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Front cover: *Vulpes vulpes*
(Photo Tom G. Bengtson)
Back cover: *Aegolius funereus*
(Photo Kjell Olsson)

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Legally bound to protect ourselves from ourselves

It is probably certain that, left alone, nature would care for itself and survive. Bound by mechanisms that man has certainly not yet understood completely, predators and prey keep each other in balance over both short and long periods of time. This of course is part of an immense evolution of which we do not know the origin and certainly not the end, although we may say, with heavy sarcasm, that we are doing our utmost to bring about the latter. No longer obeying the laws of nature, with which we have lost almost all contact, we have nevertheless come to understand that this natural environment ("the only earth we have") deserves better than just limitless exploitation.

During the very short spell that man has been on earth and has come to enjoy the role he plays at present, it has become clear that we do not only need oral agreements, regional laws and national constitutions, but also urgently binding international conventions to protect the natural environment.

Therefore, this issue of *Naturopa* is on the recent international legal instruments by

means of which we try to protect our living flora and fauna. It is to be hoped that these instruments will be fundamental in saving ourselves—from ourselves.

Early in 1982 an important international conference will be organised by the International Council for Bird Preservation. Always a champion of co-operation and co-ordination, the European Information Centre for Nature Conservation will support the theme of this conference—preservation of Europe's birds of prey, especially in the Mediterranean area—by dedicating 1982's first issue of *Naturopa* to this fascinating and lively, not to say beautiful, aspect of our world: birds of prey. H.H.H.

We all know the entire world is our common habitat. Every square inch of it is influenced by mankind in some way or other. There have been many examples of world-wide destruction of habitats of wild plants and animals, which has made us realise that national laws on protection of nature and the natural and man-made environment are not enough to ensure survival, however necessary and useful they may be for solving national and regional environmental problems. They must, however, be integrated into a framework of global environmental protection measures.

As far as our continent is concerned, it is thus to the Council of Europe's great credit that, through the European Committee for the Conservation of Nature and Natural Resources and through various specialised committees of experts, it has created a remarkable instrument for relevant projects and activities which have led to decisions and recommendations not only of the Committee of Ministers and the Parliamentary Assembly but also of other Council of Europe bodies. In this connection we must also mention the close co-operation with other international organisations such as the European Communities in Brussels, UNESCO and the United Nations. The invitation to co-operate extended to non-governmental environmental organisations (IUCN, CIC, CIPRA, etc.) also represents an important contribution to a global environment policy.

These considerations should provide the foundation for the creation of a network of universally valid principles for protection of the vital needs of mankind, plants and animals; this in itself admittedly contains no legal obligations and sanctions as yet, but these should be enacted at national or regional level, where they do not already exist, or effectively implemented where they do already exist, in order to achieve the necessary aims.

Two remarks are necessary here: firstly that a single department can never succeed in protecting the environment against damage and that "nature protection" in the widest sense must become a principle of all public administration, at all levels, from national government to local authorities. Secondly that, with the help of the mass media, we must succeed in adequately informing large sectors of the population, representatives of professional organisations, scientific experts and above all political leaders about new environmental protection discoveries and requirements and mobilising them so that ecological behaviour becomes a guiding

principle of every individual citizen's life, which even leads him to call for official measures ("citizens' action projects").

I consider it to be one of the most essential tasks of the Council of Europe Information Centre for Nature Conservation, with its national agencies, to contribute resolutely to the achievement of these two aims. Yet even the job of a "clearing house" for the exchange of information would be insufficient if the addressees merely kept the information to themselves and filed it away but did not concern themselves with its implementation and supervision of its implementation. For that reason, the Information Centre's campaigns urging national agencies, governments and non-governmental organisations to expand particular nature conservation activities are especially wel-

come. The campaign on wetlands is just one example.

However, some environmental problems cannot be solved by information, resolutions and goodwill: legal provisions are required as well. It was therefore a wise decision, on the part of the Council of Europe, to embody the knowledge arrived at on the protection of wildlife in a legally binding convention: the Convention on the Conservation of European Wildlife and Natural Habitats.

There are no economically measurable values involved in the conservation of wildlife, yet that wildlife represents the most valuable thing entrusted to mankind: the natural heritage of the world! Not even the most brilliant scientist can recreate an extinct species. If the essential requirements for life are lost, man himself will appear at the bottom of the "red list" of extinct or threatened species. Unfortunately, however, far too few people recognise this fact yet; purely economic thinking still rates much higher than ecological requirements. In reality, ecology is long-term economy!

The non-governmental organisations could and should take on the important task of making people aware of the problem by organising interdisciplinary events. Thus for example, the International Commission for Protection of the Alpine Regions (Commission internationale pour la protection des régions alpines—CIPRA) has among other things taken on the job of verifying the practical effects of Council of Europe resolutions and encouraging their application in all seven Alpine states. To that end, representatives of independent non-governmental organisations, governmental representatives and scientific experts constitute a standing forum for holding regular discussions to promote the understanding of specialised findings or requirements (Council of Europe wildlife campaign) and of the need to use techniques that do not harm the environment.

To return to my starting-point, international conventions, resolutions and decisions form a decorative but empty framework until the "empty canvas" is filled out by basic national and regional legal provisions, that is until a world-wide mosaic of harmoniously integrated measures produces a complete picture of our collective responsibility for the survival of future generations of plants, animals and even man within this decorative framework.

We should all feel duty bound to contribute to this work.



(Photo A. Rastl)

Curt Fossel



Lynx lynx—The Berne Convention allows the exploitation of certain species, like Lynx lynx and Branta bernicla, partly because they are subject to traditional hunting rights, or because the obligation to safeguard their habitats—imposed by the strict protection of the species themselves—would appear to be unrealistic (Photo G. Lacoumette)

Berne:
the convention
open to all

Gunnar Seidenfaden

In an era where we in Europe decide on each other's butter prices, it seemed ridiculous that we could do nothing to prevent our fellow Europeans from destroying our common natural resources and killing our migratory birds. What was needed was a binding international agreement, unhampered by day-to-day political quarrels, applied and kept up to date by a neutral body and accepted by all states within the range of any European species. Everybody agreed on this, but nobody felt competent or confident enough to begin the drafting of such an agreement. And yet, when in March 1976 the European Ministers of the Environment asked the Council of Europe to elaborate an international legal text, this decision met both with satisfaction and with scepticism.

The Council of Europe

What the Ministers asked for in Brussels was a treaty that would cover all possible aspects of conservation of nature as a

whole throughout Europe and not only some of them as had been done in other agreements so far. Furthermore, the new convention should, as far as possible and within the objectives of the existing world conventions, try to achieve more concrete results than those conventions, because of the urgency of the situation and high degree of protection generally called for in Europe. And finally, the convention should allow for conservation of the species found in Europe throughout their range, which meant, for migratory species, application of its provisions beyond the boundaries of our continent. The Council of Europe has, with its wide geographical membership, its structure of intergovernmental expert committees and its trained secretariat, achieved an impressive series of technical studies on various aspects of wildlife conservation and a very high level of interstate cooperation in this field. Codification of its long series of recommendations to its member states into one binding legal instrument seemed to be the natural evolution of its many activities.

At the same time, however, the Council of Europe is a political organisation of democratic states, created to achieve greater unity between its members. Its activities are thus, in principle, carried out exclusively within the geographical membership of the organisation and under the authority of its Committee of Ministers. This structure represents two drawbacks for the elaboration by the Council of a draft convention on the conservation of European wildlife: firstly, within the range of European species, non-member states would be bound to play only a passive role in such an undertaking, and secondly, any decision to be taken, even in relatively neutral matters such as species' protection, would be subject to the examination by the Committee of Ministers of its political, or potentially political aspects, for the organisation itself.

This dichotomy would imply that Contracting Parties undertaking the obligations of the convention by ratifying it would be subject to influences from states members of the Council of Europe that had not ratified, and the desirable accession of third states could lead to a

However, in November 1976 the Committee of Ministers convened a committee of governmental experts and instructed it to present a draft legal instrument on the conservation of wildlife, based on the general principles and special provisions suggested by the Ministers for the Environment. On 19 December 1978, the drafting committee submitted a text which was adopted by the Committee of Ministers on 18 June 1979.

Unusual convention

In an effort to meet the different and sometimes contradictory requirements touched upon above, the drafting committee produced a text which went some way in an attempt to introduce new elements in Council of Europe treaty-making practice.¹ First of all, with a view to ensuring a justified position for the states having ratified, and facilitating the possible participation of non-member states, Contracting Parties united in a Standing Committee were given several powers within the convention machinery to examine reports on exceptions made by

On the other hand, certain prerogatives of the Committee of Ministers, the exercise of which is likely to have political consequences for the organisation itself, were maintained in the text: amendments which would modify operational provisions need the approval of the Committee of Ministers, which also decides on the inviting of third states to accede to the convention. In this way, the Contracting Parties themselves can assure the efficiency of the convention, and adapt the substantive provisions—if need be—to changing situations. They cannot, however, modify the instrument so as to put it out of line with official Council of Europe policy, nor can they freely modify the geographical area covered. At the same time, although in comparison with other Council of Europe conventions it is far more "open" to participation by third states, the convention will continue to benefit from the organisation's achievements and research in nature conservation, as well as from its secretarial services. Both these aspects are important: the convening of a new and costly scientific committee can be avoided and no new permanent secretariat—source of much concern in existing international conventions—need be set up.

Leading principles

The convention starts from the principle that all plants and animals to be found in the wild in Europe must be protected: the population of wild flora and fauna must be maintained at, or adapted to, a certain acceptable level. The convention thus aims firstly at bringing to an end any further deterioration of the European natural environment. A second basic principle of the convention is the recognition that the greatest threat to wildlife is the destruction of habitats.

It was felt that concrete undertakings in this important field could best be specified once co-operation between Contracting Parties had developed within the Standing Committee, also with a view to co-ordinating the duties under this convention with obligations within other international bodies. As a result, the wording of the article on habitat protection has been kept very flexible, again so as not to frighten potential signatories: Contracting Parties shall ensure the conservation of the habitats of all wild flora and fauna species, and especially those of threatened species, and endangered natural habitats. In accordance with the emphasis the convention lays on the protection of migratory species—a first target in international conservation—Contracting Parties also undertake to give special attention to wintering, staging, feeding, breeding and moulting areas of migratory birds. Finally, the convention urges interstate co-operation for the protection of habitats situated in frontier areas.



Branta bernicla (Photo Jan van de Kam)

situation where obligations undertaken by such a third state could be modified without its consent because of the votes cast by states which had not committed themselves to any obligations whatsoever. Hence the proposal by the Ministers for the Environment that a pan-European convention be elaborated by the Council of Europe, but that the draft be submitted to a European conference of plenipotentiaries for conclusion.

This proposal was not followed up by the Committee of Ministers who felt that such a procedure was outside the traditional pattern of Council of Europe conventions.

Parties; to make recommendations to Parties; to propose the conclusion of agreements with states which are not Parties. The Standing Committee was also entrusted with the admission of observers to its meetings, the adoption of amendments to certain provisions and the right to recommend that third states be invited to accede.

1. See, for the institutional and legal aspects of the Wildlife Convention, "La Convention relative à la conservation de la vie sauvage et du milieu naturel de l'Europe, exception ou étape?" by Pierre-Henri Imbert, in *Annuaire français du droit international* 1979.

