretariat per year over the triennium; several of the Regional Vice-Chairs also have considerable support that could be made available for the work of the Commission.

Commission on Environmental Law (CEL)

Chair: Dr Parvez Hassan

Rapporteur: Dr Françoise Burhenne-Guilmin

The meeting recommended the continuation of the Commission's activities, as presented by the outgoing Chair, Dr Wolfgang Burhenne. In particular the Commission should continue to:

1. draft a Covenant on Global Environmental Conservation and Sustainable Use of Natural Resources. (A fourth draft was being prepared and a meeting planned for March 1991 to discuss and further revise the draft articles);
2. collaborate on the draft Convention on Biological Diversity, especially in its drafting, development and promotion;
3. collaborate on the Alpine Convention, taking an active part in the development of the Framework Treaty and related Protocols;
4. continue to provide legal expertise for IUCN's contribution to the development of a comprehensive regime of environmental protection for Antarctica;
5. assist in the development of amendments to the African Convention on the Conservation of Nature and Natural Resources, providing materials and advice to the Organization of African Unity (OAU);

6. participate in the preparation of the United Nations Conference on Environment and Development 1992;
7. provide support for the Environmental Law Centre and its projects, in particular:
 - the projected seminar on Biodiversity Conservation and International Law, for participants from English-speaking African states, and other efforts to build expertise in this field;
 - the review of legal instruments to implement the ASEAN agreement for the Conservation of Nature and Natural Resources;
 - promoting the development of environmental law in Central and Eastern Europe;
 - promoting and developing a legal instrument for the Caribbean region;
 - maintaining the databases on international and national environmental law;
 - promoting and strengthening national legislation in developing countries through environmental law services;
8. support the Working Group on Environmental Impact Assessment (EIA), in particular its survey of EIA practices and its work to encourage the development of EIA-related legislation.

The Workshop also recommended a number of new initiatives, in particular to:

1. prepare reports on developments in environmental law. Commission members should provide and the Commission should compile in one document lists and brief reviews of new environmental legislation and other major legal developments at the national level for each calendar year. It should also prepare short information documents on specific subjects, with priority given to a compendium of existing "environment" clauses in the constitutions of various countries;
2. establish a network of Environmental Law Centres, with the aim of organizing an information network and encouraging coordination between such centres (regional, national and international), so as to avoid duplication. The outputs of the network should be kept relatively simple, consisting of:
 - a list of participants with their address, fax, telephone number, computer links, etc.;
 - a short compendium of resources, such as

finances, texts, physical infrastructure and electronic communication facilities;

- information about the activities of each Centre;
 - ways in which members can help each other in litigation, law reform, research, etc.;
3. establish links with parliamentarians, so as to assist them in promoting and strengthening environmental legislation and policy, by providing information and other services;
 4. establish links with environmental enforcement agencies, decision-makers, administrators and members of the judiciary, by providing them with a platform for sharing experience at national, regional and global levels;
 5. create a Task Force on Customary Law, to examine questions such as the role of indigenous people in natural resources management, concentrating first on wildlife management;
 6. increase the representation of members on the Commission from developing countries, as these countries will be the focus for a substantial part of the future work of the Commission.

Commission on Ecology (COE)

Chair: Professor François Doumenge

Rapporteur: Ms Elaine Dickinson

In a general discussion, the following points emerged:

1. The Commission on Ecology must develop a broad geographical representation, and should in particular include members from developing countries and from Eastern and Central Europe.
2. Communication between members of the Commission could be improved if a scientific institution could be identified to act as a regional focus for meetings and communication within a particular region. Where possible, an IUCN Regional Office could fulfil this function.
3. It is essential to build effective horizontal links to other Commissions and thematic programmes of the Union. It is particularly important that COE establishes strong links with CNPPA and SSC.
4. Cross-cutting themes such as Global Change

and Biodiversity will need guidance from all Commissions, and COE will be asked to contribute members to these Inter-Commissional Task Forces.

5. It is important for COE to build strong linkages with other networking organizations and ecological institutions such as Intecol.
6. It is stated in the mandate that members of the Advisory Groups of the thematic programmes of IUCN (such as the programmes on Marine and Coastal Areas, Tropical Forests and Wetlands) will become members of the Commission. Initially, the structure of the Commission must be flexible to allow the establishment of appropriate and viable working groups.
7. The Chair will appoint the Vice-Chairs of the Commission. Together they will prepare a membership list to be presented to the Council for approval.
8. Initially, the COE membership will be limited to a manageable size (approx. 100 members) to allow effective communication in the early phases of the triennium. If COE is to make a valuable contribution to the work of the Union, its activities must be focused and product-orientated.
9. The Commission will take advantage of the participation of its members in major international conferences to hold meetings during the same event (e.g. at the Parks Congress and UNCED). Otherwise, Commission meetings will be held as appropriate with a regional focus.

Commission on Environmental Strategy and Planning (CESP)

Chair: Dr Thaddeus (Ted) Trzyna

Rapporteur: Dr Paul A. Driver

Noting that the Commission on Sustainable Development had been relatively inactive over the past several years, the Chair looked forward to a more active triennium, with enthusiastic Commission members, a feasible programme of work and improved linkages with and through IUCN Headquarters. He told the meeting that:

1. the guiding theme of the Commission would be

"Caring for the World—a strategy for sustainability";

2. Dr Liberty Mhlanga had been selected as Deputy Chair;
3. a Steering Committee would be established consisting of Dr Ashok Khosla and the chairs of the working groups of the Commission;
4. three working groups and one sub-group would be established, as follows:

(a) Strategies for Sustainability

Chair: Mr Robert Prescott-Allen

concerned with establishing an NCS database, forming a network of strategists and evaluating strategies;

(b) Environmental Assessment and Resource Economics

Chair: Drs Rudolf de Groot

concerned with resource economics within environmental appraisal, environmental accounting, and linkage with other Commissions;

(c) Tools for Sustainability

Chair: Dr Ted Trzyna

concerned with developing new ideas, and translating existing material into methods for implementation, e.g. sustainability audits and environmental assessment of programmes and policies;

d) Sub-group on the Ecosystems Approach to Land-use Planning

Chair: Ms Catherine Bickmore

concerned with case studies to test the applicability of this approach;

5. a Commission Newsletter would be produced within Dr Trzyna's institution;
6. the Chair will spend approximately 50 per cent of his time on Commission business.

Various speakers drew attention to the following requirements for the success of the Commission:

1. minimise the number of activities to achieve feasibility;
2. establish regional sub-groups and links with IUCN Regional Offices;
3. link Commission work with related Secretariat activities;
4. address the question of funding for proposed activities;

5. form links between working groups and with other Commissions;
6. involve NGOs in the work of the Commission;
7. adopt an action-orientated approach rather than study alone.

Commission on Education and Communication (CEC)

Chair: Mr M.A. Partha Sarathy

Rapporteur: Mr John Burke

By way of introduction, the Chair confirmed that funding had been promised to support a Programme Officer, Environmental Education, at IUCN Headquarters. As soon as a formal document had been signed, and funds received, the Director General would recruit a suitable person. The Chair then asked potential members of the Commission to submit a list of their achievements and estimate the amount of work they could do for the Commission over the next triennium.

In general discussion, it was agreed that the Commission would focus on setting and achieving a small number of important objectives rather than trying to attack a long list. The Workshop endorsed

the terms of reference for the CEC as set out in the revised mandate and agreed specifically to:

1. prepare a document on "Education for a Sustainable Future" (in collaboration with UNESCO, UNEP and others) for submission to UNCED in 1992;
2. provide support to the proposed Service in Conservation Education;
3. establish a support mechanism to advise the IUCN Secretariat on information dissemination, publications and related communications issues;
4. set up working groups as necessary to address selected topics.

The revised structure, with emphasis on strengthened regional networks, was welcomed. The Workshop also agreed to include a strong ethical component in the Commission's activities and stressed the need to involve young people and their networks.

The meeting developed an operational framework for the Commission's activities with four main elements: (a) priority initiatives; (b) services to other Commissions; (c) establishment of networks, and (d) provision of resources.

In particular, the group agreed the CEC should build and market the concept of the Commission as an intellectual power-house and Centre of Excellence for Education and Communications, both in solving problems and in making opportunities for environmental education.

Annex 1

Agenda adopted by the 18th Session of the General Assembly

89th Sitting of the General Assembly

09h30-11h00

Opening Ceremony

90th Sitting of the General Assembly

WEDNESDAY, 28 NOVEMBER 1990: 11h30-12h30

1. Introduction to the work of the General Assembly
2. Adoption of the Agenda (GA/18/90/1*)
3. Adoption of the Rules of Procedure
4. Appointment of:
 - a) Credentials Committee
 - b) Resolutions Committee
 - c) Finance and Audit Committee
 - d) Programme Committee
5. Messages from Co-operating Organizations
6. Membership Admissions and welcoming of new members (GA/18/90/2)

91st Sitting of the General Assembly

WEDNESDAY, 28 NOVEMBER 1990:14h30-17h30

1. Conservation in a Changing World—Major Presentation on the theme of the General Assembly
2. The Surrounding Environment—An Introduction to Perth and Western Australia
3. First report of the Credentials Committee

* General Assembly Paper reference number

4. The Director General's Report on the Work of IUCN since the 17th General Assembly (Costa Rica, February 1988)—discussion and approval (GA/18/90/3 and GA/18/90/4)

92nd Sitting of the General Assembly

THURSDAY 29 NOVEMBER 1990: 09h00-12h00

1. Highlights of the achievements of the IUCN Commissions—presentations by the Commission Chairs (Part II of GA/18/90/3)
2. Accounts and Auditors' Reports for 1987-1989—Report of the Finance and Audit Committee and approval of the Auditors' Reports (GA/18/90/5)
3. New Headquarters for IUCN—report on progress
4. The Mission, Objectives and Approach; Governance; and Strategy for the World Conservation Union in the 1990s—introduction by the Director General and discussion (GA/18/90/6; GA/18/90/7; GA/18/90/8; and GA/18/90/9)

93rd Sitting of the General Assembly

THURSDAY 29 NOVEMBER 1990:14h00-17h00

1. Structure and Mandate of the IUCN Commissions—introduction of the proposals and discussion (GA/18/90/10)
2. Triennial Programme and Budget 1991-1993—introduction by the Director General and discussion (GA/18/90/11 and GA/18/90/12 Rev.)
3. Amendments to the IUCN Statutes—explanation and discussion (GA/18/90/13)

Technical Meeting

THURSDAY 29 NOVEMBER 1990:19h00-21h30
Conservation Policy and Practice in Australia

Workshop Sessions

FRIDAY, 30 NOVEMBER 1990 AND SATURDAY, 1
DECEMBER 1990: 009h00-12h00 and 14h00- 17h00

(Venue: University of Western Australia)

- Workshop 1 The World Conservation Strategy for the 1990s
- Workshop 2 Human Population Dynamics and Resource Demand
- Workshop 3 Designing and Implementing the Biodiversity Conservation Strategy
- Workshop 4 Conservation of the Marine Environment
- Workshop 5 Realistic Strategies for Tropical Forests
- Workshop 6 Critical Issues for Protected Areas
- Workshop 7 Sustainable Wildlife Utilization
- Workshop 8 A Global Strategy for Conserving Wetlands
- Workshop 9 The Conservation Strategy for Antarctica
- Workshop 10 The Environmental Implications of Global Change
- Workshop 11 Conservation and Sustainable Development in the Sahel and other Arid Regions
- Workshop 12 Harmonizing Environmental Conservation and Economic Development

Technical Meeting

SATURDAY, 1 DECEMBER 1990:19h00-21h00

Discussion of the draft Triennial Programme 1991-1993 in the light of the conclusions of the Workshop Sessions (GA/18/90/11)

94th Sitting of the General Assembly

SUNDAY, 2 DECEMBER 1990: 09h00-12h00

1. Second report of the Credentials Committee

2. Structure and mandate of the IUCN Commissions—adoption (GA/18/90/10)
3. Amendments to the Statutes—adoption (GA/18/90/13)
4. Election of:
 - a) President of IUCN (GA/18/90/14)
 - b) Regional Councillors (GA/18/90/15)
 - c) Commission Chairs (GA/18/90/16)
 - d) Treasurer (GA/18/90/17)

95th Sitting of the General Assembly

SUNDAY, 2 DECEMBER 1990:14h00-17h00

1. The Draft World Conservation Strategy for the 1990s (GA/18/90/18)
2. A Strategy for Antarctic Conservation (GA/18/90/19)
3. Results of the Elections

Workshop Sessions

MONDAY, 3 DECEMBER 1990: 09h00-12h00

Discussion with the Commission Chairs on the composition and activities of the Commissions in the forthcoming triennium

96th Sitting of the General Assembly

MONDAY, 3 DECEMBER 1990:14h00-17h00

Preliminary discussion of draft Resolutions and Recommendations

97th Sitting of the General Assembly

WEDNESDAY, 5 DECEMBER 1990: 09h00-12h00

1. Determination of membership dues for 1992-1994 (GA/18/90/20)
2. Fund for IUCN's Network in the Developing World (GA/18/90/21)
3. Adoption of:
 - a) The Mission, Objectives, Approach and Governance of the World Conservation Union (GA/18/90/7 and GA/18/90/8)
 - b) The Strategy for IUCN in the 1990s (GA/18/90/9)

- c) The IUCN Programme 1991-1993 (GA/18/90/11)
- d) The Budget 1991-1993 (GA/18/90/12 Rev.)
- 4. Appointment of Auditors (GA/18/90/22)
- 5. The 1992 UN Conference on Environment and Development—presentations and discussions

98th Sitting of the General Assembly

WEDNESDAY, 5 DECEMBER 1990:14h00-17h00

Adoption of Resolutions and Recommendations

99th Sitting of the General Assembly

WEDNESDAY, 5 DECEMBER 1990:19h00-21h00

Closing Ceremony

1. Election of Patrons and Conferral of Honorary Membership
2. Presentation of Awards:
 - a) John C. Phillips Memorial Medal
 - b) Peter Scott Merit Awards
 - c) Fred M. Packard International Parks Merit Awards
 - d) The Tree of Learning Awards
 - e) Appreciation of Outgoing Officers
 - f) Enrolment in the World Conservation Fellowship
3. Address by the President Elect of IUCN
4. Closing remarks by the Director General
5. Farewell remarks by the Representative of the Host Country
6. Closure of the Assembly by the President

Annex 2

List of Agenda Papers

GA/18/90/1	Provisional Agenda and Time Schedule	Annex 1 (rev.)	Financial Comparison over the 1988-1990 Triennium
GA/18/90/2	Report on Membership	Annex 2	Rules for Use of World Conservation Trust Funds
Addendum 1	Ratification of Admission to IUCN Membership	Annex 3	Report of Statutory Auditors and Financial Statements (for 1987)
Addendum 2	Report on Membership		
Addendum 3	Updating of Report on Membership	Annex 4	Report of Statutory Auditors and Financial Statements (for 1988)
GA/18/90/3	Director General's Report on the Activities of the Union since the 17th Session of the IUCN General Assembly held in San José, Costa Rica, February 1988, including the Reports of the Chairs of IUCN's Commissions	Annex 5	Report of Statutory Auditors and Financial Statements (for 1989)
GA/18/90/4	Report on Follow-up to the Resolutions of the 17th General Assembly	GA/18/90/6	Introduction by the Director General to General Assembly Papers on the Mission, Objectives and Approach; Governance; Strategy of IUCN; the Commissions; and the Triennial Programme
Addendum 1	Note by the Director General on the Policy of IUCN regarding the Harvesting of Furbearing Animals and the Use of Particular Capture Methods	Annex 1	Resolution 17.4 of the 17th Session of the IUCN General Assembly, San José, Costa Rica, 1988: Governance of the Union
Annex 1 to Addendum 1	Draft Motion, 17.32—Use of Steel-Jaw Leg-hold Traps	GA/18/90/7	The Mission, Objectives and Approach of IUCN
Annex 2 to Addendum 1	Chair's Report on the Development of International Humane Trapping Standards	Annex 1	Interactions between IUCN Members and the Central Organization
Annex 3 to Addendum 1	Draft Resolution, 18.8—Methods for Capturing and/or Killing of Wild Animals	Annex 2	Draft Resolution: 18.1—Mission, Objectives and Approach of the Union
GA/18/90/5	The Finances of IUCN in the 1988-1990 Triennium	GA/18/90/8	The Governance of the World Conservation Union
		Annex 1	Draft Resolution: 18.2—The Governance of the World Conservation Union

GA/18/90/9	A Strategy for the World Conservation Union	Annex 1	Motion of the Council of IUCN: Amendments to the Statutes
Annex 1	Draft Resolution: 18.3—A Strategy for the World Conservation Union	Annex 2	Amendments to the Regulations under the Statutes of IUCN
GA/18/90/10	The Role and Mandates of the IUCN Commissions, Standing Committees and Task Forces within the World Conservation Union	Annex 3	Comparison between Existing Text and Text of Proposed Amendments
Annex 1	Draft Mandate of the Species Survival Commission (SSC)	Addendum (Rev.)	(revised proposals on Article II, 27 and 30 November)
Addendum 1	(proposed later changes)	Addendum 2	(revised proposals on Article II, undated)
Annex 2	Draft Mandate of the Commission on National Parks and Conservation Areas (CNPCA)	Addendum 3	Notes on the discussion over the amendments to the Statutes at the 93rd Session of the General Assembly, prepared by the Rapportage Team, 1 December
Addendum 1	(proposed later changes)	Addendum 4	Revised Amendments to Article II of the Statutes (2 December 1990)
Annex 3	Draft Mandate of the Commission on Environmental Law (CEL)	Addendum 5	(revised proposals on Article I)
Annex 4	Draft Mandate of the Commission on Ecology (COE)	GA/18/90/14	Election of the IUCN President
Addendum 1	(proposed later changes)	Annex 1	Biographical Note: Sir Shridath Ramphal
Annex 5	Draft Mandate of the Commission on Environmental Strategy and Planning (CESP)	GA/18/90/15	Election of IUCN Regional Councillors
Addendum 1	(revised draft mandate)	Annex 1	Report to the 18th Session of the IUCN General Assembly by the Election Officer (including List of Nominations for Regional Councillors)
Annex 6	Draft Mandate of the Commission on Education and Communication (CEC)	Annex 2	Background Information on Candidates for Election as Regional Councillors
Annex 7	Extract from the IUCN Statutes and Regulations: Revised Regulations under Article VIII of the Statutes regarding the Commissions	Annex 3	List of States by Region, as defined in Article VI, paragraph 2 of the IUCN Statutes
Annex 8	Draft Resolution: 18.4—The Role and Mandates of the IUCN Commissions, Standing Committees and Task Forces	Addendum 1	Election of IUCN Regional Councillors (updates)
GA/18/90/11	The IUCN Programme 1991-93, Draft June 1990	Annex to Addendum 1	Additional background information on candidates
Annex 1	Analysis of Members' Comments on the Triennial Programme	GA/18/90/16	Election of the Chairs of IUCN Commissions
GA/18/90/12	Rev. Estimates of Income and Expenditure for 1991-1993	Annex 1	Background information on candidates for election as Commission Chairs
GA/18/90/13	Proposed Amendments to the IUCN Statutes and Regulations	GA/18/90/17	Election of the IUCN Treasurer

- Annex Election of the IUCN Treasurer (proposal by the Finance and Audit Committee)
- GA/18/90/18 World Conservation Strategy for the 1990s—Draft
- Annex 1 Draft Resolution: 18.5—The World Conservation Strategy for the 1990s
- GA/18/90/19 A Strategy for Antarctic Conservation
- Annex 1 Draft Resolution: 18.6—The Antarctic Conservation Strategy
- GA/18/90/20 Membership Dues for the 1992-1994 Triennium
- Annex 1 Membership Dues over the 1989-1991 Triennium
- Addendum to Annex State and Government Agency Members of IUCN
- GA/18/90/21 A Voluntary Fund to Support the Governance of the World Conservation Union and its Activities in the Developing World
- Annex 1 Draft Resolution: 18.7—Creation of a Voluntary Fund to Support the Governance of the World Conservation Union and its Activities in the Developing World
- GA/18/90/22 Appointment of Auditors

General Assembly Information Papers

1. General Assembly Workshops, Friday 30 November and Saturday 1 December 1990 (outlines and agendas)
2. Review of IUCN's Programme 1988-1990, by Anil Agarwal and Adrian Phillips (reproduced here as Annex 14)
3. Organization of IUCN
4. Note to Delegates: Technical Meeting: Saturday, 1 December 1990, 19.00- 21.00 hours, by Martin W. Holdgate

5. Note to Delegates: Workshop Sessions: Monday, 3 December, by Martin W. Holdgate
6. IUCN Collaboration in World Bank Programmes: Statement by Mr Ken Piddington, Director, Environment Department, World Bank (reproduced here as Annex 21)
7. Statement by Mr Carl Tham, Director General, Swedish International Development Authority (reproduced here as Annex 15)
8. Opening Address by the President of the World Conservation Union, Dr M.S. Swaminathan FRS (reproduced here as Annex 3)

Other documents circulated to delegates

(This list is not necessarily complete.)

Statutes, as revised by the 14th Session of the General Assembly (Ashkabad, USSR, October 1978) and following 25th (June 1988) and 28th Meetings (May 1990) of the IUCN Council, and Regulations, as amended by the 3rd (September 1978), 5th (June 1979), 10th (October 1981), 21st (November 1986) and 28th (May 1990) meetings of the IUCN Council

Rules of Procedure of the General Assembly as last amended at the 16th Session of the General Assembly in November 1984 and the 28th Meeting of the Council in May 1990

First, Second and Third Reports of the Credentials Committee

Report of the Finance and Audit Committee (reproduced here as Annex 17)

Report of the Programme Committee (reproduced here as Annex 22)

Proposal submitted by 34 members of IUCN, to amend the IUCN Statutes, submitted in accordance with Article XVII paragraph 3 of the Statutes (letter dated 23 July 1990 from the Director General)

Draft Motions for Consideration by the 18th Session of the IUCN General Assembly. Later versions were distributed during the meeting both separately and as various packs.

Delegates Handbook

Annex 3

Opening Address by the President of the World Conservation Union, Dr M.S. Swaminathan FRS*

Equity in Conservation

I feel privileged to welcome you all to the 18th General Assembly of the International Union for Conservation of Nature and Natural Resources. This is a unique Assembly since we have here representatives of Sovereign States and government agencies as well as of national and international non-governmental environmental organizations. Representatives of several UN agencies including UNEP, UNESCO, FAO, IBRD and UNDP are also participating. In addition, we have many conservation experts who, working in an honorary capacity in our global networks, are promoting the work of the Union carried out under our six Commissions.

We are here on a common mission—how to make our Union serve the cause of protecting Planet Earth, which to quote HRH The Prince Philip, "is the only home we have". I am glad Prince Philip has again joined us at the General Assembly—an indication of both his personal interest in the work of IUCN, of which he is a Patron, as well as of the symbiotic bonds between IUCN and WWF-International of which he is the distinguished President. I extend him a very warm welcome. I wish to express our sincere gratitude to the Commonwealth Government of Australia and to the State Government of Western Australia for their invitation to hold this General Assembly at this idyllic location and for the outstanding arrangements made for a very meaningful and pleasant Assembly. The National Organizing Committee headed by Mr Peter Kennedy and the Australian Government Task Force headed by Mr Hugh Craft have done a superb job, for which we are grateful. The Steering Committee for this

General Assembly chaired by Ms Pam Eiser has done an equally splendid job.

We are honoured by the presence of the Hon. R.J.L. Hawke, Prime Minister of Australia, the Hon. Dr Carmen Lawrence, Premier of Western Australia, the Hon. Ros Kelly, Commonwealth Minister for the Environment and the Hon. Bob Pearce, Minister for the Environment of Western Australia. We express our great admiration to you, Mr Prime Minister, for your and your Government's leadership in the protection of Antarctica, in the prevention of the global heat trap and in the conservation of World Heritage sites.

I am also happy to welcome Mr William H. Mansfield of the United Nations Environment Programme and representatives of UNESCO and FAO, the other members of the Ecosystem Conservation Group with whom we work closely. I also welcome warmly our members who have travelled long distances to be here to give shape to the Union's Programme during the next three years. This is truly a World Conservation Congress.

Since we met last at San José in January-February 1988, the Union has made progress in every direction—in finance and administration, in programme management, in outreach and in professionalism. For this progress we are indebted to our distinguished Director General Dr Martin Holdgate and the dedicated staff of the Union as well as to the Chairs and members of Commissions and members of the voluntary networks. I also thank the Federal, Cantonal and Communal authorities of Switzerland who have done their best to redeem their pledge made at San José to provide IUCN with a permanent headquarters building. I am confident that before the next General Assembly, the Union will have its own permanent home in Gland. Finally, I wish to record our gratitude to our members and other donors for their financial support, advice and encouragement. I am glad we have the privilege of welcoming six new State

* Distributed as General Assembly Information Paper No. 8

members at this Assembly. Our total membership now stands at 722 drawn from 118 countries.

Conservation in a changing world is the theme for this General Assembly. The world has always been changing—socially, politically, economically, technologically and ecologically. Many of these changes have been desirable and have helped to enhance both human development and the quality of life. But for changes such as the movement of people over long distances to find a new home and build a new country, our beautiful host continent, Australia, would be in a different state today. Predominantly agricultural societies started becoming industrial societies during the last two centuries and are now becoming information societies, thanks to the communication revolution. The greatest impact of the information age has been the spread of democratic values and the triggering of seemingly impossible happenings. The unification of Germany, the release of Nelson Mandela and the sudden transformation of east-west relationships are examples of this welcome trend.

The spread of this democratic urge of which free and independent media and judiciary are important indicators is also the greatest ally of the conservation movement. This has led to a questioning of the pathways of social and technological change witnessed during recent decades, particularly among the younger generation. The World Bank in its 1990 Development Report has pointed out that over 1.125 billion people are today living in poverty. This is the number of people who are struggling to survive on less than US\$ 370 a year.

The United Nations Development Programme's report on Human Development, also published this year, states that "life does not begin for a majority of humankind at US\$ 11,000, the average annual *per capita* income in the industrial world". Switzerland, the host country for the headquarters of our Union, has the highest annual *per capita* income of over US\$ 28,000, while 10 countries which have over one third of the human population have a *per capita* income of less than US\$ 400, per year, a difference of 70 times. In spite of such income disparities the poor world transfers 20 to 30 billion US dollars each year to the industrialized countries by way of debt servicing and repayment, a point also made forcefully in the Brundtland Commission's Report.

A major topic for discussion at our meetings will be the conservation of biological diversity. This is an urgent task. Equally urgent is the need for promoting respect for cultural, religious and ethnic diversities. However, one form of diversity which we should not respect and which we should try to reduce and ultimately eliminate is the co-existence of unsustainable life styles on the part of about a

billion people living mostly in developed countries and the excruciating poverty experienced by another billion, living mostly in developing countries.

Six years ago when at Madrid you did me the honour of electing me as the President of the Union, and again three years ago when you re-elected me as your President for another term at San José in Costa Rica, I expressed my conviction that unless the Penguin and the Poor evoke from us equal concern, conservation will be a lost cause. There can be no common future for humankind without a better common present. Development which is not equitable is not sustainable in the long term. This is the message of both past and recent history. The growing violence in the human heart as witnessed by the spread of religious, cultural and ethnic intolerance is a warning signal. Mahatma Gandhi said in my country over 50 years ago, "How are we going to be non-violent to nature unless the principle of non-violence becomes central to the ethos of human culture?" Without harmony among human beings, it will be difficult to achieve harmony between humankind and nature.

It is such considerations that have led the IUCN Council to recommend for adoption a new Mission Statement for the Union, namely "to harness the insights and skills of the world conservation movement in order to promote the *sustainable* and *equitable* use of nature and natural resources and to establish a harmonious future for humanity within the world environment". What are the operational implications of such a Mission Statement from the point of view of integrating in developmental strategies the principles of equity with those of economic efficiency and ecological sustainability? I wish to refer briefly to four major needs for a harmonious future for humanity within the world environment.

First, let me refer to climate and radiation regulation. In 1979, the first World Climate Conference was held in Geneva under the auspices of the World Meteorological Organization (WMO) and other UN organizations. The second World Climate Conference was held at Geneva from 29 October to 7 November 1990. The papers presented at the first conference were mostly on the impact of climate on human activities, while the recent one dealt almost exclusively with the impact of human activities on climate. It is more appropriate to call the second one a Climate

* The wording was subsequently modified by the General Assembly. The final version is given in Resolution 18.1. *Ed.*

Change Conference, since the participants agreed that if the increase of greenhouse gas concentrations is not limited, the predicted climate change would place stresses on natural and social systems unprecedented in the past 10,000 years.

Many parts of the planet may experience parched crops and flooded coastlines. A major component of the impact of the postulated changes in temperature, precipitation, coastal storms and ultraviolet-B radiation is likely to be on agriculture. Developing countries which rely heavily on crop husbandry, animal husbandry, fisheries and forestry for both economic and livelihood security will suffer most. It is generally the poor and the marginalized who suffer most from environmental breakdown. For example, a study by Resources for the Future showed that the economy of the MINK region of the USA (Missouri, Iowa, Nebraska and Kansas), where the percentage of farm income to total income is 3.4 times the percentage of farm income to total income found in the USA as a whole, may still not suffer seriously due to changes in precipitation and temperature since the share of the farm sector in the income of this region is only 3.87 per cent. Unless developing countries are assisted economically and technologically to put in place appropriate avoidance and adaptation mechanisms, their poverty and misery may increase as a result of adverse changes in climate, caused by factors mostly beyond their control.

A second area relates to biological diversity. While Australia has been appropriately designated a mega-diversity area by virtue of its richness in flora and fauna, most industrialised countries are generally poor in biological diversity but are rich in the biological technology essential for converting genetic variability into economic wealth. The loss of every gene or species limits our options for the future. Yet we know that during the duration of our conference several species may become extinct. Often we do not know what we are losing since we have no definite knowledge of the number of species existing on our planet. About 1.5 million species have been described so far, but in a workshop organized by the Commonwealth Agricultural Bureau International at the Royal Society in London in July 1990, it was suggested that if we study invertebrates and micro-organisms properly, the number of species on earth may go up to more than 50 million. Unfortunately taxonomists and biosystematists are fast vanishing and we do not have adequate expertise to identify, describe and catalogue new species. People living in areas rich in biological diversity are generally stricken with poverty. The masters of biological technology are, in contrast, rich. Both, however, agree that for a better bio-future for humankind, biological diversity must be conserved.

Unfortunately, there is much controversy on methods of saving and sharing the global biological wealth. Discussions on this topic are in progress in various international fora such as FAO and UNEP. The Keystone International Dialogue Series on Plant Genetic Resources has tried to throw light on methods of resolving opposing viewpoints. Terms such as "Farmers' Rights" and "Breeders' Rights" are freely used to indicate the importance of according recognition to the informal innovation system in conjunction with the rights already accorded to plant breeders in the 20 developed nations which have so far adhered to the rules of the International Union for the Protection of New Varieties of Plants (UPOV). The continuing discussions at the General Agreement on Tariffs and Trade (GATT) on Trade-related Intellectual Property Rights (TRIPs) are also important in the context of North-South relationships in germplasm conservation and exchange. Fourteen developing nations have proposed to the Negotiating Group on TRIPs at the Uruguay Round of GATT Multilateral Trade negotiations that plant or animal varieties or essential biological processes for the production of plants or animals should not be subjected to patent protection.

Farmers and breeders are allies in the common task of advancing biological productivity. Therefore, I feel that their rights should be presented not as mutually antagonistic rights but as mutually reinforcing ones. I would like to suggest that UPOV should evolve into an International Union for the Protection of Breeders' and Farmers' Rights, with its membership including all countries—industrialized and developing. The UPOV Convention is now undergoing revision. A draft text introduces the concept of "dependence" which would ensure that a variety "essentially derived from another variety protected by Plant Breeders' Rights cannot be used commercially without the permission of the breeder of the protected variety". It should not be difficult to develop a methodology under the dependency clause which enables recognition and reward for informal innovation. The financial reward in this case will have to go to a special fund which can help to finance conservation and plant breeding activities in the country from which the key genetic material came.

A third area of concern from the equity point of view is the disposal of hazardous and toxic wastes and the dispersal of pollution-generating industries. There are a growing number of conventions in this area but it is important that technologies for detoxification of toxic wastes and for the safe disposal of hazardous wastes including nuclear wastes are shared among all nations speedily and effectively. The greed of the rich is often the root cause of serious pollution problems. In such cases,

we can only pray "God, do *not* forgive them for they *know* what they do".

Finally I shall conclude with a reference to my own field of achieving sustainable and continuous advances in biological productivity from units of land, water, time and energy. Such advances are critical both for food security and ecological security. The onward march of the Green Revolution is both economically and ecologically imperative in population-rich but land-hungry countries in order to enhance the income of small farm families and to minimize further expansion of the arable area at the expense of forests and areas vulnerable to soil erosion or other forms of deterioration. For example, farmers in India produced 12 million tons of wheat and 36 million tons of rice in 1965 from 14 and 40 million hectares of land respectively. In 1990, they produced 55 million tons of wheat and 72 million tons of rice from 24 and 44 million hectares respectively. To produce the amount of wheat and rice that India now produces at the 1965 yield levels, over 70 million ha of additional land would have been needed. This could only have come from the remaining forests. Both UNEP and FAO estimate that worldwide over 75 per cent of the annual deforestation of 17 million ha occurs for expanding food production. Therefore, there is no option but to adopt land-saving agricultural practices in countries where land is limiting and population pressure is increasing. But the new Green Revolution must be based on "green" or environmentally friendly technologies such as integrated pest management, scientific land and water management and improved post-harvest technology. For this purpose, there is a need for the dynamic integration of traditional technologies with frontier technologies such as biotechnology and space, information and management technologies. This is urgent but the hurdles in the way of free and rapid transfer of "green" technologies are many, largely arising from the growing privatization of research into frontier areas in technologically advanced nations. If we do not remove the hurdles we will find that developmental dilemmas such as "food and jobs *versus* forests" may grow.

In farming we say "we reap as we sow". As conservationists we must know that we cannot reap what we do not sow. We must sow the seeds of harmony and equity as widely as possible. Mass media and political leaders must create the substrate conditions essential for such seeds to sprout, grow and bear fruit.

Numerous conventions are now being developed and negotiated. To cite a few, a climate change convention under the auspices of WMO, a biodiversity convention under the auspices of

UNEP and a forest convention under the auspices of FAO are in various stages of evolution. The existing conventions relating to Antarctica and protection of the ozone layer are also under review. Crucial discussions are now in progress under the GATT negotiations, although the issues relate more to protectionism than to the promotion of ecologically desirable and equitable trade. In most of these discussions, time is being measured only vertically by means of clocks and calendars and not horizontally by numbers of generations. It is to add a genetic dimension to the measurement of environmental damage that I proposed five years ago an Amnesty International type of organization which can, with professional support of high credibility, draw attention to human heritage violations, as is being done now by Amnesty International in the case of violations of human rights. I had then felt that the World Conservation Monitoring Centre at Cambridge, UK, which is currently compiling a comprehensive report on global biodiversity, could be of immense help in such a task. I am glad this suggestion has found a place in the second draft of the paper entitled, "Caring for the World: A Strategy for Sustainability", which will be discussed at this General Assembly. Such an organization supported by a *World Ecological Security Compact*, comprising a series of internally consistent protocols and conventions designed to translate the World Charter for Nature adopted by the UN General Assembly in October 1982 into reality, will help us to promote both ecologically desirable life styles and prevent human heritage violations. Such a holistic approach is essential for building harmony between humanity and nature. I hope that such arrangements will materialize at the 1992 UN Conference on Environment and Development. Given the requisite blend of political will, public action and professional expertise, our Mission Statement can become a reality. Without them it will remain a piece of rhetoric.

Seeing the composition of this audience and the presence of His Royal Highness Prince Philip and the Honourable Prime Minister Hawke of Australia, I am confident that our statement can be converted from rhetoric to reality. Identifying the steps necessary for this purpose is the major task before us during the coming seven days. In this task, let us draw inspiration from the lovely song we just heard the Nedlands Primary School children sing:

"So life's a song that I must sing,
A gift of love I must share
And when I see the joy it brings,
My spirits soar through the air".

I once again welcome you all.

Annex 4

Opening Address by the Premier of Western Australia, The Hon. Dr Carmen Lawrence MLA

On behalf of the Government and people of this State I am pleased to welcome you to Western Australia.

The decision to hold the IUCN General Assembly in Australia is extremely significant to people living here, as a gathering of this kind provides the larger context within which to assess our own continuing environmental debate.

One should be wary of making generalizations, but there is little risk of inaccuracy in saying that today's Australians care deeply about the environment.

Staging the General Assembly here gives due recognition to the efforts being made by Australians to address conservation issues in this country, and to their concern that solutions be found for the increasingly complex environmental problems facing the planet.

The Assembly will give Western Australians and Australians, and particularly the residents of this city, a chance to examine more closely the impact we are having on our local environment, and to consider further conservation measures we can take to ensure the protection of wildlife within the precincts of our urban area, and beyond.

While you are in our city I hope you will take the opportunity to visit our urban parks and reserves. Western Australia has given precedence to setting aside large areas within cities and suburbs for recreation and conservation of natural bushland.

Within the city's precinct Kings Park provides spacious botanical gardens, parklands and a nature reserve. The Park also provides a vista of the Swan River, one of the cleanest rivers in the world, which runs through the city. In addition to its obvious scenic and recreational value it is home to a wide variety of wildlife, including migratory waders from as far afield as Siberia.

Opportunities are also available to visit our nearby marine parks, with their abundant bird and

sea life. It is very much a measure of the strength of conservation feeling in this State that substantial conservation areas have been reserved within what is a highly urbanised environment.

When you move about this city you should bear in mind its comparative youth. European settlement began here only 161 years ago. Being such a young settlement has some real advantages: it has allowed us, for instance, the opportunity to conserve far greater areas than would have been the case if Europeans had arrived much earlier. As it was, the first national park was established only seventy years after the Swan River Colony was founded in 1829.

Even so, in the relatively short time we have inhabited this land, we have had a massive impact on much of it.

To put the effects of 161 years of European settlement into perspective it must be remembered that when the first white settlers arrived, the area around the Swan River was already inhabited by a culturally advanced civilization. The south-west of Western Australia was the nation of the Nyungar people. Their population was about 7000 at that time.

Nyungars living in the South West had a plentiful and varied food supply, including fish, kangaroos and snakes. In summer, their diet was supplemented with turtles, frogs and fresh water crayfish. Their principal vegetable was a native potato, although many other plants were eaten.

The Nyungars managed their food supply very successfully. By systematic burning of the bush tracts of land were opened up to ease access for hunting and native potato harvesting. Many species of Western Australian plants are adapted to fire and therefore benefited from burning off. There are also some animals, such as the Tamar Wallaby, whose habitats require periodic burning to regenerate.

In their own way the Nyungars engaged in

sound conservation practices. Further evidence comes from their law that no seed-bearing plant could be dug up until it had flowered. Aboriginal people certainly had an impact on their environment but, at the time white settlers arrived, their life style was ecologically sustainable. It has taken us a long time to learn the great lesson they had to teach us.

I hope that between your discussions and field visits you will find the time to visit the Art Gallery of Western Australia which, to coincide with your General Assembly, is hosting an exhibition of

Arnhem Land art called "The Keepers of the Secrets".

The State Minister for the Environment, Bob Pearce, and I look forward to participating in the conference, and the State's Department of Conservation and Land Management will have staff stationed at the information desk in the foyer who will be pleased to facilitate any meetings, briefings or visits you wish to make.

I wish you well with your deliberations and hope that you enjoy the hospitality of our city.

Annex 5

Opening Address by the International President of WWF - World Wide Fund for Nature, HRH The Prince Philip, Duke of Edinburgh

Thank you very much Mr President for giving me this opportunity to bring greetings to all the delegates to this General Assembly from WWF-International and all the 28 members and 4 million supporters of the WWF family.

Since the founders of WWF, as a special public fund for the conservation of nature, were also involved with IUCN, and since WWF and IUCN have been sharing offices for so many years, these greetings also come from a very close member of the IUCN family.

I bring not only greetings, I also bring very sincere congratulations. The improvement in IUCN's fortunes since the last General Assembly in Costa Rica has been nothing short of miraculous. I know it has been a difficult time for everyone, but the rewards are already becoming obvious. This is very good news indeed for the whole conservation movement at a time when wild species and their habitats are coming under increasing pressure.

Speaking in Sydney on Monday, on the occasion of receiving the WWF Gold Medal, Professor E.O. Wilson estimated that, unless drastic action can be taken quite soon, something like a quarter of the world's living species will become extinct within the next 30 years. He added that this meant the estimated loss of some 100,000 species every year.

It may well be that some species would have become extinct in any case, but there can be no doubt at all that the bulk of past and future extinctions is the direct consequence of the massive increase in the human population and the growth in the *per capita* demand for natural resources.

It has been calculated that over the last 300 years, each time the population has doubled, it has taken half the time to do so. It took 80 years, from 1870 to 1950, to double from 1,200 m to 2,500 m. The most recent doubling took place during the last 40 years, between 1950 and 1990, when it went from 2,500 m to over 5,000 m. At that rate of

increase, the huge total of 10,000 m would be reached in 20 years from now. Anyone with a head for figures or a pocket calculator can work out when it might reach infinity.

Fortunately there is some evidence that this rate is slowing down, but even so the next doubling is expected to take place within the next 30 years.

If you add to this scenario the expected effects of global warming on sea levels and the destabilization of the climatic and ocean systems, it means that the next 30 years are going to be crucial for the future of all life on earth.

It is quite obvious that a great deal has to be done if a major catastrophe is to be avoided, but no one organization can hope to do everything. The best hope is for each organization to stick to what it can do best.

IUCN brings together the whole conservation community and if we all set out to work together and try to speak with one voice for the conservation of nature, I believe there is a real hope that we can make a significant reduction to that horrifying figure of 100,000 species presently doomed to become extinct every year.

I do not believe that we can achieve any significant success if we try to cope with every one of the very many issues that need to be tackled. The issue of preventing the steady decline in biological diversity is quite big and complicated enough, without getting involved in matters beyond the professional knowledge, expertise and commitment of the conservation movement.

I believe that this is going to become increasingly important as the human population begins to appreciate the full significance of the threats to its own future welfare. The need for someone to stand up and champion nature and speak for the earth with wisdom and insight is urgent. As I see it, this is the critical task for IUCN and for this purpose it must draw together the best professional knowledge that its members can provide.

Mr President, I have just come from the WWF Annual Conference and I can assure you that we are all totally committed to preventing the depletion of biological diversity by every means in our

power, and I can pledge our full support for IUCN and all it stands for in the struggle to keep this our only planet fit and healthy for all the generations we hope will come after us.

Annex 6

Opening Address by the Prime Minister of Australia, The Hon. R.J.L. Hawke AC, MP

Australia is proud to host the 18th General Assembly of IUCN. We do so aware of the responsibility we bear—as stewards of the Australian continent and as active participants in the global environmental movement.

This is indeed a heavy responsibility—first, because ours is an ancient, huge and extraordinary land mass that shelters and nourishes unique species of plants and animals. It is a laboratory for scientists, a magnet for tourists and above all a priceless part of the heritage of the world.

Second, ours is a special responsibility because of the unique history of human habitation on this continent. For at least 40,000 years, the Australian Aboriginal people exercised exclusive stewardship of this continent, acting out their belief not that they owned the land but that the land owned them.

If conservation means deep spiritual respect for the land, and identification with it; if conservation requires an accurate understanding of the place of humankind in the grand scheme of creation; if conservation means taking from the land today without compromising your children's rights to fulfil their needs tomorrow, then the Australian Aborigines were perhaps the world's first conservationists. For them, land care was literally a way of life.

It is only in relatively recent times—the last two hundred years—that this continent has undergone the impact of Western settlement. But those two centuries are of course the two centuries since the Industrial Revolution.

In that time, prosperity and quality of life has been created for some— but certainly not all—of the world's growing population. And those incomplete gains have been achieved only through the progressive conquest of the world's natural environment by farming, mining, the growth of cities and the spread of industry.

Soils have been degraded; seas and rivers and lakes have been polluted; huge parts of the world's

tree cover has been obliterated; the fragile Arctic and Antarctic environments have been damaged.

The Australian continent may seem to European or Asian eyes one that is vast, timeless, empty and untouched. Relatively speaking, it is. But no-one can ignore the fact—and Australians do not ignore it—that even here, much of the landscape bears the mark of human activity that has wrought permanent environmental change—and, not infrequently, degradation.

That brings me to the third way in which Australians bear a special responsibility. We are the only people whose nation occupies an entire continent. So the physical integrity of the Australian land mass is duplicated precisely by the political integrity of the Australian nation. This means that what Australians decide to do to preserve the environment of this large continent, or to destroy it, assumes real and lasting significance.

At the same time, as a modern society and open economy, Australians understand the vital dynamic of global interdependence. We know that the prosperity of all nations is determined by the economic decisions of each nation—a vivid example of which is provided currently by the tragic impasse in the current GATT negotiations.

And we know too that the environmental well-being of the globe is equally a shared responsibility. Australians are exposed—as are we all—to the danger of global warming and of ozone depletion. Australians share the loss we all experience when a living species ceases to exist somewhere in the world.

So Australians are coming to recognise, as are we all, the dilemma of modern life:

- We still face the pressing need to feed the people of the world and to create policies that provide the opportunity for growth and prosperity, which is the legitimate expectation of our people;

- But in the long term, such economic development is sustainable only if it is ecologically sustainable—otherwise the gains made by this generation are achieved only at the expense of those as yet unborn.

So for all these reasons, Australians are acutely aware of our responsibility to care for and to protect the unique landscape that is our national home. And in particular, we are endeavouring to show the way forward towards implementing a viable and effective process of ecologically sustainable development.

We have established working groups that are examining the Australian economy, sector by sector—agriculture, forestry, fisheries, mining, manufacturing, energy use and distribution, transport and tourism. This way, by careful study and broad community participation, we are endeavouring to ensure that our quality of life is maintained for now and for the future.

We have also established the Resource Assessment Commission, an independent advisory body that conducts enquiries into complex resource use issues—such as forestry and coastal zones—so that more informed and integrated decisions can be taken.

We are working too, with the Australian States, to develop a national environment agreement to rationalize our processes and to ensure better environmental protection.

Australia, I am proud to say, is also at the forefront of international environmental action. We are leading the way in the reduction of emissions of all greenhouse gases.

We will have eliminated consumption of ozone-depleting substances by 1998—considerably faster than urged by the Montreal Protocol.

And Australia has taken the lead, with France, in urging a total permanent international ban on mining in Antarctica. As we meet today, the parties to the Antarctic Treaty System are in conference in Chile and it is my and I believe your profound hope that they will take the next steps towards our goal of protecting this fragile and precious environment.

Ladies and gentlemen, Australia's achievement is measured—simply, if not comprehensively—in our commitment to the World Heritage List, in the creation and maintenance of which IUCN has played such a valuable and respected role. And you can understand our pleasure at the judgement of IUCN that "Australia has done more to implement the World Heritage Convention than any other single country".

Australia has eight sites of outstanding universal values of culture and nature that have been

inscribed on the World Heritage List. Tropical, arid and temperate ecosystems—marine and terrestrial—are represented by the Great Barrier Reef, Uluru and Kakadu, the forests of Queensland's Wet Tropics, and of north-east New South Wales, South-west Tasmania, the Willandra Lakes Region and the Lord Howe Island group.

Our recent nomination of Shark Bay, six hundred kilometres to our north on the coast of Western Australia, and of the sub-Antarctic Macdonald and Heard Islands will add to our distinguished World Heritage record.

And as a further step, I am pleased to announce that agreement has been reached between the Commonwealth and Queensland Governments on joint management arrangements for the Wet Tropics World Heritage Area. This Management Scheme provides a mechanism for successful cooperative management of the area. It incorporates joint funding, consideration of local community interests and professional scientific advice through two advisory committees, a professionally staffed Management Agency, a joint Management Authority and a Ministerial Council. Through this Scheme, Australia will meet its international duty to protect this vital part of the world's heritage.

Ladies and gentlemen, I say none of this in a spirit of complacency, or to pretend that countries, Australia included, need do no more to safeguard our global environment.

Because we all indeed have a very long way to go. My Government is very conscious of Australia's responsibility to help maintain the international momentum on a number of other environmental issues.

The loss of the world's biological diversity is one such issue. You will all be aware of the statistics—the five million species estimated to have evolved over billions of years; as His Royal Highness indicated, the risk of losing one-quarter of these over the next 20 or 30 years; the destruction of rainforests, the loss of genetic diversity and the loss of potential pharmaceuticals and new food crops.

While some nations may be benefiting in the short term from the activities which are leading to losses like these, there can surely be no winners in the long term.

Australia believes that the development and negotiation of an integrated international biodiversity convention is a matter of great urgency.

At the last General Assembly of IUCN, a resolution was passed calling for the establishment of a global representative system of marine protected areas. Australia has gone some way towards achieving this goal through the establishment of the Great Barrier Reef Marine Park and other

significant Australian marine reserves such as Ningaloo Marine Park, just north of Shark Bay.

There are, however, a number of other areas in Australian waters which contribute greatly to the world's biodiversity and would be valuable additions to a marine reserve system such as that proposed by IUCN. I am, therefore, pleased to announce that the Australian Government has decided to work towards the expansion of Australia's marine reserve system. In association with State and Territory Governments, we will investigate the establishment of a national, representative system of marine protected areas for Australia that will protect these areas, while permitting appropriate uses and promoting public education.

Ladies and gentlemen, I certainly trust that you will not leave Australia without having taken the opportunity to appreciate both Australia's magnificent natural environment—and the actions that we are taking to preserve it. I can assure you that Australians are proud of both.

I trust that this General Assembly—and the continuing work of IUCN—will help show us and other nations the way forward.

Since its foundation in 1948, IUCN has become a highly respected conservation organization, forming close and valuable working relationships with government and non-government agencies alike. It has also maintained an important international focus upon the world's environmental problems.

Without doubt the key to the organization's success has, in part, been the expertise it has been able to draw upon from its membership. It is this expertise, assembled here today, which is required

for the complex issues to be considered over the coming week. The challenge will be to do more to integrate economic considerations into many of these issues.

Your meeting indeed comes at a critical time in the evolution of international affairs. The events that we have witnessed of late—the transformation of superpower relations and the revolutions of eastern Europe—will certainly ensure that the historians of the future see our times as marking irreversible change. In the history books of the future the years 1989 and 1990 will be writ large. The overthrow of totalitarian rule in eastern Europe has not only changed the political landscape, bringing both freedom and democracy to tens of millions, it also offers hope that as these people shape their economic destinies in this new order the past decades of environmental devastation can now be reversed.

We must not overlook of course the persistence of substantial regional problems—not least of course the potential for conflict in the Gulf. However without doubt the balance sheet is surely positive—and must surely give us renewed confidence in the capacity of international forums such as yours to achieve lasting and beneficial change.

I have very much pleasure in declaring open the General Assembly of the International Union for Conservation of Nature and Natural Resources. I wish you all a productive and informative week and hope that it provides a solid foundation for your work in the coming years, because indeed there can be no more important work than yours.

Annex 7

Statement on behalf of the Executive Director of the United Nations Environment Programme (UNEP), Dr Mostafa K. Tolba, by Mr William Mansfield

Building Ecological Co-Existence

It is an honour to address this distinguished gathering on the occasion of the General Assembly of IUCN. Let me begin by adding my voice of gratitude to you Prime Minister—and through you to the governments and people of Australia—for your strong support of this meeting. Once again, Australia confirms its leadership in environmental protection. UNEP's Executive Director—Dr Mostafa Tolba—regrets being unable to attend this important assembly. Dr Tolba has asked me to extend to you his best wishes for a productive meeting, and to read the following statement on his behalf.

Ladies and Gentlemen, today, media headlines and policy front lines confirm that the environment has ascended from the political periphery to the heart of national and international agendas. Despite widespread support, operationalizing global conservation and sustainable development strategies remains an up-hill struggle. We face institutional inertia, bad habits, desperate poverty, North-South suspicions and powerful economic vested interests.

The 1990s must be the turn-around decade, in which public advocacy is translated into concrete, costed global action. Each minute, tropical forests are disappearing by as much as forty hectares. Biological diversity faces the worst wave of mass extinction in 65 million years. The quickening pace of soil erosion, desertification, demographic momentum and sprawling urban areas in the global South pose ecological, health and social time-bombs that must be diffused.

The burden before us, while enormous, has been made lighter by the first World Conservation Strategy, which clarified the inseparable linkage between conservation and development. It created a new conceptual framework on the global level, one which tied conservation to compensation;

which underlined that conserving the environment and its natural resources is the sole means to ensure the sustainability of development. Three priorities in the Strategy remain priorities today: (1) to maintain ecological processes and life-supporting systems; (2) to preserve genetic diversity; and (3) to manage resources in a sustainable manner.

Ten years later, we have not moved perceptibly closer in reaching any of these goals. The four biological pillars of the global economy—croplands, grasslands, forests and fisheries—continue to deteriorate. In this country, which already bears the highest incidence of skin cancer anywhere, daily broadcasts of ultraviolet radiation levels associated with the Antarctic ozone hole drive home the fact that global ecological destruction faces us all.

Through the build-up of greenhouse gas emissions, our planet is already committed to climate change. Each continent has already recorded altered seasons, as well as changed patterns of river flow, rainfall, storm intensity and other phenomena. The impacts of climate change are likely to far worsen the current crisis facing biological diversity. Already, extinction rates are approaching 150 species per day.

Slowly, governments are accepting the wisdom of the late Indian Prime Minister Nehru's comment that "the alternative to co-existence is co-destruction". Governments are slowly beginning to act together. For example, five months ago, nearly 100 developed and developing countries amended and strengthened the Montreal Protocol, by agreeing to the virtual elimination of CFCs and other ozone-destroying chemicals. For the first time ever, governments agreed to establish a Multilateral Fund of US\$ 240 million over three years, designed to provide the new and additional resources to facilitate technology transfer, and to ensure that developing countries—those least responsible for

global pollution—become full partners in defining and implementing solutions. Progress is likewise underway by the World Bank, UNDP and UNEP in establishing a Global Environmental Facility of US\$ 1.3 billion, to tackle ozone layer depletion, climate change, biological diversity and the protection of international fresh and marine waters.

These are promising starts. But we must go much further in reaching binding international commitments that include additional financing and technology transfer. These twin issues loomed large in the first session of negotiations leading to an international legal instrument on biological diversity. We are all grateful to IUCN for preparing the draft Convention three years ago. I know many are frustrated that progress has been so slow, while extinction rates have grown so quickly.

However, few could have anticipated the complex issues before the negotiators. They include the need for increased scientific research and training in tropical and humid countries; and new and additional financing to protect genetic diversity, to provide free access to genetic resources, and to provide fair compensation to "gene-rich" tropical countries and "technology-rich" industrialized countries.

Success in global conservation must combine *in situ* with *ex situ* conservation strategies. Natural reserves and wildlife protected areas in themselves are impotent in defending species against acid rain, soil erosion and the loss of wetlands, coral reefs and other habitats from human activity.

In the run-up to the 1992 United Nations Conference on Environment and Development, progress towards agreement on the two mutually reinforcing treaties on climate change and biological diversity will test our collective commitment to save the planet. While 1992 is our target date, UNEP will not sacrifice content for expediency in preparing both Conventions. We should also develop legally binding, action-oriented Protocols to give teeth to these Conventions.

But action cannot await until 1992. Governments should act now to address a number of pressing conservation issues. The status, for example, of the global network of biosphere reserves in the conservation of biological diversity needs to be given—as UNESCO's Council of Man and the Biosphere Programme recently urged—a new legal status.

Also, the existing legal agreement of the Antarctic Treaty should be closely reviewed. That treaty established key precedents including suspending sovereignty, ensuring scientific research access, and establishing a nuclear-free zone. Subsequent progress has been made in conserving the Antarctic's fauna and flora, protecting its seals, and strictly controlling waste management and marine

pollution. Action must, however, be strengthened to protect whales; to ensure human activities in Antarctica adhere to strict environmental assessments; and to prevent any form of development that would cause environmental damage. The world community must go further in protecting this last and fragile ecological frontier. Whether this can be achieved by declaring the continent a world protected area is not for UNEP to decide. It is for governments. But in so doing, governments must take into account not merely their own national self-interests, but also the interests of humanity in conserving this critical part of the global environment.

Clearly, saving our environment will not be won in a vacuum. Development policies have too often been fuelled by a gluttony for resources based on nothing firmer than ecological deficit financing. Many regions are now on the verge of ecological bankruptcy, as ill-conceived development has too often been the cause—not the cure—of environmental destruction.

Slowly, a new imperative is emerging, in which resources are being channeled to meet basic human needs, to fight poverty, to increase access to jobs, health care and education, and to engage the traditions and skills of the people—particularly women—in development. We know that poverty and environmental degradation are mutually reinforcing. We know that conservation cannot succeed when over one billion people are too worried about their next meal or tonight's fuelwood to be concerned about inter-generational responsibility. You cannot implement environmental protection without successfully accelerating sustainable development and strengthening sustainable livelihoods.

Progress likewise demands that developed countries reform wasteful consumer and other destructive habits, turn from polluting to cleaner technologies, and revamp the economic values attached to natural resources. Economics has consistently undervalued or ignored natural resources, thereby beckoning individuals, industries and governments to exploit them as if they were free and infinite resources. Clearly, standing forests, wild species, virgin soils and precious clean air and fresh water have life-sustaining and photosynthetic values that must be incorporated into GNP and other measurements. We are all looking to the Second World Conservation Strategy to help integrate ecology with economy and development in an operative manner.

Distinguished guests, we are less than ten years away from a new century. The progress we make in development reforms and environmental protection today and in the months ahead will determine

the future of our grandchildren. The energy, faith and dedication we bring to our work can light our planet with hope never kindled before. It is with this beacon before us that UNEP is proud to join

with IUCN in its work and in this important meeting.

Thank you.

Annex 8

Message on behalf of the Director-General of the United Nations Educational, Scientific and Cultural Organization (UNESCO), Dr Federico Mayor, by Dr Jane Robertson Vernhes, Division of Ecological Sciences

It is my great honour and pleasure to deliver a message from the Director-General of UNESCO, Dr Federico Mayor, to the IUCN General Assembly opening here in Perth, Australia.

The Director-General was personally invited to participate in your Opening Ceremony and he deeply regrets that due to his very busy schedule at this time he was unable to be with you today. Mr Bernd von Droste, Director of the Division of Ecological Sciences, was also unable to attend due to the fact that this Assembly falls in between two very important meetings, namely the 11th session of the International Coordinating Council of the Man and the Biosphere Programme and the 14th session of the World Heritage Committee. The Director-General has therefore entrusted me to deliver the following message to your General Assembly.

Ladies and Gentlemen, the renowned Danish physicist Piet Hein said that "Problems worthy of attack prove their worth by hitting back" and this epigram would seem to apply very appropriately to the problem of the deteriorating condition of today's global environment on the eve of the 21st Century. The seriousness of the situation was identified much earlier, notably by scientists such as Sir Julian Huxley, the first Director-General of UNESCO. As many of you know, it was with his leadership and guidance that IUCN was founded in 1948 with the mission of rallying numerous disparate associations and national organizations into a real Union for the Protection of Nature and Natural Resources.

Where are we today following the 40th anniversary of both IUCN—or the World Conservation Union as it is now called—and also UNESCO? What has been our contribution to stopping the degradation of the natural resources on which we depend for our life support system?

As with every scientific experiment, we would need a neutral control to serve as a base against

which to measure our progress. Without such a possibility, it is difficult to evaluate whether in fact, more than 40 years later, we have in any way succeeded. The general opinion of scientists, policy-makers and the general public, however, is very negative.

The magic date of 1992 is a special one in this context for United Nations organizations as it marks the 20 years following the first United Nations Conference on the Human Environment. The 1992 Conference (to be held in Rio de Janeiro, Brazil) focuses on the central issue of Environment and Development, with its various ramifications under the key themes of climate change, sustainable development and the conservation of biological diversity. UNESCO is fully aware of the institutional deadlock prevalent in nearly all countries. Most institutions are organized along sectoral lines, making it difficult to deal with interconnected problems requiring a holistic approach. Moreover, their functioning is based on the tautology of continuity, making them unsuited to adapt or change. To progress, we must recognize that even when potentially useful information has been obtained from field experiments, it is often not made accessible in a timely and comprehensible way to those shaping or making decisions.

How can UNESCO and IUCN help each other to break this institutional deadlock at a time when change is needed more than ever?

The answer probably lies in relying even more on each other's strengths. IUCN should make use of the international inter-governmental forum of UNESCO as much as UNESCO should use the forces of the Union of non-governmental and governmental organizations united for the conservation of natural resources. Here I see three main areas for future co-operation, based on present and future activities within our mandates:

1. The continued and enhanced implementation of UNESCO's World Heritage Convention. Here,

IUCN has a unique role as technical advisor to the world's most universal legal instrument to protect cultural and natural heritage. I should note here the recent adherence of three countries, Belize, Czechoslovakia and Fiji, bringing the total number of States Parties to 114.

2. The communication of information on the environment—and for IUCN especially on the conservation of natural resources—in a comprehensible and useful form for different audiences and target groups. Here, UNESCO will take advantage through an inter-sectoral task force of its unique position at the cross-roads of education, communication and science, and will mount a major new initiative on the preparation and communication of information and educational materials. UNESCO and IUCN should co-operate and co-ordinate as opportunities arise, one example being the high level of UNESCO support to the IUCN National Parks and Protected Areas Congress in February 1992 and the numerous publications, reports and communiques that are envisaged.
3. UNESCO's Man and the Biosphere Programme, particularly co-operation with the international biosphere reserve network. There are many areas of the MAB Programme where co-operative ties could be further strengthened and duplication of effort avoided. Many people in this room have been and are continuously involved in the many MAB projects aimed at resolving problems of natural resource use, which we now call the quest for sustainable development. At its 11th session, which terminated less than two weeks ago in Paris, the MAB International Co-ordinating Council called for a process of "concentration and de-

concentration". This will mean focusing on a limited number of major issues, coupled with an effort to decentralize the co-ordination of certain activities from the MAB Secretariat to the relevant regional and/or non-governmental parties and organizations (IUCN included) through its various thematic programmes.

Linked with this third area is the IUCN/UNESCO co-operation to implement the Action Plan for Biosphere Reserves. The MAB Council laid particular emphasis on the fact that the network of biosphere reserves is the only international framework of protected natural areas at the intergovernmental level that seeks to combine conservation with development, research with demonstration, education with training, and so on. The network is far from being perfect but it has the virtue of existing already. The MAB Council also launched a joint effort with IUBS/SCOPE to use this network, however imperfect, to further our understanding of biological diversity, especially the biogeography of biodiversity. The MAB Council also decided that an Advisory Group be established—to which IUCN will be invited to contribute—to review and strengthen the overall network of 293 sites in 74 countries. Finally, and perhaps most interesting and innovative of all, the MAB Council requested the Director-General of UNESCO to set up a working group to examine the status of the international Biosphere Reserve network with a view in particular to enhance its legal standing.

Ladies and gentlemen, I would like to conclude by reiterating the need for reinforced co-operation between IUCN and UNESCO; and by conveying best wishes to all present for a constructive and successful assembly.

Annex 9

Message on behalf of the Director-General of the Food and Agriculture Organization of the United Nations (FAO), Mr Edouard Saouma, by Mr Gil Child, Senior Forestry Officer

On behalf of the Director-General of FAO, Mr Edouard Saouma, I should like to convey best wishes to IUCN for a successful and productive General Assembly. I should also like to congratulate the Australian authorities on the excellent arrangements that have been made for this General Assembly and related events and to thank the people of Western Australia and, in particular, our host city Perth, for the warm welcome that they have extended to participants.

There has been long-standing collaboration between IUCN and FAO at various levels in areas of common interest. The framework provided by the World Conservation Strategy and the coordinating role of the Ecosystem Conservation Group, which brings together IUCN, UNESCO, UNEP and FAO on a regular basis, has facilitated the harmonization of our respective efforts in the field of natural resource conservation and management. In particular, the complementarity of our activities should be stressed.

Recently, FAO as one of the collaborators in the preparation of the World Conservation Strategy, has made substantial contributions to the current exercise which will revise and update it in the light of a decade of experience in its implementation. In addition to this, FAO has been able to provide advice and inputs to the development of National Conservation Strategies, to countries that have requested such assistance.

Since the 17th Session of your General Assembly in Costa Rica, biological diversity has been a subject which has received considerable attention from both our organizations. One aspect of this has entailed contributions to the preparation of an international legal instrument on the biological diversity of the planet.

Following Decision 15/34 of the UNEP Governing Council in 1989 on this subject, which requested UNEP to proceed with the preparation of a legal instrument in cooperation with FAO, the

25th Session of the FAO Conference noted this decision and to quote "urged that FAO play a key role in the formulation and negotiations of any eventual legal instrument in this regard".

As a result of this, FAO has actively cooperated with UNEP in the preparation of elements for a legal instrument on biological diversity and has prepared and discussed with UNEP, IUCN and UNESCO through the Ecosystem Conservation Group draft elements for articles for a Convention, emphasizing both the aspects of conservation and those of sustainable development and use of biological diversity.

In this connection most recently, FAO specialists have been participating in the meeting of legal and technical experts of the Sub-working Group on Biotechnology and the meeting of the *Ad Hoc* Working Group of Legal and Technical Experts on Biological Diversity, both of which have just taken place in Nairobi.

In recognizing the importance of this subject, FAO has initiated the preparation of a Special Action Programme encompassing the different elements of biological diversity relevant to the work of the organization. The Special Action Programme for Food and Agriculture will be aimed at rationalized and coordinated activities and avoiding dispersion of efforts as well as to attract additional financial support from donors to assist developing countries in strengthening their national structures and to conserve, utilize and fully benefit from their biological diversity. This programme will also promote biological diversity through stimulating evaluation and breeding programmes for marginal conditions, and diversification within and between crops, particularly of under-utilized species. It should be noted that the existence of solid national infrastructures, capabilities and programmes will be a necessary condition for the efficient implementation of any legal instrument or convention that could be ratified by

countries during the 1992 UN Conference on Environment and Development.

Tropical forests constitute another subject of importance to both our organizations. FAO has participated in activities related to IUCN's Tropical Forest Programme and is encouraged by the philosophy of reconciling conservation requirements with those of people living in forest areas, which IUCN has promoted at the field level. FAO itself is deeply involved in this area in relation to the Tropical Forestry Action Plan (TFAP) and is pleased to place on record its appreciation of IUCN's contribution to its implementation, particularly in the context of individual national TFAP exercises.

TFAP was the subject of an external review earlier this year and the recommendations arising from this are in the process of being followed up. They have been discussed by FAO's Committee on Forestry, whose observations on them are now being considered by the 98th Session of the FAO Council, which will be sitting until 30 November 1990.

In the meantime, a high-level meeting on the future of TFAP was held in New York at the beginning of this month, between its "co-founders"-UNDP, the World Bank, WRI and FAO.

Turning to the future, FAO would hope for IUCN's continuing support to TFAP and in particular, given its substantial NGO membership, would look to IUCN to help clarify some of the misunderstandings that have arisen in some quarters of this constituency.

The need for urgent world-wide action aimed at the conservation and sustainable development of the world's forests has been increasingly recognized by, for example, the Brundtland Report, the Nordwijk and Langkawi Declarations on the environment; successive declarations of the G7 summit; and, most recently, the Ministerial Declaration adopted at the Second World Climate Conference (Geneva, November 1990).

But deeds have not always followed words. In FAO's view, the lack of a proper framework at the global level and of an international consensus on policies and targets to be applied in forest conservation and management has hampered national and international efforts to respond to the increased pressures on the world's forest resources.

It is for this reason that the FAO Secretariat has been developing the concept of a global instrument on forest conservation and management. A review of the existing conventions in the forestry field has pointed out the fact that there is no single comprehensive convention dealing with all types of forests and all aspects of forest management,

conservation and development. What does exist is a patchwork of legal instruments at global or regional levels focusing on various aspects of forestry, such as trade in tropical timber, forestry research, the protection of certain endangered species, and the protection of certain types of forest environment.

An international instrument for the conservation and development of forests could provide a framework for increased national efforts, bringing together both ecological and economic approaches to the use of forest resources. It could at the same time provide a mechanism for support for and cooperation in policies and programmes aimed at the conservation and sustainable development of the world's forests.

Preliminary proposals for a world forest instrument were considered by FAO's Committee on Forestry (COFO) at its 10th Session, held in Rome on 24-28 September 1990. The Committee supported the concept of an international instrument on the conservation and development of forests as a significant means to find solutions to current socio-economic and environmental problems related to the destruction and degradation of forests and to foster international cooperation. It was agreed that FAO should continue its efforts to contribute to the preparation of the legal and technical scope and content of such an instrument.

The future development of an international instrument for the conservation and development of the world's forests will obviously be influenced by work going on in other fora, for example, in connection with the climate change and biological diversity conventions.

FAO is ready to join others in such coordination under the auspices of UNCED Secretariat.

FAO has been associated with World National Parks Conferences since the first one held in Seattle, USA, in 1962. The forthcoming World Congress on National Parks and Protected Areas to be held in Venezuela in 1992 will be particularly significant for the Latin American Technical Cooperation Network on national parks, protected areas and wildlife, which is supported by the FAO/UNEP project on wildlands, protected areas and wildlife management in Latin America and the Caribbean.

The FAO Regional Office for Latin America and the Caribbean, in collaboration with IUCN and the National Forestry Corporation of Chile (CONAF), has already held a meeting of South American country members of the network to plan participation of the region in the World Congress. FAO will continue to support this regional initiative and where possible also participated in the work of the Steering Committee for the Congress.

Apart from involvement in preparation for the IV World Congress on National Parks and Protected Areas, the regional network has been carrying out a full programme of information dissemination, technical workshops and technical exchanges in relation to wildlands, national parks, protected areas and wildlife management.

Turning to field activities at the country level, it is pleasing to note that there has been close cooperation in individual projects.

In conclusion, much of the effort of common interest that FAO and IUCN is currently engaged in at the global level will contribute to the objectives of the United Nations Conference on Environment and Development (UNCED). FAO has been actively engaged in preparations for this conference and participated in the first UNCED Preparatory Meeting held in Nairobi in August 1990. FAO has been engaged in the work of the Intergovernmental Panel on Climate Change (IPCC) and most recently was involved in the

Second World Climate Conference, both of which are key elements in the progression towards the UNCED Conference (Brazil, 1992). Another major FAO contribution to UNCED will be the FAO/Netherlands Conference on Agriculture and Environment, to be held in the Netherlands in April 1992 and to which IUCN will be invited.

FAO is also a major partner of the UNCED Secretariat in the elaboration of its reports and proposals on living aquatic resources, in coastal area management, fresh water resources, biodiversity and toxic wastes.

All these activities illustrate the need for close coordination and complementarity among the main actors in these fields. FAO, for its part, will continue to play its role in the conservation and rational use of natural resources for sustainable agriculture, forestry and fisheries and fully supports the complementary role of IUCN for the conservation of nature.

Annex 10

Greetings from Heads of State and International Organizations

Greetings from the President of Costa Rica, Dr Rafael A. Calderón

Distinguished Participants

In the name of our People and Government, I should like to salute the celebration of the 18th General Assembly of IUCN, which will surely make an important contribution to worldwide efforts to achieve protection of the environment and the wise and sustainable use of its natural resources.

As part of these efforts, on the occasion of the 17th General Assembly of IUCN held in San José, Costa Rica, in 1988, our Government signed a letter of intent to initiate the joint development of the SI-A-PAZ Project (International System of Protected Areas for Peace), whose principal objective is to achieve the conservation, protection and sustainable development of the frontier region between our two countries, which contain wildland areas and unique natural resources of great value.

Today in Central America conditions are being built for a genuine peace based on democracy and just growth. In these new circumstances, our Government has renewed its coordination and cooperation with a view to developing the SI-A-PAZ Project as part of our respective strategies for Conservation and Sustainable Development.

In the name of our People and Government, we respectfully request of this General Assembly that it continues to offer its strong support and cooperation, so as to contribute to the success of our mutual efforts to conserve these important examples of our Patrimony.

I take advantage of this opportunity to wish you every success in your deliberations and send you our respectful regards.

Rafael A. Calderon
President of Costa Rica

Greetings from the International Board for Plant Genetic Resources (IBPGR)

In the spirit of collaboration in which IBPGR signed a Memorandum of Agreement with IUCN in 1988, it is with special pleasure that we participate as Observers in the 18th General Assembly.

Please convey my best wishes to the Assembly for a very successful and fruitful session in Perth. I look forward to continuing our collaboration to promote conservation in a changing world.

Best regards

D.H. van Sloten
Acting Director

Message from the World Health Organization (WHO) by Dr Rudolf Sloff, Division of Environmental Health

The World Health Organization has a strong commitment, based on its constitutional mandate, to the promotion of environmental quality and the reduction of health hazards in the human environment. Some of the major health problems, in developed as well as in developing countries, are determined primarily by environmental factors, such as lack of good quality drinking water and sanitation, unsafe and contaminated food, chemical pollution, radiation, noise and vectors of communicable diseases. Many of these factors are, in turn, affected by development processes and population growth.

The conservation of medicinal plants has been an important focus for cooperation between WHO and IUCN over the past triennium and was the subject of a conference jointly sponsored by WHO, IUCN and WWF, held in Chiang Mai, Thailand, in

1988. This was the first international meeting that brought together health professionals with experts in nature conservation. The forty-second World Health Assembly in 1989 passed a Resolution on Traditional Medicine and Modern Health Care, which noted the Chiang Mai Declaration, agreed by the participants at the conference, and placed the whole issue of conservation of medicinal plants on the health policy arena.

WHO has recently established a high level Commission on Health and the Environment, composed of eminent scientists and politicians, charged with the task to produce recommendations on research and other action programmes for WHO in order to resolve urgent problems of environmental health, associated with food and agriculture, industrialization, energy use and urbanization. This Commission is supported by four Expert Panels in each of these developmental driving forces. It is intended to use the outcome of the Commission's

deliberations to prepare the WHO contribution to the 1992 UN Conference on Environment and Development, to be held in Brazil.

The evolution of IUCN's World Conservation Strategy into a Strategy for Sustainability, currently being drafted in collaboration with UNEP and WWF, is therefore followed closely by WHO. It should be remembered that no development can be considered sustainable as long as human health is not safeguarded and the quality of human life not secured at the highest possible level.

WHO wishes to express the hope that the conservation initiatives of IUCN, as supported by UNEP and WWF, will continue to be focused on the preservation of a steadily more productive, more supportive and a healthier environment for present and future generations of the human race. Within its mandate and resource constraints, WHO is ready to play its role in these efforts.

Annex 11

Keynote Address: Conservation in a Changing World

Professor Ralph O. Slatyer

Chief Scientist, Department of the Prime Minister and Cabinet,
Canberra, Australia

The theme of the Assembly, "Conservation in a Changing World", is timely and challenging. Timely because the environment is now firmly on the political and economic agenda of international bodies, individual countries and local authorities. Challenging because the environmental issues which surround us go to the most basic of questions—the continued functioning of the life support systems of the planet, and the ability of future generations of human beings to enjoy healthy, peaceful and fulfilling lives.

Your Assembly is also occurring at an historic time in human affairs. We are witnessing major political, social and economic changes in many parts of the world. And we have had, in the past few months, a salutary reminder of the dependence of industrial nations on energy and on the fossil fuels which provide most of that energy.

In front of this sophisticated audience I do not want to discuss in detail the changes which are occurring in the global environment. Perhaps more than any other group, those of you at this General Assembly are well aware of them. Instead I would like to begin by describing some of the key features of human impact on the biosphere and then consider some of the approaches which I believe will be needed to tackle them. I would then like to conclude with some comments on the role of IUCN in these vital matters.

Global Impact

The total impact of human beings on the global environment is the product of the number of people and the impact per person. Both have increased, and are continuing to increase, alarmingly. The scale of total human impact is now such that some 40 per cent of net global photosynthesis on land—the primary biological energy for the

whole biosphere—is diverted directly or indirectly to our needs.

It is clear that this increasing overall impact must be reined in. Indeed, the accumulating levels of greenhouse gases in the atmosphere, the increasing levels of pollutants in soils and aquatic systems, the increasing areas of degraded land, are clear testimony that the global environment is deteriorating and the carrying capacity of the planet is already being exceeded. Even with the present level of impact, it is evident that, in many ways, we have gone beyond the stage of living on the income of the natural systems of the earth to the dangerous stage of drawing down their capital.

