



# Bulletin

INTERNATIONAL UNION FOR CONSERVATION OF NATURE  
AND NATURAL RESOURCES - 1196 GLAND - SWITZERLAND

NEW SERIES VOL 11 NOS 7/8

JULY/AUGUST 1980

PUBLISHED WITH THE FINANCIAL ASSISTANCE OF UNEP, UNESCO AND WWF



## What shall we do about krill?

The findings of a major report on the management of the  
Southern Ocean.

## Why a moratorium on commercial whaling is needed now

The IUCN/WWF joint statement to the 32nd meeting of the  
International Whaling Commission.

## The Southern Ocean Convention: good and bad

A report from Australia on the Antarctic Marine Living  
Resources Conference

also in this issue:

**Antarctica and the WCS**

**How to save the IWC**

**IUCN and the Conservation  
of the Southern Ocean**



# The Convention: good and bad

by Joanna Gordon Clark

Canberra, Australia

THE ANTARCTIC TREATY Powers agreed on the final text of a Convention on the Conservation of Antarctic Marine Living Resources here on 20 May 1980. It is open for signature from 1 August to 31 December this year by nations participating in the Conference, and will enter into force 30 days after eight of those nations have ratified, accepted or approved it.

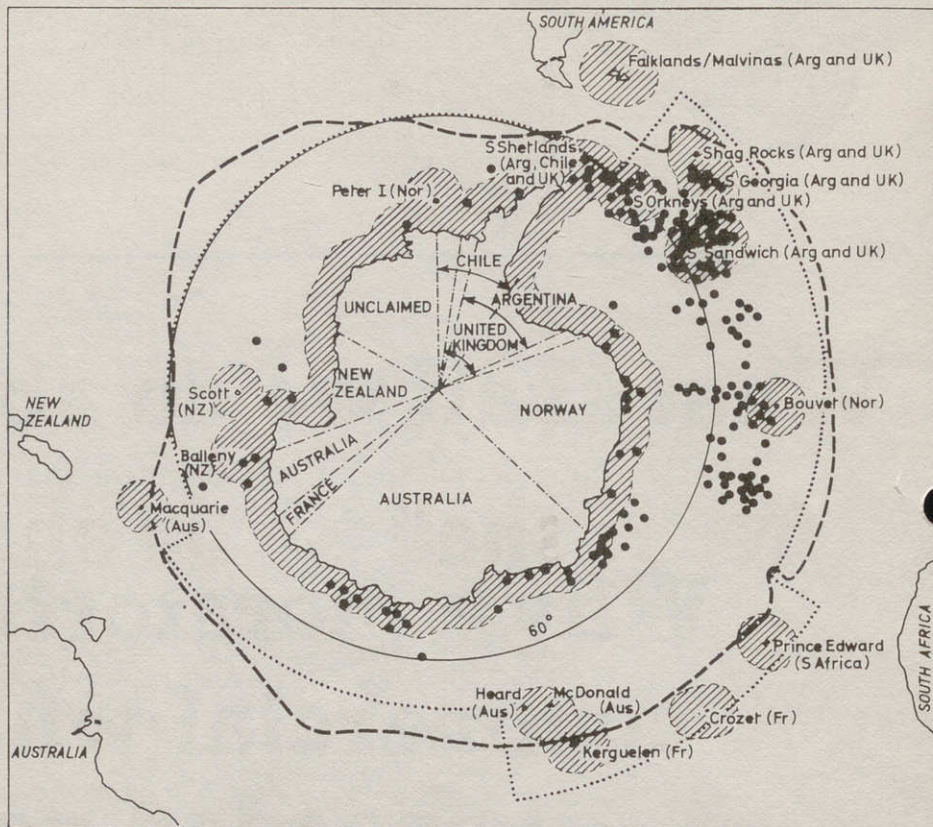
The main features of the Convention are its exceptionally strong conservation standard, which requires for the first time that both the population levels of the exploited species and the balance of the ecosystem be conserved; restrictions on who may join the Convention in future; and its voting system, which requires that important decisions – such as quotas – be taken by consensus and allows a period of 180 days in which Parties may object to such decisions.

It is in the implementation of conservation measures – regulation of take by quotas, size, sex, area, ecosystem considerations and other restrictions – that conservationists envisage almost insurmountable problems. Scientific understanding of the Antarctic marine ecosystem is very limited at present, which leaves plenty of room for political action in the Commission. The Commission will decide quotas, and membership of the Commission is restricted to nations actively researching or fishing in the area and to existing Antarctic Treaty Members. If many nations decide to fish in the area, fishery interests are liable to outweigh conservation interests; few nations are likely to incur the expense of a proper Antarctic research effort just so that their voice might be heard in the Commission. Developing nations considering fishing in the Southern Ocean may not wish to endorse the Antarctic Treaty's control over fisheries in the area, and prefer to go it alone.

Whatever the membership of the Commission, these decisions will be taken by consensus, which in effect means that one nation can block any conservation measure it does not like. Equally, one nation can block an increase in quota but conservation-minded states will have to agree some quota since without agreement, fishing will be unregulated except in certain island areas.

The Convention controls exploitation of all living things occurring in the seas between the landmass of Antarctica and the limits of the Antarctic Convergence, but steps delicately around the rights (which are contested) of certain Treaty nations who claim parts of the land mass and adjacent 200-mile fishery zones.

After 18 months of debate special treatment was agreed for the French islands (Kerguelen and Crozet) by means of a Note attached to the text of the Convention. France can regulate fisheries within the fisheries zones of these islands independently of the Commission's decisions and she will be responsible for enforcement. The understanding now applies to all islands in the area belong-



Antarctic map – The Antarctic Treaty area runs to 60° S (solid line). Krill are found south of the Antarctic Convergence (dashed line). The main known concentrations of krill are shown as dots. This map also indicates the potential effect of

200 mile zones (shaded). There is no agreement on 200 mile zones off the Antarctic mainland. The Convention includes an understanding that countries can regulate fisheries off islands belonging without dispute to them.

ing, without dispute, to other nations. Since large quantities of fish are taken, mainly by the Soviet Union and Poland, from the Kerguelen and Crozet fisheries zone, the Note has some importance.

The fishery of main concern in the area is Antarctic krill (*Euphausia superba*) though at the moment fin fisheries are of greater importance.

Even a fairly small-scale krill fishery could tip the balance against the recovery of the great whales (see summary of IIED report). The United States proposed a resolution requiring that in the period between now and when the Convention comes into force states limit krill fishing to 2 million tonnes per year and intensify research and data collection.

In the end, however, a resolution on interim measures was agreed, which included observance of the conservation principle, intensification of research, study of data collection methods, and compilation of data.

What is the future of the Southern Ocean and of this Convention? It cannot be said that international participation will be encouraged. The indications given from the closing speeches were that the Treaty Powers now wish to conclude a convention controlling mineral exploitation and view this Convention as a first step in that direction. It is doubtful whether their success in maintaining Antarctica peaceful and unexploited can

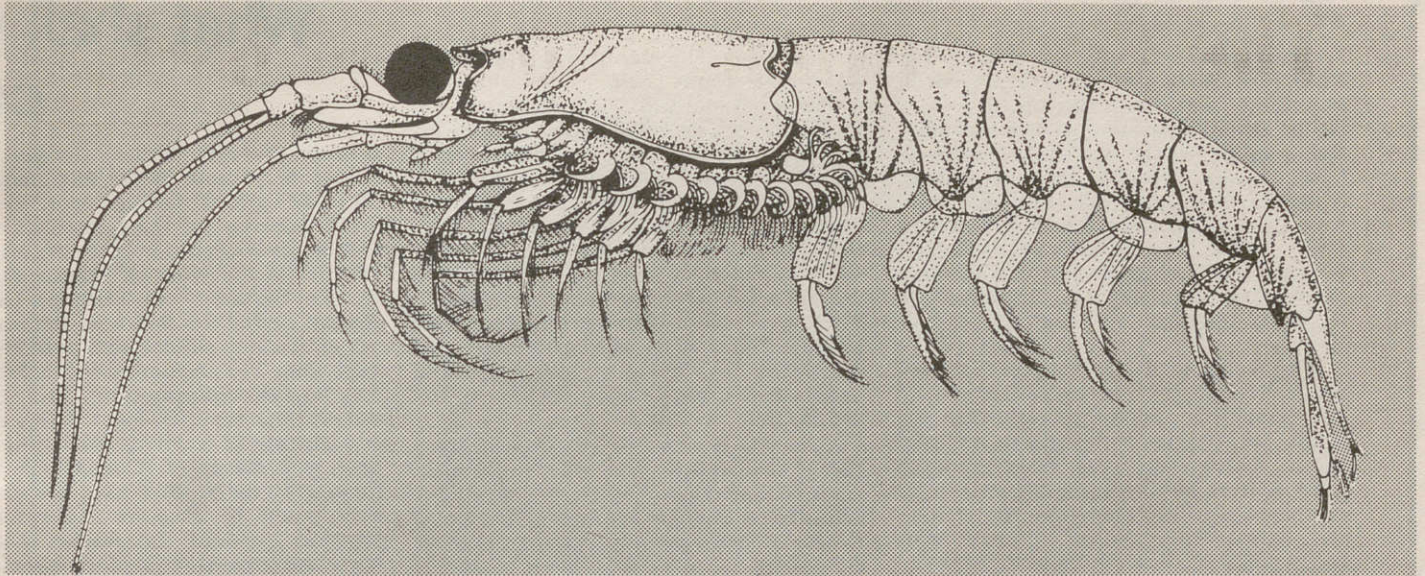
be maintained as resource issues begin to dominate.

It is difficult to argue that NGOs should press for early ratification of Convention that contains so many dubious features. There is no provision in the text for NGO observers, other than those that have "cooperative working relationships" with the Commission or its Scientific Committee. Observers wishing to participate in future will have initially to develop scientific expertise, or to secure seats on national delegations, until it is clear how the Convention text is to be interpreted.

