

# IUCN BULLETIN



INTERNATIONAL UNION FOR CONSERVATION  
OF NATURE AND NATURAL RESOURCES

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## FIRST WORLD CONFERENCE ON NATIONAL PARKS

The First World Conference on National Parks was held in Seattle, Washington, USA, from June 30th to July 7th, 1962. The conference was sponsored by IUCN and co-sponsored by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Food and Agriculture Organization (FAO), in association with the United States National Park Service and the National Research Council of America, both serving as host institutions. General Chairman of the conference and of the United States Steering Committee was Dr. Harold J. Coolidge, Executive Director of the Pacific Science Board of the United States National Academy of Sciences, who is also chairman of IUCN's Commission on National Parks.

The original proposal for the conference was made by Dr. Tsuyoshi Tamura of Japan in the historic amphitheatre at Delphi during the IUCN 6th General Assembly in 1958. At the 7th General Assembly in Warsaw in 1960, a resolution calling for the First World Conference on National Parks was unanimously adopted.

The object of the conference was to achieve a more effective international understanding and encouragement of the national parks movement on a world-wide basis. Although national parks and reserves have been established in most United Nations member countries, some have not yet done so.

The theme of the conference was "National Parks are of International Significance". Sub-themes included Propositions, Principles and Policies of National Parks; Scientific, Economic and Cultural Values of National Parks and Equivalent Reserves; Optimum use of National Parks and Equivalent Reserves; Administration of National Parks and Equivalent Reserves; International Coordination of National Parks and Reserve Programmes.



Peter Scott.

The conference focused attention on the necessity for maintaining existing national parks as well as establishing new ones, and enabled government representatives and other qualified experts to meet together to further their efforts and coordinate their activities.

In reviewing past international action in the national park sphere, particular mention must be made of the London Conventions of 1900 and 1933 for the protection of African fauna and flora. These treaties stimulated conservation programmes in many parts of Africa as well as in other continents, as did the 1942 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which has been ratified by twelve American Republics. Many governments in Africa and Latin America have introduced legislation for setting up and administering national parks and reserves based on the definitions and objectives contained in these important international agreements.

Delegates to the conference were able to visit the Century 21 Exposition which is being held in Seattle from April to October and which provided facilities for the conference. Of particular interest was the special display by the United States National Park Service. Foreign delegates were also able to take field trips to some of the American national parks.

A special supplement containing the resolutions adopted by the conference is included in this Bulletin.

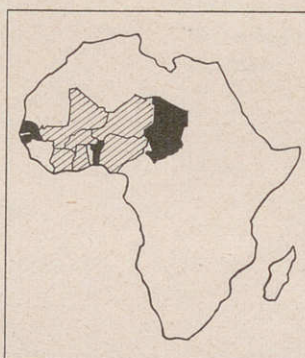
## THE SECRETARY GENERAL REPORTS... ASP III AND WEST AFRICA

The two consultants comprising the FAO/IUCN Stage III team of IUCN's African Special Project which is assisting governments to survey and assess their wildlife resources and integrate their wise use into overall national economic development plans, have returned to Morges at the end of their first four months' tour in Western Africa. This included prolonged and detailed visits to Senegal, Dahomey and Tchad, and shorter contact visits to Mali, Upper Volta, Ivory Coast, Ghana, Niger, and Nigeria.

Consideration of climatic conditions during the first leg of the mission favoured West Africa being the starting point. The programme for the second part of 1962 will be directed primarily towards Eastern and Southern Africa, investigations in other areas coming up for consideration for early 1963.

One of the most encouraging observations to have emerged from the consultants' visit to West Africa concerns its long-term wildlife potential, in terms of what the environments are capable of permanently sustaining. There is good evidence that this is probably greater than in several of the large national parks in South and Central Africa, and that the potential of some of these areas compares favourably with the best areas in East Africa, Mozambique and Natal. This evaluation is based on observations on the primary grass production, on the rate at which marginal grazing lands recover from depleted condition, on data from historical records and the remarkable increases in animal numbers in some areas which have but recently been effectively protected from intensive hunting.