Human use of the biosphere must contend with two inescapable facts. The first is that the biosphere, and its capacity to tolerate human impact, is finite. The second is that the ability of the earth's natural systems to tolerate different types of impact varies from place to place. Understandably, impacts tend to be greatest in areas of highest population density and highest levels of resource utilization, but the ability of natural systems to handle them varies markedly with climatic and soil characteristics.

By and large temperate regions have relatively favourable climates and relatively fertile soils. Tropical areas are characterized by more erosive climates and less fertile, more erodible soils. Cold and dry environments have relatively little capacity to handle impacts. Not surprisingly, it is in the world's tropical and arid countries, where rapid population growth often coincides with ecological systems less able to tolerate intensive utilization, that many of the world's most serious environmental problems are found. Global climatic change would make these problems even more intractable.

Of special concern to the biological conservation community is the rapid increase in habitat destruction and modification and the associated

reduction and fragmentation of areas of natural habitat. In the process the normal functioning of ecosystems is being disrupted, with unknown consequences. And biodiversity is being steadily lost, both through extinctions occurring directly through loss of habitat and through the inevitable subsequent losses as fragmentation and isolation lead to a decline in species richness in the affected areas.

These factors lead to predictions that one quarter of the world's species could become extinct in the next few decades, with grave consequences when it is realised how much we will depend on biodiversity for many of our future needs.

Even in Australia, with relatively low human populations but a predominantly tropical and arid environment, we are only too aware of the fragility of ecosystems to human modification. In just 200 years of European settlement, we have damaged, largely through the effects of domesticated grazing animals, more than 50 per cent of the surface of the continent to a degree that positive rehabilitation measures are needed to prevent further degradation.

During this period there have also been significant extinctions, particularly of species with specialized habitat requirements and which were subject to predation by, or occupied similar ecological niches to, introduced species. Given Australia's significance as one of the world's major centres of biodiversity, it is clear that we have a special obligation to reduce further extinctions to an absolute minimum.

More broadly, it is clear that all of us alive today owe it to future generations to provide a global environment no less able to provide for their needs than that which has provided for ours.

Achieving Sustainable Development

My basic message today is that we can provide such a global environment for future generations, difficult though this will be. It is, perhaps, the greatest challenge facing humanity, but one that we must accept.

It will require the adoption of ecologically sustainable development as a guiding ethic for our future actions. It will involve a recognition that population growth is the basic driving force for overall human impact. It will involve a recognition that ecologically sustainable development can only be achieved in conjunction with continued economic and social development. And it will involve a recognition that new, ecologically sensitive, technologies are the key to ensuring that such continued development is ecologically sustainable.

I am conscious that some of you will disagree with my concern about population growth. To an ecologist, though, faced with the reality of a world of finite capacity and resources, stabilizing world population at a level as close as possible to that which now exists is the most urgent task of all. Particularly when one is aware of the demographic statistics which highlight the potential for future growth. While we can hope to reduce the average impact of each person, increasing population ultimately means that the overall human impact on the biosphere will be unsustainable.

I am also conscious that some of you will dispute the need for continued economic development, and the positive role that technology can play in achieving sustainable development.

To me, however, the overall challenge of sustainable development is to lead to progressive increases in the quality of life for all the people of the world. To achieve that will certainly involve, indeed will require, increased economic activity to ensure that we can provide people with more options, rather than fewer, to lead fulfilling lives. The task is to ensure that such increases in economic activity have steady-state or declining impacts on the biosphere, at levels which are ecologically sustainable.

Science and technology have a key role in providing those options and in moderating those impacts. I shall return to this role in a few moments.

To achieve ecologically sustainable development will also require the active involvement of individuals, of governments and of the international community. Individuals because, although our major environmental and conservation problems are global in nature, they arise from a myriad of individual, localized actions and will ultimately be solved by such actions. Governments, because only at the national level can the mixture of legal, economic and social measures be devised and implemented. And internationally, because no one country can achieve global sustainability without corresponding actions by the community of nations.

The first step in resolving problems is to recognize that they exist. In many respects we have taken that step. The next step, of taking actions which involve a significant change in personal behaviour, is much more difficult. Particularly when, in so many cases, the problems which we must resolve are not easily perceived and their personal costs and benefits are not easily assessed. I think one has to agree that the necessary actions will only be taken by individuals who are well informed, who understand the problems and the solutions, and who consider that it is in their best

interests to change their behaviour to implement them.

The motivation for that decision will be strongly influenced by local conditions, by community attitudes and by economic considerations.

To obtain agreement on actions within individual countries, national governments have a key role to play. Only they can take an overall view of a country's population and natural resource balance. Only they can draw together local authorities and provincial governments to develop and implement a national action plan and only they can participate in the international discussions which must address regional and global issues.

This is not to underrate the importance of local community groups or of green political movements. Such groups in many countries are leading the path to change and have become an important source of pressure in inducing governments to act.

It is essential that the resultant strategies have the broadest measure of public support and that the individuals and groups who are responsible for particular impacts on the environment are positively motivated—by a mixture of incentives and disincentives—to ensure that their impacts are ecologically sustainable.

In developing national strategies, I think it is worth emphasizing the desirability of charging all areas of government, that is all Ministers and their departments and not just specialist environment departments, with the responsibility for achieving sustainable development in the areas for which they are responsible. I think this is the best way to build environmental issues into overall policy formulation in each portfolio.

Not every country will produce a national strategy for sustainable development. But what must come out of such plans and programmes that are produced must be a sense of determination to address the major sources of unsustainability in each country. I think it will be essential for countries, individually and collectively, to address the problems which only they can resolve and to seek international support for those which are beyond their means.

As a broad generalization, most countries with rapid rates of population growth have a relatively low level of impact per person and most of those with high levels of impact per person have relatively low rates of population growth. It seems to me that the first group have a special responsibility to rein in their population growth and the latter group a special responsibility to reduce their impacts, particularly those of global significance, such as greenhouse gas emissions.

International Cooperation

Regardless of the degree to which individual countries are able to develop and implement national sustainable development strategies, the achievement of regional and global strategies is going to involve unprecedented levels of mutual understanding and international cooperation. While there are some encouraging signs in this regard, I am apprehensive that the necessary level of cooperation may not be readily forthcoming.

In some cases international agreements under UN auspices may be the most effective mechanism, in others agreements between groups of countries with common or complementary interests may be more effective. I think it is important not to have unrealistic expectations of what the UN system can achieve, particularly in regard to possible outcomes from the 1992 Conference on Environment and Development. Too often, governments have been prepared to adopt UN resolutions, and agree to programmes, but reluctant to provide funding at the levels needed to result in effective action.

Nevertheless, a major strength of the UN system is its ability to give visibility and a significant degree of momentum to important international issues. The Brundtland Report is an outstanding example, as is the Intergovernmental Panel on Climate Change (IPCC).

Where UN machinery is not effective, I believe we will have to see groups of countries, with common or complementary interests, taking initiatives on specific matters. The Montreal Protocols for CFC emissions (which, incidentally, contained the mixture of incentives and disincentives which I referred to earlier) provide encouragement that this may be the most effective course of action in some circumstances, although it must be said that the phasing out of CFCs will be one of the easiest environmental problems the world has to contend with.

"Debt for nature swaps" have also been arranged bilaterally, or between groups of countries. Subject to their acceptability to the country which foregoes other use of some parts of its natural systems, it seems to me that it is entirely appropriate for creditor countries to recompense developing countries for foregoing other uses of their natural systems, assuming that this is a continuing commitment and that effective management of the protected areas is provided.

Many of the environmental problems, and unsustainable practices, evident in the developing countries are directly linked to the need for debt servicing. In a variety of ways, this limits the options of debtor countries. While debt for nature swaps can play a role, much more substantial

money flows are needed if the overall cash flow from developing to developed countries is to be reversed and ecologically sustainable practices and industries established.

The underlying principle that should guide the relationships between trading partners should involve, not the exploitation of one by the other, but the creation and maintenance of an interactive commitment which is consistent with the sustainable use of natural resources in the supplier country or countries. This would be a significant departure from current practice but one which could form the basis of global sustainability.

The best way to achieve this would be if prices for commodities reflected, as a minimum, their full cost based on ecologically sustainable land use practices.

An important step towards this objective would be the elimination of existing obstacles to trade in commodities and, more generally, of the products of developing countries. Subsidies on local production of rural and related products in the industrialized countries, plus export subsidies, are a major factor depressing world prices and therefore export receipts to producer countries. Buyer cartels also act to depress returns to commodity producing countries.

At present there is insufficient recognition in the industrialized countries that the failure to pay ecologically realistic prices makes it extremely difficult, if not impossible, for commodity producers to utilize ecologically sustainable practices. The consequence is land degradation in countries dependent on commodity exports and a diminished global environment overall.

The outcome of the Uruguay round of the GATT negotiations will be vital for the environment. The magnitude of the environmental costs, to both developing and industrialized countries, of the massive subsidies for agriculture in the US and the EC in particular, is seldom realised.

To take the escalation of support under the Common Agricultural Policy, for example, the EC has increased agricultural production at the expense of production in more efficient agricultural producing countries. This has led to major impacts in both groups of countries. In the EC, the extensive use of agricultural chemicals has led to high levels of pollutants in soils and waterways. In the efficient producing countries, including developing countries, the depression of world prices caused by the support mechanisms has resulted in increasing pressure on agricultural ecosystems through the forced utilization of unsustainable practices.

It is in the interests of global sustainability, and therefore of the world community, that

commodities and raw materials generally are produced, and processed, in countries and regions where environmental conditions permit efficient production using ecologically sustainable practices. There is a major challenge to the GATT negotiators to address this problem.

The Role of Science and Technology

Let me now turn to the important role that science and technology can have in achieving sustainable development.

We are all aware that much of the technology still in use at the present time was developed decades ago, before its adverse impact on the environment either directly, or indirectly through wastes and by-products, was apparent or before it was regarded as undesirable. This applies to all industries, including agriculture and resource extraction, and not just manufacturing industry. In many respects such technology reflects the view that neither those causing damage to ecological systems, nor the consumers of their products, had to pay the full cost of environmental impact.

Not surprisingly, such technology has earned a bad reputation, yet there are major opportunities for clean, green technologies to reduce the impact of human activities on the biosphere. Already we can see technologies being introduced which are more efficient in their use of materials and energy, which can minimise wastes and by-products and which can be cost-effective. And a substantial science base exists on which further technological progress can be built.

We need to encourage the rapid development and introduction of these technologies. In turn that requires appropriate incentives to justify the necessary R&D and investment.

It is often convenient to classify the major impacts which human activities have on the biosphere into two major categories: those which impact directly on the biosphere—for example agriculture, mining, urbanization and major public works; and those which impact as by-products of other activities, such as liquid, solid and gaseous pollutants and by-products. The former group is found in both the developing and industrialized countries; the latter is concentrated largely in industrialized countries.

For sustainable development the challenge to technology is to reduce these impacts so that they are ecologically sustainable. Improved technology can reduce both types of impact. In the former category this will be through ecologically sustainable technologies for agriculture, forestry and related industries which are using living systems to

produce biologically-based products, and for ecologically sensitive technologies for industries such as mining and those concerned with the whole process of urbanization and in providing major public works. In all these industries substantial improvements in present practices can be, and in a number of cases are, being devised.

In the latter category associated, for example, with manufacturing industry and including mineral processing, transportation and energy generation, there is scope for dramatic improvement because new technology can increase efficiency and reduce energy needs as well as reducing emissions. The task is to reduce the effect of the substances we add to the biosphere to the point where those which are bioactive, but not biodegradable, must reach as close to background levels as possible, and those which are biodegradable can be recycled ecologically without disruption to the biosphere.

With special reference to industrial activities it must be recognized by governments that substantial long-term investments will be required by industry to introduce new practices and products. To generate that investment, corporations must have clear guidelines so that they know what is expected of them.

Within any one country this should ideally involve the development of only one set of standards and approval procedures so that corporations will not be in a position of obtaining multiple approvals or approval by one authority which is countermanded by another.

I think that experience is accumulating to suggest that the best framework to encourage the development and introduction of improved technology is one which involves setting performance targets for various industries and activities, combined with timetables for achieving them.

These performance requirements need to be achievable with technology which already exists or which can be developed from the existing science base. They can be reset at intervals as long as corporations are assured of the conditions under which facilities established under current guidelines can continue to operate, or be gradually phased out, when new standards are set.

Finally there need to be real benefits for corporations which conform to the guidelines and costs to those which do not. Regulations which mandate certain standards and practices, and economic measures which encourage appropriate responses, all have a role to play.

The above procedures, to a greater or lesser degree, are now being introduced into many countries and, within countries, individual corporations and industries are implementing more

environmentally friendly processes and products on their own initiative. Good corporate citizenship in response to public opinion is a factor in this, but there can also be significant financial benefits from introducing more efficient, cleaner practices and from becoming an industry pacesetter.

What is needed now is a sense of urgency and determination, and a willingness to agree to concerted international action when individual countries could be disadvantaged by acting unilaterally. Failure to achieve such action, with respect to greenhouse gas emissions at the recent 2nd World Climate Conference, indicates that agreement may not be easily obtained and, on some issues, may be extremely difficult.

With respect to industrial technologies, it is also important, in a global context, that as countries move along the path of industrialization, they are able to move directly to new technologies, avoiding those which are more damaging environmentally. Access to these technologies is likely to require comparable changes in attitude by the industrialized countries to those required to improve the basis on which commodities are traded.

There is less opportunity for developing countries to benefit from the transfer of land care technologies. Indeed, as we have found to our cost in Australia, rural and related practices which are ecologically sustainable in temperate, moist environments, can lead to land degradation in tropical and dry environments. And similar experiences are widespread in developing countries. In this area, research in developing countries themselves, benefiting from research experience elsewhere, will increasingly be needed to provide a better basis for sustainable rural practices than exists today.

The role of IUCN

Let me now turn to the role of IUCN in this changing world. I would like to make three main points.

First, let me say that IUCN is in a unique position to play a major role in assisting the global community to shift to a future path of ecologically sustainable attitudes and practices.

It is in this special position partly because of its membership base, including all of you here today, which ranges widely over the governmental and non-governmental sectors. It can therefore draw on both sectors in a way that I believe is unparalleled elsewhere. IUCN is in this special position also because of the breadth of its perspectives, which set conservation in a broad social, cultural and economic context. And it is in this position because of

the professionalism of all of its activities. I congratulate all those of you who have been associated with the Union and have contributed to its work.

Second, I would like to encourage you to maintain and enhance your international leadership role in matters directly related to biological conservation and the conservation science which underlies it. In many respects, the protected areas now found in virtually every country in the world are testimony to the role that IUCN has played in raising awareness of the importance of conservation and in developing practical measures to implement it. This role will be even more important in the future than in the past, with the increasing pressure on, and fragmentation of, the world's natural systems.

Associated with this role, it is clear that you intend to play a leading part in developing strategies for the conservation of biodiversity, and in the development of the proposed international convention on biodiversity.

I commend your conference document on this subject. But, despite your efforts and those of other conservation bodies, it is my impression that only a small fraction of the world community is aware of the importance of biodiversity. Most people do not realise that local ecosystem functions contribute to overall biosphere functions and have little appreciation that human actions which disrupt or destroy local biological communities can ultimately lead to loss of entire habitats and their component species.

At a more extreme level, in those societies where population pressure and poverty are leading to land degradation and the progressive destruction of increasing areas of natural ecosystems, conservation of biodiversity has little relevance and very low priority. Yet it is in tropical regions where these societies are concentrated that much of the world's remaining biodiversity is at risk.

To me, therefore, a primary task is to raise awareness in all countries of the importance of biodiversity. And an associated task is to emphasize that conservation of biodiversity is not simply a matter of establishing and maintaining protected areas, but of adopting ecologically sustainable land use practices so that areas of modified natural ecosystems can be drawn into conservation units to provide the greatest possible contiguous areas of uncultivated land. Land which retains most of the structural and functional attributes of the original natural systems, and which serves to provide a much greater range of habitats than would be possible in protected areas alone.

To raise awareness and to generate support for a global strategy to conserve biodiversity, it seems to me that there could be benefit in establishing international machinery to play a role for bio-

diversity similar to that which the IPCC has played for climatic change.

That programme served to draw the world's attention to the greenhouse effect and global warming in a way that, in my view, no other mechanism could have achieved. It drew in many of the world's most outstanding scientists, and key figures from governments and international organizations. It achieved a powerful consensus on the processes involved, the likely impacts of those processes and the necessary responses. It has generated a substantial momentum for the reduction of greenhouse gas emissions. While concerted international action is yet to take place, I believe the momentum will ensure that actions do follow, whether under UN auspices or in other ways.

A similar programme for biodiversity would have comparable potential to draw together an outstanding group of people to focus the world's attention on the importance of biodiversity and generate substantial momentum for action.

Although the preparation of an international convention on biodiversity is underway, and will hopefully be considered at the 1992 UN Conference, I believe that a programme of this type could proceed in parallel and, even if it were not concluded until after the Conference, would provide considerable extra support for practical action.

I hope you might give this idea some consideration with a view to IUCN's playing a key role in the process.

Antarctica

The third point I would like to make about IUCN's role concerns the conservation of Antarctica, a matter raised by the Prime Minister this morning and on your Agenda for consideration by the Assembly.

It seems to me that a strong case can be made for the Antarctic continent to remain the world's last great wilderness and for human beings to agree not to exploit its natural resources. And, if the living resources of the Antarctic oceans (at latitudes higher than 60°S) are to be utilized at all, that this should be with a reinforced management regime that has conservation of the living resources as its overriding objective and which prescribes harvesting regimes well within the bounds of ecological sustainability.

I raise this topic in relation to IUCN's role because I believe that conservation of Antarctica symbolises the new ethic which should guide human activities in the future.

The case is based on three propositions. First,

that the Antarctic environment is extremely fragile so that even small human impacts can have severe and enduring effects on it.

Second, that we are aware that Antarctica and the southern oceans have an important effect on the world's weather and climate, but the specific mechanisms involved and the degree to which they could be perturbed by human activities are not well understood.

Third, that we are now all aware of the finiteness of the global environment and the need to live, in an ecologically sustainable way, within these finite limits.

If another island, or even another continent, suddenly emerged, fertile and productive, in one of the world's oceans, it would not change that reality. Unless we regulate our numbers and our impacts, that new land would soon be occupied and exploited and we would be in the same situation as before.

It is the same with Antarctica, although the fact that it is neither fertile nor productive makes the case even stronger. If Antarctica contains energy resources, it does not mean that we should burn more fossil fuels. Indeed we must seek to reduce our dependence on them. If Antarctica contains mineral resources, it doesn't alter the fact that we must seek ways to reduce our demands and utilize existing sources more efficiently. And even if the living marine resources provide a source of food for human beings, that does not mean that human populations should be increased.

I recognize that scientific work must continue, but with tighter environmental controls. And that a case can be made for carefully controlled tourism which does not impact on the Antarctic environment. But I believe that the presence of Antarctica

gives those of us alive today the opportunity to make a commitment that, as part of our recognition of the need for global sustainability, we will manage with those resources to which we already have access and leave Antarctica free of human impact.

This view in no way removes the need for a conservation strategy for Antarctica. But I hope that when you consider such a strategy you will give this more pervasive point of view serious consideration.

By way of a final comment on IUCN's role, let me say that it is apparent from the agenda papers for this Assembly, that IUCN is no longer (if it ever was) a narrowly focused body concerned with biological conservation to the exclusion of broader issues. In every sense your agenda encompasses the broader issues in which biological conservation is embedded, and which go to the heart of the ecological sustainability of human impact on the biosphere.

I warmly applaud this broader role, which IUCN is so well equipped to fill, and hope that you endorse it. Indeed, I consider that the new World Conservation Strategy document, which you will be considering at the Assembly, provides an outstanding framework, in terms of its breadth, depth and balance, of the key issues which should be discussed at the 1992 Conference. I trust that you will play a broad and influential role in the preparations for that Conference, at the Conference itself, and in the actions that follow.

It now remains only for me to wish you well in your deliberations over the next few days and trust that you will enjoy your stay in Australia.

Annex 12

Keynote Address: Conservation Issues in Western Australia

The Hon. Dr Carmen Lawrence MLA
Premier of Western Australia

As you have seen from our presentation there are divergent views on a number of the conservation issues confronting us in Western Australia. It makes for lively and productive debate between people who, whatever their differences, are all deeply committed to protecting the environment of this State.

As far as the State Government is concerned, our responsibility to the environment is multi-layered: we must conserve our extraordinary native flora and fauna for their intrinsic value, as well as for the delight and benefits they bring to Western Australians, to the nation, and to the whole world; we must also do everything in our power to save from extinction Australian species which have found their last refuge here; and very importantly, we have a clear duty to consider the impact of our actions on the global ecology.

It was back in the 17th Century that John Donne said "No man is an island". Nowadays not even Australia is an island in the sense he meant. We too are "part of the main", and know that what we do (or don't do) here makes a difference to the rest of the world.

In Western Australia the State Government is working hard to strike the right balance between the conservation and development of our natural resources.

Yes, we must protect the environment for ourselves and future generations; but yes, we must also provide for the economic security of Western Australians by creating adequate employment opportunities—a dilemma that all nations face.

And bearing in mind our global responsibility we must, as a State, take care to avoid the "not in my backyard" syndrome. There is no point in locking up our own timber resources, for instance, while we contribute to the massive destruction of rainforest elsewhere by importing large quantities of its timber.

As you have seen, the errors of the past have left us with a sad legacy. Our forbears perceived

the land here as harsh and invulnerable. In fact, it was no match for the European farming methods they subjected it to, so that vast tracts of this continent have suffered severe degradation. Considerable work is now being undertaken by farmers and governments to restore degraded land, but the task is immense.

Even so, we have come a very long way. Armed with knowledge, we are now in a position to ensure that the mistakes of the past are not repeated. I am confident that my Government is working towards the right balance between conservation and development for Western Australia. There are problems, of course, as there always will be, but we now have the principles and the processes in place to enable us, as a community, to solve them.

Let me tell you a little about what the State Government is doing here.

In recent years there has been considerable encouragement given by the State Government, as well as the Australian Government, to public debate on environmental issues.

When the State Government legislated in 1987 to strengthen the independence and power of the State's Environmental Protection Authority, it also provided an avenue for increased public involvement. If a proposed development is likely to have a significant effect on the environment the Authority must undertake a full public consultation as part of the required assessment process and make public its advice to the Government before approval can be given. An example of the full consultation process at work can be seen in the Authority's assessment of the proposal to establish a coal mine and power station at Mt Lesueur. The Authority's report is awaited by the Government so that a decision can be made on this highly controversial proposal.

The Department of Conservation and Land Management, which is the government agency principally involved in the management of

conservation lands, is also required to consult with the public in the process of determining its management strategies.

In establishing this Department the Government created a new framework for the practice of productive forestry. By integrating conservation and production within the same agency it has been possible to ensure that areas of productive forest are used for conservation, recreation and the protection of rivers and water courses.

When it comes to our reserves, and the creating of new ones, Western Australia is in a very unusual position. Because of their remoteness large areas of our land have remained in a natural or largely unmodified state. The Prince Regent Nature Reserve in the far north-west of the State is a superb example of the great potential for conservation we possess. Over 630,000 hectares in area it, together with other parts of the far north of the State, is one of the few places where a full suite of native wildlife remains.

But even in a State as large as Western Australia land is a finite resource. Careful planning is needed if we are to make steady progress towards achieving both our environmental and our economic objectives.

I have recently released a new policy designed to clear up, once and for all, existing anomalies in the uses to which reserved land may be put. It establishes clear guidelines for exploration and mining in the various categories of reserve, including the absolute banning of any exploration and mining in 57 of the State's 60 National Parks. Exploration and mining in the remaining three will be banned once historical land use conflicts have been resolved.

The new policy also provides a mechanism for creating new reserves. The Government is planning a series of new conservation reserves throughout areas of the State which are presently under-represented, particularly the Kimberley in the north of our State.

This process will continue the expansion of the conservation estate in Western Australia which has been undertaken by this Government.

Since 1983 nine national parks totalling 440,000 hectares have been created, including the Purnululu (or Bungle Bungle) National Park in the Kimberley and the Shannon, Mt Frankland and Tuart Forest National Parks in the South-West. The Government has recently acquired the northern area of Peron Station for the creation of the first land-based national park in the Shark Bay region. The Commonwealth Government has recently nominated the area for World Heritage listing in recognition of its outstanding conservation value.

Five marine parks and a marine nature reserve have been created, with a total area of over 390,000

hectares. The State now has 10.4 million hectares of nature reserves, 4.85 million hectares of national parks and 1.75 million hectares of State Forest.

In creating reserves my Government is very keen to reconcile conservation interests with those of the original inhabitants. As Premier and as Minister for Aboriginal Affairs I am very pleased to announce that agreement has been reached between the Government and the Purnululu Aboriginal Corporation on joint involvement in the management of Purnululu National Park. Under the new arrangements Aborigines will be able to live on leases within the Park and perform their traditional role as custodians. I very much hope this important agreement will serve as a model for others to follow.

We are very much aware of our obligation to preserve the diversity of the unique fauna of Western Australia. I was therefore pleased to announce yesterday that with the support of the Federal Government and bodies such as the World Wide Fund for Nature, State agencies have been successful in halting the decline of several threatened mammal species. Western Australia's mammal emblem, the numbat, has been on the verge of extinction; yet now, through an intensive research effort, it and other mammals are being brought back from the brink.

The Government will continue to give high priority to research into protection of our threatened mammals and will complement this research by ensuring the creation of secure conservation areas in which to re-establish species.

The Government of Western Australia has long been concerned about the need to reduce greenhouse emissions. I am pleased to announce that we have already made significant progress in the control of chlorofluorocarbons. And Western Australia is prepared to play its part in meeting the commitment made by the Australian Government to phase out production of chlorofluorocarbons by 1998, well in advance of the target set by the Montreal Protocol.

I cannot claim that we have solved all the environmental problems in Western Australia. We have not. Striking the right balance between conservation and development is a continuing process requiring consultation, expertise, ingenuity, perseverance—and, at times, strong nerves.

Difficult though the process may be, we won't walk away from it. My Government is committed to working with the community of WA to solve existing problems and to avoid creating new ones. If hard decisions need to be taken to fulfil our responsibilities we are prepared to take them, as Western Australians, as Australians, and as members of the global community.

Annex 13

Report by the Director General, Dr M.W. Holdgate, on the Work of IUCN in 1988-1990

The report which I have, in conformity with Statutes and with the agreement of Council, laid before this Assembly, uses the Programme adopted in Costa Rica as its framework. At least one paragraph addresses each paragraph of that Programme, and the numbering is identical in order to make cross-reference easy. I hope that the membership finds this presentation helpful in checking on what we have actually done, as compared with what we said we would like to do.

The Triennial Programme for 1988-1990 was ambitious. It called for 121 specific actions, in five main fields—Conservation and Development, Conservation Science, Biodiversity, Habitat and Protected Area Management, and Programme Support and Services. It was to be an integrated programme, with work by the Commissions and Secretariat supporting one another. For this reason, especially, I welcome the inclusion of the Commission Chairs' reports in the document before you.

When I was at school—and I feel ancient when admitting that this experience began some 55 years ago—a common end-of-term commendation was "quite good— but could do better". I feel that this summarizes our achievements in the past triennium. I note that Mr Agarwal and Mr Phillips, in their valuable critique, say the same. There has been no collusion between us. If we say the same things, it is because our minds have thought alike. Whether this is, as the proverb has it, a sign of greatness, I leave it to you to ascertain.

In ten minutes I can only highlight some key features of the past triennium. I will mention eight—one of general approach and seven of detail.

First, our programme has largely been designed to produce output—we have gathered information; evaluated it, and so enhanced our understanding of the relationship between people and nature; formulated methods by which we could regulate human impacts on the living world more wisely, thereby promoting sound conservation and development;

and carried out a whole range of practical applications that demonstrate that our ideas and methods work in the real world. I believe that IUCN must maintain this full spectrum from concept to practice, and must undertake sufficient field activities to show that we are capable of going beyond preaching and generalization. IUCN's reputation has to be that of an expert body that can put its expertise to work.

Second, I believe that it is right that we emphasize Conservation Strategies. The World Conservation Strategy was a landmark. An especially important achievement of the past triennium has been the help that IUCN has been able to give to some 25 countries in preparing strategies at national and sub-national level. We have also promoted conservation activities in wetlands, tropical forests, coastal and marine habitats, the Sahel and Antarctica. We had an active programme in Central and Eastern Europe before the Iron Curtain rusted through. During the triennium we have gained new insights into the relationship between human populations and their consumption of resources, through the work of our rapidly growing and productive Population and Natural Resources Programme. We have provided practical services, ranging from project development to advice on resource management, resource accounting, environmental law and the conduct of environmental impact assessments. Economic evaluations of wildlife have been a particularly important new component of our work.

My third highlight is the reconstruction of the Conservation Monitoring Centre as the World Conservation Monitoring Centre (WCMC), through partnership between IUCN, WWF and UNEP. It is an open secret that three years ago CMC was in a mess. The core funds IUCN could afford to make available to it were inadequate for the maintenance of its database. The project work the Centre had to undertake to keep itself alive was mining its central

resource of knowledge, but there was not the investment to rebuild that critical resource. Thanks to the new partnership, WCMC has a new Board, new computers, new links with users and partners, and will shortly have a new building. I would like to pay particular tribute to WWF as the major donor to that building, and thank them for what they are doing for world conservation through this support.

Conservation science is my fourth highlight. It lies at the heart of IUCN's insights, methodologies and services. If we do not know how ecosystems work, it is virtually impossible to manage them. Some members will be disturbed, as I am, by evidence of an uneven and rather limited achievement in this particular section of our Programme during the past three years. I hope we can do better in the next triennium. However, the picture of relatively slender effort in the field of conservation science revealed by my report is partly an artefact. The sections on Conservation and Development, and on Biodiversity, both report many applications of conservation science.

I believe the major new global initiative on the conservation of biological diversity, which we have launched in partnership with the World Resources Institute (WRI), UNEP and WCMC, should be my fifth highlight. This initiative will assemble knowledge, and focus efforts to safeguard key sites and conserve key populations of species, both in the wild and where necessary through captive breeding programmes. The SSC will make a major contribution here, not least through its outstanding expertise in captive breeding. So will the Botanic Gardens Conservation Secretariat, begun by IUCN before the last General Assembly and now an independent entity under its own Board.

The Commission on Environmental Policy, Law and Administration, and the Environmental Law Centre, have made a major contribution in the shape of successive draft Articles of a proposed new international convention on the conservation of biodiversity, which has been laid before inter-governmental meetings convened by UNEP. But may I at this point digress briefly. We rightly want to see such a convention adopted. But this will inevitably take time. We cannot step back from conservation action while the convention goes through its inevitably careful process of negotiation. Hence our partnership with WRI and UNEP must be pressed forward, to prepare practical measures for safeguarding centres of biological diversity and key organisms. Any convention can only work if such action is well prepared. It is for this reason that I have instructed the Secretariat to give parallel emphasis to the Biodiversity

Conservation Strategy and to the development of the convention itself, and I hope that that approach also has the backing of this Assembly.

My sixth highlight concerns protected areas and their management—clearly a key to safeguarding the biological riches of the world. This is a heartland area for IUCN, and much has been done by the Commission on National Parks and Protected Areas and by the Secretariat during the triennium. As the triennium came to its end we were devoting increasing resources to preparations for the IV World Parks Congress to be held in Venezuela in 1992 at the generous invitation of that Government. I am happy to report that I have been able to strengthen the Secretariat team working in this whole area of biodiversity conservation and protected areas. We are well prepared for the work ahead.

My seventh highlight concerns management. Financially, the Union has had a successful triennium, thanks to the sterling work of the Assistant Director-General, Management and his finance team, under the wise and supportive guidance of the Treasurer, and the cooperation of the entire Secretariat. The accumulated deficit on core funds has been reduced, and is more than covered by two generous legacies that IUCN has received. The accounts have been in the black in both the unrestricted and restricted fund sectors over the past three years, and the overall budget has grown by 68 per cent without a parallel growth in Headquarters staffing. The membership of the Union has broadened, and we have greatly extended our presence on the ground through Regional and Country Offices in the developing world—a trend which, as you will know from the papers, I believe to be of the first importance for our future.

For my eighth and concluding highlight, I recall the saying that people will be known by their works. The value of IUCN depends on what it does, and the services it provides to its members and partners. You will see that at the back of the Triennial Report we list over 130 publications produced in the past three years, and this does not include a vast number of published contributions to periodicals, magazines and the like by staff members and Commission members or a huge volume of informal advice. Our communications are receiving new emphasis, under our newly-appointed Head of Communications, and I take particular pleasure from the new-look Bulletin, which I believe is now outstanding in both its quality of design and its contents.

In concluding these remarks may I pay tribute to all those who have joined together in implementing the Programme. We have not done as

much as we set ourselves, in an ambitious mood, in Costa Rica. But we have done a great deal. My thanks go to all the staff, to all those working in the Commissions, and of course above all to our President and Council, who have proved a tower of

strength and encouragement to me as I slowly learned about this remarkably complex and curious organism, IUCN, and attempted to develop it over the past three years. I am happy to record my gratitude to them all.

Annex 14

Review of IUCN's Programme 1988-1990*

by Mr Anil Agarwal and Mr Adrian Phillips

EXECUTIVE SUMMARY

We were asked by the Council to undertake a critical review of IUCN Programme achievements since the Costa Rica General Assembly (February 1988).

We found progress had been greatest in the formulation of conservation strategies, and in their implementation in parts of the developing world; in the Species and Habitats Programmes; and in the work of the Environmental Law Centre. And least in basic conservation science, social aspects of conservation management and communications, education and training programmes. A large number of high profile initiatives in the 1988-1990 Programme were not realized, in whole or in part.

Overall, progress—while considerable—has been uneven. Work in some subject areas has moved faster than in others, and some geographical areas have benefited more than others. We agree with the Director General that IUCN is "an instrument of great potential, and somehow not yet adapted to realize that potential and hence not yet poised to serve its membership in the ways it should". But, through strong leadership and effective management, IUCN is better placed now than it was three years ago to seize the high ground.

We also looked at eight key issues concerning the Programme:

The Outer Limits of the Programme

In general, the IUCN Programme remains appropriately focused on what IUCN can do best, but a

deeper understanding is needed of human/nature linkages, especially in the context of the developing world. We recommend that, in developing the Programme, as well as the positive guidance contained in paragraph 0.24 of the draft IUCN Programme for 1991-1993, the Director General should explicitly adopt certain rules about the kinds of activities in which IUCN would not get involved.

The Integration of the Programme

There is more integration of programmes than three years ago. But much still needs to be done to carry the process further and in particular to increase the inter-disciplinary understanding of each programme. We welcome the planned appointment of a senior staff member to oversee the integration of the Programme, and recommend that improving coordination remain a priority for the Director General. There should also be a better representation of nationalities on IUCN's staff.

The Balance of the Programme

The Programme would benefit from greater balance. In particular, we recommend that IUCN should:

- coordinate and integrate its conceptual work with the expansion of the field programmes;
- ensure that the regional balance, both between countries and regions and between the developing world and developed world, is relevant to needs; and
- develop a communications strategy to disseminate its knowledge amongst the

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membership and the wider international community concerned with conservation and sustainability, and in a way which is affordable to its members in the developing world.

Programming and Funding

The success of the Programme depends critically on the size of the unrestricted funds and how these are applied. We recommend a strategy to increase unrestricted and programme funds; and the adoption of clear rules on how unrestricted funds are applied.

Field Programmes

The field programmes of IUCN have grown rapidly and further expansion is desirable. But we recommend tight management to ensure that IUCN's contribution in the field remains a distinctive one, that the quality of the work is maintained, and that top priority is given to projects which build local capacities. We also recommend a wide-ranging evaluation of the field programmes, among whose purposes would be clarification of the relationship with WWF and others with major field programmes and the adoption of long-term goals for the field programmes.

Membership Involvement in the Programme

Regional and Country Offices have created opportunities for a quantum increase in membership involvement in IUCN's programmes. We recommend that realizing this potential should be a priority for the regional and national representatives; and that efforts should be made to overcome the barriers to increasing the membership of grassroot groups from developing countries.

The Commissions and the Programme

The Commissions are a unique resource of great value to IUCN. Yet their contribution to the Programme of the Union over the past triennium has been uneven. We recommend Commissions be assigned the tasks identified in the draft Programme, resourced to harness the network and held accountable at the next General Assembly to deliver the appropriate Programme activities.

The Management and Evaluation of the Programme

The Programme document before the General Assembly in Perth is better than its predecessor. Members must be able to play a full part in the General Assembly deliberations on Programme matters. The Director General needs independent advice on the evolution of the Programme between sessions of the General Assembly. Evaluation tends to be *ad hoc* and needs improvement. We recommend: that goals and targets be set for each of the 23 programmes; a Programme Committee be appointed at the Perth General Assembly; independent programme advice to the Director General between General Assemblies; and better arrangements for reviewing and evaluating IUCN's activities.

PART I—INTRODUCTION

Terms of Reference

- 1.1. We were asked by the Council to undertake a critical review of IUCN Programme achievements since the Costa Rica General Assembly in February 1988. The Director General made clear that Council was looking for a wide-ranging assessment, identifying shortcomings as well as achievements. It was particularly interested in the underlying reasons for progress—or lack of it—and in our suggestions for improvement.
- 1.2. We were not asked to analyse every aspect of the Union's work, but to identify those which most directly affected its ability to deliver the Programme which the members had adopted. Our assessment was to be an independent one: the output was to assist the membership in its consideration, at the Perth General Assembly, of the report on the past triennium and proposals for the next.

Methods and Materials

- 1.3. This review draws on published and unpublished sources and the views of informed individuals. We have studied the following key documents:
 - the critical review of the achievements in the triennium 1985-1987 by David Munro and Martin Holdgate;

- the draft Programme and Budget 1988-1990 (GA/17/88/3);
- the report of the Programme Committee at the 17th Session of the IUCN General Assembly (Annex 16 in the report of the proceedings);
- the Director General's reports to Council for the periods February-May 1988, for 1988 as a whole; January-June 1989; and July-December 1989;
- a review of the work of IUCN undertaken during 1990 for the Swedish International Development Authority;
- papers for the 18th Session of the General Assembly, in particular the report on the work of the Union in the past triennium; the papers on the Mission, Objectives and Approach of IUCN, on the Governance of the World Conservation Union, on the Strategy for the World Conservation Union, and on the Commissions; and the draft Programme 1991-1993.

1.4 We did not have the time to review every detail of the Programme. Many issues are left unresolved—a factor to be borne in mind in reading our findings. In particular, **we were quite unable in the time available to establish the impact of IUCN's activities where it matters: on the ground.** As we were several times reminded during our study, while IUCN plans and acts, out there in the real world—so to speak—species are lost, habitats destroyed and the natural resource base upon which humanity's survival depends is further eroded and degraded. So when we say that "progress" has occurred, we mean that an activity has taken place as planned: but we cannot say whether the consequence was a real conservation achievement. This is one reason why we place so much emphasis in this report on the need for more thorough evaluations in future which will get to the heart of what IUCN really achieves.

1.5 We felt our review would benefit from the advice of individuals with a good knowledge of IUCN, and from that of some of the principal international partners with which IUCN collaborates. The Director General therefore constituted an informal advisory panel to comment upon our report in draft:

Sra Yolanda Kakabadse—IUCN Regional Councillor
 Ashok Khosla—IUCN Regional Councillor
 Jaap Kuper—Chairman, Netherlands

National Committee of IUCN
 Walter Lusigi—IUCN Regional Councillor
 George Rabb—Chair, SSC
 Peter Thacher—World Resources Institute

Similarly, comments were sought from:

Peter Kramer, WWF
 Reuben Olembo, UNEP
 Mats Segnestam, SIDA
 Bernd von Droste, UNESCO

1.6 We are grateful for the advice and perspectives given by those members of the panel who were able to send us their views and to the senior officials in collaborating institutions. These have been invaluable in finalizing our report. We were greatly helped, too, by interviews with senior staff in the IUCN Secretariat, especially those at Headquarters. However, the report is our own—and we take full responsibility for its findings and recommendations.

Structure of the Report

1.7 We want our report to be read. So it has been kept as short as possible and an Executive Summary is appended to it. The remainder of our report is organized as follows:

- Part II (and the Annex) briefly reviews the progress made in the Programme of the World Conservation Union over the past three years—essentially it reports on **what** has happened;
- Part III discusses eight key issues concerning IUCN's Programme, which seek to throw light on **why** progress has, or has not occurred; and offers suggestions for action.

PART II—PROGRESS MADE OVER THE TRIENNIUM

The Triennial Report 1988-1990

2.1 The key document in our review has been the report to the 18th Session of the General Assembly on the achievements of the past triennium. In format, it is a marked improvement upon the similar report made to the Costa Rica General Assembly in February 1988, because:

- it reports under the same overall

framework of programme areas as used in the Programme adopted at the previous General Assembly;

- it reports by each activity in turn on the progress made in implementing the Programme; and
- the reports of the Commission Chairs are bound in as an integral part of the Union's report along with that of the Director General.

2.2 The Director General's report itself is also much longer and more thorough (60 pages as against 32 in the report of the previous triennium). And it is generally more self-critical, both at the overview level and on individual activities. Because this analysis is so thorough, and because it is relatively easy to compare the Programme as adopted at Costa Rica with what has come to pass, we have not attempted a detailed sector by sector analysis of progress made since February 1988. We confine ourselves in this part of our report to underlining certain key achievements, and important shortfalls, in the Programme.

Assessment

2.3 To help us verify the broad conclusions reached by the Director General in his report of the past triennium, we reviewed the progress made in 18 activities which were specifically highlighted in the introduction to the draft Programme and budget 1988-1990 as the expected major achievements of the Union over that period. The results are at the Annex. This list of highlighted activities is very selective—even arbitrary—but nonetheless it corresponds to what was drawn to the attention of the membership in Costa Rica as the highlights of the Programme for the coming three years. We have combined this analysis with our appraisal of the Director General's own review in coming to the following general conclusions.

2.4 Under Conservation and Development, the Programme has been successful in carrying forward the recommendations of the World Conservation Strategy (now in the course of update), most importantly in moving from the preparation of conservation strategies to assistance in their implementation on the ground in many developing countries. The expansion of the field programme is indeed one of the

most striking features of the Programme overall, underpinned by rapid growth in restricted or contract funds. The benefits have, however, been unevenly spread geographically, notably in Central America and parts of Africa; it is not clear that this concentration followed any objective assessment of needs. National strategies have been complemented by strategies for particular kinds of resource: wetlands, tropical forests, and marine and coastal habitats (but we cannot say how far these strategies have been followed through). Important regional programmes and initiatives in the Sahel, Eastern Europe and the Antarctic have given IUCN a presence in several parts of the world which have been the focus of international interest. The Union's high reputation in the field of environmental law has been maintained; its work in institution-building has been less impressive. Programmes related to the social sciences have progressed rather slowly, though IUCN has made some advances in linking concepts of economics and environmental conservation. The Union's capacity to service the needs of the membership, especially in the developing world, has been enhanced by its Environmental Impact Assessment service and its Environmental Law Centre. The progress made by the World Conservation Monitoring Centre has been uneven—several highlighted priorities seem to have been abandoned as a result of its reconstitution as a joint IUCN/UNEP/WWF enterprise, as the Annex makes clear. The Union's education programme has not made the progress which members at Costa Rica wanted to see. IUCN's achievements in communicating its message to the world do not yet do full justice to the richness of its knowledge, although there has been a welcome increase in the number of publications.

2.5 For a Union which prides itself on its scientific reputation, IUCN's achievements in Conservation Science have been decidedly uneven. In several important areas for IUCN there has, it seems, been little progress: e.g. conservation of mountain areas and of islands, and the general development of conservation theory. Progress has been considerable in the areas of wetlands, tropical forests and marine conservation, in all of which IUCN has a fast expanding programme of field activities. But it is a serious shortcoming that there are few links between these practical programmes and the development of the theory of conservation

science—for example, between the large Sahel Programme and the principles of conservation in drylands.

- 2.6 Under **Biological Diversity**, there is better news to record. The SSC networks have been particularly productive, with more than 80 active specialist groups, 21 of which prepared species action plans—although without a more detailed review it is not possible to measure the real impact of such plans. Plant conservation work has been especially productive in terms of published output. Legal work is vital to the conservation of biological diversity, and IUCN's support to the CITES Secretariat has been significant. Biodiversity is now high on the international agenda, and much will be expected of IUCN. Even with its joint programme on biodiversity with the World Resources Institute, UNEP, WWF-US, Conservation International and the World Bank, and with its work on the proposed Biodiversity Convention, IUCN will have to work hard to maintain a key role.
- 2.7 **Habitat and Protected Area Management** is also a "heartland" area for IUCN, and much good work continues. It appears, however, to be rather less programmatic than in the past and has not always been as closely integrated with other theme areas as it could be—with the Wetlands Programme, for example, or with species conservation. Advice given on the World Heritage and Ramsar Conventions has been an important way of extending IUCN's influence. The preparations for the 1992 IV World Parks Congress are now well underway: this will be a major focus of worldwide efforts to conserve biological diversity.
- 2.8 Under **Programme Support and Services**, the greatest achievement in the past triennium has been to bring IUCN's financial management under tighter control, and to strengthen IUCN's financial position and support. Membership services have expanded, especially through the work of Regional Offices in several developing country regions. The Bulletin has been given a successful overhaul.

Conclusion

- 2.9 In general, we agree with the Director General that progress has been greatest in the formulation of conservation strategies, and in their implementation in parts of the developing world; in the Species and Habitats

Programmes, and in the work of the Environmental Law Centre. And it has been least in basic conservation science, social aspects of conservation management and communications, education and training programmes. The Annex reveals that a surprisingly large number of high profile initiatives in the 1988-1990 Programme appear not to have been thoroughly thought through and, on closer examination, turned out to be impractical or inappropriate.

- 2.10 We conclude that progress, while considerable—and while including some welcome initiatives which could not be foreseen in 1988—has been uneven. That in itself is to some degree inevitable; no programme of this kind is going to move with similar velocity across the board. What is more, through strong leadership and effective management, IUCN is better placed now than it was three years ago to seize the high ground. Even so, like the Director General, we feel that IUCN is "an instrument of great potential, and somehow not yet adapted to realize that potential and hence not yet poised to serve its membership in the ways it should". If real progress could now be made in dealing with the key issues which we discuss in Part III, the potential of the World Conservation Union could indeed be unlocked, to the benefit of conservation and to the satisfaction of IUCN's world-wide membership.

PART III—EIGHT KEY ISSUES

1. The Outer Limits of the Programme

- 3.1 IUCN's financial resources are limited. Its task—to act as "the intellectual powerhouse of the global movement for planet protection" as the President has put it—is immense. It follows that IUCN must focus its efforts and resources on what is most important and relevant to the world, and on what it is best able to do—given its particular characteristics as an organization. We have had that question before us in reviewing the Programme, aware that some members have expressed a concern that IUCN's Programme was conceptually too broad, and that the Union was in danger of becoming a development agency or an all-purpose environmental agency.
- 3.2 IUCN has a traditional area of core expertise, the *in situ* conservation of biodiversity and the

protection of habitats. That remains at the centre of IUCN. Its achievements in these areas in the past triennium suggest that investment in the consolidation of heartland activities (and in particular as exemplified by the work of SSC and CNPPA) is investment well made—provided that the work is well-focussed and planned, and placed within a broader context of meeting human needs on a sustainable basis.

3.3 This core area is surrounded by several further "skins of the onion" with which IUCN is also vitally concerned. For many years, IUCN's Programme has had an important place for conservation science, for the legal framework for nature conservation, for education and training in conservation, and for environmental strategies and planning—as confirmed, for example by the existence of four Commissions of long standing which cover these topics.

3.4 Particularly since the publication of the World Conservation Strategy in 1980, and the adoption of the slogan "Conservation for Development", IUCN has sought to build bridges with the development community, nationally and internationally, including with members of the United Nations family such as UNEP, UNESCO and FAO. IUCN first argued that development could only be sustainable if based upon an understanding of conservation principles. It then set out to design strategies at various scales to show how conservation and development might be linked. Finally, it became directly involved (initially through the Conservation for Development Centre but latterly as part of its main-stream Programme) in demonstrating the practical application of conservation for development principles in projects on the ground. It is a logical process which has brought IUCN credibility with aid agencies and governments. It has met the needs of many of its members—especially in developing countries. And it has enabled IUCN greatly to expand its influence.

3.5 We believe the evolution of IUCN's work in this way has been largely correct. It recognizes the changed understanding of the relationship between people and nature, and corresponds to the changing needs of IUCN's membership. It means that IUCN is now engaged, quite properly, not only in the conservation of biodiversity but also in the sustainable use of natural resources—our understanding of what is meant by the slogan of "building harmony between humanity and nature".

3.6 However, IUCN still has a long way to go towards establishing a deep understanding of the relationship of development and conservation, especially from the perspective of the developing world (in this, it could learn much from grassroots groups with which its links are presently poor). Most of the world's biodiversity today exists in the Third World where natural habitats are under pressure from an expanding population, inequitable resource exploitation and global market demands. Many natural habitats will disappear unless local communities are made partners in the management of these areas. An understanding of development and conservation is, therefore, needed which will be deep enough to generate socially acceptable and participatory strategies for resource management. Conservation and development have rightly come to be recognized as inseparable and the Union's activities have increased to cover a wide spectrum of resource management and conservation issues. However, several cross-cutting issues—for example, the role of traditional knowledge, participation of local communities and women's groups, and the economics of conservation—that lie at the interface of the two still have to be adequately integrated into the work of the Commissions and the thematic programmes. Despite the progress made in recent years, conservation and development linkages are still poor in many IUCN programmes.

3.7 In reality, "sustainable development" remains a largely hollow phrase. Since this concept is of vital concern to the world, IUCN has a major role to play in giving it practical shape, especially its biological and ecological aspects, and helping in the evolution of socially viable and participatory prescriptions. The transition from conservation to the sustainable use of natural resources has not yet been fully achieved in the organization. Sustainable development is a far more complex subject than conservation since it incorporates within its ambit not merely ecological and biological dimensions but also sociological, political, economic, demographic and gender dimensions. The Union now has programmes in the fields of population and women. It also has a Commission on Sustainable Development and on Environmental Education and Training. If these programmes and Commissions had been working well, they could have helped to give IUCN greater credibility in the field of sustainable development. Part of the problem is that, whilst IUCN's networks in its core

areas of national park management and species protection are extremely good, those in areas like education and sustainable development are poor—and their impact has so far been disappointing. This now needs to be put right.

3.8 But if the trend to broaden IUCN's Programme in this way is not to over-extend the Union, and take it into areas where others have greater competence, then IUCN must recognize the need for certain "perimeter fences" around the Programme, beyond which it should not stray. We suggest three in particular:

- first, IUCN should not seek to develop in-house expertise in areas which are primarily about other aspects of environmental management than the sustainable use of natural resources: questions of human settlements, human health, agriculture, pollution and environmentally-sound technology for example. However, all these activities have obvious implications for the sustainable use of natural resources, and IUCN will need the capacity for dialogue with leading institutions in each of these areas;
- second, IUCN should avoid entering activities which are concerned with development *per se*, and in which the conservation component is a very minor, or even cosmetic. That means IUCN should avoid an involvement in schemes which offer little scope for demonstrating "harmony between humanity and nature" (the design of residential or industrial areas for example);
- third, although IUCN must get involved in programmes concerned with, for example, the role of women, economics, peoples' participation, traditional knowledge, ethics, population or global change, its efforts should be firmly focussed on the implications for the conservation of biodiversity, ecosystems and protected areas, and the sustainable use of natural resources. Its involvement in all such programmes should therefore be very discriminating as to the contribution it seeks to make and the expertise it seeks to acquire.

3.9 IUCN may have been working outside these perimeter fences in several areas in the past triennium, for example:

- we understand that the evaluation of the Sahel Programme identified the need to

refocus activities firmly on the area of IUCN's competence, and for these to be complementary, not duplicatory, with those of development agencies active in the region;

- the EIA service exists primarily to help developing country governments manage the EIA process. But, in fulfilling its mission it tends to get drawn into advising governments on the impact of development schemes on environmental questions which go beyond IUCN's field of competence, such as the sustainability of agricultural production or the protection of human health; and
- some of the activities within the Women and Natural Resources Management Programme seem to have had rather tenuous links with the rest of IUCN's concerns.

On the other hand, we are not persuaded that the draft World Conservation Strategy for the 1990s goes outside IUCN's terms of reference. To succeed, it must address the strategic issues of global conservation in the round. Furthermore, the report is a joint product of WWF and UNEP as well as IUCN, and so it is doubly appropriate that it should adopt a broad approach.

3.10 But IUCN must remember that it occupies a special niche at the international level. Its worldwide networks of members, and of scientists and other specialists, are its strength—indeed, IUCN **is** these networks. Rightly IUCN has broadened its approach over the years. It now needs to lay down firm markers which will enable it to focus its energies and resources. There is more than enough to do in strengthening its competence in biodiversity, habitat protection and conservation science, and placing these in the context of human society through environmental strategies, education and communication—as well as linking all these elements to form a more integrated programme—without moving into neighbouring subject areas beyond the confines of IUCN's expertise.

3.11 **Conclusions and Recommendations** In general, the IUCN Programme remains appropriately focussed on what IUCN can do best, but a deeper understanding is needed of human/nature linkages, especially in the context of the developing world. We **recommend** that, in developing the Programme, as well as the positive guidance contained in

paragraph 0.24 of the draft IUCN Programme for 1991-1993, the Director General should explicitly adopt certain rules about the kinds of activities in which IUCN would not get involved (such as the guidance given in paragraphs 3.5-3.8 above).

2. The Integration of the Programme

3.12 "The World Conservation Union has one, integrated professional Programme". This claim is made in the Governance Paper (GA/18/90/8—paragraph 48), and it is entirely appropriate as an ideal at which to aim. In our review, however, we came to the conclusion that that desirable state does not yet exist.

3.13 This is not surprising. The IUCN Programme is conceptually very complicated, as a review of the annexes to the 1991-1993 draft Programme shows. Of the 23 programmes listed there, 11 are regionally based; of the 12 theme programmes, four are clearly identified with a lead Commission, whilst others involve collaboration between Commissions and the Secretariat in varying degrees. Together they are presented as a matrix. The cross linkages and possible permutations in such a complex framework are almost infinite. Moreover, the decision has clearly been taken to devolve much more of the programming exercise to the regions, where members will increasingly come together to determine their own priorities within the IUCN framework. The coordination of these bottom-up regional initiatives with the top-down thematic programmes will be particularly demanding.

3.14 Our doubts about the current level of integration relate to a number of issues, in particular:

- an integrated programme is easier if there is integrated funding. But funding for much of the IUCN Programme is, and will surely continue to be, earmarked for particular programmes or activities. However if donors are properly approached and made aware of the unique role of IUCN, some funds may be found to support a wider range of activities, thus enabling an integrated approach to be adopted to problems;
- the patchy (but extending) pattern of Regional and Country Offices means that the degree of regional coordination is

uneven. This is not helped by such apparent anomalies as the Sahel Programme's separation from IUCN's regional office in Dakar, and indeed from the machinery for Africa coordination generally; nor the absence of a direct link between the Africa Regional Coordinator and the East African Regional Office. (There may be good historical and staff management reasons for such arrangements, but they hinder successful integration);

- the difficulty encountered in the past three years in building links between certain Commissions and closely related theme programmes operated by the Secretariat;
- the tendency to create new programmes when what appears to be required is a cross-cutting approach to other programmes. The programme on Women and Natural Resources Management is a case in point. We feel this may have been less successful than it should have been because it was not approached as a cross-cutting programme meshing into, and reinforcing, other programmes, but as an entirely separate programme;
- the absence of any single individual in the Secretariat—other than the Director General who has many other calls on his time—with a responsibility for ensuring integration of IUCN's Programme (a gap which we are pleased to learn is shortly to be filled through a recruitment exercise).

3.15 Nonetheless, there has been some progress of late in bringing programmes together. There have been several individual examples of relatively successful coordination, such as the African Elephant Programme; and the four-way linkage made in the conservation of mangroves, between the Commission of Ecology, the Marine and Coastal Programme, the Wetlands Programme and several regional programmes. Moreover, it is recognized that certain programmes, e.g. Wetlands, have only recently secured sufficient funding to enable integration to occur at the project level. Finally, the appointment of programme experts (e.g. Wetlands Officers) to Regional Offices, which has now begun, promises to increase the scope for integrating theme and regional programmes.

3.16 Greater integration is indeed needed so that IUCN's programme efforts are more disciplined, are focussed on the priorities and

avoid internal confusion or duplication. Not only should different programmes be better integrated with each other, but each separate programme should aim to be more interdisciplinary, bringing together biological and ecological aspects with social, cultural and economic ones. It is a major challenge for management, involving as it does not only the activities of the Secretariat but also the networks of Commission experts and members. We believe that it should be made the responsibility of a senior member of staff, reporting directly to the Director General. Under such a Programme Director should come the responsibility for all theme programmes (Commission-led and others) as well as the Regional Offices in their programming capacity. His or her role would not just be one of securing coordination of programmes at headquarters but thereby to promote a favourable context for coordination at the regional level, e.g. between the Regional Office and the Regional Councillors, IUCN members in the region and regionally-based Commission members. To be effective, he or she will have to have a role in determining how money is spent. It is good news that the Director General plans to make such an appointment shortly. Though effective coordination and integration of IUCN's Programme will depend upon many things, a *sine qua non* is to assign this as a lead responsibility to a senior official in the Secretariat.

3.17 We add a word of caution. Complete, 100 per cent integration of every activity of an organization as complex as IUCN is probably impossible. Moreover, even to get near it could involve an unacceptable increase in bureaucracy. This would delay matters, not expedite them. It might inhibit initiative, not encourage it. What is needed, therefore, are relatively simple systems which promote contact and dialogue, the exchange of information and, if necessary, training—as well as a determination from the Director General to encourage an integrated and coordinated approach to the solution of the challenges which IUCN faces. One small example might be a house newsletter to keep an increasingly dispersed Secretariat in touch with each other; another might be the greater use of electronic communications. A better balance of nationalities represented in the Secretariat of IUCN, both at Headquarters and Regional Offices, would also help.

3.18 **Conclusions and Recommendations** There is more integration of programmes than three years ago. But much still needs to be done to carry the process further and in particular to increase the inter-disciplinary understanding of each programme. We welcome the planned appointment of a senior staff member to oversee the integration of the Programme, and recommend that improving coordination remain a priority for the Director General. There should also be a better representation of nationalities in IUCN's staff.

3. The Balance of the Programme

3.19 By "balance", we mean the intensity of effort accorded to different parts of the Programme. As the analysis under Part II shows, progress has indeed been uneven between different activities, despite many successful initiatives. In this section, we identify some other aspects of balance to which IUCN needs to give more attention.

3.20 There are several ways in which a balance needs to be struck between competing elements in IUCN's Programme:

- between different disciplinary approaches to a concept;
- between conceptual work and action in the field;
- between work in different parts of the world;
- between the effort devoted to planning and undertaking activities on the one hand, and communicating the output on the other.

We now discuss these in turn.

3.21 We have referred several times in the previous section to the need for IUCN to bring together a wider range of disciplines in its Programme. In this way, the natural and social sciences can be used to identify the root causes of environmental problems and promote realistic and socially-acceptable solutions.

3.22 At the 17th Session of the General Assembly some concern was expressed that IUCN's Programme was preoccupied with concepts at the expense of action. The Programme Committee, however, concluded that the balance was about right. Since 1988, the pendulum, at least as measured by funding, has swung further towards field activities. It is not easy to obtain an accurate picture from the

documents, but we note the following from the papers for the General Assembly at Perth:

Expenditure	Millions SFr		
	1987	1988	1989
Regional and field programmes and Sahel Programme	6.2	8.1	13.0

This expansion in field programmes over the past triennium is set to continue into the next, growing more rapidly than programme expenditure as a whole. (We comment in a later section on the implications of this trend for the field programmes themselves.) While the expansion of field projects has not, so far, been a direct opportunity cost on other, less well-endowed parts of IUCN's Programme—since they are funded from sources not available for deployment elsewhere—IUCN needs to ensure that its conceptual work does not fall behind the demands of its expanding programme of action on the ground. It also needs to ensure that it learns from its field programmes, which should help it identify the barriers to conservation and thus the issues which conceptual work needs to address.

3.23 The field programme has, of course, focused on the needs of the developing world. But their development has been opportunistic and uneven. As a result, IUCN has been most active in certain parts of the developing world, notably Central America, and Southern, Western and Eastern Africa. In these areas, Regional Offices have been established on the back of field programmes. In some areas, notably the Caribbean and South Pacific, IUCN has developed its regional presence in partnership with an existing regional body. In Asia and the Pacific, the picture is uneven: a very active programme in Pakistan and important initiatives in several other countries. But there are many countries in which IUCN has done little to date. This is particularly so in South America, although steps are now being taken to remedy this. We conclude that the intensity of IUCN activity does not always correspond in a clearly-identifiable way to the needs of particular parts of the developing world. It is right to take advantage of opportunities where they arise, but IUCN needs now to take stock as to whether its efforts could be better matched

geographically to conservation priorities in the developing world.

- 3.24 IUCN's Programme for Central and Eastern Europe has grown rapidly in the triennium and is well placed to take advantage of political changes there. What is now urgently needed is for IUCN to clarify the role it should play in Western Europe and North America. It is not enough that IUCN should be seen there only as a means of supporting conservation efforts in the South when there are such serious conservation problems in the North itself. Moreover the North is a key actor in determining whether natural resources are ruthlessly exploited, or conserved as part of sustainable development, in the South—and globally. We believe, therefore, that IUCN's large membership in Western Europe and North America could be better mobilized to address such issues, and to understand, elaborate and explain the role of North-South links in global environmental destruction and/or conservation.
- 3.25 IUCN puts much effort into the planning and implementation of its Programme. Our impression is that, as yet, it does too little to communicate the results of its work, despite a welcome increase in the amount of published materials. Communications efforts tend to be *ad hoc* and uneven across programmes, there is no strong visual identity to the organization and opportunities to collaborate with others (including the membership) are rarely taken up. It is unfortunate that IUCN's position on global conservation issues rarely get widely known—for example, its position on the proposal to ban the trade in ivory. Whether this is a result of IUCN's former close relationship with WWF (which took the lead in communicating the conservation message), of the reluctance of some scientists and oilier experts to concern themselves with the media, or of the failure to make full use of the potential of the Commission on Education and Training, there is a clear need to improve performance in this area. However, the recent upgrading in the quality of the *Bulletin* is an encouraging sign, especially as arrangements have been made with ICONA to produce a Spanish version thereof. So is the new appointment of a Head of Communications for IUCN.
- 3.26 In developing the communications strategy which IUCN now urgently needs, a priority is to address the poor dissemination of IUCN-generated information to developing

countries. This has to be increased substantially, and at prices that are affordable, especially by the many grassroots groups which are trying to make the sustainable management of natural resources a reality.

3.27 **Conclusions and Recommendations** The Programme would benefit from greater balance. In particular, we recommend that IUCN should:

- coordinate and integrate its conceptual work with the expansion of the field programmes;
- ensure that the regional balance, both between countries and regions and between the developing and developed worlds, is relevant to needs; and
- develop a communications strategy to disseminate its knowledge amongst the membership and the wider international community concerned with conservation and sustainability, and in a way which is affordable to members in the developing world. (We understand such a strategy is now available in draft).

4. Programming and Funding

3.28 If the aims of more integration and balance are to be achieved, IUCN will need greater freedom in the use of the financial resources at its disposal. There is a paradox here. Whilst contract funding has enabled IUCN substantially to expand its Programme, no single factor is more inhibiting to IUCN in fulfilling its Programme as a whole than the restricted nature of much of its financing.

3.29 The story is summarized in the report on the finances of IUCN in the 1988-1990 triennium (GA/18/90/5 Annex 1). IUCN's budget has grown by over SFr 10 m over the triennium, a cause for justified celebration. However, annual income of unrestricted funds has remained broadly at around SFr 6 m over the period, whereas that for restricted purposes has grown by two thirds. At the end of the triennium, IUCN's income is made up approximately thus: unrestricted 19 per cent, restricted (Programme) 12 per cent, restricted (projects) 69 per cent.

3.30 We welcome the strict financial discipline which has been exercised over the past three years, based upon cost centre accounting. This should continue. IUCN cannot afford to slip

back to a less disciplined regime. But we are concerned about the way in which decisions are made over the allocation of unrestricted funds. The issue is very sensitive: it can cause difficulties between the Commissions and the Secretariat, between different programmes run out of Gland, and between Headquarters and Regional Offices. Moreover, it can cause misunderstanding between the membership and the Secretariat, since the former may believe that the Director General has greater freedom in the allocation of funds between programmes than is in fact the case.

3.31 In our view there are three priorities to be pursued if the funding available to IUCN is to be used as effectively as possible to deliver the Programme the members have approved:

- increase the amount of unrestricted funding;
- promote further the concept of programme funding; and
- adopt explicit criteria and procedures for the allocation of unrestricted funds.

3.32 The search for more unrestricted funding is the holy grail for IUCN. Heads far wiser than ours have thought about it long and hard. But several areas deserve attention in the next triennium. We suggest the Director General should:

- seek to persuade those aid agencies which are already familiar with IUCN's competence and performance, that they should be prepared to change part of their planned increase in restricted funding for IUCN programmes and projects to unrestricted funding in order to ensure that IUCN retains the intellectual leadership which attracts them to working with the Union. We believe there are good prospects here, but aid agencies will expect to see further progress in the management of the Programme if they are to be persuaded to support IUCN in this way;
- look to the corporate sector for some increased funding of IUCN. This need not, we believe, necessarily depend upon the establishment of a separate membership category for corporate members;
- increase income from sales of books, etc., including through co-publishing ventures. However, marketing strategies should be such that they do not hinder sales or distribution in the developing world at

locally reasonable prices. Otherwise IUCN-generated information will reach only the developed world;

- review the scope for charging for overhead costs associated with projects funded by restricted income so as to raise more money for unrestricted expenditure;
- apply unrestricted funds to run fund-raising efforts for certain parts of the Programme (we understand SSC are to embark on precisely such an initiative);
- and set up a fund-raising office to coordinate these and other initiatives, linked closely to IUCN's communications work and with direct access to the Director General.

3.33 By programme funding, we mean earmarking funds for programme development and co-ordination. The posts supported by Scandinavian aid agencies in the Wetlands Programme are one among a number of such activities already supported in this way in IUCN. We believe the scope for more of this is considerable, especially among those funding agencies which are already familiar with the work of IUCN. Sponsorship of key posts from the corporate sector is another possibility, though care must be taken to avoid giving the impression that IUCN is beholden to such institutions. Priorities for posts to be supported through programme funding are:

- programme coordinator posts relating to the work of the Commissions;
- regional representatives of IUCN;
- expert advisers attached to regional representatives' offices.

Ideally, of course, such positions would be funded through unrestricted funds, but resources of this kind are most unlikely to be enough to cover all such expenditure, hence the need for more attention to programme funding.

3.34 Looking further afield, there are several developments at the international level which may offer IUCN access to funding for important areas of its work; in particular, the Global Environment Facility (a tripartite World Bank, UNEP and UNDP initiative) and whatever comes out of the 1992 United Nations Conference on Environment and Development (UNCED). IUCN should seek to position itself to take advantage of these emerging opportunities, which may be especially relevant to

its work on biodiversity and which offer the potential to broaden its base of funding. The implication is that, for funding as well as for programme reasons, IUCN should seek to play a leading role in the preparations for UNCED, in the conference itself and in the follow-up agenda for action.

3.35 We found much uncertainty about the way in which unrestricted funds are applied to various programmes. Management must have considerable discretion in this matter; and no decisions on how to deploy unrestricted funds amongst competing programmes can be painless. But more could be done to make the ground rules explicit and apply them consistently. We think the Director General should draw up and issue a set of objective criteria for the distribution of unrestricted funds, and should make the application of those as transparent a process as possible.

3.36 **Conclusion and Recommendation** The success of the Programme depends critically on the size of the unrestricted funds and how these are applied. We recommend a strategy to increase unrestricted and programme funds; and the adoption of clear rules on how unrestricted funds are applied.

5. Field Programmes

3.37 By field programmes (a better title, we think, than that of "field operations", which is in current use) we mean the work which IUCN undertakes in regions and countries around the world, principally in developing countries. We have already remarked on the rapid expansion of these over the past year, largely sustained by a steep growth in restricted funding from aid agencies (to give one further example: in 1988, IUCN Central American activities cost \$200,000; in 1990, they cost \$1.4m.) We have also noted that the field programmes so far have been concentrated in certain regions and countries.

3.38 Many benefits have accrued to IUCN through the expansion of field programmes. Their continued growth as planned for the next triennium, especially in parts of the world where hitherto IUCN has been little involved, is welcome. If we insert some warning notes in this section it is not to seek to obstruct the growth of IUCN field programmes but to ensure that they develop as successfully as possible.

3.39 Any programme which grows fast has the potential to create problems:

- management is made more difficult;
- quality control may be put at risk;
- priorities tend to get overlooked;
- relationships with other bodies in the same field can get confused.

IUCN is not immune to these dangers, and will need to adopt strong managerial measures to avoid them.

3.40 The following appear to us to be particularly important:

- to be quite clear **why** IUCN should be involved in particular field activities and projects;
- to be quite clear **what** sort of projects IUCN will participate in;
- to introduce specific measures for quality control; and
- to clarify relationships with others in the same field.

3.41 The ground rules for IUCN's involvement in field activities and projects at the national level are well set out in paragraph 8 of the General Assembly paper GA/18/90/9, A Strategy for the World Conservation Union. We would emphasize especially the idea of a service to members and a reinforcement of membership links in the countries and regions concerned—a point returned to in the next section. Since its membership network is one of IUCN's distinguishing characteristics, the unique role of IUCN's contribution is often most manifest when it works with its members. Even if membership is initially weak in a country or region in which IUCN plans to be involved, its participation should have as one of its principal aims to build a membership base.

3.42 The range of potential projects in which IUCN could become involved at the regional and national level is almost infinite. We have already suggested (paragraphs 3.5-3.8) that it should avoid activities outside its area of expertise. Priority should instead be given to activities in which IUCN has a unique expertise to offer and which build the members' capacity: examples are strategy preparation and programming, training, legal reinforcement, communications, technical evaluation and auditing. Indeed, we consider the

building-up of local capacities within Third World institutions to be a top priority.

3.43 Involvement in practical, on-the-ground projects in conservation and sustainable development of natural resources should be entered upon more cautiously. The potential demand for these is immense. However, expertise in their conduct is by no means confined to IUCN. Many commercial consultancies claim to offer such a capability; increasingly development charities and development agencies have the capacity and the will to undertake conservation for development projects, or to use others as their agents for this purpose.

3.44 Our view is that IUCN should be involved in practical projects of this kind, but in a selective way. The criteria which should be taken into account include these:

- demonstration value—i.e. the project should be so designed that experience gained in one place is made more widely available elsewhere (that means broadcasting failures as well as successes);
- learning value—i.e. the project will help IUCN to improve its understanding of conservation problems and their solutions and linking these back to its work on policy development (this means putting arrangements in place for collecting and codifying the results of field work in a systematic way);
- innovative quality—i.e. the project really does break new ground and this would not have happened without IUCN's participation;
- coordinating capacity—i.e. the project offers a potential for IUCN to exploit its quality as "honest broker" bringing together parties which would not otherwise have collaborated (e.g. between aid agencies and locally based IUCN members within the country or region concerned, or between members in different parts of the world);
- reinforcement quality—i.e. the project should help to reinforce the capacity of human resources in the country and the local community concerned to undertake conservation work without the need for recurrent outside technical support.

Any such criteria can be interpreted tightly or loosely: "innovation", for example, can be as long as a piece of string. We believe that the

Director General should make clear that IUCN's involvement in practical, on-the-ground field projects should be guided by a strict interpretation of such criteria in order to protect its claim to a unique niche among the many agencies, etc., now involved in conservation and development.

3.45 IUCN should ensure that it retains a reputation for projects of high quality. This poses a particular challenge to the Union, since demand for proficient experts in conservation is growing more rapidly than the supply of such expertise can expand. We suggest below that IUCN should give more thought to the evaluation of its projects and programmes, and this will itself help maintain high standards. It is essential, however, that IUCN continue to employ the best people in the conservation business. These should be drawn from the Commission network, or added to it. We are concerned that, for example, Commission members make up less than half the names on IUCN's consultants roster. The proportion should be far higher. The Commission network could be employed more fully to undertake peer reviews of field reports in draft prior to publication. But if the Commissions are to be more involved in this way, it is not just a matter of inviting Commission members to participate: the Commissions themselves must do more to attract the leading experts in the field.

3.46 While IUCN and WWF have moved apart in recent years, they have continued to co-habit in Gland and maintain much liaison and friendly cooperation, both at headquarters and in the field. Nonetheless, we are concerned by what appears to be a parallel trend in both organizations towards an expanded field programme without clear arrangements for coordination. It is true that the need for conservation action is so great that there is ample work for both IUCN and WWF (and indeed for many other bodies with international conservation programmes). But the circumstances in the case of IUCN and WWF are exceptional. Each has an international field programme in conservation and development. The total level of funding of those programmes is of broadly the same order. And the two bodies operate (for the present at least) from the same building in Switzerland. It is true that each organization has (and should retain) a different profile and a very different constituency. But the complementarity of IUCN's and WWF's strengths is

becoming blurred as WWF widens the scope of its field programme and recruits conservation experts to headquarters, and as IUCN builds competence in fund-raising and communications. Strategic coordination is necessary for IUCN and WWF to agree, for example, the countries in which each would concentrate and the types of projects which each would support. We suspect that IUCN's members—which include, of course, WWF National Organizations—would welcome such strategic cooperation.

3.47 This is one of the longer-term issues raised by the continued likely expansion of the field programmes. There are others: how should IUCN relate to other organizations than WWF with large field programmes within or near IUCN's area of competence? Is there an optimum size for the field programmes, given the nature of IUCN? Should the extent of IUCN activities in Pakistan, for example, be seen as a model for IUCN's involvement in other countries? What are the prospects for IUCN if the Scandinavian aid agencies (who support much of the field programmes) decide to reduce their cooperation with IUCN? And would there be value in IUCN developing an implementation arm to act in a consultancy role, at a certain distance from IUCN, to undertake on-the-ground projects? We have no means of answering such questions now, but feel that they are the sort of issues which will increasingly face the Union in the next triennium. There would be considerable merit, therefore, in instituting a major review of the place of the field programmes in IUCN's work before the 1993 General Assembly so as to enable members to agree on the way ahead thereafter.

3.48 Conclusion and Recommendations The field programme of IUCN have grown rapidly and its further expansion is desirable. But we recommend tight management to ensure that IUCN's contribution in the field remains a distinctive one, that the quality of the work is maintained and that top priority is given to projects which build local capacities. We also recommend a wide-ranging evaluation of the field programmes, among whose purposes would be clarification of the relationship with WWF and others with major field programmes, and the adoption of long-term goals for the field programmes.

6. Membership involvement in the Programme

3.49 A most important recent advance is the involvement of the membership in the Programme through the establishment of IUCN Regional and Country Offices. Though created through project funding, such offices can greatly strengthen IUCN membership in the regions and countries concerned. Through them, the membership can build IUCN's regional or national programmes; and members also have ready access to the Union's networks of Commissions, to Regional Councillors, to opportunities for regional and national collaboration, and to the funds IUCN can mobilize. We are in principle, therefore, very enthusiastic about Regional and Country Offices and about the plans to expand them in the coming triennium, although their development should be guided by clear terms of reference, especially in relation to their role towards the IUCN membership.

3.50 But so far the benefits of Regional and Country Offices have been felt rather unevenly. For example the first regional meeting of IUCN members, in Central America which will be held just before the General Assembly, will set the seal on a programme of cooperative effort. In East Africa, on the other hand, the programme has not been so strongly linked to the IUCN membership in the region—indeed there has been a suggestion of competition between IUCN members in the region and the IUCN Regional Office in securing funds for a project. In the Sahel, IUCN membership has been so weak that it has proved very difficult to link the programme to membership, especially as there has been little collaboration between IUCN's Regional Office in Dakar and the Sahel Programme. The membership of the poorer grassroots groups in the Third World, in general, is insignificant in IUCN—and this should be a matter of concern. In Eastern Europe, however, IUCN's membership network was vital to the successful planning of the East European Programme, and will be the key to its implementation.