Sydney Holt

## Sydney Holt misquoted

DR SIDNEY HOLT says he was misquoted in the June issue of the *Bulletin*. He says that the quote which appeared on page 58, paragraph 7 should read as follows: "Apart from occasional political statements in connection with the Law of the Sea this is the first time that a group of Third World states has expressed an interest in what is going on in the Southern Ocean."



## What shall we do about krill?

The conservation of the Southern Ocean represents a great challenge. Covering 15 per cent of the world's ocean surface, the Southern Ocean holds one of the last great untapped resources of the seas — krill — and the remnants of one of its most grossly over-exploited resources — whales.

IUCN and WWF set out two years ago to examine the future of the Southern Ocean. The results of one of their jointly-sponsored studies, "The Management of the Southern Ocean", has recently been published by the International Institute for Environment and Development (IIED).

The authors of the report, Barbara Mitchell and Richard Sandbrook, maintain that mankind as a whole has a stake in the future of the seas around Antarctica. In the report they tackle the question of the management of the living resources of the Southern Ocean with two basic objectives to the fore: the protection of the Antarctic marine ecosystem and the accommodation of the interests of the international community.

The following is a summary of the IIED report and the comments it makes on the convention that is now open for signature and ratification.

THE Report is a comprehensive review of Southern Ocean policy taking into account historical, political, legal, economic and biological aspects. But in essence it considers four underlying sets of questions:

"Krill" is a Norwegian whaling term meaning "tiny fish". *Euphausia superba* provides the major food supply of five whale species, three species of seal, 20 species of fish, three species of squid and many bird species. At night the antennae of the seven centimetre *Euphausia superba* lights up, and a shoal becomes a mass of living blue-green fire. Krill swarm regularly during the Antarctic summer (December to May) making them easy to catch with modern trawls.



Everson/BAS/Esca

Krill fishing is still at the experimental stage. Estimates vary greatly over what would be a "safe" catch if a large-scale fishery develops.

- What are the biological resources of the area and what biological-effects would follow from harvesting them?
- What is the prospect of the principal untapped resource, namely krill, being exploited for economic gain — how much might be taken and when?
- Who has an interest in the management of these resources and how can these interests be accommodated?
- What management structures should be established to control exploitation in the light of the foregoing analysis?

Formidable obstacles stand in the way of providing clear-cut answers to these questions. The report is shot through with uncertainties — of every kind. Not least is the difference of views as to the annual sustainable catch of krill. Estimates range from a few million to tens of

millions of tonnes.

Also to predict who will harvest krill and the possible scale of their operations requires a working knowledge of fishing systems and their economics, and of possible products and markets. To do this for one region, for example Northwest Europe, is difficult enough; to do it for all potential fishing countries, including Japan, the Soviet Union and China, becomes highly speculative.

Another constraint stems from the wide-ranging nature of the report's approach. A forbidding number of lines of enquiry had to be pursued simultaneously. For example, an understanding of the biological implications of exploitation, requires advanced population dynamic modelling and an understanding of the habitat and its constituent members. Here the conclusions of the report owe much to a parallel project on the biological impact of krill harvesting, sponsored by IUCN under the direction of John Beddington at the University of York, UK. (The results of this study can be obtained from IUCN.)

Uncertainty is not limited to the biological sphere. It is extremely difficult to predict the future course of any of the world's fisheries, partly because of the revolution taking place in the law of the sea and partly because of changes in the costs of fishing, particularly in relation to soaring energy prices.

Uncertainty bordering on mystery, hangs over Antarctica itself. Antarctic politics are remarkably impenetrable; Antarctic Treaty powers have by and large conducted their negotiations in secret. Neither the data and rationale influencing consultations, nor the positions of individual parties are widely understood.

Continued next page



The report, however, observes that the Antarctic Treaty powers have played an important role in ensuring up till now, a stable, demilitarised and environmentally-sound status for the Antarctic continent. (The Treaty powers are: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, UK, USA, USSR and Poland. The Federal Republic of Germany and the German Democratic Republic who attended the Canberra meeting are not yet Treaty powers.)

The Antarctic Treaty belongs to the old order. The Treaty powers are those who got there first or late arrivals with the funds and technical capacity to stay there. Differences exist between them over matters like sovereignty, but so far the members of the Antarctic "club" have consistently shown a united front to the international community.

To date other nations, perhaps for lack of funds have shown little interest in the future of Antarctica. But will this always be the case? The recent conference of Indian Ocean states in the Seychelles expressed a great deal of interest in the conservation of the resources of the Southern Ocean. The Treaty powers may have done a good job in managing the continent but this does not give them any special claim to the resources. So, while the authors of the report welcome the new conservation convention they comment that "deliberate efforts should be made to show that the initiative was undertaken with the interests of other states in mind".

#### Multispecies management

The biological review of the area demonstrated that there is a great deal of uncertainty surrounding the status of Southern Ocean species and their population dynamics. It is known that many of the great whales are depleted, but the effects of this depletion on the remaining whale stocks and other marine mammals

are less clear. The effect on species lower down the food chain — such as the cephalopods and fish — is unknown.

The report says that it is a "gross oversimplification" to bank on there being a fishable "surplus" of krill because of the decline of whales. The predation rates of krill over time have not been established. If the recovery of whale stocks is not to be hindered then care will be needed to prevent a reduction in their food supply. The size of various fish stocks is unknown and current over-fishing cannot be ruled out. Even low levels of krill harvesting may have a noticeable impact on the species that feed on it.

For this reason the report welcomes the new scientific principles for fishery management written into the Southern Ocean Convention. For the first time a fishery commission must take account of all species when setting catch levels. If this multispecies approach can be made to work, there is no reason why a controlled krill harvest should affect the recovery of the baleen whales. The need for more research to fill in the gaps is clear.

#### The potential for krill as food

Given the rudimentary state of our understanding of the biological questions, it is perhaps fortunate that krill fishing is still at the experimental stage. The Soviet Union has been harvesting krill and fishing in the area for about ten years, and Japan, the Federal Republic of Germany, Poland, the German Democratic Republic, Chile, Taiwan and South Korea have also sent down exploratory missions.

Krill catches reported to FAO for the period 1977/78 came to 129,000 metric tonnes.

The initial enthusiasm for the fishery, which it was thought might provide an annual catch in the millions of tonnes, was a result of both wishful thinking and the prospect of many distant water vessels being displaced from traditional

## What shall we do about krill? continued

fishing grounds either through over-fishing or because of the introduction of 200 mile national fishing zones.

In working out the economics of krill fishing for Western fleets the report draws heavily on the work of Seamus McElroy of the University of Stirling, UK. His market survey has indicated that krill as a prawn cocktail substitute is unlikely to be economic. The great unknown is krill meal for human consumption (krill protein concentrate type B). Type B fish protein concentrate is receiving increasing attention as a means of feeding high quality protein to the world's poor and certainly krill could be used as a raw material. However, should the market take off, there are a number of much more accessible species of fish that could be used first.

The overriding conclusion of the market study is that extensive catches by Western fleets, including Japan, would only occur if krill could be used economically as an animal feedstock meal. With a medium position in the protein by weight league table, krill meal would only be competitive if its price came midway between those of the two main animal feedstuffs — soya and fishmeal; and this assumes that none of its other attributes, such as high fluorine content, are found to be limiting.

Producing krill meal within such a price range is going to be difficult. The krill fishing season is short owing to the inclement weather in the Southern Ocean. Krill also has a very short decklife; it has to be processed extremely quickly after capture if it is not to deteriorate. Trawlers have to be equipped with large processing decks, and only a limited amount of krill can be landed per day. With existing technology, a maximum catch of about 120 tonnes per day is indicated for the operation to be at all economical. This has to be kept up for about 100 days per season. Even so, this rate of catch would only recover operating as opposed to total costs.

In short, no Eldorado is indicated. But fisheries develop and operate for many other reasons than sheer economic profitability. Political and strategic considerations may determine both size and location of fishing fleets and economic considerations other than profitability are also important. For example, excess capacity coupled with high costs of redundancy of both fleets and men can make projects that cover even a reasonable proportion of operating costs attractive.

#### Management needs

Bringing together the unknowns in the biological and fishery spheres, the report comments on the various methods that could be used to set total allowable catches for the next ten years. Three criteria are proposed that could apply in addition to the principles set out in the Convention. In brief these are the setting aside of zero catch areas as a hedge against uncertainty, regulation of the pace of

expansion of the fishery, and a suggested upper limit for quotas tied to the estimated level of whale predation.

In the final section, the study concludes that deliberate action will be needed if the wider international community is to benefit from the Southern Ocean. To allow for all possible developments, it suggests that a series of steps be taken now: parts of the area should be held in trust for future generations; the Southern Ocean Convention should be submitted for review by an internationally representative body; a technical and economic committee should be established with links to other international bodies, and preferential quota allocations for Third World countries, should be provided for.

