

IUCN intervenes on Law of Sea

IUCN has put forward a number of amendments and additions to the present Revised Single Negotiating Text of the UN Third Conference on the Law of the Sea. IUCN believes that these would add teeth to the provisions of the Text dealing with marine conservation and management.

In particular IUCN proposes that:

— all plans of work submitted to the Council for approval should be accompanied by a detailed statement of the expected impact on the marine environment, unavoidable adverse effects and alternatives to the proposed activity;

— allowable catches should be quantified and the term Maximum Sustainable Yield be replaced by a more satisfactory

formulation (viz: the yield which maintains the ecosystem in an optimum state);

— anadromous fish stocks should be included in the conservation provisions;

— international waters of ecological significance and areas inhabited by rare or important marine animals should be designated International Reserves (which could become part of a network of World Parks) within which all exploitation of resources and all activities harmful to

the marine environment and its living resources would be forbidden.

Being strongly opposed to any reduction in the conservation provisions of the Text, IUCN has requested permission to make a statement to the competent Committee or Working Group should such a reduction be proposed.

IUCN will continue to press these matters between now and the time the conference reconvenes in May 1977.

This month... at a glance

★ A provisional registration

Form for the Extraordinary General Assembly is enclosed with this issue. Early completion and return of the form by all Members wishing to send delegates and by all those wishing to attend as observers will help the Membership Officer obtain favourable block hotel bookings. So please fill in the form and return it as soon as possible—and not later than the end of November 1976.

★ The Environmental Law

Committee of IUCN needs national correspondents. IUCN Members are asked to nominate lawyers to help the Committee in its important work. Please see back page.

☆☆ The Marine Steering

Committee met on 20 and 21 September and agreed on the nature and scope of the IUCN Marine Programme. It meets again in late November to complete the 1977 stage of the programme plan. There is still time, therefore, for IUCN Members and members of Commissions to send in their proposals.

A new phase for Europe's plants

Conservation of plants in Europe has moved into a new and exciting phase now that the IUCN List of Rare, Threatened and Endemic Plants of the Countries of Europe has been completed and submitted to the Council for Europe.

The List is the first of continental scope based on a complete screening of all the elements of the flora that could be threatened. The 260-page report provides the scientific basis for future action, including legislation and the selection of areas for nature reserves.

The List was compiled by the secretariat of IUCN's Threatened Plants Committee at the Royal Botanic Gardens, Kew (UK), under the direction of Mr Grenville Lucas, Secretary of the TPC, and Dr Max Walters, Chairman of the TPC Subcommittee for Europe. The project was carried out under a contract with the Council for Europe. The secretariat itself is supported by the World Wildlife Fund.

Botanists throughout Europe were asked to supply the TPC with information on the conservation status of a list of species, using the IUCN *Red Data Book* categories as criteria. It was this thorough and lengthy cooperation by more than 100 botanists that made the List possible. All are busy people, and their willingness to give up so much of their time to this project bodes well for the future of plant conservation.

Only species that are rare or threatened on a continental basis are covered, so national rarities common elsewhere in Europe are excluded. Despite this restriction, as many as 1389 species have been found to be rare or threatened throughout their range; and this figure will doubtless

be increased as more information becomes available.

Fortunately, only about 100 species are actually endangered (that is, in imminent danger of extinction or with critically low populations), the rest being vulnerable or rare.

Because the majority of the European flora is in the south, the lists of endemic species are longest for such countries as Greece and Spain. Therefore—although threats to plants are greatest in the north—the lists for northern European countries are shorter, mainly consisting of widespread species, most of which are aquatics or wetland plants.

The largest proportion of species threatened on both a continental and a global scale is endemics confined to a single country. Most effort, the report suggests, should go into safeguarding the habitats (generally cliffs or steep rocky surfaces) in the countries of southern Europe where the majority of these species occur.

The subcommittee hopes to make a more detailed comparison of the threats to European plants in the next phase of its work. A short review of this interesting topic is planned for a forthcoming issue of the *Bulletin*.

It is hoped that the efforts of the TPC's Subcommittee for Europe and the initiatives of the Council of Europe will generate much increased concern for threatened plants, and stimulate governments and non-governmental conservation bodies to protect as an urgent priority plants in their countries that are threatened on an international scale.

News from Members

IUCN Members with news of interest to other Members are invited to send it to Membership Officer, IUCN, 1110 Morges, Switzerland.

Pakistan ratifies, New Zealand signs Wetlands Convention

Pakistan and New Zealand, both State Members of IUCN, have become respectively the 12th and 13th Parties to the Convention on Wetlands of International Importance Especially as Waterfowl Habitat.