3.51 Full advantage should be taken of the Regional and Country Offices, which it is planned to extend to other parts of the world, in strengthening the membership. This requires certain principles to be followed:

- as soon as possible, the regional or national representatives need to be relieved of their project management responsibilities—which means, in effect, being funded from unrestricted funds (or at least programme funds) as opposed to funds tied to particular projects. We are pleased to see that it is planned to do this in the next triennium for regional representatives;
- while the prior presence of IUCN membership should not be a *sine qua non* for participation at the national level, IUCN should use the potential leverage of support for projects to encourage Governments and NGOs to join the IUCN family;
- the operation of field programmes from Regional and Country Offices should never be undertaken in competition with IUCN members, or where there is a well-founded fear that they could smother ongoing efforts to build up local capacities. Wherever possible such programmes should be carried out in cooperation with IUCN members, or through them.

3.52 The emphasis we put on building the membership base in developing countries will be facilitated if more grassroots groups were to become members of IUCN. They will bring to IUCN experience in developing socially viable and participatory conservation strategies. At present, many such bodies are discouraged from applying for membership by the fees required of them. IUCN should review how this barrier to membership by grassroots groups might be overcome.

3.53 Finally, we congratulate the Director General on the regional annexes to the Programme document for the next triennium which will help members see how they can collaborate with each other, and with the Secretariat, within the IUCN framework. If acted upon, these regional programmes will provide an excellent springboard for future cooperation among the membership in all regions.

3.54 **Conclusions and Recommendations** The development of Regional and Country Offices has created opportunities for a quantum increase in membership involvement in IUCN's programmes. We **recommend** that realizing this potential should be a first charge upon the work of the regional and national representatives; and that efforts should be made to overcome the barriers to increasing membership of grassroots groups in developing countries.

7. The Commissions and the Programme

3.55 At the 17th Session of the General Assembly, members noted that IUCN's Commissions were "a unique resource" but that "the Commission structure may not adequately reflect the multi-disciplinary nature of contemporary approaches to sustainable development". They went on to ask the Director General to "undertake a detailed examination of all structural components within the Union" (Resolution 17.4). The results of this examination as they affect the Commissions are set out in paper GA/18/90/10. We have studied that document alongside the Commission Chairs' and the Director General's reports on the past triennium.

3.56 Our concern is with the Programme and the part played by the Commissions in its implementation. We are clear that there has been great disparity between the contribution which different Commissions were able to make over the past triennium. We have to say there is little, if any, connection between the length of the accounts given to the General Assembly by each Chair on the work of his Commission and the true worth of that Commission's contribution to the Programme as a whole. While there are many examples of excellent work undertaken in the Commission networks, some of it has little apparent relation to priorities in IUCN's approved Programme; other initiatives where Commissions had a contribution to make have been neglected. Reference back to part II of our report will indicate the areas where we feel most progress has been made and where it has been least apparent. We acknowledge the efforts made by all Commissions over the past three years, but it is clear to us that the contributions made to the Programme by the Commissions on Ecology, on Sustainable Development, and on Education and Training fell short of what was planned for in the Programme adopted at Costa Rica and have often been of questionable relevance to conservation priorities—and as a result the Union has not been anything like as effective in these areas as it could, or should, have been.

3.57 We understand that, in undertaking the examination on the role of the Commissions, the Council and the Director General looked at some radical options. However paper GA/18/90/10 pulls back from these, and instead

sets out the necessary conditions for the success of the existing Commissions, proposes new mandates for them, and assigns to them lead activities from the Programme and other activities to which they are expected to contribute. We believe a rare opportunity to reshape the Commission structure of IUCN has been missed. But given that the Commissions are likely to remain in broadly their present form for the next triennium, it is imperative they be resourced to undertake the work assigned to them and held accountable for delivery at the next General Assembly.

3.58 From our review of the Programme, several important examples emerge of where the work of the Commissions could be more firmly integrated with the rest of the Programme in future:

- it is essential to build close links between thematic programmes on global change, wetlands, tropical forests, marine and coastal areas and the Sahel (which has the potential to develop into a programme on drylands generally), and the working groups and task forces of the Commission on Ecology. The successful example of the Mangrove Working Group (see paragraph 3.15 above) shows the benefits which can occur when the expertise in a COE task force is brought together with theme programmes which are resourced to deliver projects in the field—though even here the scope for collaborating with SSC on fisheries aspects needs to be developed;
- it is important that work on environmental strategies and environmental impact assessment, and on the follow-up to the World Conservation Strategy for the 1990s, be linked to the Commission on Environmental Strategy and Planning (replacing the Commission on Sustainable Development). At present, the CSD network has too little in common with the network of advisers on environmental strategies and environmental impact assessment;
- there is a welcome new emphasis on communications in the plans of the Commission on Education and Communications (the change in title from the Commission on Education and Training underlines the point). The Commission should now establish an expert group on communications to provide highly qualified support for the communications unit at headquarters;

- it is proposed (draft resolution 18/4) to establish an Inter-Commission Standing Committee on the Conservation of Biological Diversity. That would seem a desirable way of encouraging the Commissions to pool their expertise.

3.59 All these, and other connections between the Commissions' programmes and those of other parts of the Union, are identified in the Annexes to paper GA/18/90/10. But, on past record, the existence of such statements of intent are not enough. All the Commissions are entitled to look to the Director General to provide them with the resources to fulfil these tasks (above all, with support for programme coordinators not tied to projects but employed to harness the networks); the Director General is entitled to look to the Commissions to cooperate closely by giving priority to implementing those parts of the Programme assigned to them; and the Union as a whole is entitled to look for leadership from the Commission Chairs which will ensure that the potential of these networks of individual expertise is realized to the full.

3.60 **Conclusion and Recommendations** The Commissions are indeed a unique resource of great value to the Programme and an essential part of IUCN. Yet their contribution to the Programme of the Union over the past triennium has been decidedly uneven. Since the decision has been taken to advise the General Assembly to maintain all six Commissions, albeit with new mandates, we recommend they be assigned the tasks identified in the draft Programme, resourced to harness the network and held accountable at the next General Assembly to deliver the appropriate programme activities.

8. The Management and Evaluation of the Programme

3.61 If the Programme is to be developed to the satisfaction of IUCN's members, the following are prerequisites:

- the programme documentation before the General Assembly (both the report on the previous triennium and the plans for the next) must be designed so that the membership is able to arrive at well-informed judgements;
- the agenda, timetable and other arrangements for the General Assembly itself

should allow members to get to grips with the main programmatic issues;

- between sessions of the General Assembly, the Director General should have recourse to outside advice to help in the development of the Programme;
- staff dispositions in the Secretariat should facilitate programme management; and
- arrangements for the monitoring and evaluation of the Programme as a whole, of major programmes within it, and of projects are required.

We now take these matters in turn.

3.62 We have already commented that the report on the past triennium 1988-1990 represents a considerable improvement over comparable documents in the past. The element of greater self criticism is especially helpful—though it is applied rather unevenly. The Director General should use a similar format at the end of the next triennium, so that an activity by activity comparison can be made. On that occasion, reporting staff should be encouraged to make sure that their comments represent an open and honest assessment of what has succeeded, or failed, and that these in fact refer to the precise activities concerned (which is not always the case in the current document).

3.63 We congratulate the Director General on the format of the Programme document for the next triennium. We particularly welcome:

- the reduction in the number of individual activities (from 117 to 71) by grouping related initiatives;
- the emergence of separate programme areas on Providing Conservation Services and Building IUCN's Regional Presence; and
- the annexes which provide a more detailed guide to each programme area.

However, we note that the document does not set out the "well-defined goals and targets" called for in the critical review of the triennium for the Programme 1985-1987, and repeated in the Programme Committee's report at the Costa Rica General Assembly. This is a major omission. Such goals and targets could have been included within each of the 23 Programme annexes, so as to provide a basis for a more informed assessment of the progress made by IUCN over the coming three years.

- 3.64 The General Assembly is the principal opportunity given to the membership to comment on the broad thrust and balance of the Programme. In the past, this has been done through a Programme Committee established by the General Assembly, which has gathered the views of members and offered these in a consolidated form as a contribution to the plenary debate on the adoption of the Programme for the coming triennium. We have noted with some concern that the General Assembly documents indicate that this is not planned to happen in Perth. It may be that the full schedule of workshop sessions is felt to obviate the need for a Programme Committee at the General Assembly. If so, we disagree.
- 3.65 Workshops are not designed to cover all parts of the Programme. More importantly, they can look only at individual elements of the Programme. They cannot take a synoptic view of the Programme as a whole (for example, to address many of the issues covered in this report). The programme of workshops will certainly help members to get to grips with the details of the Programme, but there is a danger that "the wood will not be seen for the trees". We hope, therefore, that Council will, after all, recommend, that a Programme Committee be set up for the duration of the General Assembly to collect and review members' comments on the broad balance and thrust of IUCN's Programme, and consider how the Commissions and members can best be involved in its implementation.
- 3.66 The Programme must evolve and adapt to changing circumstances between sessions of the General Assembly. A source of independent advice is needed to help guide it, and assist the Director General in reporting on programme achievements and plans, both to Council meetings and the next session of the General Assembly. The current Programme has evolved with assistance from the Programme Planning Advisory Group (PPAG). We note that it is proposed that this function may in future be linked more closely to the Council or Bureau. The precise mechanism is, however, less important than that there should be arrangements to ensure independent, wide-ranging and informed advice on the Programme as a whole.
- 3.67 All our earlier suggestions for programme management would be facilitated by the employment of a Programme Director, as we understand is now planned (paragraph 3.16).
- It would be to him, or her, that the prime responsibility of overseeing the preparation of the programme document, of assisting the General Assembly on programme matters and facilitating the work of any programme advisory mechanism would be entrusted.
- 3.68 We have several times commented on the need for more review and evaluation of the IUCN Programme. We believe that review and evaluation in IUCN at present tend to be rather *ad hoc*. A more systematic approach is needed which would:
- ensure a critical desk review of the Programme as a whole once every three years, through an exercise such as we have undertaken, and conveyed in the form of a report to the membership at the General Assembly;
 - ensure that progress made in each of the 23 programmes is reviewed say, once every six years against clearly defined goals and targets;
 - undertake *ad hoc* evaluations of parts of IUCN's Programme which are evolving rapidly or otherwise give rise to concern (the field programme for example); these may involve field examinations; and
 - evaluate projects, or groups of projects, in a structured manner to ascertain the real impact on the ground of the activities which IUCN has undertaken.
- One requirement of such an emphasis on review and evaluation will be that all activities will have to have, as a matter of routine, clearly formulated objectives, timetables and criteria for success. Another will be to use the great fund of knowledge within IUCN's networks, especially the Commissions, in order to help undertake such evaluations.
- 3.69 We suggest that the Director General will need to establish a separate evaluation unit in the Secretariat to plan and manage (but not to undertake) evaluation exercises, because the conduct of evaluations will need a degree of independence from those parts of the Union which "own" the programme or project under review. There is scope for undertaking some such evaluations as joint assessments with sponsors. The results of evaluation should be widely disseminated.
- 3.70 Conclusion and Recommendations The programme document before the General Assembly in Perth is better than its predecessor. Membership must be able to play its full

part in the General Assembly deliberations on programme matters; and the Director General needs independent advice on the evolution of the Programme between sessions of the General Assembly. Evaluation tends to be *ad hoc* and need improvement. We recommend: that clear goals and targets are incorporated in each of the 23 programmes; the establishment of a Programme Committee be appointed at the Perth General Assembly; that independent programme advice be provided to the Director General between General Assemblies; and better arrangements for reviewing and evaluating IUCN's activities.

Annex

Summary Evaluation of the 18 Highlighted Activities from the 1988-1990 Draft Programme and Budget*

1. Under the Programme area **Conservation and Development**, four highlighted activities were listed:

- a major new on the ground programme in the Sahel: this has indeed got underway with a projected 1990 expenditure of over SFr 10 m. Our impression is that the programme, which was externally evaluated in 1989, has taken time to establish a clear direction and needs to be more integrated with other relevant programmes of the Union;
- the preparation of the second edition of the World Conservation Strategy: this is before the 18th Session of the General Assembly in draft as the successor document to the World Conservation Strategy: "Caring for the World";
- the feasibility of an Environmental Amnesty Service: no action has been taken to develop this service as a distinctive element of the Union's work. This item does not reappear in the 1991-1993 Programme, although something like it is proposed in "Caring for the World";
- a new programme on environmental economics: though a separate programme has not been developed, some progress has been made in integrating economic and

conservation theory—reflected for example in "Caring for the World".

2. Under the Programme area Conservation Science, seven highlighted activities were listed:

- regional and national databases for species and ecosystems: no consolidated initiative has been taken in this field but some individual activities have taken place in certain countries. Our impression is that the progress has fallen far short of what the membership would have expected from the 1988-1990 Programme document. (The problem appears to have arisen from the changes in the running of the World Conservation Monitoring Centre (WCMC) and the work may now go ahead in revised form);
- electronic link of IUCN Conservation Database to world's databases: it is difficult to identify what progress has taken place, but our impression is that little concrete has occurred (the same comment relating to the WCMC applies here too);
- an Andean action plan: no progress has been made in this area; however the project reappears in the current Programme;
- a conservation strategy for the Alps: an international conference was held in 1989, leading to the publication of a booklet surveying the state of the Alps and the pressures on them. This would appear to fall short of the strategy envisaged in 1988;
- a conservation strategy for islands: a Global Island Database has been prepared, and considerable work done on island conservation in the Plants Programme. But little progress has been made in the application of science to island ecosystems;
- a Botanic Gardens Conservation Strategy: this was published in 1989;
- a network of regional task forces on coastal conservation: these task forces have not been established.

3. Under the Programme area of **Biological Diversity**, three highlighted activities were listed:

- a global species monitoring network: this section of the Programme did not proceed as planned (but may now be picked up by WCMC through its planned programme of Biological Diversity Status Reports);

* as listed in paragraph 18 of that document

- preparation of the convention on biological diversity: six successive versions of the draft articles have been prepared;
 - a published series on plant conservation: a substantial series of publications has occurred (nearly 20 in all).
4. Under the Programme area **Habitat Management**, four highlighted activities were listed:
- completing the Antarctic strategy: this is before the Perth General Assembly in draft;
 - completing the global wetlands conservation strategy: a document fulfilling this purpose was published in 1990, upon

which a series of more detailed policy reports have been based;

implementing protected area action plans in the tropical realms: it is difficult to establish precisely what progress has been made, but our impression is that, while a lot of activity is underway, it could be more organized and prioritized. Moreover there is an urgent need to undertake a comprehensive review of protected area needs in the neotropical realm;

identifying critical sites for tropical forest conservation: progress has been most marked in certain areas, e.g. Central Africa, Madagascar and Guinea.

Annex 15

Remarks by Mr Carl Tham, Director General of the Swedish International Development Authority (SIDA), on the IUCN Programme*

It is very clear that the industrialized world must change its pattern of consumption, transport and production. There is no other way for us to avoid ecological and economic disasters in the future. There are technical and economical possibilities, but the basic question is political—are we prepared to make these changes?

However, there is also a profound need for policy change in many developing countries. Accountability and responsibility for national environmental problems ultimately rests with the governments of the countries concerned. The developing countries cannot simply refer to the industrialized countries for the solutions to these problems. They must themselves take action and make priorities. The industrialized countries must and should assist by providing active technical support and financial assistance. International cooperation and agreement is necessary but must be based on firm and vigorous national policies. Each country must first of all put its own house in order.

A particular set of problems is of course the linkages between poverty and environmental degradation. These linkages are complex.

Poverty and environmental degradation are connected in two ways. Firstly, poverty is often the result of environmental degradation. Soil erosion, deforestation, water pollution, the loss of flora and fauna and so on, all have a negative impact on the welfare of individuals and societies, with varying degrees of poverty as a consequence.

Secondly, poverty is often the cause of environmental degradation. Extreme poverty often means that knowledge is limited as well as that resources are lacking to make the investments necessary to

protect the environment. Add to that the pressure of population growth.

SIDA has commissioned a paper on the relationship between poverty and the environment, to be produced as part of the preparatory process for the UN Conference on Environment and Development in 1992.

IUCN deals with the development of ideas and policies and is endowed with a network consisting of governments, voluntary organizations and professionals. The Union has an important role to play by examining the problems of poverty and environment, by creating awareness about the situation and by addressing these issues in National Conservation Strategies and conservation plans and programmes.

IUCN is a unique organization. Its distinctive feature is, as we all know, embedded in the combination of three systems: the membership, the scientific network and the Secretariat. The strength of IUCN lies in its ability to organize and manage a smooth interaction between these components and to promote their integration.

In our endeavour to expand the collaboration with IUCN, SIDA commissioned a study of the organization's structure and strategy.

The study concluded that IUCN is an extremely important actor in the world and one which has earned both the intellectual and financial support of donor organizations. The results of the study proved positive to further and increased collaboration in the future. It did, however, identify a few problems. The most acute was the organization's financial insecurity and financial dependence and, partly linked to this, the rapid and somewhat opportunistic growth of its project activities. For this the donor community will have to take part of the blame. The rapid growth has been triggered by a wide range of ambitions and pressures posed, in part, by the demands of the donor community. Donors have had a tendency to regard IUCN too

* Distributed as General Assembly Information Paper No 7

much as merely another consultant. We, the donors, have to restrain ourselves from asking IUCN to carry out too many single projects. Instead we have to view IUCN as a forum for strategic dialogue between politics and science and as a path-finder towards sustained resource utilization.

The challenge that IUCN is facing involves a choice of focus and the need to find a sound balance between the traditional area of expertise, that is the field of nature conservation, and a dynamic development orientation. The involvement of its members and of professionals in an active partnership is another area of major concern.

The study commissioned by SIDA recommended:

- A consolidation of the organization and its activities;

- Support to programmes rather than projects; and,
- A strong emphasis on institution-building and on networking.

The SIDA support to IUCN is approaching what the study is advocating. There is, however, a need for us to take a step further in developing our funding arrangements with IUCN.

We are looking forward to continued discussions with IUCN on its role and on the best possible funding mechanisms, and hope that other donors will also be involved in the process.

I am convinced that our combined efforts and continued collaboration will lead to an even better IUCN.

Annex 16

Remarks by the Treasurer, Mr R.C. Steele, on introducing the Accounts and Auditors' Reports for 1987-1989

IUCN's Statutes make the Auditors responsible for submitting the accounts of IUCN for the past triennium to the General Assembly. These Audited Accounts are shown in Annexes 3-5 of Agenda Paper GA/18/90/5. The projections of our accounts for 1990 have been brought up to the end of October by a paper recently distributed to you all.

In discussion with the Director General, it appeared to us that members might find it helpful to have a fuller statement of our income and expenditure than are shown in the Audited Accounts in the Agenda Paper. That is why we prepared together the paper distributed to you as GA/18/90/5. I will not go through that paper in detail because you have all had it for some time and studied it, but I will comment on some of the points made in it.

At the end of 1987, the last year of the last triennium, it was clear that IUCN was living beyond its means and we had accumulated a considerable deficit, some SFr 1.8 million, on our unrestricted funds. The last General Assembly expressed its concern. IUCN needed to bring its income and expenditure into balance; it had to improve its financial control mechanism so that its finances could be properly managed; and it had to repay the debt.

I am pleased to be able to report that IUCN is now living well within its means. Our income and expenditure are in balance; our financial procedures are now adequate to manage our monies; and we have, with the Council's agreement, devised a debt repayment schedule which will enable us to eliminate the debt by 1996. In devising the repayment schedule, we have sought to maintain the work programme agreed by the last General Assembly and indeed have expanded it.

I ought to make clear that the IUCN debt is an internal debt—we do not owe any money outside IUCN. If IUCN were to go out of business

tomorrow, our assets would equal, and indeed exceed, our liabilities. This was not the case at the end of the last triennium.

We must record our thanks to two generous benefactors of IUCN—Madame Nicollier and Mrs Julia Ward. When the total of their bequests has been received, the World Conservation Trust Fund will stand at just under SFr 2 million.

I do not believe that IUCN should accumulate large reserves of money—we must put as much of our resources as we can into our conservation work—but we do, in prudence, need to have a cushion against the uncertainties of our income. These benefactors have helped us to provide such a cushion.

I do not want you to think that IUCN's financial problems are now past. Certainly our financial management is now sound but we need more money—much more money—especially in the form of unrestricted funds. Some increases in income can be made quite quickly; others will take longer. For example, if all members paid their annual dues early in January, as required by the Statutes, we would immediately be better off.

The outgoing Council has approved a fund-raising strategy and I hope that it will be pursued vigorously by the incoming Council. IUCN, as has been acknowledged at this General Assembly, is a unique organization providing important services worldwide and we must do more to try and use these qualities to bring in the money we need to further our activities.

Donors have been generous in boosting our project income. Such support is very welcome, but IUCN must seek to ensure that it is not driven entirely by projects. More emphasis on programme support in addition to the project support we receive would benefit the balance of our activities.

The financial figures for the past triennium and the projections for the next triennium which you will be discussing later show that IUCN is growing

fast. At the end of the last triennium our income was just under SFr 20 million. At the end of the next triennium it is forecast to be SFr 56 million and could well be much larger. This increase reflects our growing importance but I want to add a note of caution. The past has shown the trouble that IUCN gets into if its managerial skills do not grow and develop in relation to its growing finances. The Director General and his staff are well aware of this danger and I feel confident will

maintain control of IUCN's rapidly increasing budget.

Finally, on a more personal note, may I express my appreciation and thanks for the collaboration and help I have received from the Council, the Director General and his staff, from members and from the World Wide Fund for Nature. My especial thanks go to Mike Cockerell, Assistant Director General, Management, and to Heather Morgans, Comptroller, and their staff. Not only I but the whole membership have much to thank them for.

Annex 17

Report of the Finance and Audit Committee

Membership

Syed Babar Ali (Chair) (Pakistan)
Dr Martin Edwards (Canada)
Mr Henri Nsanjama (Malawi)
Dr Juan Sevilla (Ecuador)
Mr Jorgen Wenderoth (Germany)

The Committee met on 28, 29 and 30 November 1990 and discussed the audited financial statements for 1988, 1989 and estimates for 1990, along with the report of the Treasurer and Director General on the previous Triennium and the Revised Estimates of Income and Expenditure for the forthcoming Triennium.

As a result, the following recommendations were drafted and adopted by all members of the Committee present:

Recommendation 1

Having examined the audited financial statements for 1988, 1989 and the projections for 1990;

Noting with pleasure that each year has ended without a deficit and that the unrestricted fund balance is now positive;

The Finance and Audit Committee:

Recommends to the 18th General Assembly that the Report of the Treasurer and the Director General on the Finances of IUCN in the 1988-1990 Triennium be accepted.

Note: This was approved by the General Assembly at the 92nd Sitting.

Recommendation 2

Having examined the Revised Estimates of Income and Expenditure (1991-1993);

The Finance and Audit Committee:

Recommends to the 18th General Assembly the approval of the Revised Estimates of Income and Expenditure; and

Also recommends the approval of the proposal on Membership Dues for the Triennium 1992-1994 (GA/18/90/20) in its entirety.

Note: This was approved by the General Assembly at the 97th Sitting.

Recommendation 3

The Finance and Audit Committee:

Recommends to the 18th General Assembly that the Director General be asked to establish additional financial regulations based on the existing internal procedures, for submission to and approval by Council as a regulation under 'Article X of the Statutes.

Note: This was approved by the General Assembly at the 97th Sitting.

Recommendation 4

The Finance and Audit Committee:

Recommends to the 18th General Assembly that in addition to the current Programme budget the Secretariat should prepare an Administrative budget and make it available to members on request.

Note: This was approved by the General Assembly at the 97th Sitting.

Recommendation 5

Having examined the resume of the proposed Treasurer and finding him to be eminently qualified;

The Finance and Audit Committee:

Recommends that the 18th General Assembly accept the proposed candidate for Treasurer, Mr Don Person.

Note: Mr Person was duly elected Treasurer at the 92nd Sitting.

Annex 18

Progress Report by the Director General, Dr M.W. Holdgate, on the New Headquarters for IUCN

At the last General Assembly, the membership of IUCN accepted the generous offer of the Swiss Government to provide a new Headquarters for IUCN, thereby permitting the Union to remain based in Switzerland. Since then a great deal of activity has culminated in the following situation.

First, a site of 8500 sq. m of land in Gland, where we are currently based, has been made available by the Commune of Gland, rent-free for 50 years. This site has planning approval for the construction of a building of some 4800 sq. m of usable floor space. The site is within five minutes' walking distance of the existing World Conservation Centre, on the edge of the town of Gland, and beside the road between the nearby towns of Nyon and Rolle. Between our building and the road, there is a strip of land which is zoned to remain as open space. The site, with its exemption from rent, was calculated to be worth SFr 5.5 million in 1990.

Second, the Canton of Vaud and the Swiss Confederation are contributing respectively SFr 5 million and SFr 12.5 million to pay for the new building. The building will be in IUCN's name, but understandably subject to restrictions governing our freedom to dispose of it or let it to other organizations.

Plans for the Headquarters have been prepared by a well-known Lausanne architect, Mr Hans Schaffner, whose firm was successful in a contest between three invited local architects. The plans were displayed and explained to the people of Gland at two evening meetings held in the Commune, and an exhibit showing IUCN's work and the proposed new headquarters was organized in a local school. These plans are now on display in the first-floor exhibition area at the Burswood Convention Centre. The detailed design of the building and the selection of furnishings is now well advanced. Mr Schaffner has been requested to design to a price of SFr 16 million, thus leaving a margin for inflation and overruns.

Legal agreements have now been signed with the Commune, Canton and Confederation, and the architect has been commissioned. We expect work to begin on site early in 1991 and the building to be in occupation by the end of 1992.

In consideration of our vacating the World Conservation Centre, where we have a right to 50 per cent occupancy, the World Wide Fund for Nature, who are the legal owners of the building, have agreed to make IUCN an *ex gratia* payment of SFr 1.75 million. I am happy to report that the first one million has been paid, and is in an IUCN bank account where it will generate interest. It is intended that this sum contributed by WWF will be maintained as a Headquarters Facility Fund, to cover the contingencies of maintenance and other costs inevitable in a separate Headquarters.

The building, as designed and funded by our generous Swiss hosts, will be decorated and fitted with essential services. It will not, however, be fully furnished. While we have a considerable amount of furniture in the existing buildings which we could move with us, we believe that a new Headquarters merits something better, and I would like to appeal to members of IUCN—and especially Governments—to consider donating the fitting out, furnishing or otherwise embellishing of the new Headquarters in a fashion which will allow their name to be associated with a particular feature, and perhaps the display of some particular national craftsmanship. One member Government has already shown considerable interest in fitting out the library and archive, and we are in discussion with others about the possibility of their furnishing the conference room, which will have a capacity of up to 200 people, or be capable of sub-division for smaller meetings. I would be happy to discuss with individual members here at the General Assembly the contributions that they might make. I would add that it would be particularly inspiring if we could have artefacts representative of the widest

possible range of cultures in the new Headquarters, so that paintings and traditional craft articles would be welcome.

In closing this brief presentation, and drawing your attention to the exhibition on the first floor, I must pay the warmest possible tribute to those who have worked with us to make this happy situation possible. In particular I pay tribute to Professor Pierre Goeldlin, Swiss member of Council, who would have been making this presentation had not ill-health sadly prevented him from travelling to the General Assembly. Professor Goeldlin, working with the authorities of the Confederation, Canton and Commune, has given unsparingly of his time and energy in service of

IUCN. I would also like to pay tribute to Minister Walter Gyger of the Confederation, Chancellor Werner Stern of the Canton, and the Syndic of Gland, Mr Jean-Claude Christen, for their immense assistance.

Much of the burden of negotiation on behalf of IUCN has fallen on Mr Michael Cockerell, Assistant Director General, Management, ably assisted by Mr Francis Parakatil, and I would emphasize the debt owed to them by all our members.

By the time of the next General Assembly I hope I shall have been able to welcome many of you to an outstanding new facility, created by Switzerland in the service of world conservation.

Annex 19

Remarks by the Director General, Dr M.W. Holdgate, on the Mission, Objectives, Approach, Governance and Strategy of IUCN

We are about to discuss what I consider to be some of the most important matters for this General Assembly:

- What is IUCN's mission in the world ?
- What kind of body should it be ?
- How should it go about its work ?
- What should our strategy be ?

The four papers before us—GA/18/90/6, 7, 8 and 9—have been prepared in response to the instruction of the last General Assembly to the Director General, in consultation with the Council, to review the structure of the Union, with a view to providing the most effective framework for its overall operation. The four papers together with that on the Role of the Commissions, which we are to discuss in the next session, form a package of response to that Resolution. But I would not claim that they are all of equal importance. I attach especial significance to Paper 7 on the Mission, Objectives and Approach of IUCN and to Paper 9 on the Strategy for the Union, regarding Paper 8 on Governance as essentially a description of the structure of the organization and of certain directions in which it is evolving, although there are some matters I would like to highlight when I come to that paper.

Mission, Objectives and Approach (Paper 7)

IUCN is—*de facto* if not yet *de jure*—a World Conservation Union. It brings together activities in 120 countries. It spans governmental and non-governmental organizations, scientific bodies and advocacy groups. It provides a forum and a

framework for communication between them. It also provides an opportunity to pool their ideas and plan joint action. I believe that we should recognize the true nature of the organization by adopting, as this paper proposes, the working title "The World Conservation Union". I also consider this linkage between the governmental and non-governmental sectors to be the shape of the future, and potentially far more productive than organizations which segregate the governmental and non-governmental sides. I take as a point of departure therefore that the structure of IUCN is a great strength and one on which we must build.

We need to be clear about our Mission, especially in a world where innumerable bodies seem to be preoccupied with the vital questions of environment. Ours has been suggested as "to build harmony between humanity and nature". We all know that human life depends on nature and is at present not living in harmony with it, facing severe problems in consequence. Building that harmony, essential for the future, seems the right task for us.

But how should we express this in detail ? A number of members have expressed concern with the statement at the end of paragraph 9 which attempts to spell out the Mission of the Union in one sentence. That concern arises because the sentence as it stands speaks of using nature and natural resources rather than safeguarding them because they are of value in their own right. I think that this concern is a proper one and I would like therefore to propose an amendment which slightly extends that sentence. I suggest that our Mission statement could be:

"To harness the insights and skills of the world conservation movement in order to safeguard the diversity of the natural world, in its own right and as humanity's life support system; to promote the sustainable and equitable use of nature and natural resources; and to establish a

harmonious future for humanity within the world environment."

What objectives should we pursue in fulfilment of such a Mission? The paper suggests that we need conservation goals set out in paragraph 13 and operational goals set out in paragraph 18 and I invite discussion as to whether these are correctly stated. Paragraph 13 in fact does little more than split up the Mission statement I have just read out. Paragraph 18 suggests the technology for doing the things we need to do and this in turn needs to be judged against what is said especially between paragraphs 25 and 30 on the service that the Union should give to its members. I return to some of those points in the conclusions of this paper—in which you will note emphasis is laid first on the scientific base for the work of a World Conservation Union, and then a little later on on the need for high professional standards. The paragraph suggests that we are in the business of leadership, as well as practical and effective conservation on the ground. You will note finally that there is stress on the relevance of our Mission to our members, the commitment of those members, the benefits that any organization should gain from belonging to IUCN, and the need for linkage and communication. I invite your response on all those points.

Governance (Paper 8)

I will now turn to the Governance paper. This begins by making the point that the five statutory components of the World Conservation Union exist within a wider frame, consisting of our membership, of the worldwide scientific networks we tap through the Commissions and Secretariat, and within the Union itself, in the Secretariat, which has no statutory existence being treated as an appendage of the Director General, but without which the Union could not function.

In the Governance paper, may I highlight just a few points. First, please note the very considerable stress laid on the need to expand the regional

presence of the Secretariat, and to strengthen the links between the Secretariat, the Regional Councilors and the regional membership. You will note in paragraph 7 a proposal to extend the Secretariat's presence on the ground in parts of the world where IUCN is currently poorly represented, and such a strengthening in South America was directly requested by our members there in a special meeting that they held early in 1990. I believe that if we are truly to be a World Conservation Union, we have to be organized on such a basis, rather than try to function through the coordinating activities of a centralized Secretariat located in the very beautiful but very special environment of Switzerland.

I will not linger on what is said here about the General Assembly. Some of the points made have already been acted upon, and you will evaluate their wisdom or otherwise in the light of experience here in Perth. Very similarly, I will pass over what is said about the Council and Bureau, while paying tribute to the effectiveness of these institutions in the past three years. We shall be discussing the Commissions separately. Proposals have already been laid before you for the direct election of the Treasurer. As for the Secretariat, since this paper was prepared, I have taken it upon myself to revise the organizational structure, under two Assistant Directors General, one responsible for conservation programmes and the other for management, and I will circulate to all members an organigram which shows the structure of the Secretariat as it now stands. I naturally consulted the Council before taking the important step of naming two Assistant Directors General, and going out to advertisement for the crucially important post of ADG—Conservation Programmes, to which we are now seeking to recruit. Copies of the advertisement and job specification for that post have been circulated to all members here present, and I would warmly welcome your help in finding somebody of the outstanding calibre that we need. I would stress, this Officer will be the senior scientific professional of the Union under the Director General, and will have primary responsibility for preparing and implementing the technical programme of our work. We have to have a first class person.

Before leaving the Governance paper, I would like to correct a misunderstanding. Paragraph 56 could be read as criticism of the universities in the region of Switzerland near to IUCN Headquarters. This was not the intention. There are a number of well-established and eminent centres of learning in the Canton de Vaud and the Canton de Geneve. However, the Union's work is very specialized, and

* The final version adopted by the General Assembly reads:

"To provide leadership and promote a common approach for the world conservation movement in order to safeguard the integrity and diversity of the natural world, and to ensure that human use of natural resources is appropriate, sustainable and equitable." (*Ed.*)

this restricts the number of centres with which our Secretariat are likely to establish very close working contacts. Most of these close working contacts lie outside the area of our Headquarters, and this seems likely to continue to be the case, although it has been agreed that Professor Pierre Goeldlin and I will review the opportunities for strengthening our linkage, to the mutual benefit of the universities concerned and of IUCN. I propose to amend paragraph 56 in any later version of this paper that receives wider circulation, so that no criticism of the Swiss institutions among which we work is implied.

Strategy (Paper 9)

I hope you will feel that the paper on the Strategy follows logically from what has already been said. We first have to be clear about the wider world objectives to which we are trying to contribute. I have set these out in very general terms. Second, we have to be clear about our contribution, at international, national, and community and individual level, and this is the focus of paragraphs 7, 8 and 9 which are central to this document.

From this analysis the Strategy must follow and I draw your attention to paragraph 11 in particular. It emphasizes that this General Assembly should be made a truly effective world conservation forum. It emphasizes that our programme must be focussed on the needs of members and Partners. It emphasizes that it must also be focussed in areas where we can provide professional leadership. It implies high priority to the development of specific conservation services, a more effective linkage between our members and Partners, and a programme of catalysis in the building of new institutions for conservation and sustainable development, especially in the developing world. It ends with two functions on which I would very much welcome your views.

The first concerns how far we in this forum can develop, articulate and promote the collective vision of the world conservation movement. The second concerns how far you would be content for your President, Council, Director General and Secretariat to speak for you and give leadership in the wider world in promoting the objectives which we will consider in this General Assembly and adopt in our Statement of Objectives. We are often asked to adopt such a role, without prejudice of course to our members speaking for their own causes in their own ways. How should we do it?

Obviously, if we have a Strategy, which in turn implements a clearly formulated Mission, we have

to develop our programme in conformity with it and paragraph 12 of the paper makes some suggestions about doing this. You will note the proposal for strengthening our work on planning for conservation and sustainable development and providing better services to the members. But this is linked to the maintenance of our heartland of expertise in ecology and its application in the conservation of biological diversity and the establishment and safeguarding of protected areas.

The draft Strategy emphasizes the need for decentralization, institution-building and communication. There are accordingly implications for governance. Seven are suggested. First, the General Assembly is proposed as a World Conservation Forum concerned with global issues and with programming rather than "housekeeping"—by which I mean delectable but at times frustrating debates over our structure, statutes, organization and mode of operation! Second, it is suggested that we try to have more congresses on key topics, possibly regionally based. Third, emphasis is placed on the development of national and regional representation. Fourth, it is stated that we must operate one integrated programme, whether executed via Commissions or Secretariat. Finally you will note emphasis on three points—the provision of conservation services, possibly through subsidiary entities, on the need for better communication, and on the role of the Director General and Secretariat especially as network managers.

Resolutions

A series of draft Resolutions has been put forward in conjunction with these papers. I have already mentioned that arising from Paper 7, which repeats the key paragraphs of the latter. Obviously the Statement of Mission in paragraph 1 of the draft resolution will need amendment if you accept my restating of it, made a few moments ago. The Resolution arising from Paper 8 again summarizes the key message of that paper, and especially ways of strengthening the involvement of membership, improving information flow, the development of the General Assembly, the strategic role for Council and the more executive role for the Bureau, the strengthening of the Commissions, and the clarification of roles of the officers, Director General and Secretariat. You will note also in this Resolution the proposed constitution of a voluntary fund with a target income of not less than SFr 800,000 per annum, to be used to support the work of Regional Councillors, the convening of regional forums and

discussions, and the expansion of the representation of the Union in the developing world. This matter comes up again under Paper GA/18/90/21 and will be discussed on Wednesday 5 December, but its appearance in the papers now before you gives you an opportunity for initial reaction if you wish. Finally the Resolution addressed to Paper 9

provides for its endorsement as our Strategy to guide us in the next three years, and authorizes me to promulgate it as a statement.

May I commend these papers and draft Resolutions to you, for your discussion, amendment and ultimate adoption in whatever form seems best to you. Thank you.

Annex 20

Mandates for the IUCN Commissions 1991-1993

The General Assembly approved the following mandates for the six IUCN Commissions for the Triennium 1991-1993.

SPECIES SURVIVAL COMMISSION (SSC)

1. Mission

To conserve biological diversity by developing and executing programmes to save, restore and manage wisely species and their habitats.

2. Purpose

IUCN's Species Survival Commission (SSC) serves as the principal source of advice to the Union and its members on the technical aspects of species conservation. It seeks to mobilize action by the world conservation community on behalf of species, in particular those threatened with extinction and those of importance for human welfare. It achieves this by providing leadership with the following four goals:

- (a) To assess the conservation priorities for species and their habitats;
- (b) To develop plans for their conservation;
- (c) To initiate actions needed for the survival of species;
- (d) To provide an expert resource network on the conservation of biodiversity.

In essence, the SSC provides the expertise and the framework needed by the world conservation community to target available resources to the most urgent and important priorities for the maintenance of biological diversity globally.

3. Objectives

SSC's objectives are as follows:

- (a) To promote the practical implementation of the principles of the World Conservation Strategy, with particular emphasis on the conservation of biological diversity, and on ensuring that the utilization of species does not exceed a sustainable level;
- (b) To maintain and augment a global network of committed, volunteer experts on the conservation of species;
- (c) To gather data pertinent to the conservation of species through the volunteer network, and to manage these data in a standardized, distributed computerized database;
- (d) To assess species conservation priorities through an Action Planning programme, and to target the recommendations of Action Plans to appropriate agencies and organizations within the global conservation community, with particular emphasis on IUCN members;
- (e) To promote and carry out field projects aimed at addressing particularly important priorities identified in the Action Planning programme;
- (f) To develop policies and guidelines pertaining to the conservation of biological diversity, and to bring these to the attention of the conservation community;
- (g) To monitor the status of species of conservation concern and to transmit this information to those agencies or organizations that are able to take the necessary remedial action;
- (h) To provide a technical advisory service to IUCN and its members on the development and implementation of projects and other programmes relating to species conservation (including the screening of project proposals);

- (i) To provide a technical advisory service to international treaties relating to the conservation of biological diversity;
- (j) To provide coordination and leadership for the conservation of biological diversity worldwide.

4. Terms of Reference

To carry out its objectives, the Commission, under the guidance of its Chair and Steering Committee, and in close collaboration with the Director General and staff of the Secretariat designated by the Director General, will:

- (a) Maintain and augment a network of scientists, conservation professionals, and dedicated lay conservationists to assess the status and conservation priorities of particular taxonomic groups of animals and plants, and to advise on the action needed to safeguard their future;
- (b) Reinforce its network to apply expertise in important conservation methodologies, such as the sustainable utilization of wildlife, monitoring the effects of trade in wildlife products on wild populations of species, the re-introduction of species into their former ranges, controlling populations of introduced species, improving the application of veterinary science to wildlife management, captive breeding of threatened species, and the conservation of genetic diversity at the species and population levels;
- (c) Ensure that recommendations arising from the network are carefully targeted so that they are relevant at local and national levels, and readily usable by IUCN member organizations and governments in implementing action;
- (d) Ensure that all recommendations of Specialist Groups, and especially those which involve potentially controversial issues such as setting conservation priorities, captive propagation, collection of wild species, reintroductions, eradication of exotics, and sustainable utilization are adequately reviewed by appropriate specialists and all involved agencies prior to their presentation to government and other management agencies for implementation;
- (e) Place species conservation within the broader context of habitat management and restoration, including consideration of underlying social, economic and political factors that threaten biological diversity, through close collaboration with other IUCN Commissions, particularly the Commission on National Parks and Protected Areas (CNPPA), and the Commission on

Ecology (COE), as well as key sections of the IUCN Secretariat, notably the Tropical Forest Programme, Wetlands Programme, Marine Programme, Population and Natural Resources Programme and the work of the Regional and National Offices;

- (f) Cooperate on inter-commissional task forces, covering such subjects as global change, education and training, communication and conservation strategies.

5. Structure and Organization

IUCN's Species Survival Commission harnesses the skills of a global network of experts committed to the conservation of plant and animal species. To make these skills available to the worldwide conservation movement and to fulfill its mission, the Commission operates in the following ways:

Network Management

- Plans general strategies of approach and organizes work at local, national and regional levels with regard to taxa, themes and special disciplines;
- Attracts financial and human resources for information-gathering, analysis, action planning, communicating, implementing and evaluating programmes;
- Evaluates work process and products, compares these with other programmes and organization, and revises work plans accordingly.

Programme Execution

- Internal Process
 - Gathers information on status of species and factors affecting likelihood of their survival;
 - Devises plans for conservation of species and their habitats by analysis of biological data and consideration of human factors.
- External Product
 - Communicates conservation strategies, action plans and policies to the SSC network, to other components of IUCN and to outside organizations and agencies;
 - Initiates actions towards saving, restoring and wisely managing species and their habitats.

In order to operate most effectively along these

lines during the 1991-1993 Triennium, the SSC will be structured as follows:

- (a) **Chair and Steering Committee.** The Commission administration will be carried out by the Chair with a Steering Committee, which will have up to 20 members, providing geographical and interdisciplinary balance in formulating policy and setting operational directions. A smaller Executive Committee will facilitate operational decisions, as needed.
- (b) **Roll of Honour.** These are people who have made major contributions to species conservation in general and to SSC in particular.
- (c) **Regional Members.** SSC regional members will be appointed, with particular emphasis on incorporating senior figures in wildlife conservation and management from both government agencies and non-governmental organizations. Such members will, to a large extent, constitute part of the delivery mechanism for the technical recommendations arising from the Specialist Groups.
- (d) **Specialist Groups.** SSC will maintain a network of Specialist Groups, which will include scientists, conservation professionals and dedicated lay conservationists. These Groups will be organized to provide broad coverage of taxonomic groups of animals and plants, as well as of important special and inter-disciplinary conservation methodologies.
- (e) **Cooperating Organizations.** Cooperating Organizations are appointed to SSC for two reasons: first, as recognition of the logistical and financial assistance that many organizations provide to the SSC, in particular to the Specialist Groups; and second, to form part of the delivery mechanism for conservation action, which needs to be linked as closely as possible to the work of the Specialist Groups.
- (f) **Members Emeritus.** Members Emeritus are those who have served the Commission in the past but who have stepped down from active day-to-day service to the Commission.
- (g) **Regional and National Networking.** During the 1991-1993 Triennium, the SSC will improve its networking at national and regional levels, with a particular emphasis on ensuring that recommendations of the Commission are available to the various national and regional authorities concerned with implementation. The Commission will encourage national and regional groupings to develop as appropriate to meet local needs, rather than by imposing such structures in a "top-down" manner. Such

groupings will not necessarily be permanent structures, but can be temporary networks with limited life-spans.

6. Triennial Activities

The activities to be undertaken by the Species Survival Commission during the 1991-1993 Triennium are listed and described in the following paragraphs in the draft IUCN Programme 1991-1993:

- A15. Developing and Managing the IUCN Species Conservation Network.
- A16. Enhancing Communications about Species Conservation Requirements.
- A17. Planning Species Conservation Action.
- A18. Establishing a "Heritage Species" Programme.
- A19. Developing IUCN Positions on Critical Species-related Issues.
- A20. Supporting Species-related Field Projects.
- A21. Wildlife Utilization as a Component of Conservation.

Budget details for these activities are also provided in the Draft IUCN Programme. These budgets do not include the operations of the SSC Specialist Groups, which are funded entirely from external sources.

In addition, SSC will make a significant contribution to the following activities:

- A1. Completing and Promoting the World Conservation Strategy for the 1990s.
- A2. Completing and Promoting the Antarctic Conservation Strategy.
- A4. Developing and Implementing National Conservation Strategies.
- A5. Development of Sub-National Conservation Strategies.
- A6. Promoting the Role of Women in Natural Resource Management.
- A7. Promoting and Enhancing the Integration of Population and Natural Resource Issues in the Work of IUCN.
- A8. Evaluating the Ecological Implications of Global Change.
- A9. Planning for Sea Level Changes.
- A10. Preparing a Global Strategy for Conserving Biological Diversity.

- A12. Supporting the Legal Basis for Conserving Biological Diversity.
- A13. Utilizing Concepts of Economics to Promote Conservation of Biological Diversity.
- A14. Designing and Holding the IV World Congress on National Parks and Protected Areas.
- A22. Conserving Plant Genetic Resources.
- A23. Promoting the Implementation of the Botanic Gardens Conservation Strategy.
- A24. Wetlands Policy and Management Guidance.
- A25. Wetland Management Programmes and Projects in Priority Regions.
- A26. The Ramsar Convention.
- A27. Supporting Global Efforts to Conserve Tropical Forest Ecosystems.
- A29. Marine Habitat and Ecosystem Conservation: Coastal Zone Management.
- A30. Assisting in Implementation of Conservation Law in Coastal and Marine Habitats.
- A31. Conservation of Mountain Environments.
- A33. Promoting the Completion and Effective Management of the Worldwide System of Protected Areas.
- A35. Developing New Concepts in Protected Area Management.
- A38. Compiling and Maintaining a Register of Consultants on Major Environmental Issues.
- A41. Managing Information on Species and Habitats: Support to the World Conservation Monitoring Centre.
- A44. Providing an Information Service.
- A45. Achieving Sustainable Development in Central and Eastern Europe.
- A48-50. Achieving Sustainable Development in Central and South America and the Caribbean.
- A51. Achieving Sustainable Development in West and Central Africa.
- A55. Achieving Sustainable Development in Asia and the Pacific.
- A63. Contributions to International Meetings.
- A64. Supporting Conservation Worldwide through Expansion and Strengthening of the IUCN Network.

COMMISSION ON NATIONAL PARKS AND PROTECTED AREAS (CNPPA)

1. Mission

To promote the establishment and effective management of a worldwide network of terrestrial and marine protected areas.

2. Purpose

IUCN's Commission on National Parks and Protected Areas (CNPPA) serves as the principal source of technical advice to the Union, its members and its collaborating organizations on all aspects of the selection, planning and management of protected areas. It supports action by government agencies, international organizations, local communities, private land owners and non-governmental organizations to ensure that natural and semi-natural habitats can be conserved in such a way as to make their optimal contribution to human society. CNPPA aims to demonstrate the value of protected areas within wider strategies for the sustainable use of the Earth's natural resources, and seeks to expand the constituency for protected areas by identifying productive partnerships with a broad range of other sectors.

3. Objectives

CNPPA's objectives are:

- (a) To promote extension of the global system of protected areas through identification of gaps in coverage, and to assign priorities for action to address the gaps identified;
- (b) To identify priorities at global, continental, national and sub-national levels for the effective management of protected areas;
- (c) To expand strategies for protected area management—involving training, planning, economics, traditional knowledge and other means—that will enable managers to adapt to changing political and social conditions;
- (d) To enhance monitoring of the status of protected areas and call attention to "Threatened Spaces";
- (e) To develop and apply mechanisms for encouraging support for protected areas from the people living in and around them and for maximizing the contribution of protected areas to those people;

- (f) To strengthen the application of natural and social science to protected area management issues;
- (g) To increase greatly international support for protected areas as an integral part of national development efforts, and enhance the financial means available to manage such areas.

4. Terms of Reference

To achieve its objectives over the coming three years, CNPPA will:

- (a) Take the lead on behalf of IUCN in the preparations for the IV World Congress on National Parks and Protected Areas, scheduled for February 1992 in Venezuela, and use them to consolidate partnerships with a wide range of institutions in support of better management for protected areas;
- (b) Conduct a series of reviews from all parts of the world on the major protected area issues in each region, with the reviews to be presented at the IV World Congress and subsequently published;
- (c) Prepare a Global Plan of Action on Protected Areas, which will identify where new protected areas should be located, agree priorities for action, and establish a worldwide network of demonstration protected areas to illustrate the application of principles in widely varying circumstances and different regions;
- (d) Provide technical advice and assistance to governments, non-governmental agencies and the IUCN Secretariat on identifying priorities for establishing new protected areas and improving the management of existing ones; and on implementing the priorities identified;
- (e) Collaborate with other international agencies, particularly with UNESCO in the implementation of the World Heritage Convention and the Biosphere Reserve Action Plan;
- (f) Nurture a worldwide network of professionals for developing management techniques, exchanging information, monitoring the status of protected areas, training and providing technical advice to IUCN members;
- (g) Collaborate with the World Conservation Monitoring Centre (WCMC) so as to develop further and maintain the global database on protected areas and the species and habitats contained therein as an information service to the world community;

- (h) Communicate the outputs of the IV World Congress on National Parks and Protected Areas in a variety of ways including a series of publications on major protected area issues, and publish *Parks* magazine and other material relevant to protected areas;
- (i) Maintain and disseminate a roster of CNPPA members and a directory of protected area management agencies; publish a regular newsletter distributed to all members; and hold regular meetings, rotating among the different biogeographic realms of the world.

5. Structure and Organization

CNPPA is a global network of professionals involved in the management of protected areas, from government agencies, universities, research institutions and conservation organizations. In mobilizing the network during the 1991-1993 Triennium, CNPPA will be structured as follows:

- (a) Chair, Deputy Chair, Vice-Chairs and Steering Committee. The Chair will be elected by the General Assembly, and will nominate for Council approval a Deputy Chair (whose qualifications will be complementary to those of the Chair) and up to 12 Vice-Chairs representing each of the biogeographical realms, plus marine habitats and other thematic subjects. The Vice-Chairs will be responsible for coordinating the activities of CNPPA in their respective regions and subjects, and preparing the regional reviews required by the IV World Congress on National Parks and Protected Areas. They will also serve on the CNPPA Steering Committee.
- (b) Honorary Members. These are individuals who have been elected by the Commission as Honorary Members, in recognition for long and outstanding service to protected areas.
- (c) Members. Members will be appointed for their personal contributions to protected areas. At least one of those members from each country or autonomous region with protected areas will be appointed to coordinate the flow of information between the Commission and the protected area authorities; where multiple agencies exist in a country, several such individuals will be identified. The member(s) will serve as a coordinator for CNPPA links with relevant projects, for identifying potential consultants for projects with which CNPPA is involved, collecting information, overseeing the preparation and updating of data sheets on each protected area, advising on "Threatened Spaces", and serving as the primary liaison

with the Protected Areas Data Unit (PADU) of WCMC.

- (d) **Task Forces.** The Chair will appoint task forces as required to address particular parts of the work programme; some of these task forces will relate directly to workshop themes at the IV World Congress on National Parks and Protected Areas.
- (e) **Correspondents.** These are individuals who are interested in supporting the work of the Commission, but do not qualify as members. They will pay a fee, which will entitle them to receive *Parks* magazine and to attend Commission meetings.
- (f) **Protected Area Agencies.** CNPPA will initiate an institution-level relationship with the agencies that are responsible for managing protected areas in each country. Such an institutional linkage will be developed to provide technical advice to the Commission, identify project and policy priorities, and ensure a free flow of information about protected areas.
- (g) **Cooperating Bodies.** These are bodies which have an institutional interest in protected areas and work closely with CNPPA. Foremost among these are PADU (now part of WCMC), which was established by CNPPA in 1981 and serves as its data management arm; UNESCO and the World Heritage Committee, with which CNPPA works closely on biosphere reserves and World Heritage, respectively; the US National Park Service, with which CNPPA has a Cooperative Agreement which fosters field activities on matters of mutual interest; WWF, to which CNPPA provides technical advice on protected areas and which contributes to a number of joint programmes with CNPPA; Canadian Parks Service, which has supported the Chair and contributes financial and technical support to a number of CNPPA activities; the World Resources Institute, with which IUCN is collaborating on a Biodiversity Conservation Programme which will include a major activity on protected areas. Other IUCN member organizations that do not fall in Section (f) above will be welcome to become Cooperating Bodies.
- (h) **IUCN Secretariat.** The Commission will be served by a Protected Areas Unit established within the IUCN Secretariat and reporting to the Director General. It will include at least two full-time professional officers and necessary support staff, and will provide linkages to all IUCN Secretariat units dealing with protected areas.

6. Major Activities 1991-1993

The draft IUCN Programme 1991-1993 includes the following activities for which CNPPA has the lead responsibility (or shared lead responsibility):

- A10. Preparing a Global Strategy for Conserving Biological Diversity. (CNPPA will have responsibility for protected area components of the Strategy.)
- A14. Designing and Holding the IV World Congress on National Parks and Protected Areas.
- A33. Promoting the Expansion and Effective Management of the Worldwide System of Protected Areas.
- A34. Providing the Information Required to Implement IUCN's Protected Area Activities.
- A35. Developing New Concepts in Protected Area Management.
- A36. Providing Technical Advice to World Heritage and Other International Agreements.

CNPPA will contribute actively to the following activities:

- A2. Completing and Promoting the Antarctic Conservation Strategy. (CNPPA will promote the protected area aspects of the Strategy.)
- A4. Developing and Implementing National Conservation Strategies. (CNPPA will provide technical advice on protected area issues for each NCS.)
- A5. Development of Sub-national Conservation Strategies. (CNPPA will provide technical advice on protected area components.)
- A6. Promoting the Role of Women in Natural Resource Management. (CNPPA will be particularly interested in mechanisms for increasing the role of women in protected area management, and in improving the relationship between protected areas and people living in surrounding lands.)
- A7. Promoting and Enhancing the Integration of Population and Natural Resources Issues in the Work of IUCN. (CNPPA will be particularly interested in relating demographic changes to the management of protected areas, for example through changes in human pressure on boundaries.)
- A8. Evaluating the Ecological Implications of Global Change. (CNPPA will advise on protected area issues, and seek information

on implications of global change for protected areas.)

- A9. Planning for Sea Level Changes. (CNPPA will advise on coastal and marine protected areas, and seek advice on implications of sea level change for protected areas.)
- A11. Identifying Centres of Plant Diversity. (The results will contribute to protected area systems plans.)
- A12. Supporting the Legal Basis for Conserving Biological Diversity. (CNPPA will advise on protected area components, and seek advice on how legal support for protected areas can be enhanced.)
- A17. Planning Species Conservation Action. (CNPPA will draw on species conservation activities to enhance protected area management.)
- A19. Developing IUCN Positions on Critical Species-related Issues. (CNPPA will contribute the protected areas perspective to these positions.)
- A22. Conserving Plant Genetic Resources. (CNPPA will incorporate the results into protected area systems plans, management approaches and other activities.)
- A24. Wetlands Policy and Management Guidance. (CNPPA will contribute technical advice on protected area issues.)
- A25. Wetland Management Programmes and Projects in Priority Regions. (CNPPA will contribute technical advice and draw on the results of the projects.)
- A26. The Ramsar Convention. (CNPPA will contribute technical advice and incorporate existing and potential Ramsar sites in its activities.)
- A27. Supporting Global Efforts to Conserve Tropical Forest Ecosystems. (CNPPA will contribute to protected area components and draw on the information developed on critical sites, buffer zones and other issues relevant to protected areas.)
- A28. Formulating Marine Policy and Coordinating Arrangements. (CNPPA will seek advice on policy issues relating to protected areas in marine habitats.)
- A29. Marine Habitat and Ecosystem Conservation: Coastal Zone Management. (CNPPA will contribute to protected area components and draw on new approaches developed under this activity.)

A31. Conservation of Mountain Environments. (CNPPA will contribute to protected area components.)

A41. Managing Information on Species and Habitats: Support to WCMC. (CNPPA will work closely with PADU on protected area data management issues.)

A45. Achieving Sustainable Development in Central and Eastern Europe. (CNPPA will contribute to protected area issues.)

A48-50. Achieving Sustainable Development in Central and South America and the Caribbean. (CNPPA will contribute to the protected area projects and draw on the results.)

A51. Achieving Sustainable Development in West and Central Africa. (CNPPA will contribute to protected area projects and draw on the results.)

A55. Achieving Sustainable Development in Asia and the Pacific. (CNPPA will contribute to protected area projects and draw on the results.)

A63. Contributions to International Meetings. (CNPPA will contribute to meetings dealing with protected area issues.)

A64. Supporting Conservation Worldwide through Expansion and Strengthening the IUCN Network. (CNPPA will seek to enlist institutional members active in protected area management.)

COMMISSION ON ENVIRONMENTAL LAW (CEL)

1. Mission

To assist in laying the strongest possible legal foundation for the conservation of the natural environment, thereby underpinning and supporting efforts at both national and international levels.

2. Purpose

IUCN's Commission on Environmental Law (CEL) serves as the principal source of technical advice to the Union, its members and its collaborating institutions on all aspects of environmental conservation law.

It supports action by international governmental organizations, governments and non-governmental organizations to improve or develop legal and

institutional infrastructures best attuned to, and conducive of, natural resources conservation in the framework of sustainable development.

CEL aims to demonstrate the vital importance of such infrastructures within national and international strategies for environmental conservation, including the sustainable use of natural resources within and beyond national jurisdictions.

3. Objectives

CEL's objectives are:

- (a) To identify areas where improved legal and administrative instruments and mechanisms would contribute significantly to the process of conservation;
- (b) To promote the development and improvement of environmental law at international and national levels by advocating adequate and innovative responses;
- (c) To assist and advise IUCN members and other governmental and non-governmental institutions on the elaboration of international or national legal instruments.

4. Terms of Reference

To achieve its objectives over the coming triennium, CEL will:

- (a) Initiate, promote and support legal research consistent with the objectives of IUCN and its Law Programme;
- (b) Propose and, where appropriate, assist in drafting, legal instruments at the national, regional or global level;
- (c) Promote and assist in the development of soft law instruments;
- (d) Follow the initiatives of other institutions in the field of environmental law, in particular those of international governmental and non-governmental organizations, and provide an input from an IUCN perspective, as appropriate;
- (e) Advise on the legal implications and aspects of initiatives taken, and issues addressed, by IUCN components and programmes;
- (f) Coordinate activities with such components and programmes, in particular the Environmental Law Centre (ELC), with a view to maintaining maximum integration, complementarity and inter-disciplinarity in carrying out the overall programme of the Union;

- (g) Assist and advise the ELC with regard to activities for which the ELC has the lead, in particular those related to the provision of services to developing countries in the field of environmental legislation;
- (h) Provide assistance to the ELC in maintaining the Environmental Law Information System (ELIS), as well as in monitoring developments both of international and national law including treaties, legislation, custom and jurisprudence, in order to secure an adequate basis for the activities of the IUCN Law Programme;
- (i) Maintain an international network of independent volunteer experts in the various legal disciplines involved, selected for their expertise and willingness to contribute to IUCN's mission in this area, and to provide a forum for the exchange of views and information in this field.

5. Structure and Organization

CEL is a global network of professionals expert in environmental law, from government agencies, universities, research institutions and conservation organizations. In mobilizing the network during the 1991-1993 Triennium, CEL will be structured as follows:

- (a) **Chair, Deputy Chair, Vice-Chairs and Steering Committee.** The Chair, elected by the General Assembly, will nominate for Council approval a Deputy Chair (whose qualifications will be complementary to those of the Chair), and up to six Vice-Chairs appropriately representing legal disciplines and geographical concerns. The Vice-Chairs will be responsible for coordinating the activities of CEL in specific areas. A work plan will be established at the beginning of each year by the Steering Committee.
- (b) **Honorary Members.** These are individuals who have been elected by the Commission as Honorary Members, in recognition of long and outstanding services to IUCN in the field of environmental law.
- (c) **Working Groups.** The Chair will appoint Working Groups as required to address particular parts of the work programme; some of these task forces will be appointed for the triennium; others will constitute *ad hoc* groups dealing with a specific temporary assignment.
- (d) **Members.** Efforts will be made to have at least one member in each State of the world. Members will serve as coordinators for CEL's

links with relevant projects, for advising in the identification of potential consultants for projects of the Law Programme, for collecting information and serving as the primary liaison with the Environmental Law Information System (ELIS) of the Environmental Law Centre (ELC), and for participating in CEL's activities in their field of competence. Members will be grouped according to their expertise, both in relation to legal disciplines and natural resources law sectors.

- (e) Associates. The Commission will consider the desirability of appointing Associates, i.e. individuals or organizations interested in supporting the work of the Commission.
- (f) **IUCN Secretariat.** The Commission will be serviced by the Environmental Law Centre which is a part of the Secretariat, reporting to the Director General. The Centre will assign at least a part-time professional and necessary support staff to work with the Commission, and will provide linkages to all IUCN Secretariat units dealing with environmental law.

6. Major Activities 1991-1993

The Commission will lead in the following components of the IUCN Triennial Programme, 1991-1993:

- A12. Supporting the Legal Basis for Conserving Biological Diversity.
- A39. Promoting Conservation Oriented National Legislation and Providing Environmental Legislation Services (working via ELC).
- A40. Developing Conservation Oriented International and Regional Law.

The Commission will also contribute to other areas of the Programme especially:

- A1. Completing and Promoting the World Conservation Strategy for the 1990s.
- A2. Completing and Promoting the Antarctic Conservation Strategy.
- A4. Developing and Implementing National Conservation Strategies.
- A31. Conservation of Mountain Environments
- A41. Managing information on Species and Habitats: Support to the World Conservation Monitoring Centre.
- A45. Achieving Sustainable Development in Central and Eastern Europe.

A63. Contributions to International Meetings.

The Commission will be available to provide legal guidance to the whole IUCN Programme, and is likely to contribute to many aspects of species and habitat conservation and regional development.

COMMISSION ON ECOLOGY (COE)

1. Mission

To ensure that the management of natural ecosystems has a sound scientific basis.

2. Purpose

The IUCN Commission on Ecology (COE) serves as the Union's source of technical advice for translating knowledge of ecological processes into practical tools for conservation, sustainable management and restoration, in particular of areas degraded by human action. The Commission will be particularly concerned with practical application of ecological knowledge to conservation; at the same time it will maintain strong links with centres or groups specializing in other aspects of ecological and environmental science and its application, such as SCOPE, INTECOL, IUBS and GESAMP.

The Commission as a whole will maintain an overview of, and provide advice on, those components of the IUCN Programme concerned with conserving biological diversity in major habitats, biomes and regions, and in particular those parts of the IUCN Programme concerned with "Conservation in Major Biomes" (as outlined in Section 6, below).

In collaboration with other IUCN Commissions and Programmes, various groups within the Commission will focus on the application of ecological science to management of habitats and biome types (e.g. tropical forests, mangroves and other wetland ecosystems, rivers, arid lands, coral reefs, tundra), or particular geographic areas (e.g. Mediterranean, Caribbean, the Sahel, the Alps, the Andes). Some groups will be concerned with specialized topics, for example traditional ecological knowledge and restoration ecology. Members of the Commission will collaborate with inter-commissional task forces or standing committees concerned with cross-cutting themes such as global change, Antarctic conservation or conservation of biological diversity.

3. Objectives

The Commission on Ecology will pursue the following objectives:

- (a) To provide a forum for the exchange of views and information on the aspects of ecological science that can guide conservation management;
 - (b) To identify major existing or potential changes in ecological processes, their causes and their consequences for conservation, and to report these to the IUCN members;
 - (c) To maintain an overview of the practical application of ecological science to conservation, sustainable development and the restoration of major biotopes, and to keep IUCN informed about significant developments in this regard;
 - (d) To provide advice to those responsible for components of the IUCN Triennial Programme that are concerned with conservation of biological diversity in major biomes;
 - (e) To undertake specific tasks within the framework of the IUCN Programme including the preparation of guidelines for the conservation, restoration and sustainable management of major biomes; the convening of workshops on the application of ecological knowledge; the provision of assistance to those preparing IUCN policy and position statements on conservation-development issues; and other such activities;
 - (f) To recommend and promote priority research, training, information exchange and management action;
 - (g) To undertake other tasks from time to time as may be requested by the Council, Bureau or the Director General in accordance with Article VIII of the IUCN Statutes.
- (b) Establish working groups, task forces, expert panels (or other such groups) for the purpose of obtaining and synthesizing information or developing positions on conservation issues under review;
 - (c) Collaborate with other IUCN Commissions, Centres, members, and various external institutions and organizations such as UNEP, UNESCO, SCOPE, INTECOL, IUBS, GESAMP, etc., in collecting and collating information and establishing databases related to ecological issues pertaining to conservation and development;
 - (d) Designate from among its membership individuals that will participate in inter-commissional task forces (e.g. for the IUCN Global Change or Antarctic Programmes);
 - (e) Advise the Director General on needs and opportunities for fund-raising to support priority objectives within the Commission; and cooperate in providing proposals and approaching positive sources of funding according to an agreed plan.

4. Terms of Reference

To carry out its objectives the Commission's Chair and its members, in collaboration with the Director General and staff of the Secretariat designated by the Director General, will:

- (a) Establish and maintain an independent international network of volunteer experts selected from the professional community of scientists and conservation managers on the basis of their capacity to contribute to the application of ecological knowledge to conservation management;
- (a) The Chair and Vice-Chairs, together with not more than four other members, will constitute the Steering Committee of the Commission, which will guide the work of the Commission in dialogue with the Director General and Secretariat staff designated by the Director General to collaborate with the Commission. Within the Commission, the specific implementation of components of the Commission's Terms of Reference will be the responsibility of working groups, Commission task forces or groups advisory to the established IUCN theme programmes. Chairs of these groups will be

5. Composition, Structure and Organization

The General Assembly will elect the Chair of the Commission. Council, on the recommendation of the Chair, will appoint one Vice-Chair for each of the established IUCN theme programmes (e.g. Tropical Forests, Coastal and Marine, Wetlands). These officers will serve for the Triennium 1991-1993. The members of the Commission will be nominated by the Chair in consultation with the Vice-Chairs, the Director General and the staff members of the Secretariat designated by the Director General to collaborate with the Commission. The list of nominees for membership will be reviewed and endorsed by the IUCN Council in accordance with Article VIII paragraph 2 of the IUCN Statutes.

designated by the Chair of the Commission in consultation with the appropriate Vice-Chairs and the Director General. Membership for these groups will be drawn both from inside and outside the Commission.

The Director General will designate a staff member of the Secretariat to act as a contact point within the Secretariat for the Commission Chair (and the secretary of the Commission if one is appointed, according to Article VIII paragraph 3 of the IUCN Statutes). This officer will be responsible for maintaining communication within the Commission network and facilitating cooperation between Commission working groups, task forces and the advisory groups to IUCN thematic programmes.

(b) **Advisory Groups.** "Theme programmes" are thematic groupings of activities (currently the Tropical Forest Programme, Coastal and Marine Programme, Wetlands Programme) that are foreseen to continue as major components of the IUCN Programme for more than one triennium. Advisory groups to these programmes, when established, will work within the framework of the Commission. Members of these advisory groups shall be full members of the Commission. Normally, the head of an advisory group would also be a Vice-Chair of the Commission. However, the Chair of the Commission could also serve as Chair of an Advisory Group. These groups will provide advice and technical guidance to the thematic activities approved within the framework of the IUCN Triennial Programme (see annexes to the IUCN Programme No. 6, 7, 8). It is the intention of the Union, subject to resources, to establish a network of arid land specialists who will be able to advise IUCN thematic and regional programmes in arid land ecology and management (including conservation science activities within the Sahel Programme).

(c) **Working Groups.** Working groups may be established to focus on particular aspects of the application of ecological science to management. Such groups carrying forward existing activities are likely to deal with traditional knowledge, restoration ecology, mangroves, rivers, coral reefs and mountains, or, regions such as the Mediterranean or Caribbean. The Commission Chair will designate and establish these groups in consultation with the Vice-Chairs, Director General and appropriate members of the Secretariat. Criteria for establishing these working groups will include:

- (i) Specification of objectives and clear terms of reference which address components of the IUCN Programme and define the scope of work and the time frame in which objectives are to be accomplished;
- (ii) Clear definition of the financial provisions for activities of the working group, including allocation of a budget, raising of funds, or agreement that work will be accomplished on the basis of "in kind" voluntary contributions. The source and allocation of funds for IUCN Secretariat staff servicing and participating in a task force or working group will be clearly defined and agreed as part of this process;
- (iii) Definition of the administrative and substantive relationship between the working group, the rest of the Commission and the IUCN Secretariat. An officer from within the IUCN Secretariat must be designated to be responsible for each working group, and the role of that officer in providing professional and substantive inputs will also be specified;
- (iv) Selection of Chairs and IUCN Secretariat focal point(s) who are skilled at operating networks of experts.

Working groups may be foreseen to continue for an indefinite period, but they must be formally re-established at the beginning of each triennium.

- (d) **Task Forces** address shorter term problems, issues or undertake multi-disciplinary activities requiring a broader range of expertise than is available in the Commission (e.g. to assist in articulating an IUCN policy or position statement or to advise on a future course of action for IUCN). Task Forces are not normally expected to span more than one triennium.
- (e) Staff of the Secretariat will be assigned by the Director General to work directly with the advisory groups, working groups and Commission task forces in consultation with the Commission Chair or Vice-Chairs, and the Chair of these groups.
- (f) **Programme Implementation.** The General Assembly approves and endorses the overall Triennial Programme of work of the Union. This includes the broad mandates for the thematic programmes. At the same time, it is the responsibility of the Director General to implement specific activities. To a great extent, priorities for implementation are dictated by the availability of funds from outside sources

since only a minimum of IUCN core funding can be allocated for this purpose. Thus, although the Chair, Vice-Chairs and members of the Commission will advise on Programme activities, staff of the Secretariat responsible for programme implementation will ultimately have to apply this advice within the context of contractual responsibilities to donors and sponsors.

6. Major Activities 1991-1993

During the next triennium the Commission will concentrate its activities on part C of Chapter II of the draft IUCN Programme 1991-1993 (Conservation in Major Biomes) and especially on:

- A24. Wetland Policy and Management Guidance.
- A25. Wetland Management Programmes and Projects in Priority Regions.
- A26. The Ramsar Convention.
- A27. Supporting Global Efforts to Conserve Tropical Forest Ecosystems.
- A28. Formulating Marine Conservation Policy and Coordinating Arrangements.
- A29. Marine Habitat and Ecosystem Conservation: Coastal Zone Management.
- A30. Assisting in Implementation of Conservation Law in Coastal and Marine Habitats.
- A31. Conservation of Mountain Environments.
- A32. Establishment of an Arid Lands Programme.

The Commission will also contribute to work on:

- A8. Evaluating the Ecological Implications of Global Change (via Commission members serving on an Inter-Commissional Standing Committee established to steer this programme);
- A9. Planning for Sea Level Changes;

and sections of Chapter II, part A, B and D concerned with strategies for the conservation of biological diversity, conservation of species and genetic diversity and habitat conservation.

COMMISSION ON ENVIRONMENTAL STRATEGY AND PLANNING (CESP)

1. Mission

To guide the development of conservation strategies and promote sound environmental planning.

2. Purpose

Over the past decade, there has been a vast expansion in IUCN's work in the broad field of planning for conservation and sustainable development. The World Conservation Strategy provided the initial focus, emphasizing that conservation had to be carried forward within a context of social policy that catered for human needs and led towards a durable balance between people and natural resources. The imperative to meet human needs, now and in the future, through conserving the systems of the natural environment on which all human societies depend, is a central message of the Report of the World Commission on Environment and Development, and of the World Conservation Strategy (WCS) for the 1990s.

The Commission on Environmental Strategy and Planning (CESP) will be IUCN's principal means of harnessing worldwide expertise in order to guide the Union's implementation of the WCS for the 1990s. In particular, it will contribute to conservation strategies and environmental management plans at regional, national and sub-national levels. It will complement the Commission on National Parks and Protected Areas (CNPPA) in considering the optimal approach to the conservation and sustainable use of the 95 per cent of the earth's land surface that is not, and cannot be, the subject of special protection measures.

3. Objectives

The objectives of CESP will be:

- (a) To promote the development of expertise in conservation strategy formulation and implementation, environmental planning and management, environmental economics, and related professional disciplines;
- (b) To develop and promulgate methods of securing effective conservation and multi-purpose sustainable use of the vast majority of the earth's land areas that lie outside national parks and protected areas;
- (c) To promote the application of the World Conservation Strategy, the World Conservation

Strategy for the 1990s, and the Report of the World Commission on Environment and Development, especially through regional, national and sub-national conservation strategies and plans;

- (d) To encourage and advance appropriate development processes in developing countries, especially through the development or transfer of environmentally benign technology;
- (e) To encourage the development and use in industrialized countries of industrial and agricultural technologies which are efficient in their use of materials and energy and avoid or minimize impacts on the environment.

4. Terms of Reference

CESP will be responsible for:

- (a) Establishing an effective forum for individual experts in conservation strategy development, environmental planning and management, and other disciplines relevant to sustainable environmental use, with particular attention to the promotion of dialogue between specialists from developing and industrialized countries;
- (b) Synthesizing, evaluating and publishing or otherwise disseminating information and proposals of practical value in enhancing conservation and sustainable environmental use;
- (c) Guiding and assisting IUCN members and the IUCN Secretariat in implementing the World Conservation Strategy for the 1990s;
- (d) Guiding the IUCN Secretariat in their provision of services to IUCN members and others in the development of national and sub-national conservation strategies, the planning of environmental resource use and the development and application of specific techniques such as environmental impact assessment indicators of sustainable development, rapid resource appraisal and GIS;
- (e) Providing a forum and expert support for business sector bodies in the development and dissemination of environmentally appropriate industrial technology, especially for application in developing countries;
- (f) Monitoring, digesting and disseminating information about new concepts and practices in environmental policy and management that are germane to the achievement of IUCN's and the Commission's objectives.

5. Structure and Organization

- (a) **Chair, Deputy Chair and Steering Committee.** CESP will be led by a Chair elected by the General Assembly and a Deputy Chair appointed by Council. The Chair, Deputy Chair, Chairs of Working Groups and not more than four other members will constitute the Steering Committee, which will meet at least annually together with the Director General and/or such members of the Secretariat as he may appoint to work with the Commission.
- (b) **Members.** The members of the Commission will be appointed by the Chair, the list of proposed names being laid before Council insofar as this is required by Statute.
- (c) **Working Groups.** CESP will undertake its mandate by establishing a series of Working Groups. Initially the following are proposed:

- (i) **Working Group on National Conservation Strategies**

Mandate: To evaluate IUCN's experience to date in assisting the governments of some 40 countries to compile National Conservation Strategies (NCS); to convene workshops or other groups to evaluate the nature of "best practice" in NCS compilation; and to propose adaptations and developments for the future. Specifically to advise the Director General and responsible staff on the operation of the Union's conservation strategy service, which is implemented through the Field Operations Division.

- (ii) **Working Group on Environmental Planning and Management**

Mandate: To reanimate links with the planning profession and address priorities for IUCN inputs to the land use planning process, for example in order to safeguard biological diversity. The group would work closely with CNPPA. It will also consider specific techniques for optimization of environmental resource use, such as Environmental Impact Assessment (EIA).