Another important point that has arisen is the urgent necessity for an international service to emphasize the need for close integration in the development of the renewable natural resources, for overall land-use planning, and for introducing ecological thinking into such planning. The consultants came across several instances of the serious consequences that are emerging from the lack of an integrated approach to the development and utilization of local natural renewable resources. For example, the establishment of water points to provide for numbers of livestock out of all proportion to the carrying capacity of the vegetation or the ability to establish controlled grazing practices, is already developing into a serious problem in the semi-arid lands of West Africa. The obvious dangers associated with such developments emphasise only too clearly the need for a coordinated approach not only by governments but by the outside expert advisory



▨ Mali, Upper Volta, Ivory Coast, Ghana, Niger, Nigeria  
■ Senegal, Dahomey, Tchad

services as well. If the stability and improvement of living standards of local populations on marginal lands in West Africa is considered a desirable objective, then many of the kinds of improvements now being undertaken will in the long run achieve an opposite effect and kill marginal pastoral communities by kindness unless steps are taken to correlate such development to the natural environment.

A longer history of intensive human disturbance, as compared with parts of East and Southern Africa, and a higher density of human population in many areas, has naturally taken its toll of the wild animal population. On the other hand, a still rather early stage of economic development of much of West Africa, combined with the presence, locally, of simuliids and tsetse flies, small-pox and spinal meningitis, and of very large waterless areas, have singly or in combination been effective in compensating for human depredation by protecting residual populations of large mammals. Another possibly contributory element which it is hoped can be enhanced to play a most important role is the existence of locally strong yet age-old traditions in conservative exploitation of natural resources.

West African parks and reserves are in general in a rather early stage of development. The potential is great and governments are extremely interested in their faunal resources. The particular motivation for this interest is often the desire to attract the free-spending tourist. The government service technically responsible for such areas usually combines responsibility for forests, fresh-water fisheries and wildlife. This is a fortunate situation in economically young countries since it favours coordination of the development of these interdependent natural resources in a way which would be difficult if the administration were split into several departments. The administration is, furthermore, in the hands of men familiar with the overall basic principles of management of natural resources, even if they are not acquainted with the details of wildlife management.

In such circumstances there would appear to be grounds for designing special courses, to be given within the African region, to meet the specific needs of existing personnel and the present stage of development of the parks and reserves of West Africa. The provision of sample management plans and advice on details of proposed park policy and administration would seem to constitute another positive step in assisting governments to integrate tourism in their overall plans for economic expansion.

## ACTIVITIES OF THE INTERNATIONAL COUNCIL FOR BIRD PRESERVATION

### Oil Pollution of the Sea

The International Conference on the Prevention of Pollution of the Sea by Oil held in London March-April 1962 was attended by representatives of 55 nations, and achieved a good deal in strengthening the 1954 Convention. A most important step forward was the acceptance of the principle that ships shall in no circumstances discharge persistent oil into the sea (though for the time being this provision is restricted to new vessels of larger size). The Convention was extended to cover more classes of ships than before, and all tankers down to small ones of 150 gross tonnage are now included; the Governments also agreed that as far as possible the Convention should also apply to naval vessels (which had previously been exempted). The most conspicuous gain from the North-West European point of view is the agreement to declare the Baltic and North Sea as well as large areas of the Atlantic Ocean as prohibited zones where waste oil may not be discharged.

Up to the time of the opening of the Conference the 1954 Convention had been accepted by 16 countries; during the meeting the Liberian Government intimated its acceptance, followed by the Government of Ghana on 17th May 1962.

In his closing address the President of the Conference, Sir Gilmour Jenkins, K.C.B., K.B.E., said: "Man has found, in mineral oils, a wonderful source of power to use for his own convenience and comfort - to heat his homes and his places of work, to transport him and his goods across the world by sea and land and air, to assist in all sorts of manufacturing processes. All these benefits he has taken, and it is our shame that in doing it he has fouled the seas and shores and brought untold destruction to other creatures, notably to birds and marine life."

It is of the greatest importance that all Governments which have adhered to the 1954 Convention accept the amendments as quickly as possible, and that those governments which have not yet adhered to the Convention should give their support without delay. A resolution pressing for this action was unanimously passed at the World Meeting of the I.C.B.P. in New York in June.

### VIII Bulletin of the I.C.B.P.

The VIII Bulletin of the I.C.B.P. which was produced in Japan, has recently been published. The accent of this Bulletin is on Asia, and in addition to a report of the World Conference of the I.C.B.P. held in Tokyo in 1960, when the Asian Continental Section was set up, there are reports on bird preservation from Borneo, India, Japan, Korea and Taiwan. The Bulletin

also includes a report on threatened species; the history and present status of the Japanese Crested Ibis; and a preliminary report of research on ornithological problems in rice planting. The results of the extensive census of breeding pairs of the White Stork conducted by the I.C.B.P. in 1958 are given by Professor E. Schüz and Dr. J. Szijj (Germany). A previous census had been carried out in 1954, so some comparison is possible

and shows that from 1934-1958 a decrease of almost exactly half has taken place, and during this period the Stork has disappeared from Sweden and Switzerland and decreased to 20% in Denmark and the Netherlands. A report on the present status of the Japanese White Stork by Dr. Yamashina states that after the war the number of these birds had fallen to about 20 or 30 individuals. However, as the result of protective measures the species has so far been saved from extinction, though its situation is extremely precarious.

