PROTECTED AREAS IN THE EUROPEAN COMMUNITY

AN APPROACH TO A COMMON CLASSIFICATION

ABSTRACT

This study gives an overview of the various types of protected areas existing in the Member States of the European Community. On the basis of this comparative overview and in light of relevant work done in international organisations (especially I.U.C.N. and Council of Europe), a common classification with 8 types of areas is suggested. Such a classification should permit a matching up of the different types of protected areas used in the European Community and should give a kind of "common language" which is necessary for future Community activities in this field.

FOREWORD

This study was carried out as part of the European Community action programme on the environment. It is the result of close collaboration with the Research Institute for Nature Management (Rijksinstituut voor Natuurbeheer) at Arahem and Leersum (The Netherlands) and the Environment and Consumer Protection Service of the Commission of the European Communities, represented by Mr. Gunter Schneider and his assistants
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The study is based on a report by Dr. Vera de Meester - Manger Cats *, who, under the guidance of Dr. C.W. Stortenbeker and with the collaboration of Professor Dr. M.F. Mörzer Bruyns and Dr. S.M. ten Houte de inagro, completed, updated and summarized an initial analysis done by the late Dr. F. de Soet. **

In addition, the study was greatly helped by a number of contributions generously provided by the relevant authorities in the Member States and by international organizations, in particular the International Union for Conservation of Nature and Natural Resources and the Council of Europe.

- * Nature and landscape management in the European Community (1979 unpublished)
- ** Characteristic landscapes and biotopes of the European Community (1975, unpublished), a study provided for in the 1973 Community action programme on the environment.

This study does not necessarily reflect the opinion of the Commission of the European Communities in this field, nor does it prejudice the Commission's future attitude on this subject.

The manuscript was completed in December 1979.

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1.0 INTRODUCTION

More than six years after the adoption of the first European Community action programme on the environment we may undoubtedly say that much has been achieved and that we have every reason to be pleased. However, this should not gloss over the fact that much still remains to be done.

The first phase of the Community's environment policy was primarily one of reaction and was characterized by a concentration of efforts on a series of immediate and urgent problems of pollution and nuisance deriving from developments in the past. But in the meantime environment policy has increasingly developed and taken shape in response to the general public's wish to see the rise in the standard of living accompanied by an improvement in the quality of life.

This approach aims at making the quality of life angle a whole dimension of environmental endeavours and at embodying it from the very first stage in the planning and decision-making process. A vital feature of the efforts to achieve this aim is that they are based on measures of a new type which attempt to apply the old saying that an ounce of prevention is worth a pound of cure.

It is significant that since the updating of the European Community action programme on the environment in 1977 European ministers have missed no opportunity of pointing to the need to strengthen the preventive character of environment policy and of stressing the importance of measures likely to achieve this aim.

Such a strategy is particularly appropriate for the protection of the open spaces and landscapes of the Community which, as the programme on the environment* points out, "are continuously subject to pressures arising from urban growth, road construction, modern farming methods and recreational use".

This change in natural environments and landscapes - already noticeable in some parts of Europe at the beginning of the century - became considerably more widespread and rapid in the fifties, when modern farming methods came into general use. The reduction in numbers of many species of wild flora and fauna is one of the most obvious consequences of this development.

Faced with this situation, the countries of the European Community have taken a series of measures intended to halt the erosion of their natural and cultural heritage and to repair - as far as possible - the inroads which have been made into it. The regulation of hunting or of the marketing of wild animals, town planning ordinances and the requirement that environmental impact studies be carried out in respect of certain human activities are examples of such measures.

Title III, Chapter 1, Section 3 (c) (125) of the European Community programme on the environment (OJ C 139 of 13.6.1977).

Above and beyond these measures, all the Member States of the Community were induced to classify under various forms of protection an increasing number of areas representing an asset for the general public from the scientific, cultural and recreational point of view or from the point of view of conserving natural resources.

However, it is evident from the work done by the Member States of the Community or by international organizations that at the present time the extent of the zones which are actually protected remains too limited both as regards the size of the heritage to be protected and the pressures which threaten it.

This is why the Commission has constantly attached particular importance to protected zones in a whole series of Community actions directly or indirectly connected with this question.

One of the most important actions which must be mentioned in this connection is the setting up of a Community system of "ecological mapping". The aim of this project is to provide an environmental information system which would make it possible to identify those zones which are of European importance as regards the conservation of nature and of landscapes. Discerning utilization of such information, comparable at Community level, may be expected to provide a considerable stimulus for the much-needed strengthening of measures to protect natural environments and European landscapes, particularly those which are divided by one or more of the frontiers of the Member States.

Without waiting for the implementation of this vast project, the Commission is already drawing up an inventory of Community wetlands pursuant to the Directive on the conservation of birds. This inventory, which is designed to be compatible with the "ecological mapping" system and to contribute to international endeavours in this field, aims at setting up a cohesive Community network of projected zones guaranteeing the survival of wild birds in the Community.

With further reference to the protection of wildlife and habitats, it should be pointed out that the Community has contributed in the drawing up of the International Conventions of Berne* and of Bonn** and that the Community intends to take a full part in the efforts to implement these conventions, which stress protection of natural habitats as vital elements in the conservation of wildlife.

- International Convention on the Conservation of European Wildlife and Natural Habitats (signed by nineteen countries and the European Community on 19 September 1979 in Berne).
- International Convention on the Conservation of Migratory Species of Wild Animals (signed by 22 countries, including six Member States of the European Community on 23 June 1979 in Bonn).

Furthermore, a number of studies carried out by the Commission and by certain international bodies have underlined the need to set up more protected zones - of various types - in coastal and mountainous areas. The natural ecosystems and landscapes of these areas are undergoing the consequences of lively competition for use of the available space between a large number of human activities. As a result, the wildlife conservation and recreative functions which these areas are particularly fitted by their natural characteristics to fulfil, are being more and more seriously impaired.

Finally, various studies on the problems of the major conurbations and, in particular, of the megalopolis in formation in North-West Europe** have highlighted the urgent need to take measures to preserve the open spaces which are becoming increasingly rare in these densely populated areas and increasingly necessary because of the recreative functions they fulfil.

While all these actions undertaken by the Commission undoubtedly help to provide better protection of certain spaces, it is proving increasingly desirable to continue and extend such actions in the interests of a real Community policy on protected areas.

With this aim in mind, this study - basing itself on the existing situation in the Member States and the efforts made at international level - tries to establish a common typology which will make it possible to match up the various types of protected areas current in the Member States. By acting as a common language, such a classification should make it easier to define future Community action in this sphere.

Integrated management of the coastal areas of the European Community. EUR 6105 FR. Integrated management of mountainous areas, Alpeninstitut, Munich (in process of being published).

Prospective study on physical planning and the environment in the Megalopolis in formation in North-West Europe. ERIPLAN, Elsevier Scientific Publishing Company, 1976.

2.0. PROTECTED AREAS IN THE MEMBER STATES

2.1. The origins of Nature and Landscape Protection

Nature conservation started in most countries with the protection of items which were rare or of scientific importance. As society developed, the concept of "nature conservation" developed with it, including progressively the protection of landscapes and of recreation areas.

The development of nature and landscape protection and management began in almost all Member States on the initiative of private individuals, voluntary nature conservation organisations being responsible for the setting up of the first nature reserves.

The date when the first nature reserves were set up varies considerably from country to country. The first nature reserve was set up in England in 1899 by the National Trust and in the Netherlands by private donations in 1906. In France, too, it was private individuals who in 1927 began to protect the Camargue. As the idea of nature conservation spread, the authorities gradually became involved.

The historical development and the differences from country to country and often from region to region within a country in socio-economic factors, population density, economic activity and land use, and in natural conditions (e.g. relief, soil, climate and vegetation) have resulted in a mosaic of types of protected zones, the pattern of which is outlined in Section 2.2. for each Member State.

As the contributions from Member States were collected over a period of more than one year, the data concerning the number of protected areas and their size do not always reflect the latest situation. However, this does not change significantly the comparative survey of protected areas în the EEC which this chapter is intended to provide.

2.2. Situation in the Member States

2.2.1. Belgium

Organization

Nature protection is the responsibility of the Ministry for Agriculture via the Water and Forests Administration (L'Administration des Eaux et Forêts - Bestuur van Waters en Bossen). The Nature Conservation Council (Le Conseil Supérieur de la Conservation de la Nature - Hoge Raad voor Natuurbehoud) acts as an advisory body on nature management. The establishment and management of the national reserves are the responsibility of:

- the Nature Conservation Service (Division 7) at the Water and Forests Administration (Le Service de la Conservation de la Nature - Dienst voor Natuurbehoud). This body was set up in 1976. Scientific committees (Commissions scientifiques consultatives - Wetenschappelijke adviescommissies) provide advice on the management of the reserves.

There is also the Royal Commission for Monuments and Sites (La Commission Royale des Monuments et des Sites - Koninklijke Commissie voor Monumenten end Landschappen) which decides what is to be designated a monument or site by royal order. This commission comes under the ministries for French and Dutch education and culture.

Pollution problems are the responsibility of the Ministry for Health and Environment. The Minister for Health and the Environment acts as coordinator (Le Ministre de la Santé publique et de l'Environnement - Minister van Volksgezondheid en Leefmilieu).

The Law on Nature Conservation (1973) provides for the setting up and management of nature reserves and protected forest areas, as well as the protection of Landscapes in the form of natural parks. The law also provides for official supervision.

A number of nature conservation organizations operate in Belgium. The "Bond Beter Leefmilieu/- Inter-Environment" acts as umbrella organization. Only some administer so called independent nature reserves. These may receive a government subsidy.

Protected areas

Belgium possesses the following types (1)

- Nature reserve;
- Natural park;
- Forestry reserve

Nature Reserves

There are some one hundred nature reserves with a total area of 15 000 hectares. These reserves may be broken down as follows:

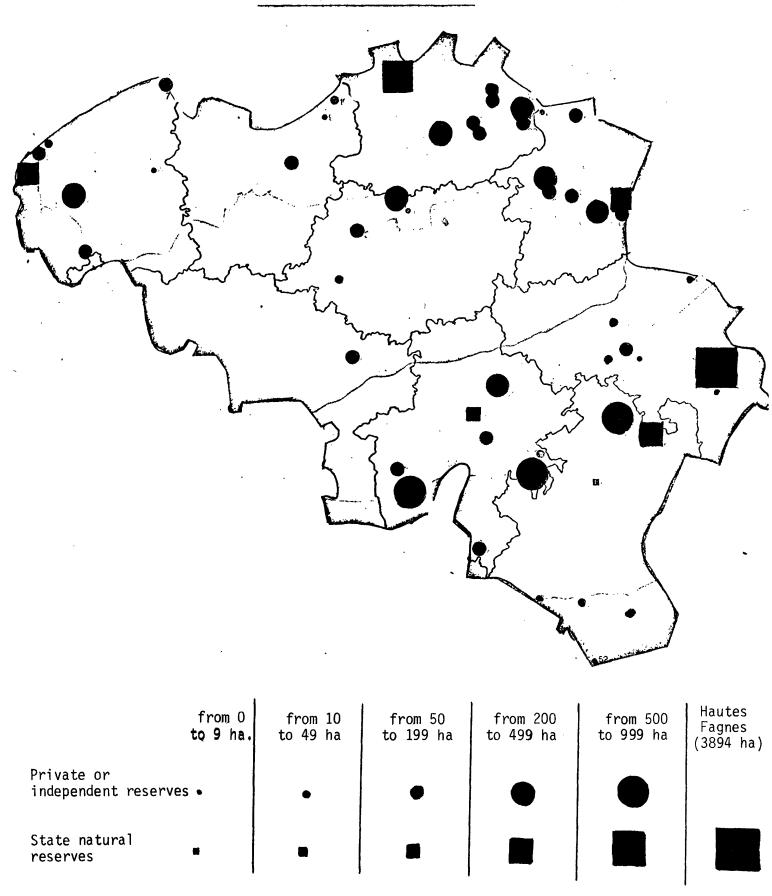
- 20 national reserves, owned or leased by the State, with an area of 7 400 hectares;
- 50 private reserves owned by private individuals and associations;
- 30 independent reserves owned by private individuals and administrered at their discretion.

The degree of protection and the legal basis of the private and independent reserves vary considerably; usually there is no supervision. Under the new law on nature conservation they may obtain the legal status of recognised nature reserve. This law stipulates that each nature reserve must have a management plan. The national reserves are supervised by the district water and forestry engineer.

In the nature reserves the forests are preserved. No hunting or fishing is permitted. The large reserves are divided into areas where the general public may be admitted, excluded or admitted only on certain conditions. The Hautes Fagnes reserve (Hoge Venen) is usually closed in April and May because of the risk of fire. The Kamlthout and Westhoek reserves have to cope with a large number of visitors. Brochures have been issued for the large reserves - Haute Fagnes (4 000 hectares), Kalmthout (850 hectares) and Bois du Pays (601 hectares).

- (1) Other protected areas: The Secretariats of State for regional economic affairs incorporate certain protected areas in their regional plans pursuant to the Law on "town and physical planning".
 - Green zones including natural areas, natural areas of scientific value or nature reserves;
 - Valuable landscape areas;
 - Forests.

NATURE RESERVES IN BELGIUM



Source : Les réserves naturelles de la Belgique (Nature Reserves in Belgium) by A. Noirfalise et al, 1970.

Some private reserves are called <u>national parks</u> although their real status is that of a nature reserve or natural park. This, for instance, is the case with the Parc National de Lesse et Lomme, 975 hectares, which was set up in 1958 by the Ardenne & Gaume Association.

A protected nature reserve (Réserve intégrale - Integral reservaat) is a nature reserve or part thereof where there is no human interference and nature is left to itself.

Natural Park

The term natural park is used in Belgium. The aim of a natural park is to preserve the character, diversity and scientific value of the countryside and the indigenous flora and fauna, while providing space for recreation and tourism. Nature reserves and forestry reserves way be found within a natural park, as well as villages and local industry. Management consists of balancing out the requirements of tourism, economics and nature conservation.

So far, only the Parc Naturel National Hautes Fagnes-Eifel has been realised, forming part of the international Naturpark Nord-Eifel in Germany. Wallonia will share the Parc Naturel Haute Sure with Luxembourg and the Parc Naturel Régional de la Croix-Scaille will be set up along the French border. There are plans in Flanders to set up natural parks in the valleys of a number of rivers.

Forestry reserve

(Réserve forestière - Bosreservaat). No decisions have so far been taken on the legal status of these areas. Such decisions could endorse human interference in order to conserve or to create specific situations or they could ban all human interference.

The Law on Nature Conservation of 1973 provided a welcome legal basis for nature reserves, forestry reserves and natural parks, but Belgian legislation does not yet provide expressly for the protection of cultivated landscapes of particular value. The setting up of nature reserves is still extremely dependent on the availability of funds and

whether the land to be protected is put up for sale. There has been a nationwide stock-taking of special landscapes - under which 42 landscapes are described - but most of them still lack any form of protection (2).

It is obvious that a densely populated and industrialised country like Belgium finds it difficult to protect the interests of nature and landscape; on the other hand, the provision of effective protection is very necessary in a country of this type.

While the Law on Nature Conservation was being drafted, plans were made for the setting up of an Institute for Nature Conservation. The purpose of this institute would be to encourage study and research on matters related to nature conservation and the protection of the environment. This could occur in collaboration with the universities, which are already making their contribution to this sector.

2.2.2. Denmark

Organisation

Nature preservation is administered by the National Agency for the Protection of Nature, Monuments and Sites, and together with physical planning, pollution control, food control and state forestry it falls within the competence of the Ministry of the Environment.

The National Agency for the Protection of Nature, Monuments and Sites, has an official advisory body on questions concerning natural sciences and education, namely the Nature Conservancy Council.

Formerly in each county there was a Conservation Planning Committee responsible for regional conservation. This Committee consisted of local and regional politicians, interested organisations and officials from the state administration. On January 1, 1979, these Conservation Planning Committees were abolished and the work taken over by the County Councils.

⁽²⁾ Ministry for Public Works, Protection of Nature and Landscape, 1972.

Protected Areas

The following categories of nature and landscape protection exist in Denmark:

- Reserves
- Conservation Orders
- State-owned areas
- Monuments and sites
- Countryside of special value
- North East Greenland National Park

Reserves

In all, there are nine scientific reserves, to which there is no public admittance. The most well-known is "Tipperne" (646 ha), where extensive scientific research is taking place. Furthermore, there are a number of sanctuaries or reserves, to which there is occasional public admittance. The best-known are $B\phi t\phi$ (100 ha) and Dybs ϕ . For all these reserves there is a management plan. Furthermore, there are approximately 75 game reserves under the Game Act.

Conservation Orders

The Conservation of Nature Act makes it possible to protect private areas of scientific, scenic, historic, educational or recreational value. In all, approximately 135 000 ha or 3 % of Danish territory is protected by conservation orders. The provisions of the orders vary depending on whether areas are to be conserved for primarily scientific or primarily recreational reasons.

State-Owned Areas

Approximately 160 000 ha are owned by the Ministry of Environment and, of these, approximately 20,000 ha are administered from a protection point of view.

Monuments and Sites

All ancient monuments and sites are automatically protected under the Conservation of Nature Act.

Countryside of Special Value

The Conservation Planning Committees, in cooperation with the National Agency for the Protection of Nature, Monuments and Sites, issued a national landscape classification in 1971, based on landscape analyses for the whole country. The analyses are based on data (indicators) concerning natural science interest (e.g. ornithology, wildlife, botany), cultural history interest (e.g. a group of grave mounds or a well preserved manor-house environment) and recreational possibilities (e.g. beaches, lakes).