These two Groups are seen as a start. There are numerous other fields in which CESP could play a useful role, including the promotion of environmentally sound policies for international financial assistance, methodology to assist governments in judging the optimal balance between investment in new development schemes and in maintaining existing capital stock in an environmentally sound way,

and the development of natural resource use criteria for incorporation in national accounting. These and other issues would be assigned to an Working Group on Environmental Economics (which would then interact with the Secretariat members implementing Programme Activity A13: Utilizing Concepts of Economics to Promote Conservation of Biological Diversity). However, resources to permit this expansion in the Commission's mandate are not yet available, and the first essential is to establish CESP as a tightly focused and productive body within its priority field, which is seen as the conservation strategy process.

- (d) **Cooperation.** CESP will establish links with professional organizations in appropriate fields, including those for city and regional planners, landscape architects, engineers and social scientists. CESP will maintain close links with CNPPA, and through it with the agencies responsible for managing protected areas.
- (e) **Resources.** The Chair of CESP will be provided with a modest core budget as an Operational Fund, to be used as defined in the paper on "The Management of Commission Operating Funds" adopted by the IUCN Council. Other resources, for example to support Working Groups, will be sought in a manner agreed between the Chair and the Director General. No Working Group will be established unless resources are clearly available to support its activities. The Chair of CESP, the Chairs/ Convenors of the Working Groups and the Director General will consult annually regarding the budget and the way in which essential resources are to be raised. The Chair may, if funds permit, appoint a personal assistant. It is the Chair's responsibility to secure funds for such an appointment, which will not be an IUCN staff post or subject to the Director General's authority.
- (f) **Secretariat.** The officer appointed to provide technical support to IUCN's strategic planning efforts (see paragraph A3 of the Triennial Programme) will be assigned by the Director General to work closely with CESP, and especially the Working Group on National Conservation Strategies. The Secretariat member leading the unit concerned with providing EIA services to governments will liaise with the Working Group on Environmental Planning and Management, which will be concerned with the concepts and techniques that the EIA service might apply. Other IUCN Secretariat personnel concerned with conservation strategies at regional or national level will establish

links with CESP and its members in their areas as appropriate.

If resources can be secured, a member of the Secretariat will be assigned to support the Commission by maintaining communication within its network of members, organizing workshops, facilitating production of reports and other such tasks.

- (g) **Planning Cycle.** Each year the Chair will consult the Steering Committee about the programme to be undertaken in the following year and the budget required. Members of the Secretariat working in association with CESP will assist in this planning process and the representative designated by the Director General will discuss the proposals with the latter prior to transmitting them to the Assistant Director General, Management for incorporation in the overall IUCN annual budget.

The Chair is required to report annually to Council on the work of the Commission and these reports provide a further opportunity to align the work of CESP to the wider programme of the Union.

6. Major Activities in 1991-1993

CESP will be responsible for guiding IUCN's implementation of the following elements in the IUCN Programme 1991-1993:

- A3. Providing Technical Support to Strategic Planning Efforts.
- A4. Developing and Implementing National Conservation Strategies.
- A5. Development of Sub-National Conservation Strategies.
- A37. Providing an EIA Service to Governments.

The Commission will also contribute to:

- A7. Promoting and Enhancing the Integration of Population and Natural Resource Issues in the Work of IUCN.
- A8. Evaluating the Ecological Implications of Global Change.
- A9. Planning for Sea Level Changes (through participation in a Standing Committee on Conservation and Global Change).
- A33-36. Protecting Natural Areas (through links with CNPPA).
- A45. Achieving Sustainable Development in Central and Eastern Europe.

- A48-55. Achieving Sustainable Development in Central and South America, the Caribbean, West and Central Africa, the Sahel, East Africa, Southern Africa, Asia and the Pacific.
- A52. Promoting International Efforts to Implement Conservation and Sustainable Resource Use in the Sahel.

COMMISSION ON EDUCATION AND COMMUNICATION (CEC)

1. Mission

The mission of the Commission on Education and Communication (CEC), taken directly from the IUCN Statutes, will be: "To promote education in and disseminate widely information on the conservation of nature and natural resources and in other ways to increase public awareness of the conservation of nature and natural resources".

2. Purpose

Through its Commission on Education, IUCN was the first large international organization to launch international programmes promoting environmental education. As a unique community of both governmental and non-governmental bodies, working closely with the UN system and other international organizations, IUCN is especially well placed to continue to promote environmental education and communication.

Education in this context is the whole process by which human behaviour is developed to fit the individual to lead a successful life. It is a life-long process in which a variable succession of influences (home and family, friends and neighbourhoods, school and play, employment and society, customs and traditions, hobbies and capabilities, laws and life-style) play their parts. Formal education is a small part of this experience, but disproportionately important as the component by which standards of success and quality are most often judged.

The need for environmental education goes far wider than this. To play a responsible part as members of a sustainable society, individuals should be not only personally and socially competent but also environmentally literate. This requires the development of awareness, the communication of knowledge, the acquisition of skills and the development of understanding, attitudes, values and an inclination to act both creatively and considerately. These qualities are

fostered through a wide range of influences involving both direct communication about the environment and indirect communication through the environment in which people live and learn.

The special role of IUCN is to ensure that all available means and avenues of influence are used to promote the environmental competence of people and that information and communication in support of this are accurate and appropriate. In 1991-1993 this will be done through a reconstituted Commission and the development of closely-linked Secretariat activities.

3. Objectives

CEC's principal objectives for the triennium will be:

- (a) To promote the exchange and collation of information on methods for raising awareness, providing skills and creating understanding of nature and natural resources;
- (b) To provide institutional support and an intellectual focus for a worldwide network of communicators and educators, and to encourage and assist their activities at regional level;
- (c) To develop principles, policies and procedures for programmes of communication designed to change people's behaviour in ways that will benefit the environment;
- (d) To contribute to the dissemination of information about education on the environment, through appropriate publications;
- (e) To provide a source of technical advice to the membership, Director General and Secretariat on matters pertaining to the work of IUCN that lie within the competence of the Commission.

4. Terms of Reference

In pursuance of these objectives, CEC will:

- (a) Collaborate with UNESCO, UNEP and other international agencies to prepare a document on "Education for a Sustainable Future", to be submitted to the UN Conference on Environment and Development in 1992;
- (b) Develop its network of members to provide technical support to all IUCN activities which involve education, training and communications; and particularly to provide such support to the proposed Service in Conservation Education;

- (c) Establish a new support mechanism for advising the IUCN Secretariat on publications, communications and the broad dissemination of relevant information;
- (d) Establish projects or limited-term working groups to address selected topics, as noted below.

5. Structure and Organization

The Commission on Education and Communication will have a new structure, both in the Secretariat and among the membership. The structure will include the following:

- (a) **Chair, Deputy Chair and Steering Committee.** As with other Commissions, the Chair will be elected by the General Assembly. The Chair will nominate for Council approval a Deputy Chair (whose qualifications will be roughly complementary to those of the Chair), and up to 10 members who will each chair a Regional Committee (see (d) below). The Steering Committee will comprise the Chair, Deputy Chair and Regional Chairs, plus up to five members at large. The major cooperating organizations (see (f), below) will also be represented on the Steering Committee. The Chair of CEC, the Chair/Conveners of the Working Groups and the Director General will consult annually regarding the budget and the way in which essential resources are to be raised.
- (b) **Task Forces.** The Chair will appoint Task Forces as required to address particular parts of the work programme, once funds have become available to support the activity; these Task Forces will exist only until the task for which they were established has been accomplished. The Chair of a Task Force may be invited to participate in meetings of the Steering Committee.
- (c) **Members.** The membership will be designed to address the needs of the work programme, and to reflect the interests and capacities of IUCN member organizations.
- (d) **Regional Committees.** Regional Committees will be established under the appropriate members of the Steering Committee. They will bring together Commission members in the regions concerned and provide a forum for their discussions. They will develop specific programmes of education and communication that meet the needs, and are appropriate to the cultures, in the regions concerned. A close dialogue will be established between the

Regional Committees and IUCN Regional and Country Offices, which, subject to resources, will provide secretarial support to the Committees. The Committees will advise regional IUCN staff on education and communications components of proposed projects, and Regional Committee members may be involved, as appropriate, in the execution of these activities.

- (e) **Advice to Secretariat.** The Commission will establish, in consultation with the Director General, Advisory Groups that will assist the Director General and the Secretariat in the broad fields of competence of the Commission. A Communications Advisory Group will advise the IUCN Head of Communications and an Education Services Advisory Group will guide the member of the Secretariat advising developing country governments in this area (paragraph A42 of the Triennial Programme). In addition, and in consultation with the Director General, the Commission may establish a group to advise on opportunities for presenting the work of IUCN via the entertainment industry and the mass media.
- (f) **Cooperating Organizations.** The Commission will sustain IUCN's close links with organizations that have an institutional interest in education, communication and training. Foremost among these are UNESCO, UNEP and WWF, but the Commission will also collaborate with FAO in relation to environmental aspects of agriculture, IPPF on population education, IYF on youth matters, and IUCN's programme on the role of women in natural resource management in building links with women's organizations generally. The Commission will cooperate with other organizations as appropriate.
- (g) **Support from the IUCN Secretariat.** As with other Commissions, an appropriate level of support at the IUCN Secretariat is essential to the success of the revitalized Commission on Education and Communication. At least one full-time professional, with secretarial support, will be required in the IUCN Secretariat to enable the activities outlined above to be carried out. Such a person would be able to ensure that the activities of the CEC are fully integrated with the activities of other parts of the Secretariat and the Union.
- (h) **Programme Cycle.** Each year, the Chair will consult the Steering Committee about the programme to be undertaken in the following year, and the budget required. Members of the Secretariat working in association with CEC

will assist in this planning process and the representative designated by the Director General will discuss the proposals with the latter prior to transmitting them to the Assistant Director General, Management for incorporation in the overall IUCN annual budget.

The Chair is required to report annually to Council on the work of the Commission and these reports provide a further opportunity to align the work of CEC to the wider programme of the Union.

6. Major Activities in 1991-1993

The Commission will have lead responsibility for advising and guiding the Secretariat in the following sections of the Triennial Programme:

A42. Providing a Service in Conservation Education.

A44. Providing an Information Service.

The Commission will contribute to the following activities as appropriate:

A1. Completing and Promoting the World Conservation Strategy for the 1990s.

A4. Developing and Implementing National Conservation Strategies.

A5. Development of Sub-national Conservation Strategies.

A6. Promoting the Role of Women in Natural Resource Management.

A10. Preparing a Global Strategy for Conserving Biological Diversity.

A23. Promoting the Implementation of the Botanic Gardens Conservation Strategy.

A66. Coordinating Media Relations.

In the development of its work, the Commission will establish projects or limited-term working groups to address selected topics, commencing with the following:

(a) Provision of materials for communicators on the principles and application of sustainable

use of nature and natural resources (a concept which is still poorly understood); this activity will aim at promoting widely the implementation of the World Conservation Strategy for the 1990s;

(b) Taking responsibility for organizing and holding a Workshop on "Training and Education: Building the Human Capacity to Conserve" to be held as part of the IV World Congress on National Parks and Protected Areas (Caracas, Venezuela, 1992);

(c) Means for encouraging traditional methods of education and communication as applied to environmental care, leading to the conservation and application of traditional wisdom and knowledge;

(d) Support for international children's events (e.g. the Assisi Nature Council);

(e) Developing materials for incorporating environmental issues into public administration and related courses and training programmes;

(f) Investigating and disseminating information about flow channels of benefits from large development programmes, set against local/environmental costs;

(g) Studying the role of the media in unsustainable consumerism, seeking to counteract anti-environmental influences in media, advertising and environmental policies;

(h) Preparing guidelines for training and deployment of volunteers to promote environmental understanding around the world;

(i) Initiating the preparation of simple material for teachers which helps them to teach environmental awareness in the context of the daily life of those being educated, especially at village level;

(j) Producing educational and information material useful to zoos, museums, botanic gardens, national parks and other areas, in promoting public understanding of the environment and conservation;

(k) Developing means for communicating environmental ethics in different social and cultural circumstances.

Annex 21

Statement by Mr Ken Piddington, Director, Environment Department, World Bank, on IUCN Collaboration in World Bank Programmes*

This Assembly will be well aware of the fact that in recent years, the World Bank has embarked on a fresh approach to environmental issues. Progress is already well advanced, thanks largely to the eagerness of many member countries—including those in Eastern Europe—to ensure that development is no longer carried out to the detriment of the environment (and therefore to the detriment of future generations).

I would like to use my time, first to highlight the salient features of our programmes, and second to invite your active collaboration in the new direction which the President, Barber Conable, has given to the Bank's traditional activities.

The starting point for us is the need to drive the integration of economic and environmental policies to the point where longer-run costs cannot be treated as external to the project or to the development process. The true internalization of environmental costs is central to our approach to sustainability.

We work with the member country to identify those environmental trends where the threat to development is most pronounced. From that point, the task is to decide which form of investment will offer the most cost-effective results. The increased availability of concessional and grant funds to deal with specific environmental problems obviously helps to construct financial packages which are attractive to low income countries.

The net effect has been to create a new category of World Bank lending—the "free-standing" environmental projects of which there are now many examples, such as in Poland, Brazil and Madagascar. These will moreover increase rapidly in the years ahead. This overall shift in the lending pipeline is very significant indeed, complementing

as it does the introduction of environmental assessment procedures and the considerable level of policy research now underway throughout the Bank. It means, in effect, that the commitment to environmentally sensitive development is now irreversible.

I sometimes hear the claim in some highly developed countries that these changes are superficial and cosmetic, but this grossly misrepresents the energy which developing countries are devoting to the interface between environment and economics—as well as the efforts of dedicated experts, including many belonging to the IUCN network, who are assisting in various phases of the programme.

It is not as if the world is awash with successful precedents. The World Bank has quickly found itself in lonely and uncharted waters. There is no established model for bringing environment to the centre of decisions about development strategy—least of all in the industrial countries. But there is a great deal of knowledge about how to avoid gross miscalculations—and this surely is a service we must provide to our borrowers. The use of environmental assessment as a policy tool is the main guarantee we now offer, although I prefer to see it as more than just a safety net. Beyond that, we believe in working in the country context to identify what the priorities should be. Where IUCN has developed a National Conservation Strategy, or where Bank staff have assisted in formulating environmental action plans, this provides a running start and we can set out to create the essential linkage between that strategy and the economic policy framework.

A brief comment is needed on the priorities which have emerged from this approach. Obviously there will be a concentration on resource management issues, where pricing policy and other economic instruments can produce sound environmental results. Increasingly, our borrowers also

* Distributed as General Assembly Information Paper No. 6

wish to attack the problems of pollution in the urban context. Water as a resource, and energy as a sector, will require special attention by all of our clients. Bank lending will often cover the institutional and technical needs which flow from these priorities.

The comparative advantage of IUCN in its future collaboration with the Bank's programme, clearly lies towards the "green end" of the environmental spectrum. The pattern is already clear. In Eastern Europe and the Mediterranean, in a number of African and Asian countries, we have used IUCN expertise on the priorities for nature conservation, on the management of protected areas, and on the establishment of inventories and data banks. This has helped enormously in areas where the Bank has not been traditionally strong, for example in the marine area.

Sometimes IUCN services have been paid for; in other situations the "buddy" principle has prevailed, and IUCN has been a partner in what has become an extensive Bank network on conservation management, particularly in tropical moist forests and on biodiversity.

As we move towards steady increases in funding in this area, and as we work with UNEP and UNDP next year to launch the pilot programme known as the Global Environmental Facility (GEF), all this will need to change. I hope that in the workshops we can talk more about the GEF, but I can report to the Assembly that we expect substantial funding to be pledged by donors at this week's final meeting in Paris on the establishment of this significant inter-agency Facility. Already, the

administration of a global fund has begun under the Montreal Protocol, and we are stimulated by the prospect of adding "green dollars" to the wide array of funding mechanisms which we administer.

For the IUCN work programme, this implies both challenge and opportunity. The challenge is to be ready with scientific advice on the identification and technical design of projects to be funded under the Bank's rapidly expanding programmes. The opportunity is to become a significant, indeed a preferred, source of contractual services for the Bank to call on in the area of nature conservation. Our rules require that you have a competitive advantage and I am sure that the unique make-up of the Union can be used to provide services to the Bank and its borrowers which no other network can offer. This is why a number of my colleagues from the Bank are here in Perth to learn about the technical and advisory services that IUCN may be able to offer in each region.

I therefore conclude by advocating a tight professional focus within IUCN. The task we are grappling with in our member countries requires hard-core environmental economics and hard-core conservation management skills. There is an abundance of soft-core advice available in both areas, but it is broadly irrelevant to the real policy choices and the economic decision-making sequence, which is about what money should be spent, and how. I see the comparative advantage of IUCN lying in the scientific and technical aspects of nature conservation, and we look forward to the consolidation of a close partnership in this area.

Annex 22

Report of the Programme Committee

Membership

Dr Walter Lusigi (Chair) (Kenya)
Dr Eric Edroma (Uganda)
Dr Elsa Escobar (Colombia)
Dr Jay Hair (USA)
Dr Reuben Olembo (Kenya)
Mr Adrian Phillips (UK)
Dr Danny Elder (Committee Secretary, IUCN)
Mr Jeffrey McNeely (Committee Secretary, IUCN)

Introduction

Upon appointment by the 18th Session of the IUCN General Assembly, the Programme Committee met to discuss its charge relative to the evaluation of the 1991-1993 IUCN Programme document (GA/18/90/11). After consideration of several options, it was concluded that the Committee resources' and time could be used best by providing consensus recommendations on programme direction rather than specific comments on the proposed programme and/or projects. We felt the latter were addressed appropriately by the excellent recommendations resulting from the Workshops as well as comments received from IUCN members. For the record, all such contributions were incorporated into an annex of this report (not present here) and recommended for further consideration by the IUCN Council and by the Director General for appropriate integration into the IUCN's 1991-1993 programme activities.

Our Committee also considered the report entitled "Review of IUCN's Programme 1988-1990" by Anil Agarwal and Adrian Phillips, as part of our evaluation process. The following summarizes our conclusion and recommendations.

The IUCN Programme 1991-1993 Draft Document (GA/18/90/11)

Overall, we commend the Director General and the Secretariat staff for the development of an excellent draft programme document. A document of this magnitude (228 pages) does not normally lend itself to easy comprehension of programme activities as extensive as those proposed to be undertaken by IUCN during the next three years. However, we felt that this draft document was a vast improvement over previous submissions and, in general, was quite responsive to the recommendations from the 1988 General Assembly in Costa Rica. The "Overview" section (Part I, pp. 9-16) and the summary of "Programme Activities" (Part II, Chapter I to V, pp. 19-52) were presented in a well organized and logical manner. The 23 annexes to the document (pp. 55-228) provided ample details for IUCN members interested in specific programme activities. The "Overview" section (Part I) was particularly helpful in establishing the rationale for the development of the 1991-1993 programme recommendations. In addition to providing helpful introduction and background sections, it contained very useful information on IUCN's funding (pp. 12-13), including a comparison of the 1988-1990 programme activities with those proposed for 1991-1993 (Box 1, page 11). Further, this part of the document identified the major new programmes as well as progress on initiatives implemented during the 1988-1990 period. This was followed by a section on the priorities for the 1991-1993 Programme (pp. 14-15) and the process for their selection (pp. 15-16).

Part I of the draft programme document concluded with a summary of the 1991-1993 budget (Table 1, page 17) by year and programme activity. While this information permitted a quick review of programme expenditure, a comparable listing of

revenues, by source, offsetting these expenses for the respective programme activities, was not included. In the future we recommend this information should be included in order to provide a complete overview of the IUCN's triennial budget plan. In addition, and as elaborated below, a differentiation between "core" and "project" specific funds should help eliminate many of the concerns expressed in various fora over an apparent disproportionate allocation of IUCN financial resources between certain regions and/or programmes/projects.

Review of IUCN's Programme 1988-1990

The IUCN Council requested Anil Agarwal and Adrian Phillips to undertake a critical review of IUCN's programme achievements since the Costa Rica General Assembly (February 1988). Their report (General Assembly Information Paper No. 2) was presented to this General Assembly on November 28 and received strong supportive comments from several IUCN members. Our Committee undertook a further, more detailed review of their report and concurred unanimously with their thoughtful recommendations. We commend the authors for their superb contributions to efforts to enhance the overall effectiveness of IUCN's programme activities. Further, we incorporate their report into the submission of this Committee and hereby, for the record, recommend their report be adopted officially and their recommendations implemented to the fullest extent feasible within IUCN policy and budgetary guidelines.

Programme Recommendations: Overview

As noted above, we did not feel it was within the purview of our Committee to make specific programme or project recommendations. We felt that was best left within the domain of the expert recommendations received from the various workshops and/or comments offered by IUCN members.

As an alternative, we attempted to identify cross-cutting programme trends and/or overall recommendations from the various sources of information available to us. Many of these reinforce the recommendations made in the Agarwal/Phillips report. Our summary recommendations for follow-up deliberations and actions by the IUCN Council Commissions and/or the Director General are as follows:

1. It is unclear how the IUCN Programme 1991-1993 fits within the context of a long-term organizational strategic vision. It is highly probable that IUCN's Programme will need to be restructured upon completion of the 1991 World Conservation Strategy. We recommend that the IUCN 1994-19% Programme draft document reflect its short-term (3 years) and long-term (12 years) strategic options for achieving the relevant goals of the 1991 World Conservation Strategy. This approach should include both a pragmatic focus on specific programme objectives, including criteria for evaluating success, as well as a vision of how IUCN aspires to pursue its mission in the future.
2. We recommend that Council ask the Director General to set up an effective means for involving the membership in the development of the programme between sessions of the General Assembly. This should be done through a programme planning process which ensures that the Director General receives independent advice on the programme and which enables interested members to contribute their own suggestions on programme priorities during the course of the triennium.
3. IUCN has adopted a revised mission statement at this General Assembly. This mission statement must be the operational driving force behind all IUCN programme activities, otherwise it is just a statement of good intentions. In light of this revised mission statement and the expectation noted above, the IUCN Council, Commissions and Secretariat should evaluate the current IUCN Programme for compatibility.
4. The concepts of "natural resources conservation" and "environmental protection" must be the philosophical basis of the IUCN mission, strategic vision and the practical focus of all its programme activities. We feel the debate enjoined on several occasions at this General Assembly over whether IUCN is a "nature protection" or a "sustainable development" organization is a false and potentially divisive one. The IUCN Programme should reflect a major organizational leadership position in defining the linkage between these compatible concepts and their essential roles for the achievement of global environmental security.
5. IUCN should incorporate the fundamentals of ethics, culture (including the views of indigenous people on their role with nature

conservation) and equity (race, age and gender) in all of its conservation programme activities. This recommendation does not necessarily imply an expansion in programme expenditure but rather an integration into ongoing initiatives.

6. We commend the trend of the decentralization of IUCN programmes through the expansion of a network of regional/country offices. However, a clear strategic direction for future growth in this area needs to be established in two respects. First, there is widespread concern among the membership that so far regionalization has brought marked benefits to some areas (e.g. Central America, the Sahel and East Africa) but not to others (e.g. South America, North Africa, Asia and the Pacific). The Director General should give priority to strengthening IUCN's regional presence in those regions which have not so far felt the advantages of IUCN's regionalization. Secondly, the regionalization of IUCN should involve the establishment of a limited number of adequately staffed and funded major Regional Offices, with specific project managers, located in an expanded network of country-based offices.
7. The allocation of IUCN core funds for priority programmes should be evaluated for equity between different regions and projects. Where inequities in funding exists (both core and project), the IUCN Secretariat should assist in the identification of potential funding opportunities for IUCN specific programme priorities.
8. The availability of credible scientific data is essential to the success of IUCN's conservation programme. However, greater attention needs to be given to converting such information into specific conservation policy recommendations, actions and/or public education initiatives. Additionally this would help alleviate the concern expressed over the apparent imbalance of IUCN's programme emphasis between work on science and work on consciousness-raising, advocacy and education.
9. Research and global environmental monitoring programmes and their funding should continue to be strengthened. Further, IUCN should be involved actively in the process of synthesizing

available information on global environmental trends and particular efforts should be made to ensure it is made readily available to policy and other decision-makers.

10. Potential environmental impacts and policy implications of the release of genetically altered organism on biological diversity and environmental health should be evaluated by an appropriate IUCN Commission.
11. For new programme initiatives involving the role of women in natural resources management, priority should be placed on their integration into ongoing IUCN programmes rather than separate activities. Additionally, IUCN should evaluate opportunities that would be appropriate for the involvement of different age groups in conservation programme activities (i.e. youth education and involvement).
12. Greater efforts should be made to identify the total IUCN programme activities undertaken by IUCN members either (a) directly with the Secretariat, (b) through the respective Commissions or, to the extent feasible, (c) those undertaken independently by member institutions (with listing of appropriate budgets), in direct co-ordination with IUCN's programme priorities. This would provide both a clearer representation of the overall programme activity of IUCN and a greater sense of identity by and with its member organizations.
13. IUCN Commissions should co-ordinate their activities with one another and relate them directly to the IUCN programme priorities. Specifically, the Commissions should provide back-up support of scientific information, advice etc for IUCN projects on the ground. In turn, IUCN project directors should be expected to feed the results of their field experience back into the work of the Director General.

Programme Committee Recommendation

The Programme Committee recommends that the contents of this report and supporting annexes be approved and submitted to the IUCN Council, Commissions and Secretariat for appropriate actions.

Annex 23

Speech by Sir Shridath Ramphal on accepting the Presidency of the World Conservation Union

I thank you most warmly for the honour you have done me in electing me as your next President. In thanking you, allow me to say what a privilege it is to take over the Presidency from my respected friend Dr Swaminathan, whose work in so many fields I have admired for so long and to whom this organization owes so much for his leadership over the last six years.

There is something special for me in accepting the Presidency in Australia. First of all, because it is Australia—which, over the years, I have come to know and love and admire, and to which (if Australians will permit) I feel such a sense of belonging from my Commonwealth work. This is both an ancient land and a young nation, and each of these dimensions of Australia has meaning for IUCN's mission. Its youthfulness helps us to find pathways to the future without too much of the baggage of the past. Yet, from its own ancient past, comes the heritage of Australia's first people, who did not need global assemblies to tell them how to live in harmony with nature. In the myths of 'Dreamtime', in the 'songlines' that mark the geography of their Aboriginal culture of respect for nature, are lessons that all Australians are re-learning and are in turn helping to teach the world. This Assembly meets not at the ends of the earth but in one of its environmental homelands. I could not wish for a better beginning.

And I accept the honour of the Presidency with a special measure of humility because the triennium ahead presents challenges to our human society of the most enormous magnitude: challenges which I do not hesitate to say could bear on human survival itself, all of them challenges which IUCN has been urging onto the agenda of human concern for the last 40 years and more. What a commentary on the relevance of this organization's work, not just to the future, but to the very future of the future.

The objective "to promote and encourage the protection and sustainable utilization of living resources"—all living resources—is the most basic objective of the World Conservation Union. In the pursuit of it, over the years, your activities may have seemed esoteric to the uninformed. Today, far fewer are uninformed, and no-one believes them esoteric. Thematic programmes on tropical forests, on wetlands, on marine ecosystems, on plants, on the Sahel, on Antarctica, on population and sustainable development and on women in conservation: all these speak a language that the world's people understand. How can one be anything but humble in accepting the leadership of a movement whose aims in their realization are so crucial to the unfolding of human destiny?

In the triennium ahead, we shall have as well the United Nations Conference on Environment and Development which must confront the central challenge with which this movement has for so long been occupied, namely the ways in which we simply have to establish a harmony between humanity and nature. That conference will have to face the reality which the world has for so long been evading, that which our Director General once so pointedly described—that "unless there is development that abates the pollution of poverty, nature will remain embattled with the desperate deprived". As IUCN's long campaign for the world's attention to these issues is at last being heeded, though still with far too much reservation and hesitancy, our work assumes a further dimension of importance calling for even greater commitment to the basic aims which inspired IUCN's foundation in 1948.

Bringing together the governmental and non-governmental sectors, spanning a wide spectrum of environmental knowledge and concern, IUCN stands poised to help the world community in the process of careful, considerate and constructive

thought and action that lies ahead. I look forward to working with you to that end, drawing upon your many strengths and promising you my complete commitment to the cause for which you

have stood, and which I join you in adopting as my own.

Thank you for your confidence.

Annex 24

Presentations on behalf of Indigenous Peoples

Implications for Aborigines of Australian Conservation Policy and Planning

by Sue Gordon, on behalf of the
Chairperson, Aboriginal and Torres Strait
Islander Commission

The ancestors of my people have lived in this land for many thousands of years. From the earliest times Aborigines lived as gatherers and hunters, and have acquired a detailed understanding of the workings of their environment. More than 2,000 generations of ancestral experience with the land have bequeathed to Aboriginal people a range of ways of living attuned to all the natural environments of the Australian continent.

Aboriginal people believe that there was a creation epoch during which ancestral beings appeared and travelled upon a formless earth. As well as forming the landscape and imbuing it with life, the actions of the ancestral beings set precedents for behaviour and established traditional social and religious law. Aboriginal people also believe that they are responsible for the upkeep and continuance of the created order through attention to the law, and through ritually renewing and re-enacting creation.

Aboriginal care for the land has its practical side as well. The most widespread Aboriginal management technique is regular, low intensity burning of over-mature vegetation. This periodic removal of over-mature vegetation cuts the risk of large-scale catastrophic fires. The patchwork effect establishes a wider range of habitats, and a higher diversity of animal and plant life, than in uniformly aged vegetation. This small plot burning regime also allows animals to find refuge in regenerating areas during burning. Such burning also encourages the

growth of green pick for grazing animals, and the germination of a range of human food plants.

Non-Aboriginal land managers and conservationists are becoming increasingly confident that Aboriginal patchwork burning provides a key to maintaining the populations of many Australian small mammals now facing extinction. This traditional land management technique may also have application in similar environments overseas.

The importance of fire management to traditional Aborigines can be seen in the dismay of elders returning to their country after absences of many years and finding that the land has fallen into disrepair.

Recent ecological research confirms what we Aboriginal people have said so often, that Australian environments of two hundred years ago were to a large extent dependent upon Aboriginal intervention for their maintenance. They were not the 'natural' untouched systems that European Australians have thought them to be ever since this continent was described as 'terra nullius' or 'no-one's land'.

During the past decade of granting land rights to Aboriginal groups in some states, an increasing recognition has emerged of the logic of traditional land management strategies. A role in non-Aboriginal nature conservation has begun to emerge. As a result of this recognition there have been some fundamental developments in Australian park management. This has chiefly occurred in the Northern Territory.

A number of Northern Territory national parks are now established on land which has been returned to traditional owners, and in turn leased back as parks for conservation and recreation. Examples of such lease-backs in the Northern Territory are at Uluru National Park (Ayers Rock), Kakadu National Park and Nitmiluk National Park (Katherine Gorge).

The details of the leases vary, but they share a

number of important elements reflecting both Aboriginal ownership of the land and recognition of Aboriginal interest and practice in conservation. I might mention the following:

- Where Aboriginal land is leased back, traditional owners receive financial returns; this may be in the form of park rental, and payments such as gate takings, camping fees and from concession holders.
- Aborigines from relevant groups are trained and employed to work in the park. Employment can be as rangers, park labour and other necessary positions, and from time to time, as special consultants on such matters as the interpretation of Aboriginal culture for tourists.
- Special consultation may occur in areas such as fire management, management of significant sites, siting of facilities, or granting of public access to particular areas.
- Aborigines may be employed on specific management projects such as the re-establishment of rare mammals in conservation areas.
- Aborigines may be given preference in such areas as contracting for works.
- Management is required to assist Aborigines to establish enterprises within parks.
- Leases and their terms and conditions are to be regularly renegotiated between the parties. This has allowed Aborigines to revise aspects of leases and negotiate improvements, as is currently occurring with the Kakadu lease.
- Living areas and facilities for traditional owners are to be established within parks so that traditional owners can pursue their chosen life-style within the park boundaries.
- Traditional owners maintain their traditional rights to hunt, fish and gather plants for domestic purposes. However, in many leases these rights may be subject to review if stocks become depleted.
- Traditional owners are guaranteed access to, and protection of, sites of significance.
- In recognition of their ownership of the land, Aboriginal owners are to have a major role in park decision-making, over both day-to-day matters and larger policy concerns.

It has been suggested that in the early days of

lease-back arrangements, Aboriginal owners may not have understood the full implications of what they had been asked to agree to. With provisions for the periodic review of leases, this has meant that, with their increasing experience and understanding, Aboriginal owners have been able to improve lease conditions. As an example, the owners of Kakadu and Uluru have been able to negotiate quite substantial rental increases.

However I have been talking about developments in the Northern Territory, where more substantial progress has been made than in other states. Elsewhere, and particularly here in Western Australia, government has yet to fully acknowledge the importance of Aboriginal traditional ties to national park areas. Despite some progress in incorporating Aboriginal concerns in park management planning, there is still more that can be done at policy and day-to-day management levels. Some of the critical issues are:

- Joint management of national parks by Aboriginal traditional owners and government authorities. This must include appropriate title to be vested with the traditional owners and lease-back or other arrangements put in place.
- Granting of suitable living areas for Aboriginal people within parks.
- Traditional hunting and fishing rights.
- Employment in park management and enterprise projects.
- Power to withhold consent to mining and other activities.

Yet there may be some hope on the horizon in Western Australia. The recently approved management plan for the Purnululu (Bungle Bungle) National Park makes explicit recognition of traditional associations with the lands, of hunting and gathering rights, of living areas and of involvement of Aborigines in management and land rehabilitation. This initiative needs to be extended to other national parks throughout Western Australia.

Moreover, despite these advances, the benefits to Aborigines from national parks and conservation are not necessarily uniformly positive throughout Australia. Although Aborigines may be permitted to hunt and gather in areas where their traditions remain central to their lifestyle, this right may not be granted in other areas. However, many non-traditional Aborigines also regard freedom to hunt and fish as an ancestral right and complain that they should not be bound by nature conservation regulations. For instance, the question of the need

to conserve the dugong population in the Torres Strait must be reconciled with the traditional hunting rights of the Islanders. Aborigines complain that they are not responsible for the degradation of the natural environment and they should not therefore be penalized for others' actions.

Although Aboriginal culture, and particularly art, is a major attraction in a number of sometimes long-established parks and reserves in Australia (examples include the Kuringai Chase near Sydney, Mootwingee and Lake Mungo in Western NSW, the Grampians in Victoria and the Flinders Ranges in South Australia), the interests of Aborigines may not always be thoroughly considered in management plans. Indeed, until relatively recently, it was possible for State authorities to manage areas for their Aboriginal heritage values without adequately consulting or involving the descendants of the artists who created the works being managed. In recent years this has led to Aboriginal protest, for example against the NSW National Parks and Wildlife Service at Mootwingee in western NSW. Access roads to the ancient art were blockaded as Aborigines pressed for their ownership of their heritage to be recognized.

One of the most important issues facing national parks and Aboriginal people is that of mining. It is alarming that here in Western Australia the government has recently decided to permit mining operations in three national parks. Aboriginal people have substantial residential and cultural interests in two of these, Rudall River and Hamersley Range National Parks, while the third, D'Entrecasteaux National Park, is immediately adjacent to a significant Aboriginal archaeological site at Lake Jasper. This site is unique in the southern hemisphere in that it was preserved by being submerged under the Lake about 5,000 years ago. In all three Aboriginal concerns have not been addressed in relation to the management of the parks, land tenure arrangements within them and the protection of important sites.

This failure to address Aboriginal interests adequately gives us cause to question whether State governments have the commitment to put Aboriginal interests high on their priorities when deciding on the future direction of national parks. Effective Commonwealth leadership may well be needed to give proper attention to the aspirations and interests of Aboriginal people in the management of national parks.

In my view, the Commonwealth must reject the recommendations of the Industry Commission that 'nature value', that is the natural environment, should no longer be a criterion for listing areas of land on the national estate and that mining should be permitted in national parks.

In conclusion I would like to suggest that the success of the Aboriginal people, in the often harsh and changing environments of Australia, is due in part to a cultural inheritance of living with the land and sharing a detailed knowledge of natural systems. This approach is complemented by a spiritual belief in which people are inextricably linked to the landscapes in which they live, and over which they have a responsibility to exercise care and concern.

Governments and industry should pay attention to this age-old conservation wisdom instead of seeing financial profitability as the main determinant of how land is to be used. If this occurred, we all might be assured a sustainable environment, such as that achieved by my people for many thousands of years here in Australia.

IUCN and Indigenous Peoples: A New Partnership

by Mary Simon, President, Inuit
Circumpolar Conference

In recent years indigenous peoples of the world have taken a strong interest in the activities of worldwide organizations such as the International Union for Conservation of Nature and Natural Resources, the United Nations Environment Programme, the United Nations Working Group on Indigenous Peoples, the International Labour Organization, The Convention on International Trade in Endangered Species and the International Whaling Commission.

At the last General Assembly of IUCN (Costa Rica, February 1988), the Assembly requested the Director General to place a high priority on cooperation with IUCN's NGO members and other NGOs in their efforts to build public support for, and influence governments and international bodies in favour of actions on, implementing IUCN's Programme and the goals of the World Conservation Strategy. Moreover, the General Assembly requested the Director General to develop strong cooperative relationships with NGOs of indigenous peoples having traditional knowledge of renewable resource management.

Indigenous peoples are in full agreement with the three basic conservation objectives being pursued by The World Conservation Union, which are:

- (a) To secure the conservation of the renewable natural resources of the earth, and particularly its biological diversity, as an essential foundation for human nature;

- (b) To ensure that these natural resources are developed and used in a wise and sustainable way;
- (c) To guide the development of human communities towards ways of life that are both of good quality and in enduring harmony with nature.

In many instances, indigenous peoples have asked international organizations to recognize and incorporate their extensive traditional knowledge, based on their special relationship with the environment and living resources, in promoting the conservation and wise use of nature and natural resources. We are pleased to note that the Commission on Environmental Law has already taken some decisions that highlight the importance of the rights of indigenous peoples.

As indigenous peoples, we can make a unique contribution to the world in fulfilling the goals and objectives of IUCN. After all, there are over 200 million indigenous people.

In its report "Our Common Future", the World Commission on Environment and Development discusses the importance of empowering vulnerable groups (p. 114). The report underlines the fact that these communities are the repositories of vast accumulations of traditional knowledge and experience that link humanity with its ancient origins. Moreover, the starting point for a just and humane policy for such groups is the recognition and protection of their traditional rights to land and the other resources that sustain their way of life—rights they may define in terms that do not fit into standard legal systems. This recognition must also give local communities a decisive voice in the decisions about resource use in their area. Hence a more careful and sensitive consideration of their interests is a touchstone of a policy for sustainable development.

In order to ensure that these objectives are fulfilled, indigenous peoples would like to put forward and submit to the attention of this General Assembly a series of concrete initiatives to reflect the New Partnership between IUCN and Indigenous Peoples. We propose that the objectives of IUCN should include:

1. To promote full participation of indigenous peoples in activities of IUCN;
2. To ensure that the traditional knowledge of indigenous peoples is fully integrated in the various environmental initiatives and policies of IUCN;
3. To develop projects and positions on the environmental rights of indigenous peoples, as defined in the World Charter for Nature.

Advocacy Role of IUCN

No doubt, such a very important international organization as IUCN should play a leading role in supporting indigenous peoples. Here are some elements of this advocacy role that IUCN could undertake:

1. To urge all national and regional governments to take fully into account the views and aspirations of indigenous peoples in relation to development projects;
2. To inform the international community of the environmental concerns of indigenous peoples;
3. To support indigenous peoples in situations where non-indigenous people are competing over a natural resource.

Scientific, technical and financial assistance

As pointed out in the document "Caring for the World—A Strategy for Sustainability", advice and technical assistance should be exchanged among all partners. Partnership can be built around NGOs who work with indigenous peoples (p. 29).

In the document, the fourth of eight principles for sustainability reads, "Aim for an equitable distribution of the benefits and costs of resource use and environmental management". In this context, achieving equity means expanding opportunities for the disadvantaged.

To help achieve this, IUCN should:

1. Set up an Inter-Commissional Task Force to deal with issues especially relevant to Indigenous Peoples;
2. Provide and earmark funds for assistance to indigenous groups;
3. Provide scientific and technical assistance to these groups.

In closing, I would like to mention to this General Assembly the great importance we attach to the recent regime of having an indigenous Council Member of IUCN, and we believe this should and will continue.

I would also like to reiterate the importance of the objectives we have proposed for IUCN on this new partnership between IUCN and indigenous peoples, and of the concrete and practical suggestions made to ensure the fulfilment of these objectives. To follow-up on this, the indigenous peoples have submitted a resolution to this General Assembly.

Territories and Self-Determination of Indigenous Peoples: Pillars of Defence of Amazonian Biodiversity for Humanity

by Wilfrido Aragón Aranda, Vice-president of the Coordinating Body for the Indigenous Peoples' Organization of the Amazon Basin (COICA)

I bring with me greetings from more than one million citizens living on 6 million sq. km in the Amazon and comprising some 300 indigenous communities. These communities were originally organized into regional federations, then unified along national lines to form the Interethnic Association for the Development of the Peruvian Forest (AIDSESP—*Asociación Interétnica de Desarrollo de la Selva Peruana*), the Confederation of Indigenous Peoples of the Equatorial Amazon (CONFENIAE—*Confederación de Nacionalidades Indígenas de la Amazonia Ecuatoriana*), the Indigenous Confederation of Eastern Bolivia (CIDOB—*Confederación Indígena del Oriente Boliviano*), the National Indigenous Organization of Colombia (ONIC—*Organización Nacional Indígena de Colombia*) and the Union of Indigenous Nations of Brazil (UNI—*Unión de Naciones Indígenas del Brasil*) and finally united into the Coordinating Body for the Indigenous Peoples' Organizations of the Amazon Basin (COICA—*Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica*). COICA is the fruit of 25 years of work by many different indigenous peoples in the Amazon basin to organize ourselves in the defence of our territories, identity and way of life.

COICA is present at this important event of IUCN to contribute to the achievement of the Union's aims and conclusions, which will serve to ensure a higher standard of living and re-establish a harmonious balance in ecological biodiversity.

For thousands of years, long before and not only during the time of IUCN, we indigenous Amazonian peoples have lived a way of life which uses the Amazonian forest so wisely and integrally that we have been able to keep its biodiversity completely intact. We are now struggling under adverse conditions to curb anti-ecological settlement, development and socially unjust policies being imposed on the Amazon. We have also been involved in important activities to restore and promote indigenous technologies, updated to achieve real and sustainable development in the Amazon. Nevertheless, in spite of the leading role

we are playing, we have come to this IUCN General Assembly as an "observer". This incoherency must be rectified. We therefore propose that COICA be recognized as an official participant in these meetings.

Over the past 40 years, two factors have brought the native peoples in the Amazon basin out of their isolation. First, the spread of agriculture into adjacent regions has uprooted hundreds of thousands of native and non-native inhabitants who immigrate to these outlying areas in search of land, gold or work. Second, modern industrial centres in the northern hemisphere have helped Latin American states to bring the Amazon basin under the direct control of state bodies and to exploit the resources there.

Generally speaking, our organizations have the same basic principles and are representative in that they begin in local communities, where leaders are elected to represent them in the regional or ethnic federations and in the national confederations. They struggle for autonomy, they endeavour to represent the interests of local communities rather than following political parties, missionaries, local governmental institutions and others who would use these organizations to benefit themselves. They have a common platform, including the defence and care of their territories, their way of life, their social rights and their right to autonomous development including health and education.

Our native villages, our territories and the Amazon belong to us—we are inseparable. The destruction of any one part affects the other. But for us, it is not only a question of conservation and conserving ourselves, of protection and protecting ourselves. The destruction of the forest also affects all our countries together, and humanity as well, because the Amazon forest is the most important absorber of carbon dioxide in the world. Its function as regulator and stabilizer of the atmosphere and climate and, for that matter, life on earth, is affected.

We have inhabited and used the forest without damaging it. We have managed it totally and integrally and, in this sense, have been its defenders for centuries. When we started growing weaker as peoples, protection for the Amazon also declined. Now, we have renewed strength thanks to our organizations and have again assumed the leading role in the defence and safeguard of our Amazonian environment.

We are at a historically decisive crossroads. Either our peoples and the forest survive together or we disappear together. The forest is not just another special project or another environment for us, but life itself. It is the last possible place for us to live because emigrating means death for us as a

people. The Amazon is also the only heritage we can leave our children. I hope this gives you an idea of our resolve to protect the Amazonian forest. There is but one direction to take, without hesitation or turning back.

I would like to end with a final thought, an appeal, and a real plan of action.

1. We do not suggest another form of technology but an ecological way of life. We do not suggest a plan, a project, a manual or ideas on a sustainable future through political support and financial resources. We are more than one million citizens and hundreds of peoples and organizations, which have no other resources or destiny on earth than to live in harmony with the Amazon and to manage it integrally for the sustainable development of generations to come.
2. We come before you not only with 500 years of resistance and defence of humanity's lungs, the Amazon, but also with a proposal for a real and effective alliance to ensure a lasting, sustainable future for all.

We know the effectiveness of uniting the energy and efforts behind common objectives rather than separating them.

In conclusion:

- we ask that COICA be granted membership of IUCN to strengthen our collective activities;
- we ask the Assembly to support the indigenous proposals which we call Basis for an Indigenous and Environmentalist Alliance (*Base para una Alianza Indígenay Ambientalista*);
- we ask the Assembly for its support to the objectives of "an Amazon for humanity" (*Amazonia para la humanidad*) as stated in the Iquitos Declaration;
- we ask the Assembly to encourage the joining of efforts between IUCN and the Coordinating Committee between COICA and Environmentalists and Conservationists, as established in the Iquitos Declaration and in the alliance between COICA and European cities.

As we are men who say what we think and do what we say, we hope that the feeling of solidarity at this Assembly will lead to decisive and historic measures for our peoples, the Amazon and biodiversity of the earth.

Annex 25

Presentations at the Session on the UN Conference on Environment and Development

Statement by Ambassador Tommy T B Koh, Chairman, Preparatory Committee, UNCED

It is both a pleasure and a privilege to have this opportunity to speak to the General Assembly of the World Conservation Union. The World Conservation Union is a unique organization because it brings together, on the basis of equality, states, government agencies and non-governmental organizations in the cause of conservation. I note that your present membership includes 55 states, 95 government agencies (over half of which are in developing countries), and over 400 non-governmental organizations, including such well-known ones as the World Wide Fund for Nature and the Sierra Club. Altogether 106 countries are represented in IUCN's membership. I note also the fact that you not only analyse problems and produce strategies for solving them, but that you actually implement your ideas through practical action on the ground, especially in developing countries. I would urge you to expand your membership in the Third World and to do more to assist the developing countries to adopt and implement national programmes for the protection and sustainable use of their natural resources.

Stockholm and Rio

Your Director General, Dr Martin Holdgate, has requested me to say a few words on the 1992 UN Conference on Environment and Development and the progress that has been achieved by the Preparatory Committee. The world's first Conference on the Environment was held in Stockholm in 1972. Twenty years later, the world will meet again in Rio de Janeiro, Brazil. There is

one important difference between the 1972 Conference and the 1992 Conference. The 1972 Conference had a single focus: protection of the environment. The 1992 Conference has twin focusses: environment and development. In convening the 1992 Conference, the UN General Assembly required us to pay equal attention to mankind's aspiration for economic progress and a better life, on the one hand, and the imperative to protect and preserve our environment on the other.

Pollution and Prosperity

Many people in Asia believe that there is a contradiction between these twin objectives. Looking at the situations in the Republic of Korea, Taiwan and Hong Kong, they believe that it is impossible for a developing country to achieve rapid economic progress while upholding high environmental standards to protect its land, water, air and other natural resources. They believe that pollution is a necessary price to pay for prosperity and that after a country has taken off economically, it could then take remedial action to rectify the harm it has done to its environment. I do not subscribe to this view. I would point to the experience of Singapore in the last 25 years to support my view that there is no inherent contradiction between environment and development. Singapore's achievements in the past 25 years suggest that it is possible for a developing country to strike a balance between its aspirations for economic progress and for a healthy environment. To be sure, there are trade-offs and difficult choices to be made. However, comparing the situation in Singapore with those in other parts of East and Southeast Asia, one feels justified in believing that an environmentally sensitive development policy can work.

It is also interesting to compare the situation in

Japan with those in the Soviet Union and Eastern Europe. In Japan, spectacular economic achievements were matched by progress in protecting the environment. In the Soviet Union and Eastern Europe, economic stagnation was accompanied by environmental disaster. This contrast seems to support the central thesis in the report of the Brundtland Commission, that there is a positive correlation between development and environment and that without sustainable development the very process of development would be in jeopardy.

UNCED Preparatory Committee

Let me now say a few words about the work of the Preparatory Committee for the 1992 Conference. The Committee is a large one and consists of all the member states of the UN plus some states which are not UN members. The Committee has two Working Groups. The first Working Group, chaired by Ambassador Bo Kjellen of Sweden, deals with the protection of the atmosphere and land resources, the conservation of biological diversity and the environmentally sound management of biotechnology. The second Working Group, chaired by Minister Bukar Shaib of Nigeria, deals with the protection of the oceans and the seas, the protection of freshwater resources, the environmentally sound management of wastes and toxic chemicals, and the prevention of illegal international traffic in toxic and dangerous products and wastes. There will be a third Working Group on law and institutions; the exact mandate of this Working Group and the timing of its establishment have not yet been agreed upon.

The Preparatory Committee has held two meetings. The first meeting, which was held in March 1990, in New York, was an organizational meeting. The second meeting of the Committee was held in Nairobi, in August 1990. In Nairobi, the Committee and its two Working Groups began a review of its agenda and adopted a preliminary programme of work. The Committee also adopted a liberal decision regarding the participation of non-governmental organizations in the preparatory process.

Maurice Strong's Hopes for 1992

At the Nairobi meeting, our Secretary-General, Mr Maurice Strong, presented his ideas on what the Preparatory Committee should attempt to produce for the 1992 Conference. First, he suggested that the Conference should open for signature, a number of conventions, for example, on climate change, biological diversity and possibly forestry. Second, the

Conference should adopt either an Earth Charter or an Earth Declaration. Third, the Conference should adopt a programme of work which Maurice Strong has labelled as Agenda 21, the figure "21" standing for the 21st Century. As for the means of implementing the agenda, Maurice Strong has suggested that the Preparatory Committee should focus on three things: financial resources, technology transfer and institutions.

IUCN's Contributions

How can the World Conservation Union contribute to the work of the Preparatory Committee? First, on the conservation of biological diversity and the environmentally sound management of biotechnology, the Preparatory Committee has acknowledged the important contributions which have been made by IUCN. I would urge IUCN to continue to assist the negotiating process on these two interrelated subjects and to try to complete the negotiations for the adoption of a new international legal instrument on biological diversity before June 1992. Second, I would urge IUCN to take advantage of the Preparatory Committee's decision, taken in Nairobi, to enable non-governmental organizations to contribute to our preparatory process. There already exists a strong bond between IUCN and the UNCED Preparatory Committee. Your incoming President, Sir Sonny Ramphal, is our Special Advisor. IUCN is contributing significantly to the professional work of the UNCED Secretariat on a whole variety of questions. I look forward to working closely with you as we prepare for Rio in 1992.

Statement by Mr A.S. Blunn, Secretary, Department of the Arts, Sport, the Environment, Tourism and Territories, Government of Australia

UNCED is important simply because it is the first global conference on the whole question of the environment and development. In the twenty years since Stockholm, which concentrated on the environment, the picture has changed very significantly in terms of the focus and extent of environmental concerns—moral, scientific, political and economic. The Conference provides the opportunity to address, or re-balance, old and new interests including the concerns of nations and

regions which twenty years ago were simply not involved. Of special concern to Australia are the interests of the Asia-Pacific region and, in particular, that recognition be given to the small island states of the Pacific.

In terms of concrete outcomes, Australia is particularly interested in seeing the Conference achieve effective conventions on climate change and biodiversity. We also support the principle of a charter of environmental rights and a more comprehensive international approach to sea and air pollution and land degradation.

The real test of UNCED, however, will not be the conclusion of specific conventions, important though they are, but whether or not UNCED sets the right international environment and development agenda for the next twenty years.

"Agenda 21" must do more than simply identify issues. It must give the lead to achieving environmentally sound and sustainable development on a world scale and make sure that the mechanisms capable of achieving those objectives are in place. It must address the underlying causes of environmental problems, including the problems of population growth, poverty, urbanization and unbalanced consumption patterns.

The most difficult questions we will face will probably not be about the state of the environment, who or what caused the problem, or even what we have to do to rectify the particular problem, although some of those will be difficult enough. The most difficult questions will be whether collectively the nations of the world have the will to make the necessary changes and to mobilize the resources required.

It is important that the Conference should not become a battlefield on which regional or factional fights or short-term economic expediences are allowed to obscure the issues, the science or the principles. It is disappointing to see that in the early meetings of the Preparatory Committee there have been firm lines developing between what are perceived as the interests of the developing and the developed countries. If that pattern continues, the Conference cannot achieve its full potential and the global environment will be poorly served.

To achieve that potential, we will have to re-examine many of the accepted precepts and underlying assumptions of the current world order. Environment and sustainability now clearly rank among the most important international issues on the UN agenda. However, it would be complacent to assume that the current institutional arrangements and the relationships and resource relativities in the existing UN system are appropriate for the post-1992 international environment.

Australia's Ambassador to the United Nations,

in a recent address to the General Assembly, expressed the view that it is time to have a hard look at the institutionalized practices and structures of the system, as some of them did not seem to be relevant to the 1990s. In his opening address to this IUCN Assembly, Professor Slatyer suggested that there are some major weaknesses in the UN system when it comes to dealing with environmental issues.

Australia has no fixed position on international outcomes and generally supports the current UN organizations, particularly UNEP and UNDP, broadly in their current roles. Indeed, most of the examples that Professor Slatyer cited as environmental successes are ones that UNEP has been instrumental in achieving. Nonetheless, we believe that UNCED should look at the whole UN system from the General Assembly—where environment issues now get considered only every second year—down to the regional and sub-regional level, to ensure that the UN system best serves the needs of the environment.

Above all, we need to find ways to ensure rational and constructive debate on the issues and to find ways to go forward quickly in areas of common agreement while working to resolve genuine differences. Issues such as funding and technology transfer are difficult but they are not going to go away or even get any easier. They must be solved.

Much can be done regionally. For example, Australia, Indonesia and Papua New Guinea share responsibility for one of the world's principal mega-diversity zones. There is scope for doing much more together to maximize the impact of national measures to protect natural resources and to share information and expertise on sustainable resources.

Within Australia there have recently been some promising moves in this direction. These include the establishment of formal mechanisms to consider how ecologically sustainable development can be achieved.

Mechanisms have also been developed to involve the principal non-government organizations (NGOs). For example, the environmental NGOs are closely involved with the Federal Minister through existing processes, including meetings with the governing bodies of the major conservation organizations. These mechanisms, along with the regular consultations the Minister has with industry and other groups, will be built into Australia's preparatory process for UNCED. In addition, Australia's Ambassador for the Environment, Sir Ninian Stephen, will be convening regular meetings of broader community organizations, business, environmental NGOs, aboriginal

and youth groups, etc., to provide Australia's formal consultative process on UNCED. We will use this forum to consult with community organizations in the preparation of Australia's national report to UNCED.

Statement by Mr Morifing Kerné, Ministre de l'Environnement et L'Elevage, Mali

Mr President, I would like to take this opportunity to extend to you my warm congratulations on your well-deserved election to the Presidency of our organization. At the same time, I would like to express our deep gratitude to your distinguished predecessor Dr Monkombu Swaminathan, who conducted our work with a great deal of tact for two terms. I should also, Mr President, like to express my sincere congratulations to all those who have been elected or designated to preside over the destiny of our Organization for the three years to come; I wish them every success. My special thanks go to Dr Martin Holdgate for the good relations maintained by IUCN with my country, Mali.

Our participation in this important gathering of the IUCN General Assembly is first and foremost a reflection of our commitment to nature conservation and our unflinching support to the Union in the noble aims which it pursues.

There is no other attitude for us to adopt considering that we have come a very, very long way from the Sahel where conservation is an inescapable stage in the path to development.

This 18th Session of the General Assembly has marked yet another success for our Union. The organization of this gathering, the participation, the discussions and the recommendations which we are to adopt are commensurate with the importance of the subject: Conservation in a Changing World.

We express the hope that all members of IUCN will commit themselves firmly to the implementation of the recommendations and resolutions. Our discussions have focussed at length on the question of conservation and sustainable development. This could not have been otherwise, given that the two concepts are two sides of the same coin. The World Conservation Union (IUCN) derives its specific character from the statutory structure of its membership and its major concern with the conservation of natural resources. For many countries, particularly developing countries, the exploitation of natural resources remains the foundation of

development. Their development requires that the relationship of conflict between conservation and natural resources should be transformed into a relationship of complementarity. There can be no conservation without development, just as the process of sustainable development is inconceivable without conservation.

It is pleasing to note that this debate on sustainable development is going well and is a good prelude to the United Nations Conference on Environment and Development that is to be held in Brazil in 1992. This will be the second conference of its kind after Stockholm 1972. It is now an established principle that a sound environment is essential to sustainable economic growth, whether in developed or developing countries. There is no doubt that the "World Conservation Strategy", which the IUCN is actively engaged in reformulating, will be an important contribution to the Brazil meeting in 1992.

I do not doubt for a moment, that, as in the past, our organization will be in the forefront in ensuring that this world gathering will prove the success that the peoples of the world are entitled to expect.

During the 21st century, much will be at stake for mankind, for ourselves and for future generations. It is vital that we prepare for it during the next 10 years. All of us must participate in the debate to make it more productive. As far as Africa is concerned, many initiatives have been taken at the national or regional levels to establish a balance between lagging development and conservation of rapidly deteriorating resources. This is a real challenge which it will be difficult for us to meet without the cooperation of the international community.

During his term of office as acting President of OAU, the President of the Republic of Mali initiated a discussion on debt and development on the one hand, and environment and development, on the other.

This initiative led to a decision to convene an African Conference on Environment and Sustainable Development at Bamako in accordance with the OAU Resolution of 1989. Originally, this Conference was to have been held in June 1990. For various reasons to do with the OAU Secretariat, this timetable could not be met and the new date of 14-17 December 1990 was set.

Despite the persistent foot-dragging of some, who want to strip the Bamako Conference of its real content and to confine it to a debate on the single subject of transboundary transfer of toxic wastes, the OAU decision regarding the agenda for this meeting has been maintained.

The Bamako meeting is strictly in line with the

concerns of the United Nations Conference on Environment and Development to be held in Brazil in 1992 and will be a prime opportunity for the African States to formulate a common platform with a view to their participation in this world debate.

At Bamako we will have to:

- outline Africa's response to the report of the World Commission on Environment and Development in preparation for the Brazil Conference;
- strengthen the reciprocal commitments of African states as between themselves with regard to major common problems, shared water and energy resources, coordination and consistency between the programmes of neighbouring countries;
- prohibit the import into Africa of dangerous wastes in all their forms and control trans-boundary movements in the dumping of dangerous wastes produced in Africa.

It is my earnest hope that there will be a major participation in Brazil 1992 by OAU and indeed all developing countries so that the international community can share with us one of our major concerns.

In conclusion, Mr President, I would like to wish all members of the World Conservation Union, good heart for a better future.

Statement by Mr Celso Schenkel, Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA)

I am very pleased to speak here on behalf of the Government of Brazil, the country where the United Nations has chosen to hold the Conference on Environment and Development. Environment and development are essential for Brazil and reflect the growing concern for the environment throughout the world.

The people of Brazil are very gratified to see in this international effort the desire to unite interest in conserving the natural environment with the equally important idea of socio-economic development.

For example, the conservation of the Amazon and its natural resources—undoubtedly one of the

main topics of discussion concerning the environment—is closely connected to the process of sustainable development in other regions of the country and continent. It makes no sense to talk about one without considering the other.

I hope that the United Nations Conference finds that although definitive answers to what is essentially a dynamic question cannot be found, it can at least point out acceptable ways to harmonize the well-being of populations with the conservation of nature.

The Government of Brazil is happy to see that interest among non-governmental organizations is growing and that they are working with official bodies in these areas. With this in mind, I am pleased to announce that the Government of Brazil intends to become a member of IUCN in 1991. This is an example of the numerous activities undertaken by Brazil and its people in search of solutions to problems which arise when attempts are made to conserve the natural environment without inhibiting development, the legitimate aspiration of all countries and their peoples.

In conclusion, I should like to thank the international community for showing its confidence in Brazil and in Brazilians by choosing our country as the site for the 1992 Conference. I am sure that there will be something for all of us to learn and to teach on that occasion.

Thank you very much.

Statement by Ms Yolanda Kakabadse, NGO Liaison Officer, UNCED Secretariat

NGO Participation in the Preparation of UNCED

The United Nations, the UNCED Preparatory Committee and the UNCED Secretariat would like to stress once again the importance of the participation of the non-governmental community in the preparation of the Conference.

Several working parties have been created at the Secretariat, covering topics such as land and agriculture, oceans, atmosphere, biodiversity, biotechnology, toxic chemicals and hazardous wastes, and environmental education. For these and many other subjects of common concern, we would welcome your support; there is a lot of creativity and discussion in the non-governmental sector, and this must be taken into account in both the developed and non-developed worlds. It is also

important that the different NGO communities find some channels through which they can organize their input and their forthcoming proposals at national, international and regional level. This is an opportunity to start building up that alliance mentioned in the World Conservation Strategy for the 1990s.

One initiative, the International Facilitating Committee, based in Geneva, Switzerland, is already underway. Its purpose is to raise the level of international debate around the Conference beyond the traditional pursuit of sectoral and national interest.

To this end, three kinds of opportunities for action are foreseen: 1) Enabling the independent sectors to contribute intellectually and to participate in person at the three remaining meetings of the Preparatory Committee and its Working Groups; 2) Convening a 'summit' of independent

sectors to share and reflect upon the similarities and differences within their sectors' proposals for agendas and action plans for UNCED; and 3) Facilitating arrangements for parallel events to UNCED in Brazil.

The UNCED Secretariat takes this opportunity to call upon the NGO members at this meeting to develop their own agendas for the present decade and for what we are calling Agenda 21. We also call on governments to allow this work to take place as a joint effort.

However, it is important to note that the UNCED Secretariat is also open to other initiatives. Maurice Strong, my colleagues at the Secretariat, and I will do all we can to co-ordinate, provide and facilitate the positive work of NGOs towards what we believe will be one of the most important events of the decade.

Annex 26

Remarks by the Director General, Dr M.W. Holdgate, on IUCN's Contribution to the Work of the UN Conference on Environment and Development

It is clear that IUCN, as a World Conservation Union linking the governmental and non-governmental sectors and with extensive membership in both "north" and "south", has a great potential contribution to make to the work of the UN Conference on Environment and Development. It is also evident from the presentations just made to the General Assembly and the comments in the discussion that the Union's members recognize the importance of UNCED and want to participate. In particular, they want to help ensure that the Conference addresses the environmental issues of key importance to our members with the necessary urgency.

There are three main ways in which the Union can respond as an institution (obviously many members, especially State members, will be making other, direct contributions).

The first way is by participating in the preparatory process. We will send a delegation, led by the Director General, to the March meeting of the Preparatory Committee, and hope and trust that the Chairman of the Committee, whose presence here today we greatly appreciate, will give us the floor on appropriate occasions! We will also maintain and develop the close links that have already been established between the Secretariat of UNCED and the Secretariat of IUCN. These informal links involve the tropical forests, marine, wetlands, biodiversity, population and environment, and environmental law components of the Secretariat and, subject to resources, I will be happy to see other programmes involved as well. I should emphasize that these informal links allow members of the UNCED Secretariat to obtain advice from IUCN experts from day to day, but do not involve the Union's staff in specific new work, for which we would have to seek funding.

The second way is by using the World Conservation Union's machinery to develop analyses

which can be delivered as specific inputs to UNCED. Some are already well advanced. In this General Assembly we have discussed "Caring for the World", the current draft of the successor and complement to the World Conservation Strategy. We hope that when completed this text can be transferred effectively to the UNCED Preparatory Committee. If the document is seen as a product of a process involving 65 States, 110 Government Agencies and over 500 NGOs, and is recognized as a challenging document highly relevant to "Agenda 21"—the programme for the next century—it should have important influence.

Similarly, I hope that the IV World Parks Congress, to be held in Venezuela in 1992, will produce an important global plan of action for safeguarding biological diversity through the protection of habitats in the various categories of protected areas. This plan, drawing on the Union's current, cooperative programme on the conservation of biological diversity, should give practical expression to the actions that will need to be taken in making any International Convention on Biodiversity an operational reality.

The Antarctic Conservation Strategy could be another input, although I think that all attending this General Assembly hope that by 1992 international action will have led to the completion of a new legal instrument on Antarctic conservation. Other inputs should arise from the Commissions, and from special workshops. I think that we should do our utmost to ensure that any workshops and conferences organized within the IUCN system between now and 1992 are designed also to provide an input to the UNCED process.

The third way in which the World Conservation Union can contribute is through exchange and development of thought among our members in the different regions of the world. The Bergen Conference, convened by the Government of

Norway and the UN Economic Commission for Europe in May 1990, demonstrated the benefit of discussions that bring governmental and non-governmental sectors together, and if IUCN can secure the funding we would be well placed to arrange other regional forums, especially in the developing world, which could be a valuable extension of the UN's own preparatory process. I shall be approaching possible funding agencies on this score, and urging my regional representatives to take the matter seriously.

Of course there is a reciprocal link we must build. The next IUCN General Assembly is likely to be held in the autumn of 1993—just over a year after UNCED. The findings of the UN Conference, and the ways in which they can be carried forward in the World Conservation Union's distinctive context, must be high on the agenda for that Assembly. Indeed, the theme of that Assembly could well be the Union's contribution to "Agenda 21".

Citations for the Conferral of Honorary Membership of the World Conservation Union

Members of Honour of the World Conservation Union are eminent individuals able to contribute to advancing the mission of the Union. They are nominated by the Council and elected by the General Assembly.

Professor Dr HRH Princess Chulabhorn

Professor Dr HRH Princess Chulabhorn, a member of the Thai Royal Family, is a distinguished chemist who has made a significant contribution to the conservation of the natural environment through her scientific work. She has demonstrated her particular concern with chemicals which are harmful to the environment and among her professional affiliations has chaired and advised many working groups and committees directly concerned with the sustainable use of natural resources. Professor Dr HRH Princess Chulabhorn is President of the Chulabhorn Foundation, Chair of the Foundation for Promotion of Nature Conservation and Environmental Protection in Thailand and has represented her country on many occasions at international environmental fora.

Wolfgang Burhenne

Dr Wolfgang Burhenne was born in Germany and began his career in 1948 as Deputy Chief of Wildlife Management in the Bavarian State Ministry for Food, Agriculture and Forestry. Later on he served as the Legislative Adviser to the Bavarian Parliament while pursuing further parallel studies at the Academy of Political Science in Munich. He organized the Interparliamentary Working Centre, which in 1953 produced the Interparliamentary Declaration on the Conservation and Use of Natural Resources. From 1953 to 1972 the Centre was responsible for the initiating, negotiating and

drafting of major environmental laws relating to land, water, air and noise pollution. Dr Burhenne was the Co-founder of the German Wildlife Protection Association and of World Wildlife Fund Germany. He is the founding member of the Environmental Round Table, which brings together organizations and representatives from industry, science, labour, government and NGOs. He is also a founding member of the German Council for Environmental Law and has served as Chairman of the German Federal Commission on Thermal Pollution. At the international level, he was in 1950 the first German representative to the IUCN General Assembly and has participated since then in the activities of the Union in various capacities. His most recent service to the Union has been as Chairman of the Commission on Environmental Policy, Law and Administration since 1977 until this very day. He has been the mentor of practically every initiative undertaken by IUCN in the field of environmental law, including the Charter for Nature adopted by the UN General Assembly, the CITES and Ramsar Conventions and more recently the draft Convention for the Conservation of Biological Diversity.

François Ramade

Professor François Ramade was born in France and is a Professor of Ecology at the University of Paris South (Orsay). Since 1973 he has also been the Director of the Ecology and Zoology Laboratory at this University. His major areas of research are the study of the ecological consequences of pollution of aquatic ecosystems especially by pesticides, and the application of the fundamental ecological laws to the conservation of nature. He is the author of important scientific works on the ecology of natural resources, ecotoxicology, two manuals on ecological science and many others. He is a member of

the International Association of Ecology and of the European Science Foundation, and is the President of Honour of the French Federation of Societies for the Protection of Nature. Professor Ramade has been associated with IUCN since 1979 as a member of the Council and Bureau, and as a member of the Ecology Commission, in which he has chaired the Task Forces on Population and Resources, Ecotoxicology and Conservation of the Mediterranean Coastal and Marine Ecosystems.

Thane Riney

Born in the United States of America, Thane Riney has made an outstanding contribution to conservation science, especially in the field of sustainable land-use. After studying at the University of California Berkeley, he spent some years in New Zealand on wildlife and habitat research. He was an early proponent of ecosystem conservation and was specially selected to lead a team of Fulbright Scholars to Zimbabwe in 1958-61, which did much to catalyse that country's wildlife programme. This work was extended to over 20 countries in Africa, under the auspices of IUCN. During this time and while head of FAO's Forest and Forest Products Division Mr Riney catalysed and/or participated in many far-sighted initiatives in Africa, including the two African Wildlife Training Colleges, and the Wildlife and Protected Area Management Programme of Botswana. Mr Riney also worked at the Environmental Institute of Edinburgh University and briefly for the Australian Commonwealth Parks Service. He now lives in the small

town of Denmark in Western Australia, where he continues to advise, mainly Aboriginal groups, on sound resource management practices. While an architect in conservation science, Thane Riney has a wonderful ability to show others, including those without formal education, how they can see for themselves what is going amiss in their local ecosystems.

Mats Segnestam

Of Swedish nationality, Mats Segnestam was for 15 years the Secretary General of the Swedish Society for the Conservation of Nature, one of the most active NGO members of IUCN. He has been a strong supporter of IUCN's work for 20 years and this General Assembly in Perth is the eighth Assembly that he has attended. He has been a member of the Species Survival Commission and of the Commission on National Parks and Protected Areas, while demonstrating a keen interest in the work of the other Commissions. Mats Segnestam worked in IUCN as Marine Programme Officer for two years, and later became a Regional Councillor and Member of the Bureau for six years. He has also been a member of the Programme Advisory Group established by the Director General of IUCN, a member of the 1988 General Assembly Steering Committee and the Chairman of the IUCN Review committee at the 1984 General Assembly. At present Mats Segnestam is Senior Policy Adviser on the Environment to the Swedish International Development Authority (SIDA).

Annex 28

Citation for the Award of the John C. Phillips Memorial Medal for Distinguished Service in International Conservation to Professor Mohamed Kassas

Dr John Charles Phillips was a pioneer of the conservation movement. Born in 1876, he specialized in medicine and zoology and made significant contributions to science, particularly in taxonomy and genetics.

Dr Phillips worked constantly to increase public awareness of wildlife conservation. He was vitally concerned with international cooperation for the conservation of nature. In his memory, his friends established a Memorial Medal recognizing outstanding service in international conservation, and entrusted the awarding of the medal to IUCN.

At its 29th meeting on 26 November, Council formally resolved to award the John C. Phillips Medal to Professor Mohamed Kassas.

Professor Mohamed Kassas

Professor Kassas was born in July 1921, and graduated in 1944 from the University of Cairo. In 1950 he obtained his Ph.D. from the University of Cambridge for research in wetland ecology. Over the past 40 years he has carried out extensive studies on plant ecology in the desert regions of Egypt and the Sudan. His work provided new insights into vegetation patterns, successions and the processes and causes of desertification. His understanding of desert ecology led directly to his becoming one of the pioneers who warned the world about the dangers of increasing human pressure and misuse on these vulnerable systems. He played a leading part in the UNESCO Arid Land Research Programme (1950-1960) and the United Nations Conference on Desertification (1977).

Professor Kassas has been one of the leading scientific figures in his native country, Egypt, for

several decades. He is a member of the Egyptian Academy of Scientific Research and Technology, and Chairman of the Environmental Research Council of the Institut d'Egypte. In 1959 he received a State Award for Research in Biology, followed in 1978 by the Order of the Republic, in 1981 by the Order of Merit, and in 1982 by a State Award for Science. He is an appointed member of the Shoura Council (the Second House of the Egyptian Parliament). He has also played a distinguished part in international scientific affairs. From 1970 to 1972 he was Vice-Chairman of the International Coordinating Council for MAB (UNESCO), and from 1972 to 1973 Vice President of the ICSU Scientific Committee on Problems of the Environment (SCOPE), from 1973 to 1976 Assistant Director General of the Arab League Educational and Scientific Organization (ALECSO) and from 1978 to 1984 President of IUCN. He has been a Senior Adviser to the United Nations Environment Programme since its establishment in 1972, and was co-Editor for UNEP's publication on *The World Environment, 1972-1982*. In 1978 he was joint recipient of the Pahlavi International Prize for the Environment. He is a Member of the Club of Rome, Fellow of the Indian National Academy of Science, recipient of a Gold Medal for Education from the Government of the Sudan, and the ALECSO Gold Medal in 1978.

Professor Kassas was an outstanding President of IUCN, combining considerable scientific knowledge and ability with great human warmth and a quick and sympathetic understanding of people. As a conciliator, and quiet achiever of solutions that endure, he has served the international communities of science and conservation with dedication and success, and is a fitting recipient of the highest honour which IUCN can confer.

Annex 29

Citations for the Peter Scott Awards for Conservation Merit by the Species Survival Commission

The Peter Scott Awards for Conservation Merit are given to those who have made an outstanding contribution to the conservation of wild animals and plants, especially of threatened species and of species exploited by humankind. The recipient may be one or more individuals, or an organization, or even a communal entity such as a village.

The Awards are made by the Species Survival Commission of IUCN. Recipients are chosen by the Commission's Steering Committee, of which the Director General of IUCN is a member *ex officio*, and are presented by the Chair of the Commission.

The Award consists of a medal and a citation.

Didier Marchessaux

Shortly after the last IUCN General Assembly, the Species Survival Commission lost a valued member in a fatal accident in the Western Sahara.

Didier Marchessaux, a world-renowned expert on the endangered Mediterranean monk seal, was one of four scientists involved in a serious accident when their Land-Rover struck a landmine, presumably a relic of the Polisario war. Marchessaux was largely responsible for establishing the Cap Blanc reserve, and was a key figure for future research and development of the park.

The Peter Scott Award will be presented to the widow of Didier Marchessaux later this month at her home in France.

Grenville Lucas

In 1974, Grenville Lucas began his service to the Species Survival Commission as Secretary of the Threatened Plants Committee. In 1981 he succeeded Sir Peter Scott as Chairman of the Species Survival Commission. As the Deputy

Keeper and then Keeper of the Herbarium at the Royal Botanic Gardens, Kew, Mr Lucas focused his scientific work on African plants.

"Partnership in conservation" served as the theme of his years as SSC Chairman. During his chairmanship, membership in the Commission increased from hundreds to its current total of nearly 2,500 members from 137 countries. As noted by one Specialist Group Chairman, the efforts of Gren Lucas as Chairman of the Species Survival Commission "enhanced survival of species of fauna and flora throughout the world". We are very grateful for his leadership and make this Peter Scott Award with admiration and fondness.

Jersey Wildlife Preservation Trust

The Jersey Wildlife Preservation Trust is recognized for its leadership in conservation over the last two decades. With carefully developed programmes, the Trust has had an impact on many vital areas of conservation today: basic scientific research, training of people from developing countries in captive breeding and species recovery techniques, creating programmes to instill local pride in native species, and developing cooperative programmes with governments and conservation organizations for species and habitat protection.

The Jersey Wildlife Preservation Trust has realized Sir Peter Scott's vision of uniting governmental and conservation communities for the survival of plants and animals in many places around the world. This Award recognizes work of the Trust in Madagascar, Mauritius, Morocco, Indonesia, Brazil and the Caribbean, as well as the outstanding training programme in Jersey, which has prepared more than 240 people from 54 countries for leadership roles in local conservation programmes.

The Village of Shiraho

Shiraho Reef is the most diverse coral reef in Japan and is the location of the largest colonies of blue coral in the world.

The people of Shiraho have lived in harmony with the reef for generations, depending on it for their survival. Ten years ago the Government of Japan decided to construct an airport on this reef. With the traditional focus of the village at risk, village elders were obliged to challenge the decision. Through their dedicated efforts, thousands of people throughout Japan and the world have learned about the importance of the Shiraho Reef. The Species Survival Commission, with support from WWF-Japan and the Nature Conservation

Society of Japan, sponsored scientific surveys that confirmed the stand taken by the village elders and documented the essential role that the reef plays in maintaining the biological diversity of marine ecosystems in the region of Shiraho.