The Bulletin can be obtained either from the London or New York Secretariats of the I.C.B.P., price 15s.

### XIII World Meeting of the I.C.B.P.

The 13th World Conference of the I.C.B.P. was held in New York June 11-15, and was attended by representatives of 33 nations from every continent and also of four international organisations including the IUCN. Fifteen resolutions covering a wide variety of subjects were adopted, and a full report will be published in the next number of the IUCN Bulletin.



The White Stork—will it survive?  
Photograph by Eric Hosking F.R.P.S., M.B.O.U.

## WORLD NEWS

### United States

In 1961 the national parks reported an attendance of 80 million. The figure will almost certainly be higher in 1962, and higher again each succeeding year. A decade ago no one conceived that the U.S. national parks would be subjected to this kind of pressure.

The Conservation Foundation has announced receipt of a grant from the Old Dominion Foundation to undertake a 2½ year study of the impact of such numbers upon the wildlife and vegetation of the U.S. national parks.

The survey, scheduled to begin in May of this year, will be made in cooperation with the National Park Service and will be conducted by Dr. F. Fraser Darling, Vice President and Director of Research of The Conservation Foundation.

The title of the study is "Man and Nature in the National Parks." It is expected that the report will also consider the nature of recreation the parks can continue to provide for these steadily mounting numbers each summer and yet remain superb and unspoiled wilderness areas for the enjoyment of future generations.

An effort will be made to visit as many of the areas in the national parks system as is possible. This summer's field work will include two weeks in the Northern Cascades and two months based at Moose, Wyoming, near Grand Teton National Park. From Moose, trips will be made to Glacier, Yellowstone and Rocky Mountain National Parks and Craters of the Moon and Dinosaur National Monuments.

Subsequent field trips will be made to the South-West, California, the South, and the parks in the Middle-West and the North-East. The field work should be completed in the summer of 1964.

### Unesco's programme in Africa

Dr. E. B. Worthington, a member of the Executive Board of IUCN, in the capacity of special consultant to UNESCO, accompanied by Mr. M. A. Gille, African Scientific Liaison Officer, who represents UNESCO on the Board of IUCN, spent two and a half months during the early part of 1962 visiting fifteen countries of tropical Africa. Their purpose was to advise the Director-General of UNESCO on three points: first, the long term scientific and research programme in tropical Africa which UNESCO hopes to establish; second, the higher education and post-graduate training which would be required in order to produce scientific research workers within Africa and, third, the conservation of natural resources. In the process of collecting the necessary information to prepare a report on these topics, the mission paid special attention to matters in which IUCN and its African Special Project is particularly concerned. Among these were, for example, the problems of the Mount Nimba area which lies partly in Guinea and partly in Liberia and, in the latter country, is about to be the source of a major export of high-grade iron ore; the effect of the future Volta River lake in Ghana on the natural resources of that country; the possibilities of establishing additional national parks or reserves in Nigeria, the Cameroun and Ethiopia; the future of the parcs nationaux in the Congo (Leopoldville); the impact of the new Kariba lake on the conservation of wild resources and fisheries of the two Rhodesias; and the future of biological research institutes and of post-graduate training schemes in conservation in Kenya, Uganda and Tanganyika as well as in the Rhodesias.

### Tanganyika

FAO has recently started a research project in Tanganyika's Serengeti National Park with the dual objective of exploring the possibility of utilizing wild animals to assist in remedying Africa's chronic protein shortage and, at the same time, examining methods of helping to safeguard the wildlife of Africa. These objectives, which at first sight may seem contradictory, are in fact complementary and are in keeping with the principle, relatively new in so far as Africa is concerned, of conservation through rational utilization of the wildlife resource.

The FAO team consists of two scientists, Dr. Jacques Verschuren, the Belgian ecologist who has spent seven years in the Albert National Park, and Mr. R. N. Watson, a young English zoologist who recently led a scientific expedition to British Guiana.

They plan to obtain accurate data on the lives and habits of the wild herds and their habitats, as an essential preliminary to any management scheme. Wildlife and the national parks are important features in the East African economy and the FAO study should be valuable in enabling the Tanganyika Government to assess the potential value of the region in terms of tourism and protein production.