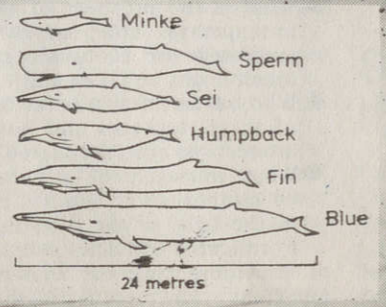
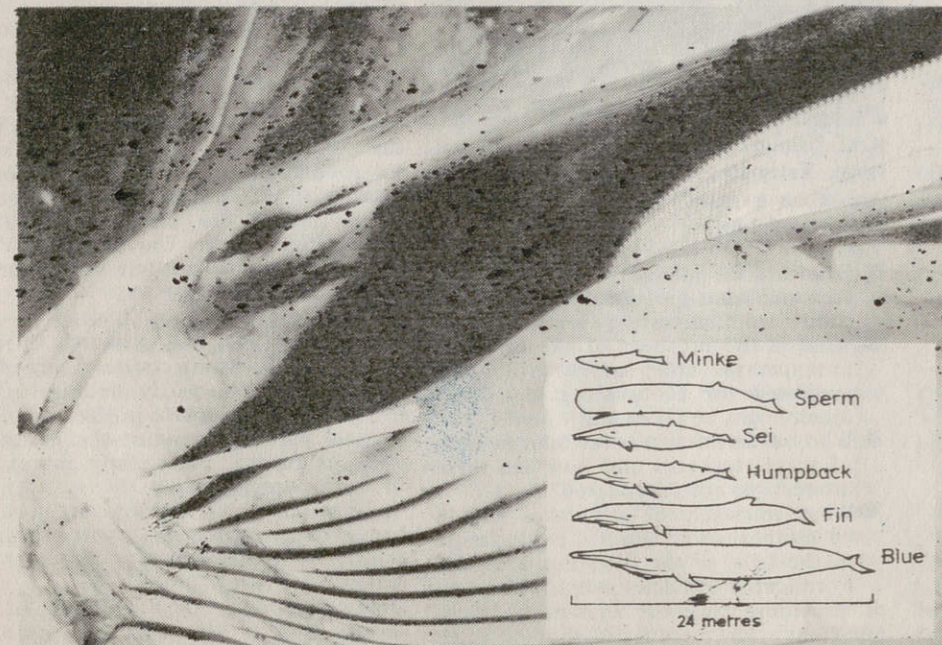
A series of novel approaches to the question of international community participation could be adopted if the fishery began to take off. For example, krill could be used in an international food aid system or in a high grade food stock for emergency purposes. Direct participation by developing countries could also be encouraged through technical and financial assistance. Joint ventures involving LDCs should be promoted and the terms of joint ventures contracts submitted to international scrutiny. (FAO provides this kind of assistance in its EEZ programme.)

(Copies of the IIED report can be obtained from 10 Percy Street, London W1)



Krill is frozen into solid blocks aboard a West German fisheries research ship for transport from the Antarctic to Europe.

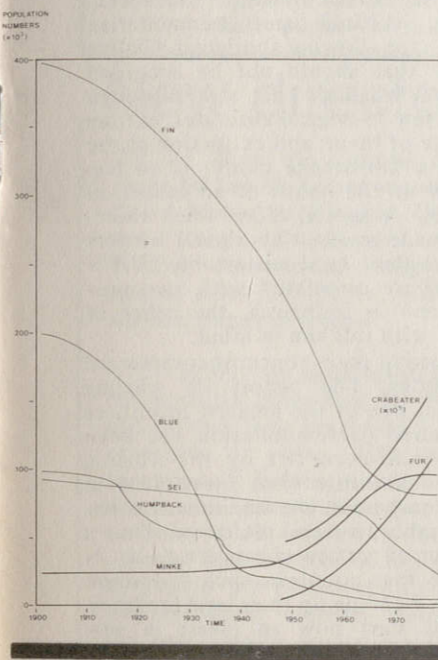
Everson/BAS/Esca



Once ignored as being too small to bother about, the minke whale is now a favourite target of whalers some of whom kill it with the inhumane "cold grenade".

credit Institute of Oceanographic Sciences/WWF

### Estimated population curves of the major mammals in the Southern Ocean



### What the WCS says about Antarctica

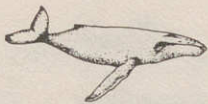
Any regime for the exploitation of the living marine resources of the Southern Ocean should so regulate the krill fishery as to prevent:

- irreversible changes in the populations of krill;
- irreversible changes in the populations of the baleen whales and those seal, fish and bird species which feed on krill, as well as in the Southern Ocean ecosystem as a whole;
- overcapitalisation of krill fishing fleets, which could make it more difficult to agree on a reduction of the krill take should this prove necessary, and could have severe impacts on fisheries outside the Southern Ocean, due to the need to redeploy the krill fleets during the Antarctic winter.

An independent observer system should be provided for in such regulations.

The Antarctic Treaty powers and nations fishing or intending to fish the Southern Ocean should exercise extreme restraint on catch levels until understanding of this uniquely productive ecosystem improves. All harvesting should be on an

experimental basis as part of a scientific research programme to improve knowledge of krill and of the Southern Ocean as a whole. Baseline areas where no krill or other living or non-living resources may be taken should be set aside and given complete protection, so that impacts outside can be monitored and evaluated correctly. The dimension and location of these areas should be established according to the best available knowledge of the ecosystems concerned. Current research efforts should be strongly supported; and the collection, analysis and dissemination of biological information should be mandatory. An International Decade of Southern Ocean Research, focusing particularly on ecological processes, should be initiated as a matter of urgency. Investigation of the possible environmental impacts of tourism, scientific research, mining and oil exploitation, and so on, should be continued. Since oil degrades extremely slowly in conditions such as those of Antarctica and since operating hazards are very high, the feasibility of oil exploration and exploitation in particular should be approached with the utmost caution.



## IUCN and WWF's statement to the 32nd Meeting of the International Whaling Commission (IWC), July 1980.

Every year for the past nine years IUCN and WWF have called for a moratorium on commercial whaling. Every year there has been new evidence of the need for a moratorium. And every year, by ignoring that evidence, the few remaining whaling nations have hastened the extinction of whaling as an industry. This year we renew the call for a moratorium, and for much the same reasons.

IUCN and WWF have long supported the use of living resources, including whales, provided it is sustainable. Sustainable utilisation is a cardinal objective of conservation as set forth in the recently launched World Conservation Strategy. The Strategy is the outcome of an unprecedented international effort involving more than 450 governments and non-governmental organisations and over 700 scientists and experts in living resource management. Prepared by IUCN with the help of WWF, UNEP, FAO and UNESCO, and supported by national and international leaders during a simultaneous launch in 34 countries, the Strategy represents a truly global consensus on how living resources should be managed.

Commercial whaling continues to provide a demonstration of how living resources should *not* be managed. Hence the World Conservation Strategy calls for a moratorium on all commercial whaling until:

- "the consequences for the ecosystems concerned of removing large portions of the whales' populations, and such populations' capacity for recovery, can be predicted;
- permitted levels of exploitation are safe, and an effective mechanism exists for detecting and correcting mistakes in the management of any stock;
- member nations of the IWC are no longer purchasing whale products from, or transferring whaling technology and equipment to, or otherwise supporting, non-member nations, or pirate whaling ships."

These conditions are not yet met. After many years of research associated with commercial whaling there is still not enough information on which to base quotas that can assure the maintenance of exploited species, much less the recovery of depleted ones. The history of the IWC has been one of reiterated claims by the whaling nations that adequate information exists and that the quotas are safe – followed invariably by the discovery that the quotas concerned were too high and that the populations were being depleted. As IUCN and WWF have stated before, and as each year's scientific results have shown, a continuation of whaling at levels considered prudent by whaling nations simply results in a continuation of the depletion of the resource.

Sperm whales are a case in point. Although more data exist on sperm whales than any other cetacean species, the data remain so inadequate that the Scientific

# Whaling - act now!

Committee itself has felt unable to recommend quotas other than zero for stocks which were clearly "Protection Stocks". Where new data have been obtained they have shown that the populations concerned have been over-exploited, sometimes very seriously so. IUCN has contributed to new analyses of sperm whales in the northern oceans which indicate that all of the stocks subject to these analyses are so depleted that they should be Protection Stocks under the New Management Procedure.

Depleting one cetacean population after another is morally indefensible. In so doing, a handful of countries is depriving the bulk of the world's nations and peoples of a valuable resource, making it unavailable for whatever use: food, scientific research, recreation, or the contemplation of some of humanity's most remarkable companions on this planet. It is also immoral, in our view, to kill whales in ways that are manifestly inhumane – for example, killing minke whales with "cold grenades", a method which usually results in a long slow death. Though not strictly a conservation issue, IUCN and WWF believe that IWC has an obligation to ensure that killing is as humane as possible.

Despite quotas that are too high not only for whales but also for the future of commercial whaling, there have been several contraventions by IWC members during the past year. The recent take by the Soviet Union of a large number of sperm whales in the North Pacific flagrantly violates the decision of the IWC last year to stop all factory ship whaling for sperm whales. Peru also has substantially exceeded its quota for sperm whales.

Also in the past year Japan and the Republic of Korea have flouted IWC rules by importing whale meat from non-IWC sources, notably Taiwan – although Japan has reportedly stopped importing the meat (which was trans-shipped through the Republic of Korea) in response to worldwide publicity. Such violations continue to undermine the effectiveness of the IWC and to frustrate efforts to stop pirate whaling.

These episodes serve to deepen disillusion with the New Management Procedure and to cast doubt on the efficacy of partial moratoria. The decision by Australia – the main proponent of the NMP as an alternative to a moratorium – to ban whaling outright is evidently the only rational response. If other members of IWC are still unwilling to make this response, then they should exert themselves to make the New Management Procedure and any moratorium work. In particular, now that the great

whales have been made unavailable, either by depletion or protection, it is inexcusable simply to redirect unscientific, unsustainable hunting methods to the smaller whales. The recent catch by Soviet whalers of more than 900 killer whales in the Indian Ocean sector of the Southern Ocean clearly contravenes the spirit and intent of the New Management Procedure.

To prevent a repetition of this type of occurrence (or at least to preclude "legalistic" excuses for it), and to ensure that a moratorium does not save the great whales at the expense of the smaller, it is essential that the present Schedule be extended unequivocally to cover all cetaceans. It is also important that other sources of "misunderstanding" be removed. To this end, IUCN and WWF recommend that:

- a. The areas and periods to which quotas apply be clearly defined. Some of the past year's infractions have been blamed on confusion over whether the quotas are based on a calendar year or on parts of two years. The Commission has an obligation to ensure that the Schedule is clear and cannot be misunderstood.
- b. The Secretariat write to each nation after the IWC meeting, confirming quotas, moratoria, and other details of the Schedule which affect that nation. There were at least four cases during the past year when the nations involved claimed misunderstandings of such matters.
- c. The types of whaling referred to be clearly defined. In particular it should be made clear that pelagic expeditions include factory-catchers operating pelagically as well as factory ships with catcher boats. It is also essential that a clear distinction be made between commercial land stations and aboriginal whaling.