Based on this landscape analysis, the countryside is classified into three zones:

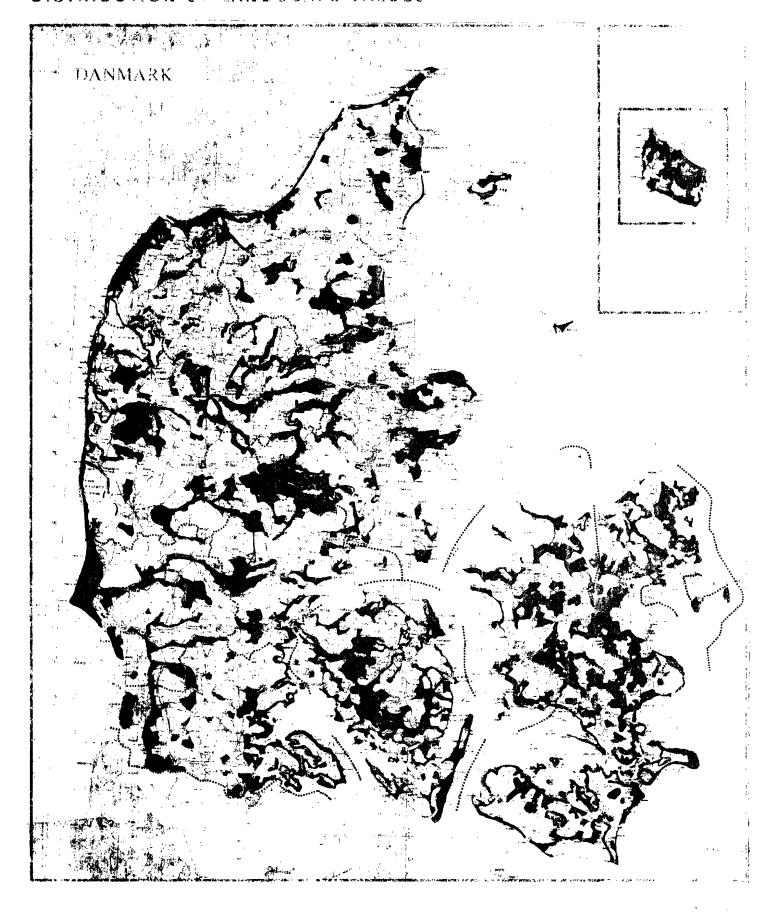
- Zone 1 Countryside of special value (approx. 25 %)
- Zone 2 Countryside of great value (approx. 25 %)
- Zone 3 Countryside in general.

This classification is shown on outline maps on a scale of $1/100\ 000$ which have been published.

The maps are used by the authorities for all categories of integrated planning and management of countryside.

South Denmark has today neither natural parks not national parks, but the open country as a whole enjoys considerable protection through the above mentioned mapping, planning legislation and the Raw Materials Act.

DISTRIBUTION OF LANDSCAPE VALUES



ZONE I Countryside of seedal value

ZONE II Countryside or great value

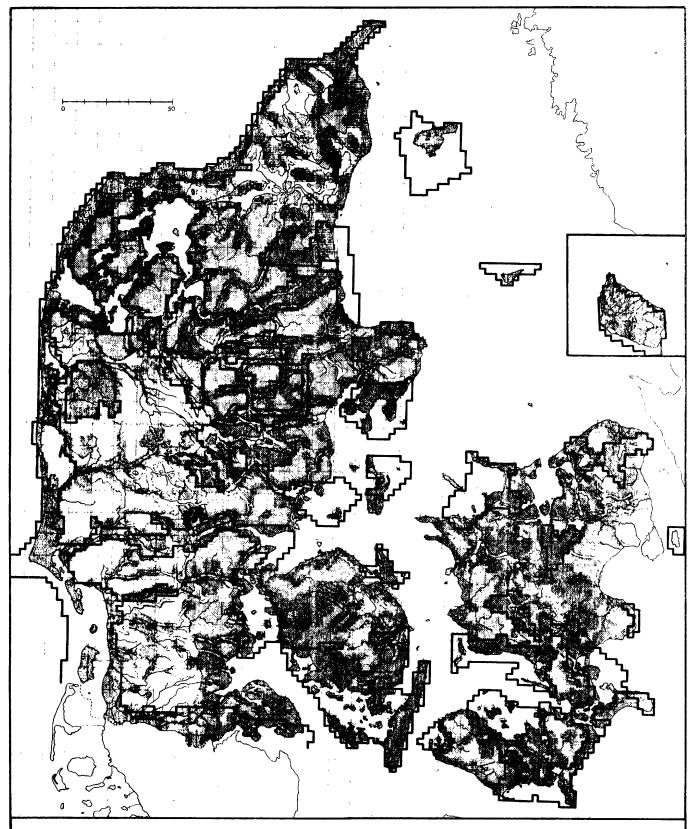
ZONE III Countryside in general

Statens naturfrequings- og landskabskonsulent 1975

On the basis of the landscape analyses already carried out, the National Agency for the Protection of Nature, Monuments and Sites published a survey in 1979 entitled "Larger National Nature Areas", i.e. a survey of natural areas which are in one way or another of national or international interest, e.g. due to their characteristics or because the areas in question are representative of a Danish type of landscape or provide special opportunities for recreational or touristic activities. The larger national nature areas are often characterized by a concentration of nature conservation values and contain valuable, characteristic, cultural landscapes whose designation as natural parks might be considered.

Greenland

In Greenland, the world's largest national park was set up by a special act in May 1974. Covering about 700 000km², the park takes in the whole of north east Greenland, including part of the icecap and adjoining sea. The park area comprises wide stretches of stone desert; flat valleys, rivers, rolling hills with grassy slopes and low willow thickets in sheltered sites; high, snow-covered mountains, a rough coastline - a maze of peninsulas, deep fjords, islands and glacier fronts - inaccessible throughout most of the year because of the pack ice. The entire park lies within the high Arctic area, from the Stauning Alps (72° N. Lat.) to a point near Canada's Ellesmere Island (83° N. Lat.).



Foreløbig oversigt over større nationale naturområder
Preliminary Survey of Larger National Nature Areas

Landskaber af væsentlig fredningsmæssig betydning
Country of special conservation interest
Større nationale naturområder

targer National Nature Areas

NORTH EAST GREENLAND NATIONAL PARK



2.2.3. Federal Republic of Germany

Organization

The Federal Republic of Germany is a federation consisting of eleven Federal States. Because of the constitutional situation, the Federal States enjoy considerable autonomy, especially as regards nature and landscape protection. The Federal Nature Conservation Law of 1976 is thus only an outline law; the Federal States independently adopt their own laws on the subject within the limits set.

The implementation and financing of nature and landscape protection are the responsibility of the Federal States (Länder). The Federal Ministry of Food, Agriculture, and Forests, which is responsible for nature and landscape protection at Federal level, thus has only an initiating and coordinating role, along with limited powers of providing financial support in special cases. The Federal Research Institute for Nature Conservation and Landscape Ecclegy, under the Federal Ministry, provide scientific assistance.

Other areas of environmental protection more or less closely connected with nature and landscape protection - e.g. prevention of water pollution, waste disposal, prevention of air pollution, noise prevention, protection against radiation and chemicals in the environment - are the responsibility of other ministries at Federal Government level, in particular the Federal Ministry of the Interior and its Federal Environmental Agency. Regional planning, the responsibility at federal level of the Federal Ministry for Regional Planning, Building and Urban Development (with its subordinate body, the Federal Research Institute for Geography and Regional Planning), is of particular importance for nature and landscape protection.

In line with the general division of administration, nature and landscape protection in the Federal States is normally organized on a tripartite basis. The competent Ministry (the Ministry of Agriculture in six of the Federal States and various other departments in others) is the supreme authority for nature conservation; at the intermediate level of administration the president of an administrative district (Regierungspräsident) is normally the senior nature conservation authority while the local district administration is the subordinate authority. These authorities are normally assisted at all three levels of administration by honorary bodies such as advisory boards or nature conservation officers.

A number of voluntary organisations are involved in nature conservation. Representatives of these organizations are often on the advisory boards of the above-mentioned departments. Some nature conservation organizations administer and/or own nature conservation areas; however, as they receive few State grants, they are limited in number.

• Protected areas

Under the Federal Nature Conservation Law of 1976, the following categories of nature and landscape protection exist in the Federal Republic of Germany:

- Nature conservation area
- National park
- Landscape protection area
- Natural park
- Natural feature
- Protected landscape feature

In addition the forestry laws of the Federal States contain special categories of protection such as protected forest areas and protective forests.

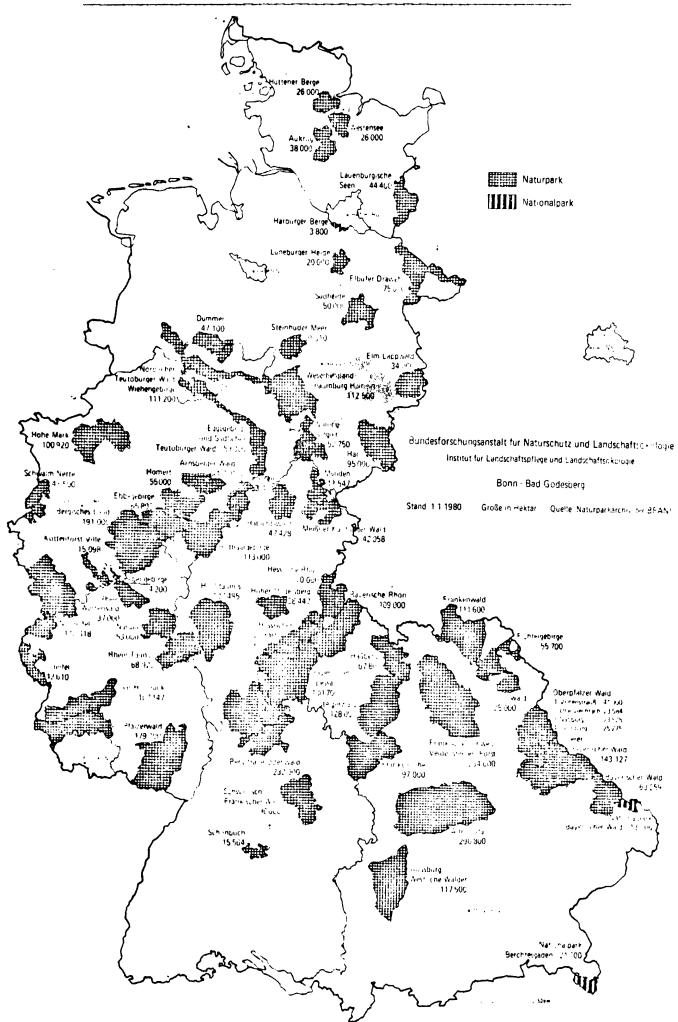
Nature Conservation Areas

The Federal Republic of Germany has an extensive network of nature conservation areas. Nature and landscape in these areas are protected to preserve species of flora and fauna and their habitats for scientific, natural or geographical reasons or because of their rarity, special characteristics or exceptional beauty. In 1977 there were 1 150 of these areas covering 435 000 hectares, i.e. 1.7 % of the total area of the Federal Republic.

Forestry, fishing and hunting are permitted to a limited extent in many nature conservation areas. Most nature conservation areas are privately owned and the private privileges pertaining there persist. However, the owner is obliged to accept a number of restrictive conditions. The nature conservation areas are generally freely accessible to the public; only some of the bird sanctuaries are closed during the nesting season.

National Park

At present there are two national parks in the Federal Republic: the "Nationalpark Bayerischer Wald" with an area of 13 000 hectares and the Berchtesgaden National Park with an area of 21 000 hectares. The establishment of three other national parks is under consideration: the North Frisian mudflats, Lüneburg Heath and the Lange Rhön.



The first two are nature conservation areas which could be managed more effectively if they were given national park status. Part of the Lange Rhön is a landscape protection area and part is a natural park. National parks are large areas with special characteristics which satisfy the conditions of a nature conservation area in most of their area and must be protected accordingly. They should be in a condition which is not, or hardly, influenced by Man and should in particular help to preserve as wide a range as possible of indigenous species of flora and fauna. National parks have their own administration.

Landscape Protection Areas

These areas are protected in order to preserve or restore the capability of the countryside because of the variety, special nature or beauty of the landscape or because of its special recreational importance. Agriculture and forestry, fisheries and hunting may be continued in the traditional manner provided that the character of the area is preserved or protection is ensured. About 25 % of the area of the Federal Republic is now designated as landscape protection areas.

Natural Parks

These are large areas which are particularly suitable for recreation because of their landscape features and which are set aside for this purpose under regional planning. They are intended to consist mainly of landscape or nature conservation areas. Apart from protection, there is planning, exploitation and management. A natural park is usually large enough to be divided into zones, with nature and landscape protection being given priority in the central zone. For the purposes of the recreation, most natural parks are easily accessible from the large towns and offer accommodation. When the first natural parks were set up, the aim was to bring people closer to nature. is clearly set out in an appeal by Alfred Toepfer, the initiator of the natural park system in Germany, for a network of natural parks: "Oases of calm for the wellbeing of persons seeking recreation, for the use of research and science, for the benefit of yough hikers and as an obligation to posterity". Agriculture, forestry and hunting are generally unrestricted in the natural parks. There are 58 natural parks in the Federal Republic, accounting for 17.2 % of this territory. Of these, three are cross-frontier natural parks - the German-Luxembourg, German-Belgian and German-Dutch natural parks. Various forms of organisations are used to administer the natural parks.

Natural Features

These are individual natural phenomena protected for scientific, natural or geographic reasons because of their rarity, special character or beauty. Typical natural features are individual trees or cliffs of a striking nature.

Protected Landscape Features

These areas help to ensure the capability of the countryside, the stimulation, organization and care of places and landscapes or protection against harmful effects. In some areas protection may extend not only to individual natural species but also to trees, hedges and other features of the landscape.

General

Until recently, nature and landscape protection in Germany suffered from the disadvantage that it was based almost exclusively on the various legal provisions of the Federal States. As an outline law, the Federal Nature Conservation Law of 1976 brought an improvement and a certain degree of simplification. Under this law, operations which may be harmful to nature must be avoided or offset. Landscape planning has been introduced to achieve the aims of nature and landscape protection in the Federal Republic and must be closely coordinated with town and country planning and special sectoral plans.

Apart from necessary exceptions, nature protection and forestry legislation in the Federal Republic of Germany provides for free accessibility of the countryside for recreational purposes.

2.2.4. France

• Organization

The protection of nature, sites and landscapes is the responsibility of the Ministry for the Environment and the Quality of Life.*

Work is divided between:

- the nature protection directorate, responsible for nature protection activities, i.e. the protection of flora and fauna, the setting up and management of nature reserves and national parks and the management of hunting and fishing;
- the quality of life delegation in respect of rural environments.

Various local and regional nature conservation organizations collaborate within the French Federation of Nature Conservation Associations (FFSPN). They conduct studies preliminary to the setting up of nature reserves, particularly in Brittany, on the Côte d'Azur and in Vendée, and manage the reserves which they themselves have set up. The Ministry for the Environment and the Quality of Life often entrust these associations with the management of nature reserves, and the French Bird Protection League (LPO) manages the nature reserve of Sept Iles on the Breton coast.

• Protected areas

The main categories of nature and landscape protection existing in France are :

- Nature reserve
- National park
- Regional natural park
- Game reserve
- Buffer zones
- Scenic area

^{*} Ministère de l'Environnement et du Cadre de Vie.

Nature Reserves

These reserves can be established pursuant to an Article added in 1957 to the law of 1930 on the protection of sites.

The nature conservation law of 1976 has defined what a <u>nature</u> reserve is:

Nature reserves are areas where special protection measures are applied, when it is particularly important to conserve the fauna, flora, soil, water, mineral deposits, fossils and, in general, the natural land or marine environment or when these elements have to be protected against any artificial influence liable to spoil them.

The following matters come under this heading:

- the preservation of animal or plant species and habitats threatened with extinction on all or part of the territory of France or presenting considerable qualities;
- the reconstitution of animal or plant populations or their habitats;
- the conservation of botanical gardens and arboretums forming reserves for plant species which are threatened by extinction, or are rare or remarkable;
- the preservation of remarkable biotopes and geological, geomorphological or speleological formations;
- the preservation or setting up of staging points on the major migratory routes for wild fauna;
- scientific or technical studies indispensable for the development of human knowledge;
- the preservation of sites of special interest for studying the evolution of life and original human activities.

Legislative measures must be accompanied by a dynamic and consistent policy of setting up reserves. Until 1973 this was done on a case-by-case basis, but in that year it was decided to draw up a nature reserve programme. This required a detailed ecological stock-taking of the whole territory of France.

The preliminary stock-taking of France's natural wealth in 1969 was intended to provide practical information and permit the review of 350 natural sites of biological or scientific value which would justify their classification as nature reserves.

A programme for one hundred priority nature reserves was drawn up and approved by the inter-Ministerial action committee on nature and the environment (CIANE) in December 1973. It was intended to implement it throughout the period of the Sixth plan and the beginning of the Seventh plan. Since then it has formed a priority objective, although it does not exclude consideration of other nature reserves asked for by associations or official bodies when there are reasons for designating them. Similarly, a policy of establishing reserves must extend to new sectors, as was made possible by the law of 10 July 1976: geological and mineralogical sites, botanical gardens, marine reserves.