Berne: the convention open to all

All species listed in Appendix II benefit from strict protection measures; they may not be deliberately captured or killed; they may not be kept; their breeding or nesting sites may not be deliberately damaged or destroyed; they may not be deliberately disturbed; eggs, even if empty, may not be deliberately taken, destroyed or kept; the possession of and internal trade in these animals is prohibited, where such prohibition would contribute to the effectiveness of the convention.

Control of hunting

For most mammals, almost all birds, all reptiles and all amphibians that are not put under strict protection, the convention requires a system of conservation whereby exploitation of these species must be regulated so as to meet with certain conditions. However, none of the species covered by the convention may be captured or killed by any of the means or methods listed in Appendix IV to the convention; thus practices such as poisoning, netting, gassing, or other means that may have indiscriminate effects, cause local disappearance or even serious disturbance to populations of a species, will be brought to an end.

Prospects

The immediate signature of the convention, on 19 September 1979, by nineteen states, including Finland as the first non-member state, and the European Economic Community, proved that the drafting committee, with the assistance of the

International Union for the Conservation of Nature and Natural Resources, the International Council for Game and Wildlife Conservation, the International Council for Bird Preservation and the International Waterfowl Research Bureau, had succeeded in its effort to produce an instrument which fosters conservation in Europe and is yet acceptable to governments. This clear determination to embark on interstate co-operation became even more apparent when, in December of that same year, all signatories constituted an interim committee to prepare, even before its entry into force, the implementation of the Berne Convention. Since then, this committee has identified the most urgent problems and critical areas and has suggested possible solutions to enable the Standing Committee to take fast and effective action the moment it is convened. That moment will probably be in spring 1982, three months after the deposit of the fifth instrument of ratification.

This Standing Committee of Contracting Parties has all the assets to assure effective implementation of this convention; it has very broad terms of reference, enabling it to address Contracting Parties reluctant to comply with their undertakings, or to adapt quickly any substantive provision of the convention to the changing needs of wildlife, or even to establish contacts with any third state—member of the Council of Europe or not—or organisation that it deems important for the conservation of European wildlife. And last, but not least, this Standing Committee will be served by a functional, experienced and influential organisation—the Council of Europe. G.S.



Non-selective methods of capture are, in principle, forbidden (Photo RSPCA)

Under the wings of "Brussels"...

European Environmental Bureau

The EEC directive on the conservation of wild birds is, in the view of most persons concerned with this subject, a model international regulation. It combines guaranteed protection for all species as a basic obligation with exceptions possible for hunting and other uses, as well as prevention of damage, etc. In addition, it contains provision for the conservation of important areas. Finally, but not least in importance, is its binding nature as to its effect on the ten member states of the Community.

An encompassing protection

The fundamental principle of protection granted to all species of wild birds is established in Articles 1 and 5 and this protection extends to cover killing, capture and egg-collecting as well as a number of other matters. The fact that all species are given such protection, and these are not nominated specifically, makes this protection absolutely all-encompassing and automatically includes new colonists, vagrants, etc. This is in the best tradition of scientific bird protection legislation.

Having established this universal protection, the directive makes defined exceptions: first, to provide special protection (Article 4), in the form of habitat protection measures in the case of seventy-four specially rare or vulnerable species (listed in Annex I), and in the case of other, un-nominated, regularly occurring migratory species; secondly, (Article 7), to

allow for certain species nominated in Annex II to be hunted in a manner that does not jeopardise their conservation status and does not use prohibited hunting methods. Huntible species are split between twenty-four species which may be hunted in all member states and a further forty-eight which may be hunted in a few states only and are afforded full protection elsewhere.

Further limited exceptions are allowable under Article 9 where there is no other satisfactory solution for public health or safety, prevention of crop damage and very limited use of birds. In any of these exceptional circumstances full reports must be made to the Commission concerning the scope of such derogations.

Article 8 of the directive prohibits the use of all means of large-scale or non-selective capture or killing and in particular the means nominated in Annex IV. Article 6 prohibits commercialisation of all species except those on Annex III. Finally, Article 14 is of particular importance emphasising that the directive only lays down minimum standards and that member states are free to adopt stricter protective measures if they wish.

No major controversy

The legal base chosen for the directive of protecting all birds first as a generality and then making exceptions by nominating particular species, has the advantage of making clear in as simple a form as possible what the legal status of the species actually is and no grey areas are left—if the species is not specified in Annex II then it must be protected—if it is not in Annex I then that protection is given at a normal level. No problems appear to arise and although there are naturally some differences of opinion amongst scientists, politicians and others as to which species are suitable for these exceptions, in general the directive's lists have been drawn up with an astonishing degree of accord; the only really major area of controversy centering on the acceptability or otherwise of shooting small songbirds such as *Alauda arvensis*. The directive in fact only allows, of the small

songbirds, this species and five thrush species to be killed and these only in France and Italy and both in these countries and elsewhere commercialisation will be forbidden—so no more *pâté de grive*.

As with any law concerning wildlife we can expect the situation to change and therefore Articles 16 and 17 establish procedures whereby the directive can be changed: a sensible precaution which will be needed to be used periodically.

So the Birds Directive, as it is popularly known, can be seen by most persons concerned to be a nearly model text for a bird protection instrument. It came into force in April 1981 and member states of the Community are obliged at least to live up to its provisions or risk a judgment against them in the European Court.

So, what of the future; obviously it is early days yet and many member states have probably not yet fully implemented every detail of the directive. However, work has started. The Commission, too, has contracted for various studies to be undertaken and with this hive of work in Europe centring on providing for the protection of birds and their habitats, the future must look brighter.





One of the many geese ringed each year (Photo L. C. Goldman - Interior Sport Fisheries)

Migratory birds in the USA

Earl B. Baysinger

In the United States, the general authority of the federal government is limited to that assigned it by the United States Constitution, all other governmental functions being the responsibility of the states. Although the Constitution is silent on the subject of wildlife management, it assigns authority to the federal government to conduct foreign policy and to regulate interstate or international commerce and it was under those authorities that the five migratory bird treaties which provide the authority and responsibility to carry out federal migratory bird conservation activities were negotiated.

An ever-present preoccupation

That migratory birds have long been the subject of international interest is shown

by the fact that the 1916 United States/United Kingdom (Canada) Convention for the Protection of Migratory Birds was among the first three of the 139 wildlife or fisheries related treaties to which the United States now is Party, being preceded only by two fisheries treaties.

Since then the United States has become Party to: the 1936 Convention for the Protection of Migratory Birds and Game Mammals with Mexico; the 1940 Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere; the 1972 Convention for the Protection of Migratory Birds and Birds in Danger of Extinction, and their Environment with Japan, and the 1976 Convention concerning Conservation of Migratory Birds and their Environment with the USSR. Collectively this series of treaties gives the

United States federal government the authority and responsibility to:

- provide needed protection to all wild birds in the United States (except non-migratory game birds such as the Galliformes which are managed intensely by the state wildlife agencies, introduced species such as *Passer domesticus* or some groups such as parrots which are not covered by any of the treaties);

- permit the regulated taking of these birds for sport, scientific, educational or other legitimate purposes as long as the conservation status of the population is not adversely affected;

- control the import, export or release into the wild of living animals or plants that may be injurious to wild birds or their environments;

- prevent or abate pollution or the detrimental alteration of the environment of migratory birds with special emphasis on island ecosystems and pollution of the seas;

- establish refuges or other protected areas dedicated to the conservation of migratory birds and manage such areas so as to preserve or restore their natural ecosystems;

- unilaterally, within areas under the jurisdiction of the United States, or in collaboration with the USSR in areas outside the jurisdiction of the United States to identify areas of special significance to migratory birds and regulate the activities of persons subject to United States jurisdiction with respect to these areas;

- unilaterally or in co-operation with other Parties, to conduct the research needed to manage migratory birds properly and to share the information thus obtained.

These authorities and responsibilities have been defined and, in some cases, expanded by a number of domestic laws and the primary responsibility for the conservation of migratory birds in the United States has been delegated to the United States Department of the Interior's Fish and Wildlife Service.

Some figures

The extent to which these mandates have been met is difficult to quantify in a brief article such as this. However, some statistics concerning current efforts may shed some light:

- the United States National Wildlife Refuge System, which is devoted primarily to migratory birds, now contains some 404 areas which total approximately 36 422 500 hectares—a much larger system than the more widely known United States National Park system;

- last year there were approximately 1 250 United States Fish and Wildlife Service employees working full time on migratory bird management and another 260 working part-time;

- in the fiscal year 1980 (1 October 1979–30 September 1980) the United States Fish and Wildlife Service devoted approximately \$ 61 892 000 to migratory bird management; an additional \$ 34 million to the acquisition of new migratory bird habitat; an additional \$ 2-3 million to the conservation of threatened or endangered birds and United States Fish and Wildlife Service law-enforcement officers initiated over 7 000 investigations of probable federal migratory bird law violations.

In addition, the federal government collects a tax on all guns, ammunition or other hunting equipment which is pro-rated back to the state wildlife agencies for their use in wildlife management and

research. In the fiscal year 1980, over \$ 31 million were provided through this programme for the use of the states in their migratory bird programmes.

Although the United States Fish and Wildlife Service is the federal agency primarily responsible for migratory bird conservation, a number of other agencies such as the National Park Service, the Forest Service, the Bureau of Land Management and even the military collectively control hundreds of millions of hectares and carry out extensive programmes aimed at the conservation of migratory birds and other wildlife found in national parks, national forests, on military bases or other federal land.

Additionally, each of the fifty American states has a professionally staffed agency devoted to the management of wildlife, including migratory birds, within their borders. As at the federal level, the efforts of the state fish and wildlife agencies are complemented by those of the state park and state forest agencies.