This last point raises two issues. The first concerns aboriginal whaling. The distinction between subsistence and commercial whaling is difficult to make precisely and consistently. Nevertheless a strong case can be made – on social, economic, cultural and humanitarian grounds – for allowing aboriginal whaling a latitude that should not be accorded commercial whaling. That said, although there are few biological absolutes, extinction is one of them; and extinction at the hands of a subsistence hunter is no less final than at the hands of an industrial harpoonist. A special effort must therefore be made to assist aboriginal whalers to manage their hunt sustainably. IUCN and WWF are associated with two projects – one in Indonesia, the other in Canada – with this aim in mind.

The second issue concerns commercial land stations. The history of whaling shows that one of the greatest incentives to continued overexploitation has been the economic need felt by the whaling nations to amortise their investment in whaling equipment. Overcapitalisation has led inexorably to overexploitation. Thus it is a matter of particular concern to IUCN and WWF that countries such as Iceland should be building up their land facilities. If nations start now to invest in new

*continued on back page*

# personal view



The International Whaling Commission is an institution under fire — from every quarter. Conservationists consider that it bends too much to commercial whaling interests; Eskimos and other indigenous people are angry that the IWC should presume to interfere with their traditional hunting activities; the whaling nations accuse the IWC of being in the pocket of the conservationists who want to kill the industry and put thousands out of work; and interested groups not invited to participate in the annual general meeting moan about the private deals struck between delegations who are intent on appeasing minority groups at home.

Given these kind of pressures, some observers are amazed that the International Convention for the Regulation

of Whaling (ICRW) — first signed in Washington in 1948 by fourteen members of the exclusive whaling "club" — is still in existence. Motions calling for a moratorium on commercial whaling and for tighter controls on the trade in whale products have sharpened internal pressures within IWC over the last two years. The Secretariat readily admits that internal disputes could tear the IWC edifice apart, leaving as a possible consequence the prospect of whaling nations pursuing their activities outside any form of international control.

Clearly something has to be done to resolve these internal conflicts. Tim Clarke now outlines what measures he believes should be taken to restore the tattered reputation of the IWC.

THE membership of the IWC should be widened. This would certainly make its decisions more representative of international feeling. But if it leads to either the withdrawal of whaling nations, or the "bartering" for votes from new signatories, this may in the long term be counter-productive.

Structural and administrative changes may help. For example diverting more funds towards benign research on whales and providing better inspection and supervisory facilities. But such changes cannot hope to solve the major political controversies.

Perhaps what is most needed is a completely revised convention to deal with cetacean conservation and management. The IWC has already taken some initiatives in this area by convening special meetings to discuss modifications of the ICRW. Unfortunately, due to political inertia these reforms seem to be floundering. The last drafting meeting held in Lisbon fell apart in disarray after little progress had been made. Despite this latest setback, this seems the most effective course for the future.

The whole picture is made more

## IWC is a hotbed of controversy

confusing by the existence of several other conventions which refer to cetacea. When the Migratory Species Convention, signed in Bonn last year, comes into force, certain "range states" on the migratory routes of cetacea will need to adopt conservation measures. All cetacea are now included on the appendices of CITES, thus bringing the international trade in whale products under a licensing system. It is interesting to note that the 60 countries that have already ratified CITES are obliged to regulate trade in whale products in this way, yet most of these nations do not send delegates to the IWC and are to that extent disenfranchised from decisions taken in that forum. (CITES has achieved three times as many signatories as the ICRW in just seven years.) When the Law of the Sea

Convention is ultimately adopted it too will refer to the management of cetacea although it is far from clear which of these various international conventions will retain overall jurisdiction in the event of any legal disputes.

Whatever scheme of cetacean management is ultimately chosen, there are at least three lessons that can be learnt from the IWC debacle over the last three decades. First, no international wildlife convention should ever be restricted to those nations with a vested interest in the commercial exploitation of the wildlife resource. In this respect the Convention on the Conservation of Antarctic Marine Living Resources is a disaster since membership is restricted to Antarctic Treaty Powers and to countries with either a direct fisheries or research interest in the area. The potential for conflict between fisheries and whaling interests in the Southern Oceans is immense.

Second, no commercial exploitation of any species of wildlife should be permitted until the exploiting industry has proved to the complete satisfaction of an independent body of scientific experts that the future survival of the species is assured. Particular attention should be given to the non-consumptive value of wildlife.

Third, the basis for any future wildlife convention must be an ecosystem's approach to wildlife management. Whilst acknowledging the great practical difficulties of applying such a system, it remains the only rational biological approach to wildlife management.

International organisations like IUCN can and should take a lead in ensuring that these criteria are applied as widely as possible. As a start, IUCN should consider incorporating the second of these points into the discussions at New Delhi in February 1981 when parties to CITES meet for the third time.

*(Tim Clarke is wildlife campaigner for Friends of the Earth)*

## New director general for IUCN

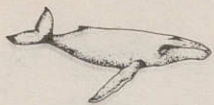
ON 27 June the Council of IUCN chose Dr Lee M. Talbot as successor to David Munro as Director General of the Union. Dr Talbot, currently WWF's conservation director and special scientific adviser, will take up his new duties in August.

Dr Talbot has been involved in the conservation movement for 25 years, and in that time has worked in many capacities in over 100 countries. Immediately before joining WWF, he was an environmental adviser to three successive US presidents as senior scientist and director of International Affairs in the President's Council on Environmental Quality. Before that the new director general was in charge of the Smithsonian Institution's en-

vironmental programmes.

His involvement with IUCN stretches back to 1954 when he was appointed the Union's first staff ecologist. He has since been associated with the organisation in many capacities; most recently as a member of the Executive Board (now the Council) for six years after 1969, and as a vice president from 1975 to 1978.

Dr Talbot has broad experience of conservation in developing countries and has served as consultant to UN organisations and governments on five continents. Like his predecessor, Dr Talbot has been a long-time advocate of the need for environmentally-sound development. He was closely involved in the drafting of the World Conservation Strategy.



# IUCN's opportunity

Antarctica and the Southern Ocean provide the first big test of commitment to the World Conservation Strategy for the governments involved and for IUCN and the NGO community at large.

There can be no more difficult arena for NGOs than Antarctica and the Southern Ocean. Data gathering is so expensive that NGOs must be content with re-analysis of data gathered by or at the behest of governments. The governments concerned operate as a highly exclusive club. Monitoring what happens in the region will demand great ingenuity and persistence. So will getting the public sufficiently worked up about what happens to make governments take notice

of NGOs. Out of sight out of mind; and no place can be more out of sight than Antarctica.

No NGO can be in a better position than IUCN to overcome these difficulties. As an NGO it cannot be told by the Antarctic Treaty powers to stay out and shut up as some inter-governmental bodies have been. As an NGO with government members it has easier access to "closed shops" than have conventional NGOs. As an NGO with considerable scientific and technical resources, backed by financial resources from WWF, it can marshal the evidence and arguments needed to promote conservation in the region. And as an NGO that is itself a

## WWF/IUCN Statement — continued

capital equipment, it follows that they will want to carry on using it regardless of the condition of the whale stocks exploited.

Since we recommend clarity to IWC, it is perhaps only right that we ourselves be clear. IUCN and WWF have little faith in selective moratoria (however well defined) on commercial whaling, and no enthusiasm at all for continued application (however conservatively) of the New Management Procedure. We call for improvement in both because we believe that IWC members have an obligation to respect IWC decisions; and because we recognise that selective moratoria may be necessary to ensure an orderly, as well as expeditious, transition to a comprehensive moratorium. We remain convinced, however, that a moratorium on *all* commercial whaling is indispensable — for the whales, for the world community of nations, for future generations of people, and indeed for any future whaling industry. Needless to say, by all commercial whaling we mean all commercial whaling, both pelagic and from land stations; and we mean the moratorium to apply to the commercial taking of *all* cetaceans. The only taking of cetaceans we would exclude from the moratorium is aboriginal or subsistence whaling.

In renewing our call for a moratorium on commercial whaling, IUCN and WWF are conscious of being overtaken by events. The days of commercial whaling are clearly numbered. Those nations most vigorously opposed to a moratorium are as vigorously promoting it by reducing whale stocks to uncommercial levels. The phase-out of commercial whaling is also being speeded through CITES and national controls. The recent EEC regulation — binding on all member countries — imposing a near-total ban on the import of whales and whale products, is an especially welcome and significant move in this direction.

Accordingly IUCN and WWF recommend that IWC begin to consider its role after commercial whaling ceases. There is much that it could do. One course of action should be to examine the value to people of live whales. Until now, of

course, the IWC has been concerned only with dead whales. Their potential as a tourist resource, for example, or as objects for benign research has scarcely been tapped. Another course should be to develop a research programme using already available biological and documentary materials, such as histological samples and historical records. Among the more important subjects for consideration and research are the behaviour and intelligence of whales and the ethics of whaling. The recent IWC meeting on these subjects is a welcome if tentative step in this direction.

Relevant to IWC's emerging role is its farsighted move last year in establishing the Indian Ocean Sanctuary. As the World Conservation Strategy observes, this now needs to be matched by international measures to protect the habitats of cetaceans. Unfortunately, the southern boundary of the Sanctuary (set at 55°S) is artificial in ecological terms. In accordance with the resolution of the recent meeting of Indian Ocean states in the Seychelles, we urge the IWC to shift this boundary south to take in the whole of the Indian Ocean sector of the Southern Ocean. The Sanctuary would then embrace the feeding grounds of male sperm whales in the sector and protect minke whales in the area from further exploitation. Given the great uncertainty over the status of minke whales in the Southern Hemisphere, it is most desirable to protect the species in some part of its range at least.

The Indian Ocean Sanctuary provides an unrivalled opportunity for cetacean research. IUCN and WWF intend fully to play their part in supporting and assisting benign research on cetaceans and their habitats in the region, and hope that IWC will do likewise.