Once a reserve is set up, the evolution of the natural environment must be supervised, application of the rules ensured and the public provided with guidance and information. If the nature reserves are not places of recreation intended for tourism but protected areas with a basically scientific character, it must be ensured - except in a few rare cases where the fragility of the environment demands almost total protection - that they do not become "museums" where nothing changes and that they remain places where the public, in particular the young, can observe nature and its living elements and thus know them better and conserve them.

Each reserve is appropriately managed in line with its special features and the funds which can be obtained.

As the setting up of a nature reserve is in the general interest the State normally covers the management costs (in the budget for the Ministry for the Environment and Quality of Life). However, the financial assistance of the local authorities (region, "department", municipality) or any other body is regularly sought.

On 1 September 1978, there were 36 nature reserves covering an area of 40 868 hectares. The largest reserve is the Camargue national reserve managed by the SNPN (13 100 hectares) while the smallest is the reserve of St Nicolas des Glénan managed by the municipality of Fouesnant (Finistère): 1.5 hectares.

A large number of small reserves have sprung up in recent years, in particular areas with considerable water and of ornithological and botanical importance. They include Estagnol lake (78 hectares), Cerisy State forest (2 124 hectares), the Caravelle peninsula (517 hectares), Cousseau lake (600 hectares) and Saint Denis du Payré (206 hectares).

The National Parks

The purpose of the national parks is:

- to protect flora, fauna and the natural landscape (which is often of considerable beauty) against harmful influences;
- to offer the public the opportunity to enjoy it;
- to promote the development of certain rural areas (especially those in outlying areas).

France has five <u>national parks</u>:

- the Vanoise national park (1963) 1 250-3 852 m;
 park area: 52 800 hectares
 no permanent limitalitants;
 peripheral zone: 144 000 ha;
 23 000 inhabitants
- Port Cros national park (1963) park of 700 hectares, surrounding maritime zone 600 m broad
- West Pyrénées national park(1967) 1 100-3 298 m;

 park area : 48 0000 hectares;

 no permanent inhabitants;

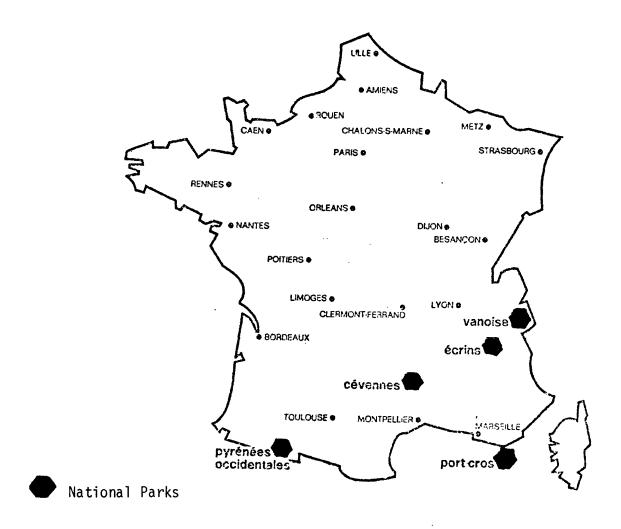
 peripheral zone : 206 000 ha;

 34 000 inhabitants
- Cévennes national park (1970) park area : 85 700 hectares;
 434 inhabitants;
 peripheral area : 237 000 ha;
 41 000 inhabitants.
- Ecrins national park (1973) 800-4 102m;
 park area: 91 800 hectares;
 no permanent inhabitants;
 peripheral area: 128 000 ha;
 26 400 inhabitants

In preparation:

- Mercantour national park (30 000 hectares and 45 000 hectares);
- Iles d'Hyères national park (1 900 hectares);
- Haute Ariège national park

NATIONAL PARKS



Source : Ministère de la Culture et de l'Environnement, 1976.

The national parks and their buffer zones occupy about 2 % of French territory and are mainly in mountainous areas. In France, the national parks are large wild areas. They possess considerable scientific value. The parks are divided into zones: the peripheral zone, or pre-park, forming a buffer zone and receiving visitors; then there is the park in the strict sense of the term where human activities are restricted to a minimum. There are rules for agriculture, forestry and grazing. Hunting is prohibited (except on certain conditions, in the Cévennes national park). Visitors are not allowed to camp, make a noise, bring in dogs or pick anything. Hikers, cyclists and skiers are allowed to enter. Motor vehicles are prohibited, except in the Cévennes.

The State decides to set up a national park after consulting the persons concerned. Management is the responsibility of an administrative council consisting of the prefect of the personner and other regional and local administrators appointed by the Minister for the Environment and the Quality of Life. The director is responsible for day-to-day administration. The council's administration covers only the park in the strict sense of the term.

The recreational infrastructure in the peripheral zone is intended to improve the development and economy of the area. However, the reception potential is often inadequate for the large stream of visitors. An attempt is being made to increase collaboration between the various bodies and also to provide better information and increase awareness among the young.

Regional Natural Parks

France also has regional natural parks, set up by order in 1967. The regional parks help promote rural development. There has been such an exodus from the country in France that two-thirds of the population occupy 3% of the French territory. As a result, living conditions have deteriorated in the country: the population has grown old, communal amenities declined and there is insufficient manpower for agricultural activities, leading to adverse effects on the preservation of sites. The urban population has lost contact with nature. The regional parks provide an opportunity to re-establish this contact, not to the disadvantage of the local population, but in collaboration with it. Urbanization has no place in the regional parks.

A regional natural park is an area of 10 000-200 000 hectares, consisting of a few score villages. The area is chosen for its beauty, its special character, its natural resources and its cultural and historical heritage or for the purposes of conserving a sensitive site against the pressure of civilization. Usually, they are economically backward rural areas on the outskirts of large population centres.

The regional parkes have three aims :

- to improve the living conditions of the local population (in particular through more effective use of agriculture and crafts)
- to protect fauna and flora, sites and landscapes;
- to educate the urban population and introduce it to nature and rural life.

A regional park is created on the initiative of the local population, the local authorities, trade and industry and regional associations and authorities.

The study phase (survey, proposals for development, drafting of a costed programme and a timetable) is followed by the drafting of the park's constitutive charter. This charter is drawn up by the region, along with the local authorities and interested bodies, which collaborate on the wording and undertake to respect it after signature. In view of the support of the authorities concerned, this charter enables the Government to take a favourable decision on designating the area a regional natural park once the inter-Ministerial committee has expressed its opinion.

There are twenty regional parks already existing and two in preparation:

Regional natural park	Year set up	Area in hectares	Number of villages	Inhabitants
Armorique	1969	65 000	79	30 000
Briere	1970	40 000	16	50 000
Brotonne	1974	50 000	37	30 000
Camargue	1970	82 000	2	8 000
Corse	1972	150 000	53	20 000
Forêt d'Orient	1970	60 000	38	17 000
Haut-Languedoc	1073	132 000	70	25 000
Landes de Gascogne	1970	206 000	23	26 000
Lorraine	1974	181 000	196	59 000
Morvan	1970	173 000	64	33 000
Normandie-Maine	1975	234 000	152	89 000
Pilat	1974	60 000	42	28 500
Saint-Amand-Raismes	1968	10 000	15	2 500
Vercors	1970	135 000	5	20 000
Vosges du Nord	1976	118 000	97	82 000
Luberon	1977	120 000	32	80 000
Martinique	1976	70 000	35	80 000
Montagne de Reims	1976	51 000	68	33 000
Volcans d'Auvergne	1977	241 000	54	20 000
Queyras	1977	60 000	11	2 000

In preparation:

Regional natural park : Ardenne

Marais Poitevin

The other forms of protection for nature, landscapes and sites in France are as follows :

Game reserves,

where hunting is considerably restricted.

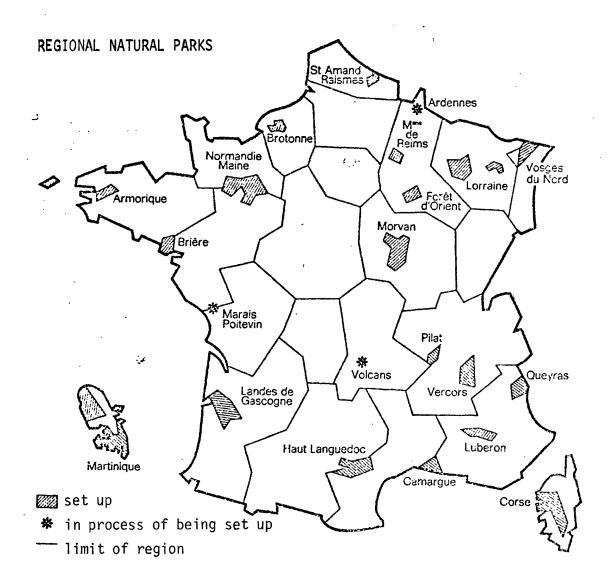
Buffer zones,

which exist not only around national parks but also around a number of large towns and reserves (in particular the Camargue) to preserve sensitive terrains and sites against building, etc.

Scenic zones,

where there are also restrictions on building, mainly for aesthetic and architectural reasons.

In France too, valuable sites and landscapes are subject to increased pressure from recreation-seekers. It is to hope that they will enjoy sufficient protection in the long term.



-Source: Ministère de la Culture et de l'Environnement, 1976

2.2.5. Ireland

• Organisation

Since the passing of the Wildlife Act of 1976, nature protection has been the responsibility of the Department of Fisheries. The Forest and Wildlife Service of that Department, in addition to implementing the State afforestation programme, has responsibility for nature conservation matters including the protection of flora and fauna, the setting up of nature reserves, etc.

- The National Parks and Monuments Service manages National Parks. This service is provided by the Office of Public Works which is part of the Department of Finance.
- Foras Forbartha is the national agency for physical planning and construction research.

The Government recently established a Department of Environment.

An Taisce (The National Trust for Ireland), one of the most active private organisation for nature conservation manages three reserves.

There are several acts which deal with protection, namely: the Wildlife Act of 1977, the Local Government Act of 1963, the Bourn Vincent Memorian Park Act of 1932, the State Property Act and the Local Government Planning and Development Act.

Protected Areas

Nature Reserves

The Wexford Wildfowl Reserve (160 ha) is a habitat of international importance, primarily as the major wintering ground for Greenland Whitefronted Geese. Held jointly by the State and a private organization it is open to the public and will be given the status of a nature reserve under the 1976 legislation.

Other important bird habitats include North Bull Island (1 390 ha), Loch Rusheen (120 ha) and the Skelligs (two rocky islands in the Atlantic Ocean which shelter 10 000 pairs of gannets).

There are also 56 "no shotting areas" designated to protect certain species of birds.

National Parks

Ireland at present has two National Parks, namely Killarney National Park, Co. Kerry (also called the Bourn Vincent Memorian Park) covering 8 100 ha, and Glenveagh National Park, Co. Donegal, covering 10 100 ha. The latter is a recent acquisition and is not yet open to the public. Two further National Parks are in process of being set up, one at Letter-Grack where the nucleus of the park has already been acquired and one in the Burren area where a small area has been acquired.

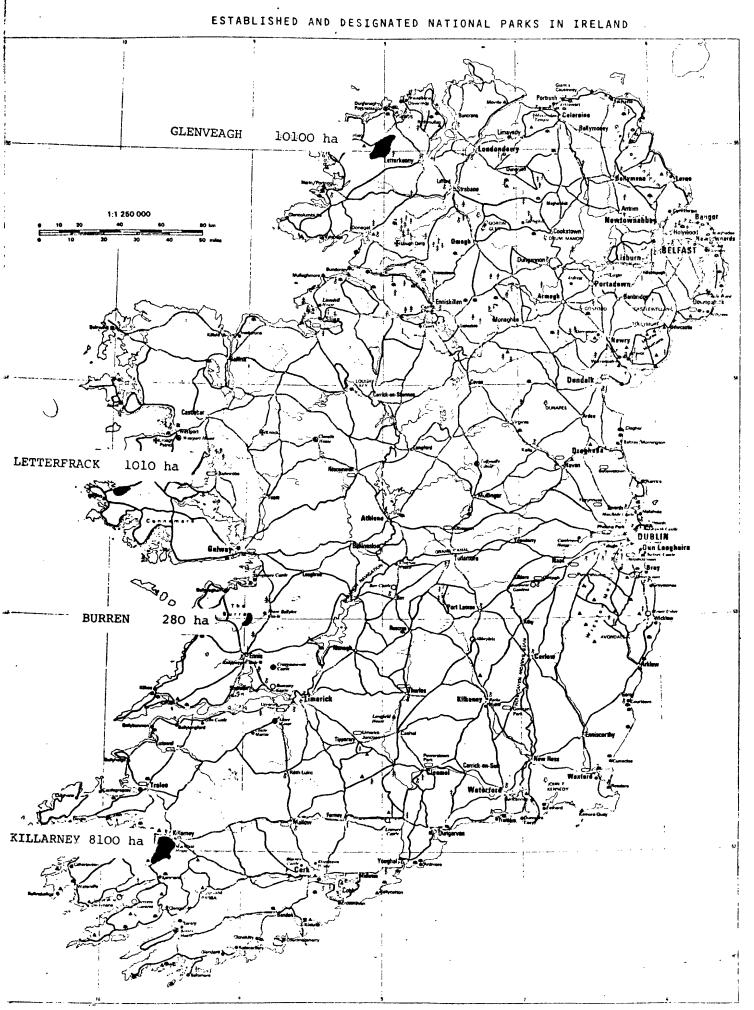
Pedestrian access to the Killarney National Park is unrestricted and this will also apply in the other National Parks when they are opened to the public, although some areas within these Parks may be zoned as Strict Nature Reserves to which even pedestrians access would be controlled. Motor traffic is subject to severe restriction.

Information concerning Killarney National Park is available at three centres in the Park. A main Visitors Centre is being planned. Information centres are also planned for Glenveagh and Connemara.

It is the policy of the Commissioners of Public Works to manage the National Parks so that they will conform to the criteria laid down by the IUCN.

The major problems experienced in the National Parks are control of deer population and control of infestation by Rhoddondendron ponticum.

Since the National Parks and Monuments Branch was set up in 1969, it has been actively engaged in the setting up of a network of National Parks in order to conserve areas of outstanding scientific and scenic value. However, the pressure of recreational activities especially on the coasts, is increasing. Foras Forbatha, the government advisory body for physical planning, is looking for areas of ecological and geological interests and is urging the local authorities to protect them.



Source: An Foras Forbartha, 1979

2.2.6. Italy

• Organisation

Nature conservation is the responsibility of the Ministry of Agriculture and Forestry. The Italian State Forestry Agency manages nature reserves and three of the national parks: Stelvio, Circeo and Calabria.

Italy has no basic set of regulations on nature conservation (fauna, flora and biotopes), but a number of measures for the conservation of Italy's natural environment have so far been adopted:

- under laws which contain provisions suitable for the purpose but which were designed to achieve different objectives (laws on fishing, hunting, the conservation of areas of natural beauty, the protection of the soil for hydrogeological purposes, etc.);
- measures enacted by Parliament or the Central Government relating to specific environmental areas (for example, laws and decrees governing national parks);
- specific regional measures also relating to particular environmental areas;
- as a result of administrative decisions by the Central Government relating to specific areas outside national parks;
- as a result of international agreements.

Protected Areas

The main categories are :

- Nature reserves
- National parks (Parchi Nazionali)
- Regional parks (Parchi Regionali et Provinciali)
- Natural parks (Parchi Naturali)

Nature Reserves

In 1959 the Ministry of Agriculture and Forestry, through the State Forestry Agency, began setting up nature reserves in areas managed by the Agency.

These reserves are of various types: fully protected (integral reserves), strictly administered, partial (zoological and anthropological), special (for specific protected natural sites and forestry areas and animal population areas) and biogenetic reserves; the classification follows the typology adopted by the Council of Europe.

The State Forestry Agency has set up 101 reserves of various types, with a total area of 55 316 hectares.

Five of these reserves are wetlands, and there are others of great interest, such as the island of Montecristo in the Tuscan Archipelago, not far from the island of Elba, the nature reserves of the Val Grande (2 257 hectares) in the eastern alpine region of Piedmont, and the nature reserves of the Bellunesi Dolomites in the Eastern Alps, comprising a total area of about 17 000 hectares.

Ten other nature reserves with a total area of some 7 000 hectares have been established by the Friuli-Venezia Giulia and Trentino Alto Adige Regions, and also by the Universities of Pavia and Camerino.