The Village of Shiraho, as represented by its elders, serves as an example to all of us in conservation. The security of the Shiraho Reef is still in question, as an IUCN Recommendation adopted at this General Assembly has shown, but without the commitment and continuing dedication of many village people to prevent airport construction, Shiraho Reef would already have been lost—and the world would have lost one of its most wonderful biological treasures. The Peter Scott Award is therefore given to the Village of Shiraho.

Annex 30

Citations for the Fred M. Packard International Parks Valour and Merit Awards by the Commission on National Parks and Protected Areas

The Fred M. Packard Award commemorates the first Secretary of CNPPA, who began the *United Nations List of National Parks and Protected Areas*. He worked with vigour to ensure the establishment of an Award for Valour for field wardens fighting poachers, mostly in the developing world. At the **third** World National Parks Congress in Bali, 1982, the Award was expanded to include people who have contributed to protected areas far above and beyond the call of duty.

Biocenosis A.C and Lic Victor Manzanilla Schaffer (Mexico)

Under the leadership of Sr Robles, Juan José Consejo and Javier de la Maza, and with the cooperation of the Governor of the Yucatan, Victor Manzanilla, a systematic programme for the creation of nature reserves has been established. They have enlisted the cooperation of the local, state and federal governments in the establishment of reserves, including the Calakmul Biosphere Reserve. They have incorporated comprehensive management plans in each of these reserves. Their work exemplifies the integration of the interests of local people, the academic community and all levels of government. They are forging the path which all protected area managers who believe in future generations must follow.

Harold K. Eidsvik (Canada)

By awarding Harold Eidsvik the Fred M. Packard Award, the Commission acknowledges his commitment to national parks worldwide, in addition to his dedicated service to national parks in Canada. Harold Eidsvik has made an outstanding contribution to the Commission on National Parks and

Protected Areas, as a member since 1972, and as Executive Officer from 1977 to 1980, and served with distinction as Chair from 1983 to 1990. Hal Eidsvik has not only served with distinction but with commitment, with energy, with humour and with a delightful turn of phrase for the right occasion. He has been a truly outstanding supporter of the cause.

Ponsiano Ssemwezi (Uganda)

Mr Ponsiano Ssemwezi retired as Director of Ugandan National Parks in August 1989. Prior to his appointment as Director, he served in the field as a Warden and, later, Chief Warden. His distinguished career spanned a turbulent time in the history of Uganda. A brutal military regime led to the destruction of wildlife and park facilities. Mr Ssemwezi persevered in his tireless, and at many times perilous, task of convincing the military regime that the parks and their wildlife must be saved. In spite of great hardship and personal risk, he succeeded. As a "Life Warden" he continues to serve the parks he loves. The international conservation community is grateful for his continuing dedication.

Jiri Svoboda (Czechoslovakia)

Director (Emeritus), Krkonose National Park. From 1974 to 1984, Jiri Svoboda provided outstanding leadership in the management of Krkonose National Park. The education and interpretative programmes he initiated remain today as an outstanding example of his work. He extended park management beyond the park's boundary and initiated a programme of international cooperation which, in June 1990, culminated in the International Conference entitled "Parks, People and Pollution".

Citoyen Mankoto ma Mbaelele (Zaire)

The Fred M. Packard Award to Citoyen Mankoto ma Mbaelele (Zaire) was given to him by the Director General, Dr Martin Holdgate, at the occasion of the celebrations of the 50th Anniversary of the Garamba National Park, Zaire, in May 1989. The citation reads:

President Délégué General de l'Institut Zairois pour la Conservation de la Nature. In following the example given by the President of the Republic and founder of the popular movement of the Revolution, Citoyen Mankoto has given the lead in encouraging the people of Zaire to conserve the richness of their natural heritage on behalf of the whole world. His efforts provide a courageous model for all those who work to establish a durable balance between people and nature on our planet.

Samuel A. Cooke and The Nature Conservancy of Hawaii

The Fred M Packard Award to Samuel A. Cooke and The Nature Conservancy of Hawaii was presented at a ceremony in The Conservancy's new offices in Hawaii.

Samuel A. Cooke, Chairman of The Nature Conservancy of Hawaii, has, over a period of ten years, demonstrated distinguished leadership. Growth has taken place in: "nature conserved" from zero to 43,000 acres; membership by 150 per cent to 9000; funds raised to US\$ 13 million. Samuel Cooke's imaginative leadership was instrumental in the success of the "Endangered Hawaiian Forest Bird Project" and the "Islands for life Campaign". Due to The Nature Conservancy of Hawaii, the State is a better place for nature as well as for people.

Annex 31

Citations for the Tree of Learning Awards by the Commission on Education and Communication

The Tree of Learning Award was instituted by the IUCN Commission on Education and Communication to recognize and honour men and women of distinction around the world who, by their personal commitment and exemplary leadership, have made an outstanding contribution to environmental education.

The Award, which is a silver inlaid plaque, depicts the Bodhi tree, under which the Buddha is said to have meditated and received his enlightenment.

Professor Dr HRH Princess Chulabhorn

Princess Chulabhorn, the youngest child of Their Majesties King Bhumibol and Queen Sirikit of Thailand, received her BSc in Organic Chemistry with First Class Honours, whereafter she was awarded a PhD in Organic Chemistry. She has had a Postdoctorate training at the University of Ulm in Germany, and is presently a candidate for a PhD in Toxicology.

She has received several international prizes and honours for her work, and is a president or member of many national and international bodies concerned with scientific research, health, environment and heritage.

She has received honorary degrees from several academic institutions, including from Japan, Korea, Germany and the United States of America. She is a Patron of the International Foundation for Science, in Sweden, and she was awarded the Einstein Gold Medal of UNESCO.

She is presently Founder and Director of the Chulabhorn Research Institute, in Thailand, and Chair of the Foundation for Promotion of Nature Conservation and Environmental Protection.

Nancy W. Anderson

Nancy Anderson, from the United States of America, took a BA degree at George Washington University in Public Administration, and undertook graduate studies in government and political science.

She is many things. To list just a few:

- Director, Global Action Network, a computerized network providing information on legislation and background material on environmental issues;
- Director, New England Environmental Network (NEEN), a network of individuals and organizations working towards sustainable development and environmental protection.
- Director, the New England Environmental Conference. The Twelfth Annual Conference, in March 1990, attracted over 1700 persons from throughout the region and across the nation, and was co-sponsored by over 400 environmental groups, government agencies and businesses.

More recently, she organized, with Nathaniel arap Chumo of Kenya, the Eastern Africa Environmental Network, patterned after the New England Environmental Network. She will be assisting with the First Annual Eastern African Environmental Conference, in Kenya, in Spring 1991.

Dr Michael Atchia

A citizen of Mauritius, Dr Atchia received degrees from the Universities of Calcutta, London, Salford, Chelsea College of Science and Technology, and the Institute of Biology, in biology, chemistry,

education, environmental resources, environmental education and microbiology.

He was President of "Action Civique" from 1983 to 1985 and was a leading environmentalist, writer of popular environmental items and presenter on TV and radio of environmental programmes in the island of Mauritius until 1986.

Dr Atchia has been a Science and Biology teacher since 1962, teaching in Calcutta, London, Nigeria and Mauritius before becoming a teacher-trainer, curriculum developer and textbook writer at the Mauritius Institute of Education, where he worked from 1975 to 1986.

From 1969 to 1986, Dr Atchia was consultant to 14 different international organizations including UNESCO, WHO, UNEP, the African Curriculum Organization (ACO) and the Science Education Programme for Africa (SEPA).

Since 1986, he has been Chief of Environmental Education and Training at the United Nations Environment Programme (UNEP) working from its world headquarters, in Nairobi, Kenya.

Dr Maria Luisa Cohen

Dr Cohen, an Italian, graduated with a BA in Philosophy from the University of Trieste, and has a Diploma in Art and Design from St Martin's School of Art, London.

Her wide variety of experience includes doing comic strips for children, freelance illustration, promoting social surveys for a housing association, teaching at the International School in Geneva and campaigning for the elimination of phosphates in detergents.

She directed the International Children's Festival of Spring "Peace with Nature" in Assisi, for the European Year of the Environment, a conference of 300 children from 45 countries.

Dr Victor A. Kolybine

From the Ukraine, Dr Kolybine began his career as a researcher and university professor in biology and pedagogical sciences, and biology teacher training. He became head of the department in the National Centre for Young Naturalists in ecological education. He later acted as Scientific Secretary of the Zoological Institute of the Ukrainian Academy of Sciences and Director of the Laboratory of Ecology.

He was appointed to the UNESCO Secretariat in 1976 as Programme Specialist in Environmental Education and subsequently became head of the UNESCO-UNEP International Environmental

Education Programme. He is presently Director of the Division of Education for the Quality of Life.

Author of over 100 publications, Dr Kolybine worked on the preparation of the background documents for the Tbilisi Conference on Environmental Education (1977) and for the Moscow Congress on Environmental Education and Training (1987). Dr Kolybine also provided important inputs for the philosophy of a global strategy for the development of environmental education.

Yami Lester

Mr Lester is a Yankunytjarjara man, born at Wallatina in North West South Australia.

Yami is frequently called in by Aboriginal communities, governments and private enterprise to assist in resolving conflict and negotiations on environmental issues affecting the Pitjantjatjara people, such as mineral exploration and tourism.

Yami is currently the Director of the Pitjantjatjara Council, Alice Springs. His responsibilities extend over large areas of the Northern Territory, South Australia and Western Australia.

Yami's contribution to nature conservation, tourism and mining are uniquely Aboriginal and have achieved cross-cultural balance, by two-way cooperation and achievements where others could not hope to succeed.

Yami's strength of commitment to Aboriginal interests, to the land and the law are matched by a gentle manner and a sense of humour which have eased many a difficult situation. His contributions to nature conservation are indeed outstanding.

Professor John C. Smyth

John Smyth began his career as a lecturer in zoology and rose to become Professor of Biology, Dean of the School of Science, and a member of the Board of Governors of Paisley College, Scotland. He is now Honorary Professor in the Department of Environmental Science at Stirling University.

Among his many activities in environmental education, he has been Chairman of the Scottish Environmental Education Council (since 1983) and is now President. A member of the Steering Committee of the IUCN Commission on Education and Communication, and Chairman of the North West Europe Committee of the Commission (1980-1985), he is presently Chairman of a Working Group set up the Secretary of State for Scotland to make recommendations for a national strategy for environmental education.

Annex 32

Presidential Address by the President Elect of the World Conservation Union, Sir Shridath Ramphal

We have come to the end of a memorable General Assembly and I join in all the expressions of congratulation and gratitude to those who have made it such a superlative occasion—principally, of course, to our hosts in Australia: from the City, from the State, from the Commonwealth Government. And I am sufficiently new as your President Elect to express my congratulations to the membership of IUCN for the excellence of your contributions and for the quality of your commitment and resolve. What you have done here in Perth over this last week is of importance to the world's future. There is no hyperbole in that statement; no mere self-congratulation; simply a worthy reality, of which the World Conservation Union can be proud. Certainly, Perth provides a backdrop against which I am proud to become your President.

At the close of this Assembly, therefore, let me say a few things that I consider relevant to the task you have set me in working with you over the next triennium. Merely to use that word "triennium" is to conjure up the enormity of the challenge that lies ahead of us. 1991-1993 will be testing years for IUCN; but they will be, as well, exciting years—full of opportunity for advancing the noble aims of the World Conservation Union: those aims, set (it now seems such a long time ago) in 1948, have been refined over the years with enlightenment and integrity so that IUCN has remained both true to itself and to human needs. It has been a long process of caring for the world. That process will be a continuing one—guiding us over many triennia and gaining in intensity and commitment over the decades ahead. As ever, our onward progression must be deeply rooted in those principles that have stood the organization well in the past. What are some of those principles ?

Equity, of course, is high among them. The world is an uneven place—environmentally and geographically—and in other important respects as

well. Progress towards the human society we all seek will not be possible if present gross inequities—in access to resources, for example—remain; or while the world's commercial and economic systems are as distorted as they are at present by so many abuses that nations inflict on one another.

Ethics, surely, is another and about this I shall have more to say later.

And, we have, as always, to be honest. First of all with ourselves and then with all the constituencies to which we must reach out. Truth is frequently uncomfortable; so often it challenges deeply held beliefs and deeply ingrained prejudices. We must not allow such discomfort to hold us back. Our duty, like that of Plato's philosopher kings in another context, is surely to learn all we can about the realities of the environment and of human impacts on it; and, having learned, to tell our fellows. Since 1948, world knowledge, world opinion, has moved on—and at a hugely accelerating pace in the last decade. In the beginning, IUCN was at the frontier of knowledge and awareness. We must remain there—at the forefront of the process of deepening insights and strengthening effectiveness in achieving equity and harmony in the future.

It follows that we must be fearless. If we are clear that the world community is heading for disaster, it is our duty to speak out; we cannot be constrained to silence for fear of giving offence to those in authority—whether governments or other establishments. Correspondingly, if we believe that positive action to encourage people to limit the size of their families is an essential part of the ethic of care for future generations, then we must say so—though we know there are those with whose beliefs such an injunction will clash. If we are clear that the world economic system functions through the exploitation of one section of humanity by another, we have to criticize it—though this is not the path of easy popularity. If we believe that it is

impossible for humanity to live in harmony with nature without some redistribution of people around the world, this too we will need to say—deeply unpopular though its implications will be. We have to face the logic of our convictions and announce them with clarity and commitment. That is what the world, the professional world, and the steadily caring world of informed and concerned people, expects of IUCN.

Yet, we must not, at the same time, be arrogant or strident. Humanity is culturally diverse and there is much we have to learn from the traditions of ancient people and from groups that are now ethnic minorities. We should never be so committed to our own views that we have no time for the respectful study of the views of others.

In discharging my functions as your President, I shall endeavour to be guided by these principles, among others.

Let me turn now to some other matters. Our union has to adopt, in the years ahead, an enlightened strategy of sustainable development. That strategy will be at the heart of our credo of caring for the world. I want to say a few words about this concept of sustainable development—as one who had something to do with its evolution in the Brundtland Commission, and because of anxiety lest it become a code-word meaning different things to different people: all embracing it as a virtue, but only as a virtue that others must practise. "Sustainable development", in the Commission's now classic sense of "meeting the needs of the present without compromising the capacity of future generations to meet their own needs", relates to all development, not just to "development" in a specialized Third World context; it relates to the development of all countries, all peoples, indeed, to the development of our human society.

The development of rich countries must be sustainable; as must the development of poor ones. Developed countries must pursue a path of sustainable development; as must countries still underdeveloped.

Of necessity, the burden of respecting sustainability falls particularly heavily on developed countries whose patterns of development to date so demonstrably fail to meet the standard of sustainability.

For developing countries, the concept carries a special implication beyond sustainability; it requires development itself. It is that development that must be sustainable—development that meets the needs of the present, the desperate needs of the poor.

For the industrial countries, therefore, sustainable development means modifying, modulating,

moderating development so that it becomes sustainable in a global context. For the developing countries, it means facilitating development, and doing so on a basis that is also sustainable in a global context.

Earlier this year, a Stanley Foundation conference expressed this integrated nature of environment and development in plain and succinct language:

"There will be no effective action on the environment (it concluded) without equally effective action on development."

There has been, in this Assembly, some concern lest the highlighting of sustainable development in IUCN's Programme involves a departure from the Union's basic purpose. Such concern is legitimate; but we should be careful not to be, or appear to be, unmindful of new challenges or new dimensions of old challenges. It would be cosy (though it would hardly be ethical or rational) for conservationists to forget that two-thirds of humanity live under the stress of poverty. But since conservation is about bringing humanity into harmony with nature, it is simply not practicable to ignore the impact of such massive stress on conservation itself—as you have found in virtually every area of IUCN's activities: from the work of the Commissions to the Union's thematic programmes on the ground.

The socio-economic condition of human beings is directly relevant to our work for nature. That is why we have to care for the world, all the world, the earth and all its living resources—including its people. That is why we must have a broadly based strategy of sustainability to give conservation a chance to be credible in the eyes of the world's people—represented so strongly in IUCN's global membership—and through that credibility a chance to succeed.

I have no doubt whatever that we can be both credible and faithful to our highest ideals, for IUCN's work in furtherance of those ideals has been a process of continuous evolution—and where there is a continuum the beginning and the end are not in conflict but in harmony. We are always the stronger for the newness that genuine evolution brings: the refreshment that permits the more dynamic pursuit of an early vision. Without all this, IUCN would itself become an endangered species—but without a global constituency to mourn it. Convinced as we are of our own worthiness, let us not be so complacent as to believe that our relevance is all that self-evident to another generation that waits impatiently to have a world to inherit.

When the report of the Brundtland Commission was launched in London in 1987, one of the young

people invited to receive it from Mrs Brundtland was Jenny Damayanti of Indonesia, who made this moving plea:

"Please Presidents, Prime Ministers and Generals, listen to the poor, to the voice of the hungry people who are forced to destroy the environment. Listen to the silent death of dying forests, lakes, rivers and the seas, the dying soil of the earth, poisoned and trampled by human greed, poverty and inequality. We, the young, hear them loud and clear."

The young understand intuitively how environment and development are integrated, how ecology and economy are entwined. There were resonances of Jenny Damayanti in our General Assembly here in Perth. We, too, do well to listen.

At the heart of every civilization worthy of the name is an ethical core. From it springs, for example, the duty of care for each other. Laws codify that duty and constrain behaviour that fails to respect it. In the global neighbourhood that our world has become, that duty of care has to be extended, therefore, to the environment which is, after all, our life support system—the "mother of humanity" as the ancients of many cultures saw the earth—the first people of Australia among them. We have to promote that ethic of caring for the environment and of caring for our fellow humans as being at the very heart of IUCN's mission. Unless we develop an ethical basis for human survival, a shadow will forever fall between the promise of our technical solutions and their fulfilment.

Such an ethical commitment has itself to rest on an acknowledgement that it is our own genius, unconstrained by ethics, that is leading us to despoil our earthly home. The threat comes not from a hostile habitation but from the domination we have assumed over our life-sustaining planet. I do not need to remind you that acid rain does not fall unaided from the heavens above. The ozone layer has not opened up as a natural phenomenon. The seas are not threatening to rise, or the earth to grow warmer, as an act of God. The problems of poverty, of population increase, of hunger, are of our own making. A nuclear holocaust, by accident or by design, will not be blameable on an "Armageddon" thesis. To all these threats to human survival, our genius, our science, our politics of power have contributed. Having evolved to exercise dominion over the earth, we now face the by-product of self-destruction. We speak of this danger as a threat to the environment; and so, in part, it is. But it is essentially a threat to the human species.

And the sad truth is, that whether we go by a

nuclear bang or an environmental whimper, the earth and its other species may be the better for our exit. Mother Earth will heal her wounds, however grievous; our planet's flora and fauna, however transfigured, may have a better chance to survive and flourish. Having made ourselves the earth's most dangerous and greedy predator, *Homo sapiens* may not be missed. But does it have to happen? Can we not mend our ways and save ourselves? The answer overwhelmingly is "yes"—provided we develop and live by an ethical commitment to sustainability.

So, as IUCN enters the next triennium, we must have no illusions about the magnitude of our task. Ranged against us are formidable foes: greed, selfishness, ignorance, smugness, meanness of spirit, lack of vision, are only some of them; and they exist in all countries, among all peoples. We must overcome them, and IUCN's role in the campaign to do so is a vital one. It will call for integrity in our judgements and conclusions as scientists and professionals of many kinds; it will demand courage in speaking out in all our countries and throughout our global neighbourhood. There will be detractors, doubters, disbelievers and many who would rather not hear. There will be honest differences of view; and some contrariness. And there will not necessarily be vindication in our time.

We can be sure, however, that there will be a time when another generation asks: "What did they think they were doing, putting human survival at risk? Did no-one speak out while there was still time to warn?" Let us make certain that some will answer then: "Yes, some did; IUCN in particular, through scientists and non-scientists alike, governmental people and non-governmental organizations, ecologists and green parties and environmental groups of many kinds, above all ordinary people who cared enough". And those who spoke out will include some in the business community to whom our Union has not been ready yet to open the doors of membership, but to whom we must of course keep open windows of opportunity for dialogue—for the ready and constructive interchange of ideas and information on steering our global economy with true sensitivity towards a sustainable, dignified future.

IUCN's message of "Caring for the World" must reach the world; its "Strategy of Sustainability" must become a global credo. I have already pledged myself to that cause; but the real action is with you all: in your Commissions; in your national organizations; in all you do in, and with, and for IUCN, in that "field full of folk" that is our world.

In the end, the message from Perth is a message

for us to carry, but a message as well for us all. I bid you receive and carry that message so that when we meet in 1993, we can say in good conscience that we not only tried, but succeeded—enough at any rate to have made the effort worthwhile and to go on striving. The road ahead may sometimes appear dark, but it is not a

darkness that should deter us. Rabindranath Tagore, a century ago, wrote of "The lantern that we carry in our hands making enemy of the darkness of the farther road". IUCN's lantern is a light the world needs. We must not weary of carrying it down the pathways of the future.

Annex 33

Closing Address by the Director General, Dr M.W. Holdgate

I have been wondering how best to sum up the value of this General Assembly to the Union. I think that I can do so very simply. It has brought integration, and integrity.

Integration, because it has brought the membership, the Council, the Commissions and the worldwide Secretariat together. We leave Perth with a common mission and purpose, and a programme binding us to work together, to care for the world of nature, to serve the world of man, and to build a sustainable future.

Integrity, because we have developed a mission statement and message which is authoritative, honest, scientifically valid and socially relevant.

We have emphasized that IUCN's central purpose is to ensure the conservation of nature, and we have reminded ourselves that we do not do this only for utilitarian reasons. We are the children of the earth, and whatever happens to the earth happens to us. We are a part of nature, and without nature we lose inspiration for the spirit, support for our lives, and the foundation for our grandchildren's future. We have reminded ourselves that we need to be concerned with the ethics of environmental care as well as with the material rewards that sustainable use can and must bring.

The world is reeling under the onslaught of humanity. The desperate poor are being forced into actions which reduce their chances of escape. The over-consumption of the rich, and the distortions of the world's trading and economic systems which they dominate, are locking millions into hopelessness. It is our task to help the worldwide community find a way out of this appalling situation, and towards a new balance, so that the 8 to 10 billion people the earth will contain less than a century from now live in a style that nature can support.

This General Assembly has emphasized that we are not obliged to use all of nature. We have

demonstrated this belief by urging that Antarctica be set aside as a wilderness, shielded from destructive use. We are similarly committed to protecting the integrity of our national parks and nature reserves, especially as centres within which the biological diversity of our planet can be conserved. But we have also accepted the need for realism. Over much of the world, human needs are increasing, and must be met in a fashion which is environmentally responsible and sustainable. This Union has a duty to help governments and local communities—men and women—young and old—to develop practical strategies and methods which will allow the essential process of development to occur in a fashion which does not undermine the resilience of nature or the prospects of future generations. We also need a capacity to predict and warn, where development processes seem likely to bring people into collision with the environment to the detriment of both.

We have discussed the overall strategy for the 1990s—the document "Caring for the World"—and I hope that we are now clear about our future path. We have discussed the Conservation Strategy for Antarctica, and the many National Conservation Strategies and sub-strategies that are essential products of our work. We have also discussed in considerable depth the scientific programmes of the Union—our programmes for species survival, habitat protection, the conservation and wise use of forests, wetlands, coastal and marine environments, and arid rangelands, and the ways in which through our programme we can increase understanding of the relationship between population and resources, of the role of women in natural resource management, of the potential impacts of the global change that humanity is threatening to bring about, and the roles of law, education, communication, and social action in shaping tomorrow's world. We have recognized through these discussions that our conservation activities

must be promoted and developed within the wider social context, just as social policies have to be based on a sound understanding of the natural world which is their ground of being and their ultimate constraint.

I believe this General Assembly has seen the beginning of a major change in the role of IUCN. Over the greater part of our past 42 years we have exhibited many of the characteristics of the legendary boffin. We have sought to be a body concerned with careful, considered scientific analysis; with the presentation of well-argued propositions for others to take or leave as they think fit; and with support to our individual members in their work of advocacy and action. But this General Assembly has argued that we have to be more positive and forceful as advocates and leaders. I welcome the acceptance by the membership of more of an advocacy role for IUCN. But let us be clear on one thing. If your President, your Council and I as the head of your permanent organization are to act as your advocates, we must do so for the whole movement represented by the members of IUCN and not a particular sector of that movement. If therefore we are to have a leadership and advocacy role for IUCN we have to have much stronger internal communication. We cannot base our campaigns and statements simply on the judgements of those who happen to come together once every three years in a General Assembly. The Council and Director General are challenged in the mission statement you have adopted to set up new mechanisms for communication with, and consultation of, the membership all the time and that is an essential.

Dialogue is essential. But I put it to you that we must not only have an improved internal dialogue. We have to promote the advancement of understanding of conservation, and especially of the need for care of nature as the foundation of all development and all futures. Let us face facts. Less than a century from now the earth may have twice as many people to support. Today's 5.3 billion are not living in harmony either with one another or within nature. Three-quarters of the world is going to industrialize. If that industrialization is done badly, using the technology of the past, disaster will be upon us within the lifetime of many people in this hall. That industrialization must be done well, and this means new technology—technology that we have not yet invented. That invention, and the installation of what the inventors produce, will be done largely by the private sector of industry, regulated by governments who will all the time be torn between political pressures for short-term economic return and their logical acceptance of the

need for long-term sustainability. I believe that in this situation a dialogue between the business and industrial sector, the governmental sector and the environmental sector is essential and that IUCN, with its breadth of membership, is extremely well placed to bring this about. This General Assembly has for good reason declined to admit the business sector into a new category of associate membership. But I do not think we can step aside from a dialogue, in which we, as advocates for the earth, bring home to industry and government the imperative of new patterns of technology and development, and at the same time help them to understand the environmental sensitivities and constraints which industrialisation must respect if it is not to bring disaster. I propose to develop such consultation in the next three years.

When we come together for the next General Assembly much will have happened. We will have launched "Caring for the World" (under whatever title it finally bears). There will have been many important meetings—organized through UNEP, UNESCO, and the international Conventions such as Ramsar and CITES. We will have held the Fourth World Parks Congress in Venezuela early in 1992, a meeting which promises to be a global conference on the conservation of biological diversity rather than a specialist meeting on parks alone. We will have held the United Nations Conference on Environment and Development. I hope we will have begun to arrange IUCN regional forums to bring our membership together at that level to discuss our common interests. They are going to be demanding and exciting years. I hope that by the next General Assembly we will have seen a quantum leap in IUCN's internal strengths, and in the Union's collective contribution to the future of our world, which needs the insights and commitments of our membership more than it has ever done before.

In closing, may I thank you all for your support, encouragement and friendly criticism during this General Assembly. May I record my debt to our outgoing President, Dr Swaminathan, and my delight at the election of Sir Shridath Ramphal to succeed him. The next three years will see the culmination of my contribution to IUCN and I feel heartened by all that I have heard here in these magnificent surroundings, so generously provided and furnished by our Australian hosts, whom I thank most sincerely for all that they have done and are doing for IUCN. We go from here with a strong and committed Secretariat and I would like to pay tribute to my own staff for their loyalty. I wish you all well in the next three strenuous years, when we can do so much for the world.

Annex 34

Farewell Address by the President of the World Conservation Union, Dr M.S. Swaminathan FRS

We are reaching the end of a truly memorable General Assembly—memorable for the beauty of its setting, for the generosity of the host country, its Commonwealth and State Governments and its people, for the efficiency of the Organizing Committee, for the sense of pride in performance demonstrated by everyone connected with the arrangements, and for the wonderful help given by our interpreters to ensure that language is no barrier for effective communication among women and men drawn from over 100 countries and all the continents. Above all, this is a memorable Assembly because of the spirit of understanding and commitment to the cause of conservation of natural resources and the sense of urgency in preventing a further deterioration in the human environment displayed by the members of the Union and observers, irrespective of their affiliation—governmental, non-governmental or inter-governmental.

This General Assembly has also been memorable in another respect—to the attention drawn first by the Prime Minister of Australia in his inaugural address, and later by the representatives of the indigenous and aboriginal people from several regions and countries, that the harmony within nature we are seeking today was central to the ethos of the pre-industrial age. When I visited Guyana early this year, the beautiful country of our incoming President, whose inspiring address we have just heard, I was told of an old Amerindian legend: "The sky is held up by trees. If the forest disappears, the sky—the roof of the world—collapses and nature and man perish together." To our forefathers, forests were not just carbon sinks but were the very foundations of life. The aboriginal Charter for Nature was born from the world of day-to-day life and not from the world of words we generally witness at international meetings. This explains why it has such deep emotional and spiritual impact, in contrast to the conventions and protocols we now draw up where excellence in

drafting is often measured by the ability to substitute platitudes for precision in commitments.

"Conservation in a changing world" has been the theme for this General Assembly. No better title could have been chosen. The world has certainly undergone great changes since we started our work eight days ago. Chances of war in the Middle East—probably involving weapons capable of inducing not only mutilations and death but also mutations and genetic harm—have increased. It is unfortunate that just when chances for the conversion of guns into grain and goods to satisfy the minimum needs of the bottom billion of the human family were getting brighter, this welcome trend should have received such a severe set-back.

In several countries, including our host country, economic recession with possibilities of enhanced unemployment have set in. Trade and subsidy wars have led to the undermining of the livelihood security of farmers in both developed and developing countries, often for opposite reasons.

In life pleasure and pain go together. During the last eight days there have been several happy events also. On 28 November, the World Bank, UNEP and UNDP announced the establishment of a Global Environment Facility—the first step in the long road to a global commitment to the spread of "green" policies and technologies world wide. On 1 December, it was reported that a team of Australian and Chinese scientists working at the University of Sydney have developed methods of enabling wheat plants to derive nitrogen from the atmosphere, thereby opening the possibility of delinking yield from the consumption of mineral fertilizers.

The inclusion of Spanish as an official language, the decision to adopt a decentralized organizational structure with regional and national offices, and the establishment of a voluntary fund for facilitating the more widespread participation of developing country representatives in the work of

the Union, will help the Union to become truly earth-centric, rather than continue to remain predominantly Euro-centric. I consider this transition as one of the most important contributions of this General Assembly.

The Resolution on Antarctica we have adopted today, seeking a permanent exclusion of mineral exploration and exploitation in Antarctica, underlines our resolve that considerations of public good and inter-generational equity rather than private profit and short-term economic gains should constitute the basic ground rules in the management of global commons.

The presentation of the Si-A-Paz or Peace National Park project jointly by the Nicaraguan and Costa Rican delegates brought home effectively the point that what human beings divide, nature can help to unite.

We do not know precisely the number of species that must have become extinct during the days we debated on methods of protecting the protected areas, although we know that continued habitat destruction and species extinction are sad realities. However, what we do know more precisely is the number of children who die each day because of hunger, malnutrition and disease. The exhortation in the IUCN Mission Statement adopted at this General Assembly that the use of natural resources must be based on principles of ecological sustainability and equity is therefore an appropriate one, to save the children of today and of tomorrow.

As we leave Perth, we are entering a season traditionally associated with peace and goodwill. This is also the season when we should count our blessings. We recall with gratitude the vision of men like the Swiss environmentalist Paul Sarasin, Sir Julian Huxley, of the participants in the two preparatory conferences held at Brunnen in 1946 and 1947 and of organizations like the Ligue Suisse pour la protection de la nature, UNESCO and the Government of France which led to the birth of IUCN in 1948. We recall again with gratitude the contributions of conservation giants like Sir Peter Scott who founded the Species Survival Commission of IUCN. Coming to the last triennium, we recall with pride and pleasure the 40th Anniversary Meeting at Fontainebleau and the commemoration of our 40th Anniversary by UNESCO and the Government of France. And we feel grateful to Councillors like Dr Jean Claude Lefeuvre, who made our 40th Anniversary ceremony so meaningful.

We count the commitment of our members and network partners as well as the leadership of our Director General and the dedication of IUCN staff among our principal blessings. Above all, we are

fortunate to add to this list of blessings our incoming President, Sir Shridath Ramphal, a world leader of rare distinction in international ethics, peace and social justice and whose contributions to contemporary history have been truly remarkable.

Miss Susannah Begg challenged us during the Australian Presentation on 29th November to define our vision for the world in which the younger generation will have to spend their productive lives. The answer of this General Assembly is clear—for the youth of today and of tomorrow to be happy and healthy, we must move towards a Conservation Society—a society where the best in modern agricultural, industrial, information and management technologies are integrated in an ecologically desirable manner with traditional wisdom and technologies, and a society where both unsustainable life-styles and unacceptable poverty will become anachronisms of the past.

The birth and growth of a Conservation Society will not be an easy task. In democratic societies, public policy generally tends to be influenced by the time span between two elections, while in dictatorships this time span extends to the next coup. In both cases, the next generation is far too distant. Accomplishing higher economic growth rates rather than extinguishing the ecological fires engulfing our world becomes the primary preoccupation of Governments under these political environments.

Thus, it is a sad fact that the outcome of the Uruguay Round of GATT trade negotiations may have a greater impact on the world's forests than our resolutions. It is a sad fact that the decisions taken in the halls of the World Intellectual Property Organization (WIPO) and the International Union for the Protection of New Varieties of Plants (UPOV) and the GATT-TRIPS (Trade-related Intellectual Property Rights) negotiations will have more influence on the progress in the development of an agreed global convention on biological diversity than our resolutions. It is also a sad fact that slowing down the change in climate and safeguarding the ozone layer will depend more on the decisions of industrialized countries and multinational corporations on the relative importance of patent and planet protection than on our resolutions.

The magnitude of the educational task before us conservationists is clear. This is a battle which we will win ultimately but every day's delay in the spread of the ethos of a Conservation Society will only add to the misery of millions of children, women and men, since it is the poor and the marginalized who suffer most from environmental degradation. We should therefore sharpen our tools for arousing public and political consciousness. I

am happy that one such tool I proposed five years ago—an Amnesty for Earth Organization—took an embryonic shape at this General Assembly.

I wish to end with the same quotation from the song sung so movingly by the children of the Nedlands Primary School at our opening Ceremony, which I quoted in my opening address.

"So life's a song that I must sing
A gift of love I must share
And when I see the joy it brings
My spirits soar through the air"

I pray that the New Year—just 26 days away—may bring more joy than sorrow—more songs of hope than of despair—and that each and every one here will experience both personal happiness and professional fulfilment. I thank you most sincerely for all the kindness and cooperation you have so generously extended to me at this General Assembly and during the past six years.

I wish you all a safe return journey, a Happy Christmas and a satisfying New Year.

I declare the 18th General Assembly of the World Conservation Union closed.

List of Participants

Argentina

Mr Fernando Ardura
Vocal del Directorio
Administración de Parques
Nacionales
Secretaría de Agricultura y
Ganadería
Av. Santa Fe 690
1059 Buenos Aires
Argentina
Tel. (541) 3116633
Telex 21535 dgaag ar
O Administración de
Parques Nacionales

Lic Jorge Aumedes
Presidente del Directorio
Administración de Parques
Nacionales
Secretaría de Agricultura y
Ganadería
Av. Santa Fe 690
1059 Buenos Aires
Argentina

Tel. (541) 3116633
Telex 21535 dgaag ar
O Administración de
Parques Nacionales

Mr Francisco Erize
Fundación Vida Silvestre
Argentina
Defensa 245
Buenos Aires
Argentina
Tel. (54 1) 3314864
NG Fundación Vida Silvestre
Argentina

Sr Francisco Ingouville
Fundación Ambiente y
Recursos Naturales (FARN)
Monroe 2142
1428 Buenos Aires
Argentina
Tel. (54 1) 7819171
Fax (54 1) 7816115
O Fundación Ambiente y
Recursos Naturales
(FARN)

Dr Prof. Raymond Laurent
Fundación Miguel Lillo
Miguel Lillo 251
4000 Tucumán
Argentina
Tel. (54 81) 251277
Fax (54 81) 311462
O SSC

Australia

Mr Robert Adams
Conservation Commission of
the Northern Territory
P.O. Box 496
Palmerston NT 0831
Australia
Tel. (61 89) 894467
O Conservation Commis-
sion of the Northern
Territory

Mr Peter Alabaster
ACT Parks and Conservation
Service
ACT Legislative Assembly
P.O. Box 158
Canberra ACT 2601
Australia
Tel. (61 62) 751111
GA ACT Parks and
Conservation Service

Ms Pam Allan
Department of the Arts, Sport,
the Environment, Tourism
and Territories
P.O. Box 91
Wentworthville
Australia
Tel. (61 2) 6317006
O Department of the Arts,
Sport, the Environment,
Tourism and Territories

Mr Nicholas T. Allen
Manager Environmental
Services
BHP Utah Minerals Inter-
national Asia Pacific
Division
140 William Street
Melbourne VIC 3000
Australia
Tel. (61 3) 6093342
Fax (61 3) 6093532
Telex 30408

O BHP Utah Minerals
International Asia Pacific
Division

Mr Peter Ambrosy
c/ Harper-MacRae &
Associates P/L
Level 67, MLC Centre
Martin Place
Sydney NSW 2000
Australia
Tel. (61 2) 2387630
Fax (61 2) 2211987
Telex AA72566 COHQ
O

Mrs Audrey Anderson
Wider Visions
24 David Crescent
Hillarys
Perth WA 6025
Australia
Tel. (61 9) 4010025
O Wider Visions

Mr David Annandale
Kinhill Engineers (Environ-
mental Group)
7/3 Ellen St.
Fremantle WA
Australia
Tel. 3352898
O Kinhill Engineers
(Environmental Group)

Dr Mike Archer
University of New South
Wales
Australia
O University of New South
Wales

Ms Jacqueline Ashton
WWF-Australia
P.O. Box 528
Sydney NSW 2001
Australia
Tel. (61 2) 2476300
O WWF Australia

Mr Roger Attwater
Peel-Harvey Catchment
Support Group
P.O. Box 376
Pinjarra WA
Australia
Tel. 5311954
O Peel-Harvey Catchment
Support Group

Key and Abbreviations

ST	Delegate of a State member
GA	Delegate of a Government Agency member
NG	Delegate of a National NGO member
IN	Delegate of an International NGO member
AF	Delegate of an Affiliate member
O	Observer
SSC	Species Survival Commission
CNPPA	Commission on National Parks and Protected Areas
CEL	Commission on Environmental Law
COE	Commission on Ecology
CESP	Commission on Environmental Strategy and Planning
CEC	Commission on Education and Communication

Note: The Commission titles are as modified by the 18th Session of the General Assembly.

Mr John Bache
President
Crocodile Farmers Association
of Australia
P.O. Box 38503
Winnellie NT 0821
Australia
Tel. (61 89) 844099
Fax (61 89) 470374
O Crocodile Fanners
Association of Australia
O SSC

Mr Alex Bainbridge
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
O Australian Conservation
Foundation

Dr Graham Baines
Environment Pacific
3 Pindari Street
The Gap
Brisbane QLD 4061
Australia
Tel. (61 7) 3003304
Fax (61 7) 3002611
O COE

Mr John Bannister
The Western Australia
Museum
Francis St.
Perth, WA
Australia
Tel. (61 9) 3284443
Fax (61 9) 3288686
O SSC

Dr Sue Barker
South Australian Department
of Environment and
Planning
55 Grenfell Street
Adelaide SA 5001
Australia
Tel. (61 8) 2167777
GA South Australian
Department of
Environment and
Planning

Dr Bryan A. Barlow
CSIRO Division of Plant
Industry
P.O. Box 1600
Canberra City ACT 2601
Australia
Tel. (61 62) 2465039
Fax (61 62) 2465530
O CSIRO Division of Plant
Industry

Mr Robert Beeton
University of Queensland
Gatton
Gatton QLD 4343
Australia
Tel. (61 75) 620325
Fax (61 75) 623081
Telex QUCOL AA 40866
O CEC

Ms Susannah Begg
Leader of the Australian Youth
Delegation to the 1990
Montreal Convention
Meeting
Australia
O

Ms Pam Beggs
Minister for Tourism
State Government
Government House
Perth WA
Australia
O State Government

Mr Ahmet Bektas
Wilderness Society
Parliament House
Hobart
Tasmania 7000
Australia
Tel. (61 02) 306201
Fax (61 02) 231406
NG Wilderness Society

Dr Richard Bell
Baha' International Com-
munity Office of the
Environment
15 McKenzie Road
Samson WA 6163
Australia
Tel. (61 09) 3376585
Fax (61 09) 3104997
O Baha' International
Community Office of the
Environment

Mr Glen Bennett
Environmental Education
Consultant
Ministry of Education
Curriculum Policy Branch
151 Royal Street
East Perth WA 6004
Australia
Tel. (61 9) 4204810
Fax (61 9) 4205005
O Ministry of Education

Mr Marcus Beresford
Conservation Council of South
Australia
120 Wakefield Street
Adelaide 5000
Australia
Tel. (61 8) 2235155
Fax (61 8) 2322490
NG Conservation Council of
South Australia

Mr Raj Bessarab
Friends of the Earth-Australia
18 Pelham Road
Armadale WA 6112
Australia
Tel. (61 9) 3997518
Fax (61 9) 3322507
O Friends of the Earth-
Australia

Ms Ana Bisset
Island Coordinating Council
P.O. Box 264
Thursday Island

Australia
Tel. (61 70) 691446
Fax (61 70) 691868
O Island Coordinating
Council

Mr David Black
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
Corporate Policy Division
Dept. of Primary Industries
and Energy
P.O. Box 858
Canberra ACT 2601
Australia
Tel. (61 62) 723502
Fax (61 62) 725448
O Department of the Arts,
Sport, the Environment,
Tourism & Territories

Mr Neil Blake
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Mr A. S. Blum
Secretary
Department of the Arts, Sports,
the Environment, Tourism &
Territories
G.P.O. Box 787
Canberra City ACT 2601
Australia
O Department of the Arts,
Sports, the Environment,
Tourism & Territories

Mr John David Blyth
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
O Department of
Conservation and Land
Management, WA

Prof. Bernhard Willem Boer
Environmental Law Centre
School of Law
MacQuarie University
Sydney NSW 2109
Australia
Tel. (61 2) 8057099
Fax (61 2) 8057686
NG Environmental Law
Centre

Ms Marion Bowers
Vice-President
Save African Endangered
Wildlife Foundation
Australian Branch
229 Oxford Street
Leederville WA 6007
Australia

Tel. (61 9) 4446550
Fax (61 9) 4441073
O Save African
Endangered Wildlife
Foundation

Ms Kate Boyd
National Parks Association of
New South Wales Inc.
P.O. Box A96
Sydney S. NSW 2000
Australia
Tel. (61 2) 264 7994
Fax (61 2) 264 7160
NG National Parks
Association of New
South Wales Inc.

Mr Desmond E. Boyland
Assistant Director
National Parks and Wildlife
Service of Queensland
P.O. Box 155
North Quay QLD 4002
Australia
Tel. (61 7) 2277797
Fax (61 7) 2277676
GA National Parks and
Wildlife Service of
Queensland

Mr Mark Brabazon
Executive Officer
Dept. of Conservation and
Land Management
Hayman Road
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
O Dept. of Conservation
and Land Management

Mr Ernie Bridge
Minister for Agriculture, WA
Ministry of Agriculture, WA
Capita Centre
197 St George's Terrace
Perth WA 6000
Australia
O Ministry of Agriculture,
WA

Dr Peter Bridgewater
Director
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 62) 500222
Fax (61 62) 4735228
Telex 62971 aa
GA Australian National
Parks and Wildlife
Service
O CNPPA

Dr Bob Brown
The Wilderness Society
Parliament House
Hobart
Tasmania 7000
Australia
Tel. (61 02) 306201

Fax (61 02) 231406
NG The Wilderness Society

Ms Elizabeth Brown
David Sheppard Conservation
Foundation
Australia
O David Sheppard
Conservation Founda-
tion

Dr Mick Brown
Forestry Commission of
Tasmania
199 Macquarie St.
Hobart
Tasmania 7001
Australia
Tel. (61 02) 308202
Fax (61 02) 238280
O Forestry Commission of
Tasmania

Mr Peter R. Brown
Senior Tutor in Wildlife
Management
Victoria College, Rusden
Campus
662 Blackburn Road
Clayton, VIC 3168
Australia
Tel. (61 3) 853333
Fax (61 3) 5447413
O SSC

Dr Andrew Arnold Burbidge
Dept. of Conservation and
Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 4055100
Fax (61 9) 3061769
O Dept. of Conservation
and Land Management
O SSC

Mr John Burgess
26 Adelaide St.
South Hobart,
Tasmania 7004
Australia
Tel. (61 02) 306487
O

Ms Chris Bumup
Assistant Director
Business Council of Australia
P.O. Box 7225
Melbourne VIC 3004
Australia
Tel. (61 3) 8676288
Fax (61 3) 8677861
O Business Council of
Australia

Mr Noel Bushnell
Gavin Anderson & Co.
124 Exhibition Street
Melbourne VIC 3000
Australia
Tel. (61 3) 6546555
Fax (61 3) 6548179
O

Dr David R. Butcher

Executive Director
The Royal Society for the
Prevention of Cruelty to
Animals
201 Rookwood Road
Yagoona
Sydney NSW 2199
Australia
Tel. (61 2) 7095433
Fax (61 2) 7962258
O SSC

Mr Harry Butler
Conservation Commission of
the Northern Territory
P.O. Box 496
Palmerston
Darwin NT 0831
Australia
Tel. (61 89) 894533
Fax (61 89) 323849
GA Conservation Commis-
sion of the Northern
Territory

Ms Norma Calcutt
Conservation Council of
Western Australia
10 Rosser Street
Cottesloe WA 6011
Australia
Tel. (61) 3844274
Fax (61) 2200653
NG Conservation Council of
Western Australia

Ms Debbie Callister
TRAFFIC Oceania
PA Box R594
Royal Exchange
Sydney NSW 2000
Australia
Tel. (61 2) 2478133
Fax (61 2) 2474579
Telex 176177 btats
O TRAFFIC Network

Mr William Carr
Manager of Environment
Department of Resources
Development
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra ACT 2601
Australia
O Department of Resources
Development, Dept. of
the Arts, Sport, the
Environment, Tourism &
Territories

Hon. Fred Chaney MP
Shadow Minister for the
Environment
P.O. Box 1005
Midland WA 6056
Australia
O Dept. of the Arts, Sport,
the Environment,
Tourism & Territories

Mr Stephen P. Charles
Murdoch University
Biological and Environmental
Sciences

South St.
Murdoch WA 6150
Australia
Tel. (61 9) 3322727
Fax (61 9) 3104997
O Biological and
Environmental Sciences,
Murdoch University

Mr Tony Charters
Acting Secretary
Wet Tropics Ministerial
Council
P.O. Box 155
North Quay QLD 4002
Australia
Tel. (61 9) 2277713
O Wet Tropics Ministerial
Council

Mr Paul Chatterton
The Wilderness Society
130 Davey St.
Hobart
Tasmania 7000
Australia
Tel. (61 02) 349366
Fax (61 02) 235112
NG Wilderness Society

Dr David Chittleborough
Baha'i International Com-
munity Office of the
Environment
2 Oriana Avenue
Rostrevor SA 5073
Australia
Tel. (61 8) 13361862
Fax (61 8) 3365242
O Baha'i International
Community Office of the
Environment

Dr Robert Graham Chittle-
borough
24 Watt Street Swanbourne
Swanbourne WA 6010
Australia
Tel. (61 9) 3831516
O

Ms Janet Cohen
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Mr Ross Colliver
Australian Conservation
Foundation
79 Stirling Street
Perth WA 6000
Australia
Tel. (61 9) 2200669
Fax (61 9) 2200668
NG Australian Conservation
Foundation

Mr John Cordell
Director, Pacific Programme
Cultural Survival

c/o Tropical Health Pro-
gramme
University of Queensland
Herston QLD 4006
Australia
Tel. (61 7) 3663548
Fax (61 7) 2522579
O Cultural Survival

Mr Peter Cosier
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
41 George Street
Norwood 5067
Australia
O Dept. of the Arts, Sport,
the Environment,
Tourism & Territories

Dr John Coulter
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
41 George Street
Norwood 5067
Australia
O Dept. of the Arts, Sport,
the Environment,
Tourism & Territories

Ms Janet Coveney
Hon. Secretary
Australian National Parks
Council (ANPC)
13 Park Road
Middle Park VIC 3206
Australia
Tel. (61 3) 6992830
NG Australian National
Parks Council (ANPC)

Ms Donna Craig
Environmental Law Centre
School of Law
Macquarie University
Sydney NSW 2109
Australia
Tel. (61 2) 8057077
Fax (61 2) 8057686
NG Environmental Law
Centre, Macquarie
University

Dr Wendy Craik
Great Barrier Reef Marine Park
Authority
P.O. Box 791
Canberra ACT 2601
Australia
Tel. (61 6) 2470211
Fax (61 6) 2475761
GA Great Barrier Reef
Marine Park Authority,
Queensland

Mr Peter Cranny
Queensland Forest Service
P.O. Box 944
Brisbane QLD 4001
Australia
Tel. (61 7) 2340004
Fax (61 7) 2340271
Telex QUEFOR AA43988
O Queensland Forest
Service

- Ms Rosey Crisp
Queensland Conservation
Council
P.O. Box 238
North Quay
Brisbane QLD 4002
Australia
Tel. (61 7) 2210188
NG Queensland Conserva-
tion Council
- Mrs Ethnee Critchley
Heytesbury Stud
Keysbrook WA 6206
Australia
O
- Lt Col R.A. Critchley
Heytesbury Stud
Keysbrook WA 6206
Australia
Tel. 5252158
O
- Dr David Dale
Conservation Council of
Western Australia
1 Canning Avenue
Mt Pleasant WA 6153
Australia
Tel. (61 63) 648663
Fax (61 63) 648663
NG Conservation Council of
Western Australia
O Wilderness Society
- Mr Adrian Davey
Resource & Environmental
Science
University of Canberra
P.O. Box 1
Belconnen ACT 2616
Australia
Tel. (61 6) 2522517
Fax (61 6) 2522166
O Resource & Environmen-
tal Science, University of
Canberra
- Dr Jim Davie
Queensland University of
Technology
Dept. of Planning & Landscape
Architecture
P.O. Box 2434
Brisbane QLD 4000
Australia
Tel. (61 7) 2232111
Fax (61 7) 2291510
O COE
- Prof. Bruce Davis
Institute of Antarctic &
Southern Ocean Studies
University of Tasmania
P.O. Box 2526
Hobart
Tasmania 7001
Australia
Tel. (61 2) 202972
Fax (61 2) 202973
Telex 58150
O CNPPA
O Australian Committee
for IUCN
- Ms Paula Deegan
Conservation Council of
Western Australia
P.O. Box 137
West Perth WA 6005
Australia
Tel. (61 9) 4811244
Fax (61 9) 3221048
NG Conservation Council of
Western Australia
- Mr John DeJose
The International Union of
Directors of Zoological
Gardens
c/o Perth Zoo Western
Australia
P.O. Box 489
South Perth WA 6151
Australia
Tel. (61 9) 4740335
Fax (61 9) 3673921
IN The International Union
of Directors of
Zoological Gardens
O SSC
- Ms Anne-Marie Delahunt
Australian Heritage Commis-
sion
P.O. Box 1567
Canberra ACT 2601
Australia
Tel. (61 6) 2712111
Fax (61 6) 2732395
GA Australian Heritage
Commission
- Mr John Dell
Western Australian Naturalists'
Club (Inc)
P.O. Box 156
Nedlands WA 6009
Australia
Tel. (61 9) 3898085
O Western Australian
Naturalists' Club (Inc)
- Mr Tim Dendy
South Australian Dept. of
Environment and Planning
55 Grenfell Street
Adelaide SA 5001
Australia
Tel. (61 8) 216 7777
GA South Australian Dept.
of Environment and
Planning
- Ms Joanne DiSano
First Assistant Secretary
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 6) 2741590
Fax (61 6) 2573010
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Hon Donald Dobie M.P.
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
- P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 62) 5218200
Fax (61 62) 5401887
O Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Mr John Dorman
National Parks Association of
New South Wales Inc.
12 Rodgers St.
Teralba NSW 2284
Australia
Tel. (61 49) 581564
Fax (61 2) 2647160
NG National Parks
Association of New
South Wales
O CNPPA
- Mr Peter Dring
Royal Agricultural Society of
Western Australia
P.O. Box 111
Carnamah 6517
Australia
Tel. (61 99) 511233
Fax (61 99) 511091
O Royal Agricultural
Society of Western
Australia
- Mr Craig DUBY
ACT Government
ACT Legislative Assembly
P.O. Box 158
Canberra City ACT 2601
Australia
Tel. (61 62) 751111
GA ACT Parks and
Conservation Service,
Conservation and Land
Management Branch
- Mrs Elaine Duncan
Wider Visions
24 David Crescent
Hillarys 6025
Perth WA
Australia
Tel. (61 9) 4010025
O Wider Visions
- Mr Nicholas Duncan
President
Save African Endangered
Wildlife Foundation
Australian Branch
229 Oxford Street
Leederville WA 6007
Australia
Tel. (61 9) 4446550
Fax (61 9) 4441073
O Save African
Endangered Wildlife
Foundation
- Mr Murray Edmonds
State Manager
Greening Australia
Unit 5
Leederville Village
106 Oxford Street
Leederville WA 6007
- Australia
Tel. (61 9) 2275771
Fax (61 9) 2275760
NG Greening Australia Ltd.
- Ms Pam Eiser
Fraser Island Defenders
Organization
3 Roslyn Avenue
Panania NSW 2213
Australia
Tel. (61 2) 2476300
Fax (61 2) 2478778
NG Fraser Island Defenders
Organization
O CNPPA
IUCN Council Member
- Mr Murray Elliott
Conservation Commission of
the Northern Territory
P.O. Box 496
Palmerston
Darwin NT 0831
Australia
Tel. (61 89) 894467
GA Conservation Commis-
sion of the Northern
Territory
- Ms Adele Farina
Secretary to Minister Pearce
WA State Government
Government House
Perth WA
Australia
O
- Mr Anthony Feamside
Institute of Foresters of
Australia
P.O. Box E73
Queen Victoria Terrace
Canberra ACT 2600
Australia
Tel. (61 6) 2887656
Fax (61 6) 2880441
NG Institute of Foresters of
Australia
- Dr Margaret A. Feilman
75 Malcolm Street
West Perth, WA 6005
Australia
Tel. (61 9) 3219989
O
- Mr Ken Felton
Forestry Commission of
Tasmania
P.O. Box 207B
Hobart
Tasmania 7001
Australia
Tel. (61 02) 308181
Fax (61 02) 238280
O Forestry Commission of
Tasmania
O SSC
- Mr Chris Fitzharding
Executive Director
South West Development
Authority
Australia
O South West Develop-
ment Authority

- Dr Timothy Flannery
Head Mammal Section
Australian Museum
6-8 College St.
Sydney South NSW 2000
Australia
Tel. (61 2) 3398114
Fax (61 2) 3604350
O SSC
- Mr Wayne Fletcher
Director, Biodiversity Section
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 6) 2741553
Fax (61 6) 2741517
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Mr Thomas Fox
A/g Deputy Director
National Parks and Wildlife
Service of New South Wales
P.O. Box 1967
Hurstville NSW 2220
Australia
Tel. (61 2) 5856418
Fax (61 2) 5856555
Telex 26034 aa
GA National Parks and
Wildlife Service of New
South Wales
- Mr Paul Frewer
Deputy Premier's Office
Government House
Canberra City ACT 2601
Australia
O
- Mr Ian William Fry
Director
Wildlife Survival
The Environment Centre
608 Dean St.
Albury NSW 2640
Australia
Tel. (61 60) 230813
Fax (61 60) 215629
NG Wildlife Survival
O CEL
- Hon Christine Gallus MP
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
967 South Road
Melrose Park SA 5039
Australia
Tel. (61 8) 2779877
Fax (61 8) 2779915
O Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Ms Morag Gamble
The Wilderness Society
130 Davey St.
Hobart
Tasmania 7000
Australia
- Tel. (61 02) 349366
Fax (61 02) 235112
NG The Wilderness Society
- Mr McGlynn Gene
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Mr David Gibbs
President
WWF Australia
P.O. Box 528
Sydney NSW 2001
Australia
Tel. (61 2) 2476300
O WWF Australia
- Dr John R Giles
Zoological Parks Board of New
South Wales
P.O. Box 20
Mosman NSW 2088
Australia
Tel. (61 2) 9692777
Fax (61 2) 9697515
GA Zoological Parks Board
of New South Wales,
National Parks and
Wildlife Service of New
South Wales
O SSC
- Dr Brendon Gooneratne
President
Project Jonah
P.O. Box 234
Baulkham Hills
Sydney NSW 2153
Australia
Tel. (61 2) 854335
Fax (61 2) 8768694
Telex 26064 virus aa
NG Project Jonah, Australia
- Mr Reg Gorden
Minister of Aboriginal Affairs
WA State Government
Capita House
197 St George's Terrace
Perth WA 6000
Australia
O WA State Government
- Commissioner Sue Gordon
Assistant General Manager
Aboriginal and Torres Strait
Islander Commission
P.O. Box 17
Woden
Canberra ACT
Australia
Tel. (61 6) 2893377
Fax (61 6) 2853742
O Aboriginal and Torres
Strait Islander Commis-
sion
- Ms Carla Gorton
Australian Conservation
Foundation
- 340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
O Australian Conservation
Foundation
- Ms Yvonne Gosselink
Ministry of Economic
Development Australian
Forest & Land Management
Capita House
197 St George's Terrace
Perth WA 6000
Australia
O Ministry of Economic
Development Australian
Forest & Land
Management
- Ms Raeme Goves-Jacka
Conservation Council of
Western Australia
1-54 Broadway
Nedlands WA
Australia
Tel. (61 9) 3863761
Fax (61 9) 2200653
NG Conservation Council of
Western Australia
- Mr Alistair Graham
The Wilderness Society
130 Davey St.
Hobart
Tasmania 7000
Australia
Tel. (61 02) 349366
Fax (61 02) 235112
NG Wilderness Society
- Ms Robyn Graham
Policy & Planning, Antarctic
Division
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
Channel Highway
Kingston
Tasmania 7050
Australia
Tel. (61 02) 290209
Fax (61 02) 295050
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Ms Rosemary Graham
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
O Australian Conservation
Foundation
- Dr Colin Peter Groves
Dept. of Prehistory &
Anthropology
Australian National University
Canberra ACT 2601
Australia
Tel. (61 62) 494590
- Fax (61 62) 492711
Telex 62760 natuniv
O SSC
- Mr Charles Richard Hall
Curtin University of Techno-
logy
School of Civil Engineering
Kent Street
Bentley WA
Australia
Tel. (61 9) 3517824
Telex (61 9) 3512818
O Curtin University of
Technology
- Ms Kay Hallahan
Minister for the Arts
Western Australia State
Government
Capita House
197 St George's Terrace
Perth WA 6000
Australia
O Western Australia State
Government
- Ms Helen Halliday
P.O. Box 1373
Canberra ACT 2601
Australia
Tel. (61 6) 2480888
Fax (61 6) 2480110
O SSC
- Mr John P Hannon
Australian Crocodile Farmers
Association
P.O. Box 4694
Darwin NT
Australia
Tel. (61 89) 819588
O Australian Crocodile
Farmers Association
O SSC
- Mrs Barbara Hardy
WWF Australia
60 Marine Parade
Seacliff SA 5049
Australia
Tel. (61 8) 2967338
O WWF Australia
- Mr Bill Hare
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Mr Colin Harris
South Australian Department
of Environment and
Planning
55 Grenfell Street
Adelaide SA 5001
Australia
Tel. (61 8) 216 7777
GA South Australian
Department of
Environment and
Planning

- Ms Jill Harris
Conservation Council of
Western Australia
228 Brisbane St.
Northbridge WA 6000
Australia
Tel. (61 9) 2277926
Fax (61 9) 2200653
NG Conservation Council of
Western Australia
- Mrs Clodagh Harrison
Project Jonah
3/213 Edgecliff Road
Woollahra 2025
Australia
Tel. (61 2) 8991211
Fax (61 2) 8992151
Telex 26064 virus aa
NG Project Jonah
- The Hon R. J. L. Hawke AC,
MP
Prime Minister of Australia
Canberra
Australia
- Mr Christopher David Haynes
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
GA Department of
Conservation and Land
Management, Western
Australia
- Mr Edward Hegerl
Director
Australian Littoral Society, Inc.
P.O. Box 49
Moorooka QLD 4105
Australia
Tel. (61 7) 8485235
Fax (61 7) 8925814
NG Australian Littoral
Society, Inc.
NG Queensland Conserva-
tion Council
O COE
- Mr Don Henry
Director
WWF Australia
P.O. Box 528
Sydney NSW 2001
Australia
Tel. (61 2) 2476300
Fax (61 2) 2478778
NG WWF Australia
- Mr John Hibberd
Kestel Research
P.O. Box 2546
Canberra ACT 2601
Australia
Tel. (61 6) 2473670
Fax (61 6) 2575336
O
- Mr Peter Hitchcock
National Parks and Wildlife
Service of New South Wales
- P.O. Box 1967
Hurstville NSW 2220
Australia
Tel. (61 2) 5856305
Fax (61 2) 5856555
Telex 26034 aa
GA National Parks and
Wildlife Service of New
South Wales
- The Hon. Barry Hodge
Chairman
Lands and Forest Commission
of Western Australia
50 Money Road
Melville WA 6156
Australia
Tel. (61 9) 3303309
Fax (61 9) 3171605
O Lands and Forest
Commission of Western
Australia
- Mr Rod Holesgrove
Director, Policy Liaison Section
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 62) 741390
Fax (61 62) 573010
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Mr Theo Hooy
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 62) 500351
Fax (61 62) 473528
Telex 62971 aa
GA Australian National
Parks and Wildlife
Service
- Dr Stephen Donald Hopper
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 4055100
Fax (61 9) 3061769
O Department of
Conservation and Land
Management, Western
Australia
O SSC
- Ms Elaine Home
Conservation Council of
Western Australia
91 Webster St.
Nedlands WA 6009
Australia
Tel. (61 9) 4440606
Fax (61 9) 2200653
NG Conservation Council of
Western Australia
- Dr Geoffrey W Howard
- 138 Leicester St.
Parkside 5063
Australia
Tel. (61 8) 3730303
O
- Mr Russell Hume
26 Holdsworth St.
Fremantle WA 6160
Australia
O
- Mr Geoffrey Hume-Cook
Wilderness Society
15 Glendower St
Perth WA 6000
Australia
O Wilderness Society
- Dr Bob Humphries
Western Australian Environ-
mental Protection Authority
1 Mount Street
Perth WA 6000
Australia
Tel. (61 9) 2227000
Fax (61 9) 3221598
O Western Australian
Environmental
Protection Authority
- Dr Tor Hundloe
Environment Institute of
Australia
Australia
O Environment Institute of
Australia
- Mr Peter John Hunnam
WWF-Australia
P.O. Box 528
Sydney NSW 2001
Australia
Tel. (61 2) 2476300
Fax (61 2) 2478778
O WWF-Australia
- Ms Penny Hussey
Western Australian Naturalists'
Club (INC)
P.O. Box 156
Nedlands WA 6009
Australia
Tel. (61 9) 3898085
O Western Australian
Naturalists' Club (INC)
- Dr Ross Hynes
Dept. of Environment and
Heritage
13th Floor
160 Ann St.
Brisbane QLD 4000
Australia
Tel. (61 7) 2277804
Fax (61 7) 2277803
O Dept. of Environment
and Heritage
- Dr Nina Jablonski
Dept. of Anatomy and Human
Biology
University of Western
Australia
Nedlands WA 6009
Australia
- Tel. (61 9) 3803296
Fax (61 9) 3801051
O Centre of Human
Biology
- Mr Colin Jackson
Australian Trust for Conserva-
tion Volunteers
P.O. Box 423
Ballarat VIC 3350
Australia
Tel. (61 53) 331483
Fax (61 53) 332290
O Australian Trust for
Conservation Volunteers
- Ms Sue Jackson
Environment Centre N.T.
P.O. Box 2120
Darwin, NT
Australia
Tel. (61 89) 811984
Fax (61 89) 410387
NG Environment Centre
N.T.
- Dr David James
Resource Assessment
Commission
Locked Bag 1
Queen Victoria Terrace
Canberra ACT 2600
Australia
Tel. (61 6) 2715111
Fax (61 6) 2715929
GA Resource Assessment
Commission
- Mr John Adrian Jeffreys
Director
Wildlife Preservation Society of
Queensland
4th Floor 160 Edward Street
Brisbane QLD 4000
Australia
Tel. (61 7) 2210194
Fax (61 7) 2210701
NG Wildlife Preservation
Society of Queensland
- Mr Hank Jenkins
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 6) 1500270
Fax (61 6) 2473528
Telex 62971 aa
GA Australian National
Parks and Wildlife
Service
O SSC
- The Hon. Gary Johns MP
Member of Australian House
of Representatives
P.O. Box 64
Redcliffe QLD 4020
Australia
Fax (61 7) 2841379
O Member of Australian
House of Representa-
tives, Chair of Caucus
Environment Committee

- Ms Louana Johnston
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Mr Ross Johnston
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Mr Lindsay C. Jolley
South Australian National
Parks & Wildlife Service
P.O. Box 444
Murray Bridge 5253
Australia
Tel. (61 8) 2167777
Fax (61 8) 2311392
O South Australian
National Parks &
Wildlife Service
- Mr Graeme Kelleher
Chairman
Great Barrier Reef Marine Park
Authority
P.O. Box 791
Canberra ACT 2601
Australia
Tel. (61 6) 2470211
Fax (61 6) 2475761
GA Great Barrier Reef
Marine Park Authority
- The Hon. Ros Kelly MP
Minister for the Arts, Sport, the
Environment, Tourism and
Territories
Parliament House
Canberra ACT 2600
Australia
ST Department for the Arts,
Sport, the Environment,
Tourism and Territories
- Mr Garth Kelsey
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Mr Richard A. Kenchington
Resource Assessment
Commission
Locked Bag 1
Queen Victoria Terrace
Canberra ACT 2600
- Australia
Tel. (61 62) 715280
Fax (61 62) 715073
GA Resource Assessment
Commission
O CESP
O COE
- Ms Amrit W. Kendrick
15 Parkside Ave.
Mt Pleasant WA 6153
Australia
Tel. (61 9) 3646619
Fax (61 9) 3824947
O
- Mr Gary A. Kendrick
c/o Botany Department
University of Western
Australia
Crawley WA 6009
Australia
Tel. (61 9) 3802217
Fax (61 9) 3824947
O
- Mr Danny Kennedy
Environmental Law Centre
c/o Macquarie University
Sydney NSW
Australia
Tel. (61 2) 8057077
NG Environmental Law
Centre
- Mr Michael G. Kennedy
WWF-Australia
P.O. Box 302
Avalon 2107
Australia
Tel. (61 2) 9189482
Fax (61 2) 9189644
NG WWF-Australia
O SSC
- Dr Aila Keto
Rainforest Conservation
Society Inc.
19 Colorado Avenue
Bardon QLD 4065
Australia
Tel. (61 7) 3681318
Fax (61 7) 3683938
O Wet Tropics Manage-
ment Authority
- Prof. Jiro Kikkawa
International Union of Forestry
Research Organizations
(IUFRO)
c/o Department of Zoology
University of Queensland
St. Lucia
Brisbane QLD 4072
Australia
Tel. (61 7) 3772966
Fax (61 7) 3710057
O IUFRO
O COE
- Dr D. Kitchener
Senior Curator
Western Australia Museum
Francis Street
Perth WA 6000
Australia
- Tel. (61 9) 3284411
Fax (61 9) 3288686
O SSC
- Mr Cam Kneen
National Association of Forest
Industries
P.O. Box 254
West Perth WA 6005
Australia
Tel. (61 9) 3222088
Fax (61 9) 4811019
O National Association of
Forest Industries
- Mr John Koeyers
Conservation Council of
Western Australia
P.O. Box 347
Margaret River WA 6285
Australia
Tel. (61 97) 572073
Fax (61 97) 2200653
NG Conservation Council of
Western Australia
- Mr Peter Koffel
Murdoch University
26 Davies St
Beaconsfield WA 6162
Australia
Tel. 3354775
O Murdoch University
- Mr Michael Krockenberger
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Dr Gerald Kuchling
Department of Zoology
University of Western
Australia
Perth WA 6009
Australia
Tel. (61 9) 3802243
Fax (61 9) 3801029
Telex 92992 aa
O SSC
- Mr Doug Laing
Department of Foreign Affairs
and Trade
Office of the Ambassador for
the Environment
4 Treasury Place
East Melbourne VIC 3002
Australia
Tel. (61 3) 6552686
Fax (61 3) 6509467
O Department of Foreign
Affairs and Trade
- Dr Padma Lal
Australian Bureau of
Agricultural and Resource
Economics
P.O. Box 1563
Canberra ACT 2601
Australia
- Tel. (61 6) 2469544
Fax (61 6) 2469699
O Australian Bureau of
Agricultural and
Resource Economics
- Dr David Lamb
Botany Department
University of Queensland
Brisbane QLD
Australia
Tel. (61 7) 3772045
Fax (61 7) 8703854
Telex AA40315 UNIVQLD
O COE
- Dr Judy Lambert
Ministerial Advisor
Dept. of the Arts, Sports, the
Environment, Tourism &
Territories
Parliament House
Canberra ACT 2600
Australia
Tel. (61 62) 777640
Fax (61 62) 734130
O Dept. of the Arts, Sports,
the Environment,
Tourism & Territories
- Dr Bill Lane
Environmental Services
Australia (ESA) Pty Ltd
P.O. Box 226
St. Leonards NSW 2065
Australia
Tel. (61 2) 9065789
Fax (61 2) 9067452
O Environmental Services
Australia (ESA) Pty Ltd
- Mr Jim Lane
Department of Conservation
and Land Management
c/o Executive Director
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
Telex 94585 aa
O Department of
Conservation and Land
Management, Western
Australia
- Dr Carmen Lawrence
Premier of Western Australia
Western Australia State
Government
Capita House
Perth WA 6000
Australia
O Western Australia State
Government
- Mr Dean Lee
Pacific Whale Foundation
Unit 1
81 Mary St.
Como WA
Australia
Tel. (61 9) 4501271
O Pacific Whale Founda-
tion

The Hon. S. Lenehan
Minister
Ministry of Environment and
Planning
Parliament House
Adelaide SA 5000
Australia
GA South Australia
Department of
Environment and
Planning

Ms Angie Lensink
Australian Conservation
Foundation
Perth Branch
79 Stirling Street
North Perth WA
Australia
Tel. (61 9) 2200665
NG Australian Conservation
Foundation

Dr Godfrey Letts
Conservation Commission of
the Northern Territory
P.O. Box 496
Palmerston
Darwin NT 0831
Australia
Tel. (61 89) 894533
Fax (61 89) 323849
GA Conservation Commis-
sion of the Northern
Territory
O SSC

Mr Nigel Livesey
Environment Centre NT
79 Stirling St.
Perth WA 6000
Australia
Tel. (61 9) 2200654
Fax (61 9) 2200653
NG Environment Centre NT
O Wilderness Society

Mr Owen William Loneragan
United Nations Association of
Australia (WA Division)
16 Deverell Way
Bentley WA 6102
Australia
Tel. (61 66) 4584615
O United Nations
Association of Australia
(WA Division)

Mr David Luck
Environment Group
Australian International
Development Assistance
Bureau (AIDAB)
P.O. Box 887
Canberra ACT 2601
Australia
Tel. (61 6) 2764650
Fax (61 6) 2764626
GA Australian International
Development Assistance
Bureau (AIDAB)

Mr Getano Lui Jr
Island Coordinating Council
P.O. Box 264
Thursday Island QLD 4875

Australia
Tel. (61 7) 691446
Fax (61 7) 691868
O Island Coordinating
Council

Dr John M. Lumb
Department of Conservation
and Environment, Victoria
240 Victoria Parade
East Melbourne VIC 3002
Australia
GA Department of
Conservation and
Environment, Victoria

Mr Ian MacKenzie
National Association of Forest
Industries
225 Adelaide Terrace
Perth WA 6062
Australia
Tel. (61 9) 4216826
O National Association of
Forest Industries

Mr Brendan Mackey
Centre for Resource and
Environmental Studies
Australian National University
P.O. Box 4
Canberra City ACT
Australia
O COE

Dr Jonathan Majer
Curtin University of Techno-
logy
School of Biology
P.O. Box 01987
Perth WA 6001
Australia
Tel. (61 9) 3517964
Fax (61 9) 3512495
Telex 92983 aa
O Curtin University of
Technology
O Australian Entomologi-
cal Society

Mr Alec Marr
The Wilderness Society
Parliament House
130 Davey St.
Hobart
Tasmania 7000
Australia
Tel. (61 2) 349366
Fax (61 2) 235112
NG Wilderness Society

Mr Duncan Antony Marshall
Australian Council of National
Trusts
P.O. Box 1002
Civic Square ACT 2608
Australia
Tel. (61 6) 2476766
Fax (61 6) 2491395
NG Australian Council of
National Trusts

Mr Bemie Masters
Conservation Council of
Western Australia
P.O. Box 162

Capel WA 6271
Australia
Tel. (61 97) 272474
Fax (61 97) 2200653
NG Conservation Council of
Western Australia

Dr Freya Mathews
Murdoch University
Social Sciences
Murdoch WA 6150
Australia
Tel. (61 9) 3322698
O Murdoch University

Mr Richard May
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
O Department of
Conservation and Land
Management, Western
Australia

Prof. Arthur McComb
Murdoch University
Environmental Science
Murdoch WA 6150
Australia
Tel. (61 9) 3322191
Fax (61 9) 3104997
O Murdoch University

Ms Joanne McCormick
National Association of Forest
Industries
P.O. Box R1276
Perth WA
Australia
Tel. (61 9) 4216840
Fax (61 9) 2211658
O National Association of
Forest Industries

Ms Margaret McDonald
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Mr Peter McGinnity
Great Barrier Reef Marine Park
Authority
P.O. Box 791
Canberra ACT 2601
Australia
Tel. (61 6) 2470211
Fax (61 6) 2475761
GA Great Barrier Reef
Marine Park Authority,
Queensland

Mr Lauchlan McIntosh
P.O. Box 363
Dickson ACT 2601
Australia
Tel. (61 6) 2498955

Fax (61 6) 2474985
Telex 62285
O

Dr Frank McKinnell
Department of Conservation
and Land Management
c/o Executive Director
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
Telex 94585 aa
NG Institute of Foresters of
Australia

Dr Don McMichael
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 6) 2951436
Fax (61 6) 2396572
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories

Mr Keiran James McNamara
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3670333
Fax (61 9) 3670466
O Department of
Conservation and Land
Management, Western
Australia

Dr I.R. McPhail
Director General
South Australian Department
of Environment and
Planning
55 Grenfell St.
Adelaide SA 5001
Australia
Tel. (61 8) 2167777
GA South Australian
Department of
Environment and
Planning

Mr David Menere
Department of Primary
Industries and Energy
P.O. Box 858
Canberra ACT 2601
Australia
Tel. (61 6) 2723933
Fax (61 6) 2724875
Telex 2723933
O Department of Primary
Industries and Energy

Mr Geoff Mercer
Department of Conservation
and Land Management
P.O. Box 72
Geraldton 6530
Australia
Tel. (61 99) 215955