The International Whaling Commission is an important intergovernmental body with a network of contacts and access to invaluable scientific capabilities. After commercial whaling ceases it should continue to play a vital role in research and management, one important aspect of which would be to make sure the moratorium on commercial whaling is observed. IUCN and WWF stand ready to help in every way possible in planning and implementing this new chapter in cetacean conservation.

network of national and international NGOs it can ensure that its voice is heard in a large number of countries.

So far IUCN, with the help of IIED and WWF, has been able to put together the scientific, economic, management and policy information needed by NGOs to arrive at an independent position on Southern Ocean conservation. Three mailings have been made to IUCN members urging them to promote the IUCN/IIED position. At the Canberra meeting IUCN was one of only five organisations — and the only network NGO — granted observer status.

Unfortunately, an NGO network formed for the purpose, the Antarctic and Southern Ocean Coalition (ASOC), was not allowed to attend. IUCN's representative, Vice President Robert Boote, was able to help ASOC deliver its views (based on and very close to IUCN's) and to press the case for NGO participation in the future.

For in the future there will need to be very close cooperation among NGOs, and between NGOs and governments.

For IUCN's part, the IUCN Council, at its June meeting, reiterated the high priority given to Antarctica and the Southern Ocean in the World Conservation Strategy. It called on the Commissions and Secretariat to make a special effort to develop activities in the region for inclusion in the 1981-1983 Programme; and decided that a feature of the next General Assembly (to be held in New Zealand, on the doorstep of Antarctica in October 1981) should be an Antarctic plan of action.

The lesson to be learned from Antarctic experience to date is that IUCN and its colleagues must take the initiative, anticipating issues and the moves likely to be taken by the countries involved. National interest in Antarctica seems to be reverting to exploitation, first of living resources and eventually of oil and minerals. The current system of protected areas is scarcely adequate in a context of protection; it is quite inadequate in a context of exploitation, however "ecosystem oriented". A much improved system needs to be devised and promoted, together with a philosophy and procedure for regulating human activities outside the protected areas. And all of this should be done well before the Antarctic Treaty comes up for review in 1991.

Published monthly by the International Union for Conservation of Nature and Natural Resources, 1196 Gland, Switzerland, with the financial assistance of UNEP, UNESCO, UNESCO Subvention 1979/80 DG/2.1/414/48 and the World Wildlife Fund. Annual subscription is US\$20.

Opinions expressed in the Bulletin are editorial opinions and should not be taken as the official view of IUCN.

All materials may be reprinted unless protected by copyright. The editor would appreciate two copies of any reprinted material.

Printed by Feb Edge Litho (1979) Ltd, 3-4 The Oval, London E2.

# **IUCN**

## **Director General's report**

This IUCN report covers the period June to December 1979. It has been produced in order to bring the reporting sequence in line with the programme. The next report will cover a 12 month period.



# Director General's report

## INTRODUCTION

This report is submitted in compliance with the requirement in Article IX (6) of the Statutes. It is a comprehensive but succinct account covering the activities and operation of IUCN for the period June to December 1979. It completes the report for the calendar year 1979 partly covered by the Annex to Council Paper UC.79/24. By covering a seven month period this paper makes it possible for future Director General's reports to deal with a twelve month calendar year period, which harmonises closely with the arrangements for Programme planning and budgeting, and Council's decision to hold in future regular meetings generally near the end of the calendar year.

I should like to acknowledge the support and assistance that have been given to the planning and implementation of the IUCN Programme during the report period by members of IUCN, officers and members of the Council and Bureau, members of Commissions and the staff of the Secretariat. (For an account of recent staff changes, see attachment 2. For a list of IUCN staff members and their functions as at 31 December 1979, see attachment 3.) I should also like to express gratitude to the United Nations Environment Programme (UNEP) and World Wildlife Fund (International and National Organisations) for their valued continuing collaboration and support.

Though most of the subject matter of this report is concerned with programme issues, it would be incomplete if it made no reference to the move of IUCN in October 1979 from its former headquarters in Morges, where it was occupying two attractive but inefficient villas, to Gland, a new modern building located closer to Geneva. This move brings together IUCN (including the CITES Secretariat) with WWF; numerous advantages are expected from this closer association. Moreover, administrative economies are expected after a period of settling in. The building offers previously unavailable facilities, such as space for a book and photographic library, meeting rooms, display areas and projection facilities.

As in previous years, the annual report is presented under four headings: Monitoring, Planning, Promotion and Assistance.

*Monitoring* covers the status of threatened species, protected areas and areas in need of protection, actual or impending ecological changes and their causes and consequences, and important issues regarding the management of natural resources. Monitoring provides the basis for IUCN's representations to governments and other bodies, which are reported under the heading of Promotion.

*Planning* covers strategy design, programme design and project development, screening and management.

*Promotion* covers the promotion by IUCN of action by governments, intergovernmental organisations and other bodies.

*Assistance* covers IUCN's response to requests for technical assistance in the design and execution of conservation plans and projects. It also includes administration on UNEP's behalf of the Secretariat for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

## MONITORING

The Species Conservation Monitoring Unit (SCMU) set up by the SSC went into operation at the end of 1979. Based at Cambridge in the UK, the Unit brings together in one place the compilation of the Mammal, Amphibian and Reptile, Freshwater Fish and Invertebrate volumes of the Red Data Book, and other special listing for various purposes. SCMU has been given the responsibility for managing every stage of the Red Data Book production and the associated analyses.

The data gathered by SCMU will be used by the SSC to produce and update its Action to Prevent Extinction (APX) programme as a basis for identifying priority conservation actions. All the component parts of IUCN will be able to draw on the information gathered by the Unit.

### Red Data Book

In the latter half of 1979 the following loose-leaf volumes of the Red Data Book were published: Volume I, Mammalia

— fourth service of new and revised sheets; Volume II, Aves — second part of the completely revised edition; Volume III, Amphibia and Reptilia — first service; Volume IV, Pisces — completely revised edition.

### Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC)

TRAFFIC/USA is now operating and other regional and national TRAFFIC groups are to be set up. The London office, now called TRAFFIC International, will act as the central organisation for these groups.

### Protected areas

The new and revised inventory sheets of the World Directory on National Parks and Other Protected Areas were completed for India, Indonesia, New Zealand and Antarctica. West European and African data sheets are scheduled for 1980 and Latin America's for 1981. Preliminary work on a list of classified marine parks and guidelines for their establishment is underway. The report on Northern and Western European National Parks was completed in December, subject only to review by UNEP; and the Directory of Wetlands for the Western Palaearctic is now being edited.

## PLANNING

### Commission meetings

A joint meeting of the Commissions on Ecology (COE) and National Parks and Protected Areas (CNPPA) was held in Canberra, Australia, in October 1979. For the first time a representative of the People's Republic of China took part.

The COE set up working groups on mangrove, coral reef and mudflat ecology. Similar groups were set up to deal with the ecological aspects of environmental pollutants and of species migration.

The newly-elected chairman of the Education Commission, Albert Baez, held a meeting of consultants in Arlon, Belgium, in September 1979 where general policy and future membership were discussed. Also in September the first meeting of the reconstituted Commission on Environmental Planning was held in Cheltenham, UK. Its main task was a review of the proposals for a programme developed by a task force in the first part of the year.

The Commission on Environmental Policy, Law and Administration (CEPLA) held a Steering Committee meeting in October 1979 to review the Commission's work and to propose future initiatives. The SSC met in Cambridge, UK, in September 1979. One of the principal tasks was a joint review with the Editor in Chief for the World Conservation Strategy sourcebook volume on species.

### World Conservation Strategy (WCS)

Strategic guidance for IUCN's programme — and for the programmes of many other bodies involved in living resource conservation — is provided by the WCS.

The final draft of the Strategy was submitted to UNEP, FAO, Unesco, WWF and all members of the IUCN Council on 10 August. After some minor modifications each organisation gave the document its approval. The two year drafting process was finally completed on 18 October when the Ecosystem Conservation Group (UNEP, FAO, Unesco, IUCN) approved the text. Design and production occupied the balance of the year.

The IUCN Council meeting in November agreed that the first edition should be monitored continuously and revised when necessary.

Draft texts of nearly all the chapters of volume one on terrestrial ecosystems of the sourcebook of the WCS had been received by the Editor in Chief by the end of the year. Work on the volume on species also got underway.

### Programme design

In December the programme document, "A Conservation Programme for Sustainable Development", was published following the third and final meeting of the year of the Programme Planning Advisory Group (PPAG) and the approval of Council. The outcome of close cooperation between UNEP, WWF and IUCN, publication of the "grey book" represented a milestone in IUCN's recent history. For the first time the full range of IUCN's activities has

been set out in a prospectus along with the financial implications. The Union now has a comprehensive framework for all its operations, set within strategic guidance provided by the World Conservation Strategy.

The document arose out of the need for a more measured approach to conservation action: only in this way can IUCN be sure that its slender resources and those of WWF are being directed to areas where they will do most good.

The programme covers the three years 1980 to 1982, and gives indications of the priority species, ecosystems and regions for the attention of IUCN over this period. It should be regarded as a working document, intended to guide IUCN and WWF, but not to impose a strait-jacket upon them. An element of flexibility has therefore been built into the programme and a procedure has been agreed for an annual review, updating and "rolling forward" of the programme, all under the guidance of PPAG. A fuller discussion of recent developments in programming and budgeting is given in Attachment 1 to this paper.

#### **Liaison with UNEP**

With the WCS nearing completion, the second half of 1979 saw a strengthening of IUCN's already close links with UNEP, mainly through personal contacts and participation in international meetings, many of them within the framework of IUCN's project with UNEP, FP/1110-79-01, which runs for two years (1979-80).

Discussions were held with senior UNEP officials on IUCN's involvement in the Caribbean and Kuwait Action Plans. IUCN participated in the Government Experts Meeting (Kuwait, 19-23 November) which was held to review project proposals for inclusion in the Kuwait Action Plan, including several which will involve IUCN. IUCN officials also attended other UNEP meetings as follows: Inter-Agency Meeting on Regional Seas (Rome, 23-25 July); Thematic Joint Programming and Ecosystem Conservation Group Meetings (Rome, 15-18 October); workshop on the environmental effects of oil spills (Brest, France, 26-28 November); and an Inter-Agency meeting on Mediterranean Protected Areas (Geneva, 11-12 December). IUCN also made a submission to the UNEP/Economic Commission for Europe Regional Seminar on Alternative Patterns of Development and Lifestyles in the ECE Region (Ljubljana, Yugoslavia, 3-8 December).