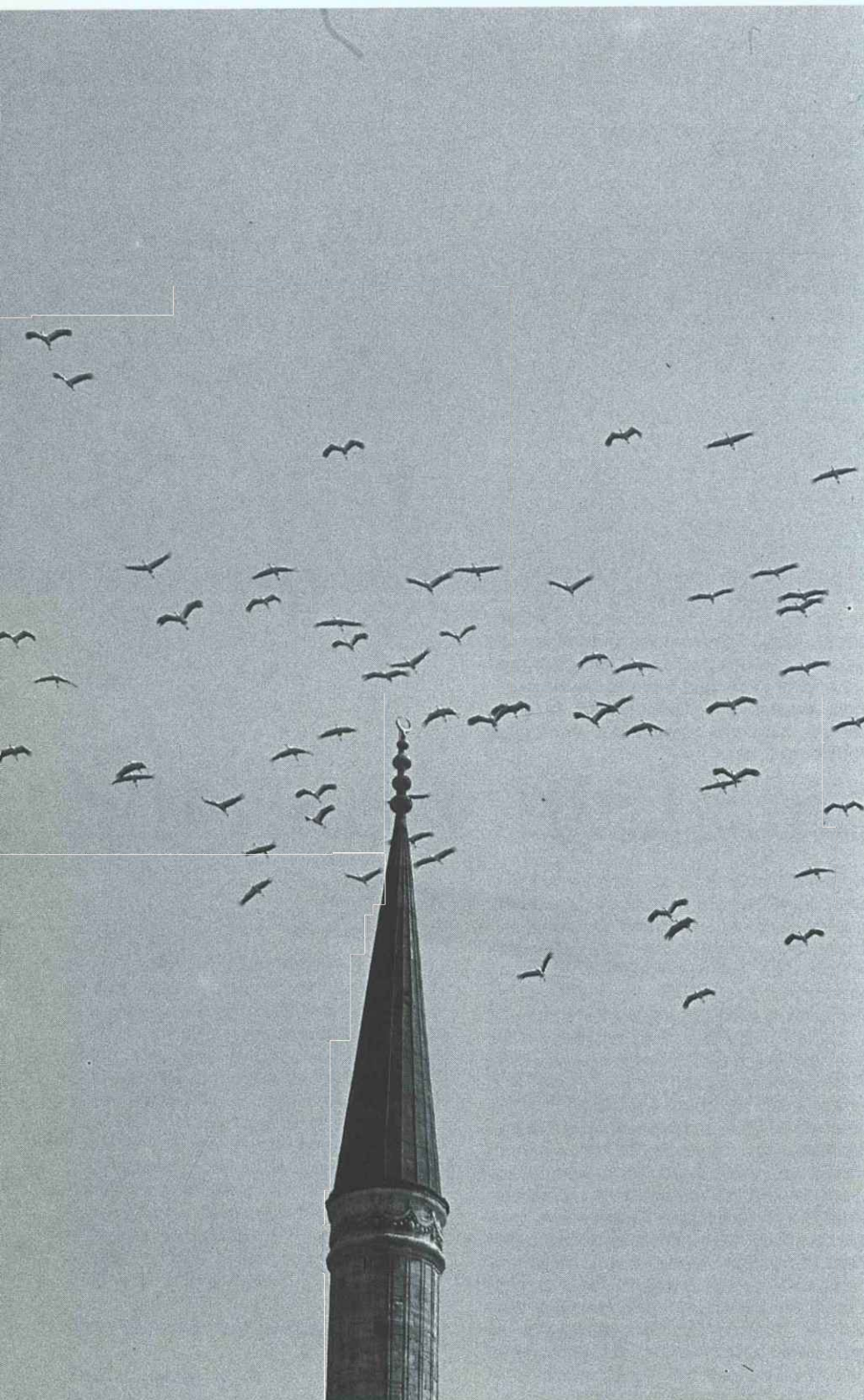
These activities are aimed primarily at ensuring sustainable utilisation and enhancing the conservation status of migratory bird populations. United States law, supported by the treaties, also requires federal agencies engaged in water development projects or other activities, that modify the natural environment, to consult with the Fish and Wildlife Service as their projects are being planned in order to minimise any adverse effects upon fish or other wildlife, including migratory birds. This "preventive medicine approach" is much more cost-effective than are efforts to correct environmental problems caused by development projects carried out with insufficient ecological considerations.

The value of migratory birds

In cost conscious times such as the present, questions are frequently raised over whether such expenditures and considerations are justifiable and rough estimates of some of the contributions migratory birds make to the citizens of the United States have been attempted. For example, in 1975 it is estimated that migratory birds provided well over 175 million hunter days of recreation, during which those who hunted the birds spent some \$ 949 million (that would be approximately \$ 1 500 million if converted to 1981 dollars) in pursuit of their sport and American birdwatchers spent some \$ 180 million on seed for wild birds the previous year. Thus, even if we ignore the intangible—and probably more important—values of migratory birds such as: the cultural, therapeutic, recreational and aesthetic benefits they provide; the contributions they make to agriculture by consuming harmful insects and weed seeds; the legal, ethical and diplomatic benefits derived from meeting

our international commitments to conserve such species or the as yet unrecognised potential of their genetic material to help meet basic human needs in tomorrow's more crowded and resource-short world, a solid case can be made in defence of the inherent wisdom of ensuring the perpetual well-being of the world's migratory birds. An equally strong case can be made in favour of continued and increasing international co-operation in this effort. It is official government-to-government commitments, in the form of treaties or other international agreements, that make such co-operation possible and those of us concerned for this resource should do all in our power to educate and convince our national politicians and policy-makers of these facts and do our utmost to ensure effective implementation of such agreements once they are negotiated. Our grandchildren will be thankful we did.

E.B.B.



No frontiers

Karl-Günther Kolodziejcok

Many species of animals undertake cyclical, predictable and usually seasonal migrations. They bring forth and raise their young in particular places within their range; they feed, winter, rest and moult in other places at other times. Some areas they cross fairly rapidly in the course of their migrations, which can cover immense or relatively short distances. The most familiar example of a long journey is that of the stork, which flies from Central Europe to South Africa, a distance of more than 10 000 km. Numerous mammals, amphibians, reptiles and fish also undertake migrations like the birds of passage, so called because of their peregrinations. Invertebrates, for instance many species of butterfly, also migrate.

Wonderful to behold: massed flocks of *Ciconia ciconia* migrating over Istanbul (Photo T. Gürpınar)



What natural strength—*Salmo salar* on the way to its spawning grounds (Photo Electricity Supply Board, Ireland)

Migratory and sedentary species: the same need for protection

Migratory species can be exposed to dangers and need protection in the same way as sedentary species. The dangers derive basically from the same causes: firstly, the wilful destruction or impairment of habitats and biotopes; secondly, trapping and hunting and, lastly, the unintended consequences of other human activities (e.g. the release of pollutants). Generally speaking, protective requirements and measures are thus, in theory, the same as those for sedentary species, but, in practice, the effective protection of a migratory species is much more difficult. Such protection implies a knowledge of the various species' vital needs, the sources of danger and the possible means of preservation, but naturally this knowledge is more limited and gaps in it more difficult to fill. The crucial difference is however that, unlike their sedentary relatives, the population of an endangered migratory species has to be protected and looked after not just in one place or one particular area (depending on the source of danger) but in all the various places or areas within their range at the right time and in the right way. Should even one link in this chain be permanently broken, the population will not be able to survive and all other conservation efforts will be in vain. The cleanest seas and rivers and a total ban on fishing will be of no avail to a salmon population if a dam in a river prevents their passage to its upper reaches. The best breeding and rearing conditions in the Siberian tundra will be of little use to the Brent goose, if in spring it cannot feed

undisturbed over sufficiently wide areas of the mud-flats along the Dutch, German and Danish coasts.

Co-ordination is not easy even when the rangelies within the boundaries of a single state. If, however, the range comprises the territory of several states, as is generally the case, co-operation between these so-called "range states" is necessary if effective protection is to be provided.

The purpose of the Convention on the Conservation of Migratory Species of Wild Animals is to enjoin such co-operation on the range states, to create the requisite institutions, organisations and instruments and, at the same time, to lay down guidelines for the type of co-operation to be established.

The convention: background and origin

There are already several international agreements on the protection of individual migratory species of animals. Nevertheless, they often vary widely as regards aims, objects protected and instruments and there is no general provision for international co-operation in the protection of migratory species. For that reason the United Nations Conference on the Human Environment (Stockholm 1972) called on governments to conclude a general convention on the protection and management of migratory species. The government of the Federal Republic of Germany undertook, in co-operation with the International Union for the Conservation of Nature and Natural

Resources (IUCN), to draw up such a convention, to be submitted for adoption to a conference of states convened in Bonn.

After several years of preparation carried out by the Federal Ministry for Food, Agriculture and Forestry (which is responsible for nature conservation) and the IUCN, the conference was held in Bonn from 11 to 23 June 1979. Sixty-three states took part as full members, while fourteen others and a large number of international organisations sent observers. In intensive and sometimes dramatic negotiations the conference worked out a final convention and appendices, which were adopted by 32 votes in favour, 0 against and 13 abstentions. Since then twenty-nine states have signed the convention and three have already ratified it. The convention will come into force when fifteen states have ratified it or acceded to it.

The agreements concluded

The aim of the convention is to evolve comprehensive regulations, based on the principle of international co-operation, for the preservation, protection and management of virtually all migratory species. It covers all species of animals which migrate in the biological sense, and whose migration is not confined to the territory of a single state. Relatively sedentary populations living in frontier areas are dealt with in a subsidiary clause. Generally speaking, the Contracting Parties are required to:

— promote, support or participate in research on migratory species;

— endeavour to provide immediate protection for the migratory species listed in Appendix I; and

— endeavour to conclude agreements on the preservation, protection and management of the migratory species listed in Appendix II.

Within this framework Article III enjoins "range states" to take immediate measures (if necessary, without prior international agreement) to protect the species listed in Appendix I which are in danger of extinction. These immediate measures include direct concerted action, the conservation of habitats, the removal of obstacles to migration movements and other factors liable to endanger the relevant species.

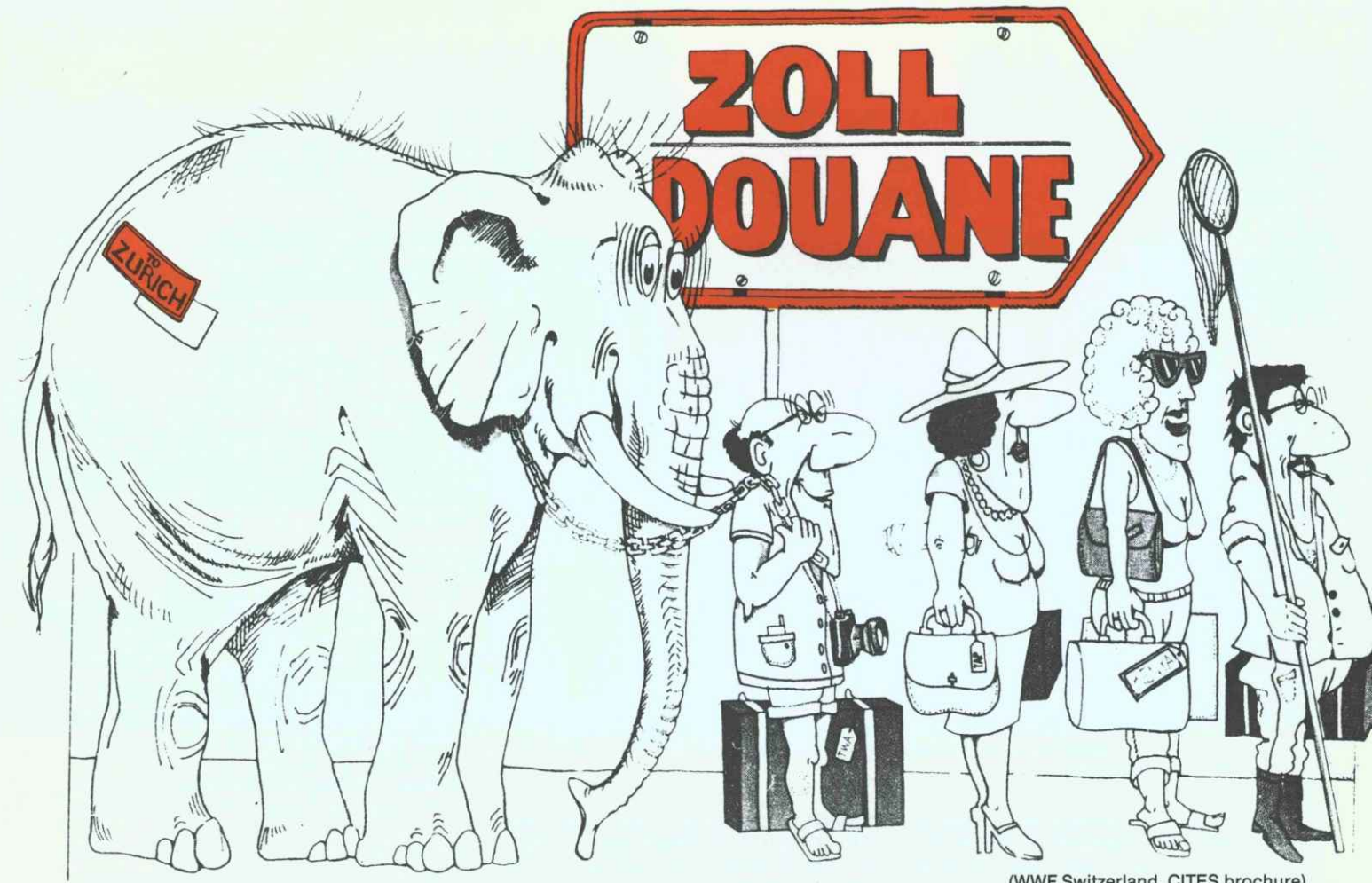
The main substance of the convention is the requirement in Articles IV and V for the range states of migratory species listed in Appendix II to conclude detailed agreements committing them to take co-ordinated action to preserve specific species. These agreements should, in particular, ensure effective co-operation between the states concerned in the protection and rational management of biotopes, research and mutual information. Every agreement should, wherever possible, deal with more than one migratory species and cover the entire range in each case in order to achieve maximum effectiveness and efficiency.