National Parks

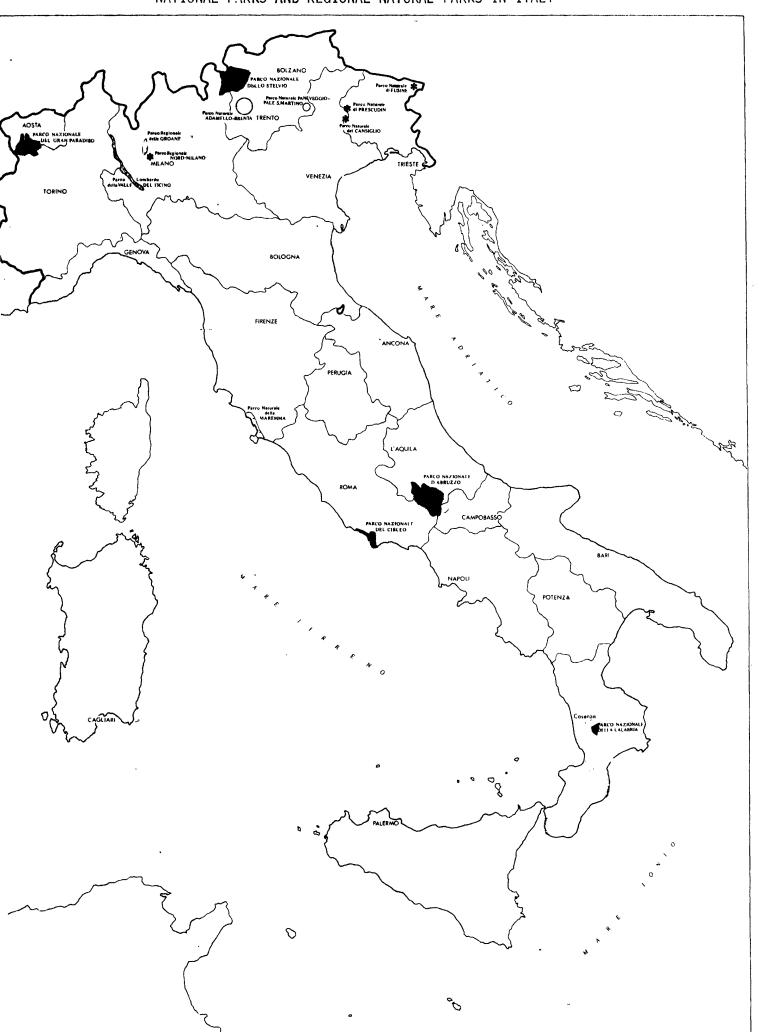
Italy has five National Parks:

	<u>Area in ha</u> .
Gran Paradiso NP	62 000
Stelvio NP	131 161
Abruzzo NP	39 160
Circeo NP	8 300
Calabria NP	18 000
Total	258 621

For Italy's national parks (excluding the one in Calabria, formally established in 1968) the laws setting them up, which date back to 1922 to 1935, pursued the objectives of environmental conservation and of tourist development, and this has brought about an ambiguous situation which has contributed to the development of activities incompatible with the very concept of national parks (residential development, improved mountain access facilities and so on).

The biggest management problems have taken place in the smallest of the four parks, the Circeo National Park, which is particularly vulnerable owing to its proximity to Rome and its attractions as a seaside resort.

Gran Paradiso borders in the west on the French "Parc National de la Vanoise". The aim is to achieve mutual cooperation. Stelvio is the largest national park in Italy, a very large Alpine natural area is under protection.



Regional Parks and Natural Parks

Italy has 9 natural and regional parks (Parchi Regionali e Provinciali):

Parco Lombardo della Valle del Ticino	(1974)	120 000 ha
Parco di interesse regionale Nord Milano	(1975)	600 ha
Parco di interesse regionale della Groane	(1976)	3 000 ha
Parco Naturale della Maremma	(1975)	7 800 ha
Parco Naturale di Fusine	(1971)	45 ha
Parco Naturale del Cansiglio	(1972)	253 ha
Parco Naturale di Prescudin	(1974)	1 647 ha
Parco Naturale Adamello-Brenta	(1967)	43 600 ha
Parco Naturale Paneveggio-Pale S Martino	(1967)	15 700 ha

The last five parks are administred by the State Forestry Agency. These parks are called "natural parks". There is, however, at the present stage, no nationally accepted definition in Italy of a natural park (synonymous with a regional park or a regional natural park). In general, however, this concept is based on models in other European countries where the natural park is designed more for public recreation purposes than for the conservation of eco-systems, and intended to safeguard the more important features and local customs, which are traditionally agricultural, woodland and pastoral, and which find their primary expression in the man-made landscape.

As in the other European countries, this sort of park is well suited to the current situation in Italy, and therefore several are likely to be set up.

Wetlands

Although wetlands most often coincide with one or another type of protected areas described above, they deserve special mention here.

Indeed, a policy for the conservation of <u>wetlands</u>, both as biotopes to be safeguarded and as the habitats of aquatic birds, was introduced in Italy in 1970 (European Nature Conservation Year proclaimed by the Council of Europe) and was implemented with the ratification of Ramsar Convention.

At the time of ratification, Italy drew up a list of 18 wetlands, totalling 11 898 ha in all, for inclusion in the register of wetlands of international importance. Hunting was already forbidden throughout these areas.

By various administrative decisions, another five areas totalling 7 340 ha were subsequently added to the list of wetlands of international importance, thus bringing the total area of Italian wetlands covered by the Ramsar Convention to 19 329 ha. Italy now occupies the tenth position among the 18 States which have ratified the Convention, in terms of the area of wetlands of international importance listed in the Ramsar Convention.

2.2.7. Luxembourg

• Organization

Nature protection is the responsibility of the Ministry of the Interior. The Minister is assisted by an advisory committee on nature and landscape protection. The Department for the Conservation of Nature of the Administration of Waters and Forests (Service de la Conservation de la Nature de l'Administration des Eaux et Forêts) administers the protected areas.

Luxembourg has some 30 private nature conservation organizations forming a League which administers a number of small reserves and receives a Government subsidy.

Protected Areas

To mark European Nature Conservation Year (1970) the Ministry of the Interior presented its "Plan de Secteur" with four types of protected areas:

Nature Reserves

Luxembourg possesses a growing number of small nature reserves, forestry reserves and game reserves for protection of certain species of game.

Natural Parks - which are

covered by rules to preserve the character and diversity of the landscape and protect cultural and scientific values, flora and fauna. These parts are also of considerable importance for tourism. A German-Luxembourg natural park was set up in 1964. It is 78 400 ha in area, of which some 35 800 ha are on Luxembourg territory. A Belgian-Luxembourg natural park is being planned.

Protected Landscapes

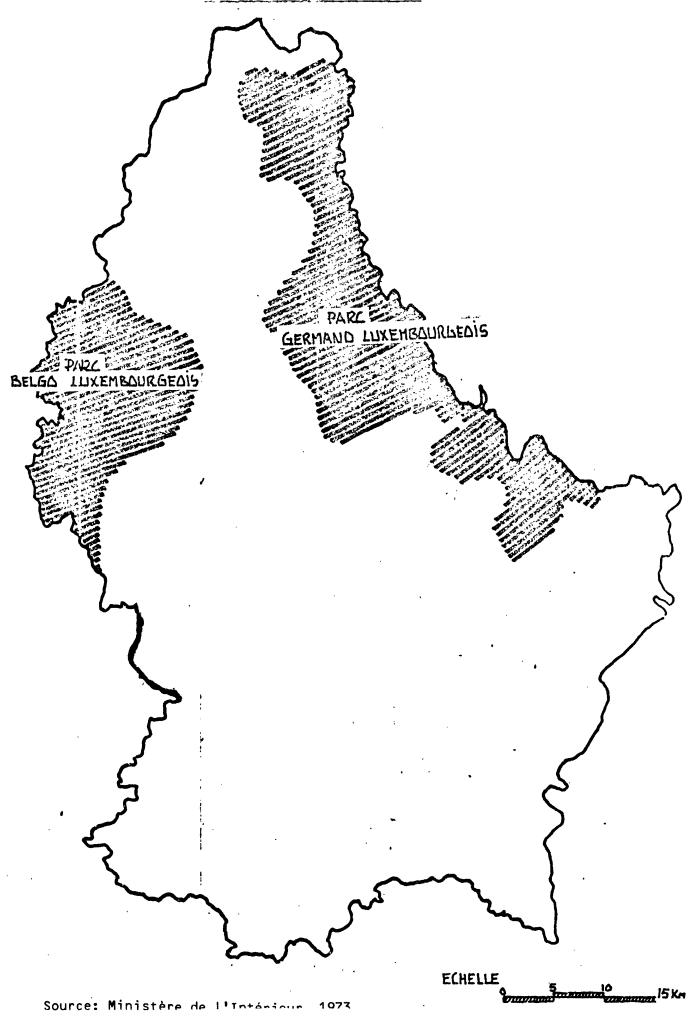
demarcated areas which issue rules to preserve the characteristic features of the landscape.

Sites or natural monuments,

small areas which qualify for protection because of their rarity value, beauty or scientific or cultural importance.

The plan also includes legal provisions to prevent damage being done to nature, even outside the official nature reserves. A stock-taking of the country has been conducted to identify parts of the country-side which qualify as nature reserves. Areas which are on the list but which have not (yet) become nature reserves enjoy some form of protection. The same is true of landscapes of particular value where no topsoil may be removed, no roads built, no trees felled and no hedges destroyed. For many years tourists have flooded Luxembourg's attractive countryside, becoming a source of revenue; it is thus only realistic to protect the countryside against harmful effects by means of planning and legal measures.

NATURAL PARKS IN LUXEMBOURG



2.2.8. The Netherlands

• Organization

Nature and landscape management is the responsibility of the Directorate-General for Nature Conservation, Recreation and Media of the Ministry for Cultural Affairs, Recreation and Social Work. The Minister is assisted by the Nature Conservation Council, under which there are a number of scientific committees. In the provinces the nature conservation advisers are responsible for nature management activities and support for nature and landscape conservation. These officials belong to the State Forestry Administration, which comes under the Ministry of Agriculture and Fisheries. The State Forestry Administration administers various national nature reserves and the State forests. This executive department also has two research institutes: the National Institute for Nature Management and the National Institute for Research into Forestry and Agriculture.

Various private organisations are committed to nature and landscape protection in the Netherlands and the "Provincial Landscapes" groups purchase and administer nature reserves and estates and receive government subsidies in return. The Association for the Protection of Birds runs an information service and administers a number of bird sanctuaries. There are also a number of associations which critically inspect government policy on the environment, nature and the landscape; they include the Nature and Environment Foundation, the National Association for the Preservation of the Wadden Sea (tidelands) and a large number of regional and local environmental and action groups.

Protected areas

The following types exist in the Netherlands:

- Nature reserves
- National parks
- State forests

Nature Reserves

In the Netherlands there are a large number of <u>nature reserves</u> and protected natural areas of various types and sizes. Ownership can be broken down as follows:

- Ministry for Cultural Affairs, Recreation and Social Work (administered by the State Forestry Administration), 31 500 hectares;
- Ministry of Agriculture and Fisheries (administered by the State Forestry Administration), 22 500 hectares;

- Ministry of Finance (administered by the Crown Lands), 25 000 hectares;
- Association for the Preservation of Natural Monuments in the Netherlands, 32 400 hectares;
- other private organisations, 36 000 hectares.

This adds up to 147 400 hectares or 3.5% of the Netherlands. Some of these areas are protected nature reserves, which means that they are closed to the public. Most of the nature reserves are freely accessible to members of the public provided they keep to the footpaths. The nature reserves are administered on the basis of a management plan. The largest nature reserves include:

Fochteloër Veen		407	ha
Boschplaat	4	400	ha
Dwinglose Heide		923	ha
De Wieden	3	375	ha
Deelerwoud	1	150	ha
Naardermeer		752	ha
Noordhollands Duinreservaat	4	760	ha
Voorne's Duin		750	ha
Grote Peel		923	ha

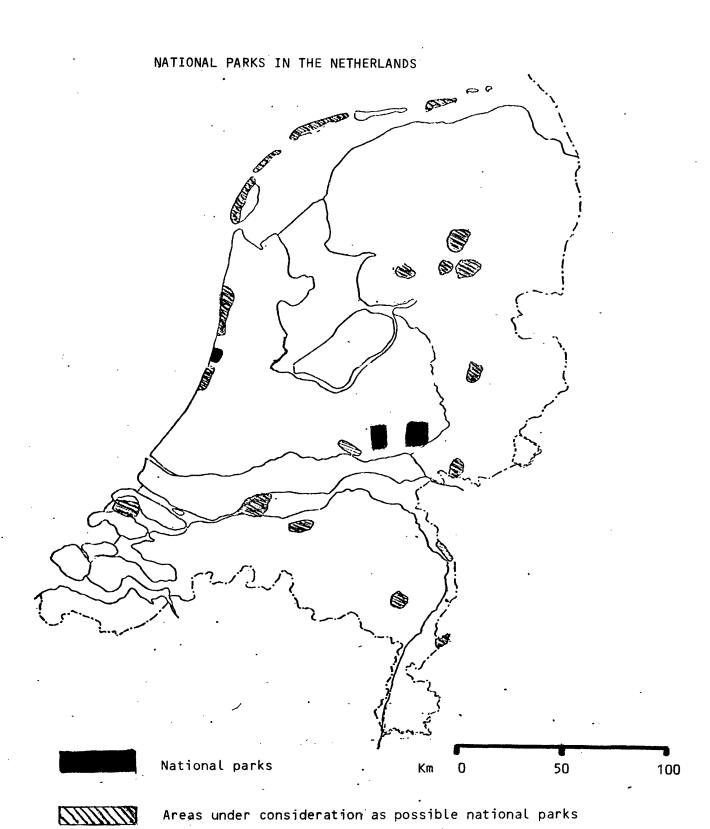
The term "natural monument" deserves special mention. This is a possession of the Association for the Preservation of Natural Monuments in the Netherlands with protected status, although it needs not to be a nature reserve. A natural monument can also take the form of an estate, i.e. anhistorical building with its surrounding lands and countryside, or any other historically developed landscape unit.

National Parks

Netherlands has three national parks:

Nationaal	Park	de	Hoge Veluwe	(1935)	5	450	ha
Nationaal	Park	de	Veluwezoom	(1930)	4	600	ha
Nationaal	Park	de	Kennemerduinen	(1950)	1	240	ha

Some parts of the national parks are closed to the public. These mainly take the form of game sanctuaries. The number of visitors is high: 543 000 people visited the Hoge Veluwe and 267 000 the Kennemerduinen in 1977. Recreation plays a major role in both parks: in the Hoge Veluwe the well-known Kröller-Müller Museum (collection of Van Gogh and modern painters and sculptors) and the restaurant attract crowds of visitors and in the Kennermerduinen many people relax on the lakes, in the play areas and on the camping site. This utlization does not entirely coincide with the IUCN definition (3.3.1) and is not completely covered by the definition drawn up by a Dutch Government committee in 1975: **



Drawn by the "Environment and Consumer Protection Servie of the EEC, 1979 on the bases of different sources.

A national park is a connected area of at least 1 000 hectares consisting of countryside, water and/or woods, with special natural features and landscape and special plant and animal life. The area belongs to the public authorities and/or legal persons pursuing the aim of nature conservation. The area may also be owned completely or in part by other bodies or private individuals, provided it is permanently administered as a national park.

A national park is designated or recognized by the central authorities and administered as a whole under supervision of the public authorities in accordance with instructions laid down by the central authorities. Management is intended to maintain and/or develop the features of natural, landscape and cultural value, at the same time providing an opportunity to get to know and enjoy the area's beauty and value.

The above mentioned Government memorandum states that another twenty areas are under consideration as possible national parks. However, the restrictions on land utilization are causing major difficulties in setting them up.

State Forests

The Netherlands has 100 State Forests with a total area of 22 000 hectares. The State Forestry Administration is in charge of the management and exploitation of these forests. This department, is currently converting the management role from a mainly timber production to a multiple purpose role in which nature management and recreation will take their place alongside exploitation. Many forests are accessible to hikers and are provided with marked paths. There are also some educational centres for visitors. Forestry conservation in the Netherlands is covered by the Forestry Law and a number of regulations including the prohibition on felling trees and the obligation to replant.

General comments

Several smaller stretches of countryside and valuable landscape form part of the estates which are sometimes owned by the Association for the preservation of Natural Monuments or by provincial organizations (the "landscapes") and are sometimes in private hands. If an owner opens up his estate to the public, he receives a government subsidy under certain conditions.

The Wadden area should be mentioned separately. This area is adjacent to the German and Danish mudflats. The Wadden Sea - with its rich food resources - is of considerable value for biology (in particular ornithology) and fisheries. Various nature reserves and forests are found on the Wadden islands. However, there is considerable pressure on these nature areas from people seeking recreation. In 1974, the text of an international convention was drawn up with a view to cooperation between the Governments of the Netherlands, the Federal Replublic of Germany and Denmark for the conservation and management of the mudflates area in general.

Nature conservation and nature management have a long tradition in the Netherlands and a good deal of information and experience has now been gained in this sector. Since the pressure on the countryside is nevertheless still increasing as a result of cultivation and civil engineering, the need for landscape protection is becoming more and more a matter for general discussion.

One aim of government policy is thus "conservation in the form of adequate planning protection and the establishment of good and permanent management in all natural areas still remaining in the Netherlands" 1). The Town and Country Planning Law and the Nature Conservation Law lay down that regional plans and urban development plans shall be drawn up to this end. The latter are binding for ten years but one objection is that local interests often prevail over the general interests of nature and landscape conservation when they are drawn up.

Ecological maps were recently (1976) drawn up covering the whole country 2). The maps (1:200 000) are used for town and country planning.

The establishment of national landscape parks is called for to protect the various valuable cultivated landscapes found in the Netherlands. (3)

A Government committee has recommended that 17 such areas be set up.

A start should be made with five pilot areas. Establishment and management should be incorporated into the regional plan.

To administer biologically valuable cultivated land, even outside the future national landscape parks, the central authorities plan to conclude management and maintenance agreements with individual farmers so that their agricultural activities can also be based on nature conservation 4).

¹⁾ Structural view of nature and landscape conservation.

Ministry for Cultural Affairs, Recreation and Social Work, 1977.

²⁾ Environmental Survey of the Netherlands, A landscape ecological survey of the natural environment in the Nederlands for physical planning at national level.

³⁾ Memorandum on national landscape parks, Lover House, 1974-1977 session 13284, No 1-2.

⁴⁾ Memorandum on the relationship between agricultural and nature and landscape conservation, Lower House, 1974-1975 session, 13287. A 1-2.