Discussions were also held to explore possible links between IUCN's Red Data Book system and UNEP's Global Environment Monitoring System (GEMS). UNEP officials attended the third meeting of PPAG and IUCN's Council meeting in November. A preliminary meeting of IUCN experts was held in December to prepare the ground for the UNEP meeting on tropical rain forests scheduled for Gabon but later moved to Nairobi.

#### **Liaison with FAO, Unesco and UNDP**

The WCS consultation process also brought IUCN into closer contact with Unesco and FAO — both of whom subsequently endorsed the document. At the same time the Union was working with Unesco and FAO in other areas, notably on the World Heritage Convention and the Man and the Biosphere (MAB) programme (with Unesco); and on plant genetic resources and fisheries with FAO. Another welcome development was the UN Development Programme's decision to include two ecologists in a multi-disciplinary mission to the Kagera river basin in East Africa; IUCN and Unesco have consistently held the view that an independent ecological assessment should be carried out before the final go-ahead is given for the Kagera agricultural development project (see April 1980 *Bulletin* for latest news).

#### **WWF/IUCN projects**

A vital part of the planning process is the guidance provided by IUCN for WWF projects. The new project design and screening procedures referred to in the Annex to UC.79/24 were introduced at the beginning of the year. During the whole of 1979, 340 project proposals were received (194 in the seven months under review), and nearly 80 per cent of them were screened in less than eight weeks. In addition, a backlog of over 250 projects were reviewed and action was taken. With the new streamlined system in operation, most project proposals were processed within three months, and the backlogs in project screening have been removed. In all, 75 projects, or continuation of existing ones, were approved in 1979 (47 in the seven month period under review). (A complete listing of approved projects has been given to the Council in a separate document.)

The screening process involves all the Commissions of IUCN, selected members, individual experts and advisers and the Secretariat of IUCN. It constitutes an expert service which IUCN provides to WWF, ensuring that funds raised for wildlife conservation are spent on priority requirements and on intrinsically sound projects. The same expertise is used as necessary to review the progress of projects, to assess results and to recommend follow-up measures. This arrangement has been greatly enhanced by the opportunities for closer cooperation with WWF provided by the move to the new shared building in Gland.

Though most of the projects are field ones, a number are designed to improve the quality of conservation planning at a strategic level and therefore merit a reference here. Several examples illustrate the point, and show how WWF projects can be used to increase IUCN collaboration with its partners in international conservation:

#### **International Waterfowl Research Bureau (Project 1377)**

In September a detailed re-evaluation of IWRB's role in achieving the conservation aims of the two organisations was carried out. As a result the project was completely redesigned with much greater emphasis laid on the help IWRB can provide in the work of wetlands conservation, especially the strengthening of the Ramsar Convention on this subject.

#### **The Natural Resources Defence Council (Project 1574)**

The NRDC is a member of IUCN and receives a grant from WWF for its international work. NRDC has developed much expertise in tropical rain forest conservation; a new relationship has been worked out whereby IUCN will use NRDC as a principal adviser in this field.

#### **African Rhino Conservation Programme**

In cooperation with WWF, IUCN has been developing a major programme for the conservation of rhinos. The New York Zoological Society (NYZS) has provided the funds necessary for the operation of a coordinating secretariat for African rhino conservation, under the direction of Dr Kes Hillman, Chairman of SSC's African Rhino Specialist Group. The Group has drawn up a list of high priority projects, based upon a continent-wide assessment of rhino conservation needs undertaken by a network of experts.

#### **African Elephant Action Plan**

A major three-year project was concluded with the preparation of a draft 174-page Action Plan submitted by Dr Iain Douglas-Hamilton in December 1979. When adopted by the SSC, the plan will provide the basis for approval and funding of elephant conservation projects.

#### **Other important planning activities**

With WWF and IUCN participation, the first World Conference on the Conservation of Sea Turtles has held in Washington, DC, from 26-30 November 1979 to determine what can be done to restore endangered and depleted populations of these turtles to former abundance. The meeting was attended by more than 300 experts.

A conservation strategy was drafted at the Conference, and a list of conservation projects drawn up to prevent the extinction of sea turtle populations. The Deputy Chairman of SSC, Mr Wayne King, served as Chairman of the Conference Scientific Committee. Follow-up actions are being carried out within the framework of the IUCN/SSC Marine Turtle Specialist Group.

The role IUCN could play in the campaign against desertification was reviewed with the help of a consultant. His recommendations were approved by PPAG and included in IUCN's programme. The major emphasis is upon demonstration projects for drylands species and ecosystems restoration.

## **PROMOTION**

#### **Interventions**

*Africa:* The large scale destruction of Uganda's wildlife in protected areas prompted letters of intervention to the Presidents of Uganda and Tanzania; however, the uncertain political position in Uganda continues to hamper attempts to protect wildlife. A letter of intervention was also sent to the President of Niger about the proposed mining of phosphate deposits in his country's section of the "W" National Park. To date there has been no response from the President. A copy was sent to the Conseil de l'Entente — made up of Niger, Ivory Coast, Upper Volta, Togo and Benin — whose Chairman has now taken up the matter.

*Asia and Australia:* IUCN's concern about the threat to

the Jarrah forests from bauxite mining was expressed in a letter to the Premier of Western Australia. Two letters were sent to the President of the Philippines: one to congratulate him on a presidential decree on the conservation of coral reefs; the other outlined IUCN's concerns about plans for a nuclear power plant in Bagac, Bataan.

**Latin America:** IUCN sent letters to the Presidents of Argentina and Mexico congratulating them on setting up national parks. Both letters also urged the leaders to create additional protected areas. A letter was also despatched to the Bonaire authorities stating IUCN's concern over the possible impact of a proposed oil refinery on the flamingo population on the islands.

**Europe:** Letters of intervention were sent to the appropriate Irish and Liechtenstein Government authorities advocating the protection of key threatened wetland areas.

#### Regional activities

**Africa:** The Regional Officer, Mr John Kundaeli, visited Madagascar, Mauritius and the Seychelles between September and October. The mission provided an opportunity to review conservation problems and activities with government officials. The Seychelles Government indicated its approval in principle of the IUCN report on the "Conservation of Marine Resources in the Seychelles".

**Asia and Australia:** Dr Chew Wee-Lek took advantage of home leave travel to stop over in Thailand, to discuss with wildlife authorities arrangements for a meeting of the IUCN/SSC Asian Rhino Specialist Group; and Australia to visit organisation members in Sydney, Canberra and Melbourne to discuss activities of the Australian Committee for IUCN.

**Latin America:** In October the regional officer, Mr Felipe Matos, travelled to Costa Rica and Venezuela. In Costa Rica he visited the Tropical Agricultural Research and Training Centre (CATIE) to explore ways of cooperating in the implementation of the Caribbean Conservation Strategy. He also attended a symposium on forestry sciences. In Venezuela a special meeting was held to look into ways of establishing an IUCN National Committee.

**Europe:** The Director General travelled to Greece to consult on the implementation of a World Bank-financed forestry project which threatened the habitat of rare birds of prey. The intervention was successful. A new plan sets aside a protected area for the threatened birds (see December *Bulletin* for full account).

#### International conventions

In agreement with IWRB, IUCN has assumed the role of technical adviser in the planning of a meeting of Contracting Parties to the Convention on Wetlands of International Importance Especially as Waterfowl Habitat – better known as the Ramsar Convention – scheduled for November 1980 which will provide the occasion for a critical review of the working of the Convention. A consultant identified by CEPLA started work on guidelines for a framework for national legislation to implement CITES. Under IUCN's Legal Regime of the Sea Project, CEPLA started work in the last few months of 1979 on an overview document that traces the historical development of marine conservation law. The analysis will be used to provide the basis for future initiatives.

The Charter for Nature was formally presented to President Mobutu Sese Seko of Zaire by IUCN's President, the Director General and the Chairman of CEPLA in November 1979. The President confirmed his intention to bring the Charter formally to the General Assembly of UN.

In collaboration with the Government of the Federal Republic of Germany, IUCN Secretariat and CEPLA personnel provided secretariat and advisory services at the Conference held at Bonn in June 1979 to adopt the Migratory Species Convention.

Further attention was given to the development of policy positions on the Western Hemisphere and Whaling Conventions, and a contribution was made to the Law of the Sea Conference concerning treatment of marine mammals.

Work was started on draft Guidelines for Protected Areas Legislation, for review early in 1980.

The CNPPA Executive Officer, Mr Harold Eidsvik, provided advice to the World Heritage Committee on selection criteria for the World Heritage List for its October meeting in Cairo.

#### Publications

In addition to the Red Data Book (already covered in the

IUCN/UNEP report) "Ecological Guidelines for Balanced Land Use, Conservation and Development in High Mountains" was published and distributed.

## ASSISTANCE

### Conservation for Development

The Ford Foundation and the Netherlands Government have provided initial funding for the Conservation for Development programme. The aim of the programme is to provide developing countries with technical advice on the conservation and management of natural resources, drawn largely from IUCN's own network of experts and funded mainly through unilateral and bilateral development assistance programmes. IUCN is seeking an experienced development expert to assume responsibility for managing this programme.

### Regional

A Strategy for the "Conservation of Living Marine Resources and Processes in the Caribbean Region" was submitted to UNEP and the Economic Commission for Latin America (ECLA/CEPAL). The Strategy and the accompanying data atlas, which was printed with financial assistance from UNEP, provided guidance on living resources conservation priorities as part of the UNEP/ECLA action plan for sound environmental management in the Caribbean. Also concerning the wider Caribbean, IUCN participated with UNEP, FAO and IMCO, in the preparation of a report on the ecological consequences of the IXTOC 1 oil spill. The report was later reviewed by IUCN's experts and submitted to the President of Mexico.