The limited number of migratory species listed in the appendices (Appendix I: 40 species; Appendix II: 32 taxa) is the result of thorough bilateral discussions and of experiences with the inordinately long lists of the Washington Convention. The idea is that these species should constitute only a representative uncontroversial selection of different types of migratory species from all geographical regions. They are intended to form the basic components of appendices which will be progressively extended.

The Conference of the Parties, the Scientific Council and the Secretariat are the organs of the convention. The Conference of the Parties, which is the decision-making organ, will meet regularly every three years. It will supervise the implementation of the convention; foster its aims through appropriate decisions and ensure that the convention and, above all, the appendices are kept up-to-date and abreast of progress. The Scientific Council will provide advice to the Conference of the Parties, the Secretariat and any other bodies set up later under the convention or under special agreements. The Secretariat will be the permanent body of the convention and its driving force. The Secretariat will be provided by the Executive Director of the United Nations Environment Programme (UNEP) and will be financed by that Programme and, above all, by the Contracting Parties.

Accede without delay

Both the Conference and the conclusion of the convention have received considerable attention and recognition. Particular note was taken of the fact that it had been possible to produce a relatively forceful and comprehensive convention despite considerable opposition. The World Conservation Strategy expresses the following opinion on the convention: "The Convention on Migratory Species of Animals is very important as it could have a tremendous impact. Governments should accede to the convention without delay and national and international organisations should help them with its implementation." It is to be hoped that the convention will soon enter into force and will fulfil the hopes placed in it. K.G.K.



(WWF Switzerland, CITES brochure)

Exotic memories...

Peter H. Sand

European tourists have become a major threat to the survival of many endangered species of wildlife all over the world. That is a sad fact—for tourism, properly managed and properly controlled, can indeed provide incentives and valuable support for local wildlife conservation. The problem is that some tourists insist on appropriating bits and pieces of "nature" and on carrying them home as proof: ivory, leopard skins, stuffed baby crocodiles, snakeskin belts, turtle shells, rare plants and live pets—the taste for exotic wildlife souvenirs is without limits.

Illegal trade

Few people seem to realise that the mere crossing of international boundaries with any of these objects may be an illegal act. The 1973 Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) defines "trade" as including all export, re-export, import, and introduction from the sea. To pass the customs line with a prohibited "specimen" (live, dead or derivative), or without a valid permit for a CITES-controlled one, therefore may result in confiscation and a fine. The convention now applies in more than seventy countries of the world. In Western

Europe, ratification procedures will finally be completed this year in the Benelux countries, Ireland and Spain, and hopefully also in Iceland (which held out because of its small whaling industry). This will leave only Austria and the Balkan states as the last remaining "loophole".

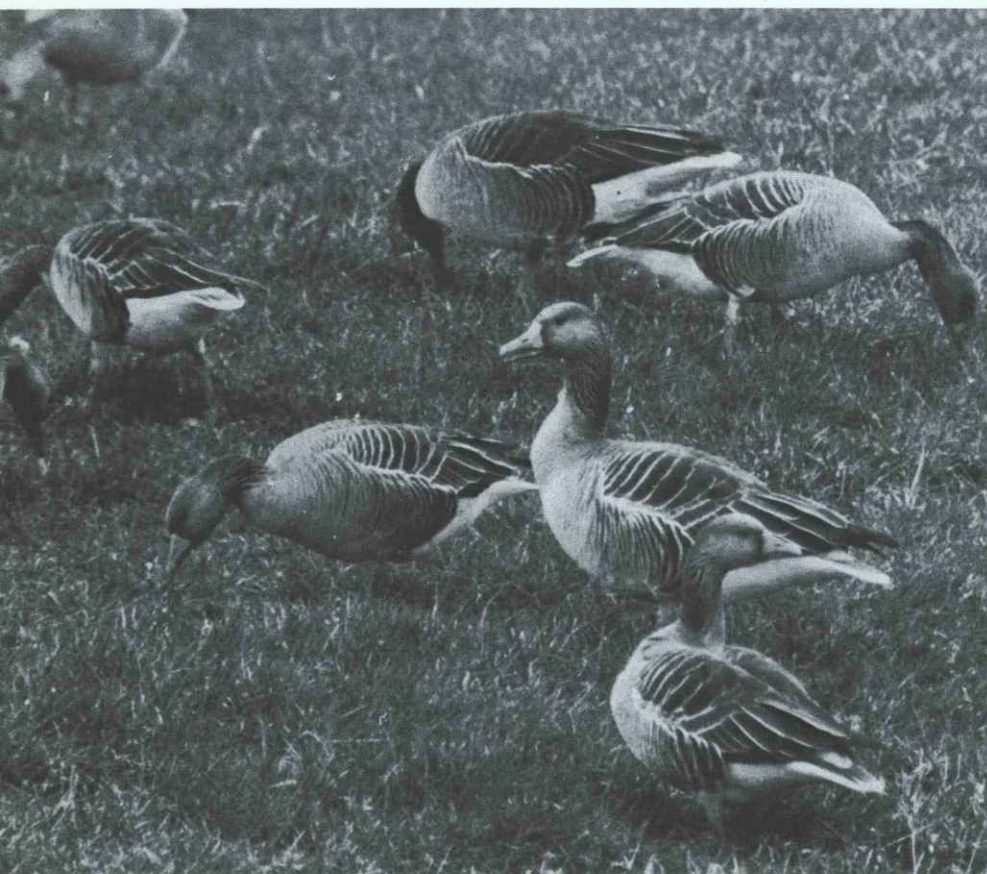
During the first six years of operation of the Washington Convention (which entered into force in July 1975), the main emphasis of controls was on large-scale commercial imports. The small CITES secretariat in Gland in Switzerland, administered by the International Union for Conservation of Nature and Natural Resources (IUCN) on behalf of the United Nations Environment Programme, succeeded in establishing an effective network of direct communications between national nature conservation and customs officials in member countries; reported more than 300 suspected violations of the convention, and uncovered several major cases of smuggling and document forgeries in the European ivory, fur and pet trade.

Customs inspections: difficulties

For understandable reasons, national import controls have been considerably more lenient in the case of tourists. No

customs officer enjoys spoiling the vacation of an individual traveller who happily returns from safari with his treasured trophy and perhaps an (empty) crocodile leather wallet. But organised mass tourism has changed all dimensions. Plane-loads of tourists, all purchasing the same souvenirs at the same shops recommended by the tour operators, now can wipe out entire populations of local wildlife within three or four holiday seasons. "Mass production" of wildlife souvenirs rapidly becomes an organised business with middlemen hiring the hunters and setting up long-distance supply lines to stock up for the next charter flight. Recent anthropological studies show how this new external demand for wildlife products has in some cases completely changed the life-styles of traditional hunting tribes, with growing economic dependency on a single natural resource eventually leading to depletion, overexploitation and collapse.

Potentially even more destructive than the standard "airport market" of cheap wildlife products is the simultaneous demand for "exclusive" souvenirs—the rarer, the better. Here again, commercial operators have long replaced individual collectors in pursuit of the ultimate market niche: a French tour operator advertises "gorilla-



Migratory species, such as *Anser anser*, need protection in each of their various habitats (Photo Jan van de Kam)



Only occasionally does the illegal commerce concerning certain threatened species come to the surface: here 141 rhinoceros horns seized by the customs authorities (Photo WWF/M. Wolf/QUICK)

hunting safaris" to Equatorial Guinea; a British scientist organises "butterfly expeditions" to South-East Asia; a West German travel agency arranges "study tours" to South and Central America for the collection of rare orchids and cacti. Often the participants subsequently sell part of the loot in order to finance their next tour—a practice known as "profit tourism". In most European countries there is virtually no control over the resale of items imported as duty-free trophies or personal effects. Frequently these sales are carried out by classified advertisements in daily newspapers or in specialised hunters' or collectors' periodicals. The price is determined by the degree of rarity—to a point where even the listing of certain wildlife species in Appendix I of the Washington Convention has been criticised as potentially speeding up the scramble for the last surviving specimens.

The countries most immediately threatened by this trade are, of course, the countries of origin where export controls are usually weak or non-existent. Sri Lanka now distributes information leaflets to tourists in English, German, French and Swedish, imploring them to help to save the island's wildlife and not to buy wildlife products. Senegal and Gambia display official posters in airports, informing visitors that the sale and export of these products is illegal. In India and Sierra Leone, Europeans have been fined for attempting to smuggle animals and animal skins through customs; in Sweden and Iceland, some foreign "collectors" of rare birds and birds' eggs ended up in jail. Certain notorious Austrian and German "tourists" were denied entry visas into Madagascar, Morocco and into Central America after having repeatedly been caught red-handed.

Effective international enforcement, however, depends on the co-operation of the

importing "consumer" countries. Some of the Parties to the Washington Convention are tightening up their import controls, especially in the case of organised tours arriving from known centres of illegal trade. Customs inspections are never popular, though; and anybody who has watched tourist crowds descending on any major European airport during a single holiday knows that the task is an impossible one. The only hope for coming to grips with the problem is voluntary self-restraint by the consumers themselves.

Public awareness

The key factor in this effort is public awareness. Several European governments and non-governmental organisations have recently issued new information material to warn tourists about import restrictions for wildlife and wildlife products:

— in the United Kingdom, a leaflet and poster "Thinking of bringing back an animal or skin or shell from a holiday or visit abroad?" (Department of the Environment, Wildlife Conservation Licensing Section, Tollgate House, Houlton Street, Bristol BS2 9DJ);

— in Switzerland, an illustrated brochure in French and German, *Plutôt que de ramener un éléphant de vos vacances* (WWF Suisse, c.p., CH-8037 Zürich);

— in the Federal Republic of Germany, a similar brochure *Souvenirs, souvenirs* and a special magazine issue on the Washington Convention (Umweltstiftung WWF, Bockenheimer Anlage 38, D-6 000 Frankfurt 1).