- Fax (61 99) 215713
 O Department of Conservation and Land Management, Western Australia
- Prof. Harry Messel
 Vice Chairman
 Australia, SSC
 Hopewood Gardens
 13 Thornton St.
 Darling PT. NSW 2027
 Australia
 Tel. (61 2) 6923383
 Fax (61 2) 6602903
 Telex 26169 unisyd aa
 O SSC
- Dr Judy Messer
 Nature Conservation Council
 of New South Wales
 39 George Street
 Sydney NSW 2000
 Australia
 Tel. (61 2) 2472228
 Fax (61 2) 2475945
 NG Nature Conservation
 Council of New South
 Wales
- Mr Greg Middleton
 Department of Parks, Wildlife
 and Heritage, Tasmania
 P.O. Box 44A
 Hobart
 Tasmania 7001
 Australia
 Tel. (61 02) 302336
 Fax (61 02) 238765
 GA Department of Parks,
 Wildlife and Heritage,
 Tasmania
 O CNPPA
- Ms Kerrie Milburn-Clark
 Business Council of Australia
 P.O. Box 7225
 Melbourne VIC 3004
 Australia
 Tel. (61 3) 8676288
 Fax (61 3) 8677861
 O Business Council of
 Australia
- Mr Denis Henry Millan
 Department of Land Adminis-
 tration
 Central Government Buildings
 Cathedral Avenue
 Perth WA 6000
 Australia
 Tel. (61 9) 3231222
 Fax (61 9) 3231201
 Telex 93784 lands aa
 O Department of Land
 Administration
- Ms Christine Milne
 The Wilderness Society
 Parliament House
 Hobart
 Tasmania 7000
 Australia
 Tel. (61 2) 306201
 Fax (61 2) 231406
 NG Wilderness Society
- Mr Robert K. Morland
 Department of Land Adminis-
 tration
 Central Government Buildings
 Cathedral Avenue
 Perth WA 6000
 Australia
 Tel. (61 9) 3231222
 Fax (61 9) 3231201
 Telex 93784 lands aa
 O Department of Land
 Administration, Western
 Australian State
 Government
- Ms Leonie Morrison
 The Wilderness Society
 Parliament House
 130 Davey St.
 Hobart
 Tasmania 7000
 Australia
 Tel. (61 2) 349366
 O Wilderness Society
- Mrs Judith Mortlock
 National Parks and Wildlife
 Service of New South Wales
 Government House
 Lord Howe Island 2898
 Australia
 Tel. (61 65) 632066
 Fax (61 65) 632127
 GA National Parks and
 Wildlife Service of New
 South Wales
- Mr Seamus Mulholland
 Department of Conservation
 and Land Management
 Hayman Road
 P.O. Box 104
 Como WA 6152
 Australia
 Tel. (61 9) 3676333
 O Department of
 Conservation and Land
 Management
- Ms Josephine Mummery
 Dept. of the Arts, Sport, the
 Environment, Tourism &
 Territories
 P.O. Box 787
 Canberra ACT 2601
 Australia
 Tel. (61 62) 741111
 Fax (61 62) 573010
 O Dept. of the Arts, Sport,
 the Environment,
 Tourism & Territories
- Ms Frances Murray
 Australian Conservation
 Foundation
 340 Gore Street
 Fitzroy VIC 3065
 Australia
 Tel. (61 3) 4161455
 Fax (61 3) 4160767
 NG Australian Conservation
 Foundation
- Mr Nicholas Newland
 South Australian National
 Parks and Wildlife Service
- P.O. Box 1782
 Adelaide SA 5001
 Australia
 Tel. (61 8) 2167867
 Fax (61 8) 2311392
 GA South Australian
 Department of
 Environment and
 Planning
 O South Australian
 National Parks and
 Wildlife Service
- Dr Peter Newman
 Murdoch University
 Australia
 O
- Dr Ray Nias
 WWF-Australia
 P.O. Box 528
 Sydney NSW 2001
 Australia
 Tel. (61 2) 2476300
 Fax (61 2) 2478778
 NG WWF-Australia
- Mr Frank Nicholls
 61-4 Sydney Street
 Prahran VIC 3181
 Australia
 Tel. (61 3) 516611
 O CEL
- Dr Ebbe S. Nielsen
 Division of Entomology
 CSIRO
 P.O. Box 1700
 Canberra ACT 2601
 Australia
 Tel. (61 62) 464258
 Fax (61 62) 464264
 O Division of Entomology,
 CSIRO
 O SSC
- Mrs Robyn M. Nolan MLA
 ACT Legislative Assembly
 1 Constitution Avenue
 P.O. Box 1020
 Canberra ACT 2601
 Australia
 Tel. (61 62) 758574
 Fax (61 62) 758114
 O ACT Legislative
 Assembly
- Mr Peter Nugent
 Dept. of the Arts, Sport, the
 Environment, Tourism &
 Territories
 31 Winswood Close
 Vermont South VIC 3133
 Australia
 Tel. (61 3) 7203233
 Fax (61 3) 7205250
 O Dept. of the Arts, Sport,
 the Environment,
 Tourism & Territories
- Ms Molly Olson
 Greenpeace Australia
 P.O. Box 51
 East Balmain NSW 2041
 Australia
 Tel. (61 2) 5557044
- Fax (61 2) 5557154
 NG Greenpeace Australia
 IN Greenpeace International
- Mr Victor Onions
 Crocodile Farmers Association
 of Australia
 P.O. Box 669
 Cairns QLD 4870
 Australia
 Tel. (61 70) 547955
 Fax (61 70) 331048
 O Crocodile Farmers
 Association of Australia
 O SSC
- Mrs Kay Osborne
 c/- Harper-MacRae &
 Associates Plc
 Level 67, MLC Centre
 Martin Place
 Sydney NSW 2000
 Australia
 Tel. (61 2) 2387630
 Fax (61 2) 3211987
 Telex AA72566COHQ
 O
- Mr Robert Osborne
 c/- Harper-MacRae &
 Associates Plc
 Level 67, MLC Centre
 Martin Place
 Sydney NSW 2000
 Australia
 Tel. (61 2) 2387630
 Fax (61 2) 2211987
 Telex AA72566 COHQ
 O
- Mr Terry O'Brien
 National Association of Forest
 Industries
 P.O. Box 254
 West Perth WA
 Australia
 Tel. (61 9) 3222088
 Fax (61 9) 4811019
 O National Association of
 Forest Industries
- Commissioner Terry O'Shane
 Aboriginal and Torres Strait
 Islander Commission
 P.O. Box 17
 Woden
 Canberra ACT
 Australia
 Tel. (61 62) 893377
 Fax (61 62) 853742
 O Aboriginal and Torres
 Strait Islander Commis-
 sion
- Mr Eric I. Paling
 Murdoch University
 Biological and Environmental
 Science
 Murdoch WA 6150
 Australia
 Tel. (61 9) 3322385
 Fax (61 9) 3104997
 O Murdoch University
- Mr David Papps
 National Parks and Wildlife
 Service of New South Wales

P.O. Box 1967
Hurstville NSW 2220
Australia
Tel. (61 2) 5856477
Fax (61 2) 585655
Telex 26034 aa
GA National Parks and
Wildlife Service of New
South Wales

Mr Mark Parnell
Conservation Council of South
Australia
66 Grote Street
Adelaide SA 5000
Australia
Tel. (61 8) 2316586
Fax (61 8) 2311068
NG Conservation Council of
South Australia

Mrs Cathy Parsons
ACT Parks and Conservation
Service
P.O. Box 1119
Tuggeranung ACT 2909
Australia
Tel. (61 6) 2935125
Fax (61 6) 2935158
GA ACT Parks and
Conservation Service,
Conservation and Land
Management Branch

Mr Terence Peacock
Australian Trust for Conserva-
tion Volunteers
P.O. Box 423
Ballarat VIC 3350
Australia
Tel. (61 53) 327490
Fax (61 53) 332290
O Australian Trust for
Conservation Volunteers

The Hon. Bob Pearce
Minister for the Environment,
WA
Department of Conservation
and Land Management
8th Floor Curtin House
60 Beaufort Street
Perth WA 6000
Australia
GA Department of
Conservation and Land
Management, Western
Australia

Mr Rodney Pearse
Dept. of Parks, Wildlife and
Heritage, Tasmania
P.O. Box 44A
Hobart
Tasmania 7001
Australia
Tel. (61 02) 306230
Fax (61 02) 238765
GA Dept. of Parks, Wildlife
and Heritage, Tasmania

Dr Robert Prince
Western Australian Wildlife
Research Centre, Woodvale
P.O. Box 51
Wanneroo WA 6065

Australia
Tel. (61 9) 4055115
Fax (61 9) 3061641
Telex 94616 aa
GA ACT Parks and
Conservation Service,
Conservation and Land
Management Branch
O SSC

Ms Dianne Proctor
Executive Director
Family Planning Federation of
Australia
Suite 3, 1st Floor
LUA House
39 Geils Court
Deakin ACT 2600
Australia
Tel. (61 6) 2851244
Fax (61 6) 2825298
O Family Planning
Federation of Australia

Mr Stephen Francis Prytz
The Australian Manufacturing
Council Secretariat
P.O. Box 196
World Trade Centre
Melbourne VIC 3005
Australia
Tel. (61 3) 6115208
Fax (61 3) 6115232
O The Australian
Manufacturing Council
Secretariat

Mr Jim Puckridge
Conservation Council of South
Australia
3/75 Esplanade
Henley South
Adelaide SA 5022
Australia
Tel. (61 8) 2285566
NG Conservation Council of
South Australia

Dr Rosemary Purdie
Australian Heritage Commis-
sion
P.O. Box 1567
Canberra ACT 2601
Australia
Tel. (61 6) 2712111
Fax (61 6) 2732395
GA Australian Heritage
Commission

Ms Jill Reading
Australian Conservation
Foundation
79 Stirling St.
Perth WA 6000
Australia
Tel. (61 9) 2200669
Fax (61 9) 2200668
NG Australian Conservation
Foundation

Dr Trevor David Redhead
CSIRO
Division of Wildlife and
Ecology
P.O. Box 84
Lyneham ACT 2602

Australia
Tel. (61 6) 2421661
Fax (61 6) 2413343
O CSIRO

Ms Dorothy Redreau
Greening Australia
Unit 5
106 Oxford St.
Leederville WA
Australia
Tel. (61 9) 2275771
Fax (61 9) 2275760
O Greening Australia

Ms Mary Regts
Conservation Council of
Western Australia
P.O. Box 61
Inglewood WA 6052
Australia
Tel. (61 9) 271 7662
Fax (61 9) 220 0653
NG Conservation Council of
Western Australia

Dr Barry Richardson
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 62) 509400
Fax (61 62) 509449
Telex 62971 aa
GA Australian National
Parks and Wildlife
Service
O SSC

Mr Tim Richmond
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 62) 500223
Fax (61 62) 473528
Telex 62971
GA Australian National
Parks and Wildlife
Service

Ms Margaret Robertson
The Wilderness Society
1st Floor
53 Liverpool St.
Sydney NSW 2000
Australia
Tel. (61 2) 2677929
Fax (61 2) 2642673
NG Wilderness Society

Mr Peter Robertson
The Wilderness Society
P.O. Box 169
Stirling St.
Perth WA 6000
Australia
Tel. (61 9) 2200667
Fax (61 9) 2200653
NG The Environment Centre,
NT, Inc.
NG Wilderness Society

Mr Fred Robinson

Director of Planning and
Research
South-West Development
Authority
Australia
O

Ms Sally Robinson
Senior Environment Officer
c/o CALM
50 Hayman Rd.
Como WA 6152
Australia
O

Ms Jan Louise Rodda
Conservation Council of
Western Australia
19 Hubble St.
East Fremantle WA 6158
Australia
Tel. 339 2297
O Conservation Council of
Western Australia

Mr Peter Rosendorf
Press Secretary
Office of the Minister for the
Environment
Capita House
197 St George's Terrace
Perth WA 6000
Australia
O

Dr Helen Ross
Australian National University
Australia
O Australian National
University

Mr Jon Rowdon
The Wilderness Society
25 Crawshaw Crescent
Manning 6152
Australia
Tel. 450 3390
O Wilderness Society

Mr Graeme Rundle
WA National Parks and
Reserves Association
c/o The Peninsula Community
Centre
219 Railway Road
Maylands WA 6051
Australia
Tel. (61 2) 3234381
O DASETT

Mr Brian Sadler
Director of Water Resources
Water Authority WA
Australia
O Water Authority WA

Mr Uilou Samani
Murdoch University
School of Biological and
Environmental Sciences
Murdoch WA 6150
Australia
Tel. (61 9) 3142535
Fax (61 9) 3322738
O Murdoch University

- Ms Rachael Satour
Impaja Television
Alice Springs
Australia
O Impaja Television
- Mr Donald S. Saunders
Department of Conservation
and Environment, Victoria
240 Victoria Parade
East Melbourne VIC 3002
Australia
Tel. (61 3) 4124111
GA Department of
Conservation and
Environment, Victoria
- Mr Gary Saunderson
The Wilderness Society
P.O. Box 8169
Stirling St.
Perth WA 6000
Australia
Tel. (61 9) 2200667
Fax (61 9) 2200653
O The Wilderness Society
- Mr Frank J. Schaper
Greening Australia
31 Malcolm Street
Fremantle WA 6160
Australia
Tel. (61 9) 2276177
Fax (61 9) 2276871
NG Greening Australia
- Miss Martine Scheltema
Greening Australia
Unit 5
Leederville Village
106 Oxford Street
Leederville WA 6007
Australia
Tel. (61 9) 2275771
Fax (61 9) 2275760
NG Greening Australia
- Mr John Seed
Rainforest Information Centre
P.O. Box 368
Lismore NSW 2480
Australia
Tel. (61 66) 218505
Fax (61 66) 222339
O Rainforest Information
Centre
- Mr Jimmy Seow
Senior Environmental Officer
Petroleum Division Mines
Dept.
Perth WA
Australia
O Petroleum Division
Mines Dept.
- Mr Vincent Noel Serventy
President
Wild Life Preservation Society
of Australia
8 Reiby Road
Hunters Hill NSW 2110
Australia
Tel. (61 2) 3818020
Fax (61 2) 8173705
NG Wild Life Preservation
Society of Australia
- Mr Jim Sharp
Executive Director
Dept. of Conservation and
Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
Telex 94585 aa
O Dept. of Conservation
and Land Management,
Western Australia
- Dr Gwen Shaughnessy
Australian National Parks and
Wildlife Service
P.O. Box 636
Canberra ACT 2601
Australia
Tel. (61 62) 466211
Telex 62971 aa
GA Australian National
Parks and Wildlife
Service
- Dr Sydney Ronald Shea
Executive Director
Department of Conservation
and Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
GA Department of
Conservation and Land
Management, Western
Australia
IUCN Council Member
- Mr Brian Sheridan
National Association of Forest
Industries
37 Noble Court
Dianella
Australia
Tel. 2765527
O National Association of
Forest Industries
- Mr Jeff Short
Senior Experimental Scientist
CSIRO Division of Wildlife &
Ecology
L.M.B. 4
P.O. Midland
Australia
- Mr Gerard CWH Siero
Landmarc Consultancy
1 King Edward Street
South Perth WA 6151
Australia
O
- Mrs Rachel Siewert
Conservation Council of
Western Australia
79 Stirling St.
Perth WA 6000
Australia
Tel. (61 9) 2200652
Fax (61 9) 2200653
NG Conservation Council of
Western Australia
- Dr Chris Simpson
Western Australian Environ-
mental Protection Authority
1 Mount Street
Perth WA 6000
Australia
Tel. (61 9) 2227000
Fax (61 9) 3221598
O Western Australian
Environmental
Protection Authority
- Mr John Sinclair
Fraser Island Defenders
Organization
P.O. Box 71
Gladesville NSW 2111
Australia
Tel. (61 2) 8174660
Fax (61 2) 8161642
NG Fraser Island Defenders
Organization
- Mr Allan Andrew Skinner
Acting Executive Director
Department of Land Administ-
ration
WA State Government
Central Government Buildings
Cathedral Avenue
Perth WA 6000
Australia
Tel. (61 9) 3231222
Fax (61 9) 3231201
Telex 93784 lands aa
O Department of Land
Administration, WA
State Government
- Prof. Ralph Slatyer
Chief Scientist
Department of the Prime
Minister and Cabinet
Barton ACT 2600
Australia
Tel. (61 6) 2715217
ST DASETT
- Mr Jason Smith
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
O Australian Conservation
Foundation
- Mr Wayne Smith
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
O Australian Conservation
Foundation
- Mr Paulo Souza
P.O. Box 3582
Manuka ACT
Australia
O
- Mr Rod Squire
Forestry Commission of NSW
P.O. Box 2667
Sydney NSW 2000
Australia
Tel. (61 2) 2341517
GA Forestry Commission of
NSW
- Mr Bob Stensholt
Assistant Director General
Australian International
Development Assistance
Bureau (AIDAB)
P.O. Box 887
Canberra ACT 2601
Australia
Tel. (61 6) 2764009
Fax (61 6) 2764626
GA Australian International
Development Assistance
Bureau (AIDAB)
- Sir Ninian Stephen
Ambassador for the Environ-
ment
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories
- Mr John Stickney
Pastoralists and Graziers
Association of Western
Australia
789 Wellington Street
Perth WA 6000
Australia
Tel. (61 9) 3212788
Fax (61 9) 4814106
O Pastoralists and Graziers
Association of Western
Australia
- Ms Sharon Sullivan
Director
Australian Heritage Commis-
sion
P.O. Box 1597
Canberra ACT 2601
Australia
Tel. (61 6) 2712111
Fax (61 6) 2732395
GA Australian Heritage
Commission
- Ms Ros Sultan
Australian Conservation
Foundation
340 Gore St.
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation
- Dr Keith Suter
Foundation Director
Trinity Peace Research Institute
72 St. George's Terrace

Perth WA
Australia
Tel. (61 9) 4813773
Telex AA 96855
O Trinity Peace Research
Institute

Mr John Sutton
West Australian Environmental
Protection Authority
1 Mount Street
Perth WA 6000
Australia
Tel. (61 9) 2227000
Fax (61 9) 3221598
O West Australian
Environmental
Protection Authority

Mr Mark Swadling
c/- Harper-MacRae &
Associates Plc
Level 67, MLC Centre
Martin Place
Sydney NSW 2000
Australia
Tel. (61 2) 2387630
Fax (61 2) 2211987
Telex AA72566 COHQ
O

Mr Keith Tarlo
The Wilderness Society
130 Davey St.
Hobart
Tasmania 7000
Australia
Tel. (61 2) 349366
Fax (61 2) 235112
NG Wilderness Society

Ms Diane Mary Tarte
Australian Littoral Society, Inc.
P.O. Box 49
Moorooka QLD 4105
Australia
Tel. (61 7) 8485235
Fax (61 7) 8925814
NG Australian Littoral
Society, Inc.
NG Queensland Conserva-
tion Council

Mr Ian Taylor
Deputy Premier
WA State Government
Government House
Perth WA
Australia
O WA State Government

Mr Max Thorbjornsen
Peace Education Foundation
39 Holmesfield Crescent
Carine 6020
Australia
Tel. 447 6952
O Peace Education
Foundation

Mr John A. Tilemann
Dept. of Foreign Affairs and
Trade
Canberra ACT 2605
Australia
Tel. (61 6) 2612312

Fax (61 6) 2612144
O Dept. of Foreign Affairs
and Trade

Dr Susan Tingay
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Prof. Clem Tisdell
Department of Economics
University of Queensland
St Lucia QLD 4072
Australia
Tel. (61 7) 3773520
O University of Queens-
land

Mr Jeffery V. Townsend
Dept. of Environment, Land
and Planning
P.O. Box 158
Canberra ACT 2601
Australia
Tel. (61 6) 2468885
Fax (61 6) 2468579
O Australian Committee
for IUCN

Mr Phillip Toyne
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Dr Elizabeth Truswell
Dept. of Primary Industries
and Energy
Bureau of Mineral Resources
P.O. Box 378
Canberra ACT 2601
Australia
Tel. (61 62) 499427
Fax (61 62) 576465
O Dept. of Primary
Industries and Energy
O Australian National
Commission for
UNESCO

Dr Andy Turner
Ass. Secretary, Nature
Conservation
Dept. of the Arts, Sport, the
Environment, Tourism &
Territories
P.O. Box 787
Canberra City ACT 2601
Australia
Tel. (61 6) 2741599
Fax (61 6) 2573010
ST Dept. of the Arts, Sport,
the Environment,
Tourism & Territories

Mr Roger John Underwood
Dept. of Conservation and
Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
O Dept. of Conservation
and Land Management,
Western Australia

Mr Matti Urvet
Conservation Commission of
the Northern Territory
P.O. Box 496
Palmerston NT 0831
Australia
Tel. (61 89) 894533
GA Conservation Commis-
sion of the Northern
Territory

Mr Peter S. Valentine
Geography Department
James Cook University
Townsville QLD 4811
Australia
Tel. (61 77) 814111
Fax (61 77) 814020
O CNPPA

Senator Jo Vallentine
P.O. Box 137
Perth WA 6005
Australia
Tel. (61 9) 4811244
Fax (61 9) 3221040
O

Dr Kevin Vang
Wilderness Society
130 Davey Street
Hobart
Tasmania 7005
Australia
NG Wilderness Society
O Ministry of Environment
and Conservation, Papua
New Guinea

Dr Nigel Wace
Centre for Resource and
Environment Studies
Australian National University
Canberra ACT 2601
Australia
Tel. (61 6) 2490670
Fax (61 6) 2490757
Telex 62760
O COE

Dr Brian Harrison Walker
Chief
CSIRO
Division of Wildlife and
Ecology
P.O. Box 84
Lynham ACT 2602
Australia
Tel. (61 6) 2421742
Fax (61 6) 2411742
Telex 62284
O COE

Mr Ken Wallace

Dept. of Conservation and
Land Management
P.O. Box 100
Narrogin 6312
Australia
Tel. (61 98) 811113
Fax (61 98) 811645
O Dept. of Conservation
and Land Management,
Western Australia

Mr Ray Wallace
Director
Office of Catchment Manage-
ment
c/o CALM
50 Hayman Rd.
Como WA 6152
Australia
O

Mrs Hazen Waller
PLEA Network Greenhouse
Action Australia
RMB 878
Creswick VIC 3363
Australia
Tel. (61 53) 434288
O PLEA Network
Greenhouse Action
Australia

Mr Doug Watkins
Lot 25
Kinley Road
Banjup 6164
Australia
Tel. (61 9) 4172422
O

Dr John Richard Watson
Dept. of Conservation and
Land Management
44 Serpentine Road
Albany WA 6330
Australia
Tel. (61 98) 417133
Fax (61 98) 417105
O Dept. of Conservation
and Land Management,
Western Australia

Dr Christopher Watts
Chief Scientist
South Australian Museum
North Terrace
Adelaide SA 5000
Australia
Tel. (61 8) 2238873
Fax (61 8) 2321714
O SSC

Dr Grahame J.W. Webb
Conservation Commission of
the Northern Territory
G. Webb Pty. Ltd.
P.O. Box 38151. 0821
Winnellie NT 0821
Australia
Tel. (61 89) 221355
Fax (61 89) 470678
GA Conservation Commis-
sion of the Northern
Territory
O SSC

Prof. Leonard Webb
A.E.S. Griffith University
c/o P.O. Box 338
Alderley (Brisbane) QLD 4051
Australia
Tel. (61 7) 3565782
O COE

Mr Neil Westbury
State Manager ATSIC WA
Aboriginal and Torres Strait
Islander Commission
117 Darlington Rd.
Darlington
Perth WA 6070
Australia
Tel. (61 9) 2203200
O Aboriginal and Torres
Strait Islander Commis-

Mr Garry Whisson
Western Australian Environ-
mental Protection Authority
1 Mount Street
Perth WA 6000
Australia
Tel. (61 9) 2227000
Fax (61 9) 3221598
O Western Australian
Environmental
Protection Authority

Mr Bernard White
Institute of Foresters of
Australia Inc.
338 Salvado Road
Floreat Park WA 6014
Australia
Tel. (61 9) 3874869
NG Institute of Foresters of
Australia Inc.

Mr John F. Whitehouse
17 Mawson Street
St Ives NSW 2075
Australia
Tel. (61 2) 233622
O CNPPA

Dr Keith D. Williams
ACT Parks and Conservation
Service
P.O. Box 1119
Tuggeranong ACT 2905
Australia
Tel. (61 6) 2463187
Fax (61 6) 2470852
O ACT Parks and
Conservation Service

Mr Robyn Williams
Chairman of the Commission
for the Future
Australia
O

Mrs Lynette Williamson
International Association of
Zoo Educators
Perth Zoo Education Centre
20 Labouchere Road
South Perth WA 6151
Australia
Tel. (61 9) 4740360
Fax (61 9) 3673921

IN International Association
of Zoo Educators

Mr Brian Wills-Johnson
Public Relations Manager
ALCOA of Australia Ltd.
535 Bourke Street
Melbourne VIC 3000
Australia
Tel. (61 3) 6166111
Fax (61 3) 6166143
Telex 30446
O ALCOA of Australia
Ltd.

Dr Barry Robert Wilson
Dept. of Conservation and
Land Management
P.O. Box 104
Como WA 6152
Australia
Tel. (61 9) 3868811
Fax (61 9) 3861578
GA Dept. of Conservation
and Land Management,
Western Australia

Dr George R. Wilson
Dept. of Primary Industries
and Energy
Bureau of Rural Resources
Canberra City ACT 2600
Australia
Tel. (61 6) 2724544
Fax (61 6) 2724533
Telex 62188 a
O SSC

Ms Margaret Wilson
Conservation Council of
Western Australia
7 Longfellow Road
Gooseberry Hill WA 6076
Australia
Tel. 293 2078
Fax 220 0653
NG Conservation Council of
Western Australia

Ms Felicity Wishart
Australian Conservation
Foundation
340 Gore Street
Fitzroy VIC 3065
Australia
Tel. (61 3) 4161455
Fax (61 3) 4160767
NG Australian Conservation
Foundation

Mr Simon Woodley
Great Barrier Reef Marine Park
Authority
P.O. Box 791
Canberra ACT 2601
Australia
Tel. (61 6) 2470211
Fax (61 6) 2475761
GA Great Barrier Reef
Marine Park Authority,
Queensland

Dr Paul Wycherley
Kings Park and Botanic Garden
Kings Park Board
West Perth WA 6005

Australia
Tel. (61 9) 3214801
Fax (61 9) 3225064
O Kings Park Board/Kings
Park Botanic Garden

Dr John Young
University of Adelaide
Adelaide
Australia
O

Bahamas

Mrs Lynn P. Holowesko
The Bahamas National Trust
Higgs & Kelly
P.O. Box N-1113
Nassau
Bahamas
Tel. (809) 3227511
Fax (809) 3250725
NG The Bahamas National
Trust
O CNPPA

Bangladesh

Mr Rahat Uddin Ahmed
Executive Director
Comilla Proshika
House No 12
Road 12
Dhanmondi R/A
Dhaka 1209
Bangladesh
Tel. (88 02) 811239
NG Comilla Proshika Centre
for Development

Mr A.M.M. Nurul Alam
Ministry of Environment and
Forest
National Botanic Garden
Mirpur
Dhaka 1216
Bangladesh
Tel. (88 02) 381038
ST Ministry of Environment
and Forest

Mr Mir Masud Ali
Polli Unnayan Sangstha
(POUSH)
22 Rupchan Lane (1st Floor)
Sutrapur
Dhaka 1100
Bangladesh
Tel. (88 02) 241118
Fax (88 02) 813218
Telex 632406 SEDI BJ
NG Polli Unnayan Sangstha
(POUSH) (Rural
Development Organiza-
tion)

Md Azam
Public Relations Officer
Ministry of Environment and
Forest
Building 6
Bangladesh Secretariat

Dhaka
Bangladesh
Tel. (88 02) 416035
ST Ministry of Environment
and Forest

Dr Monowar Hossain
Managing Director
Multidisciplinary Action
Research Centre (MARC)
House 2A
Road 5
Dhanmandi
Dhaka 1205
Bangladesh
Tel. (88 02) 861903
Fax (88 02) 883542
Telex 642940
NG Multidisciplinary Action
Research Centre (MARC)

Mr Sanowar Hossain
Secretary
Polli Unnayan Sangstha
(POUSH)
43 New Eskaton Road
Dhaka
Bangladesh
Tel. (88 02) 402801
Telex 642639 ocn bj
NG Polli Unnayan Sangstha
(POUSH) (Rural
Development Organiza-
tion)

Prof. K.Z. Husain
President
Wildlife Society of Bangladesh
38/B Issakhan Road
Dhaka 1000
Bangladesh
Tel. (88 02) 501306
NG Wildlife Society of
Bangladesh

Ms Liana Kaiser-Mahmud
Programme Officer
FAO Representative's Office in
Bangladesh
P.O. Box 5039
Dhaka PC 1205
Bangladesh
Tel. (88 02) 310311-4
Fax (88 02) 813446
O FAO Representative's
Office in Bangladesh

Dr Ahmed Kamal
Multidisciplinary Action
Research Centre
Dept. of History
Dhaka University
Dhaka
Bangladesh
Tel. (88 02) 329857
Fax (88 02) 883542
Telex 642940 adab
NG Multidisciplinary Action
Research Centre

Ms Veena Khaleque
United Nations Development
Programme (UNDP)
House No 60, Road No 11-A
Dhanmandi Residential Area
Dhaka

Bangladesh
Tel. (88 02) 310370
Fax (88 02) 8131%
Telex 642582 UNDP BJ
O United Nations
Development Programme (UNDP)

Dr M. Salar Khan
Department of Botany
University of Dhaka
Dhaka 1000
Bangladesh
Tel. (88 02) 506378
O SSC

Dr Fasih Uddin Mahtab
Planning and Development
Services Limited
31 Bijoy Nagar
North South Road
Dhaka 1000
Bangladesh
Tel. (88 02) 405064
Fax (88 02) 813218
Telex 642546 CKC BJ
O Planning and Development Services Limited

Mr Haroun Er Rashid
Polli Unnayan Sangstha
(POUSH)
43 New Eskaton Road
Dhaka 1000
Bangladesh
Tel. (88 02) 402801
Telex 642639 OCNBJ
NG Polli Unnayan Sangstha
(POUSH) (Rural
Development Organization)

Barbados

Mr David Simmons
Caribbean Conservation
Association
Savannah Lodge
The Garrison
St Michael's
Barbados
Tel. (809) 4265373
Fax (809) 4298483
IN Caribbean Conservation
Association

Belgium

Mrs Roseline Beudels
IRSNB
29 rue Vautier
1040 Bruxelles
Belgium
ST Ministere de l'Education
Nationale

Dr Jean-Pierre d'Huart
Director of Conservation
WWF-Belgium
Chaussee de Waterloo 608
1060 Brussels
Belgium

Tel. (32 2) 3473030
Fax (32 2) 3440511
Telex 23986 wwfbel
NG Université de Liège
NGWWF-Belgium
O SSC

Dr H. Kalchreuter
Fédération des Associations de
Chasseurs de la CEE (FACE)
European Wildlife Research
Institute (EWI)
7823 Bonndorf-Glashuette
Germany
Tel. 7653 1891
Fax 7653 9269
IN Federation des
Associations de
Chasseurs de la CEE
(FACE)

Dr Wilfried de Pauw
Ambassador
Royal Belgian Embassy
19 Arkana Street
Canberra ACT 2600
Australia
Tel. (61 6) 2732501
Fax (61 6) 2733392
ST Ministere de l'Education
Nationale

Mr Claus Stuffmann
Commission of the European
Communities
Directorate General Environ-
ment
Rue de la Loi 200
B-1049 Brussels
Belgium
Tel. (32 2) 2354116
Fax (32 2) 2350144
Telex 21877 comeu b
O Commission of the
European Communities

Belize

Mrs Janet Patricia Gibson
President
Belize Audubon Society
P.O. Box 282
Belize City
Belize
Tel. (5012) 44015
Fax (5012) 74819
NG Belize Audubon Society

Mr Vincent Gillett
Fisheries Dept.
P.O. Box 148
Belize City
Belize
Tel. (5012) 44552
O

Bhutan

Mr Til Mongar
Dept. of Forestry
Royal Government of Bhutan
P.O. Box 130

Thimphu
Bhutan
NGWWF-US

Bolivia

Sra Mónica Moraes M.Sc.
Liga de Defensa del Medio
Ambiente (LIDEMA)
Casilla 11237
La Paz
Bolivia
Tel. (591 2) 356249
NG Liga de Defensa del
Medio Ambiente
(LIDEMA)
O SSC
Sr Juan Carlos Navarro
Fundación Amigos de la
Naturaleza
Attn: Sr Justiniano
Av. Irala 421
P.O. Box 2241
41327 Santa Cruz
Bolivia
Tel. (591 33) 33806
Fax (591 33) 41327
NG Fundación Amigos de la
Naturaleza

Botswana

Mr S.D. Liphuko
Acting Permanent Secretary
Ministry of Local Government
and Lands
P. Bag 006
Gaborone
Botswana
Tel. (267) 354254
Fax (267) 352384
Telex 2589bd
O Government of
Botswana

Dr Paul Shaw
Kalahari Conservation Society
P.O. Box 859
Gaborone
Botswana
Tel. (267) 314259
Fax (267) 374557
Telex 2410 bd
NG Kalahari Conservation
Society

Brazil

Sr Nauile Barros Filho
Zootecnista
Sociedade de Defesa do
Pantanal (SODEPAN)
Parque de Exposicoes "Laucido
Coelho"
Avenida Américo Carlos de
Costa, 320
Joquei Clubs
CEP 79020 Campo Grande/MS
Brazil

Tel. (55 67) 7211891
Fax (55 67) 7215026
NG Sociedade de Defesa do
Pantanal (SODEPAN)

Prof. Keith Brown, Jr.
Universidade Estadual de
Campinas
Departamento de Zoologia
Instituto de Biologia
C.P. 6109
Campinas Sao Paulo 13.081
Brazil
Tel. (55 19) 2397022
Fax (55 19) 2393124
O SSC

Dr José Pedro de Oliveira
Costa
Vice President
Associação de Defesa do Meio
Ambiente
Rua Conselheiro Carrao 640
Bela Vista 01328
Sao Paulo
Brazil
Tel. (55 11) 2825806
Fax (55 11) 2805468
NG Associação Brasileira de
Ecologia
NG Associação de Defesa do
Meio Ambiente
(ADEMA)
NG Fundação Pró-Natureza
(FUNATURA)
NG Sociedade Brasileira de
Paisagismo
O Secretaria do Meio
Ambiente do Estado de
Sao Paulo
O Companhia Energetica
de Sao Paulo (CESP)
IUCN Council Member

Prof. Norma Crud Maciel
Fundação Brasileira para a
Conservação da Natureza -
FBCN
Rua Miranda Valverde, 103
Botafogo
22281 Rio de Janeiro, RJ
Brazil
Tel. (55 21) 2665008
Telex 2137984 fbcn br
NG Fundação Brasileira para
a Conservação da
Natureza (FBCN)

Mrs Ana Maria Fonseca
General Director
Biodiversity Foundation
R. Bueno Brandao 372
Sta Tereza
Belo Horizonte
MG 31010
Brazil
Tel. (55 31) 22675985
Fax (55 31) 0736234
O Biodiversity Foundation

Sr Ricardo Freire da Silva
Associação Brasileira de Caga e
Conservação (ABC)
Rua Mourato Coelho, 1372
Sao Paulo, SP - 05417
Brazil

Tel. (55 11) 8138238
Fax (55 11) 2209955
NG Associação Brasileira de
Caça e Conservação
(ABC)
NG Associação dos
Pescadores com Isca
Artificial (APIA)

Dra Maria Tereza Jorge-Pádua
Presidente
Fundação Pró-Natureza
SCLN 107, Bloco B, salas
201/10
70.743 Brasília - DF
Brazil
Tel. (55 61) 2745449
Fax (55 61) 2745324
NG Fundação Pró-Natureza
(FUNATURA)
O CNPPA

Ms Sonia E. Rigueira
Conservation International
Rua Bueno Brandao 393
31.010 Bela Horizonte - MG
Brazil
Tel. (55 31) 2265145
Fax (55 31) 2265145
IN Conservation Inter-
national

Dr Celso S. Schenkel
Director
Instituto Brasileiro do Meio
Ambiente (IBAMA)
Av. L4 Norte
SAIN
70800 Brasilia DF
Brazil
Tel. (55 61) 2253241
GA Institute Brasileiro do
Meio Ambiente
(IBAMA)

Mr Herbert Schubart
Special Advisor
Instituto Nacional de Pesquisas
da Amazonia
Alameda Cosme Ferreira
1756 CX P478
CEP 69083
Manaus
Amazonas
Brazil
Tel. (55 92) 2369683
Fax (55 92) 2360255
O Instituto Nacional de
Pesquisas da Amazonia

Bulgaria

Prof. Dr S. T. Nedialkov
Conseil Ecologique
Académie Bulgare des Sciences
1000 Sofia
Pl. Slaveikov 7
Bulgaria
Tel. (359 2) 892476
O CNPPA

Burkina Faso

Ms Marguerite Kaboré
Ministère de l'Environnement
et du Tourisme
03 B.P. 7044
Ouagadougou 03
Burkina Faso
Tel. (226) 307027
Fax (226) 307764
Telex 5555 segegouv
ST Ministère de
l'Environnement et du
Tourisme

Mr Jean Baptiste Kambou
Secrétaire General
Ministère de l'Environnement
et du Tourisme
Ouagadougou
Burkina Faso
ST Ministère de
l'Environnement et du
Tourisme

Cameroon

M M. Amine
Ministère du Tourisme
Yaoundé
Cameroon
Tel. (237) 220007
Fax (237) 8318kn
ST Ministère du Tourisme

M Joseph B. Besong
Direction des Forêts
Ministère de l'Agriculture
Yaoundé
Cameroon
Tel. (237) 221106
Telex 8325 kn
ST Ministère du Tourisme

Mr Augustin Bokwe
Director
Wildlife and National Parks
Ministry of Tourism
Yaounde
Cameroon
Telex CG TOUR 8318kn
ST Ministère du Tourisme

Mr Tony Utanga
Ministry of Internai Affaire
P.O.Box 98
Rarotonga
Cameroon
Tel. (237) 29370
O CNPPA

Canada

Dr Frank Baldwin
Ducks Unlimited Canada
1190 Waverley St.
Winnipeg
Manitoba R3T 2E2
Canada
Tel. (1 204) 4771760
Fax (1 204) 4527560
NG Ducks Unlimited Canada

Mr James Beckett
Dept. of Fisheries and Oceans
Fisheries Research Branch
200 Kent St.
Ottawa, Ontario K1A 0E6
Canada
Tel. (1 613) 9900279
Fax (1 613) 9969055
GA Government of Canada
Dept. of Fisheries and
Oceans

Prof. Dr Tony Blackburn
Nipissing University College
North Bay
Ontario P1B 8L7
Canada
Tel. (1 705) 4743450
Fax (1 705) 4741947
O

M Jean-Luc Bourdages
Union québécoise pour la
conservation de la nature
160, 76e Rue Est
Charlesbourg
Québec G1H 7H6
Canada
Tel. (1 418) 6289600
Fax (1 418) 6263050
NG Union québécoise pour
la conservation de la
nature

Mr Ken Brynaert
200 - F Woodridge Cresnet
Neapean, Ontario K2B 7S9
Canada
Tel. (1 613) 8286915
Fax (1 613) 8286915
NG Fondation International
pour la Sauvegarde du
Gibier (FISG) (France)
IN European Bureau for
Conservation and
Development
O Fur Institute of Canada
IUCN Council Member

Dr James R. Butler
Department of Forest Science
University of Alberta,
Edmonton
855 General Service Building
Alberta, Edmonton T6G 2G6
Canada
Tel. (1 403) 4922819
Fax (1 403) 4924323
O CNPPA

Mr Tony Clarke
Director General
Canadian Wildlife Service
17th Floor
Place Vincent Massey
Hull, Quebec K1A 0H3
Canada
Tel. (1 819) 9971301
Fax (1 819) 9536283
GA Canadian Wildlife
Service—Environment
Canada

Mr George Clavelle
The Wood Bison Re-
establishment Foundation
253-375 York Ave.

Winnipeg, Manitoba R3C 3J3
Canada
Tel. (1 204) 9439581
Fax (1 204) 9571067
NG The Wood Bison
Re-establishment
Foundation

Ms Sylvie Côté
Environment Canada
10 Rue Wellington
22eme Etage, Tour Nord
Hull, Quebec K1A 0H3
Canada
Tel. (1 819) 9539000
Fax (1 819) 9537025
ST Canadian Parks
Service—Environment
Canada

Mr Roger Dumelie
Canadian International
Development Agency
200 Promenade du Portage
Hull, Quebec K1A 0G4
Canada
Tel. (1 819) 9943380
Fax (1 819) 9534676
O Canadian International
Development Agency

Dr Martin H. Edwards
Professor of Physics
Royal Military College
Kingston, Ontario K7K 5L0
Canada
Tel. (1 613) 5416414
Fax (1 613) 5429489
NGWWF - Canada
NG Canadian Nature
Federation (CNF)
NG Federation of Ontario
Naturalists
O SSC
O CEL

Mr Harold K. Eidsvik
Chairman
IUCN Commission on National
Parks and Protected Areas
Canadian Parks Ser-
vice—Environment Canada
Department of the Environ-
ment
Ottawa, Ontario K1A 0H3
Canada
ST Canadian Parks
Service—Environment
Canada
O CNPPA
IUCN Council Member

Dr Bert Einsiedel
Protected Areas Management
Program
Faculty of Extension
Students Union Building
University of Alberta
Edmonton, Alberta T6G 2J7
Canada
Tel. (1 403) 4923029
Fax (1 403) 4920627
O CEC

Mr Bob Gardiner
Executive Vice President

Canadian Association for
Humane Trapping
1202-1390 Bay Street
Toronto
Ontario M5H 2Y2
Canada
Tel. (1 416) 363 2614
Fax (1 416) 363 8451

O Canadian Association for
Humane Trapping

Ms Cindy Gilday
RR Department of Northwest
Territories
Yellowknife NWT X1A 2L9
Canada
Tel. (1 403) 9203391
Fax (1 403) 8730114
O Department Renewable
Resources, Government
of the North West
Territories

Mr George Greene
IUCN Consultant
Greene Associates
1 Nicholas St.
Suite 406
Ottawa K1N 7B7
Canada
Tel. (1 613) 230 0162
Fax (1 613) 563 4758

NG School for Resource &
Environmental Studies,
Dalhousie University
O CESP

Prof. Peter Jacobs
Chairman, IUCN Commission
on Sustainable Development
644 Belmont Ave.
Westmount, Quebec H3U 2W2
Canada
Tel. (1 514) 3437119
Fax (1 514) 3432183
O CESP
IUCN Council Member

Mr Norman James
703 Evans Ave.
Suite 202
Toronto, Ontario M9C 5E9
Canada
Tel. (1 416) 6950311
Fax (1 416) 6950381
O WWF International

Dr David M. Jarzen
Canadian Museum of Nature
P.O. Box 3443, Station D
Ottawa, Ontario K1P 6P4
Canada
Tel. (1 613) 9540355
Fax (1 613) 9544724
GA Canadian Museum of
Nature

Mr Harvey Jessup
Fur Harvest Manager
Fur Institute of Canada
Yukon Renewable Resources
Fish & Wildlife Manager
P.O. Box 2703
Whitehorse, Y1A 2C6
Canada
Tel. (1 403) 6675767

Fax (1 403) 6684363
O Fur Institute of Canada

Mr Sven Jurschewsky
Deputy Director, Environment
External Affairs Canada
Department of the Environ-
ment

Ottawa, Ontario K1A OH3
Canada
ST Canadian Parks
Service—Environment
Canada

Mr Peter Kilburn
President and CEO
International Institute for
Sustainable Development
Office No. 202
333 Broadway Ave.
Winnipeg, Manitoba R3C 0S9
Canada
Tel. (1 204) 9450985
Fax (1 204) 9450999

O International Institute for
Sustainable Develop-
ment

Mr Kevin Lloyd
Department of Renewable
Resources
Government of the North West
Territories
Yellowknife NWT X1A 2L9
Canada

Tel. (1 403) 8737411
Fax (1 403) 8730293
O Department Renewable
Resources, Government
of the North West
Territories

Mr David Morton Lohnes
Canadian Parks Service
10 Wellington St.
Hull, Quebec K1A OH3
Canada
Tel. (1 819) 9942639
Fax (1 819) 9945140
ST Canadian Parks
Service—Environment
Canada

M Harvey L. Mead
Ministere de l'Environnement
du Quebec
3900 Rue Marly, 6e etage
Sainte-Foy G1X 4E4
Canada
Tel. (1 418) 6437860
Fax (1 418) 6437812
GA Ministere de
l'Environnement du
Quebec

Mr Duncan Stewart Morrison
Executive Vice-President
Ducks Unlimited Canada
1190 Waverley St.
Winnipeg Manitoba R3T 2E2
Canada
Tel. (1 204) 4521760
Fax (1 204) 4527560
NG Ducks Unlimited Canada

Dr David Munro
Director, WCS 90s Project
2513 Amherst Ave.
Sidney BC V8L 3H1
Canada
Tel. (1 604) 6560367
O CESP
Honorary Member of IUCN

Prof. James Gordon Nelson
Heritage Resources Centre
University of Waterloo
Waterloo, Ontario N2L 3G1
Canada
Tel. (1 519) 8851211
Fax (1 519) 7462031
O CNPPA
O COE

Mr Douglas K. Pollock
Acting Director General
Canadian Wildlife Ser-
vice—Environment Canada
17th Floor
Place Vincent Massey
Hull, Quebec K1A OH3
Canada
Tel. (1 819) 9971245
Fax (1 819) 9536283
GA Canadian Wildlife
Service—Environment
Canada

Mr Robert Prescott-Allen
PADATA
627 Aquarius Road
RR2 Victoria, BC V9B 5B4
Canada
Tel. (1 604) 4741904
Fax (1 604) 4746976
O SSC
O CNPPA
O CESP

Dr George Rabb
Calgary Zoological Society
Attn: Mr Karsten
P.O. Box 3036
Station "B"
Calgary, Alberta T2M 4R8
Canada
Tel. (1 403) 2329300
NG Calgary Zoological
Society
NG Metropolitan Toronto
Zoological Society
O SSC
IUCN Council Member

Mr Brian Roberts
Environment Canada
Indian Affairs and Northern
Development, Fur Trade
Section
Les Terrasses de la Chaudiere
Hull, Quebec K1A OH4
Canada
Tel. (1 819) 9977247
Fax (1 819) 9970514
ST Canadian Parks
Service—Environment
Canada

Mr Ralph Roberts
Canadian International
Development Agency

200 Promenade du Portage
Hull, Quebec K1A OG4
Canada
Tel. (1 819) 9976586
Fax (1 819) 9534676
O Canadian International
Development Agency

Dr Ian Rutherford
Canadian Parks Service
10 Wellington St.
Hull, Quebec K1A OH3
Canada
Tel. (1 819) 9979525
Fax (1 819) 9539745
ST Canadian Parks
Service—Environment
Canada

M Donat Savoie
Senior Advisor
Inuit Circumpolar Conference
(ICC)
650, 32nd Ave.
Suite 404
Lachine, Quebec H8T 3K4
Canada
Tel. (1 514) 6370203
Fax (1 514) 6373146
IN Inuit Circumpolar
Conference (ICC)

Ms Mary Simon
President
Inuit Circumpolar Conference
(ICC)
650, 32nd Ave.
Suite 404
Lachine, Quebec H8T 3K4
Canada
Tel. (1 514) 6370203
Fax (1 514) 6373146
IN Inuit Circumpolar
Conference (ICC)

Dr D. Scott Slocombe
Wilfred Laurier University
Dept. of Geography
Waterloo, Ontario N2L 3C5
Canada
Tel. (1 519) 8848854
Fax (1 519) 8848854
O

Mr Val Smyth
Protected Areas Management
Program
Faculty of Extension
University of Alberta
216 Students Union Building
Edmonton, Alberta T6G 2J7
Canada
Tel. (1 403) 4923029
Fax (1 403) 4920627
O CEC

Chad

M Ban-Ymary Daboulaye
Directeur
Direction des Parcs Nationaux
et Reserves de Faune
B.P. 905
Njamena

Chad
Tel. (235) 512305
Fax (235) 514397
O Direction des Parcs
Nationaux et Reserves
de Faune, Ministère du
Tourisme et de
l'Environnement
O CNPPA

Chile

Abogado Pedro Fernandez
Bitterlich
Presidente
Comité Nacional pro Defensa
de la Fauna y Flora
Casilla 3675
Santiago
Chile
Tel. (56 2) 771607
Fax (56 2) 377290
NG Comité Nacional pro
Defensa de la Fauna y
Flora (CODEFF)

Dr Alfonso A. Glade
CONAF
Av. Bulnes 259
OF 604
Santiago de Chile
Chile
Tel. (56 2) 6996677
Fax (56 2) 715881
Telex 240001 conaf cl
O CONAF

Sr Carlos Noton
Jefe de Departamento
Corporación Nacional Forestal
(CONAF)
Avnda. Bulnes 259
Santiago
Chile
Tel. (56 2) 6991257
Fax (56 2) 715881
Telex 240001 conaf cl
GA Corporación Nacional
Forestal y de Protección
de Recursos Naturales
Renovables (CONAF)

Dr Miguel Stutzin Schottlander
Comité Nacional pro Defensa
de la Fauna y Flora
Santa Filomena No. 185
Casilla 3675
Santiago
Chile
Tel. (56 2) 377290
Fax (56 2) 377290
NG Comité Nacional pro
Defensa de la Fauna y
Flora (CODEFF)

Sr Hernan Torres
IUCN-Consultant
Avda Bulnes 259, of. 604
Santiago
Chile
Tel. (562) 6991257
Fax (562) 715881
Telex 240001 conaf cl
O SSC
O CNPPA

China

Mr Dong Zhiyong
China Wildlife Conservation
Association
Hepingli, Beijing 100714
China
Tel. (86 1) 4216343
Fax (86 1) 4214180
NG China Wildlife
Conservation Associa-
tion

Mr Hsu Kuo-Shih
Superintendent
Taroko National Park
4 Tien Hsiang Road Hualien
Taiwan 97203
China
O Taroko National Park

Prof. Ji Weizhi
Vice-Director
Division of Primate Research
Kunming Institute of
Zoology
Academia Sinica
Kunming, Yunnan 650107
China
Tel. (86 8) 7182661
O SSC

Prof. Liu Yu Hu
South China Institute of Botany
Academia Sinica
Guangzhou
China
Tel. (86 20) 705626
NG South China Institute of
Botany Academia Sinica
O SSC

Mr Liu Yuan
China Wildlife Conservation
Association
Hepingli, Beijing 100714
China
Tel. (86 1) 4213184
Fax (86 1) 4219149
NG China Wildlife
Conservation Associa-
tion

Prof. Dr Kuang Yang Lue
Professor
National Taiwan Normal
University Dept. of Biology
#88, Sec. 5, Roosevelt Road
Taipei 11718
Taiwan
China
Tel. (886 2) 9326234
Fax (886 2) 9312904
O SSC

Mr Meng Xianlin
China Wildlife Conservation
Association
Hepingli, Beijing 100714
China
Tel. (86 1) 4216343
Fax (86 1) 4214180
NG China Wildlife
Conservation Associa-
tion

Ms Kristin Nowell
Consultant
National Taiwan University
Sealed Air Corporation
No 20 LN 238
Tun HWA N. Road
Taipei
China
Tel. (886 2) 3634606
Fax (886 2) 7135334
O SSC

Prof. Wang Sung
Executive Vice-Chairman
Endangered Species Scientific
Commission, PRC
Institute of Zoology
Academia Sinica
19 Zhong-guan-cun Lu
Haidian, Beijing 100080
China
Tel. (86 1) 2562717
Fax (86 1) 2565689
Telex 22040 baoas cn
O SSC

Prof. Wang Xianpu (Huen-pu)
Institute of Botany, Academia
Sinica
141 Hsichimenwai St.
Beijing 100044
China
Tel. (86 1) 8312840
Fax (86 1) 8312840
AF Institute of Botany,
Academia Sinica
O SSC
O CNPPA

Prof. Kaiya Zhou
Nanjing Normal University,
Dept. of Biology
Nanjing Normal University
Nanjing 210024
China
Tel. (86 25) 631636
Fax (86 25) 307448
O SSC

Colombia

Dr Julio Carrizosa Umaña
Calle 10 No. 1-87
Apto. 60076
Bogota D.F.
Colombia
Tel. (571)2411922
O

Sra Elsa Matilde Escobar
Sociedad Colombiana de
Ecología
Calle 71A # 6-30 Piso 17
Bogota
Colombia
Tel. (57 1) 2127209
Fax (57 1) 2119776
NG Fundación Natura (FN)
NG Fundación Puerto
Rastrojo (FBPR)
NG Sociedad Colombiana de
Ecología

Sr Juan Mayr Maldonado
Director ejecutivo
Fundación Pro-Sierra Nevada
de Santa Marta
Apartado Aero 5000
Bogota
Colombia
Tel. (57 1) 2173487
Fax (57 1) 2183256
NG Fondo para la Protección
del Medio Ambiente en
Colombia (FEN
COLOMBIA)
NG Fundación Pro-Sierra
Nevada de Santa Marta

Dr Antonio Puerto Tovar
Embajador
Fundación Natura-Colombia
Embassy of Colombia
101 Northbourne Avenue
Turner, ACT 2601
Canberra
Australia
Tel. (61 6) 2951384
Fax (61 6) 2571448
O Fundación Natura-
Colombia

Dr Heliodoro Sanchez
Specialist Professional
INDERENA
Apartado Aereo 13458
Bogota
Colombia
Tel. (57 1) 2860601
Fax (57 1) 2859987
Telex 44428
NG Fondo para la Protección
del Medio Ambiente en
Colombia (FEN
COLOMBIA)
O INDERENA
O CNPPA

Congo

Dr Assitou Dinga
Directeur
Direction de la Faune Ministère
de l'économie forestière
B.P. 2153
Brazzaville
Congo
Tel. (242) 831718
Fax (242) 832458
O Direction de la Faune
Ministère de l'économie
forestière du Congo

M Dominique N'Sosso
Projet Inventaire et Aménage-
ment de la Faune
B.P. 2153
Brazzaville
Congo
Tel. (242) 831718
Fax (242) 832458
O CNPPA

Costa Rica

Mr Jim Barborak
University for Peace/Wildlife
Conservation International
Apartado 277
3000 Heredia
Costa Rica
Tel. (506) 379976
Fax (506) 242053
NG University for Peace/
Wildlife Conservation
International
O SSC
O CNPPA

Ing Mario A. Boza
Viceministro
Ministerio de Recursos
Naturales, Energía y Minas
Apartado 10104
1000 San José
Costa Rica
Tel. (506) 552122
Fax (506) 570697
O Ministerio de Recursos
Naturales, Energía y
Minas
O CNPPA

Dr Gerardo Budowski
Honorary Member of IUCN
P.O. Box 198
2300 Curridabat
San José
Costa Rica
Tel. (506) 253008
Fax (506) 534227
Telex 3534 Horizo Cr
O CEC
O COE

Lic Inés Gallegos Gurdian
Fundación de Parques
Nacionales
Apto. 1108-1002
Paseo de los Estudiantes
San José
Costa Rica
Tel. (506) 330116
Fax (506) 336838
NG Fundación de Parques
Nacionales

Dr Rodrigo Gamez
Director
Instituto Nacional de
Biodiversidad
Santo Domingo
3100 Heredia
Costa Rica
Tel. (506) 409287
Fax (506) 362816
O World Resources
Institute

Sr Juan Carlos Godoy
Centro Agronómico Tropical
de Investigación y
Enseñanza (CATIE)
P.O. Box 69
Turrialba 7170
Costa Rica
Tel. (506) 561712
Fax (506) 561533

- O Centro Agronómico
Tropical de Investigación
y Enseñanza (CATIE)
- O CNPPA

Mr James Lynch
Presidente
Asociación ANAI
Apartado 170
2070 Sabanilla de Montes de
Oca
San José
Costa Rica
Tel. (506) 246090
NG Asociación ANAI

Mr Victor H. Morgan
Director Ejecutivo
Asociación Demográfica
Costarricense
P.O. Box 10203
San José 1000
Costa Rica
Tel. (506) 4361
Fax (506) 314430
NG Asociación Demográfica
Costarricense

Dr Carlos Quesada
Biomass Users Network
Apdo 127-2070
Sabanilla
San José
Costa Rica
Tel. (506) 408997
Fax (506) 408998
O Biomass Users Network

Bíol Alberto Salas-Avila
Vice President
Corporación de Investigaciones
para el Desarrollo Socio-
Ambiental
Aptdo. 103-4050
Alajuela
Costa Rica
Tel. (506) 331072
Fax (506) 416513
NG Corporación de
Investigaciones para el
Desarrollo Socio-
Ambiental (CIDESA)

Dr Tomás Schlichter
Centro Agronómico Tropical
de Investigación y
Enseñanza (CATIE)
P.O. Box 19
Turrialba
Costa Rica
Tel. (506) 561712
Fax (506) 561533
Telex 8005 catie cr
IN Centro Agronómico
Tropical de Investigación
y Enseñanza (CATIE)

Dr Rodrigo Tarté Ponce
Director General
Centro Agronómico Tropical
de Investigación y
Enseñanza (CATIE)
P.O. Box 19
Turrialba 7170
Costa Rica
Tel. (506) 566081

Fax (506) 561533
Telex 8005 catie cr
IN Centro Agronómico
Tropical de Investigación
y Enseñanza (CATIE)

Côte d'Ivoire

Mrs Dulce Castleton
IUCN Consultant
01 B.P. 1712
Ambassade americaine
Abidjan
Côte d'Ivoire
Tel. (225) 322546
Fax (225) 223259
Telex 23660
O Population and Natural
Resources Programme

Czechoslovakia

Dr Jan Cerovsky
Chief Scientist
Czechoslovakian Institute for
Nature Conservation
Slezska 9
120 29 Praha 2
Czechoslovakia
Tel. (42 2) 2152609
NG Brontosaurus Movement
NG Czech Union for Nature
Conservation
NG Slovak Union for Nature
and Landscape
Conservation
AF Czechoslovakian
Institute for Nature
Conservation
O CEC
IUCN Council Member

Dr Jiri Pall
University of Agriculture
Dept. of Landscape Ecology
61200 Brno
Zemedelska 1
Czechoslovakia
O CESP

Denmark

Ms Sarah Banfield
World Assembly of Youth
(WAY)
C/o Ms Margaret Jack
Youth Affairs Council of
Australia
84 Eastern Road
South Melbourne VIC 3205
Australia
Denmark
Tel. (61 3) 6961696
Fax (61 3) 6967352
IN World Assembly of
Youth (WAY)
O CEC

Mr Hans Jakob Helms
Greenland Homerule,
Denmark Office

Sjaelebodernez
1122 Copenhagen K
Denmark
Tel. (45) 33134224
Fax (45) 33322024
O Greenland Homerule,
Denmark Office

Mr Veit Koester
Head of Ecological Division
Ministry of the Environment,
National Forest and Nature
Agency

Slotsmarken 13
2970 Hoersholm
Denmark
Tel. (45) 45765376
Fax (45) 45765477
Telex 21485 nature dk
ST Ministry of the
Environment, National
Forest and Nature
Agency

GA Nature Preservation
Council, Attn: The
Chairman
NG Biologforbundet, Attn:
Mr Jens Ole Ravn-
Nielsen
NG Danish Society for the
Conservation of Nature
NG Dansk Omnologisk
Forening, Attn: Mr Finn
Danielsen
NG Friluftsradet, Attn: The
Managing Director
O CEL
IUCN Council Member

Mr Finn Lynge
Greenland Homerule,
Denmark Office, Ministry of
the Environment
Kastanjens Kvarter 38
299 Nivaa
Denmark
Tel. (45) 42249446
Fax (45) 31540533
ST Ministry of the
Environment, National
Forest and Nature
Agency

Mr Gordon Shepherd
WWF - Denmark
Attn: Ms Skat-Rordam
Rymsgade 3 F
2200 Copenhagen N
Denmark
Tel. (45) 35363635
NG WWF-Denmark

Ms Birgith Sloth
Miljoministeriet, Skov og
Naturstyrelsen
Slotsmarken 13
2970 Hoersholm
Denmark
Tel. (45) 45765376
Fax (45) 45765477
Telex 21485 nature dk
ST Ministry of the
Environment, National
Forest and Nature
Agency
O SSC

Dominican Republic

Arq Christian Martinez
Villanueva
Director
Dirección Nacional de Parques
Ave. Independencia
Esq. Cervantes
Santo Domingo
Dominican Republic
Tel. (500809) 6827628
Fax (500809) 6856633
GA Dirección Nacional de
Parques
NG Fundación para el
Mejoramiento Humano -
PROGRESSIO

Ecuador

Sr Wilfrido Aragon
Vice President
Coordinadora de las Organisa-
ciones Indigenas de la
Cuenca Amazonica
6 de Diciembre
159 y Paz Mino
Casilia 4180
Quito
Ecuador
Tel. (59 32) 543973
Fax (59 32) 541668
O Las Organizaciones
Indigenas de la Cuenca
Amazonica

Ms Nancy Benavides
CECIA
P.O.Box 9068 S-7
Quito
Ecuador
Tel. (59 32) 542058
NG Corporación Omitholó-
gica del Ecuador
(CECIA)

Sr Rafael Paredes Proaño
Primer Secretario
Ministerio de Relaciones
Exteriores
10 de Agosto y Carrion s/n
Quito
Ecuador
Tel. (59 32) 501261
Fax (59 32) 504933
Telex 2705, 2142
ST Ministerio de Relaciones
Exteriores

Dr Juan Fernando Sevilla
Director de Proyectos
Fundación Natura
Casilla 253
Quito
Ecuador
Tel. (59 32) 447341
Fax (59 32) 434449
Telex 21211 natura
NG Fundación Natura

Sr Danilo Silva Chiriboga
Ecociencia
P.O. Box 257 (suc 12 de
Octubre)

Quito
Ecuador
Tel. (59 32) 502409
NG EcoCiencia, Fundación
Ecuatoriana de Estudios
Ecológicos (ECOC)

Sr Luis Suarez
Consultor de la UICN - ITTO
EcoCiencia and Wildlife
Conservation International
WCI-NYZS
P.O. Box 257 (suc. 12 de
Octubre)
Quito
Ecuador
Tel. (59 32) 502409
O EcoCiencia and Wildlife
Conservation Inter-
national

Egypt

Dr Ahmed Amin Ibrahim
Environment Affairs Agency
11 (A) Hassan Sabry St.
Zamalek
Cairo
Egypt
Tel. (202) 3416546
Fax (202) 3420768
ST Academy of Scientific
Research and Techno-
logy

El Salvador

Lic Ana Celia Dominguez
Fundación Montecristo
P. O. Box 3383
San Salvador
El Salvador
Tel. (503) 230534
Fax (503) 266430
O Fundación Montecristo

Ethiopia

Mr Gedion Asfaw
Head
Natural Resources and Human
Settlement
Office of the National
Committee for Central
Planning
P.O. Box 1037
Addis Ababa
Ethiopia
Tel. (25 11) 128959
O Natural Resources and
Human Settlement,
Office of the National
Committee for Central
Planning

Mr Ahmed Bahri
Chief, Population Division
UN Economic Commission for
Africa
P.O. Box 3005

Addis Ababa
Ethiopia
Tel. (25 11) 510177
Fax (25 11) 200191
O UN Economic Commis-
sion for Africa

Mr Berhanu Debele
Vice Minister
Ministry of Agriculture
P.O. Box 62347
Addis Ababa
Ethiopia
Tel. (25 11) 155303
Fax (25 11) 511543
Telex 21460 gtzfp et
O Ministry of Agriculture

Com Mersie Ejigu
Minister
Office of the National
Committee for Central
Planning (ONCCP)
P.O. Box 1037
Addis Adaba
Ethiopia
Telex 21531 onccp et
O Office of the National
Committee for Central
Planning (ONCCP)

Fiji

Dr Bob Lloyd
University of South Pacific
P.O. Box 1168
Suva
Fiji
Tel. (679) 313900
Fax (679) 300373
IN University of South
Pacific

Mr Bhaskaran Nair
P.O. Box 2350
Government Buildings
Suva
Fiji
Tel. (679) 211759
Fax (679) 303515
O

Mr Epeli Nasome
Town & Country Planning
Department
P.O. Box 2350
Government Buildings
Suva
Fiji
Tel. (679) 211600
O

Mr Birandra Singh
National Trust for Fiji
P.O. Box 2089
Government Buildings
Suva
Fiji
Tel. (679) 301807
Fax (679) 302646
NG National Trust for Fiji
O CEC
O CNPPA

Mr J. Veitayaki
South Pacific Action Commit-
tee for Human Ecology and
Environment
P.O. Box 1168
Suva
Fiji
Tel. (679) 313900
Telex 2276 fj
NG South Pacific Action
Committee for Human
Ecology and Environ-
ment (SPACHEE)

Mr Timoci Wagaisavou
Native Land Trust Board
Suva
Fiji
Tel. (679) 312733
O Native Land Trust Board

Finland

Ms Ulrica Cronstrom
Finnish Society for Nature and
Environment
P.O. Box 240
00151 Helsingfors
Finland
Tel. (358 90) 644731
Fax (358 90) 605850
NG Finnish Society for
Nature and Environment

Dr Matti Helminen
Ministry of the Environment
National Board of Forestry
P.O. Box 233
00121 Helsinki
Finland
Tel. (3580) 6163249
Fax (3580) 6163325
ST Ministry of the
Environment, Inter-
national Affaire Division
NG WWF - Finland
O CNPPA

Mr Esko Jaakkola
Ministry of the Environment
P.B. 399
Ratakatu 3
Finland
Tel. (3580) 1991222
Fax (3580) 1991499
Telex 123717 ymin sf
ST Ministry of the
Environment, Inter-
national Affaire Division

Mr Esko Joutsamo
Secretary General
Finnish Association for Nature
Conservation
P.O. Box 169
00151 Helsinki
Finland
Tel. (3580) 642881
Fax (3580) 6221815
NG Finnish Association for
Nature Conservation

Ms Aira Paivoke
Programme Officer

Ministry for Foreign Affairs of
Finland
Finnish International
Development Agency
(FINNIDA)
Mannerheimintie 15 C
00260 Helsinki 26
Finland
Tel. (3580) 13416429
Fax (3580) 13416262
Telex 124636 uminf
ST Ministry of the
Environment, Inter-
national Affairs Division

France

Mme Barbut
Ministère de la Coopération et
du Développement
20 rue Monsieur
75700 Paris
France
Tel. (331 4) 7831139
Fax (331 4) 3089740
Telex 202363 f
ST Ministère des Affaires
Etrangères

Dr Veronique Barre
Chargé de Mission
SRETIE - Ministère de
l'Environnement
14 Boulevard du General
Leclerc
92524 Neuilly sur Seine Cedex
France
Tel. (331 4) 7581212
Fax (331 4) 7470900
Telex 620602 denvir f
GA ORSTOM
NGWWF - France
NG Club Alpin Français
O SRETIE - Ministère de
l'Environnement

Dr Jenny Davis
Societas Internationalis
Limnologiae
Thiefosse
88290 Saulxures sur Moselotte
France
IN Societas Internationalis
Limnologiae

M Vincent Duville
Com. de Résistance à la
Destruction de l'Environne-
ment Martiniquais
Voie No. 5
Rue du Professeur Garcin
97200 Fort de France
Martinique
Tel. (596) 641824
Fax (596) 563503
NG Com. de Résistance à la
Destruction de
l'Environnement
Martiniquais

Dr Joanne Fox-Przeworski
OECD
2 rue Andre Pascal
75775 Paris Cedex 16

France
Tel. (331 4) 5249058
Fax (331 4) 5249058
O OECD

Dr Gérard Galat
Institut Français de Recherche
Scientifique pour le
Développement (ORSTOM)
213 Rue La Fayette
75480 Paris Cedex 10
France
GA ORSTOM
O SSC

Dr Ann Galat-Luong
Institut Français de Recherche
Scientifique pour le
Développement (ORSTOM)
213 Rue La Fayette
75480 Paris Cedex 10
France
GA ORSTOM
O SSC

M Alain Gille
Federation Française des
Societes de Protection de la
Nature (FFSPN)
57 rue Cuvier
75005 Paris
France
Tel. (331 4) 85449709
NG Federation Française des
Societes de Protection de
la Nature (FFSPN)

M Marcel Jouve
Min. de l'Environnement,
Direction de la Protection de
la Nature
14 Boulevard du General
Leclerc
92524 Neuilly-sur-Seine
Cedex
France
Tel. (331 4) 7581212
Fax (331 4) 7452360
Telex 620602
ST Ministère des Affaires
Etrangères

Prof. Victor Kolybine
Director
Division of Education for the
Quality of Life
UNESCO
7 place Fontenoy
75700 Paris
France
Tel. (331 4) 5680803
O UNESCO

Prof. Jean-Claude Lefeuvre
Member of Board
Fondation Tour du Valat pour
l'Etude et la Conservation de
la Nature
La Tour du Valat
Le Sambuc
13200 Aries
France
Tel. (33 90) 972013
Fax (33 90) 972018

NG Fondation Tour du Valat
pour l'Etude et la
Conservation de la
Nature
NG Office pour l'information
eco-entomologique
(OPIE)
O COE
IUCN Council Member

M S.G. Negouai
President
Com. de Resistance a la
Destruction de l'Environne-
ment Martiniquais
Voie No.5
Rue du Professeur Garcin
97200 Fort de France
Martinique
Tel. (596) 641824
Fax (596) 563503
NG Com. de Resistance a la
Destruction de
l'Environnement
Martiniquais

Mme Isabelle Paillet
Ministère des Affaires
Etrangères, Dir. des Affaires
Economiques
Cellule Environnement
37 Quai d'Orsay
75700 Paris
France
Tel. (331 4) 7534484
Fax (331 4) 7535085
Telex 202329
ST Ministère des Affaires
Etrangères

Prof. Dr Francois Ramade
Societe Nationale de Protection
de la Nature
Directeur du Laboratoire
d'Ecologie et de Zoologie de
l'Universite de Paris-Sud
91405 Orsay Cedex
France
Tel. (33 1) 69417896
Fax (33 1) 64461992
Telex 602166 f
NG Société Nationale de
Protection de la Nature
O COE

Ms Jane Robertson
Division of Ecological Sciences
UNESCO
7, Place de Fontenoy
75000 Paris
France
Tel. (331 4) 5684052
Fax (331 4) 0659897
Telex 204 471 paris
O UNESCO
O CNPPA

Prof. Bernard Salvat
Université de Perpignan Ecole
pratique hautes etudes
66025 Perpignan
France
Tel. (33 68) 66205
Fax (33 68) 503686
Telex UNIPERP505005F
O COE

Dr Jean-Marc Thiollay
WWF - France
Attr: M. Dumond
151 Boulevard de la Reine
78000 Versailles
France
Tel. (331 3) 9507514
Fax (331 3) 9530446
GA ORSTOM
NG WWF - France
NG Club Alpin Français
O SRETIE - Ministère de
l'Environnement

Dr Jacques Trouvilliez
Office National de la Chasse
85 bis Avenue de Wagram
75017 Paris
France
Tel. (33161) 30418011
Fax (33161) 30411037
GA Office National de la
Chasse

Prof. Jean Untermaier
President
Fédération Française des
Societes de Protection de la
Nature (FFSPN)
57 rue Cuvier
75005 Paris
France
Tel. (331 4) 85449709
Fax (331 4) 85726472
NG Fédération Française des
Societes de Protection de
la Nature (FFSPN)
NG Société Française pour le
Droit de l'Environne-
ment (SFDE)
O CEL

French Polynesia

Mme Annie Aubanel-Savoie
Service du Plan et de
l'Amenagement du
Territoire
B.P. 20721
Tahiti
French Polynesia
Tel. (689) 410626
Fax (689) 435087
O Service du Plan et de
l'Amenagement du
Territoire

Gabon

M Jean B. Memvié
Directeur général adjoint
Dept. des Eaux et Forêts
B.P. 2755
Libreville
Gabon
Tel. (241) 721004
Fax (241) 761073
Telex 5802
O Dépt. des Eaux et Forêts

Germany, Federal Republic of

Prof. E.F. Bruenig
University of Hamburg
2050 Hamburg 80
Germany, Federal Rep. of
O University of Hamburg

Dr Wolfgang Burhenne
Executive Governor
International Council on
Environmental Law
214 Adenauerallee
5300 Bonn 1
Germany, Federal Rep. of
Tel. (49 228) 2692 231
Fax (49 228) 2692 251
NG Brehm Fonds für
Internationale
Vogelschutz
NG Deutscher Jagdschutz-
Verband
NG German Water
Protection Association
NG German Association for
Protection of Forests and
Woodlands
NG German Hunting
Association
NG Schutzgemeinschaft
Deutsches Wild, Attn.
Mr H.J. Rohr
NG Verband Deutscher
Sportfischer, Attn. Mr U.
Schuller
IN Commission Inter-
nationale pour la
Protection des Regions
Alpines (CIPRA)
IN International Council of
Environmental Law
(ICEL)
O CEL
IUCN Council Member

Dr Friedrich Duhme
Lehrstuhl für Landschaftsökologie
TU München-Weihenstephan
8050 Freising 12
Germany, Federal Rep. of
Tel. 8161 713712
Fax 8161 714427
O COE

Prof/Dr Ludwig Ellenberg
Deutsche Gesellschaft für
Technische Zusammenarbeit
(GTZ)
Abt. 424
GTZ
Postfach 5180
6236 Eschbom
Germany, Federal Rep. of
O Deutsche Gesellschaft
für Technische
Zusammenarbeit (GTZ)

Mr Hanno Henke
Federal Research Center for
Nature Conservation &
Landscape Ecology
Konstantinstraße 110
5300 Bonn 2
Germany, Federal Rep. of

Tel. (49 228) 8491190
Fax (49 228) 8491200
ST Bundesministerium für
Umwelt, Naturschutz
und Reaktorsicherheit
NG Deutscher Heimatbund
O Federal Research Center
for Nature Conservation
& Landscape Ecology
O CNPPA

Mrs Judith Johnson
Migratory Species Convention
UNEP/CMS Secretariat
Postfach 201448
5300 Bonn 2
Germany, Federal Rep. of
Tel. (49 228) 302152
Fax (49 228) 373237
Telex 885420 wz d
O Migratory Species
Convention

Dr H. Kalchreuter
c/o M. Wiese
Johannes Henry Str. 26
5300 Bonn
Germany, Federal Rep. of
IN Federation des
Associations de
Chasseurs de la CEE
(FACE)
NG Deutscher Jagdschutz-
Verband

Dr Konrad Klemmer
Zoologische Gesellschaft
Senchenberganlage 25
6000 Frankfurt 1
Germany, Federal Rep. of
Tel. (49 69) 7542234
Fax (49 69) 746238
Telex 413139
NG Zoologische Gesellschaft
Frankfurt
O SSC

Mr Karl-Günther Kolodziejck
Bundesministerium für
Umwelt, Naturschutz und
Reaktorsicherheit
Postfach 120 629
5300 Bonn 1
Germany, Federal Rep. of
ST Bundesministerium für
Umwelt, Naturschutz
und Reaktorsicherheit

Dr Manfred Niekisch
Deutscher Naturschutzring
Bundesverband für
Umweltschutz
c/o Oro Verde
Bodenstedtstraße 4
6000 Frankfurt 70
Germany, Federal Rep. of
Tel. (49 69) 619036
Fax (49 69) 620979
NG Deutscher Naturschutzring
Bundesverband für
Umweltschutz
NG Bund Naturschutz in
Bayern
NG Bund für Umwelt und
Naturschutz, Deutsch-
land
O SSC

Mr Gordon Shepherd
WWF - Deutschland
Hedderichstraße 110
P.O. Box 70 11 27
6000 Frankfurt am Main 70
Germany, Federal Rep. of
NG WWF - Deutschland

Mr Jorgen Wenderoth
Bundesministerium für
Umwelt, Naturschutz und
Reaktorsicherheit
Postfach 120 629
5300 Bonn 1
Germany, Federal Rep. of
ST Bundesministerium für
Umwelt, Naturschutz
und Reaktorsicherheit

Ghana

Mr Gerald A. Punguse
Chief Game and Wildlife
Officer
Dept. of Game and Wildlife
P.O. Box M239
Accra
Ghana
Tel. (233 21) 666129
O Dept. of Game and
Wildlife

Prof. Kwabena Tufuor
Forestry Commission
P.O. Box M-434
Accra
Ghana
O Forestry Commission

Guatemala

Arq Jorge A. Cabrera Hidalgo
Director
Comisión Nacional del Medio
Ambiente
7a Avenida 4-35 Zona 1
Ciudad de Guatemala
Guatemala
Tel. (5022) 21816
Fax (5022) 535109
ST Comisión Nacional del
Medio Ambiente,
Presidencia de la
República (CONAMA)

Guinea-Bissau

Mr Rui Miranda
Directeur
Service de la Protection de la
Nature
B.P. 23
1031 Bissau
Guinea-Bissau
Tel. (245) 201230
Fax (245) 214448
O Service de la Protection
de la Nature

Guyana

Dr Karen A. Pilgrim
Ministry of Agriculture
(Wildlife Services Division)
Regent and Vlissingen Roads
Georgetown
Guyana
Tel. (5922) 53851/9
Fax (5922) 56281
O COE