2.2.9. United Kingdom

• Organisation

England, Scotland, Wales and Northern Ireland pursue broadly similar policies for the protection of the environment but have different legislative and administrative arrangements for implementing them. The departments responsible for matters affecting the physical environment are:

The Department of the Environment in England which co-ordinates the planning functions of 45 separate County Councils;

The Welsh Office which co-ordinates the planning functions of 8 separate County Councils in Wales;

The Scottish Development Department which carries out planning through 9 regional authorities in Scotland;

The Department of the Environment for Northern Ireland which acts through 6 divisional offices.

In addition, the Ministry of Agriculture, Fisheries and Food
(England and Wales) the Department of Agriculture and Fisheries for
Scotland and the Department of Agriculture for Northern Ireland are
concerned with physical planning relating to agricultural land. In
Northern Ireland the Forestry Service of the Department of Agriculture
as largest landowner in the Province is responsible not only for
timber production but also for the use of its land for recreation
and the conservation of wildlife. Most of the areas demarcated for
these purposes are on land owned by the Forest Service.

The central government has a number of agencies with executive and advisory responsibilities for landscape and nature conservation. The main such agencies are as follows:

The Countryside Commission for England and Wales is a statutory body which keeps under review the conservation and enhancement of the natural beauty of the countryside and the provision and improvement of facilities for the enjoyment of the countryside. The Countryside Commission's principal responsibilities in relation to protected areas lie in their power to designate National Parks and Areas of Outstanding Natural Beauty and to define Heritage Coasts.

Scotland has a separate Countryside Commission with broadly similar purposes to that for England and Wales. Northern Ireland has a similar body, the Ulster Countryside Committee, which has advisory but not executive powers.

The Nature Conservancy Council is the official body for nature conservation in Great Britain with particular responsibilities for establishing and managing nature reserves and for promoting scientific research. In Northern Ireland, the Nature Reserves Committee gives advice on the establishment and management of nature reserves and areas of scientific interest, but has no executive powers.

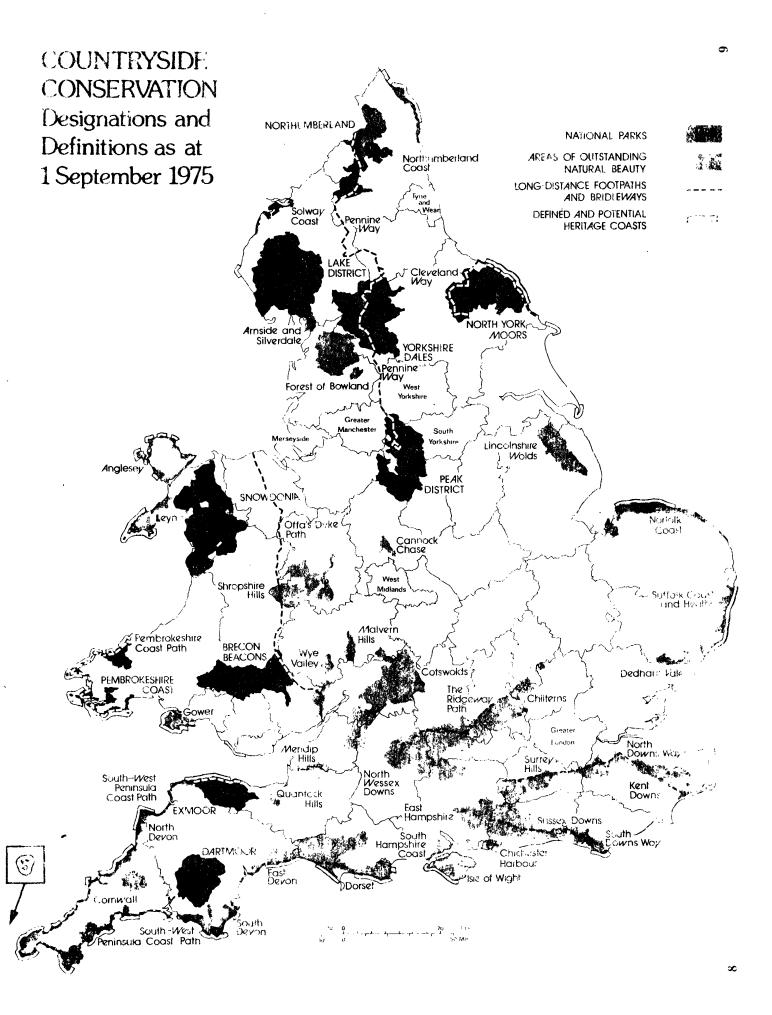
The Forestry Commission has the general duties of promoting the interests of forestry in Great Britain, but in undertaking these duties the Forestry Commission is required to take into consideration the need to safeguard and enhance the beauty of the landscape to conserve wildlife, to pay due regard to other land use interests and to meet reasonable requirements for access and recreation. The Forestry Service of the Department of Agriculture has similar duties in Northern Ireland.

In addition to the Government departments and agencies set out above, a large number of private bodies concerned with landscape and nature conservation have been active in the United Kingdom for a long time. These include the National Trust, the Ulster Trust for Nature Conservancy, the Royal Society for the Protection of Birds, the Wildfowl Trust, the Society for the Promotion of Nature Conservation, the County Naturalists' Trusts and the Scottish Wildlife Trust.

• Protected areas

The following categories of nature and landscape protection exist in the United Kingdom:

National Parks
National Parks Direction Areas
Areas of Outstanding Natural Beauty
Special Landscape Areas
Heritage Coasts
Green Belts
National Nature Reserves
Local Nature Reserves
Sites of Special Scientific Interest



National Parks

National Parks in England and Wales are extensive tracts of generally wild and largely unspoilt country designated by the Countryside Commission and confirmed by the Secretary of State for the Environment or for Wales. They serve 2 main purposes - the preservation and enhancement of their natural beauty and the promotion of their enjoyment by the public. There are 7 National Parks in England and 3 in Wales which cover 9 % of the total area of England and Wales.

	Area (ha)
Dartmoor National Park	95 000
Exmoor National Park	68 600
Peak District National Park	140 920
Lake District National Park	225 160
Northumberland National Park	103 038
Snowdonia National Park	218 762
Brecon Beacon National Park	134 364
Yorkshire Dales National Park	176 045
North York Moors National Park	143 220
Pembrokeshire Coast National Park	58 500
	1 363 609

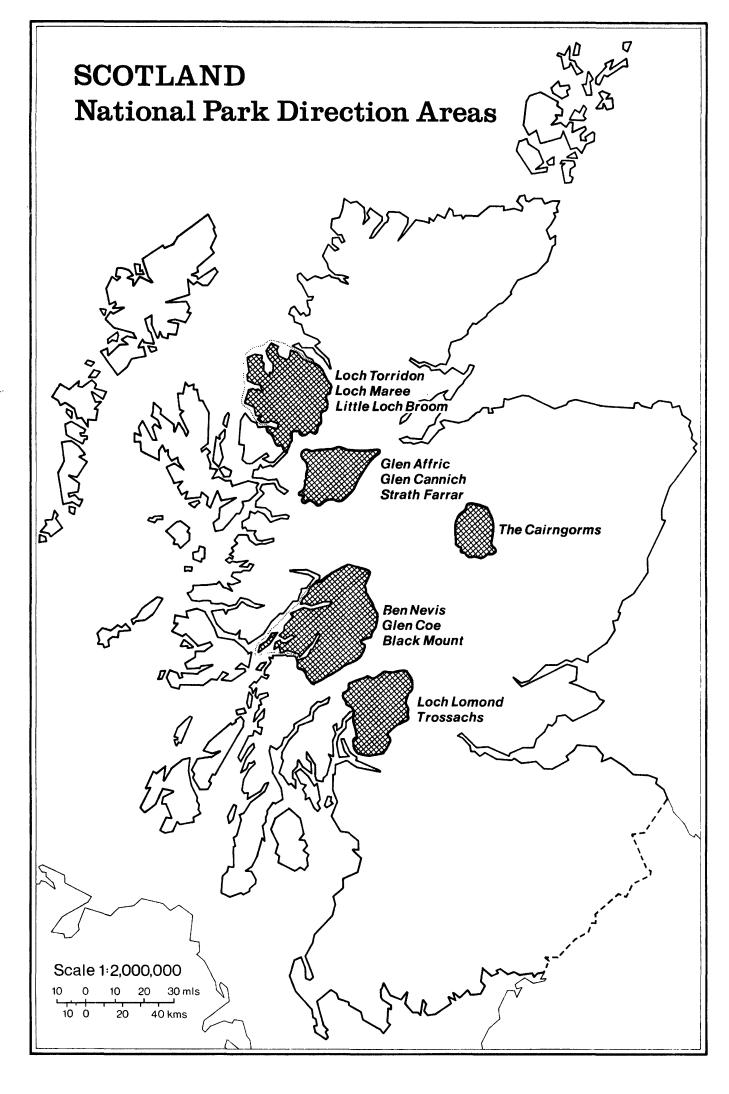
When a National Park is designated, there is no change in the ownership of land and there is no question of nationalisation of the land as public property. Much of the land is therefore privately owned, although small areas may be owned by such bodies as the National Park Authority, the Forestry Commission, the Ministry of Defence, Regional Water Authorities, the Crown Estates Commission or the Nature Conservancy Council. Administration of a National Park is the local responsibility of either a special committee or joint Planning Boards set up by the local authorities.

National Park Direction Areas

At present there are no National Parks in Scotland. There are, however, 5 areas called National Park Direction Areas, in which planning proposals must obtain sanction from the Secretary of State for Scotland. These areas cover 619 400 hectares of largely mountainous land.

·	Area (ha)
Ben Nevis - Glen Coe - Black Mount	213 700
Glen Affric - Glen Cannich - Strath Farrar	85 000
Loch Lomond - Trossachs	110 900
Caringorms	46 600
Loch Rorridon - Loch Maree - Little Loch Broom	163 200
	619 400

No National Park is provided or proposed in Northern Ireland at present, but there are country parks and forest parks there, as in other parts of the U.K.



Areas of Outstanding Natural Beauty

In England and Wales, Areas of Outstanding Natural Beauty are designated by the Countryside Commission and confirmed by the Secretary of State for the Environment or for Wales. In Northern-Ireland, the Countryside Committee recommends designation which is carried out by the Conservation Branch of the Department of the Environment for Northern Ireland. The primary purpose of designation is to encourage the preservation and enhancement of the natural beauty of these areas by local authorities. Areas of Outstanding Natural Beauty are not be be regarded as secondary to National Parks in terms of landscape importance, although they may be less spectacular in visual terms, smaller and more intensively used for agriculture and thus less suitable for recreation. There are at present 33 confirmed Areas of Outstanding Natural Beauty in England and Wales covering approximately 1 500 000 hectares or 10 % of the land area. In Northern Ireland, eight Areas of Outstanding Natural Beauty have been designated, covering 258 800 hectares. No such areas have been designated in Scotland.

Special Landscape Areas

This term covers land outside National Parks and Areas of Outstanding Natural Beauty where special policies for protection or enhancement of the landscape apply. No specific statutory powers exist for Special Landscape Areas but fairly strict control of development is exercised by local authorities. Special Landscape Areas are continually being redefined by local authorities. The term has not been adopted in Northern Ireland.

Heritage Coasts

Certain stretches of the coastline of England and Wales of high scenic quality have been identified and defined by the Countryside Commission and by local authorities as Heritage Coasts. The main aim is to prevent development which would damage the scenic value of the costs. There are also plans to manage and improve sections of the coastline which have been spoilt. So far, 33 Heritage Coasts have been recognised in England and Wales totalling 1954 kms. Many Heritage Coast Areas coincide with designated National Parks or Areas of Outstanding Natural Beauty. Neither Scotland nor Northern Ireland has adopted this policy, though much of the coast of Northern Ireland falls under the protection of Areas of Outstanding Natural Beauty policies.

Green Belts

Green belts are primarily designed to restrict further growth by large built-up areas and to prevent adjacent towns merging into one another. A subsidiary aim in some cases is to preserve the character of a town. Therefore, the land that falls within a Green Belt is not necessarily of scenic or scientific importance. The intention is that Green Belt areas should remain as open as possible and provide open air recreation for the the public. Green Belts have been estabilished around several of the major conurbations and urban centres in England, Wales and Scotland. Northern Ireland has not adopted a Green Belt policy.

National Nature Reserves

In the United Kingdom, nature reserves are set up mainly to protect and conserve a variety of wild life habitats and individual species of flora and fauna. The Nature Conservancy Council in Great Britain and the Nature Reserves Committee in Northern Ireland advise on the areas to be selected as reserves. The Nature Conservancy Council has the power to establish National Nature Reserves in areas which are regarded as of national importance and these sites are either owned by, leased to or managed under special agreements by the Nature Conservancy Council. In Northern Ireland, a similar system is used to set up National Nature Reserves by the Conservation Branch of the Department of the Environment for Northern Ireland. National Nature Reserves cover 27 692 hectares in England, 9 689 hectares in Wales, 88 865 hectares in Scotland and 2 825 hectares in Northern Ireland. There are also some private reserves. A substantial increase in the total number of reserves is planned.

Local Nature Reserves

Local Nature Reserves are established by local authorities under the direction or guidance of the Nature Conservancy Council in Britain to protect important and interesting habitats of local significance. Local Nature Reserves are owned, leased or managed by the local authority. There are 64 such areas in Great Britain and two in Northern Ireland which are statutorily recognised.

In addition to National and Local Nature Reserves in the United Kingdom there are a number of privately managed reserves, forest reserves or wildfowl refuges.

Sites of Special Scientific Interest

The Nature Conservancy Council in Great Britain has a duty to notify local planning authorities of any land not managed as a nature reserve which is of special interest because of its flora, fauna or geological or physiographical features. Local authorities are then obliged to consult with the Nature Conservancy Council in the event of planning proposals for these sites. Such sites cover 537 950 hectares in England, 142 876 hectares in Wales and 587 000 hectares in Scotland. In Northern Ireland, these sites which are called "Areas of Special Scientific Interest" cover approximately 72 000 hectares of land and there are plans to increase this area. They are not in publicly-owned and, like the sites of special scientific interest in the rest of the United Kingdom, can be affected by local development, although the Northern Ireland Nature Reserves Committee is consulted in the event of proposals for development. In this way, scientific interest can usually be protected effectively.

2.3. Cross-frontier Protected Areas

Borders between countries are frequently crossing areas forming ecological entities, some of which are highly valuable in terms of conservation and recreation. Where such entities are identified, they should be protected and managed as such.

In some cases, countries with common borders have already set up common guidelines for the management of cross-frontier natural zones. For example:

- German-Belgian nature park: Parc Naturel Hautes Fagnes-Eiffel: 230 000 hectares.

German part: around 174 000 ha, Hohe Eifel Natural Park
Belgian part: around 56 000 ha

- German-Luxembourg nature park: 78 000 hectares.
German part (South Eifel): 42 600 hectares
Luxembourg part: 35 800 hectares

- German-Dutch nature park : Mass-Schwalm-Nette

Others are in preparation. For example:

- Belgian-Luxembourg nature park : Parc Naturel de la Haute Sûre
- Italian-French national park : merger of Gran Paradiso and La Vanoise

Other existing possibilities are numerous, for example :

- "Waddensee" and the mudflats of the Netherlands, Germany and Denmark
- merger of the Vosges du Nord in France with the Pfälzer Wald in Germany
- Belgian-French nature park : Parc Natural Régional de la Croix-Scaille
- Pyrénées.

3.0. WORK BY INTERNATIONAL ORGANISATIONS TOWARDS GREATER COMPATIBILITY IN THE DEFINITION AND CLASSIFICATION SYSTEMS OF PROTECTED AREAS.

3.1. Introduction

The description in Chapter 2 of the situation of protected areas in the Member States shows that each country has its own system of protected areas set up for various purposes and given names (National Park, Natural Park, Protected Landscape, Nature Reserves, etc.) the definitions of which vary from Member State to Member State. These differences in typology and definitions are most evident in protected trans-frontier areas, where two countries cooperate in the planning and management of the area, or when the situation as regards protected areas in two or more countries is compared.

Many attempts have therefore been made during the last ten years - especially by international organisations - to establish widely accepted definitions and criteria. However, until now none of these systems has been wholly satisfactory and none has been adopted by a majority of countries.

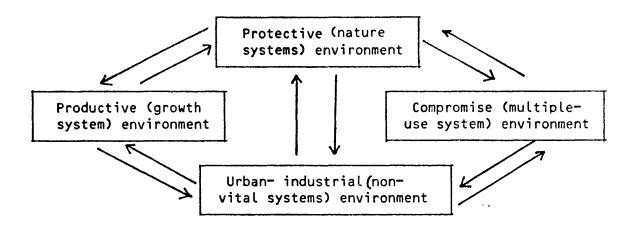
A general tendency in these attempts to classify the environment has been to divide it into zones characterized by the degree of human influence they have undergone and ranging from undisturbed nature to man-made environment, i.e. urban-industrial areas.

The following briefly describes at first two examples of attempts to classify the environment and landscape and then the main attempts by international organisations to lay down classification systems for protected areas.

3.2. Examples of theoretical work dealing with classification of environment and landscapes.

Odum's * environmental model

In this model, man's environment is divided into four groups:



The model illustrates how man turns undisturbed nature into a productive system through agriculture and horticulture or into a completely artificial urban industrial environment, which no longer offers any place for biotic communities.

In practice, the four groups described overlap each other and the names given to groups specify only the main function of a given area.