Pakistan ratified the Convention on 23 July 1976. New Zealand signed it without reservation as to ratification on 13 August 1976.

North Atlantic seabird conference

The Royal Society for the Protection of Birds, the British Ornithologists' Union and the Wildfowl Trust (all IUCN Members), together with the British Trust for Ornithology, and the Seabird Group of the Scottish Ornithologists' Club, are sponsoring an international conference.

The conference, called *The Changing Seabird Populations of the North Atlantic*, is to be held from 26 to 28 March 1977 at Aberdeen University, Scotland. The purpose of the conference is to enable the many workers on seabirds in Europe and on the eastern seaboard of North America to meet and find out about each other's research.

On each of the three days the morning session will be devoted to a topic which will be treated in depth. The afternoons will be open to invited and offered papers on current research, relevant to the theme of the conference, but dealing with specific studies.

The morning topics are: Saturday—Population ecology of auks and gulls; Sunday—Human influences (fisheries, oil developments and chemical pollution); Monday—Surveys (birds at sea and the use of aerial techniques).

Offers of papers and correspondence about the programme should be sent to Chris Mead, British Trust for Ornithology, Beech Grove, Tring, Herts HP23 5NR, UK.

Booking forms and details of accommodation and costs are available from Dr Amicia Melland, British Ornithologists' Union, c/o Zoological Society of London, Regents Park, London NW1 4RY.

Senegal's two new national parks

The *Service des Parcs nationaux* of Senegal, an IUCN State Member, reports the establishment of two new National Parks: Parc national des Iles de la Madeleine, a marine and island park off Dakar; and Parc national de la Langue de Barbarie, consisting of a band of coastal dunes and an important breeding area for seabirds.

In addition, the Parc national des Oiseaux du Djoudj has been enlarged

from almost 5,000 ha to about 16,000 ha; and a proposed international park with the Gambia, the Parc national du Siné-Saloum, is being studied.

A national anti-poaching commission has been set up, and the national commission on the environment has been reorganized.

The number of tourist visits to Senegal's national parks is already more than 5,000 each season. A weekly broadcast in the vernacular, "the voice of nature", is produced from the Parc national du Niokolo-Koba; and with the help of IUCN and WWF an audio-visual public awareness project will begin this year in the villages bordering national parks.

Poaching for ivory, cat furs and crocodile skins continues to be a major problem; and in preventing this and alleviating the other problems facing Senegal's national parks, the financial and technical support of FAO, UNESCO, WWF, IUCN and other specialized international organizations will continue to be needed.

Offer from Hawaii

In a world of mounting pressure on natural habitats one of the prime objectives of Waimea Arboretum is to bring into cultivation tropical and sub-tropical rare or endangered plants. Our findings are then made freely available.

Accordingly we will be very pleased to receive from IUCN Members seeds of such plants—or living plants or cuttings—and experiment with their cultivation here. And if you wish us in return to send you (or other researchers) herbarium specimens or living plants, we will willingly do so.

Other aims of the Arboretum include the re-establishment of plants in the wild and (looking to the future) controlled studies of the role of plants in the survival of threatened wildlife.

Notes from Waimea Arboretum, published twice a year, is sent free on request. We wish to be of service to Members and are very open to suggestions.

Waimea Arboretum, 59-864 Kamehameha Highway, Hawaii 96712.

Protecting the Barrier Reef

The Great Barrier Reef is enormous; 237,000 sq km of unique sea-structure as yet neither fully explored nor understood. Recognising, however, that size alone will not protect it from the ravages of oilmen, fishermen and tourists, Australia is taking steps to conserve this prize part of the world's heritage lying off her northern coast.

On 10 August the Environment Minister, Mr Kevin Newman, emphasizing Australia's intention of discharging her role as "caretaker of this world phenomenon", opened the inaugural meeting of the Great Barrier Reef Marine Park Authority. The Authority decided that its first task was to:

—ascertain the present and proposed uses of the Reef in order to establish

the areas with prior claim for inclusion in the proposed Great Barrier Reef Marine Park;

—request the appropriate government and non-government bodies to supply data;

—assess the data to determine what further information is needed.

These data, once gathered, will form the basis of specific proposals.

Mr Newman added that the Commonwealth and Queensland Governments have accepted a special responsibility for the Great Barrier Reef, and—recognizing their international responsibility for this part of the world's heritage—will ensure that it is conserved.

