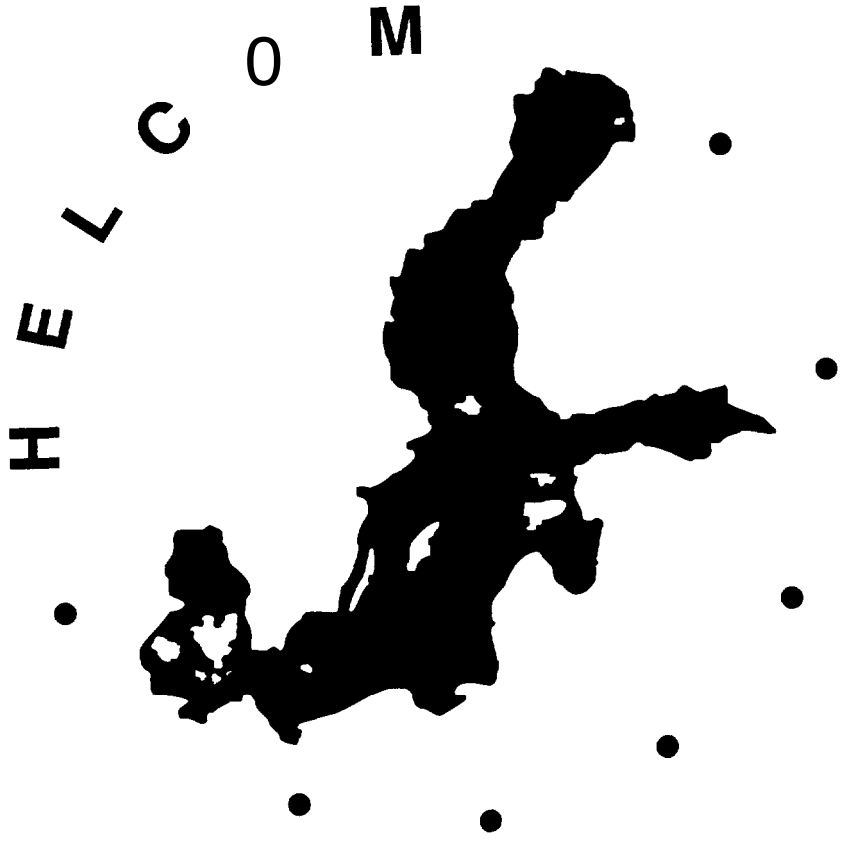
BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 63

# COASTAL AND MARINE PROTECTED AREAS IN THE BALTIC SEA REGION




HELSINKI COMMISSION
Baltic Marine Environment Protection Commission

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# PREFACE

*Coastal and Marine Protected Areas in the Baltic Sea Region* is based upon a draft report originally published by World Wide Fund for Nature (WWF) as a background document for the International Conference on Establishment, Protection and Effective Management of Coastal and Marine Protected Areas in the Baltic Region (held in June 1993, at Nyköping, Sweden).

The information contained in that draft report was based upon data collected in the winter of 1992/93 and was relevant to the situation at that time. Since then, new legislation has been adopted, new categories of protected areas have been introduced, and new protected areas have been established in several of the countries around the Baltic Sea.

For that reason, the fourth meeting of the HELCOM Working Group on Nature Conservation and Biodiversity (EC NATURE) in 1994 initiated a comprehensive revision of the draft version of the report. Financial assistance for the revision work was granted by the European Community. In addition, the Swedish Environmental Protection Agency and WWF-Sweden also agreed to provide some financial support for the work.

A questionnaire, adopted to the objectives of the revision work, was submitted in March 1995 to all contact addresses of EC NATURE within all Contracting Parties.

The draft version of this status report has been considered and amended by relevant experts in the framework of EC NATURE in the beginning of 1996 , prior to release. Thus, it represents the status of coastal and marine protected areas and habitats in the Baltic Sea Region in 1996.

The ultimate aim of the work was to have the revised report printed by the end of October 1995. The work was, however, delayed due to very late submission of information by Contracting Parties.

Ms Britt Hägerhäll Aniansson, who was the editor of the draft report, has been the editor of the present status report. She has been responsible, *inter alia*, for updating the questionnaire, collecting and compiling information, and redrafting the text of the report, including the revision of the tables and maps. The maps have been produced by Mr Stig Söderlind.

The contributions by the relevant experts for the preparation of this report are cordially acknowledged.

# 1. Introduction

Coastal and marine areas are under increasing pressure in all parts of the world. At the same time, coastal lagoons, estuaries and other coastal wetlands are ecologically among the richest biotopes on earth showing high productivity and large biodiversity. These areas have a wide range of functions which are essential for supporting this rich plant and animal life and for maintaining the quality of the environment. In recent years, the increasing need for intensified efforts to protect and effectively manage the coastal and marine regions of the world has been globally recognized.

In the action programme *Agenda 21,* adopted by the UN Conference on Environment and Development (UNCED), at Rio de Janeiro in 1992, the obligations of States to pursue the protection and sustainable development of the marine and coastal environment and its resources are emphasized. The need for an effective marine and coastal area management at the national, regional and global levels is similarly recognized. It is further stated that coastal states should undertake measures to maintain biological diversity and productivity of marine species and habitats, including the establishment and management of protected areas.

The global Convention on Biological Diversity, also signed at UNCED, stresses in its preambular part the importance of international, regional and global co-operation among States and intergovernmental organizations and the non-governmental sector for the conservation of biological diversity and the sustainable use of its components. Such co-operation should be promoted. According to the Convention, each Contracting Party shall develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity and integrate this concern into relevant sectoral plans, programmes and policies. Article 8 of the Convention states that each Contracting Party shall, as far as possible and as considered appropriate, establish a system of protected areas where special measures need to be taken to conserve biological diversity. Contracting Parties are further obliged to develop guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity. The protection of ecosystems and natural habitats, and the maintenance of viable populations of species in natural surroundings, should be promoted.

The action programme *Caring for the Earth -A Strategyfor Sustainable Living* was launched jointly by the World Conservation Union (IUCN), the United Nations Environment Programme (UNEP), and World Wide Fund for Nature (WWF) in 199 1. There it is noted that the establishment of protected marine and coastal areas is seriously lagging behind similar efforts in the terrestrial environment. Governments are, thus, urged to speed up their efforts to establish such areas. A global system of protected coastal and offshore marine areas should be established no later than by the year 2010.

*Parks for Life* is a programme adopted by the World Congress on National Parks and Protected Areas, held at Caracas, Venezuela, in 1992. The Declaration and Action Plan urges all governments and appropriate national and international bodies to take urgent action to consolidate and enlarge national systems of well-managed protected areas with buffer zones and corridors, so that by the year 2000 they safeguard the full representative range of land, fresh water, coastal and marine ecosystems of each country. The Caracas Conference, furthermore, called for the launch of a major global programme to establish marine protected areas representing all major biogeographic types and ecosystems. The Congress specifically recommended the establishment of national systems of large marine areas which should encompass complete marine ecosystems.

### THE BALTIC SITUATION

In the Baltic Sea Region, as in many parts of the world, the coastal and marine areas are likewise heavily influenced by man. Coastal wetlands, such as coastal wet meadows, marshlands, wet forests, swamps,

estuaries and shallow parts of coastal lagoons, have particularly suffered from a wide range of human activities and are facing new threats in the future. During recent years, and particularly following the political changes in the south-eastern riparian states of the region, increased attention has also been paid to the need to strengthen national and international efforts to protect coastal as well as marine areas throughout the region.

The first international Seminar on Nature Conservation and Biodiversity in the Baltic Region, held at Runö, Sweden in 1991, pointed out that the Baltic Region contains a number of threatened or endangered ecosystems, habitats and species. It was emphasized that the problems associated with the conservation and management of biotopes and species can only be solved through a combination of national and international efforts. It was concluded that in order to achieve the overall objective to protect biotopes and species within the Baltic Region, it will be necessary to include marine areas, coastal areas, and water systems flowing into the Baltic, as well as terrestrial ecosystems within the whole drainage area.

The worldwide and regional awareness of the need for protection of coastal and marine areas and habitats led during the revision process of the 1974 Convention on the Protection of the Marine Environment of the Baltic Sea **Area** (Helsinki Convention) to the inclusion of the new Article 15 on Nature Conservation and Biodiversity into the new 1992 Convention, signed by all the countries around the Baltic at a Ministerial Meeting at Helsinki in 1992.

Article 15 states: "The Contracting Parties shall, individually and jointly, take all appropriate measures with respect to the Baltic Sea Area and its coastal ecosystems influenced by the Baltic Sea to conserve natural habitats and biological diversity and to protect ecological processes. Such measures shall also be taken in order to ensure the sustainable use of natural resources within the Baltic Sea Area. To this end, the Contracting Parties shall aim at adopting subsequent instruments containing appropriate guidelines and criteria."

In 1993, the Helsinki Commission (HELCOM) set up a special permanent Working Group on Nature Conservation and Biodiversity, EC NATURE, to co-ordinate the implementation of this part of the Convention, Among the tasks given to EC NATURE, the review of the different conditions and the general environmental situation in the Baltic Sea Region is included. Furthermore, strategies and guidelines shall be prepared for, inter *alia*:

- the protection of certain nature types and biotopes;
- a system of nature protection areas in the Baltic Sea Region;
- a list of threatened biotopes for the area.

For the establishment of a system of protected coastal and marine areas in the Baltic Sea Region, EC NATURE has benefited substantially from the systematic and comprehensive efforts made by the Working Group set up jointly by the Baltic Marine Biologists (BMB) and WWF in 1991 to identify coastal and offshore marine areas that should be protected. This work was done partly in parallel with a Nordic Working Group set up under the auspices of the Nordic Council of Ministers.

In 1994, HELCOM through its Recommendation 15/5 adopted 62 marine and coastal areas to be the first phase of a system of Baltic Sea Protected Areas (BSPAs).

Progress in protecting coastal and marine biotopes could also be achieved since the Environment Ministers and HELCOM, on the same occasion, adopted HELCOM Recommendation 15/1. It states that in all riparian states to the Baltic Sea, a coastal strip of at least 100 to 300 metres landwards and seawards the medium midwater line outside of settlements shall be generally protected from diverse activities leading to destruction of habitats.

Furthermore, a list of ecologically particularly important biotopes and nature types of coastal and marine areas was adopted. Following a request by the Ministers, a *Red Data Book of Marine und Coastal Biotopes in the Baltic Sea* **Area** is currently under preparation by an international project group of EC NATURE. It will help to identify the status of endangerment and protection needs of the different biotope types in the various regions of the Baltic Sea Area.

## THE STATUS REPORT

The present status report represents the first up to date review of the situation of already existing coastal and marine protected areas and habitats in the Baltic Sea Region and the plans for further protection. It is an updated version of a draft report that was compiled and submitted by WWF to the Nyköping Seminar on Establishment, Protection and Management of Coastal and Marine Protected Areas in the Baltic Region, held in June 1993.

Large parts of the draft text of that report, *Coastal and Marine Protected Areas in the Baltic Sea Region*, as well as maps and area tables presented in the report, had to be revised and updated due to the fact that much has happened since 1993 in the field of nature conservation – including the protection of coastal and marine areas – in the Baltic Sea Region. New legislation on nature conservation and conservation on biological diversity has been adopted in several riparian states, new protection categories for areas have been introduced, new protected areas have been established, etc. In addition, some information on the impact of relevant common policy and directives of the European Union on nature conservation issues had to be incorporated.

Thus, the present status report comprises national information compiled during 1995 and early 1996 on, *inter alia*, the following topics:

– New or revised legislation relevant to nature conservation, conservation of biological diversity, etc., in coastal and marine areas;
– General structure of the national classification system of protected areas, including categories of protected areas;
– Status of existing protected coastal or marine areas;
– Establishment of new protected coastal or marine areas, or proposals or plans for new areas;
– Structure of the administration of nature conservation and environmental protection;
– Structure of management of protected areas;
– National implementation of international agreements – including HELCOM Recommendations – concerning issues of relevance for nature conservation and conservation of biodiversity in general and in coastal and marine areas in particular.

The report contains two main parts:

– Country-by-country reviews of existing and planned protection of coastal and marine areas; status of shoreline protection (based on material especially produced for EC NATURE, **see Annex** 1); existing and planned legislation of relevance for nature conservation; existing and planned administration and resources for management of protected areas; conflicts of interest; and inplementation of international agreements of relevance for nature conservation and protection of biodiversity.
– Area tables of existing protected coastal and marine areas, and areas for which protection is presently being planned or proposed; and maps showing the location and degree of protection (national and international categories) in existing areas.

The objective of the report is to serve as a source of data to be used in the discussion on the needs for establishment of new protected areas and for further conservation and protection measures for the outstanding nature and its biodiversity of our common Baltic Sea Region.

***Henning von Nordheim***
*Convener of HELCOM EC NATURE*

***Britt Hägerhäll Aniansson***
*Editor*

# 2. Present protection of coastal and marine areas and habitats in the Baltic Sea Region, and plans for the future

## DENMARK

Denmark – the peninsula of **Jutland** (Jylland), the distinctive eastern moraine archipelago with the larger islands of Zealand (**Sjælland**), **Fünen** (Fyn), **Lolland** and some 500 small islands, as well as shoals and banks, and the distant bedrock island of Bomholm in the Baltic Sea – has a total land area of about 43,000 km². The country is highly influenced by the vicinity to the sea; no spot in Denmark is further away than 52 km from the seacoast. Denmark has an average altitude of no more than 30 m above sea level, with the highest point reaching only 173 m.