Westhoff's t classification of landscapes

Westhoff's classification system is also based on the extent to which Man has influenced the original flora and fauna:

- Natural landscape: the plant and animal species found in this area originate from there, i.e. flora and fauna are native and spontaneous. The way in which the plants grow and their arrangement, i.e. the vegetation structure, is in no way disturbed by man in a natural landscape. This type of landscape no longer occurs in Western and Central Europe.
 - Subnatural landscape: flora and fauna are native, although there may be some minor exceptions. The vegetation is only slightly disturbed by Man. The subnatural landscape is extremely similar to the original landscape in the area.

E.P. Odum: The strategy of ecosystem development, Science 164, N° 3877, 1969.

V. Westhoff: New criteria for nature reserves, New Scientist, 16 April 1970.

- Semi-natural landscape: flora and fauna are largely native and spontaneous but the vegetation has been materially changed by man. The vegetation structure thus looks completely different from natural vegetation and belongs to another type of vegetation. To this category belong nearly all dry pastures and hayfields provided that they have not been artificially manured, drained, levelled down or otherwise disturbed. Other examples are heaths and moorlands, wet and dry valleys, old coastal dunes, hedges and scrub. In Western and Central Europe this type constitutes the greater part of all those areas and biotic communities which are essential for the variety of the landscape and therefore need to be preserved.
- Cultivated landscape: this is a landscape in which both the composition of flora and fauna is materially controlled by man. Cultivated landscapes emerged wherever the landscape was formed or deformed by human influence in any type of agriculture, horticulture or forestry. There are still major differences within the cultivated landscape depending on the extent of cultivation.

3.3. Systems and definitions of protected areas drawn up by international organisations

3.3.1. The IUCN Classification System

The International Union for Conservation of Nature and Nature Reserves (IUCN) has worked on definition and classification systems for protected areas for more than ten years and the "national park" concept was defined as early as 1969 by the IUCN. In 1978, the IUCN published a proposal for a classification system * consisting of 10 types of protected areas, each distinguished by the purpose for which it is protected and the ways in which it is normally used. These are:

I. Scientific Reserve/Strict Nature Reserve

The management ensures that areas are free of human intervention and unnatural outside influence and available exclusively for scientific research and environmental monitoring. These specific natural areas are necessary to provide adequate locations for research where a complete understanding of natural processes can be attained and where full protection of ecosystems and their inherent species is maintained.

^{* &}quot;Categories, objectives and criteria for protected areas", a final report prepared by Committee on Criteria and Nomenclature Commission on National Parks and Protected Areas, IUCN, August 1978.

The objectives of a specific reserve are to protect nature (communities and species) and maintain natural processes in an undisturbed state in order to have ecologically representative examples of the natural environment available for scientific study, environmental monitoring, education, and for the maintenance of genetic resources in a dynamic and evolutionary state. Research activities need to be planned and undertaken carefully to minimize disturbance.

These areas possess some outstanding ecosystems, features and/or species of flora and fauna of national scientific importance. These areas are generally closed to public access, recreation and tourism. They often contain fragile ecosystems of life forms, areas of important biological or geological diversity, or are of particular importance to the conservation of genetic resources. Size is determined by the area required to ensure the integrity of the area to accomplish the scientific management objective and provide for its protection.

II. National Parks

The IUCN drew up the following definition of a National Park as early as 1969, at its tenth general assembly in New Dehli:

National Parks are relatively large land or water areas which contain representative samples of major natural regions, features or scenery of national or international significance where plant and animal species, geomophological sites, and habitats are of special scientific, educational, and recreational interest. They contain one or several entire ecosystems that are not materially altered by human exploitation and occupation. The highest competent authority of the country has taken steps to prevent or eliminate as soon as possible exploitation or occupation in the area and to enforce effectively the respect of ecological, geomophological or aesthetic features which have led to its establishment.

The management objectives call for the protection of natural and scenic areas of national or international significance for scientific, educational and recreational use. The area should perpetuate in a natural state representative samples of physiographic regions, biotic communities and genetic resources, and species in danger of extinction to provide ecological stability and diversity.

The resource is managed and developed so as to sustain recreation and education activities on a controlled basis. The area is managed in a natural or near-natural state. Visitors enter under special conditions for inspirational, educational, cultural, and recreational purposes.

The protected status of the area is adequately maintained directly by the central government or through agreement with another agency.

III. Natural Monument/Natural Landmark

The features might include outstanding examples of a country's natural heritage such as spectacular waterfalls, caves, craters, volcanoes, unique species of flora and fauna, sand dunes, etc. They would be of such scenic, scientific, educational and inspirational importance that they merit special designation and protection. There is a need to elevate their significance because of their uniqueness so as to afford these areas greater protection for both scientific and public enjoyment.

Management objectives are to protect and preserve nationally significant natural features because of their special interest or unique characteristics and to the extent consistent with this, provide opportunities for interpretation, education, research, and public appreciation.

This category normally contains one or more specific natural features of outstanding national significance such as a geological formation, a unique natural site, animal or plant species or habitat which, because of uniqueness or rarity, may be threatened and should be protected. The specific feature to be protected ideally has little or no evidence of man's activities. These features are not of the size nor do they contain a diversity of features or representative ecosystems which would justify their inclusion as a national park.

IV. Natural Conservation Reserve/Managed Nature Reserve/Wildlife Sanctuary

The purpose of these areas is to protect a species, a group of species, biotic communities, or physical features of the environment where these require specific human interference for their perpetuation and consequently would be in danger of disappearing in a strict natural area. The vegetation, animal life, or terrain in such an area may be managed and modified to afford near optimum conditions for the species, communities, or features of special concern. Although a wide variety of protected areas fall within this category, each must have as its primary purpose the protection of nature, and not, for example, the production of harvestable resources or the provision of outdoor recreation space.

V. Cultural Landscape/Heritage Landscape/Protected Landscape

The objectives of this category are to maintain nationally significant natural landscapes which are characteristic of the harmonious interaction of man and land while providing opportunities for public enjoyment through recreation and tourism within the normal life style and economic activity of these areas. These areas also provide for ecological diversity, scientific, cultural and educational purposes.

The scope or character of areas that fall within this category are necessarily broad because of the wide variety of semi-natural and cultural landscape that occur within various nations. This may be reflected in two types of areas: those whose landscapes possess special aesthetic qualities which are a result of the interaction of man and land and those that are primarily natural areas managed intensively by man for recreational and tourism uses.

In the first case, these landscapes may demonstrate certain cultural manifestations such as: customs, beliefs, social organization, or material traits as reflected in land use patterns. These landscapes are characterized by either scenically attractive or aesthetically unique patterns of human settlement. Traditional land use practices associated with agriculture, grazing, and fishing would be dominant. The size of the area would be large enough to ensure the integrity of the landscape pattern.

In the latter case, natural or scenic areas found along coastlines and lake shores or in hilly or mountainous terrain or along the shores of rivers and inland adjacent to important tourist highways or population centres offering scenic views and climatic variation are often included. Many will have the physical qualities and potential to be developed for a variety of outdoor recreational uses with national significance.

VI. Resource/Reserve/(Interim Conservation Unit)

Land and water areas for which the most appropriate utilization has yet to be determined. In many cases, there has been little study or evaluation of these areas, and the consequence of converting these lands to agriculture, mineral or timber extraction, or the construction of roads, etc. is unclear. Similarly, use of the resources may not be appropriate because of the lack of technology, human or financial resource restrictions or alternative national priorities. Consequently, natural, social, and economic values are not sufficiently identified to permit the area to be managed for specific objectives or to justify its conversion to other land uses. Restricted access is implied so will normally require control, depending on that areas the pressures to enter and utilise the area. Some areas may be government-owned while others may be owned or administered by public corporations.

VII. Natural Biotic Area/Anthropological Reserve

These are natural areas in which man is a component and obtains his livelyhood by means that do not involve extensive cultivation or other major modifications of the vegetation and animal life. These individuals or societies may require special protection to maintain their existence.

VIII. Multiple Use Management Area/Managed Resource Area

These are areas which can both provide protection for natural resource systems and for certain natural resources and yet contribute significantly to a nation's economic, social, and material needs. Under proper management the multiple function of these areas can provide a sustained yield of a series of products and services. Watershed protection, for example, may be of particular importance in addition to the timber, forage or wildlife aspect of the area.

IX & X. Biosphere Reserve and World Heritage Site (Natural)

Categories IX and X in the IUCN classification system are protected areas, which form part of international programmes and which have specific relevance for nature conservation. In most cases these areas are already protected under a previous category. The definitions of those areas are set out hereafter in Section 3.3.2.

3.3.2. UNESCO's programmes on protected areas

Biosphere Reserves

The UNESCO Man and the Biosphere Programmes initiated fourteen projects in 1970. The focus of project N° 8 is to conserve natural areas throughout the world through the establishment of a network of biosphere reserves.

Each biosphere reserve will include one or more of the following:

(a) representative examples of natural biomes; (b) unique communities or areas with unusual natural features of exceptional interest; (c) examples of harmonious landscapes resulting from traditional patterns of land use; and (d) examples of modified or degraded ecosystems capable of being restored to more natural conditions. A biosphere reserve must have adequate long-term legal protection. Each biosphere reserve will be large enough to be an effective conservation unit, and to accommodate different uses without conflict. Each reserve must be approved by the Man and the Biosphere International Co-ordinating Council before it can receive designation as a biosphere reserve.

Each biosphere reserve will be zoned to provide direction as to its management. Four zones may be delineated as follows: (a) Natural or Core Zone; (b) Manipulative or Buffer zone; (c) Reclamation or Restoration Zone; and (d) Stable Cultural Zone.

World Heritage Site (Natural)

The International Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO 1972) provides for the designation of areas of "outstanding universal value" as World Heritage Sites. These exceptional areas must be recommended on the basis of criteria listed in the Convention by the signatory nation responsible for the site for declaration by the international World Heritage Committee. The sites will undoubtedly include many previously designated protected areas.

3.3.3. The Council of Europe's work on definitions and classification Systems

The efforts done by the Council of Europe towards greater comparability of definitions of protected areas at international level occured especially in the framework of following projects and activities:

3.3.3.1. Terminology for Protected Areas

At the First European Environmental Ministers Conference in 1971 it was decided to undertake a comparison of the nomenclatures for protected areas in Europe. Subsequently, the Council of Europe realised a comparative study on the various types of protected areas. A number of factors were taken into consideration: scientific value, traditional human activities, recreational

(scientific value, traditional human activities, recreational amenities, public access), and a classification with four categories (A, B, C, D) was proposed. The first two categories are strictly protected areas, the others less strictly protected. This work was embodied in Resolution (73)30, which was adopted by the Committee of Ministers of the Council of Europe on 26 October 1973.

Category A

For this category, the only factor admissible is that of scientific value. The category would comprise areas under complete protection where all human activities are prohibited. Access is allowed only in the case of scientific research workers and requires a special permit.

The sole concern is therefore the fundamental one of the protection and natural development of the various biotopes, scientific research being permitted under clearly-defined conditions.

^{*&}quot;Terminology for Protected Areas in Europe", Council of Europe, 1973.

Category B

Scientific value is again important with this category. The conservation of the natural heritage (flora, fauna, sub-soil, water, etc.) is compulsory in such areas, and any artificial intervention which might modify their natural appearance, composition and evolution is prohibited. However, some amenity provision is permissible in clearly-defined zones subject to strict rules. Various traditional human activities may be tolerated provided they are compatible with conservation aims. No non-traditional human activity is permissible. Visitors may be allowed to enter on condition that they comply with strict rules.

Category C

Areas would be assigned to this category mainly on account of their cultural and aesthetic value, protection of the landscape and the ecological balance being taken into consideration.

<u>Traditional human activities</u> are allowed, subject to certain rules; some <u>non-traditional human activities</u> are tolerated but strictly controlled.

As this category is often of relevance to human recreation some recreational provision as well as non-motorised public movement are permitted in clearly-defined zones on condition that they are in accordance with the area's aims.

Category D

The areas in this category are usually large tracts of land which are primarily intended for recreation but where the principles of nature conservation are observed. They may include natural monuments, private estates, villages, etc. Such areas are therefore primarily of recreational value (rest and relaxation) and also of cultural, aesthetic and natural value.

Planning area for recreational purposes will entail some amenity provision (for cultural, sporting and recreational pursuits). Traditional and/or new human activities are normally permitted on condition that they are compatible with the area's aims. Non-motorised public access is generally unrestricted but may be controlled in certain zones of particular interest (natural monuments, flora, fauna, etc). Motorised traffic is controlled in accordance with the aims of protection.

3.3.3.2. Criteria for the European Diploma of the Council of Europe

The European Diploma for Nature Conservation was instituted as a stimulant to the effective protection and management of nature reserves, natural monuments and protected land-scapes of European significance. The diploma is awarded for a period of five years and may subsequently be renewed.

The three categories of protected areas (A, B and C) for which the Council of Europe grants the diploma are reproduced below in shortened form.

Category A

The reason for including areas in this category is the protection of the European heritage of flora and fauna, its environment and ecosystem. In an area of this category there is no permanent human occupation and no production-orientated economic activities (agriculture, forestry, mining, industry, tourism). Human activities in the vicinity of the area must not harm the area itself. Protection must be based on a law or decision by the competent authorities. The area is supervised; it is not freely accessible unless specially authorised. Category A relates to nature reserves.

Category B

The aim in these areas is to protect the character of the landscape and to maintain the habitats, biological protection playing a secondary part. Protection takes the form of preserving sites, landscape or natural features of special aesthetic or cultural value or of an imposing nature. It must be guaranteed that the existing human activities do not damage the landscape. Protection of these areas must have a legal basis. The area is supervised with free or regulated access. Category B relates to natural features.

^{*} Resolution (65)6 instituting the European Diploma.

Category C

The aim in this category is to combine the social and recreational functions with maintenance of its biological or aesthetic characteristics for the purpose of achieving a first-class environment. It is a question of setting up a rural or forest area for recreational purposes. These forest areas may also lie in the vicinity of towns. Coastal areas and lakes may also be set up for the harmonious development of leisure pursuits, while preserving the character and beauty of the landscape. The boundaries of the area must be set out in a land-use plan. The area is divided into zones indicating clearly which parts are intended for agriculture, forestry, tourism, recreation and housing. Rules must be drawn up with regard to landscape protection, the size of the residential areas and the economic development. The public has free access; special arrangements are made for their benefit (parking areas, walks and drives, bridle paths, stretches of water, inns, etc.). Category C relates to protected landscapes.

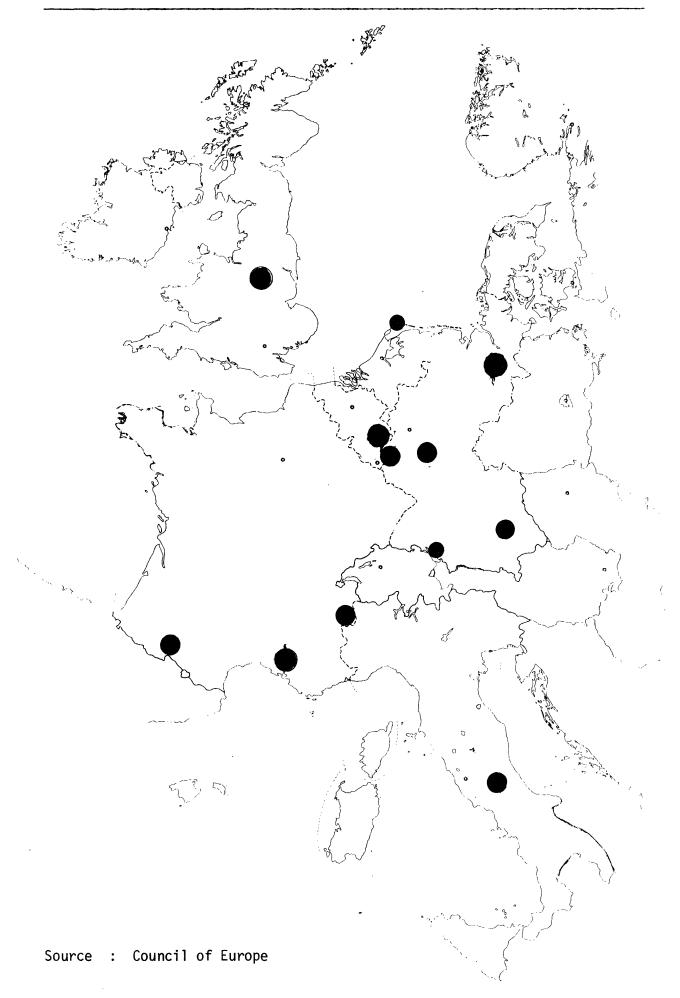
The following protected areas in the Member States of the Community have been awarded the European Diploma:

Peak District	United Kingdom	National Park	140	920	ha
Camargue	France	Reserve	9	366	ha
Hautes-Fagnes	Belgium	Reserve/Nature Park	3	651	ha
Lüneburger Heide	Fed.Republic of Germany	Reserve/Nature Park	20	000	ha
Abruzzo	Italy	National Park	39	160	ha
Wollmatinger Ried	Fed.Republic of Germany	Reserve		430	ha
Boschplaat	The Netherlands	Reserve	4	400	ha
Siebengebirge	Fed.Republic of Germany	Reserve/Nature Park	4	200	ha
German-Luxembourg Nature Park	Fed.Republic of Germany/ Luxembourg	Nature Park	78	400	ha
La Vanoise	France	National Park	52	839	ha
Pyrénées Occidentales	France	National Park	45	700	ha
Weltenburger Enge	Fed.Republic of Germany	Reserve/Nature Park		_	

3.3.3.3. Biogenetic Reserves

In 1976, the Committee of Ministers of the Council of Europe adopted a resolution ((76)17) on the "European Network of Biogenetic Reserves".