### Pacific albacore migration

Many unknown features concerning the life history and behaviour of the Pacific albacore (*Thunnus germon*) have been revealed by biologists during the last ten years with the assistance of fishing boat captains. Special tags designed by a biologist of the California Department of Fish and Game have been used to determine migrations, populations, ages and growth rates.

It has been found that albacores migrating up the Pacific coast average at least six nautical miles a day: that they undertake a trans-Pacific migration between the American mainland, the Hawaiian Islands and Japan: that their growth rate averages 7 lbs a year: that individuals and possibly some schools return to the American coast during several seasons and that there is possibly only one population in the north Pacific.

Harold B. Clemens' paper entitled "The Migration, Age and Growth of Pacific Albacore" has been selected by the Wild Life Society as the outstanding fishery publication of 1961.

### Council of Europe

A permanent Committee of Experts on the Conservation of Nature and the Landscape was recommended to the Council of Europe's Committee of Ministers by an *ad hoc* Committee, meeting in Strasbourg from February 27th to March 1st 1962, under the chairmanship of Mrs. A. Argyropoulos (Greece).

A draft programme of future action was drawn up. It includes the protection of wildlife and the countryside; the creation of national and inter-European parks and similar reserves; analysis of national legislations and their harmonisation by drafting European Conventions and a Charter; and, finally, the spread of information on nature conservation. It was recommended that Switzerland, Spain and Portugal should be invited to send observers.

The meeting was attended by representatives from seventeen countries and specialist organisations.

## WORLD NEWS

### Eskimo curlew

The Eskimo curlew (*Numenius borealis*), until recently officially regarded as extinct, has been sighted on Galveston Island, Texas, for the fourth consecutive year. The history of the Eskimo curlew makes this rediscovery doubly interesting. At one time, the bird bred in huge numbers on the tundra of Western Canada and in Alaska. The autumn migration carried the flocks due east to Labrador where they fattened on crow berries preparatory to undertaking the long journey to South America. They wintered on the pampas of Argentina and in the spring moved north over Texas and the Midwest.

The birds were slaughtered almost wherever they went. In 1915 Professor Myron H. Swenk recorded that "when the Eskimo curlew flight was unusually heavy and the hunters were well supplied with ammunition, their wagons were too quickly and easily filled, so whole loads of the birds would be dumped on the prairies, their bodies forming piles as large as a couple of tons of coal, where they would be allowed to rot while the hunters proceeded to refill their wagons with fresh victims. The compact flocks and tameness of the birds made this slaughter possible. In one instance, a single shot from an old muzzle-loading shotgun brought down 28 birds at once."

The Eskimo curlew once rivalled the passenger pigeon in abundance and, in 1887, Dr. E. W. Nelson found it to be the most abundant curlew at Kotzebue Sound, Alaska but, by 1900, numbers were so reduced that Dr. Joseph Grinnell could not locate a single specimen.

The last Eskimo curlew collected in the United States was taken over Norfolk, Nebraska on April 17th 1915, and the last recorded specimen was taken in Battle Harbor, Labrador, on August 29th 1932. From that time the species was regarded as probably extinct.

Positive identification is still uncertain, particularly in the light of the Russian ornithologist, N. P. Gladkov's belief that the Eskimo curlew of America and the least curlew of Asia are simply different races of the same species.

### Kenya

Kenya's African politicians have hitherto shown little awareness of the country's wildlife and their lack of interest has long been a source of concern to those who appreciate its true value. For a number of years conservationists have been calling on African leaders to use their influence with their own people to persuade them that the large-scale slaughter of wild animals is contrary to the best interests of the African people themselves and serves only to enrich a few middlemen and receivers at the expense of the community.

It is therefore encouraging to note that the Member for Mombasa, Mr. T. M. Chokwe, has urged that more intensive efforts should be made to deal with the receivers who trade in illicit ivory and rhino horn and that there should be a complete ban on the hunting of rhinos on the grounds that it is difficult to persuade Africans to cease killing them when foreign sportsmen are permitted to do so on licence.

Mr. Chokwe is reported to have said, "There are many of us in the present government who are seriously concerned about our animal population and we are fully aware of the indiscriminate slaughter that is being done by poachers".

### Educational campaigns

The Royal Society for the Protection of Birds has recently moved its headquarters from London to the country and is now located at The Lodge, Sandy, Bedfordshire, a mansion surrounded by nearly fifty acres of beautiful wooded grounds owned by the Society.

One of the objects of the move is to make possible the organisation of residential courses for teachers and lecturers in training colleges, as well as adult and junior members of the Society. The grounds have very special facilities for the teaching of field biology, and nature trails with a trailside museum, etc. are in preparation.