The Danish coasts face two different seas: the truly marine North Sea to the west, and the Skagerrak where conditions become increasingly brackish as one moves from the Kattegat through the Belt Sea and the Sound to the Baltic Proper. Of the total Danish sea area of 105,387 km², 45,339 km² are located south-east of Skagen, thus being part of the Kattegat and included in the Helsinki Convention Area.

The coastline is constantly changing due to erosion, accumulation and land reclamation, but in general figures measures about 7,300 km altogether. The Danish Baltic coast is, in most places, characterized by the flatness of the landscape, by dunes and shallow wetland areas, and by softly curved bays. In contrast to this, the comparatively high, steep limestone cliffs of **Møn** and Stevns rise up some one hundred meters. Further east, Bomholm and the Ertholmene islands are quite different from the rest of the Danish coast. Along the northern coast of Bomholm, the granite bedrock forms 50-70 m high, steep cliffs, whereas the southern coasts consist of dunes and sandy beaches.

Large areas in Denmark have been drained and embanked for agriculture. Over 400 km² of marine and brackish water areas along the entire Danish coast – about one fifth of the less than two meters deep original coastal waters – have been claimed.

### PROTECTED COASTAL AND MARINE AREAS IN DENMARK: *NATIONAL CATEGORIES*

*The* areas presented in the material provided by Denmark are classified in 20 different categories. Practically all areas are included in two or more of these categories. The descriptions below have been taken from the report ***Conservation Status for Danish Marine Areas,*** published in 1992 by the Division of Nature Monitoring (now the Nature Management Division) of the National Forest and Nature Agency of the Danish Ministry of the Environment (now the Minstry of Environment and Energy). In the report, the conservation status for altogether ***16 1*** marine areas, ***152*** of which are located in the Baltic Sea Area (including the Limfjord), is presented. The following national categories are, thus, used for designation of areas of conservation interest in Denmark:

**Large national nature areas**
Large composite landscapes, where values pertaining to the landscape, geology, biology, cultural history and recreation each independently or together with others are considered of special significance to the country and possibly even internationally. IUCN category V, though not strictly protected and not intended specifically for recreation.

*Total number of areas: 44*
*Total area, including parts more than 50 km from the Baltic coast:* 2,372,500 ha
*Marine area: 943,200* ha
*Number of areas larger than 5,000 ha: 44*
*Number of areas which, at least in part, are marine areas: 34*
*Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the Limfjord: 35 – 32 – 32*
*Number of areas which are more or less Baltic marine: 32*

**Areas of national biological interest**
Areas with typical or rare biotopes or species that are worth preserving from a Scandinavian viewpoint, and which Denmark under various international agreements is obliged to preserve and protect. Proposed as IUCN Category IV, though not strictly protected.

*Total number of areas: 98*
*Number of areas larger than 5,000 ha: 35*
*Number of areas which, at least in part, are marine areas: 39*
*Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the Limford: 91 – 72 – 58*
*Number of areas which are more or less Baltic marine: 34*

**Wetland bird areas worth protecting from a Scandinavian viewpoint**
Areas designated by a Scandinavian working group. These areas constitute an important background material for the designation of, e.g., Ramsar sites. Proposed as IUCN Category IV, though not strictly protected.

*Total number of areas: 5 1*
*Number of areas which, at least in part, are marine areas:* 38
*Number of areas which are more or less Baltic marine: 34* (sub-areas included)

**Areas protected by conservation order according to § 60 in the 1984 Conservation of Nature Act, now \$51 in the 1992 Protection of Nature Act**
Independent conservation measures pertaining to waters within the national fishing limits 200 nautical miles from shore or base lines are permitted. Additionally, shallow near-shore areas can be included if appropriate, when conservation measures are decided for adjoining land areas. So far the following Baltic areas have been subjected to various degrees of protection and for various reasons: Harboøre and Agger Tange; Hirsholmene, Deget and surrounding territorial waters; parts of the territorial waters surrounding Hesselø; territorial waters at Nørrestrand, Horsens; Stavns Fjord and adjoining waters; territorial waters off the Streams, off Læså and Øleå streams, Bomholm; Ertholmene and surrounding territorial waters; the eastern tip of Anholt and surrounding territorial waters; Olsemagle Revle and Staunings 0 and parts of the adjacents territorial waters; waters around the island of Saltholm; water around the island of Vorsø in Horsens Fjord; and Kalvebodeme south of Copenhagen.

*Total number of areas: 15*
*Total area, including parts more than 50 km from the Baltic coast:* **196,465** ha
*Marine area:* 184,95 1 ha
*Number of areas larger than 5,000 ha: 5*
*Number of areas which, at least in part, are marine areas: 15*
*Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the Limford: 13 – 13 – 13*
*Number of areas which are more or less Baltic marine:* **13**

Wildlife or game reserves

These reserves may be established anywhere for the purpose of conserving wildlife, including migratory birds. Many of the areas are important resting areas for water birds, but many serve primarily as breeding places for birds and seals and include only a 50 m wide strip of water below the mean daily high water mark. These areas are of little significance with respect to protection of the marine environment, and restrictions generally amount only to limiting access. Due to hunting and other disturbances being considered as main threats to water birds, some 50 additional larger game reserves are currently being created, all of them within EC Bird Directive Areas. IUCN Category IV.

*Total number of areas: 79*
*Total area, including parts more than 50 km from the Baltic coast: 183,564* ha
*Marine area: 167,130* ha
*Number of areas larger than 5,000 ha: 6*
*Number of areas which, at least in part, are marine areas: 71*
*Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the Limfjord: 75 – 69 – 68*
*Number of areas which are more or less Baltic marine: 68*

Seal reserves

Either game reserves or areas protected by conservation order according to § 60, now § 5 1, one or two localities each. IUCN Category IV.

*Total number of areas: 9 (11)*
*Number of areas larger than 5,000 ha: 0*
*Number of areas which are more or less Baltic marine: 8 (9)*

Scientific reserves

Areas established since 1917 under the first Danish Conservation of Nature Act. Of the original ten reserves, all but three are now included under areas protected according to § 60, now § 5 1: Knotteme on Læsø (now a game reserve), Vejleme by the Limfjord, and Ægholm in Fakse Bugt. IUCN Category I.

*Total number of areas: 3*
*Total area, including parts more than 50 km from the Baltic coast:* 5,45 1 ha
*Marine area: 3* ha
*Number of areas larger than 5,000 ha:* 1
*Number of areas which, at least in part, are marine areas:* 1
*Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the Limford: 3 – 3 – 3*
*Number of areas which are more or less Baltic marine:* 1

Fishery prohibition zones

Areas where certain methods of fishing, or fishing in certain time periods is prohibited, primarily in order to protect nursery areas especially for flat-fish. IUCN Category IV.

*Total number of areas: 29*
*Number of areas which are more or less Baltic marine: 36* (these areas are constantly being changed).

Areas of marine biological interest

Areas of scientific interest with respect to flora and fauna. They were, primarily, chosen by the Danish Nature Conservation Council, including marine biologists, in 1974. Additional areas have been in-

cluded, pertaining to the Action Plan for the Aquatic Environment, adopted in 1988 (not quite up to date). Proposed as IUCN Category I, though not strictly protected.

*Total number of areas: 66*
*Number of areas which are more or less Baltic marine: 62*

**Known herring spawning areas**
Mostly based on older information (pre-1949) on the occurrence of herring eggs and larvae, and of ripe specimens. Many of the areas for spring spawning are, however, no longer considered to be in use. A limited amount of newer information stems from local fishermen.

**Registered reefs (stone reefs)**
Areas where stones have been fished or dredged, or where stones occur according to fishermen or sea charts. Because of their widely acknowledged ecological value in Danish waters, where level bottoms predominate, great consideration is paid in nature management to stone reefs. Thus, it is now forbidden to extract stones in EC Bird Directive Areas. Proposed as IUCN Categories III and IV, but generally not fully protected.

**Known nursery areas for flat-fish**
Areas largely corresponding to the fishery prohibition zones, and to some extent founded on bottom topography and sediment composition.

**Bubbling reefs or pillar-like natural formations**
**These** formations have recently been discovered and are now being studied and mapped. The formations are unique and fragile and harbour a for the area particularly diverse fauna and flora. Two areas with such reefs have recently been included under the conservation order pertaining to Hirsholmene and surrounding territorial waters, and several areas are included in areas drafted as sites of Community Importance (SCIs) under the EC Habitats /FFH Directive. Proposed as IUCN Categories III and IV. Not generally protected.

**Shallow coastal areas of importance to birds**
Ornithologically important. Chosen by scientists – including ornithologists and marine biologists – of the Danish Nature Conservation Council. Proposed as IUCN Category IV. Not protected.

**Coastal and marine areas of geological interest**
Chosen by geologists of the Danish Nature Conservation Council. Proposed as IUCN Category I. Not protected.

**Areas of national geological interest**
Chosen by a group of geologists and geographers as being scientifically important and well documented. Proposed as IUCN Category I. Not protected.

*Total number of areas:* 197 (of which 87 coastal)
*Number of areas which, at least in part, are marine areas: 26*
*Number of areas which are more or less Baltic marine or Baltic coastal: 21 – 73*

**Areas of interest due to shoreline geomorphology**
Chosen by geologists and geographers of the Danish Nature Conservation Council. Proposed as IUCN Category I. Not protected.

*Total number of areas: 21*
*Number of areas which are more or less Baltic marine:* 18

**Areas given special attention and consideration in county management**
Chosen by the counties within their marine management areas (fjords and bays and coastal waters outside these within the six-meters depth contour or at least one nautical mile from the shore). Special attention is paid to EC Bird Directive Areas and to stone reefs. Measures must be taken to restore or to prevent deterioration of natural flora and fauna within these areas. IUCN Category IV.

However, for the purpose of the present report it has not been possible to list all these different categories of Danish protected coastal and marine areas separately or to include that many different categories on the general maps. Instead, the areas listed in **Area Table 1** and shown on **Map 1** have been selected and categorized in accordance with the Danish list of protected areas as presented in the IUCN report ***Protected Areas of the World. A Review of National Systems*** (Vol. 2):

**Nature reserve**
**Major conservation area**
**These** areas may be established anywhere on land, in fresh waters and in marine areas (the fishing zone as determined by the 1976 Fishing Zone of the Kingdom of Denmark Act). Each area is protected under an individual conservation order, on a case-by-case basis. Protection might be imposed for scenic, scientific, historical, cultural or recreational reasons, or for a combination of these, hence the degree of protection varies widely, both between areas and within them. In respect to land areas, there are close to 8,000 such conservation orders none of which, however, covers more than 3,400 ha and only 43 cover more than 1,000 ha. Regulations are drawn up specifically for each area, but in general existing uses including farming, forestry and hunting may well continue and farming methods are usually not restricted. Typical regulations could ban cultivation, planting, disturbance or destruction of flora and fauna, changes in landforms, extraction of raw materials such as clay, limestone, sand and gravel, and construction work. These areas are usually well protected from industrial activities, water and road developments, and the establishment of power lines. Regulations are also set down for the management of these areas; they can close, restrict or open a site for public access; they can also enforce the removal of plantations, or other vegetation or the removal of buildings and other constructions. Conservation orders can also demand the expropriation of private land for the establishment of a protected area, although this right is rarely used.

**Wildlife or game reserves**
**See** p. 7.

## PROTECTED COASTAL AND MARINE AREAS IN DENMARK:
*INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in Denmark:

**Ramsar site**
Wetlands of international importance, designated in accordance with the 1971 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

***Total number of areas in Denmark:*** 27
***Total area, including parts more than 50 km from the Baltic coast: 739,837*** ha
***Marine area: 607,939*** ha
***Number of areas larger than 5,000 ha: 22***
***Number of areas which, at least in part, are marine areas:*** 25
***Number of areas, at least part of which are within 50, 10 or 3 km from the Baltic coast, including the***

*Limfjord: 25 – 22 – 21*
*Number of areas which are more or less Baltic marine: 21*

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

*Total number of areas in Denmark:* 19
*Total area, including parts more than 50 km from the Baltic coast: 253,706* ha
*Marine area: 229,965* ha
*Number of areas larger than 5,000 ha:* 11
*Number of areas which, at least in part, are marine areas:* 19
*Number of areas, at* ***least part*** *of which are within 50, 10 or 3 km from the Baltic coast, including the Limfjord:* 19 – 19 – 19
*Number of areas which are more or less Baltic marine:* 19

EC **Bird Directive Area**
Special Protection Area (SPA) for the conservation of wild birds and their habitats, set aside in accordance with the Council Directive 79/409/EEC.

*Total number of areas in Denmark:* 111
*Total area, including parts more than 50 km from the Baltic coast: 987,542* ha
*Marine area: 718,343* ha
*Number of areas larger than 5,000 ha: 42*
*Number of areas which, at least in part, are marine areas: 5* 1
*Number of areas, at* ***least part*** *of which are within 50, 10 or 3 km from the Baltic coast, including the Limfjord: 102 – 74 – 60*
*Number of areas which are more or less Baltic marine: 47*

Ramsar sites, Baltic Sea Protected Areas and EC Bird Directive Areas for the protection of coastal and marine areas in Denmark are presented in **Area Table 2** and **Map 2.**

**The** Danish Ramsar sites fall within the country's SPAs. The Ramsar sites are of international importance due to their size and to the large numbers of birds staying there during their spring and autumn migrations and through large parts of the winter.