The global "red list" of wildlife, subject to the controls of the convention, now includes over 2 000 animal species and several thousand plant species. A number of new endangered species were added at the 3rd CITES Conference, held in New

Delhi in February 1981—including black corals, which are now threatened in several of their natural habitats due to over-exploitation for the souvenir industry. According to a 1981 study by the IUCN Wildlife Trade Monitoring Unit in Cambridge, seashells may soon have to be listed, too. Tourist demand has already severely depleted some of the once abundant areas such as the East African coast, and some collectors have begun to "invest" in rare species likely to become extinct in the foreseeable future. The information brochures of the World Wildlife Fund therefore actually go one step further than the Washington Convention, and call on consumers not to buy any products derived from wildlife—in the terms of a slogan by WWF Sweden, "corpses aren't the best souvenirs".

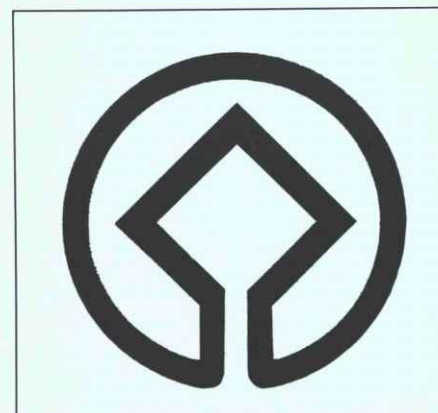
Yet the problem may not end there. The latest tourist attraction on the Mediterranean coast are beach photographers with dressed-up baby chimpanzees. Chimpanzees are listed in Appendix I of CITES, that is, commercial exports and imports are prohibited. However, since Spain until now is not yet a Party to the convention, more than one hundred of the young animals somehow found their way to the new market and are now on display all along the Costa Brava and in Mallorca, literally doomed by the tourist trade. Perhaps the only thing to be done is the somewhat frontal approach recommended by WWF in the Netherlands—walk up to the photographer's next client, and ask: "Do you know that chimps are in danger of extinction? And do you really need another monkey-face for your portrait?" P.H.S.



One of Denmark's wetlands protected by the Ramsar Convention: Veljerne (Photo P. Hald-Mortensen)

A common heritage

Veit Koester



The official World Heritage emblem symbolises the interdependence of cultural and natural properties. The central square is a form created by man, the circle represents nature, the two being intimately linked

Two of the global conservation conventions specifically aim at the protection or preservation of certain sites and habitats. The conventions in question are the Convention of Wetlands of International Importance especially as Waterfowl Habitats (adopted at Ramsar 2 February 1971, entering into force 21 December 1975) and the Convention for the Protection of the World Cultural and Natural Heritage (adopted by the 17th UNESCO General Conference 16 November 1972, entering into force 17 December 1975).

Common superior aim—otherwise totally different

The only aspect common to both conventions is their joint superior aim: protection of certain sites or habitats of international importance. Otherwise they are totally different. The conventions differ mainly in their legal and administrative structure, the measures which they envisage, and the different nature of their "lists".

The range of states parties to the conventions is also very different—not least in Western Europe. It is, for instance, remarkable that only six of the member states of the Council of Europe are parties to both conventions and that neither of the conventions has been adhered to by more than half a score of the member states of the Council of Europe.

The Ramsar Convention—aims

The aim of the Ramsar Convention is particularly to maintain wetlands as habitats of waterfowl in regard to the fact that the waterfowl population is to be looked upon as a kind of international resource, that is to say a resource belonging to all of us, and which all members of the world community must help to protect.

Wetlands, however, are also important in many other ways. Almost the entire population of the North Sea herring is some time or other during its life cycle dependent on the Wadden Sea as a whole. Furthermore, it has been calculated that two-thirds of the world's fisheries are directly dependent on the fertility of coastal wetlands. The ebb tide in salt marsh creeks contains thirty times more organic matter than the open sea.

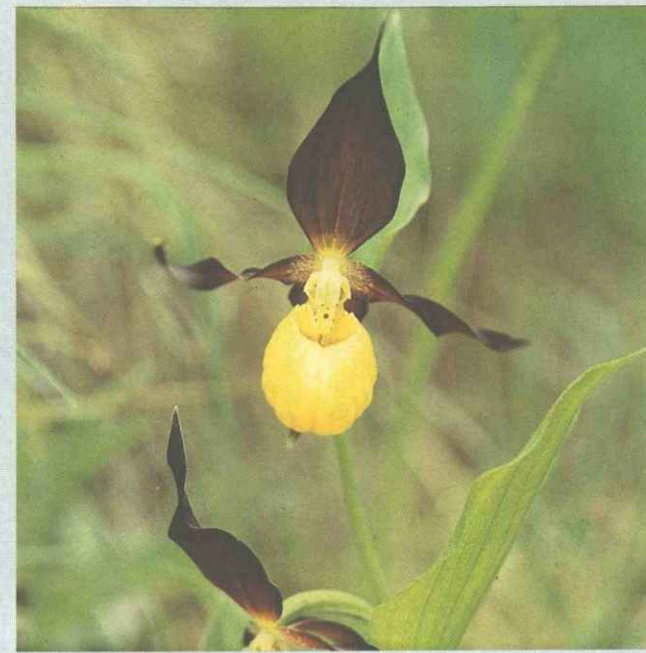
The list of the Ramsar Convention

Based on Article 2 of the Convention a list of wetlands of international importance is maintained. When a state joins the convention it is required to designate at least one site for inclusion in this list. The list now comprises approximately 220 sites totalling an area of about 60 000 km².

More than half of these sites are situated in the member states of the Council of Europe. Even though these wetlands in area only amount to between a quarter



1



3



2

4



A common heritage

cussion nationally as well as internationally and the reaction of the electorate is, as everybody knows, very often the strongest weapon against political decisions.

Besides, the convention has in fact already been very important in protecting the areas on the list. There is striking evidence of this, and no area on the list of wetlands of international importance has yet been deleted.

The weaknesses of the convention

It is not, then, the lack of obligations, the "loose" convention, which is the occasion for worries. This was indirectly shown at the Cagliari Wetlands Conference in November 1980. The problems focused upon here were of another nature, as for instance the establishment of authentic or official versions of the convention text in several languages (thus enabling France for example to adhere to the convention), and the introduction of a procedure for amendments allowing other desirable changes (that is, provisions for the setting up of financial regulations, adoption of a budget, periodic ordinary meetings of the Conference of the Parties and the establishment of a permanent secretariat). A number of recommendations to this effect were adopted. It will, however, take a long time to realise them.

In the same way, only time will remedy the weakness represented by the fact that the number of Contracting Parties is rather limited and that the geographical dispersal of the areas on the list gives no biological satisfaction.

The aim and nature of the World Heritage Convention

The aim of the World Heritage Convention is the protection of the parts of the cultural and natural heritage which are of importance to all mankind and to provide for a permanent framework for technical and economic assistance to protect the world's heritage.

In this way, the convention is to be regarded as an expression of the acknowledgement of the principle that the international community as a whole has an obligation to contribute towards the protection of that part of the cultural and natural heritage which is of universal importance.

The scope of the convention

On the basis of the definitions of outstanding universal value of cultural and natural properties in Articles 1 and 2 of the convention, the World Heritage Com-

and a fifth of the total area of the list, it might be asserted that the list is dominated by Western Europe.

The Danish contribution to the list consists of twenty-six sites totalling a land and water-area of about 6 000 km², equivalent to a tenth of the total area on the list. Two other countries have designated even larger areas. The countries in question are the USSR (just under 29 000 km²) and Iran (around 13 000 km²). Together these three countries have designated just four-fifths of the entire area included in the list by the thirty states which have adhered to the convention.

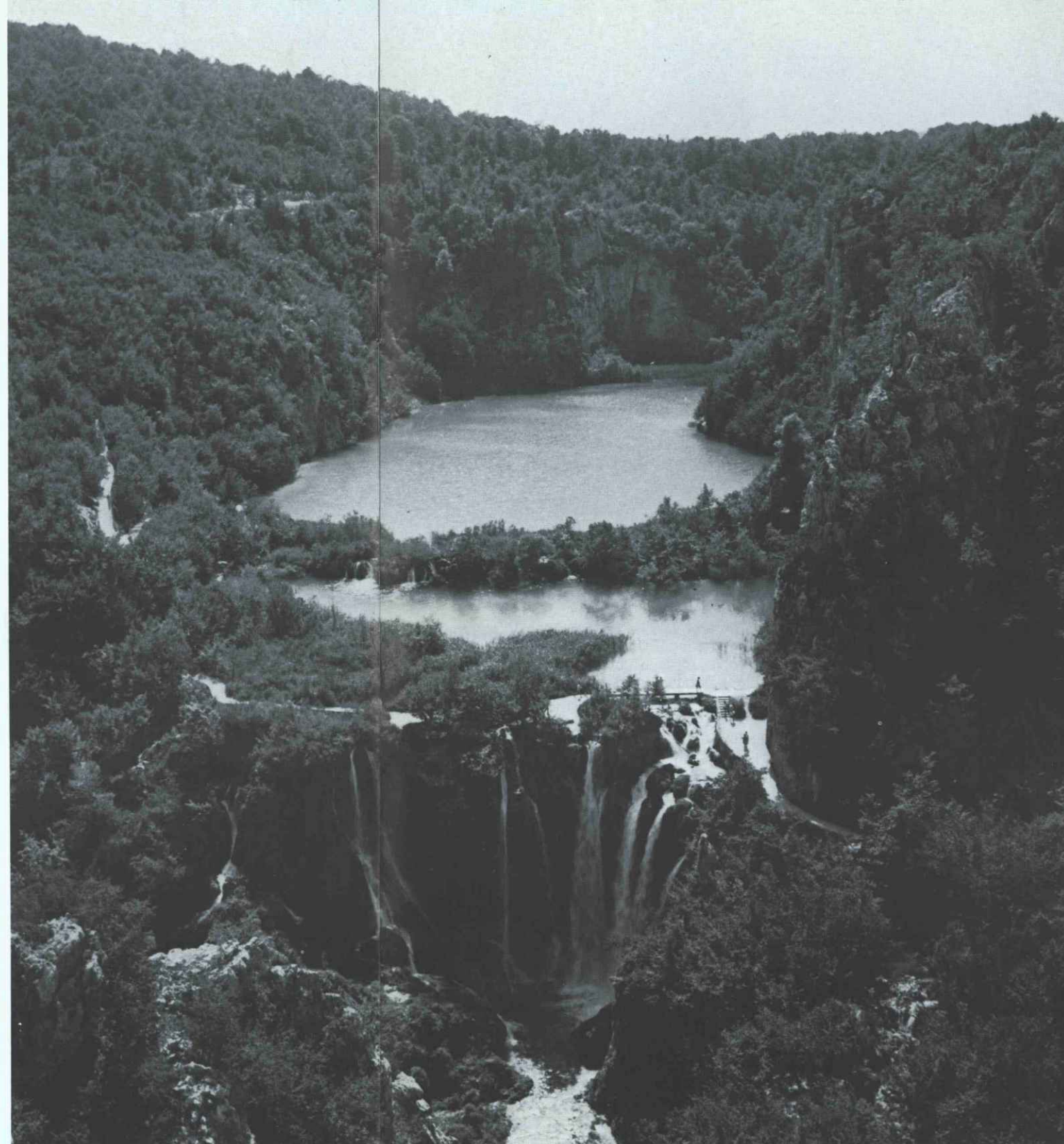
The Contracting Parties are responsible for the conscientious management of their wetlands. A wetland included in the list can only be deleted or its boundaries restricted if urgent national interests so require. Any loss of wetland resources should as far as possible be compensated for by the designation of other areas.