Honduras

Lic Jacobo Hernandez Cruz
Primer Delegado Presidencial
Presidencia de la Republica de
Honduras
Casa de Gobierno
Tegucigalpa
Honduras
Tel. (504) 379556
Fax (504) 379656
ST Ministerio de Recursos
Naturales

Sr Edwin M. Molina
Director
USAID Forestry Development
Project
Aptdo. Postal No 1378
Tegucigalpa DC
Honduras
Tel. (504) 223348
Fax (504) 222653
O USAID Forestry
Development Project

Lic Roberto Vallejo Larios
Director Ejecutivo
Asociación Hondureña de
Ecología (AHE)
Apartado T-250
Tegucigalpa D.C.
Honduras
Tel. (504) 329018
Fax (504) 310976
NG Asociación Hondureña
de Ecología para la
Conservación de la
Naturaleza (AHE)

Hungary

Mrs Enikő Szalay-Marzsó
Deputy Head
Ministry of Environment and
Regional Policy
Institute for Environmental
Management
Alkotmány-u.29.
1054 Budapest
Hungary
Tel. (36 1) 1118249
Fax (36 1) 1115826
Telex 224150 kgi
GA Ministry of Environment
and Regional Policy
O CEC

India

Dr C.R. Babu
Reader
Dept. of Botany, University of
Delhi
Delhi 110007
India
Tel. (91 11) 2511266
O SSC

Mr S.P. Godrej
Vice-President
WWF India
Godrej & Boyce Manufactumig
Co.Ltd
Godrej Bhavan
Home Street
Bombay 400001
India
Tel. (91 22) 2048371
Fax (91 22) 2042238
Telex 84151 soho
NG WWF India

Mr Nalni Dhar Jayal
Director
Indian National Trust for Art
and Cultural Heritage
71 Lodi Estate
New Delhi 110 003
India
Tel. (91 11) 611362
NG Indian National Trust for
Art and Cultural
Heritage (INTACH)

Dr Ashok Khosla
President
Development Alternatives
B-32 Institutional Area
New Mehrauli Road
New Delhi 110 016
India
Tel. (91 11) 605835
NG Development Alternatives
IUCN Council Member

Mr Thomas Mathew
Secretary General
WWF India
172 - B Lodi Road
New Dehli
India
Tel. 616532/693744
Fax (91 11) 616512
NG WWF India

Mr Duleep Matthai
Vice Chairman
Indian Institute of Forest
Management
13 Sorrento
Mount Pleasant Road
Bombay
India
Tel. (91 22) 811 4506
O CNPPA

Dr G. M. Oza
General Secretary
International Society of
Naturalists (INSONA)
Oza Building

Salatwada
Baroda 390 001
India
Tel. 558 759
NG International Society of
Naturalists (INSONA)
O SSC
O CEC
O CNPPA
O COE

Mr M. A. Partha Sarathy
No. 1, 12th Cross
Rajmahal Vilas Extn.
Bangalore 560 080
India
Tel. (91 812) 340400
Fax (91 812) 341674
Telex 91 845 2334
IUCN Council Member
Chairman, IUCN Commis-
sion on Education and
Training

Dr P. S. Ramakrishnan
Professor of Ecology
School of Environmental
Sciences
Jawaharlal Nehru University
New Delhi 110067
India
Tel. (91 11) 6524438
O COE

Mr Kishore Rao
Wildlife Institute of India
Dehradun 248006
India
Tel. 83334
Fax 0135 3518
GA Wildlife Institute of
India (WII)

Mr Samar Singh
Additional Secretary
Ministry of Environment and
Forest
National Wastelands
Development Board
New Delhi
India
Tel. (91 11) 361712
ST Department of
Environment, Forests
and Wildlife, Ministry of
Environment and Forests
O SSC
O CNPPA
O COE

Mr Kartikeya Sarabhai
Centre for Environment
Education
Thaltej Tekra
Ahmedabad 380 054
India
Tel. (91 272) 442642
Fax (91 272) 468201
Telex 121 6779 CEE IN
O CEC

Mr S.K. Sharma
Founder Secretary
Environment Society of
Chandigarh
Karuna Sadan

Sector 11-B
Chandigarh 160011
India
Tel. 22807
Telex 395 480 selz in
NG Environment Society of
Chandigarh

Dr Monkombu Swaminathan
IUCN President
11 Rathna Nagar
Teynampet
Madras 600018
India
Tel. (91 44) 455339
IUCN Council Member
IUCN President

Mrs Dilnavaz Variava
Bombay Natural History
Society
Hornbill House
S.B. Singh Road
Bombay 400023
India
Tel. 274837/8122619
Fax (91 22) 2023711
Telex 11 2840 GNO IN
NG Bombay Natural History
Society
O CEC

Prof. Dr Tej Prakash Vyas
IUCN Amphibia and Reptile
Specialist Group
Government P.G. College
Dhar 454 001
India
Tel. 2572
O SSC

Indonesia

Ms Evie Adipati
WWF Indonesia Programme
P.O. Box 525
Jayapura 99001
Irian Jaya
Indonesia
Tel. (62 967) 22576
Fax (62 967) 22576
Telex 76122airfast ia
O SSC

Dr Riga Adiwoso Soprpto
IPMI
Gendung IPMI
Jalan Tainan Kemang 1
Jakarta 12730
Indonesia
Tel. (62 21) 7993484
Fax (62 21) 7996218
O IUCN Population and
Natural Resources
Programme

Ms Suraya Afiff
WALHI
JL. Penjernihan I
Kompleks Keuangan No. 15
Jakarta 10210
Indonesia
Tel. (62 21) 586820
Fax (62 21) 586181

Telex 44672 SWIDJO IO
NG Indonesian Environmen-
tal Forum

Ambassador D. Ashari
President/Chairman
Indonesian Zoological Parks
Association (IZPA)
17 Jalan Padang
Jakarta 12970
Indonesia
Tel. (62 21) 7800636
Fax (62 21) 5781933
Telex 46860 dhl jkta
GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry
O SSC

Mr Jack Henry Cox, Jr.
FAO
c/o FAO Project GCP/
INS/060/JPN
P.O. Box 969
Jayapura
Irian Jaya
Indonesia
Tel. (62 967) 31701
Fax (62 967) 31701
Telex 76122airfast ia
O FAO
O SSC

Ms Damayanti
Network for Forest Conserva-
tion in Indonesia
Jl. Tebet Dalam I G NO -35
Jakarta
Indonesia
Tel. (62 21) 8293923
Fax (62 21) 8293923
O Network for Forest
Conservation in
Indonesia

Ir Subagio Hadiseputro
Department of Forestry
Forestry Central Building
Manggala Wanabakti
n. Gatot Subroto
Jakarta
Indonesia
GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry

Dr Kathy Mackinnon
WWF Indonesia Programme
P.O. Box 133
Bogor
Jawa Barat
Indonesia
Tel. (62 251) 323716
O SSC

Mr Stephen V. Nash
Project Coordinator, Irian Java
WWF Irian Jaya Conservation
Project
P.O. Box 525
Jayapura
Irian Jaya 99001
Indonesia
Tel. (62 967) 2257

Fax (62 967) 22576
Telex 76122 airfast i
O SSC

Dr Linda Prasetyo
Directorate General of Forest
Protection & Nature
Conservation
Mangala Wanabakti Bldg 8th
Floor
Gatot
Subroto
Jakarta
Indonesia
Fax (62 21) 584818
GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry
O SSC

Dr Widodo S. Ramono
Chief, Species Conservation
Directorate of Nature
Conservation
Jalan Ir. H. Juanda No.15
Bogor
Jawa Barat
Indonesia
Tel. (62 251) 323067

GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry
O SSC

Dr Charles Santiapillai
Wildlife Ecologist
WWF Indonesia Programme
P.O.Box 133
Bogor
Jawa Barat 16001
Indonesia
Tel. (62 251) 327316
Fax (62 251) 328177
O SSC

Prof. Dr Mohamad Soerjani
Centre for Research of Human
Resources and Environment
University of Indonesia
Jalan Salemba 4
Jakarta 10430
Indonesia
Tel. (62 21) 330318
Fax (62 21) 335929
Telex 45680 UI JKT
O COE

Dr Benni Sormin
School of Environmental
Conservation Management
P.O.Box 109
Ciomas
Jln Gunung Batu
Bogor
Jawa Barat
Indonesia
Tel. (62 251) 312841
O School of Environmental
Management, Ministry
of Forestry
O CNPPA

Mr Effendy Sumardja
Ministry of Forestry

Directorate of Nature
Conservation
Jl. Ir. H. Juanda 15
Bogor
Jawa Barat 16122
Indonesia
Tel. (62 251) 323067
Fax (61 251) 323067
Telex 45996
GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry
O SSC
O CNPPA

Mr Sutisna Wartaputra
Ministry of Forestry
Directorate General of Forest
Protection and Nature
Conservation
Forestry Central Building
Mangala Wanabakti
Jl. Gatot Subroto
Jakarta
Indonesia
Tel. (62 21) 584818
Fax (62 21) 5700226
Telex 45996

GA Directorate General
Forest Protection and
Nature Conservation,
Ministry of Forestry

Dr Soetikno Wirjoatmodjo
Research and Development
Centre for Biology
Indonesian Institute of Sciences
P.O.Box 110
Bogor
Jawa Barat 16122
Indonesia
Tel. (62 251) 321041
O SSC

Mr MS. Zulkarnsen
Executive Director
WAHLI
Jln. Penjernihan I
Kompleks Keuangan #15
Jakarta 10210
Indonesia
Fax (62 21) 586181
NG Indonesian Environmen-
tal Forum

Israel

Mr Azaria Alon
Society for the Protection of
Nature in Israel
4 Hashfela Street
Tel Aviv
Israel
Tel. (972 3) 380330
Fax (972 3) 5373552
NG Society for the Protection
of Nature in Israel

Mr Yoav Sagi
Society for the Protection of
Nature in Israel
4 Hashfela Street
Tel Aviv

Israel
Tel. (972 3) 380330
Fax (972 3) 377695
NG Society for the Protection
of Nature in Israel
O CEC

Italy

Mr G.S. Child
Senior Forestry Officer
FAO
Forest Resources Division
Via delle Terme di Caracalla
00100 Rome
Italy
Tel. (39 6) 57971
Fax (39 6) 5782610
Telex 610181 fao i
O FAO

Dr Daniel Debouck
Research Officer
International Board for Plant
Genetic Resources
Via delle Sette Chiese 142
00145 Rome
Italy
Tel. (39 6) 5744719
Fax (39 6) 5750309
Telex 4900005332
O International Board for
Plant Genetic Resources

Dr Alison McCusker
International Board for Plant
Genetic Resources
Via delle Sette Chiese 142
00145 Rome
Italy
Tel. (39 6) 5744719
Fax (39 6) 5750309
Telex 4900005332
O International Board for
Plant Genetic Resources

Mr Silvio Pentrella
Italian Ministry of Foreign
Affairs
Italian Consulate
31 Labouchene Rd.
South Perth, WA
Italy
Tel. (61 9) 3673603
Fax (61 9) 4741320
O Italian Ministry of
Foreign Affairs

Mrs Cassandra Phillips
International League for the
Protection of Cetaceans
Attn: Dr S. Holt
Podere IL Falco
06062 Citta della Pieve (PG)
Italy
Tel. (39578)298186
Fax (39 578) 29918
IN International League for
the Protection of
Cetaceans

Prof. Walter Rossi
Consiglio Nazionale delle
Ricerche

Departimento Biologia
Vegetale
Universita di Firenze
Ple Cascine 28
Firenze 50144
Italy
Tel. (39 55) 365798
Fax (39 55) 359870
GA Consiglio Nazionale
delle Ricerche

Dr Vincenzo Schioppa
Consul of Italy
Italian Consulate
31 Labouchere Road
South Perth WA 6151
Australia
O Italian Consulate

Prof. Franco Tassi
Abruzzo National Park
67032 Pescasseroli
Italy
Tel. (39 34) 96993
Fax (39 34) 97594
AF Abruzzo National Park
O CNPPA

Jamaica

Dr David C. Smith
Jamaica Conservation and
Development Trust
P.O.Box 1225
Kingston 8
Jamaica
Tel. (500809) 9222217
Fax (500809) 9249407
NG Jamaica Conservation
and Development Trust
(JCDT)

Japan

Dr Shigeru Azuma
Primate Research Institute
Kyoto University
Kanrin
Inuyama Aichi 484
Japan
Tel. (81) 568622428
Fax (81) 568622428
O SSC

Mr Eiji Fujiwara
President
Elsa Nature Conservancy
Tsukubagakuen
P.O.Box No.2
Tsukuba
Ibaraki-ken 305
Japan
Tel. (81 298) 511637
Fax (81 298) 511637
NG Elsa Nature Conser-
vancy
O CEC

Prof. Seigo Higashi
Associate Professor
Graduate School of Environ-
mental Science, Hokkaido
University

Sapporo 060
Japan
Tel. (81 11) 7162111
O SSC

Mr Hiromi Imoto
Japan Wildlife Research Center
Hongo 3-39-12
Bunkyo-ku
Tokyo
Japan
Tel. (81 3) 8138897
Fax (81 3) 8138898
NG Japan Wildlife Research
Center (JWRC)

Ms Kana Kanagawa
Graduate School of Environ-
mental Science, Hokkaido
University
Sapporo 060
Japan
Tel. (81 11) 7162111
O SSC

Mr Kazumi Kemmochi
M-30b 3-B Kotesashi-machi
Tokorozama-shi
Saitama
Japan
Tel. (81 479) 492922
O

Prof. Dr Katsuhiko Kondo
Director of the Laboratory
Laboratory of Plant Chromo-
some and Gene Stock,
Hiroshima University
Faculty of Science
1-1-89 Higashi-Senda-Machi
Naka-ku
Hiroshima City 730
Japan
Tel. (81 82) 2411221
Fax (81 82) 2427454
O SSC

Ms Maki Koyama
Environment Agency of Japan
1-2-2 Kasumigaseki
Chiyoda-ku
Tokyo 100
Japan
Tel. (81 3) 5802161
Fax (81 3) 5951716
Telex 33855 jpnea j
GA Environment Agency of
Japan

Prof. Tatsuro Kunugj
Division of International
Studies
International Christian
University
Osawa Mitaka City
Tokyo 181
Japan
Tel. (81 3) 422333178
O IUCN Population and
Natural Resources
Programme

Mr Kotaro Kusakabe
4-1-4 Asagayakita
Suginamiku
Tokyo 166

Japan
O CNPPA

Mr Tom Milliken
TRAFFIC - Japan
7th Fl. Nihonseimei
Akabanebashi
Minato-ku
Tokyo 105
Japan
Tel. (81 3) 7691716
Fax (81 3) 7691717
O SSC

Dr Katherine Muzik
WWF-Japan
Nihonseimei Akabanebashi
Bldg. 7F, 3-1-14 Shiba
Minato-Ku, Tokyo 105
Japan
NG WWF Japan

Mr Tadayuki Nishimura
Dai-ichi Kinko Building 4F
1-5-8 Oh-Akashi Cho
Akashi City
Hyogo 673
Japan
Tel. (81 78) 9121193
Fax (81 78) 9120700
O CESP

Dr Makoto Numata
Nature Conservation Society of
Japan
Toranomom Denki
Building 4F
2-8-1 Toranomom
Minato-ku
Tokyo 105
Japan
Tel. (81 3) 5034896
Fax (81 3) 59204%
NG Nature Conservation
Society of Japan
(NACS-J)
O SSC
O CEC
O COE

Prof. Hideo Obara
WWF Japan
74 Nihonseimei Akabanebashi
Building
3-1-14 Shiba, Minato-ku
Tokyo 105
Japan
Tel. (81 3) 7691714
Fax (81 3) 7691795
NG WWF Japan
O SSC

Mr Masaaki Sakurai
Environment Agency of Japan
1-2-2 Kasumigaseki
Chiyoda-ku
Tokyo 100
Japan
Tel. (81 3) 5801709
Fax (81 3) 5951716
Telex 33855 jpnea j
GA Environment Agency of
Japan

Ms Cecilia Song
WWF Japan

7th Floor
Nihonseinei Akabanebashi
Building
3-1-14 Shiba Minato-k'u
Tokyo
Japan
Tel. (81 3) 7691711
Fax (81 3) 7691795
NG WWF Japan

Mr Tokunosuke Tsuchiya
Marine Parks Center of Japan
Toranomom-Denki Building
8-1, Toranomom-2
Minato-Ku
Tokyo 105
Japan
Tel. (81 3) 5915518
Fax (81 3) 5021377
NG Marine Parks Center of
Japan
NG National Parks
Association of Japan

Mr Toshiyuki Wanibuchi
Mayor of Kushiro City
Kushiro City Office
7-5 Kurogane-cho
Kushiro City
Japan
Tel. (81 154) 23515
Fax (81 154) 224473
O

Dr Per Wegge
ITTO
Sangyo Boeki Center Building
2 Yamashita-Cho
Naka-Yu
Yokohama 231
Japan
Tel. (81 45) 6717045
Fax (81 45) 6717007
Telex 3822430
O ITTO

Ms Setsuko Yamazato
287-12 Shiraho
Ishigaki-shi
Okinawa 907-02
Japan
O WWF-Japan

Mr Masahito Yoshida
Nature Conservation Society of
Japan
Toranomom Denki-
Building 4F
2-8-1 Toranomom
Minato-Ku
Tokyo 105
Japan
Tel. (81 3) 50348%
Fax (81 3) 59204%
NG Nature Conservation
Society of Japan
(NACS-J)
O SSC
O CNPPA

Mr Zenji Yoshimine
3-56 Kinjocho Naha
Okinawa 903
Japan
Tel. (81 988) 843150
O

Jordan

Prof. Kamel Abu Jaber
Hon. Secretary General
Royal Society for the
Conservation of Nature
(RSCN)
P.O. Box 6354
Amman
Jordan
Tel. (% 26) 811689
Fax (96 26) 628258
Telex 21456 SABCO
NG Royal Society for the
Conservation of Nature
(RSCN)

Dr Linda Abu-Jaber
Royal Society for Conservation
of Nature
P.O. Box 6354
Amman
Jordan
Tel. (96 26) 811689
Fax (% 26) 628258
NG Royal Society for
Conservation of Nature

Mrs Loretta Abu-Jaber
Royal Society for the
Conservation of Nature
P.O. Box 6354
Amman
Jordan

Tel. (% 26) 41689
NG Royal Society for the
Conservation of Nature

Kenya

Mr Nehemiah Arap Rotich
Executive Director
East African Wildlife Society
P.O. Box 20110
Nairobi
Kenya
Tel. (254 2) 227047
Fax (254 2) 337423
Telex 22153
NG East African Wildlife
Society
O CEC

Mr Paul I.M. Chabeda
Kenya Wildlife Service
Ministry of Tourism and
Wildlife
P.O. Box 40241
Nairobi
Kenya
Tel. (254 2) 501081
Fax (254 2) 505866
Telex 25016
O Ministry of Tourism and
Wildlife

Dr Chris Gakahu
Wildlife Conservation
International
P.O. Box 62844
Nairobi
Kenya

Tel. (254 2) 221699
Fax (254 2) 729276
O SSC

Mrs Minnie M Gatahi
Senior Ecologist
Ministry of Environment and
Natural Resources
P.O. Box 67839
Nairobi
Kenya
Tel. (254 2) 229261
ST Ministry of Tourism and
Wildlife

Dr M.D. Gwynne
UNEP
P.O. Box 30552
Nairobi
Kenya
Tel. (254 2) 333930
Fax (254 2) 520281
O UNEP
O SSC

Dr Calestous Juma
African Centre for Technology
Studies
P.O. Box 45917
Nairobi
Kenya
Tel. (254 2) 336603
Fax (254 2) 336793
Telex 22448 acts ke
O African Centre for
Technology Studies

Hon O. K'Ombudo
Assistant Minister
Ministry of Environment and
Natural Resources
Kencom House
Moi Avenue
P.O. Box 30126
Nairobi
Kenya
Tel. (254 2) 29261
ST Ministry of Tourism and
Wildlife

Mr William H. Mansfield, III
Deputy Executive Director
United Nations Environment
Programme
P.O. Box 30552
Nairobi
Kenya
Tel. (254 2) 333930
Fax (254 2) 520711
Telex (0987) 22068unep
O United Nations
Environment Programme

Dr Esmond B. Martin
Consultant
WWF International
P.O. Box 15510
Nairobi
Kenya
Tel. (254 2) 891185
Telex 25495 wwff ea ke
O SSC

Mr Stephen P. Meacher
World Society for the
Protection of Animals

P.O. Box 24363
Nairobi
Kenya
O World Society for the
Protection of Animals
O SSC

Mrs Danielle Mitchell
UNEP/GEMS
P.O. Box 30552
Nairobi
Kenya
Tel. (254 2) 520600
Fax (254 2) 520281
O

Dr Theuri Njoka
East Africa Wild Life Society
P.O. Box 20110
Nairobi
Kenya
Tel. (254 2) 592403
NG East African Wild Life
Society
O CNPPA

Dr Steven G. Njuguna
Associate Director
National Museums of Kenya
East Africa Wildlife Society
P.O. Box 40658
Nairobi
Kenya
Tel. (254 2) 742131
Fax (254 2) 741424
Telex 22892
NG East Africa Wildlife
Society
O CEC

Prof. H.W.O. Okoth-Ogendo
Director
Population Studies and
Research Institute
University of Nairobi
P.O. Box 30197
Nairobi
Kenya
Tel. (254 2) 339015
Fax (254 2) 336885
Telex 22095 varsity
O University of Nairobi
O IUCN Natural Resources
and Population
Programme

Dr Reuben Olemba
Deputy Assistant Executive
Director
Office of the Environment
Programme UNEP
P.O. Box 30552
Nairobi
Kenya
Tel. (254 2) 333930
Fax (254 2) 520711
Telex (0987) 22068unep
O Office of the Environ-
ment Programme UNEP

Dr Perez M. Olindo
Senior Associate
African Wildlife Foundation
P.O. Box 48177
Nairobi
Kenya

Tel. (254 2) 331542/3
Fax (254 2) 332294
NG African Wildlife
Foundation
O SSC

Mrs Lydia R Onsongo
Ministry of Tourism and
Wildlife
P.O. Box 40241
Nairobi
Kenya
Tel. (254 2) 501081
Fax (254 2) 505866
ST Ministry of Tourism and
Wildlife

Dr Mark Stanley Price
African Wildlife Foundation
P.O. Box 48177
Nairobi
Kenya
Tel. (254 2) 23235
Fax (254 2) 332294
Telex 22152
NG African Wildlife
Foundation
O SSC

Dr Mbaruk A. Suleman
Chief, Animal Resources
Institute of Primate Research
P.O. Box 24481
Karen
Nairobi
Kenya
Tel. (254 2) 882571
Fax (254 2) 882546
Telex 22892
O SSC

Kiribati

Mr Teekabu Tikai
Ministry of Natural Resource
Department
P.O. Box 241
Bairiki
Tarawa
Kiribati
Tel. (686) 21099
Fax 21120
O Republic of Kiribati

Lao, People's Democratic Republic

Mr Paul C.L. Anspach
Resident Project Manager
IUCN Shifting Cultivation
Project
P.O. Box 807
Vientiane
Lao, People's Democratic
Republic
Fax 8562604
Telex 4491 te vte Is
O IUCN Shifting
Cultivation Project

Mr Lamthong Hangla
Ministry of Agriculture and
Forestry
P.O. Box 2932
Vientiane
Lao, People's Democratic
Republic
Tel. 5488
Fax dof 3807
Telex 4491 ts Is vte
ST Ministry of Foreign
Affairs

Mr Khampeuane Kingsada
Director of Forestry
Ministry of Foreign Affairs
P.O. Box 2932
Vientiane
Lao, People's Democratic
Republic
ST Ministry of Foreign
Affairs

Mr Venevongphet
Dept. of Forests and Environ-
ment
P.O. Box 2932
Vientiane
Lao, People's Democratic
Republic
Tel. 5920
O Ministry of Foreign
Affairs
O SSC

Mr Bounthong Xaisida
Dept. of Forestry and
Environment
Vientiane
Lao, People's Democratic
Republic
Tel. 5920
O Ministry of Foreign
Affairs
O SSC

Liechtenstein

Dr Wolfgang Burhenne
Commission Internationale
pour la Protection des Alpes
(CIPRA)
Heiligkreuz 52
FL 9490 Vaduz
Liechtenstein
IN Commission Inter-
nationale pour la
Protection des Alpes
(CIPRA)

Luxembourg

Mr Kenneth A. Brynaert
Direction des Eaux et Forêts
Att.: Directeur des Eaux et
Forêts
67 rue Michel Welter
L-2730 Luxembourg
ST Direction des Eaux et
Forêts

Madagascar

M.P. Randrianarijaona
Directeur des Eaux et Forêts
Ministère de la Production
Animale et des Eaux et
Forêts
Antananarivo
Madagascar
Tel. (26 12) 40811
Telex 22520 MPAEF MG
ST Ministère d'Etat aux
Affaires Etrangères

S.E. Maxime Zafera
Ministre
Ministère de la Production
Animale et des Eaux et
Forêts
Antananarivo
Madagascar
ST Ministère d'Etat aux
Affaires Etrangères

Malawi

Mr Henri Nsanjama
Chief Parks & Wildlife Officer
Ministry of Forestry and
Natural Resources
P.O. Box 30131
Capital City
Lilongwe 3
Malawi
Tel. (26 5) 723566
Fax (26 5) 723089
Telex 44456 mi
GA Department of National
Parks and Wildlife,
Ministry of Forestry and
Natural Resources
O SSC

Malaysia

Mr Patrick Andau
Wildlife Department
7th Floor
Sabah Bank Tower
Tun Fuad Stephens complex
88300 Kota Kinabalu
Sabah
Malaysia
Tel. (60 88) 214999
Fax (60 88) 222476
GA Wildlife Department,
Sabah

Mr Brian John Gilligan
Asian Wetland Bureau
Institute for Advanced Studies
University of Malaya
Lembah Pantai
59100 Kuala Lumpur
Malaysia
Tel. (60 3) 7572176
Fax (60 3) 7571225
Telex 39845 unimal ma
O Asian Wetland Bureau

Mr Mohamed Khan Bin
Momin Khan
Director General
Department of Wildlife and
National Parks
KM 10 Cheras Road
Kuala Lumpur
Malaysia
ST Department of Wildlife
and National Parks,
Peninsula Malaysia
O SSC

Ms Lee Su Win
Malayan Nature Society
485 Jalan 5/53
4600 Petaling Jaya
Malaysia
Tel. (60 3) 7912185
Fax (60 32) 7917722
NG Malayan Nature Society

Mr Sian Tuan Mok
Asean Institute of Forest
Management
Suite 903
IGB Plaza 6
Jalan Kampar
Kuala Lumpur
Malaysia
Tel. (60 3) 4429251
Fax (60 3) 4422340
Telex 28212
O Asean Institute of Forest
Management

Mr Abang Morshid
Deputy Director of Forestry,
Sarawak
Km 10 Jalan Ceres
56100 Kuala Lumpur
Malaysia
ST Department of Wildlife
and National Parks,
Peninsula Malaysia

Mr Musa Nordin
Dept. of Wildlife and National
Parks
KM10 Jalan Cheras
Kuala Lumpur
Malaysia
Tel. (60 3) 9052872
Fax (60 3) 9052873
ST Department of Wildlife
and National Parks,
Peninsula Malaysia

Mr Ken Scriven
Director
WWF - Malaysia
P.O.Box 10769
50724 Kuala Lumpur
Malaysia
Tel. (60 3) 2554495
Fax (60 3) 2540346
Telex 30423
NGWWF - Malaysia

Mr Hooi Chiew Thang
Forestry Dept. Headquarters
Jalan Sultan Salahuddin
50660 Kuala Lumpur
Malaysia
Tel. (60 3) 2988244
Fax (60 3) 2925657

O Forestry Dept.
Headquarters

Dr Yow-Pong Tho
Malayan Research Institute
Kepong
Selangor
Malaysia
Tel. (60) 7769230
O Malayan Research
Institute

Mali

S.E. M. Morifing Kone
Ministre
Ministère de l'Environnement
et de l'Élevage
Bamako
Mali
Tel. (22 3) 226359
ST Ministère de
l'Environnement et de
l'Élevage

Dr Dieudonne Ouedraogo
Centre d'Etudes et de
Recherche sur la Population
pour le Développement
B.P. 1530
Bamako
Mali
Tel. (22 3) 223043
Fax (22 3) 222178
Telex 432 insah
O IUCN Population and
Natural Resources
Programme

Mr Nampaa N. Sanogho
Directeur Général
Direction des Eaux et Forêts
B.P. 275
Bamako
Mali
Tel. (22 2) 225850
Telex 2615 mj eforet
ST Ministère de
l'Environnement et de
l'Élevage

Ms Fatoumata Sow
Youvarou Project
c/o Bureau national de l'UICN
B.P. 1567
Bamako
Mali
O IUCN Population and
Natural Resources
Programme

Mauritania

M Ibrahima Thiaw
Chef du Service
Ministère du Développement
Rural
Reboisement et Faune à la
Direction de la Protection de
la Nature
B.P. 170 Nouakchott
Mauritania

Tel. (222 2) 51763
Fax (222 2) 51834
O Ministère du Développe-
ment Rural

Mauritius

Mr Ashoka K. Reetoo
President
MAUCESCOYA
P.O. Box 61
Port Louis
Mauritius
Tel. (230) 2125593
NG Mauritius Council for
Environmental Youth
Agenda (MAUCES-
COYA)

Mr S.C. Chan Wan Thuen
Permanent Secretary
Ministry of Lands and the
Environment
Edith Cavell Street
Port Louis
Mauritius
Tel. (230) 2082831
ST External Affairs and
Emigration

Mexico

Arq Hector Ceballos-Lascurain
IUCN Consultant
Camino al Ajusco 551
Tepepan, Xochimilco
16020 Mexico, D.F.
Mexico
Tel. (52 905) 67687
Fax (52 905) 2501043
O CNPPA

Prof. Ramón Perez Gil Salcido
Presidente
Fundación Chiapaneca "M.
Alvarez del Toro" para la
Protección de la Naturaleza
Apartado Postal # 970
Tuxtla Gutierrez
29000 Chiapas
Mexico
Tel. (52 961) 33362
Fax (52 961) 10750
Telex 74445 bturme
NG Fundación Chiapaneca
"M. Alvarez del Toro"
para la Protección de la
Naturaleza
O SSC

Monaco

Prof. François Doumenge
Principauté de Monaco Service
des Relations Extérieures
Villa Girasole
Boulevard de Suisse
Monte Carlo
Monaco
Tel. (33 93) 153600

Fax (33 93) 505297
Telex 469037 REMONA
ST Principaute de Monaco
Service des Relations
Exterieures
AF Centre Scientifique de
Monaco
O COE

Mongolia

Mr Goidyn Dembereldorj
Mongolian People's Republic
Ministry for Foreign Affairs
Ulaanbaatar 11
Khudaldaany gud. 5
Mongolia
Mongolia
Tel. 29619
ST Ministry of Foreign
Affairs

Mr Osoryn Amarkhuu
Mongolian Association for
Conservation of Nature and
Environment
Ulaanbaatar 12
Central Post Office
P.O. Box 530
Mongolia
Tel. 26330
O Mongolian Association
for Conservation of
Nature

Morocco

M Abdelouhab Kannouni
Direction des Eaux et Forêts et
de la Conservation des Sols
Rabat
Morocco
Tel. (21 27) 763015
Fax (21 27) 764446
Telex 36696
ST Ministère des Affaires
Etrangères

Mozambique

Mr Elija W. Chamba
Director of Wildlife
Direcção Nacional de Florestas
e Fauna Bravia
Ministry of Agriculture
P.O. Box 1406
Maputo
Mozambique
Tel. (258) 460096
Fax (258) 460060
Telex 6195 monap mo
O Direcção Nacional de
Florestas e Fauna Bravia,
Ministerio da Agricultura

Mr Bernardo P. Ferraz
National Institute of Physical
Planning
Environment Division

C.P. 1310
Maputo
Mozambique
Tel. (258) 465041
Telex 6500 mo
O Direcção Nacional de
Florestas e Fauna Bravia,
Ministerio da Agricultura

Mr Roberto Zolho
DNFFB Ministry of Agriculture
1406 Manputo
Mozambique
Tel. (258) 460036
Fax (258) 460060
Telex 6-209 sogma mo
O Direcção Nacional de
Florestas e Fauna Bravia,
Ministerio da Agricultura

Myanmar

Mr T.A. Cho
Embassy of the Union of
Myanmar
22 Arkana Street
Yarralumla
Canberra ACT 2600
Australia
Myanmar
Tel. (61 62) 733811
Fax (61 62) 734357
Telex 61376myanmar aa
O Embassy of the Union of
Myanmar

Namibia

Dr Eugene Joubert
Assistant
Ministry of Wildlife Conserva-
tion and Tourism
P. Bag 13348
Windhoek 9000
Namibia
Tel. (264 61) 220241
Fax (264 61) 221930
AF Ministry of Wildlife
Conservation and
Tourism

Mr Hanno Rumpf
Permanent Secretary
Ministry of Wildlife, Conserva-
tion and Tourism
P.O. Box 13346
Windhoek 9000
Namibia
Tel. (264 61) 220241
Fax (264 61) 212663
AF Ministry of Wildlife,
Conservation and
Tourism

Mr Polla Swart
Assistant
Ministry of Wildlife Conserva-
tion and Tourism
P.O. Box 13348
Windhoek 9000

Namibia
Tel. (264 61) 2202241
Fax (264 61) 221930
AF Ministry of Wildlife
Conservation and
Tourism

Nepal

Dr Lekh Nath Belbase
National Planning Commission
Singha Durbar
Kathmandu
Nepal
Tel. (977 1) 228 200
Fax (977 1) 2265 00
Telex 2635 YOJANA NP
ST Department of National
Parks and Wildlife
Conservation

Mr Sushil Bhattarai
Ministry of Forests and Soil
Conservation
Department of Soil Conserva-
tion and Watershed
Management
Babar Mahal
P.O. Box 4719
Nepal
Tel. (977 1) 220828
ST Department of National
Parks and Wildlife
Conservation

Mr Rabi B. Bista
Ministry of Forests and Soil
Conservation
Babar Mahal
Kathmandu
Nepal
Tel. (977 1) 223862
Fax (977 1) 228415
ST Department of National
Parks and Wildlife
Conservation
O CNPPA

Mr Anil Chitrakar
Environmental Camps for
Conservation Awareness
(ECCA)
P.O. Box 3923
Kathmandu
Nepal
Tel. (977 1) 521506
Fax (977 1) 521506
Telex 2566 hohil np
O Environmental Camps
for Conservation
Awareness (ECCA)

Hoa Jahal Nath Khanal
Minister of Forests
Ministry of Forestry and Soil
Conservation
Babar Mahal
Kathmandu
Nepal
Tel. (977 1) 220160
Fax (977 1) 223868
ST Department of National
Parks and Wildlife
Conservation

Dr Hemanta Raj Mishra
Secretary, Governing Board,
Trustees
King Mahendra Trust for
Nature Conservation
P.O. Box 3712
Babar Mahal
Kathmandu
Nepal
Tel. (977 1) 224639
Fax (977 1) 226602
Telex 2567 kmtnc np
O SSC
O CNPPA

Mr Bhim Bahadur Rawal
Ministry of Forests and Soil
Conservation
Kathmandu
Nepal
Tel. (977 1) 412 558
ST Department of National-
Parks and Wildlife
Conservation

Mr Biswa Nath Sapkota
National Planning Commission
Secretariat
Singh Durbar
Kathmandu
Nepal
Tel. (977 1) 227998
ST Department of National
Parks and Wildlife
Conservation

Mr Krishna Sigdyal
Nepal Forum of Environmental
Communicators
P.O. Box 930
Kathmandu
Nepal
Tel. (977 1) 410815
Fax (977 1) 524386
Telex 2340 agent np
NG Nepal Forum of
Environmental
Communicators

Krishna Tamrakar
P.O. Box 57
Kathmandu
Nepal
Tel. (977 1) 471597
O

Mr Biswa Nath Upreti
Dept. of National Parks and
Wildlife Conservation
His Majesty's Government
P.O. Box 860
Kathmandu
Nepal
Tel. (977 1) 220912
Fax (977 1) 226602
Telex 2567 kmtnc np
ST Dept. of National Parks
and Wildlife Conserva-
tion
O CNPPA

Netherlands

Mr W. Bergmans
Vereniging tot Behoud van
Natuurmonumenten in
Nederland
c/o IUCN Ledencontact
Damrak 28-30 1012
1012 LJ Amsterdam
Netherlands
NG Vereniging tot Behoud
van Natuurmonumenten
in Nederland
O SSC

Ms Simone Bilderbeek
Landelijke Vereniging tot
Behoud van de Waddenzee
c/o IUCN Ledencontact
Damrak 28-30
1012 LJ Amsterdam
Netherlands
Tel. (31 20) 261732
NG Landelijke Vereniging
tot Behoud van de
Waddenzee

Mr Guido Broekhoven
Koninklijke Nederlandse
Natuurhistorische Verenig-
ing (KNNV)
Lange Nieuw Straat 106
3512 PN Utrecht
Netherlands
Tel. (31 30) 394 521
Fax (31 30) 394 527
NG Koninklijke Nederlandse
Natuurhistorische
Vereniging (KNNV)

Dr Peter J.H. van Bree
Przewalski Horse Reserves
Foundation
Attn: Mrs Grosjean
Mathenesserstraat 101-a
3027 PD Amsterdam
Netherlands
Tel. (31 20) 5255437
Fax (31 20) 5257238
Telex 16460 facwn nl
NG Przewalski Horse
Reserves Foundation
NG Netherlands Foundation
for International Nature
Protection
O SSC

Mr Jeffrey Canin
Greenpeace International
Keizersgracht 176
1016 DW Amsterdam
Netherlands
Tel. (31 20) 5236555
Fax (31 20) 5236500
IN Greenpeace International
O SSC

Dr Steven De Bie
Department of Nature
Conservation Agricultural
University
P.O. Box 8080
6700 DD Wageningen
Netherlands
Tel. (31 8370) 83174

Fax (31 8370) 84411
O SSC
O IUCN Sahel Programme

Mr Hendrick Huibert De Jongh
Centre for Environmental
Studies
University of Leiden
Garenmarkt 1A
2300 RA Leiden
Netherlands
Tel. (31 71) 277474
Fax (31 71) 226478
Telex 39427 BURUL
AF Centre for Environmen-
tal Studies, University of
Leiden

Dr Chris Geerling
Shell International Health
Safety and Environment
P.O. Box 162
2501 AN The Hague
Netherlands
Tel. (31 70) 377 3139
Fax (31 70) 377 6024
Telex 36000
O SSC

Drs Rudolf de Groot
Nature Conservation
Department
Agricultural University
Ritzema Bosweg 32A
6703 AZ Wageningen
Netherlands
Tel. (31 8370) 82247
Fax (31 8370) 84411
NG Netherlands Foundation
for Nature Protection
O CESP

Mr Frederik Joost Hesselink
Director
Stichting Milieu-Educatie
P.O. Box 13030
3507 LA Utrecht
Netherlands
Tel. (31 30) 713 734
NG Stichting Milieu-Educatie

Dr Rik Leemans
Global change (Mondiale
Biosfeer) National Institute
for Public Health and
Environmental Protection
RIVM
P.O. Box 1
3720 BA Bilthoven
Netherlands
Tel. (31 30) 749111
Fax (31 30) 250740
O Global change (Mondiale
Biosfeer) National
Institute for Public
Health and Environmen-
tal Protection

Mr Christiaan Maas Gees-
teranus
Nature Conservation Council
Maliebaan 12
3581 CN Utrecht
Netherlands
Tel. (31 30) 331441
Fax (31 30) 331471

AF Nature Conservation
Council
O CEC

Mr Peter Nijhoff
Stichting Natuur en Milieu
Donkerstraat 17
NL 3511 KB Utrecht
Netherlands
Tel. (31 30) 331328
Fax (31 30) 331311
NG Stichting Natuur en
Milieu
O CESP

Dr Johanna C. van Noordwijk-
van Veen
Chair
WWF Netherlands
le Hogeweg 2
Postbus 7
3700 AA Zeist
Netherlands
Tel. (31 3404) 22164
Fax (31 3404) 12064
Telex 76122 wnf nl
NG WWF Netherlands

Mr Egbert Pelinck
Ministry of Foreign Affairs
P.O. Box 20061
2500EB
The Hague
Netherlands
Tel. (31 70) 348 4286
Fax (31 70) 348 4303
Telex 31326
ST Ministry of Foreign
Affairs

Dr Jaap Pieters
Deputy Director General
Rural Areas and Quality
Management
Ministry of Agriculture &
Fisheries
Postbus 20401
2500 EK The Hague
Netherlands
Tel. (31 70) 3793911
Fax (31 70) 793600
Telex 32040lavi
ST Directorate for Nature
Conservation, Environ-
mental Protection and
Nature Management
IUCN Council Member

Mr Max Slingenberg
Ministry of Agriculture, Nature
Management & Fisheries
P.O. Box 20401
2500 EK The Hague
Netherlands
Tel. (31 70) 379 2934
Fax (31 70) 347 8228
ST Directorate for Nature
Conservation, Environ-
mental Protection and
Nature Management

Mr Roger C. Wilson
Director, Treaties and
Conventions
Greenpeace International
Keizersgracht 176

1016 DW Amsterdam
Netherlands
Tel. (31 20) 523 6555
Fax (31-20) 523 6500
Telex 18775 gpint nl
IN Greenpeace International

Netherlands Antilles

Mr Tom Van't Hof
The Bottom
Saba
Netherlands Antilles
Tel. (599 4) 63348
Fax (599 4) 63348
O CNPPA
O COE

New Caledonia

Dr Vili Fuavao
South Pacific Regional
Environment Programme
(SPREP)
South Pacific Commission
P.O. Box D5
Noumea Cedex
New Caledonia
Tel. (687) 262000
Fax (687) 263818
Telex 3139 nm
O South Pacific Regional
Environment Pro-
gramme (SPREP)

New Zealand

Prof. Carolyn Burns
Department of Zoology
University of Otago
P.O. Box 56
Dunedin
New Zealand
Tel. (64 34) 797971
Fax (64 34) 797584
IUCN Council Member

Mr Mark Christensen
Russell McVeagh Solicitors
P.O. Box 8
Auckland
New Zealand
Tel. (64 9) 398839
Fax (64 9) 3678592
O Russell McVeagh
Solicitors

Dr Paul R. Dingwall
Department of Conservation
35 Cheshire Street
Wellington 5
New Zealand
Tel. (64 4) 710726
O IUCN Consultant on
Antarctic Conservation

Dr David R. Given
Department of Scientific and
Industrial Research (DSIR)
P.O. Box 1578

Wellington
New Zealand
Tel. (64 3) 252511
Fax (64 3) 252074
GA Department of Scientific
and Industrial Research
(DSIR)
O SSC
O CESP

Mr Alistair Graham
Environment & Conservation
Organizations of New
Zealand (ECO)
7 MacDonald Crescent
P.O. Box 11057
Wellington 1
New Zealand
Tel. (64 4) 846971
NG Environment &
Conservation Organiza-
tions of New Zealand
(ECO)

Dr Wren Green
Department of Conservation
P.O. Box 10-420
Wellington
New Zealand
Tel. (64 4) 710726
Fax (64 4) 711082
ST Department of
Conservation

Mr Michael Hagler
Greenpeace International
c/o Greenpeace N.Z. Inc.
Private Bag
Wellesley Street
Auckland
New Zealand
Tel. (64 9) 776128
Fax (64 9) 3032676
IN Greenpeace International

Mr Leslie Hutchins
New Zealand Conservation
Authority
38 O'Neill Crescent
Alexandra
New Zealand
Tel. (64 3) 4487322
Fax (64 3) 4487322
GA New Zealand Conserva-
tion Authority

Dr Richard Jakob-Hoff
Senior Curator
Auckland Zoo
Motions Road
Pt. Chevalier
Auckland
New Zealand
Tel. (64 9) 787487
Fax (64 9) 780199
O Auckland Zoo

Mr John Klaricich
New Zealand Conservation
Authority
Waiwhatawhata
Hokianga RD 3
Kaikohe
Northland
New Zealand
Tel. Opononi 751

O New Zealand Conserva-
tion Authority

Prof. George Alexander Knox
P.O. Box 5254
Papanui
Christchurch
New Zealand
Tel. (64 3) 3521030
Fax (64 3) 642999
O COE

Mr P.H.C. (Bing) Lucas
1/268 Main Road
Tawa
Wellington
New Zealand
Tel. (64 4) 325581
Fax (64 4) 325759
O CNPPA

Mr Bill Mansfield
Department of Conservation
P.O. Box 10-420
Wellington
New Zealand
Tel. (64 4) 710726
Fax (64 4) 711082
ST Department of
Conservation

Dr Leslie F. Molloy
Department of Conservation
P.O. Box 10-420
Wellington
New Zealand
Tel. (64 4) 710726
Fax (64 4) 713279
ST Department of
Conservation
O CNPPA

Prof. Kevin F. O'Connor
Centre for Resource Manage-
ment, Lincoln University
P.O. Box 56
Canterbury
New Zealand
Tel. (64 3) 252811
Fax (64 3) 252156
Telex 4703 linsir
NG Lincoln University,
Canterbury

Mr Gordon Shepherd
WWF-New Zealand
35 Taranki Street
P.O. Box 6237
Wellington North
New Zealand
NG WWF-New Zealand

Mr Keith Tarlo
Royal Forest and Bird
Protection Society
Campaign to Save Nature
Forests
P.O. Box 631
Wellington
New Zealand
Tel. (64 4) 728154
Fax (64 4) 732952
NG Royal Forest and Bird
Protection Society of
New Zealand

Mr Tumu Te Heuheu
New Zealand Conservation
Authority
P.O. Box 381
Taumarunui
New Zealand
Tel. (812) 58212
Fax (812) 56664
GA New Zealand Conserva-
tion Authority

Mr David A. Thorn
New Zealand Conservation
Authority
51 Evelyn Road
Howick
Auckland
New Zealand
Tel. (64 9) 5347949
Fax (64 9) 5347949
GA New Zealand Conserva-
tion Authority

Nicaragua

Lic L.B. Cardenal Sevilla
Main Ecology Advisor
Ministry for the Environment
KM 12c Norte
P.O. Box 5123
Managua
Nicaragua
Tel. (505) 319163184
Fax (505) 31274
ST Ministry of the Exterior
NG Nicaraguan Environ-
mentalist Movement

Dr Jaime Incer Barquero
Minister
Ministry of the Environment
IRENA
Apartado Postal 5123
Nicaragua
Tel. (505 2) 31848
Fax (505 2) 31274
ST Ministry of the Exterior
GA Dirección General de
Recursos (DIRENA)

Lic Juan José Montiel Rocha
Presidente
Asociación de Biólogos y
Ecólogos de Nicaragua
(ABEN)
Apdo. Postal No. 2431
Managua
Nicaragua
Tel. (505 2) 74563
Fax (505 2) 663303
NG Asociación de Biólogos y
Ecólogos de Nicaragua
(ABEN)

Niger

M Abdou Daoure
Secrétaire général Adjoint
Ministère de l'Hydraulique et
de l'Environnement
Ministère de l'Agriculture et de
l'Environnement

B.P. 12277
Niamey
Niger
Tel. (227) 723889
Telex 5509NI
O Ministère des Affaires
Etrangères et de la
Coopération

M Albert Ferral
Conservateur Musée National
Organisation Nigerienne de
Volontaires pour la
Préservation de l'Environne-
ment (ONVPE)
B.P. 2842
Niamey
Niger
Tel. (227) 734573
NG Organisation Nigerienne
de Volontaires pour la
Préservation de
l'Environnement
(ONVPE)

M Michel Keita
Secrétaire Permanent
Ministère de l'Agriculture et de
l'Environnement
Comite National Code Rural
B.P. 12277
Niamey
Niger
Tel. (227) 735821
Fax (227) 732215
O CESP

M Amadou Mamadou
B.P. 280
Niamey
Niger
Tel. (227) 732313
Fax (227) 734163
Telex 5308ni
IUCN Council Member

M Anada Tiega
Directeur Faune, Pêche,
Pisciculture
Ministère de l'Hydraulique et
de l'Environnement
B.P. 257
Niamey
Niger
Tel. (227) 733338
Telex 5509 NI
ST Ministère des Affaires
Etrangères et de la
Coopération
O SSC

Nigeria

Dr Pius Amaeze Anadu
Executive Director
Nigerian Conservation
Foundation
P.O. Box 74638
Victoria Island
Nigeria
Tel. (234 1) 683563
NG Nigerian Conservation
Foundation
O SSC

Chief Philip C. Asiodu
Chairman
Nigerian Conservation
Foundation
58/60 Broad Street
P.O. Box 9310
Lagos
Nigeria
Tel. (234 1) 630646
Fax (234 1) 630229
Telex 21686 ng
NG Nigerian Conservation
Foundation

Mr E.C.J. Okafor
Fed. Ministry of Agriculture,
Water Resources and Rural
Development
Federal Department of Forestry
and Agricultural Land
Resources
Block 432
Zone 1, Wuse
Abuja
Nigeria
Tel. (234 9) 5230177
O Fed. Ministry of
Agriculture, Water
Resources and Rural
Development

Norway

Mr Jan Abrahamsen
Ministry of Environment
P.O. Box 8013-Dep.
0030 Oslo 1
Norway
ST Royal Ministry of
Environment

Mr Steinar Eldoy
Directorate for Nature
Management
Tungasletta 2
7004 Trondheim
Norway
Tel. (47 7) 580500
Fax (47 7) 915433
GA Directorate for Nature
Management
O CNPPA

Mr Harald Kristoffersen
Norwegian Agency for
International Development
P.O. Box 8142 Dep.
0033 Oslo 1
Norway
O Norwegian Agency for
International Develop-
ment

Mrs Berit Lein
Directorate for Nature
Management
Tungasletta 2
7004 Trondheim
Norway
Tel. (47 7) 580500
Fax (47 7) 915433
GA Directorate for Nature
Management

Mr Thor Midteng
Senior Officer
Norges Naturvernforbund
P.O. Box 2113
Grunerlokka
0505 Oslo 5
Norway
Tel. (47 2) 715520
Fax (47 2) 715640
NG Norges Naturvernfor-
bund

Mr Rolf Selrod
Ministry of Environment
P.O. Box 8013-Dep
0030 Oslo 1
Norway
ST Royal Ministry of
Environment

Mr Gordon Shepherd
WWF i Norge
Hegdehaugsveien 22
N-0167 Oslo 1
Norway
NG WWF Norway

Ms Anne Marie Skjold
Environmental Adviser
Royal Ministry of Foreign
Affairs
P.O. Box 8114 Dep.
0032 Oslo 1
Norway
Tel. (47 2) 343600
Fax (47 2) 349580
Telex 71004 NOREG N
O Royal Ministry of
Foreign Affairs

Oman

Mr Ali Bin Amer Al-Kiyumi
Director - NCS
Ministry of Environment
P.O. Box 323
Muscat
Oman
Tel. (968) 696444
Fax (968) 602320
Telex 5404
ST Ministry of Environment
and Water Resources

Mr Moosa bin Jaffer Al-
Moosawi
Ministry of Environment
P.O. Box 323
Muscat
Oman
Tel. (968) 696444
Fax (968) 602320
Telex 5404
ST Ministry of Environment
and Water Resources

Mr Ralph H. Daly
Adviser for Conservation
Diwan of Royal Court
P.O. Box 246
Muscat
Oman
Tel. (968) 736207
Fax (968) 740550

Telex 5667 ace (on)
O SSC

Dr Paul N. Munton
Ministry of Environment
P.O. Box 323
Muscat
Oman
Tel. (968) 696444
Fax (968) 602320
Telex 5404
ST Ministry of Environment
and Water Resources
O SSC

Pakistan

Ms Mehruunnisa Ahmad Ali
Director
Teachers Resource Centre
67-B Garden Road
Karachi
Pakistan
Tel. (92 21) 717967
Fax (92 21) 229259
NG Teachers Resource
Centre

Dr Gufaraz Ahmed
Chairman
Pakistan Oil and Gas
Development Corporation
Masood Mansion Building
Markaz F/8
Islamabad
Pakistan
O Pakistan Oil and Gas
Development Cor-
poration

Syed Babar Ali
WWF Pakistan
Packages Limited
Shahrah-e-Roomi
Lahore 54770
Pakistan
Tel. (92 42) 370158
Fax (92 42) 370429
NG WWF Pakistan
IUCN Council Member

Ms Shagufta Alizai
Shirkat Gah
1 Bath Island Road
Karachi 75530
Pakistan
Tel. (92 21) 573079
Telex 24154 mark pk
NG Shirkat Gah

Mr Dawood Nassar Ghaznavi
Director
WWF Pakistan
Ali Industrial Technical
Institute
Ferozpur Road
P.O. Box 5180
Lahore
Pakistan
Tel. (92 42) 856177
Fax (92 42) 370429
Telex 44866 pkgs pk
NG WWF Pakistan

Ms Neelam Habib
WWF Pakistan
1 Bath Island Road
Karachi 75530
Pakistan
Tel. (92 21) 573046
Telex 24154 mark pk
NG WWF Pakistan

Mr Shamsul Haque
Joint Secretary
Environment and Urban
Affairs Division
Ministry of Housing and
Works
Shaheed e Millat Secretariat
Blue Area F 6-1
Islamabad
Pakistan
Tel. (92 51) 822757
O Ministry of Housing and
Works

Dr Parvez Hassan
Hassan & Hassan
PAAF Building
7D Kashmir Egerton Road
Lahore
Pakistan
Tel. (92 42) 303825
Fax (92 42) 869483
Telex 44805 hasan pk
O CEL

Dr Akmal Hussain
Environmental Protection
Society
c/o Sayeed Engineers (Pvt) Ltd
40 Ahmad Park,
Garden Town
Lahore
Pakistan
Tel. (92 42) 867484
O Environmental
Protection Society

Senator Javed Jabbar
MNJ Communications Pvt Ltd
48-B Block 6
PECHS
Karachi
Pakistan
Tel. (92 21) 432865
Fax (92 21) 436559
Telex 23108 MNJ PK
O

Mr Abeer Ullah Jan
National Council for
Conservation of Wildlife
Ministry of Food and
Agriculture
Block B
Islamabad
Pakistan
Tel. (92 51) 825289
Telex 5844 minfa pk
ST National Council for
Conservation of Wildlife
in Pakistan

Mr Muhammad Zaheer Khan
President
Scientific and Cultural Society
of Pakistan
B-7 Sheet No. 25

Model Colony
Karachi 75100
Pakistan
Tel. (92 21) 409336
Fax (92 21) 468906
NG Scientific and Cultural
Society of Pakistan

Mr Shoaib S. Khan
General Manager
Aga Khan Rural Support
Programme
Gilgit
Northern Areas
Pakistan
Tel. 2480
O Aga Khan Rural Support
Programme

Mr Abrar Husain Mirza
Conservator Wildlife
Sindh Wildlife Management
Board
Stratchen Road
P.O. Box No. 3722
Karachi No. 1
Pakistan
Tel. (92 21) 523176
GA Sindh Wildlife
Management Board
NG WWF Pakistan

Dr Ishaq Mirza
Pakistan Space and Upper
Atmosphere Research
Commission (SUPARCO)
Sector 28, Gulzar-E-Hijri
Off University Road
P.O. Box 8402
Karachi 75270
Pakistan
Tel. (92 21) 471127
Fax (92 21) 460092
Telex 25720 space pk
GA Pakistan Space and
Upper Atmosphere
Research Commission
(SUPARCO)

Mr Abdul Latif Rao
National Council for
Conservation of Wildlife
Ministry of Food and
Agriculture
Government of Pakistan
485 St. 84
G 6-4 Islamabad
Pakistan
Tel. (92 51) 823520
Telex 5844 minfa pk
ST National Council for
Conservation of Wildlife
in Pakistan
O SSC
O CNPPA

Miss Fehmida Firdous Siddiqui
Project Officer, Marine Turtles
Sindh Wildlife Management
Board
Stratchen Road
P.O. Box 3722
Karachi No.1
Pakistan
Tel. (92 21) 523176
GA Sindh Wildlife
Management Board

Ms Syeda Bushra Waheed
Research Officer, Env. Section
Hydro Electric Planning Org.
Water and Power Develop-
ment Authority
Sunny View
Kashmir Road
Lahore
Pakistan
Tel. (92 42) 62192
Fax (92 42) 211732
O Hydro Electric Planning
Org. Water and Power
Development Authority

Ms Asma Zia
Administrator
Shirkat Gah
1 Bath Island Road
Karachi 75530
Pakistan
Tel. (92 21) 573079
Telex 24154 mark pk
NG Shirkat Gah

Ms Soni Zuberi
Environmental Projects Officer
IUCN
1 Bath Island Road
Karachi 25530
Pakistan
Tel. (92 21) 573082
Telex 24154 mark pk

Panama

Mr Luis Lin Mou Sue
Asociación Conservacionista
Caribaro
Apartado 17
BocasDelToro
Panama
Panama
Tel. (507) 789244
NG Asociación Conserva-
cionista Caribaro
(ACCA)
O Fundación de Parques
Nacionales y Medio
Ambiente (P.A.N.A.M.A.)

Sr Juan Carlos Navarro
Director Ejecutivo
Asociación Nacional para la
Conservación de la
Naturaleza
Apartado 1387
Zona 1
Panama
Panama
Tel. (507) 648100
Fax (507) 641836
NG Asociación Nacional
para la Conservación de
la Naturaleza (ANCON)
NG Asociación para la
Investigación y
Propagación de Especies
Panameñas (AIPEP)
NG Proyecto de Estudio para
el Manejo de Areas
Silvestres de Kuna Yala
(PEMASKY)

Mr Eric Fernando Rodriguez
Rivera
Institute de Recursos Naturales
Renovables (INRENARE)
Apartado 2016
Paraiso
Ancón
Panama
Tel. (507) 324330
GA Institute Nacional de
Recursos Naturales
Renovables (IN-
RENARE)

Papua New Guinea

Mr A. Murray Eagle
OK Tedi Mining Ltd.
P.O. Box 1
Tabubil
Papua New Guinea
Tel. (675) 583390
Fax (675) 589390
O OK Tedi Mining Ltd.

Mr John Genolagani
Department of Environment
and Conservation
P.O. Box 5266
Boroko
Papua New Guinea
Tel. (675) 254397
Fax (675) 254372
O Department of
Environment and
Conservation

Mr Guy Kula
Department of Environment
and Conservation
P.O. Box 5266
Boroko
Papua New Guinea
Tel. (675) 254397
Fax (675) 254372
O Department of
Environment and
Conservation

Mr Vincent Nyama
Assistant Secretary
Department of Environment
and Conservation
P.O. Box 6601
Boroko
Papua New Guinea
Tel. (675) 254397
Fax (675) 254372
O Department of
Environment and
Conservation

Mr Mick Raga
Wildlife Conservation
P.O. Box 6601
Boroko
Papua New Guinea
Tel. (675) 272500
Fax (675) 271044
O Wildlife Conservation
Dr Simon M. Saulei
PNG Forest Research Institute
P.O. Box 314

Lae
Papua New Guinea
Tel. (675) 424188
Fax (675) 424357
O COE

Mr Lester Seri
Department of Environment
and Conservation
P.O. Box 6601
Boroko
Papua New Guinea
Tel. (675) 253589
Fax (675) 254372
O Department of
Environment and
Conservation

Mr John Fraser Stewart
P.O. Box 480
Port Moresby
Papua New Guinea
Tel. (675) 217027
Fax (675) 213646
O

Dr Kevin Vang
Ministry of Environment and
Conservation
Department of Environment
and
Conservation
P.O. Box 6601
Boroko
Papua New Guinea
Tel. (675) 271537
Fax (675) 271044
O Ministry of Environment
and Conservation

Mr Brian Peter Vernon
P.O. Box 196
Lae
Papua New Guinea
Tel. (675) 424270
Fax (675) 426172
O SSC

Mr David Vosseler
Department of Environment
and Conservation
P.O. Box 5266
Boroko
Papua New Guinea
Tel. (675) 254397
Fax (675) 254372
O Department of
Environment and
Conservation

Mr David G. Vosseler
Foundation of the People of the
South Pacific
P.O. Box 1119
Boroko, NCD
Papua New Guinea
Tel. (675) 258470
Fax (675) 252670
O Foundation of the People
of the South Pacific

Mr Kembi Watoka
Dept. of Environment &
Conservation
P.O. Box 6601
Boroko

Papua New Guinea
Tel. (675) 271275
Fax (675) 271900
O Dept. of Environment &
Conservation

Paraguay

Rosa M. Villamayor Orue
Sub Secretaria de Recursos
Naturales y Medio Ambiente
Ministro de Agricultura
España # 114
Asuncion
Paraguay
Tel. (59521) 291793
Fax (59521) 447473
Telex 629 PYMDN
O CEC
O CNPPA

Peru

Sr Antonio Andaluz Westre-
cher
Presidente Ejecutivo
PROTERRA
Av. Esteban Campodonico 208
Urb. Sta. Catalina
La Victoria
Lima
Peru
Tel. (51 14) 723800
Fax (51 14) 417001
NG PROTERRA

Ing Eric Cardich
Director Técnico
Sociedad Pachamama
Camino Real 479, 8vo. piso
Lima 27
Peru
Tel. (51 14) 416031
Fax (51 14) 411990
Telex 21275 pe
NG Sociedad Pachamama
O CNPPA

Mr Tony Luscombe
Vice President
Asociación de Ecología y
Conservación
Vanderghen 560-2A
Lima 27
Peru
Tel. (51 14) 407276
Fax (51 14) 467888
NG Asociación de Ecología y
Conservación (ECCO)

Sr Gustavo Suarez de Freitas
Director Técnico
Fundación Peruana para la
Conservación de la
Naturaleza (FPCN)
Chinchón 858/A
San Isidro
Apto. 18-1393
Lima
Peru
Tel. (51 14) 422796
Fax (51 14) 406706

Telex 25129
NG Fundación Peruana para
la Conservación de la
Naturaleza (FPCN)
NG Sociedad Peruana de
Derecho Ambiental
(SPDA)

Ing Manuel Uceda C.
Director General
Dirección General de Forestal y
Fauna
Natalio Sanchez 220
Of. 304
Lima 11
Peru
Tel. (51 14) 233978
Fax (51 14) 406706
O Dirección General de
Forestal y Fauna (DGFF)

Philippines

Mr Adlai J. Amor
Chairman
Asia-Pacific Forum of
Environmental Journalists
P.O. Box 1843
1099 Manila
Philippines
Tel. (632) 5224582
Fax (632) 5224365
Telex 27674 pfa ph
O Asia-Pacific Forum of
Environmental
Journalists

Mr Danilo Balete
Haribon Foundation for the
Conservation of Natural
Resources
Suite 306 Sunrise Con-
dominium
226 Ortigas Avenue
San Juan
Metro Manila
Philippines
Tel. (632) 7211048
Fax (632) 7211693
NG Haribon Foundation for
the Conservation of
Natural Resources

Mr Antonio M. Claparos
President
Ecological Society of the
Philippines
53 Tamarind Road
Forbes Park, Makati
Metro Manila
Philippines
Tel. (631) 7351
Fax (631) 7357
Telex 29006 JRSPH
NG Ecological Society of the
Philippines

Ms Louella M. Dolar
Silliman University Marine
Laboratory
Dumaguete City 6200
Philippines
O Silliman University
O SSC

Mr Cesar Nuevo
Director
College of Forestry
University of the Philippines
Los Banos College UPLB
Laguna 3720
Philippines
Telex 4163
O College of Forestry

Mr Ruben Rayala
Protected Areas and Wildlife
Bureau
Department of Environment
and
Natural Resources
Quezon Blvd.
Diliman
Quezon City
Philippines
Tel. (632) 978511
Fax (632) 981010
Telex 757 2000 pi
GA Protected Areas and
Wildlife Bureau,
Department of the
Environment and
Natural Resources
O SSC

Mr Amado Tolentino
Attorney
Pollution and Adjudication
Board (DENR-EMB)
7 Mahiyain Street
Diliman
Quezon City 1100
Philippines
Tel. (632) 9217878
Fax (632) 968586
O CEL

Poland

Prof. Kazimierz Klimek
National Council for
Conservation of Nature in
Poland
c/o Nature and Natural
Resource
Protection Centre ul. Lubicz 46
ul. Lubicz 46
31'512 Krakow
Poland
Tel. (48 12) 215637
NG National Council for
Conservation of Nature
in Poland
O CNPPA
O CESP

Prof. T.P. Szafer
Polish Ecological Club
10 Nullo Street
Krakow
Poland
Tel. (48 12) 111431
NG Polish Ecological Club

Portugal

Sr Alberto Caires Vila Nova
Servigo Nacional de Parques,
Reservas e de Conservação
da Natureza
Rua da Lapa, 73
1200 Lisboa
Portugal
Tel. (351 1) 563317
Fax (351 1) 523103
Telex 44089
ST Serviço Nacional de
Parques, Reservas e de
Conservação da
Natureza

Sr José M. Carvalho de
Vasconcelos
Servigo Nacional de Parques,
Reservas e de Conservação
da Natureza
Rua da Lapa, 73
1200 Lisboa
Portugal
Tel. (351 1) 352 317
Fax (351 1) 523103
Telex 44 089
ST Serviço Nacional de
Parques, Reservas e de
Conservação da
Natureza

S.E. Ambassadeur Luis Gomes
Ministry of Foreign Affairs
Rua da Lapa 73
1200 Lisboa
Portugal
Fax (351 1) 523103
Telex 44089
ST Serviço Nacional de
Parques, Reservas e de
Conservação da
Natureza

Republic of Korea

Mr Choi Yoon Young
Assistant Director
Ministry of Home Affairs
77 Sejong-no chong hogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
Telex 24756
GA Division of Nature
Preservation, Ministry of
Home Affairs

Mr Kang Bong Kil
Assistant Director, JeonNam
Prov.
Ministry of Home Affairs
77 Sejong-no chong hogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
Telex 24756
GA Division of Nature
Preservation, Ministry of
Home Affairs

Mr Kang Hong Suk
Assistant Director, KyongNam
Prov.
Ministry of Home Affairs
77 Sejong-no chong hogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
Telex 24756
GA Division of Nature
Preservation, Ministry of
Home Affairs

Dr Hoon Soo Kim
Korean Association for
Conservation of Nature
207-Chongnyangri-dong
Dongdaemun-gu
Seoul 130-012
Rep. of Korea
Tel. (82 2) 9652894
NG Korean Association for
Conservation of Nature

Mr Kim Hyun Sik
Assistant Director, Seoul City
Ministry of Home Affairs
77 Sejong-no chon nogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
GA Division of Nature
Preservation, Ministry of
Home Affairs

Mr Lee Hwa-Young
The National Parks Association
of Korea
203-807 Yoowon Apt.
Tangsan-Dong
Younggongpo-Ku
Seoul 150-045
Rep. of Korea
Tel. (82 2) 6750426
NG The National Parks
Association of Korea

Mr Rhee Kyu Oong
Ministry of Home Affairs
77 Sejong/no chong hogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
Telex 24756
GA Division of Nature
Preservation, Ministry of
Home Affairs

Mr Lee Young Hyun
Assistant Director, Taegu City
Ministry of Home Affairs
77 Sejong-no chong hogu
Seoul 110
Rep. of Korea
Tel. (82 2) 7312350
Fax (82 2) 7312836
Telex 24756
GA Division of Nature
Preservation, Ministry of
Home Affairs

Romania

Prof. Dr A. Vadineanu
State Secretary, Environment
Dept.
Ministry of Environment
Strada Artera Noua N-S
Sedii Ministere
Tronson 5-6
Sectorul 5
Bucarest
Romania
Tel. (40 0) 316044
Fax (40 0) 316199
Telex 11457 cnape
O Ministry of Environment

Samoa

Mr Josefatu Reti
Assistant Director, Environ-
ment
Department of Lands and
Environment
Private Mail Bag
Apia
Samoa
Tel. (685) 22-4812
Fax (685) 21-504
Telex malo apia SX
ST Department of Lands
and Environment
O CNPPA
IUCN Council Member

Saudi Arabia

Mr Mohammed B. Al Toriaf
National Commission for
Wildlife Conservation and
Development
P.O. Box 61681
Riyadh 11575
Saudi Arabia
Tel. (966 1) 4418700
Fax (966 1) 4410797
Telex 405930 snwcwcdsj
O National Commission for
Wildlife Conservation
and Development
(NCWD)

Mr Yousef I. Al Wetaid
National Commission for
Wildlife Conservation &
Development (NCWCD)
P.O. Box 61681
Riyadh 11575
Saudi Arabia
Tel. (966 1) 4418700
Fax (966 1) 4410797
Telex 405930SNCWCD SJ
GA National Commission for
Wildlife Conservation &
Development (NCWCD)

Mr Muhammad Alkhatani
Meteorology and Environment
Protection Administration
(MEPA)
Attn: The President

King Faisal University
P.O. Box 1982
Damman
Saudi Arabia
Tel. (966 3) 5800164
O Meteorology and
Environment Protection
Administration (MEPA),
Ministry of Defence and
Aviation
O Tourism Development
Department, Assir
Principality

Mr Khalid M.A. Arkanji
Meteorology and Environmen-
tal Protection Administration
(MEPA)
Ministry of Defence and
Aviation
P.O. Box 1358
Jeddah 21431
Saudi Arabia
Tel. (966 2) 6512312
Fax (966 2) 6554188
ST Meteorology and
Environmental
Protection Administ-
ration (MEPA), Ministry
of Defense and Aviation

Dr Graham Child
IUCN Senior Advisor
c/o National Commission for
Wildlife Conservation &
Development
P.O. Box 61681
Riyadh 11575
Saudi Arabia
Tel. (966 1) 4418700
Fax (966 1) 4410797
Telex 405930
GA National Commission for
Wildlife Conservation
and Development
(NCWD)
O SSC
O CNPPA
IUCN Council Member

Mr Abdulwahab Dakkak
Meteorology and Environmen-
tal Protection Administration
(MEPA)
P.O. Box 1358
Jeddah 21431
Saudi Arabia
Tel. (966 2) 6517832
Fax (966 2) 6513640
ST Meteorology and
Environmental
Protection Administ-
ration (MEPA), Ministry
of Defence and Aviation

ProfDr Abdel Rhman El
Hawawi
National Commission for
Wildlife Conservation and
Development
P.O. Box 61681
Riyadh 11575
Saudi Arabia
Tel. (966 2) 4418700
Fax (966 2) 4410797
Telex 405930

GA National Commission for
Wildlife Conservation
and Development
(NCWD)

Mr Othman A. Llewellyn
National Commission on
Wildlife Conservation and
Development
P.O. Box 61681
Riyadh
Saudi Arabia
Tel. (966 1) 4418700
Fax (966 1) 4410797
Telex 405930 snwcwcdsj
GA National Commission for
Wildlife Conservation
and Development
(NCWD)

Mr Mohammad S.A. Sulayem
Director of Planning
National Commission for
Wildlife Conservation &
Development (NCWCD)
P.O. Box 61681
Riyadh 11575
Saudi Arabia
Tel. (966 1) 4418700
Fax (966 1) 4410797
Telex 405930SNCWCD sj
GA National Commission for
Wildlife Conservation &
Development (NCWCD)
O CNPPA

Senegal

Mr Bocaroumar Sall
Directeur des Eaux, Forêts,
Chasses
Ministere du Developpement
Rural et de l'Hydraulique
B.P. 1831
Dakar - Hann
Senegal
Tel. (221) 320856
Fax (221) 320475
Telex 21248 comides
O Ministère du Développe-
ment Rural et de
l'Hydraulique

Seychelles

M John Mascarenhas
Permanent Secretary
Department of the Environ-
ment
B.P. 445
Mahe
Seychelles
ST Department of the
Environment, Ministry
of Planning and External
Relations
The Hon. Guy F. Robert
Consul
Republic of Seychelles
Seychelles
O

Singapore

Ambassador Tommy T.B. Koh
Chairman
UNCED Preparatory
Committee
Ministry of Foreign Affairs
Singapore
O UNCED Preparatory
Committee

Solomon Islands

Mr Henry Isa
Ministry of Natural Resources
P.O. Box G24
Honiara
Solomon Islands
Tel. (677) 23696
Fax (677) 21245
Telex 66306 soinat hq
O CNPPA

Mr Vincent Vaguni
Marovo Lagoon Resource
Management Project
Tameneke
Via Seghe Postal Agency
Western Province
Solomon Islands
O Marovo Lagoon
Resource Management
Project

South Africa

Mr Keith Cooper
Director (Conservation)
Wildlife Society of Southern
Africa
100 Brand Road
Durban 4001
South Africa
Tel. (2731)210909
Fax (2731) 219525
NG Wildlife Society of
Southern Africa

Dr Bruce Davidson
Wildlife Society of Southern
Africa
Medical Biochemistry
Wits. Medical School
Parktown 2193
South Africa
Tel. (27 11) 647256
Fax (27 11) 6434318
NG Wildlife Society of
Southern Africa
O SSC

Prof. Frederick C. Eloff
National Parks Board
P.O. Box 787
Pretoria 0001
South Africa
Tel. (27 12) 3439770
Fax (27 12) 3430155
Telex 321324
GA National Parks Board of
South Africa

Mr Sydney Albert Gerber
Department of Environment
Affairs
Private Bag X447
Pretoria 0001
South Africa
Tel. (27 12) 3103695
Fax (27 12) 3222682
GA Department of
Environment Affairs,
Pretoria

Dr Anthony Hall-Martin
Director (Special Services)
National Parks Board of South
Africa
Private Bag X 402
Skukuza 1350
South Africa
Tel. (2713)1165611
Fax (2713) 1165467
Telex 335643
GA National Parks Board of
South Africa
O SSC
O CNPPA

Dr George Ritchie Hughes
Chief Director
Natal Parks Board
P.O. Box 662
3200 Pietermaritzburg
South Africa
Tel. (27331)471961
Fax (27 331) 471037
Telex 643 481
GA Natal Parks Board
O SSC
O CNPPA

Mr Brian Huntley
National Botanical Institute
Private Bag X7
Oaremont 7735
South Africa
Tel. (27 21) 7621166
Fax (27 21) 7623229
AF National Botanical
Institute (NBI)
O SSC

Dr Johannes H. Neethling
Chief Director
Chief Directorate, Nature and
Environmental Conservation
Private Bag X9086
Cape Town 8000
South Africa
Tel. (27 21) 4834093
Fax (27 21) 230939
Telex 522368
AF Chief Directorate, Nature
and Environmental
Conservation

Dr Gilbert Robinson
National Parks Board
P.O. Box 787
Pretoria 0001
South Africa
Tel. (2712)3439770
Fax (27 12) 3430155
Telex 321324
GA National Parks Board of
South Africa
O SSC

Mr Rob Soutter
WWF - South Africa
P.O. Box 456
Stellenbosh 7600
South Africa
Tel. (27 22) 3172801
Fax (27 22) 3179517
NGSA Nature Foundation /
WWF Southern Africa
O CEC

Mr A.E.G. Trollip
National Parks Board
P.O. Box 787
Pretoria 0001
South Africa
Tel. (27 11) 8831340
Fax (27 11) 8834505
GA National Parks Board
O CEL

Dr Richard D. Walmsley
Foundation for Research
Development
P.O. Box 2600
Pretoria 0001
South Africa
Tel. (2712)8413634
Fax (27 12) 8042679
Telex 3-21312 SA
AF Foundation for Research
Development

Spain

Sr Andres F. Alcantara Valero
Asociación Malaguena para la
Protección de la Vida
Silvestre
Apto. 4046
29080 Malaga
Spain
Tel. (34 52) 275482
NG Asociación Malaguena
para la Protección de la
Vida Silvestre (SIL-
VEMA)

Mrs Eliza Barahona
Secretaria General de Medio
Ambiente
Po Castellana 67
28071 Madrid
Spain
GA Secretaria General de
Medio Ambiente
(SGMA)

Ms Susana Calvo
Secretaria General de Medio
Ambiente
Po Castellana 67
28071 Madrid
Spain
GA Secretaria General de
Medio Ambiente
(SGMA)

Sr Juan Manuel de Benito
Ontañón
Institute Nacional para la
Conservación de la
Naturaleza (ICONA)
Gran Vía San Francisco 35