The SPAs play a major and increasing role in nature and environmental management in Denmark. Dredging for or gathering of stones and boulders in these areas is now prohibited. Other dredging activities for extraction purposes are gradually to be terminated. Dumping of dredged material, except for small amounts of unpolluted material from small harbours, will cease within a few years.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP IN DENMARK

*(See also Annex I.) The* Protection of Nature Act of 1992 was amended in 1994 in order to strengthen the protection of coastal areas. Consequently, the previously protected coastal strip was extended from 100 to 300 m. The distance is measured from the point where continuous vegetation starts. Within urbanized areas and areas designated in land-use plans for summer houses, the protected belt will remain 100 m. A commission has been set up to examine all Danish coasts in order to define the exact extent of the protected belt in general and where it, due to existing buildings, should be less than 300 m.

The law prohibits the erection of new buildings or other constructions, as well as fencing and placing

of mobile homes, etc., within the protected strip. The most important exemptions are harbours and constructions for military purposes. Existing farming and forestry is also allowed to continue.

The County Council can grant exemptions from the above-mentioned rules, but special reasons are required. The decision by the Council can be appealed against to the Nature Protection Board of Appeal, which is a mixed legal-administrative body.

In dune areas, however, the Ministry of Environment and Energy is the authority for granting exemptions from the law. The ministry has delegated this right to the State Forest Districts, the decisions of which can be appealed against to the Forest and Nature Agency, a body under the Ministry. The implementation of the provisions for protection of the coastal strip has been rigorous and very few exemptions have been granted.

The Raw Materials Act of 1977, amended in 1991, regulates extraction of sand, gravel and stones from land and from the sea bottom. By ministerial order, in accordance with the Act, tight restrictions are put on the extraction of such materials from the sea bottom within 300 m from the high-water mark. Within 500 m, the depth of the extraction must not exceed 1/50 of the distance to land.

According to the Saltwater Fisheries Act of 1993, restrictions are put on trawling within three nautical miles from the low-water mark, and the use of gill nets is prohibited within 100 m from the low-water mark. Fishing within 500 m from the outlet of streams and narrow inner waters measured at high water is generally prohibited, including a 500 m wide zone extending 100 m seaward.

As part of the physical planning process, the Ministry of the Environment previously gave directives for the planning on regional and local level of the coastal zone. The Physical Planning Act of 1993 was also amended in 1994, with the aim of transferring the directives into this legislation. According to the Act, it is now declared as an overall goal that undeveloped coasts are to remain essential nature and landscape resources. According to other provisions, coastal areas are to be kept free from constructions and installations which do not require a location close to the coast. No new areas may be planned for summer houses, and recreational centres must be located in the vicinity of towns or existing centres. In accordance with the Act, all land-use planning must be guided by the principles above within a coastal zone which is generally three kilometres wide. Regional and local planning authorities are to review all plans in this respect.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN DENMARK

According to the 1992 Action Plan for Nature Conservation, § 5 1 conservation orders are planned or under consideration for seven areas:

- the waters around Agerø in the Limfjord;
- Eltang Vig in Horsens Fjord on the east coast of Jutland;
- the offshore areas Schultz' Grund, Briseis Flak and Herthas Flak in the Kattegat;
- the large bay including Hyllekrog and Rødsand south of Lolland;
- Tybrind Vig; and Gamborg Fjord, both in Lillebælt.

20 Danish BSPAs were proposed in 1993, but it has not yet been determined whether a designation will entail further conservation measures.

Denmark has sent a draft list of 175 Sites of Community Importance (SCIs) to the European Commission, in accordance with the EC Habitats/FFH Directive (Council Directive 92/43/EEC).

# ESTONIA

The Baltic Sea coastline of Estonia is characterized by numerous bays, straits and inlets. The coastline is 3,794 km long and well-indented, with shallow bays and coastal meadows.

Islands account for about 2,540 km of the total coastline and for almost ten per cent of the Estonian territory. There are approximately 1,500 islands and islets in the coastal sea. The islands of Saaremaa, Hiiumaa and Muhu are the largest ones (the size of more than 200 km²) but the numerous small islands, the islets that each has an area of less than 20 km*, make the Estonian coastal sea special.

The fact that the islands and islets represent many different ages and development stages is reflected in their landscapes and vegetation types. In general, the development of the Estonian islands has been much influenced by the process of land elevation. This process still causes land to rise from the sea at a current rate of up to three mm per year. The majority of the Estonian islets emerged from the sea during the Limnea stage of the Baltic Sea, from 4,000 years ago to the present day.

The Estonian islets are flat, and the main relief forms are beach ridges. Some of the islets are based on bedrock. The islets have usually risen between 0.5 and four metres above sea level; the highest one being Naissaar 27 m above sea level. Glacial, glaciofluvial and marine deposits indicate the impact of the quaternary period. Most of islets belong to the West-Estonian Archipelago, where the landscape is characterized by Silurian and Ordovician limestone. The biggest (each 8.9 km²) of these islets are Vilsandi on the western and Abruka on the southern coast of Saaremaa. Also the south-eastern and western coasts of Estonia, as well as Väinameri between the islands of Hiiumaa and Saaremaa and the mainland, are rich in islets.

Up to 100 islets are located in the Gulf of Finland, the biggest of which is the 18.9 km* large Naissaar. Most of the islets of the Gulf of Finland are geographically connected with the North-Estonian coastal plain. The Pakri islands and the island of Osmussaar, all three of them in the western part of the Gulf, belong to the North-Estonian plateau. Therefore, the natural appearance of these islands is more like that of the West-Estonian islands based on carbonate deposits, and differs substantially from the nature of the other islands off the northern Estonian coast. As they are located in an area of Devonian sandstone, the Estonian islands in the Gulf of Riga form a separate group. The biggest ones are Kihnu and Ruhnu.

The variety of landscapes, and the extremely mosaic pattern of soil types, create favourable conditions for a rich flora (over 8,800 plant species are presently known) and fauna (over 12,000 known animal species). Estonia is on the northern border of the periphery of their range for a number of these species. On the islands, seashores are the most interesting sites and broad-leaved forests and alvars the most interesting plant communities. Many of the vascular plants found on the islets are included in the Baltic Sea Red Data Book. About half of all vascular plant species and mosses of the Estonian flora occur on the islets, which are also rich in lichen species, both common and rare ones. The vegetation types are characterized by seashore communities, seashore wet and dry meadows and park meadows, by juniper shrubberies and groves of trees. Forests are scarce and occur on ancient islets where alvar pine forests predominate. Alvar spruce forests, wet birch and alder forests are more rare.Vegetation on the islands off the northern Estonian coast varies from coastal open plant communities to forests.

The previously strictly guarded border zone along the coastline kept uncontrolled recreational and commerical activities out of the area. Being at the same time the East-Atlantic Flyway for migratory birds, it offers extraordinary high bird diversity. The shallow bays and coastal meadows create many natural habitats suitable for waterfowl. For example, huge flocks (up to 100,000 birds) of barnacle geese pass and rest in these comparatively empty coastal refuges during their annual spring migration. The Estonian islets also have a diverse and abundant bird life. About a hundred bird species breed there, and they also offer resting sites for migrating birds. Grey seal and ringed seal can be found in Estonian coastal waters, mainly in the West-Estonian Archipelago.

Estonia's total land area is about 45,000 km*. More than 1,400 lakes make up over six per cent of the total area of the country, together with some 20,000 bigger bog-pools. Although much land

has been drained over the years, Estonia is still a "wet" country. Mires cover approximately 9,150 or about 21 per cent of the area. Together with waterlogged areas where the peat layer is less than 30 cm, wetlands even make up 31 per cent of the Estonian territory. About 48 per cent of Estonia is covered with forests and forest land (young forest plantations, open woodlands and bogs covered with trees).

## PROTECTED COASTAL AND MARINE AREAS IN ESTONIA:

*NATIONAL CATEGORIES*

The following national categories, according to the 1994 Act on Protected Natural Objects, are used for designation of protected areas in Estonia:

**National park** *(Rahvuspark)*
A protected area of special national importance for the preservation, protection, investigation, and promotion of awareness of natural and cultural inheritance; it includes ecosystems, examples of biological diversity, landscapes, national culture, and is subject to sustainable nature management.

**Nature protection area** *(Looduskaitseala)*
An area protected for its nature conservation or scientific value set aside for the preservation, protection and investigation of natural processes and endangered or protected plants, animal and fungus species and their habitats, inanimate objects, as well as landscapes and natural monuments.

**Protected landscape/Nature park** *(Maastikukaitseala/Looduspark)*
An area of natural or cultural heritage value which is rare or typical for Estonia, and is established for nature conservation, cultural or recreational purposes. Parks, arboreta and botanical gardens which have been taken into protection are also considered protected landscapes.

**Programme area** *(Programmiala)*
An area managed under a local, national or international programme for monitoring, investigation or educational purposes, as well as combining conservation and management of natural resources. (This definition applies to, e.g., the West-Estonian Archipelago Biosphere Reserve.)

In the Act on Protected Natural Objects, three categories of protected natural objects are set: areas; natural and natural-historical monuments; species, fossils and minerals. In reference to the latter two, there are the categories of protected natural monument, and protected species, fossil or mineral.

**Protected natural monument** *(Kaitstav looduse üksikobjekt)*
A living or inanimate object which is of scientific, historial–cultural or aesthetic value, such as a tree, boulder, waterfall, cliff, terrace, cave, rock, outcrop or karst landform, or a group of these.

**Protected species, fossil or mineral** *(Kaitsealune liik, kivistis või mineraal)*
A plant, fungus or animal species or its taxonomic unit, a fossil or a mineral, which is found in Estonia in its natural state, is endangered, rare or of scientific, nature conservation, aesthetic or local historical value, and which has been taken into protection. Protected species, fossils and minerals are divided into Protection Category I, II or III according to the strictness and specific features or protection requirements.

Most Estonian protected areas are divided into different protection zones. The ratio of the area of these zones is one of the key factors for the definition of a protected area. In the Act, it is stated that the "types of zones include strict nature reserves, special management zones, limited management zones and general programme area zones".

**Strict nature reserve**
An area of land or water in its natural state and free from direct impact of human activity, where preservation of natural associations resulting only from natural processes is guaranteed.

**Special management zone**
A land or water area protected in order to preserve resulting or created natural and semi-natural associations. Forest in a special management zone fall into the category of preservation forest and their main function is specified in the Protection Rules.

**Limited management zone**
Part of a protected area used for economic purposes where restrictions, established by the authority which has taken the object under protection, must be taken into account. Forests in a limited management zone falls into the category either of preservation forest or protection forest, as set out in the Protection Rules.

**General programme area zone**
Land or water in between other protected zones in a biosphere reserve.

Existing national parks, nature reserves and landscape reserves for the protection of coastal and marine areas in Estonia are presented in **Area Table 3 and Map 3.** However, the following should be noted:

In 1995, according to the Act on Protected Natural Objects, a principal estimation and inventory of the network of protected areas has been commenced. The aim of this work, carried out in parallel to the Land and Property Reform, is to determine and specify the status, borders and zoning of all protected areas. All former specific protected areas, e.g., mire reserves, will be reclassified to landscape reserves or nature reserves. The previous locally protected areas, and probably some core areas of the West-Estonian Archipelago Biosphere Reserve, will also be given the protection status of nature or landscape reserve.

The work is not yet finished and, therefore, Area Table 3 includes only protected areas that have been established on a national level. For a majority of these areas, an official confirmation of their protection category remains to be made. Thus, Area Table 3 and Map 3 should be considered as preliminary. Protected areas established on local (county) level are not included.

At present, protected areas make up about seven per cent of the whole Estonian territory (the West-Estonian Archipelago Biosphere Reserve excluded). The strict protection regime applies to about one per cent of the territory only, and the aim is to increase this figure to up to five per cent by the year 2010, as declared in the draft version of the Estonian Environmental Strategy (September 1996).

In the Estonian coastal zone, within 50 km from the coastline, the most important areas are the West-Estonian Archipelago Biosphere Reserve, three national parks (Lahemaa, Vilsandi and Soomaa), three nature protected areas (Matsalu, Viidumäe and Nigula) and 24 other protected areas. In 1993, Vilsandi national park – including the former Vilsandi and Harilaid nature reserves – and the Soomaa national park (based on the Halliste, Kikepera, Kuresoo, Valgeraga and Ördi nature reserves) were established. In 1995, the Naissaar nature park and in 1996 Osmussare landscape reserve were set up on single islands in the Gulf of Finland.

## PROTECTED COASTAL AND MARINE AREAS IN ESTONIA:
*INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in Estonia:

**Ramsar site**
Wetland of international importance, designated in accordance with the 1971 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

**Biosphere reserve**
Area set aside for the conservation, for present and future use, of the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species on which their continuing evolution depends. (These are by UNESCO's Man and Biosphere Programme internationally designed sites managed for research, education and training.)

Ramsar sites, Baltic Sea Protected Areas and the biosphere reserve in the coastal zone of Estonia are presented in **Area Table 4** and **Map 4.**

The former Soviet Union included Matsalu on its list of Ramsar sites already in the 1970's. Estonia re-designated the area in 1994 as an Estonian Ramsar site. Estonia has also prepared additional proposals about the Soomaa wetland complex, Nigula bog, the Muraka mire complex, Puhtu–Laelatu–Nehatu, Väike vain, Islets near Hiiumaa, Käina Bay, Haapsalu-Noarootsi Bays in the coastal zone, Alam-Pedja wetland complex; Emajbe Suursoo mire (including Piirisaar Island); and the Endla mire complex further inland, to be included on the Estonian list of Ramsar sites.

Sixteen areas, including already protected areas like the Läänemaa–Suursoo mire complex, Nätsi–Võlla Bog, etc., and areas not yet protected, such as Kihnu Strait, Hari Kurk Strait, etc., have been designated as potential Ramsar sites (see Area Table 5).