The merits of the convention

The convention has been criticised because it does not entail real obligations for the member states. This fact cannot be denied. On the other hand, the moral obligations which the member states assume might bind them just as strongly as proper legal obligations. Interferences in areas on the international list cannot take place secretly. They will arouse public dis-

Illustrations pp. 16-17

1. *Dendrophyllia nigrescens* (Photo P. Laboute-Jacana)
2. Whaling (Photo R. Arnault-Pitch)
3. *Cypridium calceolus* (Photo Hayon-Pitch)
4. *Lutra lutra* (Photo S. Cordier-Pitch)



The wonderful waterfalls at Plitvice in Yugoslavia, preserved for future generations (Photo Office du tourisme yougoslave)

mittee of twenty-one members (*p.t.* France, the Federal Republic of Germany, Italy and Switzerland, among others, are members of the committee) has developed two sets of criteria: one set for cultural property, another set for natural property.

Natural heritage sites should thus meet one or more of the following criteria:

- be outstanding examples representing the major stages of the earth's evolutionary history;
- be outstanding examples representing significant ongoing geological pro-

cesses, biological evolution and man's interaction with his natural environment;

- contain superlative natural phenomena, formations or features or areas of exceptional natural beauty;
- contain the most important and significant natural habitats where threatened species of animals or plants of outstanding universal value from the point of view of science or conservation still survive.

World Heritage List

On the basis of nominations from the

member states and an evaluation of these, a World Heritage List has been compiled.

This list includes at present eighty-five sites. Only about half of the sixty Contracting Parties are represented on the list. Among these are Cyprus (Paphos), France (*inter alia*, Mont St Michel and Chartres cathedral), the Federal Republic of Germany (Aachen cathedral), Italy (*inter alia*, the historic centre of Rome), Malta (City of Valetta), and Norway (Urnes Stave Church). Other examples of the list are the Galapagos Islands (Ecuador), Sagarmatha National Park (Nepal), Yellowstone (the United States of America), and the Virunga National Park (Zaire).

Only about 20% of the sites on the World Heritage List are natural sites, the remaining 80% being cultural sites. This lack of balance has given cause to worry, and work is being carried out to effect a more just representation of natural sites.

Until now no sites have been nominated by Switzerland, Portugal or Denmark. As far as Denmark is concerned, the explanation is that the adherence to the convention in itself, and with it the contribution to the World Heritage Fund, is regarded as the most important aspect. The aim of the Fund is that the rich world should help the developing countries.

World Heritage Fund

The member states contribute to the World Heritage Fund, the aims of which are to support the maintenance of sites, to meet the costs of related training and the provision of scientific advice and preparatory assistance. The Contracting Parties contribute to the Fund 1% of their normal contribution to UNESCO. In the case of Denmark this is approximately US \$ 15 000 a year. The budget of the Fund for 1980-81 amounts to approximately US \$ 1.4 million. Assistance from this Fund may be given in different ways, such as technical help, cheap loans or grants.

Conclusion

There is, of course, a connection between the Ramsar Convention and the World Heritage Convention. In the same way, these conventions are also related to the Berne Convention and, for instance, to the Council of Europe's Network of Biogenetic Reserves. In the long run, it may become a problem to make these international instruments work in unison or at least in harmony. One crucial condition is that the range of member states has to be more or less identical. It would seem natural if the member states of the Council of Europe took the lead in this matter.

V.K.

The underwater environment is still too little known
(Photo J. G. Harmelin)



A multiplicity of treaties

Cyril de Klemm

The first wildlife conservation treaty, the International Convention for the Protection of Birds, which is in fact still in force, was concluded in 1902. Since then, but especially during the last fifteen years, more and more treaties dealing with nature protection have been signed. This is the tangible result of greater international awareness of the need to protect species and ecosystems.

State of ratification of five important conventions¹

| | Berne | Ramsar | Washington | Bonn | UNESCO |
|----------------------|-------|--------|------------|------|--------|
| Austria | S | | S | | |
| Belgium | S | S | S | | |
| Cyprus | S | | R | | R |
| Denmark | S | R | R | S | R |
| France | S | | R | S | R |
| Fed. Rep. of Germany | S | R | R | S | R |
| Greece | S | R | S | S | R |
| Iceland | | R | | | |
| Ireland | S | S | S | S | |
| Italy | S | R | R | S | R |
| Liechtenstein | R | | R | | |
| Luxembourg | S | | | S | |
| Malta | | | | | R |
| Netherlands | R | R | | S | |
| Norway | S | S* | R | S | R |
| Portugal | S | S | | S | |
| Spain | S | | | S | |
| Sweden | S | R | R | S | |
| Switzerland | R | R | R | | R |
| Turkey | S | | | | S |
| United Kingdom | S | R | R | S | |

1. Situation in October 1981.

Key: S = signed
R = ratified
S* = signed without reservation of ratification

Protection of wildlife

One type of treaty deals with the protection of wildlife in a particular region of the world. These agreements usually make provision for the designation of protected areas, the protection of certain species, the regulation of game hunting and, in the most recent treaties, control over the introduction of exotic species.

After an abortive first attempt in 1900, it was not until 1933 that the first convention on the preservation of African fauna and flora was signed in London. The creation of some of the finest national parks in Africa dates from the implementation of the London Convention.

Where America is concerned, the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which is still in force, was concluded in 1940.

In Antarctica, the signatories of the Antarctic Treaty of 1959 adopted "Agreed measures for the conservation of Antarctic fauna and flora" in 1964.

Finally, there is a convention for the South Pacific region, not yet implemented, signed in Apia (Western Samoa) in 1976. There are as yet no treaties on the protection of wildlife as a whole in the Middle East, Asia and the Far East. However, the ASEAN countries (i.e. Indonesia, Malaysia, the Philippines, Singapore and Thailand) have begun negotiations on a convention of this type.

Regulating catches of marine species

Another type of treaty regulates catches of marine species whose stocks are exploited by more than one country. These are mainly fishing agreements. They may apply to the whole of a region such as the

North-East Atlantic, the Baltic or the Black Sea, or to certain species such as tunny, seals or whales. The very first such treaty, between Canada and the United States, was signed in 1923 to regulate halibut fishing in the North Pacific. Since then many multilateral and bilateral fishing treaties, covering most of the world's seas and most commercially important species, have been signed by the countries concerned. Their main purpose is to avoid overfishing.

Among these treaties, those affecting marine mammals deserve special mention here because of the vulnerability of these species and their popularity among the general public. For example, there are bilateral agreements between Norway and the USSR, and between Norway and Canada, to protect and regulate the exploitation of various seal species in certain areas of the North Atlantic, a convention for the conservation for Antarctic seals signed in 1972 and, finally, the 1957 Convention on the Conservation of North Pacific Fur Seals which is a model for the rational exploitation of a migratory animal species. On the other hand, the Convention for the Regulation of Whaling signed in 1946 has not succeeded in maintaining the level of exploited whale stocks, mainly because quotas have been fixed at too high a level. So from year to year the number of whales has continued to decline, to such an extent that the Whaling Commission has been forced to decide on a policy of complete protection for one species after another, until most of the species for which it is responsible are protected.

Protection of migratory birds

Agreements for the protection of migratory birds form a third type of treaty, and these are nearly always bilateral. They usually give complete protection to cer-

tain species, often very numerous, and lay down rules governing the hunting of game species. In the most recent agreements at least, they also oblige the signatories to protect the habitats of the species concerned and to control the introduction of exotic species into these habitats where this is likely to harm the protected species.

In Europe, after the Paris Convention for the Protection of Birds useful to agriculture in 1902, a new convention, the International Convention for the Protection of Birds was signed in 1950 also in Paris. This treaty no longer distinguishes between useful and harmful birds and lays down the principle that all birds should be protected, at least during the breeding period. Unfortunately, only a few countries have ratified it. Another European agreement to note is the Benelux Convention on Hunting and the Protection of Birds, signed in Brussels in 1970. Its purpose is to harmonise hunting regulations and to protect non-game birds.

In America, agreements were signed between the United States and Canada in 1916, and between the United States and Mexico in 1936 and again in 1972, listing the species which may not be taken and setting upper limits on the length of the hunting season for the others. All subsequent developments in the regulations governing the hunting of migratory waterfowl in the United States have been based on these treaties.

In the Pacific area, several agreements have been signed recently: between the United States and Japan (1972), Japan and the USSR (1973), Japan and Australia (1974) and the United States and the USSR (1976).

Finally, although it concerns a mammal, the Agreement on the Conservation of Polar Bears (Oslo, 1973) may be included in this category. In it the five countries with Arctic shorelines agreed to protect

A multiplicity of treaties

this species, whose migrations over the pack-ice and ice floes render international co-operation indispensable.

Preservation of certain habitats

Agreements on the preservation of certain habitats make up the fourth and last type. At present these concern marine habitats only, and in fact no agreement of this type has yet been officially signed. Most important among them are the new draft treaty on the law of the sea, in which an article provides for the protection of rare or vulnerable ecosystems and the habitats of marine species, particularly those in danger of extinction, and also the draft protocols to the conventions on regional seas, concluded in connection with the UN Environment Programme, for the creation of marine parks or reserves. For example, a protocol to the Barcelona Convention on the Mediterranean was discussed in Athens at the end of 1980 and may be signed soon.

This multiplicity of treaties inevitably causes some problems of overlapping—and thus of efficiency and co-ordination—between the bodies responsible for their implementation. Most of the existing treaties were designed to meet particular needs or are the result of regional or local initiatives.

At world level there have been four modern treaties with a universal application: the Ramsar Convention on Wetlands, the UNESCO Convention for the Protection of the World Cultural and Natural Heritage, the Washington Convention on International Trade in Endangered Species and the Bonn Convention on the Conservation of Migratory Species. These also seem to have been concluded in piece-

meal fashion, rather than as integral parts of an overall framework as they might have been. Certainly, the specific nature of different regions and the urgency of conserving certain species will continue to make regional or local agreements necessary. But a treaty with universal application introducing a general obligation to preserve species as well as representative samples of the different types of ecosystems existing in the world, nevertheless, seems indispensable. To compensate for this obligation, which may constitute a heavy burden, it would of course be necessary to create a system whereby at least some of the essential conservation measures were funded by the international community. This could perhaps take the form of a system of duties payable for the taking of species or products derived from species conserved in this way.

The idea of a world convention is not a new one: indeed, the question was raised at a conference held in Berne as long ago as 1913, but unfortunately nothing came of it. The matter was discussed again in 1949 at Lake Success, at the International Technical Conference for the Protection of Nature, but the idea does not appear to have been taken up since. C.de K.

A beautiful example of international co-operation (Photo C. Kempf)



Symbol of Dutch and international conservation: the Boschplaat with its European Diploma (Photo Ministerie van CRM)

National and international legislation

Henk J. C. Koster

It has undoubtedly been mentioned elsewhere in this issue of *Naturoopa*, but in nature conservation you cannot be careful enough and it is better to repeat a message infinitely than risk not getting the message across: with the possible exception of endemic species, all wildlife is not confined to the political boundaries *Homo sapiens* has created. Wild flora and fauna are found east and west, north and south of borders, be they migratory or not. Habitats are often transboundary (the habitats of endemic species might well be threatened by transboundary pollution!) and only through bilateral and multilateral co-operation can rational utilisation of natural resources be achieved.