28005 Madrid
Spain
Tel. (34 1) 76189
Fax (34 1) 2658379
Telex 47591 aeico e
ST Institute Nacional para
la Conservación de la
Naturaleza (ICONA)

Dr Josep del Hoyo Caldach
President
Lliga per a la Defensa del
Patrimoni Natural
(DEPANÀ)
Arago, 281 2 - 2a
08009 Barcelona
Spain
Tel. (34 3) 2151484
Fax (34 3) 4871560
NG Lliga per a la Defensa
del Patrimoni Natural
(DEPANÀ)

Sr Antonio Machado
Consejería de Política
Territorial, Comunidad
Autónoma de Canarias
Presidencia del Gobierno
Plaza 25 de Julio no. 1
38001 Santa Cruz de Tenerife
Islas Canarias
Spain
Tel. (34 22) 272762
Fax (34 22) 273215
GA Consejería de Política
Territorial, Comunidad
Autónoma de Canarias

Sr Don Cosine Morillo
Institute Nacional para la
Conservación de la
Naturaleza (ICONA)
Gran Vía de San Francisco 35
28005 Madrid
Spain
Tel. (34 1) 76159
Fax (34 1) 2658379
Telex 47591 aeico e
ST Institute Nacional para
la Conservación de la
Naturaleza (ICONA)
GA Agencia Española de
Cooperación Inter-
nacional (AECI)

Sr Victor Perez-Borrego
Consejería de Política
Territorial, Comunidad
Autónoma de Canarias
Avenida de Anaga 35
7 Planta
Santa Cruz de Tenerife
Spain
Tel. (34 22) 273354
Fax (34 22) 287115
GA Consejería de Política
Territorial, Comunidad
Autónoma de Canarias

Sr Carlos Segovia Espiau
Asociación para la Superviven-
cia de la Naturaleza y Medio
Ambiente
Apto. de Correos 143
41080 Sevilla
Spain

Tel. (34 95) 4214251
NG Asociación para la
Supervivencia de la
Naturaleza y el Medio
Ambiente de Andalucía
(ANDALUS)

Mr Gordon Shepherd
Asociación para la Defensa de
la Naturaleza (ADENA),
WWF-España
Santa Engracia 6
Madrid 10
Spain
NG WWF-España

Sri Lanka

Dr Raja V.W.E. Ameresekere
Secretary
Ministry of Environment and
Parliamentary Affairs
6th Floor
Unity Plaza
Colombo 4
Sri Lanka
Tel. (94 1) 589426
O Ministry of Environment
and Parliamentary
Affairs

Mr Herath M. Bandaratillake
Forest Department
Rajamalwatta Road
Battaramulla
Sri Lanka
Tel. (94 1) 566634
Fax (94 1) 580089
GA Forest Department

Mr Lalanath De Silva
Environmental Foundation Ltd.
29, Siripa Road
Colombo 5
Sri Lanka
Tel. (94 1) 588804
Fax (94 1) 546518
Telex 22894 sagco ce
NG Environmental
Foundation

Dr Sukanya Devarajan
Science and Technical Advisor
Canadian International
Development Agency
(CIDA)
12, Amarasere Mawatha
Colombo 5
Sri Lanka
Tel. (94 1) 502640
Fax (94 1) 502643
O Canadian International
Development Agency
(CIDA)

Dr Ranjen Fernando
Wildlife and Nature Protection
Society
No 10 Daniel Avenue
Colombo 5
Sri Lanka
Tel. (94 1) 25248
Fax (94 1) 580721
Telex 21537

NG Wildlife and Nature
Protection Society

Prof. I.A.U.N. Gunatilleke
University of Peradeniya
Peradeniya
Sri Lanka
Tel. (94 8) 88693
Fax (94 8) 32043
O

Mr Malcolm A.B. Jansen
Coordinator (Projects)
March for Conservation
c/o University of Colombo
College House
Thurstan Road
Colombo 3
Sri Lanka
NG March for Conservation
(MFC)

Mr Edmund Kerner
Vice President
Worldview International Sri
Lanka Foundation
3/2 Hawlton Road
Blockburn South VIC 3130
Australia
Sri Lanka
Tel. (61 3) 8025253
O Worldview International
Sri Lanka Foundation

Dr Sarath W. Kotagama
Director
Department of Wildlife
Conservation
15, Center Road
Jayanthipura
Battaramulla
Sri Lanka
Tel. (94) 567084
GA Department of Wildlife
Conservation

Mr Winasa M. Leelasena
Norwegian Agency for
Development Cooperation
(NORAD)
34, Ward Place
Colombo 7
Sri Lanka
Tel. 698936/692263
Fax (94 1) 695009
Telex 21340 norad ce
O Norwegian Agency for
Development Coop-
eration (NORAD)

Mr D.G. Premachandra
Secretary
Ministry of Lands, Irrigation
and Mahaweli Development
500 T.B. Jayah Mawatha
Colombo 10
Sri Lanka
Tel. (94 1) 687375
Fax (94 1) 584984
ST Ministry of Lands,
Irrigation and Mahaweli
Development

Mr Ansem de Silva
Faculty of Medicine
University of Peradeniya

Peradeniya
Sri Lanka
Tel. (94 8) 88130
Fax (94 8) 32572
O SSC

Mr L.C.A. de S. Wijesinghe
Addl. Director General
Natural Resources, Energy and
Science Authority of Sri
Lanka
Maitland Place
Colombo 7
Sri Lanka
Tel. (94 1) 596771
O Natural Resources,
Energy and Science
Authority of Sri Lanka

Sudan

Dr Mutasim Nimir
Sudanese Environmental
Conservation Society
Wildlife Research Centre
P.O. Box 16 El Morda
Omdurman
Sudan
Tel. (249) 76925
Telex 22738 kup sd
O Sudanese Environmental
Conservation Society

Sweden

Mr Johan Brisman
Assistant Director General
Swedish International
Development Authority
(SIDA)
105 25 Stockholm
Sweden
Tel. (46 8) 7285400
Fax (46 8) 3222141
Telex 114 505
ST Ministry of Environment
and Energy

Dr Lars-Erik Esping
Assistant Director General
Swedish Environmental
Protection Agency
17185 Solna
Sweden
Tel. (46 8) 7991000
Fax (46 8) 292382
Telex 11131 environ
ST Ministry of Environment
and Energy

Prof. Matin Falkenmark
Swedish Natural Science
Research Council
P.O. Box 6711
11385 Stockholm
Sweden
Tel. (46 8) 303508
O Swedish Natural Science
Research Council

Mr Rune Frisen
Head of Department

Swedish Environmental
Protection Agency
17185 Solna
Sweden
Tel. (46 8) 7991405
Fax (46 8) 2291106
Telex 11131 enviv
ST Ministry of Environment
and Energy

Prof. Bjorn Ganning
Ambio
Royal Swedish Academy of
Science
S-10405 Stockholm
Sweden
Tel. (46 8) 150430
O Ambio, Royal Swedish
Academy of Science

Ms Carolyn Hannan-Anderson
IUCN Consultant
Nypongrand 51
175 49 Jarfalla
Sweden
Tel. (46) 75814233
O

Ms Madeleine Hoist
Head of Section
Ministry of the Environment
103 33 Stockholm
Sweden
Tel. (46 8) 7631000
Fax (46 8) 241629
Telex 15499
ST Ministry of Environment
and Energy

Ms Gudrun A. C. Hubendick
Swedish Society for the
Conservation of Nature
P.O. Box 4625
S-11691 Stockholm
Sweden
Tel. (46 8) 7026581
Fax (46 8) 7022702
NG Swedish Society for the
Conservation of Nature

Dr Hans Lundberg
Environmental Secretary
Royal Swedish Academy of
Sciences
Environmental Secretariat
P.O. Box 50005
S-104 05 Stockholm
Sweden
Tel. (46 8) 150430
Fax (46 8) 155670
Telex 17073
NG Royal Swedish Academy
of Sciences
O COE

Mr Valfrid Paulsson
Director General
Swedish Environmental
Protection Agency
S-171 85 Solna
Sweden
Tel. (46 8) 7991000
Fax (46 8) 292382
Telex 1131 environ s
ST Ministry of Environment
and Energy

Mr Mats Segnestam
Senior Policy Advisor
Environment
Swedish International
Development Authority
(SIDA)
S-105 25 Stockholm
Sweden
Tel. (46 8) 7285406
Fax (46 8) 3222141
Telex 114 50 s
ST Ministry of Environment
and Energy

Dr Magnus Sylven
Head of Conservation
WWF - Sweden
Ulriksdals Slott
S-171 71 Solna
Sweden
Tel. (46 8) 850120
Fax (46 8) 851329
NG WWF - Sweden

Mr Carl Tham
Director General
Swedish International
Development Authority
S-10525 Stockholm
Sweden
Tel. (46 8) 7285410
Fax (46 8) 332076
ST Ministry of Environment
and Energy

Switzerland

Dr Aldo Antonietti
Office federal de l'environnement,
des foëts et du
paysage
Division principale
Protection nature et paysage
3003 Berne
Switzerland
Tel. (41 31) 618081
Fax (41 31) 61782
ST Office federal de
l'environnement, des
Forêts et du paysage
NG Academie Suisse des
Sciences Naturelles
NG Comité d'Action pour la
Défense des Animaux en
Peril (CADAP)
NG Ligue Suisse pour la
Protection de la Nature

M Jaques S. Berney
CITES Secretariat
C.P. 78
6, rue du Maupas
1000 Lausanne 9
Switzerland
Tel. (41 21) 200081
Fax (41 21) 200084
Telex 454584 ctes ch
O CITES Secretariat

Dr Mark Collins
Societas Europaea Lepidop-
terologica (SEL)
c/o Hanjurg Geiger
General Secretary

Zoologisches Institut der
Universitat Bern
Switzerland
IN Societas Europaea
Lepidopterologica (SEL)
O SSC

Mr Charles de Haes
Director General
WWF International
Avenue Mont-Blanc
1196 Gland
Switzerland
Tel. (41 22) 64 91 11
Fax (41 22) 64 58 29
Telex 419 618
O WWF International

Mrs Elizabeth Holdgate
IUCN
Avenue du Mont Blanc
1196 Gland
Switzerland
O

Mr Peter Jackson
Chairman, IUCN Cat Specialist
Group
1172 Bougy
Switzerland
Tel. (41 21) 8086012
O SSC

Dr Timothy H. Johnson
Schweizer Vogelschutz
Attn: M. Hirt
Postfach
8036 Zurich
Switzerland
Tel. (41 1) 463 7271
Fax (41 1) 461 4778
NG Schweizer Vogelschutz
(SVS)

Ms Yolanda Kakabadse
NGO Liaison Officer
United Nations Conference on
Environment and Develop-
ment (UNCED)
B.P. 80
1231 Conches
Switzerland
Tel. (41 22) 7891676
Fax (41 22) 7893536
IUCN Council Member

Mr Adam Markham
WWF International
Avenue du Mont Blanc
1196 Gland
Switzerland
Tel. (41 22) 649525
Fax (41 22) 645829
Telex 419 618 WWF CH
O WWF International

Dr Claude Martin
Deputy Director General
WWF International
Avenue du Mont Blanc
1196 Gland
Switzerland
Tel. (41 22) 649111
Fax (41 22) 645829
Telex 419 618
O WWF International

Mr John Edward Nash
Honorary Treasurer
WWF-International
Avenue du Mont Blanc
1196 Gland
Switzerland
O WWF-International

Sir Shridath Ramphal
President, IUCN
IUCN
1196 Gland
Switzerland
IUCN President-elect

Dr Michael Royston
27, Ch. de la Fontaine
1292 Chambesy
Switzerland
Tel. (41 22) 7582147
Fax (41 22) 7983842
O

Mr Robert SanGeorge
WWF International
Avenue du Mont Blanc
1196 Gland
Switzerland
Tel. (41 22) 649559
Fax (41 22) 645358
O WWF International

Mr Gordon Shepherd
Director, Conservation Policy
Campaigns
WWF International
Av. du Mont-Blanc
1196 Gland
Switzerland
Tel. (41 22) 649511
Fax (41 22) 645829
Telex 419 618 wwf ch
NG WWF - Suisse
O WWF International

Dr Rudolf Slooff
World Health Organization
Division of Environmental
Health
1211 Geneva 27
Switzerland
Tel. (41 22) 7913580
Fax (41 22) 7910746
Telex 415416 oms
O World Health Organiza-
tion

Tanzania

Mr David Babu
Director
Tanzania National Parks
P.O. Box 3134
Arusha
Tanzania
Tel. (255 57) 3471
Telex 42130 tz
GA Tanzania National Parks

Mr Godfrey L. Kamukala
National Environment
Management Council
P.O. Box 20671
Dar-es-Salaam

Tanzania
Tel. (255 51) 234603
Telex 41959 Nemaco tz
GA Wildlife Division,
Ministry of Natural
Resources and Tourism

Dr David N. Manyanza
Tanzania National Parks
College of African Wildlife
Management
Mweka
P.O. Box 3031
Moshi
Tanzania
Tel. Kibosho 18
Telex 43082 Curing tz
GA Tanzania National Parks

Mr Constantius A. Mlay
Wildlife Division
Ministry of Natural Resources
and Tourism
P.O. Box 1994
Dar-es-Salaam
Tanzania
Tel. 23230/21246
Fax (255 51) 23230
Telex 41725 nareto tz
GA Wildlife Division,
Ministry of Natural
Resources and Tourism
O CNPPA

Mr Paul J Mshanga
Tanzania National Parks
Ngorongoro Conservation
Area Authority
P.O. Box 1
Ngorongoro Crater
Tanzania
Tel. (255 57) 3339
GA Tanzania National Parks
GA Wildlife Division,
Ministry of Natural
Resources and Tourism

Mr N.K. Msimbira
Ministry of Lands, Housing
and Urban Development
P.O. Box 9132
Dar-es-Salaam
Tanzania
Tel. (255 51) 67724
Telex 41725 nareto tz
GA Wildlife Division,
Ministry of Natural
Resources and Tourism

Mr Wilfred Ngirwa
Tanzanian National Parks
Ministry of Agriculture &
Livestock
P.O. Box 9192
Dar-Es-Salaam
Tanzania
Tel. 26052 or 25284
Telex 41246 TZ
GA Wildlife Division,
Ministry of Natural
Resources and Tourism

Thailand

Prof. Sanit Aksomkoae
Faculty of Forestry
Kasetsart University
Bangkok 10903
Thailand
Tel. (66 2) 5790171
O IUCN Wetlands
Programme Advisory
Committee

Dr Howard E. Daugherty
Coordinator Natural Resources

Prog-
Asian Institute of Technology
P.O. Box 2754
Bangkok 10501
Thailand
Tel. (66 2) 5160110
Fax (66 2) 5162128
O Asian Institute of
Technology

Professor Dr HRH Princess
Chulabhorn
Thailand

Mr Jonathan E. Murray
195 Soi Ruam Santi
Saphan Kwai 10400
Bangkok
Thailand
Tel. (66 2) 2797945
Fax (66 2) 2519184
O SSC

Mr Suwan Puangsamlee
National Environment Board
60/1 Pibulwatana 7
Rama 6 Road
Bangkok 10400
Thailand
Tel. (66 2) 2798088
Fax (66 2) 2798088
Telex 20838 minsten
O National Environment
Board

Lt Bunnalert Rushatakul
Royal Forest Department
Paholyothin Road
Bangkhen District
Bangkok 10900
Thailand
Tel. (66 2) 5791151
Fax (66 2) 5798611
ST Royal Forest Department

Mr Suvat Singhapant
Director
Royal Forest Department
National Park Division
Bangkok
Thailand
ST Royal Forest Department

Mr Erik Skoglund
Mekong Committee
Mekong Secretariat
Kasatsuk Bridge, Rama 1 Road
Bangkok 10330
Thailand
Tel. (66 2) 2250029

Fax (66 2) 2252796
Telex 21322 Mekong TH
O Mekong Committee

Mr Kasem Snidvongs
Director General
Science Service Department
Rama 6 Road
Bangkok 10400
Thailand
Tel. (662) 2455004
Fax (662) 2479468
Telex 20838minsten th
O CESP

Mr Chalernsak Wanichsombat
National Environment Board
60/1 Pibulwatana 7
Rama 6 Rd
Bangkok 10400
Thailand
Tel. (66 2) 2792793
Fax (66 2) 2798088
Telex 20838
O National Environment
Board

Tonga

Ms Netatua P. Fifita
P.O. Box 5
Nuku'Alofa
Tonga
Tel. (676) 23611
Fax (676) 23216
O

Trinidad & Tobago

Mr Clarence Bacchus
Managing Director
Trinidad and Tobago Forest
Products TANTEAK
Ministry of Environment
Whitehall
Port-of-Spain
Trinidad & Tobago
Tel. (500809) 6650078
Fax (500809) 6656645
O Trinidad and Tobago
Forest Products
TANTEAK

Tunisia

Mr Mohamed Ali Abrougui
President
Ass. Tunisienne pour la
Protection de la Nature et de
l'Environnement
12, rue Tantaoui El Jawhiri
El Omrane
1005 Tunis
Tunisia
Tel. (21 61) 287603
Fax (21 61) 233237
NG Ass. Tunisienne pour la
Protection de la Nature
et de l'Environnement

Uganda

Mr Thaddaeus O. Acere
P.O. Box 9629
Kampala
Uganda
Tel. (256 41) 257976
Telex 62216 Eniro Ug
O Government of the
Republic of Uganda

Dr Eric Edroma
Director
Uganda National Parks
P.O. Box 3530
Kampala
Uganda
Tel. (256 41) 256534
Fax (256 41) 245580
Telex 61255 UNDP UGA
GA Uganda National Parks

The Hon. Moses Kintu
Minister of Environment
Protection
P.O. Box 9629
Kampala
Uganda
Tel. (256 41) 255477
O Government of the
Republic of Uganda

Mr Moses Okua
Uganda Game Department
P.O. Box 4
Entebbe
Uganda
Tel. (256 42) 20073
GA Uganda Game
Department

Mr Hector S. Opika Opoka
Permanent Secretary
Ministry of Environment
Protection
P.O. Box 9629
Kampala
Uganda
Tel. 232598 or 255481
Telex 62216 enviroUGA
O Government of the
Republic of Uganda

United Kingdom

Dr Paul Adam
School of Biological Science
University of New South
Wales
P.O. Box 1
Kensington, NSW 2033
Australia
Tel. (61 2) 6972076
Fax (61 2) 6622918
NG British Ecological Society

Dr Kenneth R. Ashby
Environment Council
25 Hawthorn Terrace
Durham DH1 4EL
United Kingdom
Tel. (44 91) 844649
Telex 537 351 Durlib G

NG Environment Council
O SSC

Ms Janet Barber
WWF UK
Panda House
Weyside Park
Godalming
Surrey GU7 1XR
United Kingdom
Tel. (44 4) 83426444
Fax (44 4) 83426409
Telex 859 602
NG WWF UK
O SSC

Mr Peter Michael Bennett
Conservation Co-ordinator
National Federation of
Zoological Gardens of Great
Britain & Ireland
Regent's Park
London NW1 4RY
United Kingdom
Tel. (44 71) 5860230
Fax (44 71) 4834436
NG National Federation of
Zoological Gardens of
Great Britain & Ireland
O SSC

Ms Catherine Bickmore
Landscape Institute
Travers Morgan Planning and
Environment Division
136 Long Acre
London WC2E 9AE
United Kingdom
Tel. (44 71) 8365474
Fax (44 71) 240959
Telex 8812307
NG Landscape Institute

Mr Martin Brasher
Department of the Environ-
ment
DRA2
Tollgate House
Houlton Street
Bristol BS2 9DJ
United Kingdom
Tel. (44 272) 218336
Fax (44 272) 218182
Telex 449321
O

Ms Amie Brautigam
Deputy Chairman, SSC Trade
Specialist Group
Center for Marine Conserva-
tion
15 Herbert Street
Cambridge CB4 1AG
United Kingdom
NG Center for Marine
Conservation
O SSC

Mr Roy Bunce
Department of the Environ-
ment
c/o International Branch
Nature Conservancy Council
Northminster House
Peterborough PE1 1UA
United Kingdom

- Tel. (44 733) 40345
 O Countryside Commission; Countryside Commission for Scotland; Nature Conservancy Council
- Dr Peter R. Burbridge
 House of Ross
 Comrie
 Perthshire PH6 2JS
 United Kingdom
 Tel. (44 764) 70900
 Fax (44 764) 70981
 O
- Mr Duncan Campbell
 Director
 Countryside Commission for Scotland
 Battleby
 Redgorton
 Perth PH1 3EW
 United Kingdom
 Tel. (44 738) 27921
 Fax (44 738) 30583
 ST Countryside Commission; Countryside Commission for Scotland; Nature Conservancy Council
- Mr Tom Clark
 British Association of Nature Conservationists (BANC)
 33 Clarence Road
 Wimbledon
 London SW19 8QF
 United Kingdom
 Tel. (44 81) 5422579
 NG British Association of Nature Conservationists (BANC)
- Dr Peter David Clarkson
 Scientific Committee on Antarctic Research
 Scott Polar Research Institute
 Lensfield Road
 Cambridge, CB2 1ER
 United Kingdom
 Tel. (44 223) 62061
 Fax (44 223) 336549
 O Scientific Committee on Antarctic Research
- Mr Ralph Cobham
 IUCN Consultant
 Cobham Resource Consultants
 Avalon House
 Marcham Road
 Abingdon
 Oxford OX14 1V4
 United Kingdom
 Tel. (44 235) 555535
 Fax (44 235) 553203
 Telex 83147
 O
- Dr Mark Collins
 Royal Entomological Society of London
 41 Queens Gate
 London SW7 5HU
 United Kingdom
 Tel. (44 71) 5848361
- IN Societas Europea
 NG Royal Entomological Society of London
 O SSC
- Ms Joan Davidson
 Environment Adviser
 OXFAM-UK
 69 Painswick Road
 Cheltenham
 Glos. GL50 2EX
 United Kingdom
 Tel. (44 242) 528254
 Fax (44 242) 523707
 O CESP
- Ms Frances Dennis
 IUCN Consultant
 Northdene
 33 Eastbury Road
 Northwood
 Middlesex HA6 3AJ
 United Kingdom
 Tel. (44 9274) 22991
 Fax (44 9238) 35578
 O IUCN Consultant, Population and Resources Programme
- Mr Mark Edwards
 International Planned Parenthood Federation (IPPF)
 Inner Circle
 London NW1 4NS
 United Kingdom
 Tel. (44 71) 486 074
 Fax (44 71) 487 795
 Telex 919573 ipepee g
 O International Planned Parenthood Federation (IPPF)
- Mr Julian Evans
 Environment, Science & Energy Dept.
 Foreign and Commonwealth Office
 King Charles Street
 London SW1A 2AL
 United Kingdom
 Tel. (44 71) 2702627
 Fax (44 71) 9301249
 O
- Mr Jorgen Finnemann Bruun
 International Fur Trade Federation
 20/21 Queenhithe
 London EC4V 3AA
 United Kingdom
 Tel. (44 71) 489 8159
 Fax (44 71) 489 8102
 Telex 917513 iff gb
 IN International Fur Trade Federation
- Dr Michael J. Ford
 Nature Conservancy Council
 Northminster House
 Peterborough PE1 1UA
 United Kingdom
 Tel. 44 733 40345
 Fax 44 733 898290
 ST Nature Conservancy Council
 O SSC
- Dr Sandra G. Fowler
 The Mill Cottage
 5 Ampney Crucis
 Glos. GL7 5RS
 United Kingdom
 Tel. (44 285) 851522
 O SSC
- Dr José I. Dos R. Furtado
 Chairman, IUCN Commission on Ecology
 19 Langford Green
 Champion Hill
 London SE5 8BX
 United Kingdom
 Tel. (44 71) 733 8523
 Fax (44 81) 299 0197
 O COE
 IUCN Council Member
- Mr Alistair Gammell
 Royal Society for the Protection of Birds
 The Lodge
 Sandy
 Beds SG19 2DL
 United Kingdom
 Tel. (44 767) 680551
 Fax (44 767) 692365
 Telex 82469
 NG Royal Society for the Protection of Birds (RSPB)
- Dr Ian Haines
 Overseas Development Administration
 Eland House
 Stag Place
 London SW1E 5DH
 United Kingdom
 Tel. (44 71) 273 0210
 Fax (44 71) 273 0679
 Telex 263907/8
 O Overseas Development Administration
- Mr Ivan Hattingh
 Chairman
 Television Trust for the Environment
 WWF
 Weyside Park
 Godalming
 Surrey GU7 1XR
 United Kingdom
 Tel. (44 483) 426 444
 Fax (44 483) 426 409
 Telex 859602
 NG Television Trust for the Environment (TVE)
- Mr David George Hughes
 Research Assistant
 Zoological Society of Glasgow and West of Scotland
 Glasgow Zoo
 Uddington
 Glasgow G71 7RZ
 United Kingdom
 Tel. (44 41) 771 1185
 Fax (44 41) 771 2615
 NG Zoological Society of Glasgow and West of Scotland
 O SSC
- H.R.H. The Duke of Edinburgh
 Patron of IUCN
 Buckingham Palace
 London SW1
 United Kingdom
 IUCN Patron
- Dr Timothy H. Johnson
 International Council for Bird Preservation
 32 Cambridge Road
 Girton
 Cambridge CB3 0PJ
 United Kingdom
 Tel. (44 223) 277318
 Fax (44 223) 277200
 Telex 818794 icbp g
 IN International Council for Bird Preservation
- Dr W.J. Jordan
 Care for the Wild, Chairman of Trustees
 Ashfolds
 Rusper, Horsham
 Sussex RH12 4QX
 United Kingdom
 Tel. (44 293) 871596
 Fax (44 293) 871022
 O SSC
- Mrs Patricia Koechlin-Smythe
 WWF-UK
 Sudgrove House
 Miserden
 Nr Stroud
 Glos.
 United Kingdom
- Miss Shuk Man. Amy Lau
 WWF Hong Kong
 P.O. Box 12721
 Hong Kong
 Tel. (85 25) 261011
 Fax (85 28) 452374
 Telex 66711 wwfhk hx
 NG WWF Hong Kong
- Dr Edward Maltby
 Department of Geography
 University of Exeter
 Amory Building, Rennes Drive
 Exeter
 Devon EX4 4RJ
 United Kingdom
 Tel. (44 392) 263338
 Fax (44 392) 263305
 Telex 42894 exuniv e
 O
- Ms Pauline Marstrand
 Institute of Biology
 20 Queensbury Place
 London SW7 2D2
 United Kingdom
 Tel. (44 71) 581 8333
 Fax (44 71) 823 9409
 NG Institute of Biology
- Mrs Gillian Mills
 International Fur Trade Federation
 20/21 Queenhithe
 London EC4V 3AA
 United Kingdom
 Tel. (44 71) 489 8159

Fax (44 71) 489 8102
Telex 917513 ifff gbg
IN International Fur Trade
Federation

Dr Jacqui Morris
Fauna and Flora Preservation
Society
79-83 North Street
Brighton BN1 1ZA
United Kingdom
Tel. (44 273)820445
Fax (44 273) 725940
IN Fauna and Flora
Preservation Society
O SSC

Mr R.F. Morrison
Associate
Touche Ross & Co
Hill House
1 Little Mew St.
London EC4A 3TR
United Kingdom
Tel. (44 71) 963 3000
Fax (44 71) 583 8517
O Touche Ross & Co

Dr M.E. Moser
Director
IWRB
Slimbridge
Gloucester GL2 7BX
United Kingdom
Tel. (44 45) 38980624
Fax (44 45) 3890827
Telex 437145 wwf g
IN IWRB

Dr Timothy Richard New
La Trobe University
Bundoora, V3083
Australia
Tel. (61 3) 479 2247
Fax (61 3) 479 1188
Telex AA 33143
NG Royal Entomological
Society of London
O SSC

Dr Max Nicholson
Earthwatch Europe
57 Woodstock Rd
Oxford OX2 6HU
United Kingdom
Tel. (44 865) 311 600
Fax (44 865) 311 383
IN Earthwatch Europe

Mr John Oldham
Travere Morgan
136 Long Acre
London WC2
United Kingdom
Tel. (44 71) 836 5474
Fax (44 71) 240 9595
Telex 8812307 gb
NG Landscape Institute

Dr Brian O'Connor
Nature Conservancy Council
Northminster House
Peterborough PE1 1UA
United Kingdom
Tel. (44 733) 40345
Fax (44 733) 898290

Telex 931 2130132 ncg
ST Countryside Commis-
sion; Countryside
Commission for
Scotland; Nature
Conservancy Council

Dr John Pernetta
2, Thomas Street
King's Lynn
Norfolk PE30 5QP
United Kingdom
Tel. (44 553)767081
Fax (44 553) 692608
O

Dr Bishnodat Persaud
Commonwealth Secretariat
Marlborough House
Pall Mall
London SW1Y 5HX
United Kingdom
Tel. (44 71) 839 3411
Fax (44 71) 930 2299
Tel. 27678
O Commonwealth
Secretariat

Mr Adrian A.C. Phillips
Director General
Countryside Commission
John Dower House
Crescent Place
Cheltenham GL50 3RA
United Kingdom
Tel. (44 242) 521381
Fax (44 242) 584270
ST Countryside Commis-
sion; Countryside
Commission for
Scotland; Nature
Conservancy Council
O CNPPA

Mrs Cassandra Phillips
WWF International
The New Grounds
Slimbridge
Glos. GL2 7BT
United Kingdom
Tel. (44 453) 890333
Fax (44 453) 890827
NG Wildfowl and Wetlands
Trust
O WWF International

Dr Duncan Poore
Balnacam
Glenmoriston
Inverness IV3 6YJ
United Kingdom
Tel. (44 320) 40261
AF International Institute for
Environment and
Development
NG British Association of
Nature Conservationists
(BANC)
O CNPPA
O COE

Mr Ian Prestt
Royal Society for the Protection
of Birds
The Lodge
Sandy

Beds SG19 2DL
United Kingdom
Tel. (44 767) 680551
Fax (44 767) 692365
Telex 82469 RSPBG
NG Royal Society for the
Protection of Birds

Dr George Rabb
Marwell Preservation Trust
Attn: Mr Knowles
Colden Common
Winchester SO21 1JH
United Kingdom
Tel. (44 96) 274 407
NG Marwell Zoological Park
NG Zoological Society of
London
NG Twycross Zoo, East
Midland Zoological
Society

Mr Steve Robinson
The Environment Council
80 York Way
London N1 9AG
United Kingdom
Tel. (44 71) 278 4736
Fax (44 71) 837 9688
NG The Environment
Council

Mr Matthew Rowntree
Ash Cottage
Gardiners Lane
Ashwell
Nr Baldock
Hertfordshire
United Kingdom
Tel. (44 46274) 2715
O WWF-UK

Mr Jeremy L. Russell
Royal Institute of International
Affairs
10 St James's Square
London SW1Y 4LE
United Kingdom
Tel. (44 71) 934 2944
Fax (44 71) 839 3593
O World Conservation
Monitoring Centre
O IUCN East European
Programme

Prof. John C. Smyth
Vice-President
Royal Zoological Society of
Scotland
Glenpark
Johnstone
Renfrewshire PA5 OSP
Scotland
United Kingdom
Tel. (44 505)20219
NG Royal Zoological Society
of Scotland
O CEC

Mr Richard Steele
"Treetops"
20 Deepdene Wood
Dorking
Surrey RH5 4BQ
United Kingdom
Tel. (44 306) 883106

NG National Trust for Places
of Historic Interest or
Natural Beauty
IUCN Council Member
Treasurer, IUCN

Mr Timothy Swanson
London Environment
Economics Centre
Dept of Law
University College London
Cower St
London WC1E 6BT
United Kingdom
Tel. (44 71) 387 7050
Fax (44 71) 383 7127
O London Environment
Economics Centre

Mr Hugh Syngé
49 Kelvedon Close
Kingston-upon-Thames
KT2 5LF Surrey, UK
United Kingdom
Tel. (44 81) 546 6725
Fax (44 81) 974 5127
Proceedings Editor/Chief
Rapporteur

Dr Bill Syrratt
Environmental Services
BP International Ltd
Britannic House
Moon Lane
London EC2Y 9B4
United Kingdom
Tel. (44 71) 920 8847
Fax (44 71) 628 2709
Telex 888811
O Environmental Services

Mr Jorgen B. Thomsen
Director
TRAFFIC International
219c Huntingdon Road
Cambridge CB3 0DL
United Kingdom
Tel. (44 223) 277 427
Fax (44 223) 277 237
O SSC

Ms Delia Ann Tomblison
Nature Conservancy Council
Northminster House
Peterborough PE1 1UA
United Kingdom
Tel. (44 733) 340345
Fax (44 733) 898290
Telex 9312130132 ncg
ST Countryside Commis-
sion; Countryside
Commission for
Scotland; Nature
Conservancy Council

Dr Chris Tydeman
WWF UK
Panda House
Weyside Park
Catteshall Lane
Godalming
Surrey GU7 1XR
United Kingdom
Tel. (44 483) 426 444
Fax (44 483) 426 409
Telex 859 602

NGWWFUK
NG British Herpetological
Society (BHS)

Dr Richard Warrick
Climatic Research Unit
University of East Anglia
Norwich
United Kingdom
Tel. 44 603 592089
Fax 44 468 166405
O Climatic Research Unit

Dr Roger Wilkinson
North of England Zoological
Society, Chester Zoo
Chester CH2 1LH
United Kingdom

Dr Adrian P. Wood
Dept. of Geographical Sciences
Huddersfield Polytechnic
Queensgate
Huddersfield HD1 3DH
West Yorkshire
United Kingdom
Tel. (44 484) 422288
Fax (44 484) 516151
Telex 518299 hudpol g
O Dept. of Geographical
Sciences, Huddersfield
Polytechnic

United States

Dr Tundi Agardy
Woods Hole Oceanographic
Inst.
Woods Hole, MA 02543
United States
Tel. (1 508) 548 1400
Fax (1 508) 548 2195
O SSC

Mr Ahkana Akoatkoak
Inuit Circumpolar Conference
(ICC)
Alaska Eskimo Whaling
Commission
P.O.Box 570
Barrow
Alaska 99723
United States
Tel. (1 901) 852 5961
Fax (1 901) 852 2402
IN Inuit Circumpolar
Conference (ICC)

Col. John A. Anderson
Lincoln Filene Center
Tufts University
Medford MA 02155
United States
Tel. (1 617) 3813451
Fax (1 617) 3813401
NG Lincoln Filene Center for
Citizenship and Public
Affairs

Ms Nancy W. Anderson
Director
Environmental Citizenship
Program
Lincoln Filene Center

Tufts University
Medford MA 02155
United States
Tel. (1 617) 3813451
Fax (1 617) 3813401
NG Lincoln Filene Center for
Citizenship and Public
Affairs
O CEC

Mr John A. Anderson Jr.
Lincoln Filene Center
Tufts University
Medford MA 02155
United States
Tel. (1 617) 381 3451
Fax (1 617) 381 3401
O Lincoln Filene Center for
Citizenship and Public
Affairs

Mrs Nancy Azzam
Windstar Foundation
2300 Noble Avenue North
Golden Valley
Minnesota 55422
United States
Tel. (1 612) 588 3300
Fax (1 612) 588 3066
NG Windstar Foundation

Mr Louis Bacardi
Director, Animal Resources
International Society for
Endangered Cats (ICES)
Lube Foundation, Inc.
18401 N.W. County Road 231
Gainesville FL 32609
United States
Tel. (1 614) 4514460
NG International Society for
Endangered Cats (ISEC)

Ms Patricia Baldi
Director of Population
National Audubon Society
801 Pennsylvania Avenue, SE
Washington DC 20003
United States
Tel. (1 202) 547 9009
Fax (1 202) 547 9022
NG National Audubon
Society

Dr Charles V. Barber
World Resources Institute
1709 New York Avenue NW
Washington DC 20008
United States
Tel. (1 202) 662 2506
Fax (1 202) 638 0036
NG World Resources
Institute

Mr Benjamin Beck
Associate Director
Smithsonian Institution
National Zoological Park
Smithsonian Institution
Washington DC 20008
United States
Tel. (1 202) 673 4871
NG Smithsonian Institution

Mr Peter Berle
President

National Audubon Society
950 Third Avenue
New York NY 10022
United States
Tel. (1 212) 546 9234
NG National Audubon
Society

Dr Richard Bilborrow
Research Professor
University of North Carolina
Carolina Population Center
University Square East 300 A
Chapel Hill
North Carolina 27516-3997
United States
Tel. (1 919) 966 2159
Fax (1 919) 966 6638
O University of North
Carolina

Mrs Mena Boulanger
Development Officer
Chicago Zoological Society
Brookfield Zoo
3300 Golf Road
Brookfield IL 60513
United States
O SSC

Ms Amie Brautigam
Center for Marine Conserva-
tion
Suite 500
1725 De Sales Street NW
Washington, DC 20036
United States
NG Center for Marine
Conservation
O SSC

Dr William Y. Brown
Waste Management Inc.
1155 Connecticut Avenue
Suite 800
Washington DC 20036
United States
Tel. (1 202) 467 4480
Fax (1 202) 659 8752
O Waste Management Inc.

Dr Donald Bruning
Wildlife Conservation
International
New York Zoological Society
Bronx
New York 10460
United States
Tel. (1 212) 220 5159
Fax (1 212) 220 7114
Telex 428279
NG Wildlife Conservation
International, a division
of the New York
Zoological Society

Ms Mary C. Carroll
President, Parks International
US National Parks Service
Office of International Affairs
403 Winsford Road
Bryn Mawr PA 19010
United States
Tel. (1 215) 527 0184
Fax (1 215) 527 5932
O US National Parks
Service

Mr Charles Cecil
Bureau of Oceans & Inter-
national Environmental &
Scientific Affairs
OES/E Room 7825
Department of State
Washington DC 20520-7818
United States
Tel. (1 202) 647 2232
Fax (1 202) 647 0217
ST Bureau of Oceans and
International Environ-
mental and Scientific
Affairs, US Department
of State

Ms Doris Cellarius
2439 Crestline Dr. NW
Olympia WA 98502
United States
Tel. (1 206) 943 6875
Fax (1 206) 866 6823
O

Prof. Richard Cellarius
Sierra Club
2439 Crestline Dr. NW
Olympia WA 98502
United States
Tel. (1 206) 943 6875
Fax (1 206) 866 6823
IN Sierra Club

Dr Leif Christoffersen
Chief, Environment Division,
Africa
The World Bank
1818 H Street NW
Washington DC
United States
Tel. (1 202) 473 4459
O The World Bank

Prof. Tim W. Clark
Chicago Zoological Society
Box 2705
Jackson WY 83001
United States
Tel. (1 307) 733 6856
Telex 325 1455
O SSC

Dr Gloria J. Davis
Environment Department
The World Bank
1818 H Street NW
Washington DC 20433
United States
Tel. (1 202) 458 2756
Fax (1 202) 477 6391
Telex 82987
O The World Bank

Ms Gina DeFerrari
US Department of State
c/o Charles O. Cecil
OES/E
Washington DC 20520-7818
United States
ST Bureau of Oceans and
International Environ-
mental and Scientific
Affairs, US Department
of State

Dr Marc Jean Dourojeanni
Chief, Environmental
Protection
Inter-American Development
Bank
1300 New York Ave. NW
Washington DC 20577
United States
Tel. (1 202) 6231795
Fax (1 202) 6232346
O Inter-American
Development Bank
O CNPPA

Ms Mary Dyson
The World Bank
Room 53051
1818 H Street NW
Washington DC 20009
United States
Tel. (1 202) 4733425
Fax (1 202) 4770968
Telex 82987 ficc
O The World Bank

Mr Augustus Edwards
Special Assistant
National Oceanic and
Atmospheric Administration
(NOAA)
US Department of Commerce
14th and Constitution Avenue
NW
Room 5804
Washington DC 20230
United States
Tel. (1 202) 377 3567
Fax (1 202) 377 8203
GA National Oceanic and
Atmospheric Administ-
ration (NOAA), US
Department of
Commerce

Mr William Eichbaum
WWF-US
1250 24th Street, NW
Washington DC 20037
United States
Tel. (1 202) 778-9645
Fax (1 202) 293-9211
Telex 64505 PANDA
NGWWF-US
O CNPPA
O CEL

Prof. John Ronald Engel
Meadville/Lombard
5701 S.Woodlawn Avenue
Chicago
Illinois 60637-1602
United States
Tel. (1 312) 753 3199
Fax (1 312) 702 1225
O CEC

Dr Richard Estes
Centre for Field Research
Earthwatch
680 Mount Auburn St.
Watertown MA
United States
Tel. (1 603) 9249804
Fax (1 603) 9247013
NG Centre for Field
Research Earthwatch
O SSC

Dr Ardith A. Eudey
International Primate
Protection League
164 Dayton Street
Upland CA 91786
United States
Tel. (1 714) 9829832
IN International Primate
Protection League
O SSC

Dr Nathan R. Flesness
Executive Director
International Species Inventory
System
Minnesota Zoological Garden
12101 Johnny Cake Ridge Road
Apple Valley MN 55124
United States
Tel. (1 612) 4319317
Fax (1 612) 4322757
O SSC

Dr Thomas J. Foose
Executive Officer
SSC Captive Breeding
Specialist Group
12101 Johnny Cake Ridge Road
Apple Valley MN 55124
United States
O SSC

Dr Nancy Foster
National Oceanic and
Atmospheric Administration
(NOAA)
1335 East West Highway
Silver Spring Maryland 20910
United States
Tel. (1 301) 427 2332
Fax (1 301) 588 4967
GA National Oceanic and
Atmospheric Administ-
ration (NOAA), US
Department of
Commerce

Dr John W. Grandy
Treasurer
American Committee for
International Conservation
(ACIC)
2100 L Street NW
Washington DC 20037
United States
Tel. (1 202) 452 1100
Fax (1 202) 778 6132
NG American Committee for
International Conserva-
tion (ACIC)
NG International Primate
Protection League
O SSC
O CEL
O COE

Mr Lynn A. Greenwalt
Vice President for International
Affairs
National Wildlife Federation
1400 Sixteenth Street NW
Washington DC 20036-2266
United States
Tel. (1 202) 797 6669
Fax (1 202) 797 5486
NG National Wildlife
Federation

Dr Jay D. Hair
President
National Wildlife Federation
1400 16th Street NW
Washington, DC 20036
United States
Tel. (1 202) 797 6842
Fax (1 202) 797 6646
NG National Wildlife
Federation
O COE

Prof. Dr Lawrence S. Hamilton
East-West Center, EAPI
1777 East-West Road
Honolulu
Hawaii 96848
United States
Tel. (1 808) 944 7253
Fax (1 808) 944 7970
O CNPPA
O COE

Dr Julia Henderson
1735 Forest Road
Venice FL 34293
United States
Tel. (1 813) 497 4808
O IUCN Population and
Natural Resources
Programme

Dr Alan Hodson
School for International
Training
Kipling Road
Brattleboro
Vermont 05301
United States
Tel. (1 802) 257 7751
Fax (1 802) 254 6674
O School for International
Training

Dr Arthur Holcombe
UN Development Programme
3006 Arlington Ave.
Bronx NY 10463
United States
Tel. (1 212) 906 5803
Fax (1 212) 906 5825
O UN Development
Programme

Mr Thomas Hormel
Lincoln Filene Center, Tufts
University
Tufts University
Medford MA 02155
United States
Tel. (1 617) 3813451
Fax (1 617) 3813401
NG Lincoln Filene Center for
Citizenship and Public
Affairs

Mr Matthew Iya
Inuit Circumpolar Conference
Eskimo Walrus Commission
P.O. Box 948
Nome Alaska 99762
United States
Tel. (1 907) 443 5231
Fax (1 907) 443 2985
IN Inuit Circumpolar
Conference

Ms Carrie Jackson
Lincoln Filene Center
Tufts University
Medford MA 02155
United States
Tel. (1 617) 3813451
Fax (1 617) 3813401
O Lincoln Filene Center for
Citizenship and Public
Affairs

Dr Andrew D. Johns
Wildlife Conservation
International Bronx Zoo
Bronx NY 10460
United States
Tel. 541681
NG Wildlife Conservation
International, a division
of the New York
Zoological Society

Dr Twig Johnson
Agency for International
Development
S&T/FENR
SA-18 Room 509
Washington DC 20523-1812
United States
Tel. (1 703) 875 4106
Fax (1 703) 875 4394
GA Agency for International
Development (USAID)

Ms Keshari Kansakar
Population Research Labora-
tory
University of Southern
California
3716 South Hope St, Room 385
Los Angeles CA 90007
United States
Tel. (1 213) 748 7362
Fax (1 213) 743 7408
O IUCN Population and
Natural Resources
Programme

Mr Katsuhide Kitatani
Deputy Executive Director
United Nations Population
Fund
220 East 42nd Street
New York NY 10017
United States
Fax (1 212) 370 0201
Telex 422031
O United Nations
Population Fund

Mrs Berthe K. Ladd
Coolidge Center for Environ-
mental Leadership
1675 Massachusetts Avenue
Cambridge MA 02138
United States
Tel. (1 617) 864 5085
Fax (1 617) 864 6503
NG Coolidge Center for
Environmental
Leadership

Dr Steven Landfried
Steven Landfried Consultants
Route one
Evansville

Wisconsin 53536
United States
Tel. (1 608) 873 8848
Fax (1 608) 822 5533
O CEC

Prof. Joseph Larson
Environmental Institute
Blaisdale House
University of Massachusetts
Amherst MA 01003-0040
United States
Tel. (1 413) 545 2842
Fax (1 413) 545 2304
O

Mr Bruce Leighty
WWF-US, Biodiversity Support
Program
1250 24th St. N.W.
Washington DC 20037
United States
Tel. (1 202) 778 9685
Fax (1 202) 293 9211
O WWF-US

Ms Connie Lewis
Senior Associate
Keystone Center
4764 Mills Drive
Anchorage
Alaska 99508
United States
Tel. (1 907) 333 9215
Fax (1 907) 333 2106
O World Resources
Institute

Mr Steve Lewis
President
International Association of
Fish and Wildlife Agencies
Post Office Box 53465
Oklahoma City OK 73132
United States
Tel. (1 202) 624 7890
Fax (1 202) 624 7891
IN International Association
of Fish and Wildlife
Agencies

Ms Halcyon Liew
Lincoln Filene Center
c/o Better World Society
1100 17th St. NW No. 502
Washington DC 20037
United States
Tel. (1 202) 331 3770
Fax (1 202) 331 3779
NG Lincoln Filene Center for
Citizenship and Public
Affairs

Ms Dounia Loudiyi
IUCN Consultant
7859 Heatherton Lane
Potomac MD 20854
United States
Tel. (1 301) 9839318
Fax (1 202) 7975461
O IUCN Consultant,
Population and Natural
Resources Programme

Prof. Dr Walter Lusigi
Environment Specialist, Africa
Region

The World Bank
1818 H Street NW
Washington DC 20433
United States
Tel. (1 202) 473 4798
Fax (1 202) 477 2979
Telex 440098
O World Bank
O CNPPA
IUCN Council Member
IUCN Vice President

Dr Craig MacFarland
Charles Darwin Foundation for
the Galapagos Isles
836 Mabelle
Moscow Idaho 83843
United States
Tel. (1 208) 883 4876
Fax (1 208) 885 6911
NG Charles Darwin
Foundation for the
Galapagos Isles
O SSC
O CNPPA

Mr Laurence N. Mason
Chief, Office of International
Affairs
US Fish and Wildlife Service
Dept. of the Interior
Arlsq. 860
Washington DC 20240
United States
Tel. (1 703) 358 1754
Fax (1 703) 358 2849
GA US Department of the
Interior (Fish and
Wildlife Service,
National Park Service)

Ms Maxine McCloskey
Cetacean Society International
Attn: Dr Barstow
190 Stillwold Drive
Wethersfield CT 06109
United States
Tel. (1 301) 229 4967
Fax (1 202) 547 6009
NG Cetacean Society
International (CSI)
NG Defenders of Wildlife
O SSC
O CNPPA

Mr Michael McCloskey
Sierra Club
408 C Street NE
Washington DC 20002
United States
Tel. (1 202) 547 1141
Fax (1 202) 547 6009
IN Sierra Club
O CNPPA
O COE

Prof. Richard J. McNeil
Cornell University
Dept. of Natural Resources
Ithaca NY 14853
United States
Tel. (1 607) 255 5662
Fax (1 607) 255 2821
O CEC
O CNPPA

Mr Tom Melius
US Department of State
c/o Charles O. Cecil
OES/E
Washington DC 20520-7818
United States
Tel. (1 202) 226 3520
ST Bureau of Oceans and
International Environ-
mental and Scientific
Affairs, US Department
of State

Ms Janice Miano
Chapter Representative
National Audubon Society
RR#1
Box 21
Pittsford VT 05763
United States
Tel. (1 802) 483 9362
NG National Audubon
Society

Dr Kenton Miller
World Resources Institute
1709 New York Avenue, NW
Washington DC 20006
United States
Tel. (1 202) 662 4582
Fax (1 202) 638 0036
Telex 64414 WRI WASH
NG World Resources
Institute
O CNPPA

Dr Richard Gordon Miller
Foresta Institute
P.O. Box 41567
Tucson AZ 85717
United States
Tel. (1 602) 327 2911
NG Foresta Institute for
Ocean and Mountain
Studies
O SSC
O CEC
O COE

Mr Robert C. Milne
Chief, Office of International
Affairs
National Park Service
US Dept. of Interior
P.O. Box 37127
Washington DC 20013-7127
United States
Tel. (1 202) 343 7063
Fax (1 202) 343 7059
Telex 1561375npsiadut
GA US Department of
Interior (Fish and
Wildlife Service,
National Park Service)
O CNPPA

Dr Russell A. Mittermeier
Conservation International
1015 18th Street NW Suite 1000
Washington DC 20036
United States
Tel. (1 202) 429 5660
Fax (1 202) 887 5188
Telex 910 2409104
IN Conservation Inter-
national
O SSC

Prof. Robert H. Mohlenbrock
Department of Plant Biology
Southern Illinois University
Carbondale IL 62901
United States
Tel. (1 618) 5362331
O SSC

Mr Franklyn Moore
Environmental Protection
Agency
Washington DC
United States
GA Environmental
Protection Agency

Mr Benjamin Pinikluk Nageak
Inuit Circumpolar Conference
North Slope Borough
Dept. of Wildlife Management
Box 69
Barrow, Alaska 99723
United States
Tel. (1 907) 8522611
Fax (1 907) 9522402
IN Inuit Circumpolar
Conference

Dr Elliott Norse
Centre for Marine Conserva-
tion
1725 De Sales St. NW
Washington DC 20036
United States
Tel. (1 202) 429 5609
Fax (1 202) 8720619
NG Centre for Marine
Conservation

Mr Silvio Olivieri
Conservation International
1015 18th St. NW 1000
Washington DC 20036
United States
Tel. (1 202) 429 5660
Fax (1 202) 887 5188
Telex 9104 ciwdc
IN Conservation Inter-
national

Mr James Overbay
Deputy Chief, National Forest
System
US Forest Service
P.O. Box 96090
Washington DC 20090-6090
United States
Tel. (1 202) 447 3523
Fax (1 202) 447 8758
ST Bureau of Oceans and
International Environ-
mental and Scientific
Affairs, US Department
of State

Mr Andrew Palmer
American Oceans Campaign
235 Pennsylvania Ave. SE
Washington DC 20003
United States
Tel. (1 202) 5443526
Fax (1 202) 5445625
O American Oceans
Campaign

Mr Michael Paparian
California Institute of Public
Affairs
Sierra Club California
1014 Ninth St. #201
Sacramento CA 95814
United States
Tel. (1 916) 444 6906
Fax (1 916) 444 0669
NG California Institute of
Public Affairs (CIPA)
O COE

Dr Pamela J. Parker
Chicago Zoological Society
Brookfield IL 60513
United States
Tel. (1 708) 485 0263
Fax (1 708) 485 3532
NG Chicago Zoological
Society

Mr Richard M. Parsons
Counsel
Safari Club International
455 Carlisle Drive
Hemdon, Virginia 22070
United States
Tel. (1 703) 709-2293
Fax (1 703) 709-2296
O Safari Clubs Inter-
national
O SSC

Mr Ken Piddington
The World Bank
1818 H Street NW
Washington DC 20433
United States
Tel. (1 202) 473 3202
Fax (1 202) 477 0565
O The World Bank

Dr Peter C.H. Pritchard
Vice President
Florida Audubon Society
1101 Audubon Way
Maitland FL 32751
United States
Tel. (1 407) 6472615
Fax (1 407) 6472060
O SSC

Mr Allen Putney
Caribbean Natural Resources
Institute (CANARI)
1104 Strand St.
Suite 206
Christiansted
US Virgin Islands 00820
United States
Tel. (1 809) 773 9854
Fax (1 809) 773 9854
NG Caribbean Natural
Resources Institute
(CANARI)
O CNPPA

Mrs Patricia Quillen
Director International Projects
International Society for
Endangered Cats (ISEC)
15453 Woods Valley Road
Valley Centre CA 92062
United States
Tel. (1 619) 749 3946

Fax (1 619) 749 1324
NG International Society for
Endangered Cats (ISEC)
O SSC

Dr George Rabb
Chair, IUCN Species Survival
Commission
President, Chicago Zoological
Society
Chicago Zoological Park
Brookfield IL 60513
United States
Tel. (1 708) 387 0269
Fax (1 708) 485 3532
IN International Primatolo-
gical Society
IN Society for Conservation
Biology
NG American Association of
Zoological Parks and
Aquariums (AAZPA)
NG American Committee for
International Conserva-
tion
NG American Society of
Ichthyologists and
Herpetologists
NG Audubon Park and
Zoological Garden
NG Cheyenne Mountain
Zoological Park
NG Chicago Zoological
Society
NG Greater Los Angeles Zoo
Association
NG Denver Zoological
Foundation
NG John G. Shedd
Aquarium
NG Lincoln Park Zoological
Garden
NG Riverbanks Zoological
Park
NG St. Louis Zoological Park
NG Tulsa Zoo
NG Zoological Society of
Philadelphia
NG Zoological Society of San
Diego
Chair, SSC
IUCN Council Member

Dr Colin P. Rees
Senior Ecologist, Asia Region
The World Bank
1818 H Street NW
Washington DC 20433
United States
Tel. (1 202) 477 6182
Fax (1 202) 477 7335
Telex 82987
O The World Bank

Dr Walter V. Reid
World Resources Institute
1709 New York Avenue NW
Washington DC 20006
United States
Tel. (1 202) 662 2579
Fax (1 202) 638 0036
Telex 64414 WRIWASH
NG World Resources
Institute

Prof. Nicholas A. Robinson
Center for Environmental
Legal Studies, Pace
University
School of Law
78 North Broadway
White Plains NY 10603
United States
Tel. (1 914) 422 4244
Fax (1 914) 422 4180
NG Center for Environmen-
tal Legal Studies, Pace
University, School of
Law
NG Environmental Law
Institute
O CEL

Mr Brian A. Rosborough
Chairman
Center for Field Research
(Earthwatch)
680 Mount Auburn Street
Watertown MA 02172
United States
Tel. (1 617) 926 8200
Fax (1 617) 926 8532
Telex 5106006452
NG Center for Field
Research (Earthwatch)

Dr Eldon Ross
Associate Deputy Chief,
Research
US Forest Service
P.O. Box 96090
Washington DC 20090-6090
United States
Tel. (1 202) 447 2702
Fax (1 202) 447 8758
ST Bureau of Oceans and
International Environ-
mental and Scientific
Affairs, US Department
of State

Dr James Perran Ross
Executive Officer, SSC/CSG
Dept. of Natural Sciences
Florida Museum of Natural
History
Gainesville FL 32601
United States
Tel. (1 904) 3921721
Fax (1 904) 3929367
Telex 387530
O SSC

Mr Raymond Rowe
Senior Forestry Adviser
World Bank
(Room N 5025)
1818 H St. NW
Washington DC 20433
United States
Tel. (1 202) 473 8972
Fax (1 202) 334 0568
O World Bank

Mr Cameron H. Sanders, Jr.
c/o IUCN-US
1400 16th Street NW
Washington DC 20036
United States
Tel. (1 202) 797 5454
Fax (1 202) 797 5461
O

Prof. Robert Scheele
University of California
Extension
2223 Fulton
Berkeley CA 94598
United States
Tel. (1 415) 643 6827
Fax (1 415) 643 8683
O CESP

Dr Mardith Schuetz-Miller
Foresta Institute
6205 Franktown Road
Carson City
Nevada 89704
United States
NG Foresta Institute

Dr Ulysses Seal
Chairman
SSC Captive Breeding
Specialist Group
12101 Johnny Cake Ridge Road
Apple Valley MN 55124
United States
Tel. (1 612) 43199325
Fax (1 612) 4322757
O SSC

Dr Melody Serena
Conservation Biologist
Healesville Sanctuary
P.O. Box 248
Healesville VIC 3777
United States
O Healesville Sanctuary

Dr Narendra Sharma
Task Manager
The World Bank
1818 H Street NW, Room
N-5027
Washington DC 20433
United States
Tel. (1 202) 473 6661
Fax (1 202) 676 0007
Telex 440098
O The World Bank

Mr Sky
Lighthawk
PO Box 100
Kerby
Oregon 97531
United States
Tel. (1 503) 592 2365
Fax (1 503) 592 2365
O Lighthawk

Dr Stuart D. Strahl
Wildlife Conservation
International
New York Zoological Society
Bronx
New York 10460
United States
Tel. (1 212) 220 7158
Fax (1 212) 220 7114
IN Wildlife Conservation
International, a division
of the New York
Zoological Society
O SSC

Mr Kenneth Strom
Manager

Rowe Sanctuary
Route 2
Gibbon NE 68840
United States
Tel. (1 308) 469 5282
NG National Audubon
Society

Mr Tim Sullivan
School of Forestry & Environ-
mental Studies
Yale University
Attn: Dr Gordon
205 Prospect Street
New Haven CT 06511
United States
Tel. (1 708) 485 0263
Fax (1 708) 485 3532
NG School of Forestry &
Environmental Studies,
Yale University
O SSC

Mr Byron Swift
Tropical Conservation Program
Wild Wings and Underhill
Foundations
3731 W Street NW
Washington DC 2007
United States
NG Tropical Conservation
Program, Wildwings and
Underhill Foundations

Dr James G. Teer
Wildlife Society
P.O. Drawer 1400
Sinton
Texas 78387
United States
Tel. (1 512) 364 2643
Fax (1 512) 364 2650
NG Wildlife Management
Institute
NG Wildlife Society

Dr Thaddeus C. Trzyna
President
California Institute of Public
Affairs
P.O. Box 189040
Sacramento
California 95818
United States
Tel. (1 916) 442 2472
Fax (1 916) 442 2478
NG California Institute of
Public Affairs
O CESP

Dr Edgar Wayburn
Sierra Club
730 Polk St.
San Francisco CA 94109
United States
Tel. (1 415) 923 5579
Fax (1 415) 776 0350
IN Sierra Club
O CNPPA

Mr Francois Wencelius
World Bank
AFTAG
1818 H. Street NW
Washington DC 20433
United States
O World Bank

Mr Len West
The Nature Conservancy
1815 N Lynn St.
Arlington VA 22209
United States
Tel. (1 703) 247 3730
Fax (1 703) 841 4880
NG The Nature Conservancy

Mr Chas Wheelock
International Indian Treaty
Council
Eco/Development Commission
710 Clayton Street No. 1
San Francisco CA 94117
United States
Tel. (1 415) 566 0251
Fax (1 415) 826 7253
O International Indian
Treaty Council

Dr Peter W. Whitford
The World Bank
Room H-9045
1818 H Street NW
Washington DC 20433
United States
Tel. (1 202) 473 2504
Fax (1 202) 477 0711
Telex 64145
O The World Bank

Dr Michael H. Woodford
Apt. B-709
500 23rd Street NW
Washington DC 20037
United States
Tel. (1 202) 3319448
O SSC

Mr Jim Wyerman
Defenders of Wildlife
1244 19th Street NW
Washington DC 20036
United States
Tel. (1 202) 659 9510
Fax (1 202) 833 3349
NG Defenders of Wildlife

Mr James Ypsilantis
IUCN Population Programme
170-49 Cedarcroft Road
Apt 1C
Jamaica Estates NY 11432
United States
Tel. (1 718) 291 4209
Fax (1 718) 739 0327
O IUCN Population
Programme

Uruguay

Mr Ariel Castelo
Centra de investigación y
Promoción Franciscano y
Ecológico
Canelones 1164
Montevideo
Uruguay
Tel. (5982) 907648
Fax (5982) 985959
NG Centra de investigación
y Promoción Franciscano
y Ecológico

USSR

Dr Vladimir Flint
State Committee for Environ-
ment Protection - GOSCOM-
PRIRODA
Ul. Nezhdanovoi 11
103009 Moscow
USSR
Tel. (7095) 2292158
Fax (7095) 2296407
Telex 411 692borei su
GA State Committee for
Environment Protection -
GOSCOMPRIRODA

Mr Arne Kaasik
Director
Lahemaa National Park
Su - 202 128 Viitna
Laane-Virumaa
Estonia
USSR
Tel. (+01432) 45759
Fax (+0142) 453310
O CNPPA

Dr V. Sakharov
Head of International Relations
State Committee for Environ-
ment Protection - GOSCOM-
PRIRODA
Ul Nezhdanovoi, 11
103009 Moscow
USSR
Tel. (7095) 2296560
Fax (7095) 2296407
Telex 411 692borei su
GA State Committee for
Environment Protection -
GOSCOMPRIRODA

Vanuatu

Mr Ernest Bani
Principal Environment Officer
Ministry of Home Affairs
Dept. of Physical Planning and
Environment
Environment Section
PMB 036
Port Vila
Vanuatu
Tel. (678) 2252
Fax (678) 3142
Telex 1040 vangov nh
O Ministry of Foreign
Affairs

Mrs Suliana Siwatibau
UN/ESCAP Pacific Centre
P.O. Box 004
Port Vila
Vanuatu
Tel. (678) 3458
O UN/ESCAP Pacific
Centre

Venezuela

Dr Nelson Andrade
Director General Sectorial
Ministerio del Ambiente y de
los Recursos Naturales
Renovables MARNR
Torre Sur, Piso 18, Of. 1805
Centra Simón Bolívar
El Silencio
Caracas 1010-A
Venezuela
Tel. (58 2) 413298
Fax (58 2) 4832445
Telex 24305 MARNR VC
ST Ministerio del Ambiente
y de los Recursos
Naturales Renovables
MARNR

Sra Cecilia de Blohm
Fundación para la Defensa de
la Naturaleza (FUDENA)
Apartado Postal 70376
Caracas 1071 A
Venezuela
Tel. (58 2) 2382930
Fax (58 2) 2396547
NG Fundación para la
Defensa de la Naturaleza
(FUDENA)
O SSC

Dra Cristina Pardo
Directora General
Instituto Nacional de Parques
(INPARQUES), MARNR
Apartado 76471
Caracas 1062
Venezuela
Tel. (58 2) 2390901
Fax (58 2) 2392698
Telex 24362 inap vc
ST Ministerio del Ambiente
y de los Recursos
Naturales Renovables

Viet Nam

Prof. Ngoc Thanh Dang
Ministere des Affaires
Etrangeres
NCSR
Nghia Do
Tu Liem
Hanoi
Viet Nam
Tel. (42) 58333
Telex 411525 ncsrvt
O Ministère des Affaires
Etrangeres

Dr Trong Cuc Le
Deputy-Director
Center for Natural Resources,
Management & Environmen-
tal Studies
University of Hanoi
19 Le Thanh Tong
Hanoi
Viet Nam
Tel. (42) 53506
Telex 411556 tnmt vt
O

Prof. Quy Vo
Director
Centre for Natural Resources
Management & Environmental
Studies
University of Hanoi
19 Le Thanh Tong
Hanoi
Viet Nam
Tel. 4253 506
Telex 411556
O SSC
O CNPPA

Yugoslavia

Prof. Velimir Pravdic
Croatian Biological Society
Center for Marine Research
Ruder Boskovic Institute
P.O.B. 1016
YU 41001
Zagreb
Yugoslavia
Tel. (3481) 435111
Fax (3481) 425497
Telex 21383 yu irb
NG Croatian Biological
Society

Zaire

Prof. Kasali Lumande
Ministère de l'Environnement,
Conservation de la Nature et
Tourisme
Avenue de Clinic
No 15
Gombe
Kinshasa
Zaire
Tel. (24312) 30250
O Ministère de
l'Environnement,
Conservation de la
Nature et Tourisme

Dr Mankoto Ma Mbaelele
President Délégué général
Institut Zairois pour la
Conservation de la Nature
P.O. Box 868 Kin 1
Kinshasa
Zaire
Tel. (24312) 32668
Telex 21112 tabaza zr
O Département de
l'agriculture, de l'économie
et de l'environnement
O Institut Zairois pour la
Conservation de la
Nature
O CNPPA
O CESP
O COE

Zambia

Mr William Barclay
Managing Director, Wildlife
Trust
Barclay Earth Movers
P.O. Box 32396
Lusaka
Zambia
Tel. 229083/229014
NG Wildlife Conservation
Society of Zambia

Mr Fidelis Lungu
Luangwa Integrated Resource
Development Project
P.O. Box 510249
Chipata
Zambia
Tel. 21126
Fax 21321
Telex 63060
O CNPPA

Mrs Josephine Muchelemba
Environment & Population
Center
P.O. Box 36452

Lusaka
Zambia
Tel. (260 1) 229508
O Environment &
Population Center
O Netherlands Develop-
ment Organization

Mr Namukolo Mukutu
Permanent Secretary
Ministry of Water, Lands and
Natural Resources
P.O. Box 50694
Lusaka
Zambia
Tel. (260 1) 251927
Fax (260 1) 250120
ST Ministry of Water, Lands
and Natural Resources

Zimbabwe

Mrs Thenjiwe Lesabe
Deputy Minister
Ministry of Environment and
Tourism
P. Bag 7753
Causeway
Harare
Zimbabwe
Tel. (263 4) 794455
Telex 26082 zimtor
ST Ministry of Environment
and Tourism

Mr Boyman Mancama
Chairman
Zimbabwe National Conserva-
tion Trust
P.O. Box 1108
Harare
Zimbabwe
Tel. (263 4) 704461
Fax (263 4) 727133
Telex 26048 zw
NG Zimbabwe National
Conservation Trust

Dr Liberty Mhlanga
General Manager
Agricultural and Rural
Development Authority
(ARDA)
P.O. Box 8439
Causeway
Harare
Zimbabwe
Tel. (263 4) 705841
Fax (263 4) 705847
Telex 22272 ARDA ZW
IUCN Council Member

Mr T.P.Z. Mpofu
Ministry of Environment and
Tourism
Department of Natural
Resources
P.O. Box 8070
Causeway
Harare
Zimbabwe
Tel. (263 4) 705661
Telex 26082 zimtor
ST Ministry of Environment
and Tourism

Dr W.K. Nduku
Department of National Parks
& Wildlife Management
P.O. Box 8365
Causeway
Harare
Zimbabwe
Tel. (263 4) 707624
Fax (263 4) 724914
ST Department of National
Parks & Wildlife
Management, Ministry
of Wildlife and Tourism
O CNPPA

Mr Kevin van Jaarsveldt
P.O. Box 124
Chiredzi
Zimbabwe
Tel. (263 31) 2709
Fax (263 31) 2782
O SSC

List of Staff

Members of the IUCN Secretariat at the General Assembly

IUCN Headquarters (Gland, Switzerland)

Martin HOLDGATE Director General
UK

Delmar BLASCO Head of Governance Unit
Argentina General Assembly
 Coordinator

Jill BLOCKHUS Programme Assistant,
USA Forests Programme
 Ecology Programme
 Division

Veronique BUDRY Secretary, Personnel and
Switzerland General Services Division

John BURKE Head, Communications
UK Division

Marlene CHAPERON Secretary, Development
Switzerland Division

Michael J. COCKERELL Assistant Director
UK General, Management

Sue DALTON Secretary, Governance
UK Unit

Elaine DICKINSON Programme Assistant,
UK Ecology Programme,
 Ecology Programme
 Division

Paul DRIVER Head, Conservation
UK Services Division

Patrick DUGAN Programme Coordinator,
UK Wetlands Programme,
 Ecology Programme
 Division

Stephen EDWARDS Programme Coordinator,
USA Species Programme,
 Ecology Programme
 Division

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USA Programme Division and
 Head of Coastal and
 Marine Programme

Vitus FERNANDO Head, Asia and Pacific
Sri Lanka Programme, Regional
 Programmes Division

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Sweden Services Division

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Switzerland Unit

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USA Division and Head
 Regional Programmes
 Division

Fiona HANSON Council Affairs
UK Officer, Governance Unit

Liz HOPKINS Head, European
UK Programme, Regional
 Programmes Division

Linette HUMPHREY Programme Assistant,
UK Species Programme,
 Ecology Programme
 Division

Margrith KEMP Secretary, European
Switzerland/UK Programme, Regional
 Programmes Division

Jip KETEL Project Manager (Sahel),
Netherlands Africa Programme,
 Regional Programmes
 Division

Claire LINDSAY Programme Assistant,
UK Conservation Services
 Division

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Per RYDEN Sweden	Head, Africa Programme Regional Programmes Division	Lothar GUNDLING Germany	Project Coordinator, Environmental Law Centre
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Ursula SENN-HARRIS Switzerland/UK	Secretary, Forests Programme, Ecology Programme Division	Vernon HEYWOOD UK	Chief Scientist, Plant Conservation and Director of Botanic Gardens Conservation Secretariat
Simon STUART UK	Programme Officer, Species Programme, Ecology Programme Division	Steve DAVIS UK	Senior Research Officer
Nathalie TANNER Switzerland	Secretary, Social Sciences Division	Nicola POWELL UK	Secretary
James THORSELL Canada	Programme Coordinator, Protected Areas Programme, Biodiversity and Protected Areas Special Programme Division	IUCN Regional Personnel	
		AFRICA	
		Regional Office for East Africa (Nairobi, Kenya)	
		Rob MALPAS UK	Regional Representative
		Patricia NGARI Kenya	Projects Officer

Scott PERKIN
Canada
Coordinator, Ngorongoro
CDP, Tanzania

Douglas TAYLOR
UK
Technical Adviser,
Uganda Wetlands
Programme

**Regional Office for Southern Africa (Harare,
Zimbabwe)**

India MUSOKOTWANE Regional Representative
Zambia

Tabeth MATIZA
Zimbabwe
Wetlands Programme
Coordinator

ASIA

Lao PDR Project Office (Vientiane)

Richard SALTER
Canada
Senior Conservation
Advisor

Nepal Project Office (Kathmandu)

Jeremy CAREW-REID IUCN Senior Advisor
Australia

Oman Project Office (Muscat)

Rodney SALM IUCN Consultant
UK

Jordan Project Office (Amman)

John MCEACHERN Project Manager
Canada

Pakistan Country Office (Karachi, Pakistan)

Aban MARKER-KABRAJI Country Representative
Pakistan

Dhunmai COWASJEE Media Coordinator,
Pakistan Journalist's Resource
Centre for the Environ-
ment

Nasir M. DOGAR Programme Administrator
Pakistan

Rashida DOHAD Programme Assistant
Pakistan

Saneeya HUSSAIN Media Director,
Pakistan Journalist's Resource
Centre

Syed A. QUTUB National Conservation
Pakistan Strategy Coordinator

Soni ZUBERI Projects Development
Pakistan Officer

Sri Lanka Country Office (Colombo)

M. S. Ranatunga Country Representative
Sri Lanka

CENTRAL AMERICA

**Regional Office for Central America (San José,
Costa Rica)**

Cesar BARRIENTOS Regional Representative
Guatemala

Alejandro IMBACH Senior Technical Officer
Argentina

Enrique LAHMANN Regional Wetlands
Costa Rica Coordinator

Yanina ROVINSKI Information Assistant
Costa Rica

Panama Country Office (Panama City)

Ramon ALVARADO IUCN Representative
Panama

Nicaragua Country Office (Managua)

Luis Manuel CASTELLO IUCN Representative
Argentina

NORTH AMERICA

IUCN-US (Washington, USA)

Byron SWIFT Executive Director
USA

Johannah BARRY Development Director
USA

Mark DILLENBECK Forest Conservation
USA Officer

Cameron SANDERS Senior Adviser
USA

**World Conservation Monitoring Centre
(Cambridge, United Kingdom)**

Robin PELLEW Director
UK

Michael ADAM GIS Officer, Habitats Data
UK Unit

Mark COLLINS Manager, Habitats Data
UK Unit

Jeremy HARRISON Manager, Protected Areas
UK Data Unit

Zbigniew KARPOWICZ Senior Research Officer,
UK Protected Areas Data Unit

Richard LUXMOORE Manager, Trade
UK

Harry MILES General Manager/Head
USA of Programme

Sheila MILLAR Personal Assistant to
UK Director

Specially Contracted Staff

Martine AMADOU Translator
Switzerland

Ingrid CATON Interpreter
France

Danièle DEVTRE Translator
France

George GREENE Coordinator, General
Canada Assembly Workshops

Peter HULM Consultant, IUCN Bulletin
UK

Catherine LOKSCMN Translator
Switzerland

Nikki MEITH Editor, IUCN Bulletin
USA

Paul RESS Media Consultant
USA

Jacqueline SAWYER Assistant, Forest
UK Programme

Hugh SYNGE Chief Rapporteur
UK

William VALK Interpreter
France

Other Staff

Karin NELSON Office of SSC Chair
USA

Craig PUGH Office of SSC Chair
USA

Marcia SANDERS Registration Assistant
USA

Members of the General Assembly Steering Committee

Pam EISER Chair, General Assembly
Steering Committee IUCN
Regional Councillor for
Australia and Oceania

Wolfgang BURHENNE Vice-Chair, General
Assembly Steering
Committee, Chairman of
the IUCN Commission on
Environmental Policy,
Law and Administration

Jan CEROVSKY IUCN Regional Councillor
for East Europe

Liberty MHLANGA IUCN Regional Councillor
for Africa

M.A. PARTHA SARATHY Chairman, IUCN
Commission on Education
and Training

George RABB Chairman, Species
Survival Commission

Members of the Australian Organizing Committee

Peter KENNEDY Deputy Secretary,
Department of the Arts,
Sport, the Environment,
Tourism and Territories

Joanne DISANO First Assistant Secretary,
Department of the Arts,
Sport, the Environment,
Tourism and Territories

Barry HODGE Western Australia
Government representa-
tive

Pam EISER IUCN Regional Councillor
for Australia and Oceania

Don HENRY President, Australian
Committee for IUCN,
Director, World Wide
Fund for Nature

Duncan MARSHALL Australian Council of
National Trusts
Paul RUTHERFORD Australian Conservation
Foundation

Western Australia Government Liaison Officers

Cassandra LANDRE Executive Officer
Genine READ Media Officer

Members of the Australian Task Force

Hugh CRAFT Assistant Secretary
Gerry MORVELL Director
Fiona SMITH Executive Assistant

Accommodation/Tours Unit

Veronica BLAZELY Head of Unit
Fiona HERNDL
Ann RICHARDS
Sandra GRUGAN

Logistics Unit

Rick STINSON Head of Unit
Tracey WALTERS
Narelle LYONS
Robyn WYLUCKI
Ian CUTHBERT

Media Unit

Phil HURST Head of Unit
April GAZE
Bronwyn ASQUITH

Protocol/Hospitality

Randall SMITH

Other Australian staff

Ahmad Abas
Jo Anderson
Tim Benjamin
Damien Broderick
Cathy Bullock
Thelma Burton
Olivier Charpenay
Andy Cox
Laryssa Crugnale
Bronwyn David
Sean David
Lisa Davis
Matthew Dwyer
Neil Eliot
Rosemary Evans
Kirston Foster
Shon Fry
Ian Gallagher
Helen Gleadell
Mark Graham
Courtney Harris
Damien Hassan
Margarita Herrera
Josephine Hill
Cathy Jukes
Shona Kennealy
Helen Kiselouski
Marcia King
Alphonse Kluyver
Barry Laing
Bruce McClintock
Sandy Moore
Marcia Pegrum
Michael Perry
Rocio Robledo
Shelley Shier
Gerard Smirthwaite
Heidi Sweidan
Dave Thompson
Madonna Valentine
Paula Whitehead
Melanie Wright

IUCN - The World Conservation Union

Avenue du Mont-Blanc
CH-1196 Gland
Switzerland

Telephone: (022) 649 114
Telefax: (022) 642 926
Telex: 419 605 iucn ch