An Education Officer, Mr. J. Clegg, who until recently was Director of the Educational Museum at Haslemere in Surrey, took up office on the 1st April 1962 and residential courses started almost immediately. It is not intended that the courses shall be confined to bird study but will be broadened in scope to take in the whole field of nature conservation.

### Uganda

The lakes of Uganda and the River Nile have continued to rise and from the Murchison Falls National Park come reports that the surface of the river is a mass of floating vegetation. In the Queen Elizabeth National Park islands of floating debris also block the Kazinga Channel connecting lakes Edward and George. In both parks, the pumping stations have been submerged by flood waters.

Five of the twenty white rhinos which were captured in the West Nile District and released in the Murchison Falls National Park have recently been sighted and appear to be thriving in their new habitat. The baby white rhino which is being reared in a paddock by the Warden is also doing well in spite of a difference of opinion with a porcupine which left her with a quantity of quills embedded in her face.

Two buffalo cows had to be destroyed when they horned one another and were unable to break free. After an all-night struggle, the horn of one was deep in the eye of the other while the latter's horn was in her opponent's ear.

Anthrax has occurred among the hippo herds in both parks. 30 of the 300 hippos inhabiting the three big wallows on the Royal Circuit of the Queen Elizabeth Park have died and the disease has spread into the Kazinga Channel.

### The Tule elk

Formerly widely distributed in the San Joaquin and Sacramento valleys of California, the Tule elk (*Cervus nannodes*) is now threatened with extinction because of competition with domestic livestock. A Committee for the Preservation of the Tule Elk (Rodney Ellsworth, Chairman, 829 N. Bushnell St., Alhambra, California) has been formed. Plans are being made for a thorough investigation to ascertain the precise degree of competition between the elk and domestic cattle and to answer other questions regarding the elk's present and future status. So few of the elk are left that a wrong "turn of the wheel" could easily result in their extirpation. This might please the stockmen, who do not see any value in the elk, but conservationists locally and all over the United States feel otherwise.

## THE INTERNATIONAL CONSERVATION DOCUMENTATION CENTRE

### BOOKS RECEIVED

**Handbook for Teaching of Conservation and Resource-Use.** Edited by Richard L. Weaver. The Conservation Committee of the National Association of Biology Teachers, in conjunction with The American Nature Association. pp. 502. *A valuable guide for teachers interested in inaugurating a conservation education programme.*

**The Vegetation of Wisconsin. An Ordination of Plant Communities.** By John T. Curtis. The University of Wisconsin Press. 1960. pp. 657. *A definitive survey of the vegetation of the State of Wisconsin.*

**Northwest Ethiopia. Peoples and Economy.** By Frederick J. Simoons. The University of Wisconsin Press. 1960. pp. 250. *A valuable contribution to the literature of this region.*

**The Forest and the Sea. A study of the Economy of Nature and the Ecology of Man.** By Professor Marston Bates. The Museum Press. 1962. *A series of essays on the biological communities of the world.*

**Atlas of Australian Resources.** Edited by T.W. Plumb. The Department of National Development, Canberra. 1959. *The first national resource atlas of Australia consisting of 30 map sheets accompanied by a commentary in booklet form designed to supplement the map data.*

**The Lion and the Lily. A Guide to Kenya.** By Kenneth Bolton. Geoffrey Bles Ltd. 1962. *Includes specialised contributions from N. M. Simon (Wildlife); J. G. Williams (Ornithology); S. Downey (Professional Hunting); W. E. Crosskill (Tourism); and M. H. Cowie (National Parks).*

**Atlas of the British Flora.** By F. H. Perring and S. M. Walters. Thomas Nelson and Sons Ltd. 1962. 1648 maps. 464 pp. *Distribution maps of most of the flowering plants and ferns, both native and naturalised, of the British Isles.*

**Some Common Flowering Plants of Uganda.** By E. M. Lind and A. C. Tallintire. Oxford University Press, London. 1962. *The first book to deal specifically with plants and herbs found below 6,000 feet in Uganda.*

**Wild Flowers of the Transvaal.** By Dr. R. A. Dyer, Inez C. Verdoorn, and Dr. L. E. Codd. Illustrations by Cythna Letty. Wild Flowers of the Transvaal Book Fund. 1962.