Australian National Parks and Wildlife Service, P. O. Box 636, Canberra City, ACT 2601, Australia.

Belgium's doubts on nuclear energy

The European Economic Community's nuclear energy programme calls for 400 nuclear stations by 1990. Aware that ill-informed rousing of public opinion could retard the programme and upset economic calculations, the Belgian environment group *Inter-environnement/Bond Beter Leefmilieu* has pursued a responsibly cautious policy in trying to evaluate the very complex problems involved—particularly those relating to security and health. Not until they had completed 2 years preliminary work (conducted in camera) did *Inter-environnement* hold their first press conference and demand a moratorium on the present programme, further extensive research and a proper public debate.

The then Minister of Economic Affairs responded by creating the *Commission des Sages*, charged with evaluating all aspects of nuclear energy. For their part, *Inter-environnement* were given the task of discovering how the Belgian people felt about it. A 60-page paper of comments and questions resulted.

For several months thereafter politicians and those in public affairs were sent relevant cuttings from the Belgian and foreign press, while the national secretariat was kept fully briefed. At the same time members of the work group took part in numerous meetings and conferences.

Inter-environnement, rue d'Arlon, 1040 Brussels, Belgium.

Development in Antarctica

The Sierra Club is to monitor the environmental effects of proposed development in Antarctica. Scientists, international lawyers, environmentalists and government officials met in June to discuss the many-sided issues involved and to formulate plans for future action by environmental bodies. Further such meetings—or dialogues—are planned. Although limited to US participants, other governments have shown much interest in this preliminary meeting. A summary and background papers are available, together with a comprehensive fact sheet on Antarctica. Plans call for broadening our activities to reach a wider audience.

Sierra Club, 777 United Nations Plaza, New York, NY 10017, USA.

Books

Large mammals and a brave people: subsistence hunters in Zambia

by Stuart A. Marks

University of Washington Press, 254 pp, 8 half-tone plates, 4 maps, 14 other figures, \$15 (£10.50)

A valuable study of the relationship between the Bisa of the Luangwa Valley, central Zambia, and the large mammals on which they prey. The author, trained in both ecology and anthropology, describes changes that have occurred in Bisa hunting patterns, why individuals decide to become hunters, the religion of hunters, their effectiveness and their contribution to the community's meat supply.

Particularly interesting is Marks's description of the gradual increase in game species that has occurred as a result both of changes wrought by the predominantly agricultural Bisa on the vegetation of the area and of the creation of nearby reserves.

The author is equally sensitive to the problems of human and non-human mammals; and his book is a model of a wildlife study combining the perspectives of nature and of culture. It is a sad and revealing comment on the continuing parochialism of science that during his studies prior to his 14 months of fieldwork, Marks found ecologists and conservationists "remote and unfeeling toward problems involving people", and anthropologists unsympathetic to anything but "studies of social systems and kinship".

Less narrow-minded conservationists should buy this book.

Environment and the industrial society

edited by Nicolas Holmes

Hodder & Stoughton, 247 pp, 6 figures, £4.50 hardcover, £2.95 softcover

An attempt to "define and elaborate on the environmental problems which are associated with a highly technical society", with chapters by several hands on such subjects as "the ecology of industry", "the physiology of cities", "who needs nature?", the economics of pollution, population control, and adult education.

The ratio of words to information is high, new insights are few, and there is evidence that some of the authors are more familiar with secondary than with primary sources of data. The chapter "who needs nature?", on the importance of a variety of species and habitats to industrial man, is slight and pedestrian. There are some odd opinions: the prime European wetlands are said to be the Camargue and Coto Doñana. No mention is made of Europe's largest coastal wetland, the Wadden Sea.

The chapter by David Pearce on the economics of pollution is rewarding, but on the whole this is a disappointing book.

Handbook of environmental education

edited by Robert N. Saveland

Wiley, 267 pp, 4 half-tone illustrations, 15 other figures, no price given

Prepared for IUCN and its Commission on Education, this important book is intended to promote exchange of information on new methods and materials for environmental education. The present state of environmental education throughout the world is described, and the direction of future developments identified.

There are chapters on curriculum design, materials, facilities and media, method, youth involvement and community action, and teacher education. Each chapter is supported by case studies from every part of the world. An excellent overview of the state of the art.

Environmental planning: a guide to information sources

by Michael J. Meshenberg

Gale Research, 492 pp, \$18

Annotated bibliographies are notoriously difficult to compile, particularly when they attempt to cover a rapidly expanding field. It is all too easy to miss out important works—and indeed this one has succeeded in missing out *all* of IUCN's environmental planning titles, including the Guidelines series and the Dasmann-Milton-Freeman *Ecological principles for economic development*. Try again, Gale Research.