IUCN has been playing a key role, within the framework of the UNEP Mediterranean programme, in the preparation of advice on the selection, establishment and management of protected marine and coastal areas and on Mediterranean species in need of special protection. Revised versions of the draft documents which were considered at an inter-agency meeting of experts in Geneva in December (see under PLANNING above) will be used to help draw up a protocol for Mediterranean protected areas, to be considered at a meeting in Greece in October 1980.

IUCN representatives attended the last of five technical meetings, held in Washington DC in December, on legal aspects related to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. The delegation advocated a strengthening of the Convention.

### National

In October the Thai Government accepted IUCN's policy guidelines for conservation in Thailand. The guidelines will now be implemented as part of the country's development plan. Draft legislation for Malawi was completed in September and sent to UNEP for review. In September an IUCN consultant visited Tanzania to assist in the elaboration of a comprehensive wildlife research programme; his draft report will be reviewed by IUCN before it is submitted to the Tanzanian Government.

A two-man IUCN mission from the Commission on Ecology and Environmental Planning visited Gambia in November to inquire into the environmental and ecological implications of a proposed barrage across the River Gambia. The mission concluded that the barrage would result in the destruction of a large mangrove forest, and the loss of fisheries and land currently under traditional agriculture systems. Consultation with the Government on this matter continues (see June 1980 *Bulletin*).

An IUCN consultant also visited the Salamanca Island National Park in Colombia which is threatened by planned industrial development, and advised the competent Colombian authorities. IUCN also participated in the preparation of a natural plan for the establishment of conservation areas in Western Samoa.

At the request of the Organisation of American States (OAS), the CNPPA Executive Officer, Mr Harold Eidsvik, travelled to Port of Spain, Trinidad and Tobago, to review parks policy with Government and NGO officials. He also met representatives of the Caribbean Conservation Association (CCA) and the Canadian International Development Agency (CIDA) to review progress on the Barbados National Park and the Caribbean Conservation Strategy.

## RECENT DEVELOPMENTS IN IUCN'S PROGRAMMING AND BUDGETING PROCEDURES

1. This paper summarises information, or refers to papers that provide relevant information, on the functions and procedures whereby the Secretariat supports and facilitates the planning and implementation of IUCN's programme.
2. Programming involves procedures for planning, implementing and managing conservation activities in an orderly fashion. During the latter half of 1979 good progress was made in improving these procedures, though considerable further improvement is needed to bring several related matters, notably information handling and publishing, to a desirable standard. What is clearly required is that all systems be integrated and harmonised so that each contributes to the effectiveness of the others and the programme as a whole operates smoothly. Satisfactory progress is being made in meeting this requirement and a fully integrated set of systems is expected to be functioning later in 1980.

### Programming and budgeting

3. Development of a programming system with a three year programme budget as its annual product was given high priority.
4. A comprehensive programme for the period 1980-82, a first prototype of what is planned, was submitted for approval in November 1979, and published in December. At the primary level of disaggregation, the programme and budget is set out to reflect IUCN's nine "programme areas": Development Planning; Law; Education; Ecosystems; Protected Areas; Species; Comprehensive Area-Based Programmes; Support for Conservation; and Programme Development. At progressively lower levels of disaggregation, it sets forth objectives, sub-objectives and activities, with associated budgetary forecasts. Anticipated sources of funding, the display of which indicates the relationships with WWF and UNEP, and other characteristics of each activity are presented in tables.
5. The development of programming concepts has taken place under the general guidance of the Programme Planning Advisory Group (PPAG) which met in February, June and November 1979.

### Financial control and reports

6. Cost centre budgeting provides the basis for best possible estimates of expenditures related to programme activities. In turn, cost centre estimates provide a means of controlling expenditure in relation to the plan. Periodic reports of variance between planned and actual expenditure allow a review of performance, early warning of over- or under-expenditures and consequent revision of estimates within the budget period.
7. Cost centre budgets were prepared for the first time for 1979; cost centre control is being exercised and quarterly performance reports are being produced.

### Programme reporting

8. The Director General is required to report annually to the Council on the implementation of the Programme, and the body of this paper is intended to serve that purpose. The report follows the functional headings employed in the report to Council in 1978 (UC.78/17) and the report to the 14th Session of the General Assembly (GA.78/11).
9. IUCN is also required to report to UNEP on Project FP/1110-79-01 twice a year, and similar reports were prepared in 1979 for WWF under project 1391. During the first part of 1979, the structure of project 1391 was realigned to fit closely with that of the UNEP project so as to simplify programme management and reporting procedures.
10. Over the next two years, further adjustments will be made to the form of reporting to IUCN's Council and General Assembly; similar adjustment will also be made to the projects with UNEP and WWF and reporting requirements to these organisations. In this way IUCN's various management and associated reporting obligations will be brought more closely into line. As this is done, reporting to Council will be arranged so far as possible in parallel to the presentation of the programme. The programme areas employed for the

programme (see paragraph 4 above) should provide the basis for a more coherent and readable account and will therefore be adopted in the report for 1980.

### Project screening

11. During the first part of 1979, procedures have been developed and implemented to improve the screening by IUCN of projects submitted to it for funding. These procedures have already led to a marked improvement in the speed with which IUCN handles the large numbers of project requests received. PPAG paper 79/24 described the new screening process, and the work of the IUCN/WWF Project Committee, in greater detail.

### Publishing

12. Publications are a major output of the IUCN programme, especially since promotion of conservation is a major function of the Union. Our publication record in the past has been bad. However, some improvement has resulted from giving emphasis to publishing material on hand, particularly Red Data Book sheets, but we will only be able to operate a satisfactory system of publishing once the backlog has been taken care of during 1980. The following publications have been issued during the period July-December 1979:  
Conservation Programme for Sustainable Development 1980-1982 (in English; French was issued early in 1980)  
Ecological Guidelines for Balanced Land Use,  
Conservation and Development in High Mountains  
Red Data Book – vol. 1 4th service  
– vol. 2 part 2  
– vol. 3 1st service  
– vol. 4 revised edition

The Biosphere Reserve and its Relationship to Other Protected Areas (French and Spanish versions; English version issued first half of 1979)

Categories, Objectives and Criteria for Protected Areas (English and French versions)

### Communications

During a recent three month period, there was an average of 1500 letters per month received and 1550 despatched. Attention is being given to improving procedures for managing the written communications that are received by the Secretariat. Consolidation of staff in one building is already proving a benefit in this connection.

## STAFF CHANGES

1. Mr Robert F. Scott was appointed Executive Officer of the Survival Service Commission replacing Mr Earl B. Baysinger who returned to the US Fish and Wildlife Service following his appointment with IUCN. Mr Scott was formerly with the National Marine Fisheries Service and US Fish and Wildlife Service, and has had an extensive career in wildlife and fisheries management.
2. At the end of the year, Mr Pierre Hunkeler was assigned the duties of Executive Officer to the Commission on Environmental Planning; part of his former duties as Regional Officer were reassigned to other staff members.
3. As part of the creation of a joint IUCN and WWF Administration Department, Mr Ernst Schneider and Mr Helmut Pusterer of the Accounting Department were transferred, as well as our receptionist, Mrs G. Python.
4. Mr Herbert Giradet retired in October 1979 after very ably looking after our Personnel Services for many years. His duties were assumed by the new joint services department.
5. At the end of the year, Dr Hartmut Jungius took over the responsibilities of regional officer for West Asia, previously undertaken by Mr Pierre Hunkeler, whilst retaining his post as Project Screening Coordinator.

# Financial report

To the Council of the  
International Union for Conservation  
of Nature and Natural Resources  
GLAND

As auditors appointed under article four of the statutes we have examined the accompanying statement of financial position of the International Union for Conservation of Nature and Natural Resources (a Swiss association) at December 31, 1979 and the related statement of unrestricted income and expenditure for the year then ended.

We report that

- (a) the statement of financial position and the statement of unrestricted income and expenditure are in agreement with the books  
(b) the books of account have been properly kept  
(c) the financial position and the results of operations conform with the principles of evaluation prescribed by the law and with the requirements of the statutes.

Based on our examination we propose that the accompanying accounts be adopted.

Price Waterhouse  
Geneva, May 27, 1980

## International Union for Conservation of Nature and Natural Resources, Gland Statement of Financial Position as of December 31, 1979 (In Swiss francs)

	1979 SFr	1978 SFr
<b>Current Assets</b>		
Cash and short-term bank deposits	539 771	628 620
Receivable from World Wildlife Fund	301 124	144 500
Other receivables and current assets	465 836	87 651
	<u>1 306 731</u>	<u>860 771</u>
<b>Less: — Current Liabilities</b>		
Accounts payable and accrued liabilities	630 659	537 716
Membership fees received in advance	156 846	6 750
	<u>787 505</u>	<u>544 466</u>
Net current assets	519 226	316 305
<b>Add: — Other Assets</b>		
Long-term receivable	—	247 081
Furniture and installations	1	1
	<u>1</u>	<u>1</u>
Net current assets and other assets	<u>519 227</u>	<u>563 387</u>
<b>Less: — Non-Current Liabilities</b>		
Provision for staff repatriation and termination costs	382 595	459 693
	<u>382 595</u>	<u>459 693</u>
Net assets	<u>136 632</u>	<u>103 694</u>
	=====	=====
Represented by:		
Excess of unrestricted expenditure over income at end of year per statement attached	(48 757)	(109 318)
UNEP earmarked projects funds	59 252	—
other earmarked projects funds	101 678	189 216
Award fund	24 459	23 796
	<u>136 632</u>	<u>103 694</u>
	=====	=====

The accompanying Notes to accounts are an integral part of this statement.