**A Flora of the Alaskan Arctic Slope.** By Ira L. Wiggins and John Hunter Thomas. Oxford University Press, London. 1962. *A full classification of the flowering plants, ferns and fern-allies on the northern slopes of the Brooks Range and the tundra between the Brooks Range and the Arctic Ocean.*

**Return to the Wild. A Story of Two Lions.** By Norman Carr. Collins, London. 1962. *An absorbing account of two lions reared by the Warden of the Kafue National Park and eventually returned to the wild state.*

**Plant Communities of the Scottish Highlands.** By D.N. Mc Vean and D. A. Ratcliffe. Monographs of the Nature Conservancy. No. 1. H.M.S.O., London. 1962.

**Wilderness. America's Living Heritage.** Edited by David Brower. The Sierra Club, San Francisco. 1961.

**Francois Matthes and the Marks of Time.** Yosemite and the High Sierra. Edited by Fritiof Fryxell. The Sierra Club, San Francisco. 1962.

**Die Erde düstert. 6000 Jahre Kampf um Wasser.** By Reimar Gilsenbach. Urania Verlag, Leipzig. 1962.

**Bis zum letzten Wildwasser.** By Otto Kraus. Dr. Rudolph Georgi Press, Aachen. 1960. *A plea for the effective protection of scenic lakes, streams and waterfalls through sound planning on an international scale.*

### REPORTS, REPRINTS AND PERIODICALS

#### AVAILABLE FROM IUCN

**National Parks - A World Need.** Compiled and edited by Victor H. Cahalane. Special Publication N° 14. American Committee for International Wild Life Protection, New York. 1962.

**The Ecological Effects of Biological and Chemical Control of Undesirable Plants and Animals.** Edited by D. J. Kuenen. Symposium of the IUCN Technical Meeting. Warsaw, 1960. pp. 115. Price: US \$ 2.00.

**Address delivered by His Excellency the Governor of Tanganyika, Sir Richard Turnbull KCMG, at the Opening Session of the CCTA/IUCN Symposium on the Conservation of Nature and Natural Resources in Modern African States.** 5th September 1961.

**The Fourth Annual Report of the Foundation for Mutual Assistance in Africa South of the Sahara for the Year 1961.** Fama. Abidjan. 1962.

**The Conservation of Wild Life and Natural Habitats in Central and East Africa.** By Sir Julian Huxley. Report on a mission accomplished for UNESCO, July - September 1960. *An extremely valuable survey of the diminishing wildlife and wild lands of East and Central Africa.*

**Conservation of Nature in the Antarctic.** Available in SCAR Bulletin No. 6, September 1960. The Special Committee on Antarctic Research (SCAR) Bulletin is published as part of the Polar Record, the journal of the Scott Polar Research Institute, Cambridge, England. Also available from SCAR is **Suggested Form of Measures to Promote Conservation of Nature in the Antarctic.** By G. de Q. Robin, Secretary, SCAR. Mimeographed report, 1961. pp. 9.

**Science in Antarctica. Part I, The Life Sciences in Antarctica. Part II, The Physical Sciences in Antarctica.** A report by the Committee on Polar Research, National Academy of Sciences, Washington, DC. Publications 839 and 878, 1961.

**Nature Conservancy Policies for the Preservation, Care and Use of Natural Areas.** Policy Bulletin No. 2. July 1961. Prepared by the Natural Area Policy Committee, the Nature Conservancy, 2039 K Street NW, Washington 6, DC.

**Man and the African Environment.** By A. S. Boughey. Reprinted from the Proceedings and Transactions of the Rhodesia Scientific Association. Vol. XLVIII. pp. 8-18. 1960.

**Manual for Outdoor Laboratories. The Development and Use of Schoolgrounds as Outdoor Laboratories for Teaching Science and Conservation.** 1959. Edited by Richard L. Weaver. The Conservation Committee of the National Association of Biology Teachers, Bryan, Ohio.

**The Sarawak Museum Journal.** Issued by the Museum, Kuching, Sarawak. Edited by T. Harrison, Government Ethnologist and Curator of the Sarawak Museum.

#### AN IMPORTANT PERIODICAL

**Conservation News. The Quarterly Bulletin published by the Association for the Conservation of Wild Life of Thailand (The Niyom Phrai Association).** Edited by Dr Boonsong Lekagul. Membership fee: 50 Tcs (\$2.50). *Deserving the fullest support.*

## CHAIRMAN'S REPORT — IUCN SURVIVAL SERVICE COMMISSION

The Survival Service was established in August 1949 during a conference at Lake Success held under the good offices of UNESCO. One section under the chairmanship of Mr. Harold J. Coolidge specialised in Emergency Action for preserving vanishing species of fauna and flora and produced a list of thirteen birds and fourteen mammals in danger of extermination.