Frontiers of life: animals of mountains and poles

by Joseph Lucas, Susan Hayes, and Bernard Stonehouse

Aldus-Jupiter, 288 pp, 149 full-colour illustrations, 10 full-colour maps, 4 other figures, £3.95

Two books in one: *Polar life* by Joseph Lucas and Susan Hayes; and *Mountain life* by Bernard Stonehouse. Both are good introductions to their subject, pleasant to look at, and excellent value for money.

International zoo yearbook 16

edited by P. J. S. Olney

Zoological Society of London, 484 pp, 24 half-tone plates, 16 figures, hardcover \$26.40 (£12), softcover \$19.80 (£9)

Besides a directory of almost 1000 zoos, this (the 1976) edition contains a symposium of 13 articles on the principles of zoo animal feeding—as well as articles on current developments in breeding, husbandry, hand-rearing, building and exhibition techniques. In place of the usual education section, there is a discussion of the role of domestic animals in zoos.

IUCN Programme...

has been held over until next month, when it will complete the *Bulletin* coverage of the proposed amendments to Appendices I and II of the Endangered Species Convention.



New title

Man and nature in the Tristan da Cunha Islands

by N. M. Wace and M. W. Holdgate

IUCN, 114 pp, 11 half-tone plates, 7 maps, 7 other figures, \$6.50

The Tristan da Cunha Islands in the South Atlantic are the only group of oceanic islands in the entire southern temperate zone to retain their natural flora and fauna substantially intact.

The authors of this book have visited the group several times, and studied its wildlife for more than 20 years. They provide an intriguing review of both the natural environment and of the impact upon it of the human community. They recognize that conservation can only be achieved with the good will of the Tristan Islanders, under a management plan that respects the interests of that community. They show how a satisfactory blend of conservation and development can be realized.

Contents: Introduction. The scientific importance of oceanic islands. The physical geography of the Tristan Islands. Discovery and utilization of the islands. Native and alien biota of the Tristan Islands. Future development of the islands' resources, and its impact on their ecosystems. Recommendations: a management plan for the Tristan da Cunha Islands. References. Appendix: new conservation ordinance for Tristan da Cunha.

The above title is available from IUCN Books, IUCN, 1110 Morges, Switzerland.

Until 31 December 1976, Members of IUCN are entitled to one free copy each, on application. From 1 January 1977, they will be charged but given discounts of 20% on orders of less than 10 copies per title and 25% on orders of 10 or more copies per title.

Bulletin subscribers receive a discount of 5% on all orders.

IUCN Friends, Associates, and other individual supporters receive discounts of 15% or 20% (depending on category) on all orders. Surface postage is free.

Correction

The Editor regrets two proofing errors that occurred in the September issue of the *Bulletin*.

On page 50, it was stated that the first Conference of the Parties to the Endangered Species Convention is to be held from 2 to 6 September 1976. This should of course be November.

On page 51, the last line of the paragraph on *Elephantidae* should refer to AI (Appendix I) and not AII.

In addition, information available after the *Bulletin* went to press indicates that Iran deposited its instrument of ratification in time for it to be eligible to vote throughout the meeting.

A slightly better deal for Czech wolves

Wolves, a recent IUCN publication on the world-wide status of the wolf, was reviewed in last month's *Bulletin*. It is good to be able to report a slight improvement in the status of the wolf in Czechoslovakia.

From 1945-72 an estimated 426 wolves were killed. Their numbers plummeted. By 1973 the total population in Slovakia (the only region of the Republic where

the wolf now exists) was assessed at under 100. Half-hearted conservation measures were introduced; the bounty was lowered. The decline continued.

Now under a new decree the bounty is abolished. And between 1 March and 15 September the use of iron traps, the digging of dens and all shooting is prohibited. Admittedly this still falls short

of the year-round protection which the Czech Nature Conservancy would like—and which the much more numerous bear enjoys. A study on the ecology of the wolf—particularly vis-a-vis the deer (bearing in mind the damage caused by deer in excessive numbers)—might now pay off in propaganda terms. The wolf needs informed friends.

Two new sanctuaries for the endangered gharial

Until recently India had only one sanctuary for the gharial. It now boasts two more. Both form part of the Government of India/FAO/UNDP Crocodile Project.