Three Estonian areas – Lahemaa, Matsalu and Vilsandi – have been proposed as Baltic Sea Protected Areas. Another two areas – Kôpu Peninsula and Islets of Hiiumaa, both of them included in the West-Estonian Archipelago Biosphere Reserve – are planned to be established as BSPAs.

The 1.5 million ha large West-Estonian Archipelago Biosphere Reserve includes the islands of Saaremaa, Hiiumaa and Abruka and, among many other protected areas, the Vilsandi national park and the Viidumäe and Abruka nature reserves.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP IN ESTONIA

*(See also Annex 1.)* In 1995, the Parliament adopted the Act on the Protection of Marine and Freshwater Coasts, Shores and Banks to replace a previous ministerial regulation of similar content. Under the new act, a protected strip is established along all shores, including the coast of the Baltic Sea. The protected strip is divided into a water protection zone, a zone where construction is prohibited, and a general coastal zone.

Within the water protection zone, which extends to 20 m from the coastline, economic activities (except grazing and mowing of meadows) is prohibited.

The zone where construction is prohibited extends to 100 m on mainland coasts, to 200 m on islands, and to 50 m in cities, towns and villages. The distances are normally measured from the mean water

mark. In case there is a terrace on the coast, the distance is measured from the upper edge of the terrace. An exception is made for activities like harbours, fishing facilities, etc., and also for the reconstruction of destroyed farm buildings (used for agriculture or forestry) on their original sites.

The extent of this zone can be increased or reduced within the framework of a general plan. General plans are drawn up by the municipalities, but they must be made in accordance with a land-use plan approved by the County Government. The purpose of this procedure is to have the exact width of the protected zone determined through physical planning taking into account natural circumstances, in order to avoid a situation where homogenous land-use areas are split up and to make use of recognizable natural boundaries. In a general plan, the width of the protected coastal strip can be extended up to 300 m. It can also be reduced for the above reasons, but such a reduction must always be approved by the Ministry of the Environment.

The Estonian coast is already covered by general plans approved by the appropriate authorities. In these plans, the required distances from the shoreline have been measured from the high-water mark, which is 1.5 m above the mean water mark. This means that the protected belt clearly is larger than the minimum requirement of the law, particularly in low-lying Western Estonia.

The general plans form the basis of agreements with previous landowners when coastal land is returned to them. In case of the entire land of an owner falling within the zone where construction is prohibited, the owner is entitled to a piece of state-owned land to build on outside the protected zone but in the same region.

It is also stipulated in the Act that a general protection zone of 200 m is established on all coasts. Certain constructions and facilities which might cause water pollution are prohibited in that zone. The same holds true for storage of polluting substances in the protected zone.

### COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN ESTONIA

Coastal or marine areas for which protection is planned or proposed in Estonia are listed in **Area Table 5.** These are wetland areas that have been propsed as Ramsar sites or designated as potential Ramsar sites. Some of them are already protected (or include protected territories), whereas others should be placed under protection for their ecological values, particularly as bird areas.

The plans to establish Kôpu Peninsula and Islets of Hiiumaa as new Baltic Sea Protected Areas have been initiated by the Hiiumaa Center of the West-Estonian Archipelago Biosphere Reserve.

## FEDERAL REPUBLIC OF GERMANY

The length of the German Baltic coastline is about 2,300 km, of which 1,7 12 km in Mecklenburg-Vorpommem and 600 km in Schleswig-Holstein. The total area of Schleswig-Holstein is 15,700 km* and that of Mecklenburg-Vorpommem 23,196 km*. The total area of the present Federal Republic of Germany is 357,046 km*, of which the former Federal Republic of Germany (FRG) has contributed around 249,000 and the former German Democratic Republic (GDR) 108,000 km* .

The two federal states, *Länder*, on the Baltic Sea coast is Schleswig-Holstein in the former FRG and Mecklenburg-Vorpommem in the former GDR. Following the constitutional division of responsibilities in the Federal Republic of Germany, nature conservation is a predominant task of the tinder. The competence of the Federal Government is mainly restricted to framework legislation and international issues. Therefore, the appropriate ministries and authorities of the *Länder* are in charge of designation and management of protected areas.

The coast of Schleswig-Holstein is characterized by long, narrow inlets *(Förden)* and bays -- like

Flensburger Förde, Eckenförder Bucht and Ltibecker Bucht. Typical for the coast, including the island of Fehmarn, are cliffs, embankments, sand bars, dunes and coastal lakes, and lagoons *(Haffs und Noore)*. The more than 20 m high moraine cliffs along some 50 km of the coast are gradually eroded by the sea. The continuous movements of the water deposes various material into embankments *(Strandwälle)* up to three metres high. Kleiner and Großer Binnensee and Schwansener See are examples of how sand bars have expanded to the point where they cut off the sea and form coastal lakes. A specific feature at the Baltic coast of Schleswig-Holstein are also small sand dune areas. More common are sandy beaches.

The character of the Mecklenburg-Vorpommem coast is quite different from that of Schleswig-Holstein. *Förden are* lacking in Mecklenburg-Vorpommem. The Mecklenburg (western) part of the coast, except for Wismar Bucht, is characterized by a mature shoreline, whereas ***Bodden*** and *Haffs* are a typical feature of the Vorpommem (eastern) part of the coast and unique for the whole Baltic.

***Bodden*** and ***Huffs are*** shallow lagoon-like sea areas which are, to a certain degree, separated from the open Baltic Sea. The degree of separation, and consequently the water exchange, may differ considerably. It may be rather intensive, as is the case with the Greifswalder Bodden (the largest one in Mecklenburg-Vorpommem), or rather weak, as is the case with the internal ***Bodden*** area of the island of Rügen (Großer und Kleiner Jasmunder Bodden) or the internal ***Bodden*** of the Darß-Zingst Bodden chain (Saaler Bodden, Bodstedter Bodden).

The different degree of separation and the natural fluctuation of water inflow and outflow is the reason for a high gradation and fluctuation of salinities. Some of the ***Bodden*** and *Haffs*, ***e.g., the*** Dar& Zingst Bodden chain and the Odra Lagoon, receive a considerable fresh-water inflow from rivers and have a typical estuarine character.

A typical feature of the ***Bodden*** coast is its very irregular course, with numerous peninsulas and water inlets, coastal lakes, spits, islets, etc. Due to this irregular character, the total length of the ***Bodden*** coast exceeds considerably that of the more or less mature outer coastline – 1,358 km of ***Bodden*** coast are faced with only 354 km of outer coast.

The coast of Mecklenburg-Vorpommem is fascinating due to the fact that it is largely unspoilt. For example, about 200 km of the outer coast and 1,100 km of the ***Bodden*** coast are free of any coastal defence constructions (see also HELCOM Recommendation 16/3 on preservation of natural coastal dynamics). Rocky and cliff shores -the chalk cliffs on the island of Riigen being an exceptionally majestic example – as well as natural embankments, dunes, salt meadows, boulder shores, mud flats (wind-generated ***Wudden*** areas) are characteristic for the beauty of the coast of Mecklenburg-Vorpommem.

## PROTECTED COASTAL AND MARINE AREAS AND HABITATS IN GERMANY: *NATIONAL CATEGORIES*

The following national categories are used for designation of protected areas in the Federal Republic of Germany:

**Nature reserve *(Nuturschutzgebiet)***
Designated in order to conserve biocenoses or biotopes of certain species of wild flora and fauna, or for reasons of science, natural history or natural heritage, or because of the area's uniqueness or particular beauty. All actions which may lead to the destruction of, cause damage to or induce changes in a nature reserve, or which may be a source of major disturbance for a nature reserve, shall be prohibited, subject to further specific provisions. Where this is compatible with the purpose of protection, nature reserves may be accessible to the general public.

**National park** *(Nationalpark)*
This category provides uniform protection to the areas concerned, which are large and of singular character; criteria defined for nature reserves apply to the greater part of the area of a national park; the

area has not been affected by human intervention at all, or to a limited extent only, and, helps to conserve the greatest possible variety of native fauna and flora. The *Länder* shall ensure that, taking into account exceptions imposed by the large size of the area or the presence of population centres, national parks enjoy the same protection as granted to nature reserves. Where compatible with the purpose of protection, national parks shall be accessible to the general public.

**Landscape reserve/Landscape protected area** *(Landschaftsschutzgebiet)*
Designated in order to preserve or restore the balance of nature, or preserve or restitute usability of nature's resources; for the diversity, singularity, or beauty of landscapes, or, for an area's special importance for recreation. All actions which alter the character of the landscape reserves, or are not compatible with the purpose of their protection, shall be prohibited or subject to further specific provisions.

**Nature park** *(Naturpark)*
Specifically designated for uniform development and maintenance of the balance of nature. Nature parks are typically to be large in size and to consist mainly of landscape or nature reserves; such areas are particularly suitable for recreational purposes due to their landscape assets. Sites are designated, in accordance with the principles and objectives of area planning and of regional planning by ***tinder,*** either as a recreational area or as a tourist destination area. Nature parks shall be planned, structured and developed in accordance with their recreational purpose.

**Natural monument** *(Naturdenkmal)*
Designated to conserve an area for reasons of science, natural history or national heritage; for their uniqueness, singularity or beauty; the area designated may also include the surrounding area necessary to conserve the natural monument concerned. The removal of natural monuments, as well as any action which may lead to their destruction, defacement or alteration, or which may cause major disturbance to the monument or its protected surrounding areas, shall be prohibited, subject to further specific provisions.

**Protected part of landscape** ***(Geschiitzter*** *Landschaftsbestandteil)*
Sites or objects designated as specifically protected parts of nature or of landscapes in order to safeguard the balance of nature; to improve, structure or preserve the scenery of a local community or landscape, or to protect the areas from deleterious influences. In some areas, this category may apply to trees, hedges or other parts of the landscape. The destruction, defacement, removal or alteration of these sites shall be prohibited, subject to more specific provisions. Where plant populations are reduced, the *Länder* may rule that substitute vegetation be planted where this is appropriate and reasonable.

Existing national parks, nature reserves and landscape reserves for the protection of Baltic coastal and marine areas in the Federal Republic of Germany are presented in **Area Table 6** and **Maps 5** and **5B**.

Under the federal building legislation, building in areas not subject to a building plan is substantially restricted.

Furthermore, the nature conservation law of the *Länder* may impose even stricter regulations in the coastal strip. In Mecklenburg-Vorpommem, it is stated in the First Nature Conservation Act from 1992 that building constructions may not be erected or essentially enlarged within a 200 m wide strip from the coastline (see also below). In Schleswig-Holstein, it is stipulated in the Nature Conservation Act, amended in 1993, that protected strips should be established for water protection and recreation. The protected strip is measured 100 m from the shoreline on all coastal waters (see also below).

Another instrument to conserve coastal and marine environment is the general legal protection of certain biotopes (habitats), as stipulated both in the Federal Nature Conservation Act and the nature conservation legislation of the *Länder* ***(see*** also below).

### *Schleswig-Holstein*

Most coastal habitats, such as banks, reed stands, salt marshes, coastal dunes, coastal grasslands, heaths and wetlands, moraine cliffs, pools and wet forests are generally protected through the Nature Conservation Act of 1993.

The use of fishing-net is forbidden within a 200 m wide strip from the shoreline. Bottom-trawl fishing is not allowed in the coastal waters up to a distance of three nautical miles from the shoreline.

Of the 450 km long Schleswig-Holstein coastline, excluding the Schlei, about 50 km (11 per cent) are protected as nature reserves, another 50 km are protected Pleistocene cliffs, and about 180 km (40 per cent) are protected as landscape reserves.

There are no marine areas set aside primarily for the protection of the marine environment in Schleswig-Holstein.

### *Mecklenburg-Vorpommern*

*"When the former German Democratic Republic joined the neighbouring Federal Republic of Germany in 1990, it offered a valuable gift as a common heritage for* ***the future*** *of the united Germany and for the Baltic region as a whole. Five national parks and a couple of biosphere reserves of outstanding ecological value were brought along into the new political union. This was made possible through the concerted last-minute action by a handful of dedicated scientists and highly motivated ecologists, who acted at the right moment and managed to obtain the legal confirmation. The decisions to establish these parks and reserves was the* ***final*** *decision by the Parliament of the GDR. The share of this heritage within the Baltic drainage area are Vorpommersche Boddenlandschaft and Jasmund National Parks, as well as the Biosphere Reserve of Südost-Rügen, each of which includes outstanding features of the Baltic coastal areas."*

This quotation from an article in *WWF Baltic Bulletin* in 1992 sums up some of the history of the nature conservation programme of the former GDR, established just before the country ceased to exist. The programme consists of six national parks, six biosphere reserves and 14 nature parks distributed over the five new *Länder* of Mecklenburg-Vorpommem, Brandenburg, Sachsen-Anhalt, Sachsen and Thüringen.

In Mecklenburg-Vorpommem alone, about 130 nature reserves, three national parks (Vorpommersche Boddenlandschaft, Jasmund, and Müritz), one biosphere reserve (Südost-Rügen), three nature parks and large areas of landscape reserves have, thus, been protected since 1990. Planning of three additional nature parks (Rügen, Usedom, and Feldberger Seenlandschaft) was started in 1990 but has not yet been completed.

A large proportion of the coast of Mecklenburg-Vorpommem is covered by protected areas. About 280 km are protected as national parks (Vorpommersche Boddenlandschaft and Jasmund), about 130 km as nature reserves, and about 1,200 km within landscape parks.

No areas in Mecklenburg-Vorpommem have yet been classified as marine reserves according to the definition used in the present report; an area set aside primarily for the protection of the marine environment.