But the rare birds and mammals named by the Commission were only examples listed to draw attention to the precarious state of the world's fauna. The Commission's danger list now names 55 mammals and 5 reptiles, excluding Australian animals. Thirty-five Australian marsupials and eleven genera of Australian rodents are believed to be endangered. Four genera of Madagascan animals (15 species) are also threatened.

The Commission relies upon the International Council for Bird Preservation for information on the status of birds. Fourteen species have been named by the Council but these can still be regarded only as examples of species in a precarious position. In *Extinct and Vanishing Birds of the World*<sup>1</sup>, 1958, Mr. James C. Greenway Jr. names 77 birds believed to be in danger of extinction; in the *International Zoo Year Book* for 1960<sup>2</sup>, Mr. James Fisher names more than 100 full species in the same plight.

At its headquarters with the Fauna Preservation Society in London, the Survival Service collects information from all over the world about rare animals and whenever possible takes action on their behalf — acting in collaboration with local persons and societies. Some examples of the Commission's work follow:

1. In 1952 Mr. Hugh Farmar went to Crete to investigate the status of the Cretan wild goat and set in motion measures for its protection.

2. During 1955, Mr. Lee Merriam Talbot, then Staff Ecologist to IUCN, visited thirty countries in Asia and North East Africa and made recommendations for conservation of endangered species in those areas<sup>3</sup>. Immediately afterwards he accompanied Mr. R. M. Arundel to the Serengeti region and made a short report on that area — most useful as an introduction to the consideration of the whole Serengeti problem which followed.

3. When, in 1956, the Serengeti National Park, Tanganyika, was threatened with disruption, the Survival Service Commission brought the situation urgently before the General Assembly of IUCN, then meeting in Edinburgh. Professor Pearsall's Survey of the Serengeti was immediately arranged<sup>4</sup>. Following this an official inquiry was held, the National Park was re-con-

stituted and the Serengeti Conservation Area formed.

4. In 1957 Mr. J. J. Petter, of the French National Museum of Natural History, investigated the status of lemurs in Madagascar. As a result of this, and following a recommendation by IUCN, a reserve for lemurs was made in a strip of coastal forest, perhaps the last remaining home of the aye-aye.

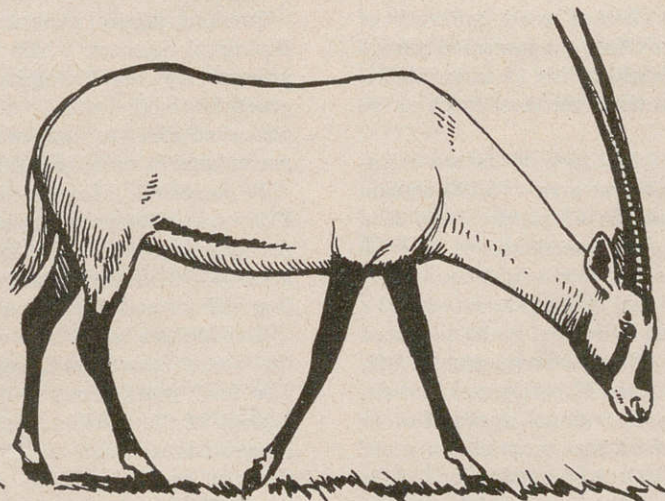
5. In 1958 Mr. Oliver Milton embarked on a mission to Burma, on behalf of the Survival Service Commission, following it up with a visit to Malaya. He is even now (1962) starting off for Sumatra. Mr. Milton is concerned with the conservation of South East Asian species and their habitats, the Sumatran and Javan rhinoceroses particularly, and the orang-utan.

6. In 1960 the Survival Service conducted an inquiry into the numbers of black rhinoceros in Africa and came to the conclusion that only between 10,800 and 12,500 of these animals still existed. A special committee has been formed to deal specifically with the preservation of the five species of rhinoceros.

7. In India Mr. E. P. Gee has many times been the able servant of the Survival Service and of the Fauna Preservation Society. His particular care has been the Great Indian rhinoceros in Kaziranga and Nepal<sup>5</sup>, but he has also reported upon the Indian lion, the Kashmir stag, and the Manipur deer. He has just completed a survey of the Indian wild ass, and his report is awaited with great interest.

8. This year (1962) the Survival Service and the Fauna Preservation Society have collaborated in "Operation Oryx", an expedition sent to Southern Arabia in order to save the Arabian oryx from extermination by establishing a breeding nucleus in captivity. "Operation Oryx", headed by Major I. R. Grimwood, Chief Game Warden of Kenya, captured three oryx in the Eastern Aden Protectorate and took them to Kenya. A decision about their final home will be made shortly.