This utilisation, according to the philosophy behind IUCN's World Conservation Strategy, includes of course the protection of natural resources. In this article "natural resources" refers to wildlife and

habitats, and consequently "the application of international conventions" will be confined to those conventions directly or predominantly aiming at the conservation of species and habitats.

Short Dutch history

Nature conservation in the Netherlands dates back to the beginning of this century, not as governmental policy but as a concern of a number of outstanding individuals who founded the Society for the Preservation of Natural Monuments in the Netherlands in 1905. This society nowadays has a membership of over 250 000 and owns and manages (together with its related provincial and other private organisations) about 120 000 hectares, which almost equals the natural areas owned and/or managed by the state and

provincial and local authorities. The role of private organisations in the field of nature conservation in the Netherlands has since been of great importance. In the same period the Netherlands Society for the Protection of Birds was established. Other organisations were created covering various other fields of interest, including the Society for the Protection of the Waddensea, the Institute for Nature Conservation Education and numerous study clubs directed at certain groups of species.

Last but not least, the Foundation Nature and Environment should be mentioned which aims to co-ordinate private activities, to influence and implement governmental policy, to study problems in the environmental field, etc. This survey is far from complete, (for example, WWF-Netherlands and the already indicated regional organisations are missing) but tries to present some idea of the role and impact of private initiative in the Netherlands in the field of nature conservation, its stimulating and initiating activities and welcome co-operation with the authorities.

Though—in the Netherlands, at least—as a rule private initiative comes first and government joins later or takes over, nature conservation forms the exception to that rule. Legislation on nature conservation appears to have already existed in the nineteenth century (at local level environmental protection measures can even be found as far back as the twelfth century!); this legislation dealt with the protection of so-called "useful" species. Unfortunately these measures were soon thought to be superfluous and were repealed, and have since been forgotten.

It was only just before the Second World

War that nature conservation again became a field of interest in governmental policy, and legislation started to be developed.

A legislative survey

The first specific conservation-minded legal instrument was the Birds Act of 1936 protecting "all species of wild birds occurring in Europe..." These words "in Europe" are significant for the scope of interest of the Netherlands as far as nature conservation is concerned: the mere fact that, during its life-cycle, the bird might visit Dutch territory is sufficient to give it full protection. This wide scope is also reflected in a certain way in the Threatened Exotic Species Act and in fact now forms in some respects a hindrance to our adherence to the Washington Convention.

The Nature Conservancy Act (1968) deals with both habitats and species, birds, of course, excepted. Important items in the act are that: areas of natural interest (not state-owned) can be designated as "protected natural monuments"; state-owned areas can be appointed "state natural monuments"; a management plan for the area concerned can be set up; finally, the protection of species has been ordered by a Royal Decree based on this act. As far as the species are concerned, the act confines itself to native species of wild flora and fauna.

The Hunting Act of 1914 provides regulations for the hunting and killing of wild fauna, closed seasons (for some species like the otter (*Lutra lutra*) and the common seal (*Phoca vitulina*) the season is permanently closed), hunting methods, etc. These regulations apply of course

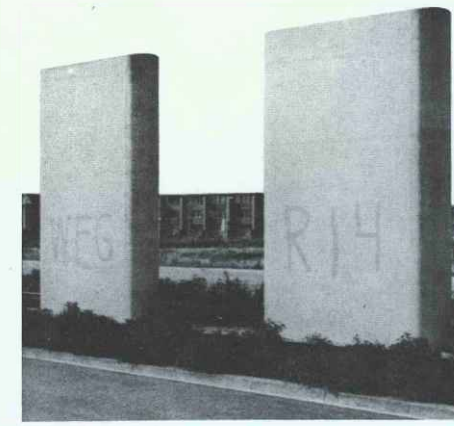
only to those species that are not listed in one of the acts previously mentioned.

The newest branch on the legal tree, as far as living animals are concerned, is the Threatened Exotic Species Act, which entered into force in 1977. Its Article 3, which applies to dead animals, recognisable parts and products, entered into force in 1980. Generally speaking, within the framework of this act it is forbidden to possess the animals, dead or alive, or recognisable parts and products thereof, listed in a lengthy appendix covering a certain number of species of fauna. As such, this piece of legislation goes much further than CITES; plants, however, are not yet covered.

Though the acts mentioned above form the core of nature conservation legislation in the Netherlands, there are many more legal instruments that are of the utmost importance in keeping intact or improving a balanced natural environment in this small country, especially the Physical Planning Act, for instance, which provides a general framework for the protection of open spaces. In addition to these formal legal instruments, important administrative measures have been or are being developed: the establishment of a National Parks system, of so-called National Landscapes, of a policy related to the compatibility of agriculture and nature conservation, maintenance contracts, etc.

International legislation and national application

In spite of public interest in nature conservation and the legislative infrastructure, nature conservationists still feel that the position is unsatisfactory (as an ex-



A highway in the Netherlands on which work has already been carried out, but whose final completion is in question (Photo F v/d Berg e.a.)

ample we note that, of the 1 400 species of plants occurring in the Netherlands in 1900, 5.3% have become extinct and 35% are in great danger of becoming extinct). The conflicting demands and interests in such a small area as the Netherlands only increase the vulnerability of what is left, and even small-scale human activities tend to deteriorate important ecological processes. Here we shall confine ourselves to the international legal instruments of direct importance to nature conservation (Conventions of Berne, Bonn, Ramsar and Washington).

The "World Heritage" Convention (UNESCO) is not taken into account as our adherence to that convention is still under study, nor are the valuable Benelux Convention on Hunting and Protection of Birds and the EEC Birds Directive, as their membership is limited. Though two conventions (Berne and Bonn) have not yet entered into force, this does not form a hindrance to the scope of this article as the Netherlands has already ratified them and has to apply the obligations they prescribe. In the Dutch governmental system international conventions cannot be ratified or adhered to before the national legal instruments have been adapted, if necessary. The approval of Parliament—the instrument of ratification or adherence—is only given on the basis of an explanatory report and, if needed, a special act indicating adjustments to and/or changes of the existing legislation; in some cases a completely new legal instrument has to be drafted.

The application of international legal instruments at national level may have consequences at three different levels: legal, administrative and moral.

The Berne Convention

The obligations deriving from the Berne Convention in the Netherlands have not led to any changes in the existing legislation. The obligations in the substantial paragraphs and the species listed in the appendices are met by the Nature Conservancy Act, the Hunting Act and the Birds Act in particular. From the legal point of view, therefore, the ratification of this convention by the Netherlands (the first country to do so) posed no problems. The general obligations as formulated in Articles 3 and 4 of the convention ("... in their planning and development policies...") are met by other legal instruments, (for example the Physical Planning Act).

Though there are no legal constraints, it is in the administrative processes that due regard should be paid to some substantial items in the convention. Habitat protection, for instance, through the Nature Conservancy Act and through acquisition and management of natural areas, finds a firm basis in the convention and is encouraging therefore the efforts at national level.

Scientific activities will receive a stimulus from the provisions in Article 9; much scientific work is done by the State Institute for Nature Management. We do think that through the exchange of data more co-operation with scientific institutions in Europe will evolve—to the benefit of European wildlife. As the convention has not yet entered into force, no formal obligations exist yet. As seen above, these formal obligations are met but, nonetheless, one may view policies from a fresh angle and feel morally obliged to check them against the intent of the convention, even if the text of the convention does not prescribe it, at least as far as the situation in the Netherlands is concerned. It is therefore gratifying that already at this stage two road construction plans have been reconsidered as a consequence of the convention.

Application of other legal instruments

The situation with respect to the Bonn Convention is very similar to what has already been explained. No changes in our national legislation were needed (we ratified the convention as the second country to do so); here also the emphasis will be on measures of an administrative kind and on scientific co-operation and exchange of information.

As such, the Bonn Convention itself has almost no implications for the Netherlands: the species in Appendix I to the convention and of relevance to the Netherlands are covered either by the Birds Act or the Threatened Exotic Species Act. The "agreements" to be concluded—in relation to Appendix II—will also hardly influence our legislative system. The existing management infrastructure will be sufficient to cope with the obligations prescribed for in the articles. Besides, the Netherlands so far is a range-state for only a very limited number of the Appendix II species, that here also find complete protection in the acts already mentioned.

As far as the Ramsar Convention is concerned, though it is theoretically easy to delist a wetland, it appeared during the Cagliari Conference of the Parties (November 1980) that the effect of adhering to the convention has been that parties continue to list new wetlands; only in exceptional cases have wetlands been delisted. When the Netherlands adhered to the convention in May 1980, six wetlands were listed (with no legal constraints) and the addition of "new" wetlands to the list is under study. The amendments to the convention proposed in Cagliari will undoubtedly have consequences for present administrative procedures, which include intensification of interministerial deliberations.

It is to be hoped that the Netherlands will soon adhere to the Washington Convention. In this case, much legal work has to be accomplished. Notably, the Threatened Exotic Species Act will have to be adapted and extended to plant species. A heavy burden is placed on the administrative sphere for proper implementation of the convention. Trained staff (in addition to the staff implementing the Threatened Exotic Species Act) is needed and customs authorities should be trained to differentiate, for example, wild orchids from cultivated ones. Nevertheless, we hope to solve the remaining problems in due course.

With the exception of the Washington Convention, not a single article in the existing legislation of the Netherlands had to be changed in ratifying or adhering to the main international legal instruments in the field of nature conservation.

Implementation of a convention, however, is not only a legal matter, but also finds its way through measures of an administrative character. In the Netherlands the administrative infrastructure is well developed and evolves continuously.

In a recent inquiry, almost 70% of the population gave high priority to nature conservation, thus showing a great interest in environmental affairs. Through the activities of private organisations the government is constantly reminded of its responsibilities towards a balanced natural environment and its obligations to implement both the national as well as the international legal instruments. H.J.C.K.



Sterna sandvicensis: an example of a lack of international co-operation. Its colonies almost disappeared because its main food became toxic (Photo N. Binsbergen)

Public involvement

Alistair Gammell

Laws without public support and understanding exist, but remain only words on paper, unheard of and unenforced. Indeed, without some public interest and support, it is doubtful if anyone would be interested in formulating the laws anyway. Thus public involvement is the cornerstone of both the initiation and the effectiveness of nature conservation activity.

The public

Everyone involved in any question perceives "the public" to be a nebulous mass of individuals outside a closely knit clique of presumably "the non public". However, since this clique changes depending on the subject and the viewpoint of that subject, we may rapidly agree the public to be the people as a whole or everyone. Thus, in examining the role of conservation organisations in informing the public we must look at their role throughout the range of interests, influences and opportunities which compose "the public". Nonetheless, certain specific groups of public can be identified in specific ways and these groups require individual treatment.

The motivated public

The motivated public comprises those persons who already believe in the need for nature conservation. They form the nucleus from which has sprung the conservation organisations and these persons continue to influence or indeed to carry out the work of such organisations. Any dialogue is thus very much a two-way process, with the motivated individuals pressing organisations to take certain courses of action and the organisations themselves informing these individuals of action taken, reasons why, etc. To presume that because of their motivation these individuals are always right or well informed is a mistake but we must accept that their motivation will ensure that from them will come many of the ideas, much of the money, almost all of the work, including that at grass roots level, and, most important, the vital impetus for nature conservation work. In return, these

people will expect the best feedback and support possible from organisations and the right to influence the actions of associations through normal democratic processes.