## PROTECTED COASTAL AND MARINE AREAS AND HABITATS IN GERMANY:
*INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in the Federal Republic of Germany:

**Ramsar site**

Wetland of international importance, designated in accordance with the 1971 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

**EC Bird Directive Area**
Special Protected Area (SPA) for the conservation of wild birds and their habitats, to be set aside in accordance with Council Directive 79/409/EEC.

**Biosphere reserve**
Area set aside for the conservation, for present and future use, of the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species on which their continuing evolution depends. (These are by UNESCO's Man and Biosphere Programme internationally designed sites managed for research, education and training.)

Ramsar sites, Baltic Sea Protected Areas and EC Bird Directive Areas in the coastal zone of Schleswig-Holstein and Mecklenburg-Vorpommem, as well as the biosphere reserve in Mecklenburg-Vorpommem, are presented in Area **Table 7** and Maps 6 and 6B.

***Schleswig-Holstein***

No Ramsar sites have been designated on the Baltic coast of Schleswig-Holstein, but the four Baltic Sea Protected Areas are all proposed as new Ramsar sites.

Twenty-one EC Bird Directive Areas are located on the coast of Schleswig-Holstein.

***Mecklenburg- Vorpommern***

***The*** lagoon waters west of Rügen, between the islands of Rügen and Hiddensee and the Zingst peninsula, was designated a Ramsar site already in 1978.

Two other areas – Wismar Bucht and Greifswald Lagoon/Strelasund Sound -have been designated Wetlands of National Importance, which was a special protection status according to the legislation in the former GDR. Although these areas are not listed as Ramsar sites, they fulfil the criteria of such areas. They presently have the protection status of landscape reserves, BSPAs and/or EC Bird Directive Areas.

Four areas are included in the Mecklenburg-Vorpommem list of BSPAs. The areas are all protected under national legislation (area and biotope/habitat protection) and/or the EC Bird Directive and Habitats/FFH Directive, respectively.

Seven EC Bird Directive Areas are found in the coastal zone of Mecklenburg-Vorpommem. They are also included in the Natura 2000 Network, within the framework of the EC Habitats/FFH Directive (Council Directive 92/43/EEC), a protection status wich will prohibit or at least strongly restrict alterations of the areas.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP AND COASTAL HABITATS IN GERMANY

***(See also Annex 1.)***

***Protection of the coastal strip***
Neither the Federal Act on Nature Conservation, nor other federal German legislation provides specific rules for the protection of the coastal strip. This issue is considered a matter of the *Länder*.

In Mecklenburg-Vorpommem, it is declared in the First Nature Protection Act, of 1992, that build-

ing constructions may not be erected or essentially enlarged within a 200 m wide strip from the coastline, including the ***Bodden*** bay shores ***(Außen- und Boddenkiiste).***

In Schleswig-Holstein, it is stipulated in the Nature Conservation Act, amended in 1993, that in a coastal strip no building constructions should be erected for water protection and recreation. The protected strip is 100 m wide measured from the shoreline of all coastal waters.

In both federal states, the nature protection authority is entitled to grant exceptions in certain cases and under certain conditions. Exceptions mostly refer to harbours, water sports, bathing and other activities connected to the shore. There could also be exceptions made within existing settlements. Similarly, a building plan under preparation can form the basis of an exception.

In Schleswig-Holstein, a specific condition for granting an exception is that the existing or future options for public recreation near the water and the coastal habitat structure are not jeopardized.

In Germany, both the federal and state planning and building legislation contains many provisions by which an effective control of development can be achieved and which are relevant for the protection of the coastal zone. Generally, the right to construct new buildings outside settlements, or areas not covered by a building plan, only applies to certain "privileged projects" (farm buildings or buildings with a public supply functions such as energy, gas, water supply, communication etc.) or constructions that for safety reasons must be located outside settlements. Other buildings can be permitted in single cases, but only if they do not affect public interests like nature or landscape protection.

***Protection of coastal habitats***

***The*** Federal Nature Conservation Act, as amended in 1987, contains provisions for general protection of certain habitats. The aim is to protect habitats of importance for the wild flora and fauna, in particular endangered species. The Act includes a list of protected habitats, but it is the responsibility of the individual *Länder* to implement habitat protection through their own legislation. They can add further habitats to the list of the federal Act, and they can also grant exceptions in cases where the loss of a habitat can be compensated or when certain measures are considered necessary following an overwhelming public interest.

Certain habitats which are frequently found in the coastal zone are, with minor variations, protected in Mecklenburg-Vorpommern and in Schleswig-Holstein alike. The most important ones are:

- dunes and sand banks;
- mudflats;
- cliffs and steep shores;
- most types of heaths;
- coastal meadows and certain types of wet meadows;
- coastal swamps;
- reeds;
- dry grasslands;
- wet forests:
- natural and non-built creeks and rivers, including river banks;
- spring areas and pools with standing water.

In addition, ***Bodden*** and ***Haffs***, typical for Mecklenburg-Vorpommern, are protected in that region. Outside settlements in Schleswig-Holstein also other areas of succession, which have not been economically used for more than five years, are protected habitats.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN GERMANY

### *Schleswig-Holstein*

A number of new nature reserves in the coastal area are proposed by the Agency for Nature Con-

servation and Landscape Management. However, these areas still need several years of detailed planning and final political decision.

The coastal or marine areas for which protection is planned or proposed in Schlesweig-Holstein can be found in **Area Table 8.** Four areas are proposed BSPAs in accordance with HELCOM Recommendation 15/5. Discussions have already been taken place on several occasions with different political and interest groups.

*Mecklenburg-Vorpommern*

The two nature parks Rügen and Usedom were provisionally established in 1990 by the National Park Programme of the GDR. The final legal establishment is not yet completed. One condition for the establishment of a nature park is that the major part of the area is enjoying the protection status of landscape reserve or nature reserve. This is already the case for Usedom, and for the island of Rügen the procedure for the establishment of a landscape reserve covering nearly the entire island is underway.

Nature parks in the FRG have traditionally not been objects of higher protection from a nature conservation point of view, e.g., the status of nature park does not imply stricter provisions than those following the landscape reserves and nature reserves included in the park. This fact has placed nature parks in IUCN category V. The concept of nature park originally indicates mainly an administrative regime for tourism and recreation. However, as intended with the National Park Programme of the GDR, the nature park of the new *Länder* should to a considerable extent include features of biosphere reserves, e.g., that especially sensitive core zones have a stricter protection status (normally as nature reserve) and that human activities should be based on the wise-use principle.

The number of nature reserves, and the total area covered by such reserves, is still increasing. 27 areas have been established since 199 1. More nature reserves are planned. A similar figure applies to the landscape reserves, and the designation procedure (including public participation) is underway for additional reserves, among them Rügen and the coast of the district of Nordwestmecklenburg.

## FINLAND

Finland, "the land of the thousand lakes" (more than 60,000, actually) is also the land of the many thousands of islands and islets. With its roughly 73,000 islands and islets – only 15 of which are over 50 $km^2$ – as well as innumerable bays and sounds, together covering an area of some 15,000 $km^2$, Finland more than any other state in the Baltic region is characterized by archipelagos. Finland's straight coastline measures 1,100 km, including bays and inlets over 4,600 km, but when the coast of all islands, islets and skerries is also included the figure rises to over 39,000 km. Finland's archipelagos are found mainly from the Quark in the Gulf of Bothnia to the south and the east in the Gulf of Finland. The density of islands and islets in the Archipelago Sea, between Finland, the Province of Åland and Sweden, is probably the highest in the world.

The Gulf of Bothnia – including the vast Archipelago Sea to the very south and the remarkable threshold Quark straits area between the Bothnian Sea and Bothnian Bay – is the sea of archipelagos, low-lying open boulder beaches, inlets of large rivers, capes and bars of gravel and sand, sand dunes, wide coastal plains and meadows. Here one can see the Archaean, bare primary rocks rise from the sea.

The archipelagos of the Gulf of Bothnia – a mosaic of land and sea in an area once covered by the great inland ice, now penetrated by rifts or covered by morains – are globally unique. The process of land elevation affects the coastline quite dramatically in the entire northern and central Baltic Sea region, along the Finnish and Swedish coasts alike. New archipelagos emerge, fishing grounds become coastal meadows, inlets are transformed into coastal lakes (first a *flada*, then a *glo* lake, and finally an ordinary lake), estuaries become deltas and eventually forest land and arable land.

This is particularly true and noticable along the Finnish coastline, and most pronounced in the Gulf of Bothnia where 8-9 mm more land rises from the sea each year. Today, the total area of the country is 338,145 km*, but every century it has been estimated that an another approximately 1,000 km* of land, rising from the sea, is added. Typical of the low-lying coastal areas in Finland, and the constant transformation of sea bottom into land, are also up to 130 km wide coastal plains – which provide good land for agriculture – and large coastal meadows.

The extensive Archipelago Sea (about 10,200 km*) has several particular features. It is a mosaic of shallow water (with an average depth of 18 m) and islands affected by land elevation. The rocky islands, with a layer of deposits, gradually rise from the sea, although somewhat more slowly (about five mm per year) than further north. This area, delimited on two sides of the open sea, consists of areas with islands scattered around, narrow straits and bays. Strong currents prevail between the numerous islands and this, together with the shallowness, prevents substantial water exchange between the open sea areas to the south and to the north.

The Finnish coast along the Gulf of Finland, particularly its eastern part, is less obviously affected by land elevation, but emerging archipelago areas occur there, too.

Most of the large Finnish rivers have been regulated for hydropower generation. Some of the rivers which fall into the Gulf of Bothnia have, however, been excluded from regulation.

Finland's total land area is almost 340,000 km², of which some 70 per cent is covered by forest.

## PROTECTED COASTAL AND MARINE AREAS IN FINLAND:
*NATIONAL CATEGORIES*

The following national categories are used for designation of protected areas in Finland:

**Strict nature reserve** *(Luonnonpuisto/Luonnonsäästiö)*
Sites reserved mainly for research. Where their protection and research goals permit they also endeavour to promote nature conservation. Access is often prohibited without a written permission, and this is only granted for specific projects. Many reserves have, however, marked trails where access is permitted.

**National park** *(Kansallispuisto)*
Sites serve as 'public sights of nature', representing the most valuable and typical natural landscapes in Finland. Nature conservation is the main purpose of national parks, but they also serve scientific research, because they offer almost irreplaceable opportunities for comparison and monitoring; teaching and general knowledge about nature; and recreation. The public has free access to these areas. Each park has its own regulations necessary for its specific requirements, although a number of general principles apply. Disturbing and causing damage to nature is forbidden. Camping and lighting fires is only permitted at specific sites, except in some of the larger Lappish national parks in the north, with wilderness zones where restrictions are less severe. Visitors are allowed to pick berries and collect edible mushrooms. Hunting is usually prohibited, except for the local population within the national parks in Northern Finland, but fishing is allowed to some extent in most parks.

**Other nature reserve** *(Muu luonnonsuojelualue)*
Areas that, because of their small size or other reasons, cannot be designated as national parks. They are protected by law or decree and have similar regulations as national parks. A number of these sites are designated for the specific natural habitat types covered under the various State conservation programmes.

**Natural monument** *(Luonnonmuistomerkki)*
A natural feature such as an historic or ancient tree, a group of trees, geological formations or other

special natural elements of the landscape. These designations are possible on state-owned land and on private land with the owner's agreement.

Existing national parks and nature reserves for the protection of coastal and marine areas in Finland are presented in **Area Table 9** and **Maps 7-9.**

**The** already protected coastal areas in Finland, and the conservation programmes for these areas, cover wetlands and smaller islands and skerries in the outer archipelago to a fairly large extent. The problem is rather the implementation of these programmes and schemes.

The mainland and inner archipelago areas are, however, poorly represented, particularly along the Gulf of Finland. The landscape values are often high in these areas, with steep or low rocks bordering the waterline, sometimes with dense vegetation. This nature type requires better protection both in the form of general shore protection and legislation for landscape conservation.

At the moment, Finland has no general provisions for the protection of shores or coastal biotopes (see below). Neither are there any provisions for landscape protection.

Finland has two areas – Boxö and Tvärminne – categorized as marine reserves set aside primarily for the protection of the marine environment.

The construction of new power plants is not permitted in water systems protected under the Act on the Protection of Rapids. For the Baltic area it applies to the following water systems:

- The lower course of Kymijoki
- Kymijoki between Hirvijärvi and Tammijärvi
- Kymijoki: Ahvionkoski, Kultaankoski and Pemoonkoski rapids
- Kiskonjoki and Perniönjoki watercourse
- Noormarkunjoki: Myllykoski rapids
- Laväärtinjoki and Isojoki watercourse
- Lower course of Ähtävänjoki
- Perhonjoki from Murkinkoski rapids to the railway bridge
- Lestijoki watercourse
- Siiponjoki
- Lower course of Kalajoki
- Lower course of Pyhäjoki
- Lower course of Siikajoki
- Kiiminkijoki watercourse
- Kuivajoki watercourse
- Simojoki watercourse

## PROTECTED COASTAL AND MARINE AREAS IN FINLAND:
*INTERNATIONAL CATEGORIES*

The following international categories are or will be used for protection of coastal and marine areas in Finland:

**Ramsar site**
Wetland of international importance, designated in accordance with the 197 1 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

**Biosphere reserve**
Area set aside for the conservation, for present and future use, of the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species on which their continuing evolution depends. (These are by UNESCO's Man and Biosphere Programme internationally designed sites managed for research, education and training.)

**EC Bird Directive Area**
Special Protected Area (SPA) for the conservation of wild birds and their habitats, to be set aside in accordance with Council Directive 79/409/ECC.