All the work of the Survival Service needs money. There can be no better augury for the Commission's work than the success of the World Wildlife Fund. This fund is contributing largely to "Operation Oryx", to the preservation of the orang-utan and to many other projects in which the Commission is vitally interested.



Arabian oryx.

Peter Scott.

(1) *Extinct and Vanishing Birds of the World* by James C. Greenway, Jr. Published by the American Committee for International Wild Life Protection. New York Zoological Park. Price: \$ 5.

(2) *The International Zoo Year Book*. Volume 2, 1960. Published by the Zoological Society of London. Price: £4.

(3) *A Look at Threatened Species* by Lee M. Talbot. Published by the Fauna Preservation Society. Price: 10s.

(4) *Report on an Ecological Survey of the Serengeti National Park, Tanganyika, November and December 1956* by W. H. Pearsall. Published by the Fauna Preservation Society. Price: 5s.

(5) *Report on a Survey of the Rhinoceros Area of Nepal* by E. P. Gee. Published by the Fauna Preservation Society. Price: 5s.

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The 1962 IUCN Christmas card is a drawing of the Nilgai antelope by Paul Wüst. Orders should be placed with the IUCN Secretariat as soon as possible. Price per card, including envelope: 50 centimes (Swiss); 10 cents (US) or 9d. (£).

## THE WORLD'S EXPANDING HUMAN POPULATION

The United Nations' population experts are in process of revising their previous projections of the rate at which mouths to be fed are increasing in this world. Their preliminary findings are even more disturbing than those they made in 1958. What they then took as "high assumptions" have now become their "medium assumptions". On present trends, the 4000 million population mark will be passed around 1975 instead of 1980, and the figure for AD 2000, just 38 years from now, is likely to be 6900 million, as compared with 3000 million to-day.

Professor Ritchie Calder, who introduced the discussion at a recent meeting of the Royal Statistical Society pointed out that the present daily increase of 140,000 is about the same number as the refugees who escaped from Portuguese Angola into the Congo, where they created a famine relief crisis. If the world's new arrivals could be formed into a single file passing a ration point, it would in the course of a year, by daily increment, reach from London to New Zealand. If each extra mouth were thought of as a refugee receiving a meagre ration of six slices of bread, half a pint of milk, and half a pound of dried fish, the increased annual demand would require a grainfield as big as Lincolnshire, 2¼ million extra cows and ten times the total catch of the Icelandic fishing fleet.

As for remedies, Professor Colin Clark of Oxford calculated that the potential agricultural area - 16,100 million acres - could, on Dutch standards of productivity, feed 16,000 million people and, on Japanese standards, 110,000 million. Converting farm produce into wheat-equivalent, he showed that while the individual in Tanganyika needed a quarter of a ton per annum, the individual in the advanced countries consumed 2½ tons of "wheat-equivalent". Mr. N. W. Pirie, F.R.S., of Rothamsted Experimental Station, calling for and illustrating unconventional approaches to the world food problem, stressed that research on more radical methods was restricted by lack of imagination, on the part not of scientists but of those who controlled the money.

Some of the world's leading biological scientists attended a special meeting held in May 1962 at the Morges Headquarters of IUCN to consider the problems created by the spectacular increase of human population.

The meeting outlined a programme of worldwide research projects over the next several years to attack such basic human problems as the need for greatly increasing the productivity of communities of animals and plants to meet population growth; alleviation of the physiological stresses to which man is exposed by our rapidly changing environment; evaluation of human genetic changes that result in part from the breakneck advance of our civilisation.

In reporting on the Morges meeting, Geneticist G. Ledyard Stebbins of the University of California's Davis campus spelled out some of the areas that attending scientists agreed need exploration - the biological basis of productivity and human welfare, biological productivity of the earth, biological resources of marine and fresh water communities, and biological basis of human adaptability.

Stebbins, general secretary of the International Union of Biological Sciences, which has a leading role in the programme, says that biologists, biochemists, physiologists and geneticists from around the world are preparing plans for a concerted effort to find solutions to these problems facing present and future populations.

Professor G. Montalenti of the University of Rome, Convenor of the programme planning committee, instructed participating scientists to have detailed project plans ready in early 1963 for submission to the ICSU for financing and organizing research teams to begin work.

The Morges conference was attended by scientists from the United States and Europe, including the Soviet Union. The final study group will include scientists from other regions of the world as well. Representatives from several organizations within the United Nations also took part in the meeting and officials of UNESCO expressed "great interest" in the programme.