The uncommitted public

This category comprises the vast majority of individuals and the role of conservation organisations is quite clear, that of motivating these people by illustrating to them the urgency of the task of nature conservation and the reasons why this should interest them. And having achieved this, guiding them as to the action they might constructively take.

Decision-makers

This category of the public encompasses administrators, legislators, and persons such as company directors, landowners, etc. They may be motivated, in which case good information is likely to be the only requirement, but in the many cases where positive motivation does not exist the role of the conservation bodies must be, through persuasion and actual examples, to illustrate the needs of nature conservation and, through giving constructive help, to motivate these decision-makers to take useful actions. Whether decision-makers are initially motivated or not, they can usually be won over by sound argument and by the interest of other members of the public.

Public opposed to nature conservation

Since nature conservation is generally perceived to be a "good thing" and a generally acceptable objective for all, few people actually oppose it *per se*, and even fewer would admit to doing so! Nonetheless, on specific issues persons may be opposed to the nature conservation solutions proposed. Industrialists may well say they are against polluting rivers but economic facts... Farmers may say they are in favour of preserving hedges, but increasing food production... Hunters



Public involvement is indispensable for nature conservation activities to be effective (Photo RSPB)

may be against restrictions on the freedom to hunt but allies in the battle to preserve habitats, their hunting grounds. So, few people are totally opposed, but many oppose certain aspects of nature conservation work. The role of nature conservation bodies is, by discussion and illustration, to persuade persons, who are at first thought to be opposed, that nature conservation proposals can be or should be integrated with their other objects.

Conservation organisations

Conservation organisations themselves vary considerably and the roles they can play and the means by which they judge

they are best able to play them are diverse. For example, a government nature conservation organisation may be limited as to the amount it can publicly lobby decision-makers and at the other end of the range may justifiably consider itself to be quite unable to contemplate participating in demonstrations, etc. It can, however, taking advantage of its position, pressurise within government for changes and, through ministries responsible for education, ensure a strong environmental content for teachers' courses, schools, etc. Thus the means by which conservation organisations perform their information tasks must remain one for each organisation.

The means used

Just as the public includes everyone and the nature of conservation organisations is so varied, the means used to transfer

information are probably too diverse to catalogue usefully. Films, television, radio, the press, magazines and leaflets, lectures, school groups, nature clubs and many more all have their place. Showing children through these means the wonderful and beautiful natural world around them is of course crucial to building a sympathetic public attitude in future generations. However, taking this one step further is equally vital, thereby demonstrating to these children the interwoven relationships between all animals and plants and explaining that they and everything else are inexorably part of this relationship. It is only through appreciating this that they will grow to appreciate that no part is dispensable and that no part can be protected in isolation but that conservation is a total strategy for survival of us all.

However, although children are important, there are many conservation tasks which require action now and, therefore, conservation organisations cannot ignore

the pressing need to alter public attitudes and to get decision-makers to make crucial decisions now.

The task

All this entails a considerable amount of work and the worst aspect of public information is that it can absorb huge budgets without any tangible results. To some extent, this must be rationally accepted on the basis that explaining the needs of conservation is absolutely critical if any future progress is to be made. However, all public information programmes need to be examined critically with a view to making some attempts at assessing their effectiveness or lack of it. Conservation organisations need to examine critically the contribution they themselves are best adapted to make. Government organisations, strong professionally but with little or no grass-roots volunteer workers, should concentrate their contribution on the production of statistics to demonstrate the need for nature conservation action. They should concentrate their educational efforts within the ministries and where they see a need for more grass-roots effort, they should consider direct funding of better-suited organisations, and with the infrastructure ready, to achieve this effectively. Equally non-governmental organisations should examine their potential to influence public opinion and be ready to accept their own limitations in this field.

The battle to inform the public is gradually being won, the question is whether or not it will be won in time to save the habitats which are so crucial. A.G.

Too often, nowadays, this is the fate
of the Mediterranean forest
(Photo Fino, Saint-Raphaël)

Françoise Burhenne-Guilmin

Let's co-ordinate our efforts!

Conserving Earth's living resources is a problem as old as humanity itself. Centuries were to pass, however, before the present crisis made itself so acutely felt. There are two major reasons for this.

Firstly, unprecedented demands by man: if present trends continue the world's population will increase by one-half over the next twenty years to reach a total of some 6 000 million; the corresponding demand for resources cannot be met by Earth without their being destroyed or

exhausted. The rhythm of such dilapidations has already been the subject of a multiplicity of prophecies of doom: for example, the destruction of a third of the world's arable land over the same twenty-year period and the disappearance of wet tropical forests early in the next century, if they continue to deteriorate and to be worked at the present rate.

Secondly, an ever-sharpening awareness of man's dependence on nature. Apart from ethical and aesthetic factors, there is

a growing recognition of a fundamental economic relationship: the conservation of "the slender surface stratum of the planet that accommodates life"¹ is essential not only to man's well-being but also to his prosperity—to say nothing of his survival.

The conservation of living resources is accordingly inseparable from their development and neither can be achieved in isolation. Conservation is no longer simply an end in itself but a process by which man perpetuates the base on which he depends.

Wildlife conservation thus takes on a new dimension. The various species have a vital role, whether as the basis of cultivated varieties, or in their natural or treated form as medicine or as factors in biological or ecological processes; to what we already know must be added the fact that "there are undoubtedly thousands of substances produced by living creatures and as many biological processes which are as yet undiscovered but

among which some will undoubtedly prove to be of capital importance in biology, medicine, agriculture or industry".¹

A shrinking genetic heritage

The conservation of genetic diversity is thus of absolutely vital importance and every time a species becomes extinct—an irreversible phenomenon—a part of our known or potential capital is lost.

And yet 25 000 plant species and some 1 000 species of vertebrates are at present threatened with extinction. These figures refer to species for which we have the necessary data; for thousands of others, plant and animal alike, data are lacking. What are the causes of this loss and how can it be arrested?

Three factors are central to the shrinking genetic heritage: over-use, destruction of habitats and the introduction of exotic species. Any policy for conserving species must therefore concentrate primarily on these three factors.

Ensuring the long-term availability of species used is a process in several stages, beginning with knowledge of the species in question and finishing with controls on the ultimate use to which they are put (trade, possession) via regulations governing their capture, taking account of interactions within an ecosystem and

the consequences of such capture on the ecosystem's other component parts.

Preventing the introduction of exotic species likely to disrupt the natural environment in a locality is theoretically easier: such difficulties as exist are primarily connected with the enforcement of any measures decided upon.

Of the three factors listed above, the destruction of habitats is undoubtedly the most important at present and the most difficult to check. The problem is not only to prevent the laying waste of certain places which, by their very nature, play a major role in the biological cycle of a given animal or plant species but also to preserve a group of phenomena that can be affected by external factors, sometimes even of distant origin, such as pollution or falls in the level of ground-water. The problem is not only to ensure the maintenance in key places of a sufficient number of protected pockets but also to preserve everywhere else satisfactory living conditions for as many species as possible.

Lastly, to these factors directly connected with the conservation of wildlife must be added a further requirement, one that is much wider in scope and without which, needless to say, nothing can be done: the maintenance of the essential ecological processes by judicious management of forests, pasture-land, catchment areas and agricultural and coastal systems, thus preventing or, at least, limiting pollution.

In this way, starting with a precise and limited objective—the conservation of wildlife—we reach the conclusion that, to achieve it, we need a whole panoply of measures constituting together a true environment policy which other policies—agricultural, industrial or regional planning—must not only take into account but to which they must also contribute.

A policy for the conservation of species

It is first and foremost at national level that such policies must be implemented. But, just as the single-discipline approach to conservation is insufficient, so a purely national approach is also insufficient. It has become something of a cliché to say that wildlife knows no frontiers. Some living resources and hence their habitats are spread over two or more states: they may be species located in frontier regions or migratory species that cover long distances during their migratory cycle; some resources are found—temporarily or permanently—in regions outside any national jurisdiction, though such instances are becoming rarer and rarer, as states extend their territorial waters to areas previously considered as the high seas; lastly, living resources and their habitats may be affected by activities in another state; here, too, the problem may be a frontier one and confined to a relatively small area, but it may also be one of long-range pollution.



Progress?
(Photo D. Chibois)

1. See World Conservation Strategy.

Let's co-ordinate our efforts!

The need for international co-operation therefore exists at several levels, depending on the particular requirement.

For example, co-operation among a small number of states is the best way of resolving local problems such as the pollution of a particular lake or river or the protection of a critical habitat spread over two or more states. Many treaties—bilateral treaties in particular—dealing with precise questions of this sort (e.g. the establishment of protected areas) are currently in force.

On the other hand, some problems lend themselves more readily to—or even require—a world-wide solution. The international trade in species and their products is a typical example that gave rise to the Convention on International Trade in Endangered Species of Wild Flora and Fauna; the combined management of migratory species, covered by the Bonn Convention, is another.

A host of other aspects in the fields of research and continuous surveillance, as well as general principles concerning the rights and duties of states or their international responsibilities in environment matters, deserve to be dealt with at this level. And it is here that world organisations have a special part to play. Many of them deal solely or in part with such questions, and among them the United Nations Environment Programme (UNEP) plays a key role in that one of its essential duties is to co-ordinate efforts at this level.

But logically it is at regional level that co-operation in carrying out a comprehensive wildlife policy can be most thorough and far-reaching. It is, moreover, at this level that the most striking formal instruments of co-operation—that is to say, conventions—have been concluded. The convention adopted under the aegis of the Council of Europe is the most recent and up-to-date example.

At European level, several organisations are giving serious attention to the prob-

lems of conserving flora and fauna in the wider context of environmental conservation. This is true of the European Communities and their major environment programme, of the Council of Europe which was the first to concentrate on conservation of the natural environment and which is vigorously pursuing its pioneer work, of COMECON, which, for the years 1981-85, has drawn up a fuller programme for co-operation in questions concerning the environment and the rational use of natural resources, and, lastly, of the UN Economic Commission for Europe, which has also turned its attention to the problems of conserving flora and fauna and is currently examining the scope for enhanced co-operation in this field between its members.

Each of these organisations represents a different structure, as regards both its membership and its resources, powers and working methods. So it is that, even though no regional institutional framework can fully cope with the demands of ecology, Europe is nonetheless on the road to developing a conservation policy which, as efforts increase, is expanding into ever wider institutional frameworks.

Manifold efforts

Such multiplicity of efforts at European level is necessary, since it corresponds to an inescapable political reality in contemporary Europe and allows a corresponding degree of flexibility in the networks of undertakings which are closer or looser depending on the institutional context.

Nevertheless, co-operation of this kind at different levels requires close co-ordination and the establishment of appropriate inter-institutional mechanisms. Our concern here is not simply to co-ordinate the work of the organisations in question but to co-ordinate all activities in this field, including those in the framework of conventions and other existing agreements.

Lastly, though the regional level is the most significant, it is unsatisfactory in a number of cases in which the particular institutional framework does not correspond to ecological realities.

For example, co-ordination, as mentioned above, is not only necessary at the level of the "internal" regional framework, but must also supply the necessary links with international activities generally.

Although much has been done towards achieving these objectives, which are as complex as the functioning of an ecosystem, much still remains to be done. Their full achievement depends primarily on national political will and then on an international political consensus, difficult though it is to achieve at any level. The efforts of each and everyone of us must be directed towards obtaining that consensus, for our future is at stake. F.B-G.

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(Photo G. Lacoumette)

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