Ramsar sites and Baltic Sea Protected Areas in the coastal zone of Finland, as well as the biosphere reserve in the Archipelago Sea, are presented in **Area Table 10** and **Maps 10-12.** As a new EU Member State, Finland has not yet notified any EC Bird Directive Areas (SPAs), but a decision has been taken to classify 15 areas as SPAs.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP IN FINLAND

*(See also Annex I.)* Neither the Nature Conservation Act of 1923, nor the Building Act of 1958 includes any provisions on shore protection. The municipalities can, however, in the building bylaws stipulate a minimum distance from the shoreline to be respected when new houses are constructed. Most municipalities require a distance of 20-30 m, but sauna buildings are usually excluded from this rule.

The Finnish law is based on the right of the landowner to dispersed settlement. Without having to present any plan, the owner is considered to have the right to construct 4-5 buildings per kilometre of shoreline. The owner can also prepare a shore plan for the area and, thus, be allowed to build even more. The municipality is obliged to adopt, and the state authorities to ratify, any such plan if the proposed development is dispersed. In fact, shore plans including up to ten building sites per kilometre of shoreline have in legal practice sometimes been considered as dispersed settlement.

The municipality can prepare a master plan for a larger shore area. Where such plans have been made for coastal areas, they have usually included 5-8 building sites per kilometre of shoreline on the mainland and 3-5 building sites in the archipelago. The planner can try to have these development rights transferred within a landowner's area in order to keep some shores free and allow others to be more densely developed. However, this is difficult or even impossible when the land is divided into small ownership units – which most often is the case on the Finnish coast.

The state or a municipality can only prevent dispersed settlement as described above by purchasing the land at the current market price, which includes the speculative development rights. The same applies in case of compulsory acquistition or protection by contract with the owner. Consequently, public protection of even small coastal areas becomes extremely expensive.

The Province of Åland has its own legislation, but it is basically the same as in other parts of Finland. One exception is that shore plan as a planning instrument is not used in Åland.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN FINLAND

Coastal or marine areas for which protection is planned or proposed in Finland are found in **Area Table 11.** One ***strict nature reserve*** – the island of Seili, located in the Archipelago Sea – is planned (IUCN category I). In order to conserve various specific biotopes, ecosystems or geomorphological formations, the Finnish Government has initiated a number of conservation programmes. Protection of a

number of coastal or marine areas (but not marine reserves) is being planned within these programmes.

The *Herb-rich Forest Conservation Programme* (1989) aims at the protection of valuable stands of deciduous forest. Protection of three such areas in the coastal zone is proposed.

Eskers are glacially deposited moraine ridges, stretching from land and offshore and thereby forming special features in the archipelagos. The *Esker Conservation Programme* (1984) comprises 14 such areas in the coastal zone, altogether covering about 7,500 hectares, for future protection. They are mainly found in the Gulf of Finland and in the Bothnian Bay. The largest area (4,440 ha) is located around the island of Hailuoto (Karlö) in the north of the Bothnian Bay.

In the *Mire Conservation Programme* (1979,198 1), *13* areas on or close to the coast (approximately 3,000 ha in total) are proposed for future protection,

Within the *Bird Wetlands Conservation Programme* (1982) protection is planned for 71 areas on the coast, together comprising over 35,000 ha. The largest areas are found in the Bothnian Bay. Limingan-lahti-Lumijoenselka (10,825 ha) and parts of the island of Hailuoto (2,550 ha) are the most important ones.

The *Shore Protection Programme* was established in 1990. It comprises 29 coastal areas, with a total length of about 1,000 km coastline. However, only 2.6 per cent of the coastline will be protected through the programme. Along the Gulf of Finland, the degree of potential protection is even lower, with less than 1.5 per cent of the coastline included in the protection scheme.

The aim of the Shore Protection Programme is to create a network of protected areas representative of regional and site variation and protecting biodiversity in these areas. The areas included are to be maintained in a natural state without exploitation in the form of constructions, building of summer houses, etc. Intensive forestry is to be avoided, but logging is not forbidden. However, it is pointed out that forestry should be conducted "in accordance with recommendations from forest authorities". Public access in accordance with the principle of *Allemansrätt* will normally be allowed. The areas are intended to be either purchased by the State, required by the State in exchange, or protected by agreement with the owner. Landowners are to be compensated.

In a report in 1992 on lakes and rivers in need of special protection, a working group at the Ministry of the Environment proposed that ten marine areas (comprising a total sea area of 1,460,000 ha) and estuaries should be granted special protection for their national or international values. Seven of the marine areas should at least partly be designated as nature reserves, and the already state-owned waters around the Eastern Gulf of Finland National Park should be included in the park.

## LATVIA

Latvia has an almost 500 km long coastline facing the Gulf of Rīga and the Baltic Proper. Vast, largely untouched sandy beaches, sand banks, dunes, coastal forests, rivers, wet and dry meadows, coastal lagoon-type lakes, estuaries and complexes of coastal biotopes can be found there.

Similar to neighbouring Estonia and Lithuania, large coastal areas have been maintained in an almost natural state in Latvia not as a result of active nature conservation but due to restrictions in utilization and access for military reasons. There are the steep coast of Jūrkalne, the beaches near Akmenrags and Oviši, the pebble fields near Uiava, the estuaries of unregulated small rivers and the sandstone outcrops at Vidzeme, and they have all remained untouched – so far. At Salacgriva, stony and in some places sandy beaches interchange with coastal meadows and reeds, which results in a rich animal and plant life.

Important natural areas like the Nida bog and the Grīņi also constitute part of the coastal zone. The large, shallow lagoon lakes of Pape, Liepāja, Engure, Babite and Kapieris with their floodland enrich the biological diversity of the coast and are important for migrating birds. Coastal forests, for instance in the Slitere complex, form specific habitats.

Latvia is a low-lying country, still rich in wetlands and natural forests, including unique wet forests. The natural richness can be described in many ways, one of them being the vast number of wolves, otters, beavers, and lynx that remain in Latvia.There are also 208 breeding bird species registered in the country. Some of them – such as white-backed woodpecker (several thousand pairs), lesser spotted eagle (more than 500 pairs), black stork (more than a thousand pairs) – are very rare outside Latvia.

Almost seven per cent of the total Latvian territory (63,700 $km^2$) are covered by protected areas. In addition, the over 400,000 ha large North Vidzeme Regional Nature Protection Complex constitutes almost six per cent of the land area. The area covered by coastal strip protection is not included in the above calculation.

## PROTECTED COASTAL AND MARINE AREAS AND HABITATS IN LATVIA: *NATIONAL CATEGORIES*

In accordance with the Law on Particularly Protected Nature Areas, adopted in 1993, and Law on Environmental Protection, adopted in 1991, there are six categories of protected areas in Latvia: state nature reserve; national park; nature park; nature monument; protected landscape area; and protected area with limited use. The classification of protected areas in Latvia is done in accordance with the IUCN criteria.

According to the legislation, new categories of protected territories can be introduced after an application from the Ministry of Environmental Protection and Regional Development to the Parliament.

**State nature reserve** *(Dabas rezervats)*
Established in natural wilderness and designated for the preservation of wilderness, unique landscapes, research into natural processes and for the elaboration of a scientific basis for nature protection. Prohibited activities include building, constructions and all economic activities such as agriculture and industry, as well as unrestricted access to the area.

**National park** *(Nacionalais parks)*
Protected natural area established in natural wilderness and altered landscapes (including arable land), although mainly on state forest land. Designated for nature protection, the protection of cultural heritage, scientific research as well as recreation focused on ecological and cultural interpretation. A national park is divided into zones:
– areas with nature scientific reserves, significant nature reserves, containing the characteristic natural landscapes, where economic activities and public entry is strictly limited;
– recreational areas;
– peripheral buffer zones with economic activities, where habitation and designated levels of exploitation of natural resources are permitted.

**Nature park** *(Dabas parks)*
Nature parks are areas representing natural and cultural values and suitable for general recreation. Activities carried out in such areas must follow the principles of sustainability and preservation of historical and cultural values.

**Natural monument** *(Dabas piemineklis)*
Nature monuments include separate nature components such as trees, stones, caves, springs, cliffs, outcrops, waterfalls and other natural rarities with special scientific, historical, cultural, aesthetical or ecological values. To safeguard natural monuments, definite protected areas are established around them.

**Protected landscape area** *(Aizsargajamas ainavas apgabls)*
Designated to preserve the characteristic regional landscape in areas with nature well preserved and a variety of cultural monuments and traditions.

**Protected area with limited use** *(Dabas liegumi)*
Designated for the protection of nature complexes: lake areas, river valleys, hilly areas; and specialized protection of bothanical, ornithological, wetland, and cranberry reserves, geological-geomorphological objects, and dendrological plantations.

In the Law on Environmental Protection, there is also the category **Regional nature protection complex** *(Regionaliais dabas uizusdzibus komplekss),* which is "a comparatively large area designated to preserve or restore characteristics of Latvia, etnographically and historically formed territories and genetic diversity of nature. Economic activities are allowed within the framework of the development of the complex area."

Another category for protection is that of **Culture heritage area** *(Kulturvesturiska dabas teritorija)*, "designated to provide the conditions for the returning of the last residence of libiesi (lybyisy nation), which is on the threshold of diasppearance. "

Existing strict nature reserves, state nature reserves, and landscape reserves in the coastal zone of Latvia are presented in **Area Table 12 A** and **Map 13 A.**

Three of the coastal or marine areas in the Latvian coastal area enjoy the strictest protection (IUCN category I), the strict nature reserves Grīņi, Slitere and Moricsala.

Latvia has no marine reserves according to the classification used in the present report (areas protected and set aside primarily for the active protection of the marine environment).

The reserves included in the North Vidzeme Regional Nature Protection Complex are presented in **Area Table 12 B** and **Map 13 B.** About half of the area of the Complex is located within 50 km from the coastline, and includes 17 protected areas. Moreover, North Vidzeme Regional Nature Protection Complex has been proposed as Latvia's first biosphere reserve.

## PROTECTED COASTAL AND MARINE AREAS AND HABITATS IN LATVIA:
*INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in Latvia:

**Ramsar sites**
Wetland of international importance, designated in accordance with the 197 1 Convention on Wetlands of International Importance, especially as Waterfowl Habitats (the Ramsar Convention).

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

Ramsar sites and Baltic Sea Protected Areas in the coastal zone of Latvia are presented in **Area Table 13** and **Map 14.** Latvia ratificed the Ramsar Convention in April 1995. Besides the two coastal lakes

Engure and Kapieris, the two inland peat bogs Teiči and Pelecares have been designated as Ramsar sites.

Latvia has also named four coastal sections along the Gulf of Rīga and the Baltic Proper as Baltic Sea Protected Areas.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP AND COASTAL HABITATS IN LATVIA

***(See also Annex 1.)***

***Protection of the coastal strip***

The Latvian coast consists to a great extent of sandy beaches with coniferous forest. The purpose of establishing a protected belt is to preserve all the protective functions of the forest, to conserve the littoral landscape and to provide sustainable utilization of natural and recreational facilities in the littoral zone.

According to a Decision on placing forests into categories, and particularly into protection categories, forests along the coast of the Baltic Sea and the Gulf of Rīga within a l-5 km wide zone are described as anti-erosion forests. All measures which could negatively affect their protective function are forbidden.

In 1994, a Law on Protected Belts was elaborated. It has been submitted to the Parliament and is awaiting final approval. In accordance with the Law, a 300 m wide strictly protected belt will be established both inland and offshore on the coast of the Baltic Proper and the Gulf of Rīga, to "guarantee the protection of the most significant part of the coast — including the beach and coastal formations (dunes, coastal sand shores and sand hills) directly above the abrasive slope". Where the dune or other coastal formation exceeds 300 m, the protected zone is extended to its natural boundries, e.g., to the point where the dune ends.

All activities are prohibited that "lessen or destroy the protective capacity of the wood and leads to the damage of soil or some plant species, transformation of visual or aesthetic features in the landscape, alteration or eradication of rare and protected plant or animal habitas and of specially protected nature objects." Clear-cutting and cutting of impressive solitary trees is forbidden as is, for instance, excavation and dislocation of boulders, land improvement, ditching, building of new houses and recreation facilities or extension of existing ones. Nor is it allowed to establish "gardening co-operative societies" (alotment areas), but that has nevertheless become a serious problem in some sections of the Latvian coast. Increasing tourism in old military areas on the coast is another threat to the valuable nature that the protection zone is intended to safeguard.

This will be a restricted management zone. Such protected belts have also been proposed for streams and lakes, following their length or area. The aim of the Law is to protect waters from pollution and to safeguard landscapes, ecosystems, recreational resources, fauna and flora.

Equally a 300 m wide belt offshore from the water's edge is established to "conserve the underwater slope of the shore and the dynamic processes there." The established regimes "are to be taken into consideration in planning and design work and in any activity within the littoral zone, including drawing of master plans and development projects for towns, townships and village centres within the boundaries of the protected zone." Among prohibited activites in the underwater area are ground excavations or blasting, extraction of sand, gravel stones or other minerals, as well as various forms of construction.

The Ministry of Environmental Protection and Regional Development can grant permission to use the dryland part of the belt for certain purposes, e.g., the construction of facilities for tourism or building of new private farm houses in old villages. Approval must also be obtained from an expert body and from the local authority.

In addition to the 300 m belt under strict protection, there is a wider belt stretching from three to live (and in some places, eight) km inland. Within this belt, building is restricted and a special per-

mission is required. The exact width of that zone will be determined in land-use planning.

The Law on Spatial Planning was adopted **in 1994. The** purpose of the Law is to establish a procedure for spatial planning in Latvia and to ensure a balanced development, taking into account natural and cultural values of specific areas. It is closely connected to the protection of coastal areas.