Biogenetic reserve means a protected area enjoying legal status and characterised by one or more typical, unique, endangered or rare habitats, biocenoses or ecosystems and the main purpose of a biogenetic reserve is to preserve the biological balance and ensure the effective conservation of one or more terrestrial or aquatic habitats, biocenoses or ecosystems.



The resolution recommends that the governments of Member States consider setting up a European network of biogenetic reserves and, for that purpose, designate biogenetic reserves on their territory.

The European network should constitute a contribution to UNESCO's worldwide network of biosphere reserves (see Chapter 3.3.2.). The following EEC Member States have nominated biogenetic reserves: Netherlands, France, Luxembourg, Italy.

3.3.4. Wetlands

One type of landscape - the Wetlands - has in particular been the subject of work carried out by international organisations on the international harmonisation of classification and definitions not least because the Wetlands are of vital importance to migratory birds.

3.3.4.1. The "Ramsar Definition" of Wetlands

The Convention on wetlands of International Importance, especially as Waterfowl Habitat, adopted at Ramsar, Iran, in February 1971 defines "areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres".

The criteria used to identify a wetland of international importance are $^{\frac{\pi}{8}}$:

- the populations and species of waterfowl which use the wetland as fly-away or habitat, the endangered species of plants and animals, the quality of flora and fauna, scientific or economic importance or ecological diversity;
- 2. representativeness in the biogeographical region and the stage in the biological processes;
- 3. research or recreational value;
- 4. the practicability of conservation and management.

Proceedings, International Conference on Conservation of Wetlands and Waterfowl., Heiligenhafen, Fed. Rep. of Germany, 2-6 December 1974.

3.3.4.2. Project MAR

At the MAR conference, organised jointly by the International Union for Conservation of Nature, the International Council for Bird Preservation and the International Wildfowl Research Bureau in 1962, it was decided to set up a list of European and North African wetlands of international importance.

The conference decided that the first list should be based primarily on ornithological data. A second list, based on all zoological and botanical aspects, should be prepared as soon as sufficient information was available. The basic criterion was therefore, that those places be listed which are of the greatest importance for the conservation of European wetland bird populations at their present level.

In preparing the list, all wetland birds were considered, but special emphasis was placed on the ecological requirements of one order, the Anseriformes, mainly because of their obvious importance but also because much information had already been compiled about them.

The list covers all European countries, except Albania and parts of the USSR on which insufficient material was available. Outside Europe, the Maghreb countries, Morocco, Algeria and Tunisia, were included and, with a preliminary inventory, the Asiatic part of Turkey. For practical reasons, the number of wetlands listed is restricted to about 200 for Europe without the USSR.

The lists of sites for each country were divided into A and B categories: "A" sites are those which are considered to be of major importance for the conservation of European wetland bird populations, and "B" sites are those of still vital importance for migratory birds and requiring conservation, althought they do not usually harbour such large concentrations or such rare species of birds as occur in the "A" sites.

The list of sites includes every kind of shallow marine, coastal or inland wetland ranging from a depth of about 6 m to wet ground without permanent surface water, not truly waterlogged fens and bogs. Deeper waters are not considered as they are in less danger of being drained.

The wetlands are divided into 8 categories:

Coastal Waters Intertidal zones Shallow zones of tideless seas Shallow coastal lagoons Coastal marshes Shallow inland salt, brackish water Shallow stagnant inland fresh water Shallow flowing inland fresh water Inland fresh water - mineral marshes

The list includes a total of some 85 wetlands within the Community.

The list was drawn up and published by the rock in 1965 It has not been updated since and therefore does not reflect the present situation (see 3.3.4.4.).

3.3.4.3. The Council of Europe's Evaluation Card for Wetlands

In 1977 the European Committee for the conservation of Nature and Natural Resources adopted an "Identification and Evaluation Card for the Protection of Wetlands" together with a handbook giving instructions for its completion.

3.3.4.4. Directory of Wetlands of International Importance

Six international organisations have collaborated with the IUCN since 1973 on a "Directory of Wetlands of International Importance". This directory includes the areas identified by the MAR project. Its publication is expected in 1980.

Food and Agriculture Organization FAO

Peatland

United Nations Educational, Scientific and Cultural UNESCO:

Organization

International Biological Programme IBP

International Council for Bird Protection ICBP International Wildfowl Research Bureau BIRS SIL (IAL Societas Internationalis Limnologiae

International Association of Theoretical and Applied

Limnology.

3.3.5. Protected Marine Areas

Increasing pressures on the littoral and sublittoral marine environmentfrom industrial developments, engineering works, mineral resource exploitation, recreational activities and other impacts, have led to a growing concern in recent years about the need for active steps to be taken to conserve this part of the natural environment.

This situation, together with the inherently international character of the seas, has led the international organisations to take steps to stimulate the creation of protected marine areas.

4.0. PROPOSAL FOR CLASSIFICATION OF PROTECTED AREAS IN THE EUROPEAN COMMUNITY

4.1. Conditions for a Community Classification System

Chapter 2 describes the types of protected areas in each Member State and Chapter 3 the existing international classification systems. These descriptions illustrate very clearly that, in spite of the attempts made by international organisations to establish widely accepted classification systems, each country has established its own system of protected areas which reflects its particular resources and requirements. An analysis of the systems used in the Member States fortunately also shows that regardless of definitions and classifications used by individual countries, all protected areas can be classified according to the objectives for which they are in fact protected and managed, in a common classification system.

Such a common classification system, even if it lacks strict uniformity between the Member States, can serve as a "common language" concerning protected areas within the Community. It will allow comparisons between the Member States and will allow accumulation of a store of knowledge on protection and management of natural areas. Its principal use can be as a guideline on nature and landscape protection within the framework of Community environmental policy, as well as when impacts of other Community policies such as agricultural and regional policies on protected areas are being considered.

The following requirements can be laid down for a Community classification system :

- The classification system must not only be scientifically sound, but must also be operable in all Member States;
- The classification system should take account of the considerable variety in, and differences between landscapes in the European Community actual and after its enlargement;
- The classification system must cover all degrees of protection according to types ranging from strict nature reserves to open agricultural areas and green belts;
- The classification system should be so flexible that all the types and forms of protection hitherto developed in the Member States can find a place within it;
- The types should correspond as far as possible to definitions and descriptions which have already been introduced or proposed at international level, in particular by the IUCN and the Council of Europe;
- The descriptions of the types should be sufficiently clear and precise to enable selection criteria to be derived from them. The descriptions must indicate not only the planning and legal protection but also the form of management and utilisation, in particular the type of recreation for which an area is suitable.

4.2. Proposal for a Community classification system

A proposal for a list of types of protected areas has been drawn up on the basis of the above mentioned requirements, an analysis of the systems used in the Member States and work done by international organisations.

The proposal is largely based on the work already done by international organisations, in particular the IUCN and the Council of Europe, but tries at the same time to take greater account of the situation in each Member State and the existing forms of protected areas specific to the Member State.

Compared with other parts of the world, there are very few extensive areas in a natural or near-natural state in the Member States.

Almost everywhere there has been some human influence on the land-scape. Therefore, worldwide definitions and classification systems cannot be used in the Member States without adaptation.

The proposed Community classification system, which is specially adjusted to the Community landscapes and their protection and management forms covers eight types:

- A. Strict nature reserve
- B. Nature reserve
- C. National park
- D. Protected natural or semi-natural landscape
- E. Protected cultivated landscape
- F. Protected cultural monument and natural features
- G. Specific protected areas
- H. Green belt.

The degree to which areas are still in their natural state and the extent of protection generally decrease from A to H.

The definitions of the types of protected areas which follow will describe these aspects:

- type of area and reasons for protection;
- form of protection and management;
- use of the area, including recreation, education and research.

The proposed classification system covers only the terrestrial and not the marine environment. However, there is an increasing need for nature conservation in the marine environment. Within the last few years, a majority of Member States have started working on this subject. It will therefore certainly be necessary to complement this classification in order to take into account the protection of marine areas and to draw up a classification system for protected marine zones, in parallel with the proposed system for protected areas.

Type A. Strict Nature Reserve

A strict nature reserve is an area consisting of natural and seminatural landscape. It is characterised by :

- special flora*, fauna* or geological values, or by
- special vegetation and/or biotic communities,

which exist there because of the landscape's high degree of naturalness or as a result of specific forms of extensive cultivation. The area is protected on the basis of one or more of these features. This takes the form of complete protection if the area is particularly sensitive and disturbing influences must be kept away. In the case of small reserves a buffer zone is necessary as a protection for the actual reserve; this is often beneficial for larger reserves as well.

e.g. a sanctuary, a small area with an endangered species of flora and fauna.

Management is conducted in accordance with a management plan and is allowed only when the existing vegetation and biotic communities are to be preserved. This may take the form of a continuation of traditional methods. Modern techniques may be used only for the achievement of this aim (e.g. mowing of orchid pastures, blue grasslands, water control in marshes with little nutrients). There is no culling of game and no hunting or fishing unless this is necessary to protect specific game species.

The area is completely closed to the public. The reserve is uninhabited. It is accessible only to those managing it and, on application, for special purposes such as scientific research and teaching.

Type B. Nature reserve

A nature reserve is an area consisting of natural and/or seminatural landscape characterized, like the strict nature reserve, by its special flora, fauna and gene-values or by its vegetation or biotic communities. A high degree of protection is needed if the latter are to survive. A buffer zone as protection for the actual reserve is often desirable in the case of large reserves; in the case of small reserves it is indispensable.

Management measures (according to a management plan), are usually necessary to preserve the vegetation and the biotic communities and restrict the harmful effects of pollution from outside the reserve. Modern techniques may be used only if they cause no harmful side-effects. Examples include the mowing of straw and grasslands and the preservation of the balance of biotic communities by means of fauna regulation. There is no culling of game and no hunting unless this is necessary to protect specific game species. Limited fishing can in certain cases be allowed, depending on the local situation.

The area is uninhabited; only wardens or persons closely involved with the reserve live there.

A nature reserve is often open to the public, but only on special conditions. There is a ban on :

- all forms of motorized transport;
- leaving fixed paths, roads or watercourses;
- picking, digging up, catching or otherwise removing, destroying or interfering with plants and/or animals;
- bringing animals (such as dogs) into the reserve.

Compliance with the rules must be supervised.

It is recommended that nature reserves which are open to the public and attract a large number of visitors should provide general information about the use, aim and content of nature reserves.

Type B also includes special reserves fulfilling a specific function such as game reserves, rest areas, staging-points for migratory birds, forestry reserves, entomological reserves, geomorphological reserves, etc. These areas may be closed to the public completely, partially or for a certain period of the year.

Type C. National Park

A national park is an area which consists of natural and seminatural landscapes and, according to the IUCN definition (1969) (Section 3.3.1.) is relatively large, with a minimum surface area of 1 000 hectares

- where one or more ecosystems are not greatly altered by human exploitation and habitation; where plant and animal species, geomorphological sites and biotic communities are of special scientific, educational and recreational interest or where a natural landscape of great beauty is to be found;
- where the highest competent authority of the country has taken steps to prevent or terminate exploitation and habitation in the whole area and enforce respect for the ecological, geomorphological and aesthetic features which have caused it to be set up;
- where visitors are allowed to enter, under special conditions, for inspirational, educational, cultural and recreational purposes.

The following comments are also relevant:

Management of the whole park is the responsibility of one body and is conducted according to a management plan.

Rules may be laid down for visitors: motorized transport may be restricted to certain roads and all other traffic, plus hikers, must normally keep the specific land and water routes.

Mass recreational amenities such as swimming baths, riding-schools, camping areas and other forms of holiday accommodation must be kept outside the park.

It is recommended that information be provided about the landscape and the special biological features of the park (in the form of a visitors' centre, brochures, nature paths, excursions, etc.)

Type D. Protected natural or semi-natural landscape

A protected area covered with natural or semi-natural vegetation with a high biological and landscape value (i.e. wetlands or forests). Nature reserves, forestry reserves, game reserves, sanctuaries or other special reserves may be features of a protected natural or semi-natural landscape.

A protected natural or semi-natural area can fulfill more than one function, e.g. nature conservation, forestry, recreation and protection against soil erosion.

If the protection is not provided by national legislation, it should be embodied in planning decisions or regulated by the central administration, especially as regards houses for outsiders and holiday accommodation for tourists. The whole area should preferably be managed, by the central authorities.

Protected natural or semi-natural areas are uninhabited or sparsely inhabited, preferably only by persons whose work connects them with the area.

The area is generally freely accessible on foot except for any reserves, though there are strict regulations for vehicles and boats.

The protected natural or semi-natural areas which are suitable for recreation should be provided with information amenities such as nature paths, visitor centres, etc.

Type E. Protected cultivated landscape

A protected cultivated landscape is a large area of cultivated land with a semi-natural landscape. Modern agriculture normally dominates, but the landscape still displays distinct traditional features such as hedges, reed-land, pools, brooks and mountain pastures. The area is thus rich in element of both biological and cultural value. The landscape as a whole is visually attractive and may include nature reserves.

Settlement takes the form of farms, houses, villages and possibly small towns which fit visually into the landscape.

The biological, cultural and landscape values are protected as effectively as possible by planning protection or by placing the whole area under central management. This management body regulates and controls the restrictions on land-use, settlement and environmental pollution. It also decides on what compensation should be awarded to land-users who suffer economic disadvantage as a result of these restrictions.

Both day-to-day and longer-term recreation is important. The recreational amenities should be included in existing settlements as far as possible and mass recreational amenities much as far as possible be kept outside the area or on its edges.

Type F. Protected cultural monument and natural features.

A geographical unit of restricted size with a high landscape and/or cultural value and very attractive for recreation.

Examples of cultural monuments include :

Prehistoric or historic remains or ruins such as burial mounds, barrows temples, etc.

Estates: a management unit which has developed historically, consisting of a historically valuable building with accompanying land and a semi-natural landscape.

Natural features: waterfalls, rock formations and other natural features of recreational and educational importance which can cope with a large number of visitors.

(NB. sensitive natural features of a biological type should be given the status of nature reserve or strict nature reserve).

Protection of specific values of the monument or feature is provided by the law or by planning decisions taken at national or regional level. Management is conducted according to a management plan. The management plan also contains rules about public access, together with conditions and supervision.

Type G. Specific Protected Areas

A number of areas with different protection rules belong to this category. The main aim, which is common to all these protected areas, is not to protect biological and landscape values, but to protect resources such as ground or surface water or good soil for farming or to protect the vegetation in order to avoid soil erosion. Areas with interim resource protection, e.g. protection of areas with raw materials, also belong to this category.

Protection is generally effected through central government decisions or in the form of local planning decisions.

The need for management varies from area to area, depending on which specific features are to be protected.

Type H. Green Belt

A stretch of countryside which is provided with a park layout of trees and bushes, and possibly play areas, ornamental ponds, etc., and which is used as follows:

- (a) as a screen to protect the open cultivated landscape from urban settlement and thus prevent urbanization and pollution of the landscape;
- (b) as a recreational area for city-dwellers.

With purposeful management, this area, particularly if laid out on the basis of natural landscaping, can be turned into a semi-natural landscape in the long term.

The area comes under regional and local protection and management. The management plan is based on the various functions of the area.

4.3. Comparison of the proposed types with the situation in the Member States

The definitions (section 4.2.) specify the standards which an area must satisfy to qualify for a certain type of protection. Generally, these standards are broadly based so that the existing forms of protection can easily be accommodated.

However, comparison of the proposed types with the situation in the Member States raises various problems. When examining whether a specific form of protection, e.g. a nature reserve, satisfies the definition for type B, it may be found that this is not the case in all respects. Hunting may go beyond mere culling or there may be a camping site in the area. In these cases, management and the management plan can be changed to ensure that the nature reserve satisfies the required standards and can be attributed to Community type B.

Things will never be quite so simple in practice. If it diverges considerably from the proposed type B, an area can no longer be entitled "nature reserve" under the common classification system and may have to be assigned to another type, for instance that of protected natural or semi-natural landscape.

natural landscaping : a method of developing a landscape rich in natural values

by means of cultivation and specific plantation.

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	Strict Nature Reserve	Reture Reserve	National Park 5	Protected Natural or Semi-Matural Landscape	Protected Cultivated Landscape	Protected Cultural Monument and Natural Feature	Specific Protected Area	Green Belt
Type of area	High degree of naturalness, natural or seai-natural landscape	Matural or semi-matural Landscape	Matural or semi-natural, large surface area (at least 1 000 ha)	Natural or semi-natural vegetation, forest, wetlands	Cultivated landscape with semi-natural and cultural elements	Cultural or natural feature Matural, semi-natural or of a small surface area cultivated landscape or forest	Matural, semi-natural or cultivated landscape or forest	Strip of forest taid out a screen or, possibly for recreation
Reason for protection	Very sensitive and high assessment of biological values	High assessment of biolo- gical values	High Landscape value;great biological value	High Landscape and biological values	Landscape, biological and cultural values	High cultural or natural + recreational value	To protect soil, water, raw To develop and maintain material or other resources nature and recreation	To develop and maintain nature and recreation
form of management	Controlled management plan for maintaining biological values	Controlled management plan for maintaining biological values	Central organisation under the auspices of the highest national authority,based on the preservation of values	Central; based on pre- servation of values	Central; based on preserva- Based on preservation, with bepends on the reason for tion of values protection	Based on preservation, with Large number of visitors		Local authority level
Settlement	None	None	Little or none	Little	Economically and traditional land-use	1	Little or none	Very little or none
Agriculture	None	Name or very limited form	Mone or traditional	Little or none	Mainty continuation of traditional land-ure	1	Possible	Possible
Forestry	None	of traditional land-use to preserve biological values	To preserve values	Based on preservation, limited exploitation	As small elements	•	Possible	for maintenance
Munting and Fishing	No control of game and no hunting or fishing unless necessary for specific game protection	No control of game and nor hunting unless necessary for specific game protect- ton – fishing	Game control exclusively maintain values – fishi	togame control, hunting and of ishing, wiht sanctuaries if appropriate	Game control, hunting and fishing	• .	fishing	,
Recreation	None	Hikers only	Day-to-day recreation, no accommodation or other amenities	Mainly daytime recreation, limited accommodation	Yes, with accommodation, no mass organisation	To a great extent	Yes	Yeu
Access	None	Conditional, restrictions concerning time, paths only, etc.	Not with motor vehicles, free movement on paths and roads outside reserves	Free, except reserves. Ind Restrictions concerning motor vehicles	free, except reserves	free	free	free
Research	Authorised if no demage is	Yes	Yes	Yes	Mainly social, economic and historical	Yes	•	•
Education/Informations	done Only in connection with research	Important; depends on type and sensitivity of area	Yes, to a large extent, information centres, brochu-	Yes	Yes	Yes		•

Table 1: Main characteristics and functions of the different types of protected areas in the suggested Community classification system.