One of these new sanctuaries is on the banks of the river Mahanadi in the state of Orissa (where a census has shown a "wild" population of only 10 gharial, none of which was able to breed during 1976). It comprises an area of 950 sq km and includes 22 km of virgin gorge free of people.

The other new sanctuary, some 400 sq km in size, has within it India's largest surviving single population of gharial—about 20. It is on the river Cirwa in the state of Uttar Pradesh. Results so far have been outstanding. 345 hatchlings were born this year. This is 5 times the total Indian population.

Wanted: environmental lawyers

★ The IUCN Commission on Environmental Policy, Law and Administration has been reorganized following the IUCN Executive Board meeting in May. Specifically, the Committee on Environmental Law has been restructured to strengthen its contribution to the work of the Union.

The Committee now has, as its core, a small group of legal experts to provide centralized assistance on environmental law matters. This body is supplemented by a larger group of consultants, expert in all relevant legal disciplines, to provide background expertise as required. Finally, the Committee also maintains a system of national correspondents, who continually supply the Commission, through the IUCN Environmental Law Centre in Bonn, with documentation and information on national environmental law issues.

National correspondents are still needed

Dr Jan Piet Doets

Dr Jan Piet Doets died of a stroke on 11 July 1976 at his holiday home in France. He was 57.

Dr Doets was well known in Dutch nature conservation. Formerly chief of the Conservation Department in the Netherlands' Ministry of Culture, Recreation and Social Welfare, he was since 1973 Counsellor for International Affairs in that Ministry.

Jan Piet Doets was an ardent and highly effective conservationist. He was Chairman

US Supreme Court rules for survival of pupfish

In a precedent-setting decision the future of a Pleistocene relic has (it is hoped) been safeguarded by the highest court in the US.

In 1952 President Truman set aside Devils Hole as part of Death Valley National Monument. This deep limestone cavern contains an underground pool, home of the unique Devils Hole pupfish, *Cyprinodon diabolis*. In 1968 a ranching

operation began to pump groundwater from the same source as the water in Devils Hole. The water level began to fall, thus threatening the survival of the pupfish. Conservationists, scientists and private individuals rallied to its aid and formed the Desert Fishes Council. But the water level prescribed in two court cases proved too low. A small natural shelf on which the pupfish depends for food, reproduction and a secure nursery ground had become largely exposed. Between 1968 and 1975 the population dropped nearly 70%.

Forestry in the Sahel

from many countries and, as it is important that as wide a representation as possible be achieved for the Committee, IUCN Members are asked to nominate lawyers to serve as correspondents. Nominations should be forwarded to: IUCN Environmental Law Centre, Adenauerallee 214, 5300 Bonn, Federal Republic of Germany.

The catastrophic droughts of 1972/73 focused world attention on the Sahel. Most experienced observers are agreed that these were caused not by any long-term change in the weather pattern but by misuse of a fragile environment—a misuse encouraged by well-intentioned but ill-informed technical innovations.

Numerous international organizations have been involved in rehabilitation programmes. One of them is the World Bank which employed Dr Colin Holloway of IUCN's Secretariat as a consultant to report on the possible role of the Bank in supporting forestry programmes in the Sahel.

The report, which is confidential to the Bank, summarizes the current status of forestry in the region, identifies ecological, technical and other constraints and proposes a multipurpose strategy for the development of forestry.

of the North West Europe Committee of the IUCN Commission on Education, and he took an active role in such important conservation projects as the proposed Convention on the Wadden Sea.

With the death of Jan Piet Doets, IUCN has lost a good friend and sympathetic active worker. During the last General Assembly in Zaire, he played a leading part in the Programme and Budget Committee and put forward an optimistic plan for the future of the Union. This was very much in character. He had high hopes for IUCN. We shall try to fulfil them.

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Last January the case went to the Supreme Court. On 7 June the Court ruled unanimously (9-0) that when the United States acquires land for public use it obtains rights both to the surface water and groundwater needed to preserve the character of the land, including the wildlife. The "implied reservation" doctrine had not previously been extended to groundwater.

Extraordinary General Assembly

★ As announced last month, the Extraordinary General Assembly will be held in Geneva from 19-21 April 1977.

A provisional registration form is enclosed with this issue. All IUCN Members wishing to send delegates, and all nonvoting members, individual supporters, and others wishing to attend as observers, are asked to fill in the form and send it to the Membership Officer as soon as possible.

The principal objects of the Extraordinary General Assembly are: to consider, amend and approve the revised Statutes and Regulations; to appoint a new Director General; and to examine progress made in implementing the programme adopted by the 12th General Assembly in Zaire.

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