***Protection of coastal habitats***

In 1994, work also continued on the elaboration of a Law on Species and Biotope Protection and a consequent decision of the Cabinet of Ministers on Particularly Protected Territories and Monuments, including Coastal Areas.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN LATVIA

Coastal and marine areas for which protection is planned or proposed in Latvia are found in **Area Table 14.** There is also planning for nature conservation areas and development plans for various coastline sections.

Besides the areas mentioned in Area Table 14, Latvian experts have suggested that the following areas should also be protected:

*Jūrkalne:* Outstanding complex of dunes with typical plant communities. The coastal zone is important resting area for waterfowl. Valley *of* ***River*** *Roja:* Upper stretches of the river almost unaffected by human impact. ***Seashore*** *between* ***Kaltene*** *and Upesgrivu:* Outstanding complex of dunes with rare plant communities. The marine area next to here is important as a resting place for waterfowl. ***Seaside near Medze:*** The area, which is now partly included in a complex nature reserve, has unique geomorphological dune complexes.

It has also been stressed that the region of River Irbe and the Kemeri region, "two territories especially rich in diverse biotopes, plant and bird species" need official protection in the nearest future. The Kemeri region is now in the final stage of being approved by the Parliament as Kemeri national park.

# LITHUANIA

Compared to the other countries around the Baltic Sea, Lithuania has a short coastline, only 94 km long. The quality of the Lithuanian coast in terms of natural values is, however, by no means inferior to the rest of the Baltic coast. On the contrary, the Curonian Lagoon (Kuršių Marios) and Curonian Spit (Kuršių Nerija), shared between Lithuania and the Kaliningrad region of the Russian Federation, belong to the more spectacular coastal features along the Baltic.

The white sandy beaches and wandering dunes of the Curonian Spit between Smiltyne and the Kaliningrad border, in places reaches as high as 60 m above sea level, contribute a very special landscape to the Baltic coastal mosaic. The dunes are stabilized by pine forests, but the wandering dunes can shape steep and sandy slopes dropping right into the water of the Curonian Lagoon. The Spit owes its designation of "Lithuanian Sahara" due to the fascinating geomorphology of the wandering dune formations.

The coast on the Lithuanian mainland is characterized by the low-lying, wide delta of River Nemunas, by meadows and wetlands, and by sandy dunes. Dunes with natural vegetation communities still remain in the Nemirseta area, the last outpost on the continental part of the Lithuanian coast. Meadows and wetlands, together with the continental dunes in the Rudninkai and other areas, are unique for Lithuania.

The Curonian Spit separates the Baltic Sea from the shallow, almost fresh-water body of the Curo-

nian Lagoon, also shared between Lithuania (30 per cent) and the Kaliningrad region. As a result of input of sediments from River Nemunas and sand from the wandering dunes of the Spit, the 1,580 km* large lagoon is gradually becoming more shallow. Its mean depth is now about 3.8 m, with a maximum depth of just under six metres. The mean water level of the lagoon is 12 cm higher than in the adjacent Baltic Sea.

The Curonian Lagoon, especially the Nemunas delta, is one of the most important areas for waterfowl in the Baltic Sea region and also of importance for migratory birds (the East Atlantic Flyway stretches along the sea shore). The delta is also economically important as agricultural land, and protected from flooding by a system of dikes with water-pumping stations.

Lithuania's total area is 65,300 km*, of which half is cultivated land and more than 30 per cent is covered by forest. The country has a dense network of rivers, and over 7 1 per cent of the total area is drained by River Nemunas. Lakes – 2,833 lakes bigger than 0.5 ha each – cover 1.5 per cent of Lithuania.

## PROTECTED COASTAL AND MARINE AREAS IN LITHUANIA:
*NATIONAL CATEGORIES*

PROTECTED AREAS

The aim of the Lithuanian system of protected areas is to protect not only natural but also cultural heritage complexes and objects, the ecological balance, biodiversity and the genetic pool. The purpose of this is to safeguard the restoration of natural resources, to set up conditions for cognitive recreation (tourism), to enable research and observations of the state of the environment, and to promote conservation of natural and cultural heritage values.

In accordance with the 1993 Law on Protected Areas, Lithuania's system of protected areas consists of the following categories and types:

***Conservational*** areas, where unique or characteristic natural and cultural landscape complexes and object are protected. These areas contain strict nature reserves, strict cultural reserves, managed reserves and protected landscape objects (natural and cultural monuments).

***Preservational ureas,*** assigned to avoid negative effects on the protected natural and cultural heritage complexes and objects, or to avoid negative anthropogenic effects on the environment. All kinds of protected zones (protected zones of conservation, integrated protected areas, protected landscape objects, surface water bodies, watering places, karst regions, etc.) are included in this category.

***Natural resource restoration (recuperational) areas,*** for the purpose of restoration, increase and protection of natural resources. Protected natural resource plots (timber, berries, mushrooms, herbs, animal biotopes, etc.) are included.

***Integrated areas,*** where conservational, preservational, recreational zones and zones of human activity (agriculture, forestry, etc.) are managed under a general protection and use programme. This category includes national and regional parks, as well as biosphere monitoring areas (biosphere reserves and biosphere polygons).

**Strict nature reserve** *(Gamtinis rezervatas)*
**Strict culture reserve** *(Kultūrinis rezervatas)*
An area set aside to protect characteristic and unique natural and cultural landscape complexes with their biota and genetic pool, and to provide options for research and observations. Strict nature reserves

have generally been established to protected marshes, but there is also one reserve for the protection of a small river basin, The network of strict nature reserves has been complemented with strict nature reserves within national parks and regional parks. There are eight strict nature reserves in the national parks and 22 strict nature reserves in the regional parks.

**National park** ***(Nacionalinis parkas)***

**An** area for protection, management and use of the most valuable landscape complexes and anthropo-ecosystems representing natural and cultural peculiarities of Lithuania's enthnocultural regions. The system of national parks is based on the following principles: representation of the most picturesque landscape types, along with ethnocultural regional differences and relative ecological stability. The purpose of national parks is to preserve naturally and culturally valuable landscape complexes, to restore destroyed or damaged natural and cultural complexes and objects, to develop research, to promote and support traditional lifestyles and to create conditions for recreation, particularly cognitive tourism.

Different functional zones-conservational (strict nature or culture reserves, and managed reserves), protectional (various kinds of protected zones), recreational as well as areas for agriculture and forestry – are included into a national park. Depending on the function of the zone, human activity is allowed, limited or restricted.

**Regional park** ***(Regioninis parkas)***

The network of regional parks was established in 1992. The level of protection is similar to that of national parks. Regional parks are set up according to the following principles: regional representation, potential vaule of the area in terms of a unified complex offering conservational/recreational/ecological and economic values. The purpose of regional parks is the same as for national parks.

Different functional zones -conservational (strict nature or culture reserves, and managed reserves), protectional (various kinds of protected zones), recreational as well as areas for agriculture and forestry – are included into a regional park. Depending on the function of the zone, human activity is allowed, limited or restricted.

**Managed reserve** ***(Draustiniai)***

Managed reserves play a very important role in the system of protected areas. These reserves are divided into different types:

- natural (geological, geomorphological, hydrographical, pedological, botanical, zoological, botanical/zoological [ zoological: ornithological, ichthyological, enthomological, herpetological, etc.], and telmological [protection of marshes]);
- cultural (archeological, memorial, ethnocultural, urban, landscape, architectural);
- complex (landscape, cartographic).

Managed reserves, which complement the state reserve network, are found in national and regional parks. The purpose of managed reserves is to preserve the natural or cultural heritage complexes and their separate elements, to protect landscape and biological diversity, as well as the ecological balance, and to provide objects for research and cognitive tourism. In the whole country, there are about 300 managed reserves.

In creating the system of protected areas, the following systematic projecting principles have been observed and categories used:

***Functional development,*** which requires the creation of a full complex of protected areas in agreement with all territorial landscape protection trends aimed at preserving natural complexes and landscape varieties.

***Territorial link,*** requiring the future network sections based on their geology to be connected.

***Regional representation,*** requiring the preservation of the existing landscape variety (genetic fund).

***Technological adequacy,*** requiring areas to be large enough to allow the implementation of the protection measures.

***Implementation consistency,*** which requires consistent implementation of the feasibility project.

**Protected nature landscape objects** *(Saugomas kraštovaizdžio objektas)*
**Natural monument** ***(Gamtos paminklas)***
For protection of valuable natural landscape objects, such as hilloks, tumuli, outcrop, springs, stones, trees, etc., or for protection of valuable cultural landscape objects, such as mounds, remnants of ancient settlements, burrial sites, castles, churches, crosses, etc. The most significant objects are classified as natural monuments. Protected landscape objects (natural monuments) occupy the smallest areas. They are natural or cultural objects which are valuable from a scientific point if view. In many cases they are very attractive for cognitive tourism.

**Biosphere reserve** ***(Biosferos*** *rezervatas)*
Biosphere reserves can be established for protection of natural areas (natural core areas) and surrounding areas for implementation of the global ecological monitoring programme and for scietific experiments. There are proposals for the establishment of several biosphere reserves in Lithuania, but a network of biosphere reserves has not yet been created.

**Biosphere polygon** ***(Biosferos*** *poligonas)*
Biosphere polygons can be established for the management of regional ecological monitoring in areas of significance from a geo-ecological point of view. They can be integrated (complex) or specialized (for hydrogeological, hydrological, zoological, etc. research). There are proposals for the establishment of several biosphere reserves, but a network of biosphere reserves has not yet been created.

**Protected zone** ***(Apsaugint*** *zona)*
There are 12 different types of protected zones with very different aims. For example, the main aim of protected zones for water bodies is to protect water bodies from pollution; protected zones of strict nature reserves or national and regional parks are designated for the protection of these valuable areas from the impact of intensive human activities. Protected zones can be established for the protection of recreational araes, resorts, as well as for the isolation of industrial objects.

**Protected natural resources plot** *(Saugomas gamtos išteklių* ***sklypas)***
The aim of protected natural resources plots are to restore areas which have been damaged by intensive use of natural resources, to extend areas with valuable natural resources and to guarantee the rational use of natural resources.

Existing national and regional parks, and managed reserves, for the protection of coastal and marine areas in Lithuania are presented in **Area Table 15 and Map 15.** Kuršių Nerija national park has been classified as an area set aside primarily for the protection of the marine ecosystems. Four managed botanical reserves (wetland areas) are found along the coast, as are the two regional parks Nemunas delta and Pajūris.

NATURE FRAME

Even the most optimal system of protected areas has not been conceived by Lithuania as sufficient to conserve landscape and biological diversity. Therefore, the concept of a *Nature frame* was elaborated

in 1983 and is now legally established within the 1992 Law on Environmental Protection and 1993 Law on Protected Areas, respectively.

The Nature frame connects all kinds of protected areas and other sensitive natural areas of importance from an ecological point of view into an integrated system of managed landscape ecological compensation zones. The purpose is not only to provide a unified natural ecological compensation system and to ensure natural connections between conservational, preservational, restorational and integrated protected areas (see above). Ultimately, the aim is to protect the natural landscape, biodiversity and natural recreational resources, to create conditions for the restoration of forests, to form an optimal structure for an agricultural landscape from a geo-ecological point of view, and to regulate the development of agriculture and landscape urbanization along with technogenical processes.

This frame consists of:

– geo-ecological watershed divides (zones dividing large geoecosystem and functioning as ecological compensation between systems);
– geo-ecological stabilization centres (areas of inner stabilization, to function as ecological compensation within geo-ecosystems);
– migration corridors (valleys and hollows where there is very intensive exchange of geodynamic and biological information).

The Nature frame is not purely a green-zones network. It connects areas with various purposes, such as strict nature reserves, managed reserves, national and regional parks, protection zones and protected plots of natural resources, with different areas of recreation, forestry, agriculture, etc. It includes all natural and semi-natural ecosystems.

The Nature frame is formed according to national, regional and local territorial planning documents. A general principle for the establishment of the Nature frame is to form it where it is necessary and not merely where it has survived. However, there are considerable difficulties. About half of the potential areas to be included are presently used for intensive agriculture and have, consequently, lost their natural quality. About 60 per cent of Lithuania's territory is included in the Nature frame, varying from 35-40 per cent in the Northern Lithuanian Plain to 75–80 per cent in Eastern Lithuania.

Optimization of land use management and protection of biota are the most important issues, and a short-term and medium-term action programme has been set up to achieve a number of objectives within the Nature frame:

– to develop and implement and system of legal and area management plans;
– to prevent the development of intensive farming in ecologically sensitive and high-risk areas;
– to complete the development of the system of protected areas and thus create a genuine basis for their protection;
– to promote protection of landscape and biodiversity;
– to carry out the most urgent research on natural resources and landscape management with the aim of creating a scientific basis for their sustainable use;
– to organize education on preservation of landscape and biological diversity, protection of recreational resources and sustainable exploitation of natural resources;
– to establish a healthy living environment in urban areas;
– to protect valuable recreational resources and to ensure their rational use;
– to extend research and strengthen the monitoring system.

The most important measures to be taken within the action programme concern legal and institutional aspects, planning (including preparation of management plans), and improved public awareness and education.

The Nature frame is perceived as a good basis for future requirements by the European Union to establish the Lithuanian part of the Natura 2000 Network.

## PROTECTED COASTAL AND MARINE AREAS IN LITHUANIA:
*INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in Lithuania:

**Ramsar site**
Wetlands of international importance, designated in accordance with the 1971 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

**Biosphere reserve**
Area set aside for the conservation, for present and future use, of the diversity and integrity of biotic communities of plants and animals within natural ecosystems and to safeguard the genetic diversity of species on which their continuing evolution depends. (These are by UNESCO's Man and Biosphere Programme internationally designed sites managed for research, education and training.)