## Statement of Unrestricted Income and Expenditure for the year ended December 31, 1979

(In Swiss francs)

	1979 SFr	1978 SFr
<b>Income</b>		
Membership fees and subscriptions	1 152 768	949 375
Regular subventions		
World Wildlife Fund (included in 1978 SFr 250,000 special subvention)	1 350 000	1 600 000
UNESCO (United Nations Educational, Scientific and Cultural Organisation)	36 239	37 026
Transfer from earmarked projects funds of which related costs included under total expenditure below		
UNEP (The United Nations Environment Programme)	1 952 351	1 850 237
Other	1 135 950	934 959
Miscellaneous grants	93 715	194 576
Conservation Coin Collection income	301 124	144 500
Proceeds from sales of publications	47 978	60 044
Other	—	9 221
	<u>6 070 125</u>	<u>5 779 938</u>
<b>Expenditure</b>		
Salaries and related charges	3 854 754	3 305 252
Staff repatriation and termination costs	—	203 613
Consultants' costs	638 242	523 563
Accommodation expenses	190 230	143 496
Office and administrative expenses	534 236	474 848
Travel expenses	428 230	469 880
Library and legal texts	18 790	38 271
Printing costs of publications	149 373	264 864
Meetings	107 561	171 085
Purchase of furniture and installations	50 166	74 065
Exchange loss (net)	37 982	44 463
	<u>6 009 564</u>	<u>5 713 400</u>
Excess of unrestricted income over expenditure for year	60 561	66 538
Excess of unrestricted expenditure over income at the beginning of year	(109 318)	(175 856)
Excess of unrestricted expenditure over income at the end of year	<u>(48 757)</u>	<u>(109 318)</u>
	=====	=====

The accompanying Notes to accounts are an integral part of this statement.

## Notes to Accounts at December 31, 1979

### Note 1 — Activity and Summary of Significant Accounting Policies

#### (a) Activity

The International Union for Conservation of Nature and Natural Resources (IUCN), an association within the meaning of the Swiss Civil Code, is devoted to promoting or supporting action which will ensure the perpetuation of wild nature and natural resources on a world-wide basis. IUCN works in close association with the World Wildlife Fund (WWF).

#### (b) Basis of accounting

To be as conservative as possible, IUCN uses the accrual basis for expenditure but income is recorded on the cash basis, except for (i) Conservation Coin Collection (CC) income (see note 7 below) and (ii) fees received from members for future years which are deferred.

(c) *Currency translations*

IUCN's records are maintained in Swiss francs. All monetary assets and liabilities denominated in other currencies are translated at exchange rates ruling at December 31, 1979.

Items of income and expenditure in other currencies are included in the accounts at the Swiss franc values prevailing at the transaction date.

Exchange differences are taken to the statement of unrestricted income and expenditure.

(d) *Furniture and installations*

All furniture and installations are expensed at the time of purchase. These assets are insured for about SFr 1,000,000.

(e) *Staff repatriation and termination costs*

Until December 31, 1978, IUCN made provisions at the rate of 20 per cent per annum of the estimated amount of staff repatriation and termination costs which may become payable under the terms of employees' contracts.

Management has decided and is seeking endorsement from the Council that, as from January 1, 1979 no further provisions be made for such costs as, on the basis of actual expenses in previous years, the provision carried in the balance sheet at December 31, 1979 is sufficient to cover foreseeable risks on an ongoing basis. Actual repatriation and termination costs are charged against the provision in the balance sheet, when incurred, until it is reduced to zero, at which time such costs will be charged to the expenditure account.

Had IUCN in 1979 made provisions for such costs on a consistent basis then, both non-current liability and excess of unrestricted expenditure over income at end of year would have been increased by about SFr 250,000.

*Note 2 – Other Receivables and Current Assets*

Included is an amount of SFr 254,982 receivable from SI LES UTTINS, property company (wholly-owned by IUCN's staff pension fund) which owns the administrative building previously occupied by IUCN. The receivable is non-interest bearing and will not be collected until the property is sold which is expected to occur in 1980.

The movements of the current account with SI LES UTTINS were as follows:

	1979 SFr	1978 SFr
Balance at beginning of year	247 081	239 623
Yearly amortisation of the principal amount of a mortgage paid by IUCN on behalf of the owner	5 003	4 917
Other payments by IUCN on behalf of the owner	<u>2 898</u>	<u>2 541</u>
Balance at end of year	<u>254 982</u>	<u>247 081</u>

*Note 3 – Provision for Staff Repatriation and Termination Costs*

The movements on this account during the year ended December 31, 1979 were as follows:

	1979 SFr	1978 SFr
Balance at beginning of year	459 693	328 600
Less: Actual expenses during year	<u>(77 098)</u>	<u>(72 520)</u>
	382 595	256 080
Add: Provided during year	<u>—</u>	<u>203 613</u>
Balance at end of year	<u>382 595</u>	<u>459 693</u>

On the basis of staff members employed by IUCN at December 31, 1979 who may become eligible for repatriation and termination benefits under the terms of employees' contracts the total of such costs is estimated to be about SFr 1,095,000 at that date.

*Note 4 – UNEP Earmarked Projects Funds*

IUCN carries out several projects in cooperation with the United Nations Environment Programme (UNEP) which makes contributions towards the related expenditure.

The movements were as follows:

	1979 SFr	1978 SFr
Excess of income over expenditure at beginning of year	—	49 722
Add: Income from UNEP during year	2 011 603	1 805 468
Less: Transfer to unrestricted income during year to cover project expenses	<u>(1 952 351)</u>	<u>(1 850 237)</u>
Less: Transfer to other earmarked projects – Note 5	<u>—</u>	<u>(4 953)</u>
Excess of income over expenditure at end of year	<u>52 252</u>	<u>—</u>

*Note 5 – Other Earmarked Projects Funds*

These comprise several projects carried out by IUCN for which contributions towards expenditure are received from various sources.

The movements were as follows:

	1979 SFr	1978 SFr
Excess of income over expenditure at beginning of year	189 216	263 004
Add: Transfer from UNEP earmarked projects – Note 4	—	4 953
Add: Income during year	1 048 412	856 218
Less: Transfer to unrestricted income during year to cover project expenses	<u>(1 135 950)</u>	<u>(934 959)</u>
Excess of income over expenditure at end of year	<u>101 678</u>	<u>189 216</u>

*Note 6 – Award Fund*

This fund relates to the John C. Phillips Award, made every three years comprising a silver medal and a cash award of \$500.

The movements were as follows:

	1979 SFr	1978 SFr
Balance at beginning of year	23 796	23 919
Add: Income attributed during year	663	705
Less: Expenses during year	<u>—</u>	<u>(828)</u>
Balance at end of year	<u>24 459</u>	<u>23 796</u>

*Note 7 – Conservation Coin Collection (CCC) Income*

Net income arising from the CCC programme is shared equally between WWF and IUCN, as follows:

	1979 SFr	1978 SFr
Net income for year received by WWF	602 248	289 000
Less: WWF share, 50%	<u>(301 124)</u>	<u>(144 500)</u>
IUCN's share, 50%, receivable for WWF at December 31	<u>301 124</u>	<u>144 500</u>

**LIST OF IUCN STAFF MEMBERS AND THEIR  
FUNCTIONS: 31 DECEMBER 1979**

**Office of the Director General**

MUNRO David	Director General
HANSON Fiona	Secretary to D. Munro
ALLEN Robert	Senior Policy Adviser
SMITH Margaret	Secretary to R. Allen
MENCE Tony	Senior Executive
PAYNE Noël	Secretary to T. Mence

**Programme Division**

PHILLIPS Adrian	Director, Programme Division
TRELOAR Lyn	Secretary to A. Phillips

**Commission Executive Officers**

BIJLEVELD Maarten	Commission on Ecology
KEUFFER Sandrine	Secretary to M. Bijleveld
EIDSVIK Harold	Commission on National Parks and Protected Areas
RALLO Sue	Secretary to H. Eidsvik
HOFFMANN Alfred	Commission on Education
FLETCHER Dinah	Secretary to A. Hoffmann
HUNKELER Pierre	Commission on Environmental Planning
VETTER Susan	Secretary to P. Hunkeler
NAVID Daniel	Commission on Environmental Policy, Law and Administration (Bonn)
SCOTT Robert	Survival Service Commission
CHABLE Patricia	Secretary to R. Scott

**Regional Officers**

CHEW Wee-Lek	Asia, Australasia and Pacific
PICHARD Geneviève	Secretary to W-L Chew
KUNDAELI John	Africa
(vacant)	Secretary to J. Kundaeli
MATOS Felipe	Latin America and the Caribbean
SERRE Mariadèle	Secretary to F. Matos

**Programme Officers**

BURHENNE-GUILMIN Françoise	Head, Environmental Law Centre (Bonn)
JUNGIUS Hartmut	Project Screening Co-ordinator
RUDAZ MaryRose	Secretary to H. Jungius

**Programme Support Division**

HERRING Richard	Director
MAGNENAT Anita	Secretary to R. Herring
DUKE William	Programme Support Officer
HERFORTH Anette	Administration Officer
KOENEN Arnold	Librarian

**Publications**

ALLEN Patrick	Editor, IUCN Bulletin
BERDEZ Monica	Word Processing Operator
DUKE Oliver	Graphic Artist
ELLIOTT Hugh	Scientific Editor (Oxford)
JURGENSEN Marguerite	Publications Assistant
MORGAN Dounia	Translator

**Membership**

VIGUET Estelle	Membership Officer
ASUNCION Madeleine de la	Secretary to E. Viguet

**Project Management**

MURPHY Peter	Head, Project Management Dept.
CLARK Marian	Secretary to P. Murphy
FERNHOUT Anton	Asia, Oceania and the Pacific
HILTBRUNNER Ursula	Secretary to A. Fernhout
GUIGNARD Sylvia	The Americas
JALABERT René	Secretary to S. Guignard
PORTAS Pierre	Africa & Europe
KRISTENSON Karin	Secretary to P. Portas

**CITES Secretariat**

SAND Peter	Secretary General
LUTHI Erika	Secretary to P. Sand
BERNEY Jaques	Executive Secretary
MENGHI Obdulio	Technical Supervisor
REMMLINGER Suzanne	Secretary