Table 2 represents a first attempt to compare the nomenclature of the proposed types with the usual forms of protection in the Member States. As there may be considerable differences within one country between areas with the same name, this designation may occur in more than one heading, e.g. national park in the Netherlands which comes under both C and E.

It should be stressed that:

- Table 2 is by no means definitive;
- the standards for A-H are treated flexibly;
- the Table merely indicates the possible direction of future activities, and
- it needs to be improved and supplemented.

	BELGIUM	DENHARK	PEDERAL REPUBLIC OF GERMANY	PRANCE	IRELAND	ITALY	LUXEIBOURG	HETHERLANDS	UMITED KINGUOM
A Strict Nature Reserve	Protected Nature Reserve	Scientific Reserve Scientific Reserve	t 5	Integral Nature Reserve	1	Integral Nature Reserve	Integral Nature Reserves	Protected Nature Reserves	•
B Nature Reserve	Nature Reserve Forestry Reserve	Areas covered by Conservation Orders	Nature Conservation Areas	Nature Reserve	Mature Reserve	Nature Reserves	Forestry Reserves Game Reserves	Nature Reserves	National Mahane, Prerves Lycal Nature Peserves Sites of special Scientific Interes
C National Park	ı	National Park North East Greenland	National Park	Natural Park	National Park	National Park	•	National Park	National Park
D Protected Natural or Semi-Natural Landscape	Nature Park	Areas covered by Conservation Orders	Nature Park	Regional Nature Park	•	Regional Parks	Nature Park	Designated National Park	Areas of outstanding Satural Beauty Special Landscape Areas
E Protected Cultivated Landscape	Nature Park	Areas covered by Conservation Orders	Landscape Protection Areas	Regional Mature Park	•	Regional Parks	Nature Park Protected Landscape	Designated National Park	Areas of outstanding National Reauty Special landscape Areas
F Protected Cultural Monument and Metural Feature	Monuments protected by royal order	Ancien Monuments and sites	Natural Peatures	1.	•	1	Sites or Natural Monuments	Katural Honumente	
G Specific Protected Area	•	•	Protective forests	•	•	Protective Vegetation	•	•	•
H Green Belt	Green zone	•	•	Buffer Zones	•	•	. •	4	Green Belt

: An attempt to a comparison between the types of protected areas in the suggested Community classification system and the main types of protected areas in the Member States. Table 2

5.0. CONSIDERATIONS ON THE IMPLEMENTATION OF A POLICY ON PROTECTED AREAS

The description of the classification systems and definitions in the previous chapterscould give the impression that nature management is a static phenomenon in the sense that it would be sufficient to define the type and management of the areas to be protected. However, this is by no means the case. Society is constantly changing, influencing the whole environment. Nature and landscape protection activities must be equally dynamic if they are to keep up with and, where necessary, anticipate such changes.

In practice, this means that new areas must be granted protection and new management methods developed. How should these areas be selected (section 5.1.), how can they be safeguarded (5.2.) and what must be done to prevent the levelling influence on landscapes and biotic communities (management, section 5.3.) must be given equal consideration.

Changes in society also influence Man as user of the landscape. The need for recreation and the opportunities for leisure-time activities are increasing. Nature and landscape protection should therefore also cover recreation (5.4.), stressing the importance of integrated planning and management (5.6.). However, nothing can be done without the support of the people for whom it is done (5.5.).

Detailed examination of these major items would exceed the scope of this report, but the following section gives a brief description of some key elements.

5.1. Selection of Areas qualifying for Protection.

The selection of areas qualifying for a specific type of protection, and thus a specific status, can be divided into two stages:

First, a stock-taking of the areas whose biological, landscape or cultural features correspond to certain criteria.

And second, the indication, for each type, of those areas in which protection or safeguarding by means of a legally regulated status and specific management has a high, fairly high or low priority.

When setting priorities, information on the following points is required:

- the specific qualities of an area (biology, landscape and culture);
- its vulnerability and degree of endangerment in the short and long term;
- protection and management potential in relation to type.

Opportunities for purchasing an area or reaching an agreement with land-owners and for keeping out undesirable external influences are further influencing factors.

It is difficult to lay down general guidelines for assessing the specific qualities of an area in relation to those of another area of the same type. This difficulty is related to the fact that in the list of types (from strict nature reserves to green belts) natural values are almost exclusively the determining factor, whereas cultural, visual or aesthetic values are gradually acquiring greater importance.

Criteria must be drawn up at regional, national and Community level for these matters. A few general observations may however, be made here on determination of biological or natural value which is of importance when setting priorities, in particular for "strict nature reserves", "nature reserves", and "national parks". A number of countries and international bodies, for example the Council of Europe*, have been working for a number of years in this direction.

A detailed examination of the use of criteria for determining "natural value" would exceed the scope of this study, but it should be mentioned here that three main criteria are used in nearly all biological or scientific assessment methods:

- representativeness: the extent to which, for instance, the biotic communities in an area may be designated as a characteristic example of a specific type of ecosystem;
- rarity: the extent to which a species or biotic community is represented in a region or a country;
- diversity: the number of elements (forms of life) in a system;
 abundance of species per surface unit.

See for example descriptive card for natural landscapes, plus a handbook giving instructions for its completion. Adopted by the European Committee for Conservation of Nature and Natural Resources, 1977.

An interesting example on these matters is provided by a work done in the United Kingdom, where ten criteria (among which the three main ones mentioned above) by which the nature conservation value of an area can be judged, have been laid down:

Extent

In general, the bigger the area the better, if other attributes are equal.

Diversity

This criterion is considered one of the most important. Variety in terms of species and communities is highly desirable and depends to a large extent on the physical diversity of an area and the number of different communities it supports.

Naturalness

This is a self-evident criterion but one which is not easily attained on land.

Rarity

The regular occurence of rare species in a particular habitat or locality has long enhanced its status relative to other areas.

Fragility

This is a measure of the sensitivity of a habitat to environmental changes.

Representativeness

This further self-evident criterion recognises that it is necessary to represent the typical or commonplace as well as those sites chosen because of features which are in some degree unusual.

Ratcliffe, DA (ed) 1977. A nature conservation review.
Cambridge University Press, cited in "Nature Conservation in the Marine Environment", NCC and NERC, London 1979.

Recorded History

The extent to which a site has already been used for scientific study and research.

Position in an ecological/geographical unit

Sites representing different types of communities or ecosystems and which are adjacent or sufficiently close to form a composite site are preferable for wardening and management purposes to comparable sites which are widely separated.

Potential value

This criterion refers to the potential for rehabilitation or restoration of habitats.

Intrinsic appeal

It is inevitable that certain ecosystems or organisms attract more interest than others. Attractive and popular groups are given more weight in assessing a site than the more obscure groups. Nevertheless, it is important to ensure that less popular groups of organisms are adequately represented.

As far as projects at international level are concerned it is important to mention in this context the "Ecological Mapping" of the European Community. Indeed this project aims at developing a pilot method which should, according to the Environmental Programme of the European Communities, "enable the environment to be described rationally and its very great diversity to be expressed in terms of levels of suitability for a range of uses, proceeding from scientific description of the basic characteristics of the environment to its significance in terms of physical planning and to environmental policy".

In other words it should enable the elaboration of an information easy to understand and to utilise, on the "state of the environment" in the European Community, highlighting the natural potential of the environment as well as "ecological imbalances".

The draft pilot method *cological mapping", which is presently being finalised after having been tested in ten regions of the Community, bases on a system of indicators. A number of main indicators in this system, such as "landscape as natural living space for fauna and flora" or "recreative value of the landscape", are directly relevant to the identification of areas which could qualify for different status of protection. It now seems that if the draft pilot method is adopted by the Council, its application by the Member States and the Community would make an important contribution to nature and landscape protection, in enabling, in first instance, to identify natural areas or landscapes of European significance.

5.2. Legal and administrative protection

Legal protection is, indeed, of decisive importance, and should follow the selection of areas. If the protected status of a terrain is not backed up by laws and planning decisions, protection is no more than an empty phrase. Legal protection would also guarantee that an area is managed in accordance with the standards for the type in question. This is simpler in the case of nature reserves than with, for example, protected landscapes.

As shown in Chapter 2, most countries have a law on the setting up and conservation of nature reserves and a number of countries have drawn up legal provisions for the setting up of national parks.

Some of the large forest areas in the Member States — benefit from a certain form of legal protection and can often be classified under types C, D or E. The extent of protection varies considerably from country to country and from case to case. It may take the form of a restriction on land utilization, a prohibition on felling linked with an obligation to replant or a subsidy system for conservation, possibly linked with public access.

Approximately the same provisions apply to a protected cultural monument and natural feature. Here too protection varies, often taking the form of a government subsidy towards preservation costs on the condition that the cultivated land is maintained.

For the future of the cultivated landscape, it is essential that measures are taken to preserve specific valuable areas as a whole and permit the survival of the essential elements in the other areas. It will not always be possible to achieve this through orders and land-use plans or other planning provisions, but new legal instruments may be developed.

This may, for example, take the form of a bonus scheme or a hectare-based contribution to conservation costs, including for example the maintenance of hedges. A hectare-based payment may also enable a farmer to obtain sufficient revenue from certain marginal plots, avoiding far-reaching changes in cultivation techniques and thus resulting in a saving of public money and the conservation of the old cultivated landscape. Persons who prefer to operate unproductively instead of leaving their piece of land would then have a chance of survival on submarginal plots.

A detailed examination of these problems, which involves an integrated environment and agricultural policy, would exceed the scope of this study. and it might be mentioned that there is a need for a farreaching study embracing all relevant aspects and their interrelations.

5.3. Management

Management forms the key part of the implementation of a policy of protected areas. The aim of management is as follows:

- maintenance and reinforcement of existing natural values in strict nature reserves and nature reserves;
- maintenance and reinforcement of landscape values and regulation of recreation in national parks, protected forest areas, protected estates, buffer zones, protected cultivated landscapes and green belts, and/or;
- the development of potential nature and landscape values, for instance in a green belt, but also in a protected forest area and a protected cultivated landscape.

Each type of protected area needs its own form of management. Here as an example it shall only be indicated what this means in the case of a nature reserve (type B):

The management of a nature reserve must provide the most suitable habitat for the local species and plants and animal communities by restricting (or, where necessary, increasing) human influence to the appropriate level. The risk associated with too much or too little regulation is considerable. It is of paramount importance that the maximum permissible level of human influence is not exceeded. Since as a rule such dangers originate outside the reserve, this aspect is often called external management. It includes, for example, preventing a the water level and an inflow of polluted water or seeing to it that there are too many visitors in vulnerable parts of the reserve at certain times of the year.

change in

The regulation of the reserve itself is often called internal management. Here the management must make sure that man's influence does not drop below the required minimum. For the conservation of plant and animal communities in semi-natural landscapes it is in most cases necessary to continue the traditional agricultural techniques which were used before the land became a reserve, for instance the cutting, burning or ploughing under of seed, grass and heather. This internal management can obviously be carried out only if there is considerable knowledge about the development of ecosystems. This should be defined in a management plan.

The management plan may provide guidelines for all aspects of management and contains data on :

- the area and its surroundings (orientation)
- biotic and abiotic elements (stock taking)
- aims
- plans for the future (long-term plan, medium long-term plan and short-term plan).

More work in connection with the management of protected areas will be needed for maintaining the landscape in future than the land-owner will be able to afford (unless the property is state-owned). In many cases it will be of benefit for both sides if the management of protected areas is combined with the implementation of a job-related environment policy. Detailed examination of this important aspect, which involves an integrated environment and social policy would exceed the scope of this study, but should be duly considered in further working steps at Community level in this field.

5.4. Management as regards recreation

Recreation is a factor which increases in importance in the list of protected types from B to H. A management plan can appropriately regulate recreational amenities. Recreation could seriously impair the quality of the countryside. Serious damage could be done by disturbing birds and game, causing fires, walking on taking plants.

The guideline for the management of protected areas as regards recreation must be the ecological capacity, which means "the maximum level of a particular recreation use that a particular ecosystem is able to support without undergoing unacceptable change"

Damage can be prevented by means of the following measures:

- good guidance and education for the young, making the public feel involved in the welfare of the area and of nature in general;
- satisfying the need to enjoy nature, fresh air and opportunities for exercise in a manner which does not harm nature and relieves the pressure on sensitive areas. This may be done by marking paths for hikers, cyclists and horse-riders, setting up facilities for boats, etc. The use of other sensitive areas can be prohibited only when sufficient facilities of this type exist;
- legal measures for the protection of specific species of flora and fauna.

As the number of people seeking recreation might be expected to continue to increase in Western Europe with the increase in leisure time and interes in nature both at home and abroad account will have to be taken of their wishes.

5.5. Information and education

Information and education in protected areas must cover two main subjects :

- (a) some basic knowledge of ecology and the influence of harmful factors on flora, fauna and biocoenoses;
- (b) the responsibility everyone has towards nature and natural resources

Information and education are two disciplines with an approach of their own which must be tailored to the group of persons at which it is aimed if it is to achieve the expected effect. This must be done professionally, preferably by experts in these sectors.

6.0. OUTLOOK

The many discussions which accompanied and made possible the writing of this study inspired a number of thoughts on the problems of protected areas, from which it appears opportune to draw certain conclusions in respect of future Community action in this sphere.

The efforts made so far at the international level to improve the comparability of definitions of protected areas show that a vital factor in the implementation of joint actions is the matching up of the various types of protected zones existing in the Member States.

On the basis of the common terminology proposed in this study, the Community and its Member States could endeavour, for a start, to agree on such a matching up system.

The existence of a common language would make it easier to carry out a Community programme on protected zones. Obviously, such a programme would have to be drawn up by closely coordinated efforts on the part of the Commission and the Member States and would have to be correctible with the work done in this field by international organizations.

Without anticipating the results of such cooperation, a number of topics can be mentioned which seem to deserve closer attention.

For example, on the pattern of the work now being done under the Directive on the conservation of birds in relation to biotopes of importance for wild birds, thought might be given to drawing up a permament inventory of protected areas in the Community including all the types covered by the common terminology.

Such a stocktaking would provide an information basis for additional protective measures which might prove necessary if, for example, the "ecological mapping" system revealed natural environments or landscapes of Community importance which were not yet adequately protected.

Areas of Community importance could be accorded a special status, taking full account of the activities of international bodies in this field (the European Diploma of the Council of Europe, in particular). In areas designated as being of Community interest it would be essential to be able to adapt certain measures deriving from Community agricultural or regional policies so as to make them compatible with the aims of conservation.

In this respect a Community Financial Instrument for the Environment, the creation of which is warmly advocated by the European Parliament, would play an extremely important part, for example in compensating, where appropriate, for any renunciation of more intensive farming which might become necessary in these areas in order to preserve Europe's natural heritage.

In addition, a Community programme would certainly have to make a special effort to deal with the many problems connected with the management of protected areas. These problems which crop up throughout the Community are extremely complex and are far from being solved, whether they are concerned with scientific matters (e.g. determination of a milieu's carrying capacity), technical and financial matters, or participation by and information of the public. A large-scale exchange of experience at Community level linked to the implementation of pilot projects in various types of zones (reserves, national parks, protected landscapes, etc) and in the various Member States should make it possible to draw certain conclusions with a view to improving the management of protected areas. Such pilot projects would, incidentally, be all the more important in that some of their findings could find large-scale application in Europe's mountainous and coastal areas, where integrated management aimed at reconciling conservation and development is often proving more difficult to apply than elsewhere. These projects could also provide a profitable testing ground for agricultural systems and techniques compatible with conservationist aims, for adapted industrial techniques or for improvements in the techniques and procedures of land utilization. Finally, a further feature - and not the least attractive one - of these projects is the opportunity they provide of showing the extent to which a more active policy in respect of protected areas can contribute to the maintenance of employment and the creation of new jobs.

In conclusion, it goes without saying that all the ideas and suggestions made above find readymade opportunities for application in the frontier areas. For how could we more aptly demonstrate to Europeans that the Environment knows no frontiers than by protecting cross-frontier landscape or ecological entities? And what more notable contribution could there be to European integration than joint and successful management of the European heritage by the authorities of neighbouring countries?

NATIONAL AND NATURE PARKS IN THE EUROPEAN COMMUNITY