The Ramsar site of Nemunas delta regional park and the three Baltic Sea Protected Areas (including Nemunas delta) located in the coastal zone of Lithuania are presented in **Area Table 16** and **Map 16.**

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP IN LITHUANIA

**The** short Lithuanian coast mainly comprises urban areas, recreational areas, already protected areas, or former military areas. Development is allowed only according to land-use plans (master plans, development projects for towns, or management plans for protected areas).

At the end of 1995, the Lithuanian Parliament issued the Law on Construction in the Coastal Strip and the Curonian Spit. A few additional Governmental regulations concerning the width of the the coastal strip were adopted in the beginning of the same year. The boundary of the coastal strip was marked on the maps in the scale 1: 10 000 at a distance of 200-700 metres from the seashore. The new regulations allow the building of houses and other constructions in the coastal strip only after decision by the Government.

In addition, natural watercourses, high bogs, fens bigger than 0.5 ha, natural meadows and pastures are protected wherever they exist. According to the laws, the use of forests is specially regulated, including the prohibition of forest privatization within a 3-7 km wide zone.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN LITHUANIA

Lithuania plans to establish the Kuršių Mariu Biosphere Polygon, consisting of Kuršių Nerija national park and Nemunas delta regional park together with the water areas off the Curonian Spit and the Curonian Lagoon between the two land areas, for management of integrated monitoring – see **Area Table 17,** and above on the development of the Lithuanian Nature frame. In addition, another two reserves are planned in the coastal zone.

# POLAND

Over 520 km of the southern coastline of the Baltic Sea belongs to Poland, and the Polish coast can be differentiated into sandbar coast, cliff shores and low, occasionally flooded shores.

Sandbar coasts is the predominating nature type along the Polish shore, covering about 70 per cent of it. The shore is made up of sandy material accumulated by the sea, and the coastal strip is covered by dune formations. The shape and character of the formations varies depending on the intensity of wind-driven processes, the dimension of the strip and on the time without a vegetation cover. In well-developed strip formations, the downs between the dunes frequently become swamped and filled with shallow deposits of peat.

The flora of the dunes is found in characteristic zones. On these strips, there are the main coastal forest areas in Poland dominated by pine woods but with considerable contributions also of birch-oaks. A characteristic feature of the Polish sandbar coast is a more rapid development of forests than of the natural vegetation of the dunes. As in mosaic, the wetland plant populations appear in the swampy downs between the dunes – birches and marshy woods, as well as alder swamps with peat plant complexes.

At present, most of the Polish strips are affected by abrasion. There are a number of relatively well preserved accumulative shore fragments. The Hel Peninsula is intensively washed off.

The Polish cliff shores are segments of Pleistocene moraine uplands. Altogether, they constitute about 19 per cent of the coastline. The longest, about 15 km long fragment on the island of Wolin forms a slope of moraine upland. This cliff, rising 94 m above sea level, is one of the highest on the southern Baltic Sea coast.

The cliffs along the Polish coast are exposed to intense abrasion. In most cases, the cliffs are not subject to any active coastal defence measures and the activity of the waves leads to slope motions, the soil is eroded. Consequently, the slope is quickly retreating inland. It has been estimated that the rate of retreat at certain points is up to 0.5 m per year.

The vegetation of the cliff shores is entirely different from that of the sandy strips. The diversity of plant habitats is the result of the diversity of sites. The natural plant succession proceeds quite quickly and is usually of a primary succession nature – from initial grass varieties and bushes to highly differentiated deciduous forests.

Certain parts of the Polish cliffs are being artifically stabilized, and today they are overgrown by bushes and deciduous forests. One of the oldest stabilized cliffs is the Przyladek Rozowie (Cape Rozewie) with a beech forests nearly 200 years old.

The headland of cliffs is formed by tops of moraine upland. Their good soils have very long allowed for farming. An exception is the cliff on the island of Wolin, with a large complex of beech forest belonging to the Wolinski national park.

Low, occasionally flooded shores are found along less than one tenth of the Polish coastline. The shores are the outer part of low planes which can be flooded by sea water. Sometimes they are separated from the sea by low shore ridges and a narrow beach. Usually, the transition zone between land and sea is made up by a band of reed. The low areas of river valley bottoms and glacial valleys of rivers are lined with peat. Because of the saline-water penetration, this peat has become habitat of halophilic plants. In fact, Poland is on the eastern border of the halophilic flora habitation. These plants species are rare and endangered.

Most of the coast is open seashore, but there are also large open bays – Gulf of Gdańsk and Pomeranian Bay – as well as a semi-enclosed one at Puck Bay, cut off from the sea by the Hel sandbar. Like in neighbouring Mecklenburg-Vorpommem and the Kaliningrad region, the lagoon landscape of the southern Baltic is also present on Poland's coast in the form of the Szczecin and Wisła (Vistula) lagoons.

Poland's total area is 312,683 km. The country is fairly low-lying; only one tenth rises more than 300 m above sea level. About half of the Polish territory is arable land and some 30 per cent is covered by forests.

Nearly 99 per cent of Poland (the catchment areas of large Rivers Vistula and Odra) belongs to the Baltic Sea drainage area.

## PROTECTED COASTAL AND MARINE AREAS IN POLAND:
*NATIONAL CATEGORIES*

As laid down in the new Nature Conservation Law of 1991, the system of protected areas in Poland includes nine forms of nature conservation of which six have been used before – national parks, nature reserves, landscape parks, protection of plant and animal species, and monuments of nature (natural monuments) – and three are new ones: documentation plots, environmentally valuable elements, and natural landscape complexes.

**National park** ***(Park narodowy)***
***The*** highest ranked category of protected areas in Poland. It is established by the Polish Parliament, and issued in the legislation as a national act. A national park, which should not cover less than 1,000 ha, is to be "a protected area distinguished by singular scientific, natural, social, cultural and educational values."

Since all activities within a national park shall be "subordinated to nature conservation, which shall have priority over all the other activities", no commercial activities are allowed. The public have access to a national park, but within the park there are usually strictly protected smaller areas – strict reserves – established for the preservation of undisturbed parts of nature. A national park is also to be surrounded by a buffer zone in which the principles of nature conservation shall be observed to protect the national park from harmful external impact.

**Nature reserve** ***(Rezerwat przyrody)***
A protection form for smaller areas, but still with strict regulations prohibiting human activities. The idea of a nature reserve is to preserve a part of the undisturbed nature, "ecosystems preserved in a natural or hardly changed state, specific plants and animal species, elements of inanimated nature, having essential significance in scientific, natural, cultural or landscape terms.". It can be established within a national park, but need not necessarily be located within an already protected area.

A nature reserve is established by the Minister of the Environment. A majority of the Polish nature reserves fall within the IUCN category IV, but there are also many reserves (especially older ones) which have the status of strict reserves (to be compared to IUCN category Ib).

**Landscape park** ***(Park krajobrazowy)***
"Protected in view of its natural, historical and cultural values, and the purpose of its creation is to preserve, popularize and spread widely these values in the conditions of rational management. Agricultural and forest land and other real estate within the park remain in managed form."

Like a national park, a landscape park could be a large area, but there is no definition given on the required size. No destructive economic activities are allowed, but human activities are not prohibited. The idea is to combine nature conservation with recreation and tourism, but large recreational centres may not be built in such a park. A buffer zone is often planned around a landscape park. The park can contain a number of nature reserves and natural monuments.

Landscape parks are established on the local level by the voivodship governor (head of the provincial government). A landscape park is, by definition, a protection form where nature conservation is carried out in agreements with selected economic functions.

**Protected landscape area** ***(Obszar chronionego krajobrazu)***
A protected landscape area embracing distinctive landscape areas with various types of ecosystems. The aim of creating such areas is to retain and restore a relative ecological balance over large areas of

the country, as well as to preserve their merits for tourism and recreation. A protected landscape area is established by the voivodship and municipal administration.

**Natural monument** *(Pomniki przyrody)*
Single formations of living and inanimate nature or their clusters. These monuments have extraordinary scientific, cultural, historical or landscape values and have individual features which make them conspicuous among other formations. They are, in particular, very old and imposingly large trees and shrubs of native or alien species, springs, waterfalls, karsts, underground stream outlets, rocks, ravines, erratic stones and caves.

**Documentation spot** *(Stanowiska dokumentucyjne)*
An area "of importance from a scientific and educational point of view, and can include geological formations, collections of fossils or minerals, or sections of quarries or mines."

**Environmentally valuable elements** *(Uzytki ekologiczne)*
Sections of the ecosystem containing unique genetic resources and types of habitats such as natural water reservoirs, fields and forests, fragments of undergrowth and groups of trees, swamps, bogs, dunes, old river beds, geological outcrops, scarp faces and others.

**Natural landscape complexes** *(Zespoly przyrodniczo krajobrazowe)*
Areas of particular value as "natural and cultural landscape protected for their aesthetical value."

Existing national parks, nature reserves and landscape parks for the protection of coastal and marine areas in Poland are presented in **Area Table 18** and **Map 17.**

**The** new Nature Conservation Law established a national system of protected areas, a "special layout of complementary forms of nature conservation, which creates a spatial network of belts and junctions. This gives better opportunities for a spatial system of nature conservation in the coastal zone, all the more since in the shore zone itself dunes and cliffs are protected by the marine authorities under other legislation". The latter refers to the fact that a narrow strip of the entire coastline is owned by the Maritime Offices for the purpose of reducing coastal erosion.

The sea area off Nadmorski landscape park, including part of Puck Bay, is a marine area in the sense understood in this report (an area set aside for the protection of marine environment). For the time being, it is the only existing Polish protected area including coastal water.

## PROTECTED COASTAL AND MARINE AREAS IN POLAND:
*INTERNATIONAL CATEGORIES*

*The* following international categories are used for protection of coastal and marine areas in Poland:

**Ramsar site**
Wetland of international importance, designated in accordance with the 197 1 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

The Ramsar site of Lake Swidwie, the five Baltic Sea Protected Areas in the coastal zone of Poland, and the biosphere reserve of Słowiński national park, are presented in **Area Table 19** and **Map 18.**

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP IN POLAND

*(See also Annex I.)* On the open sea coast, over 68 per cent of the shoreline is protected. Of this area, 10.5 per cent lies within national parks or nature reserves where all natural features are protected. The rest consists of landscape parks and protected landscape areas, where building and other development is severely restricted.

The administration of the Polish coast is the responsibility of the Maritime Offices under the Ministry of Transport and Maritime Economy. The shoreline consists of a technical belt and a protective belt.

On dune shores, the technical belt embraces the beach, the dune ridge and a zone up to 200 m behind the dune ridge. On cliff shores, it consists of the cliff foot, the cliff and a belt of land up to 100 m from the upper edge of the cliff. On lagoon shores, it includes the land between the shore and the flood embankment or, in areas without embankments, a belt of a width up to 200 m.

The protective belt, which is considered to be the natural reserve of the technical belt, extends two kilometres inwards from the shoreline. The boundaries of both belts are marked in the terraine.

The main aim of the legislation on the technical and protective belts is to protect the coast against erosion and floods, but in practice it can also serve nature protection purposes. The administrative powers of the Maritime Offices are quite extensive and controlling all economic activities within both zones. For instance, new buildings and other utilization of the area must be approved by the Maritime Office. The areas under the administration of the Maritime Offices are mainly state-owned.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN POLAND

Coastal areas for which protection as marine reserves is planned or proposed in Poland are listed in **Area Table 20.**

During the discussion on the five Polish Baltic Sea Protected Areas, it was suggested that as a primary measure in the establishment of marine protected areas, the land forms of the existing protected areas would need to be extended. Open sea basins near the shore, and fragments of lagoons, would have to be incorporated into the areas of national parks and landscape parks.

Within the borders of the Słowiński national park or the Wolinski national park, protection only covers the land ecosystems and the ecosystems of inland waters. Only the Nadmorski landscape park includes in its area a large part (over 10,000 ha) of the Puck Bay. However, its border in the Puck Bay area needs to be corrected, as well. It now runs parallel to Seagull's Shoal, an exceptional morphological formation, a sandy ridge dividing the Bay into two characteristically different parts.

The exceptionally valuable coastal zones of the Vistula Lagoon and Szczecin Lagoon, respectively, are not protected today. Coastal waters of the open sea shore and marine lagoons create habitats for a number of specific species. Being part of the ecotone zone, they provide a variety of life forms which appear in great numbers and reveal great dynamics of species composition.

At present, the general knowledge of the marine environment is rather limited. The basins in the vicinity of national parks or landscape parks have been ranked as being of natural value and worthy of protection, because they are not affected by large, environmentally harmful industrial sites.

The shallow marine area Słupsk Bank, a sea-bottom swell a few nautical miles offshore, has been suggested to be placed under protection as a marine reserve. The environment of the area is of unique, nearly natural state, as has been documented through research. It holds a considerable biodiversity and

has a decisive function in the transfer of species between the southern part of the Baltic Sea and the waters further north.

Besides the proposals for extending seawards the already existing protected areas, an extension is also planned of the small Kępa Redlowska nature reserve, located within the borders of the city of Gdynia. Such an extension would comprise the active cliff slope and the Gulf of Gdahsk sea-floor fragments inhabited by endangered remnants of once numerous plant and animal species. That would secure the natural sequence of the contact zone between the high shore and its underwater slope.

In the last two years, a formal application has been made to correct the borders of the Wolinski national park by including coastal waters of the Szczecin Lagoon with reed islands and a one-metre wide band of open waters. This application is presently being discussed in relevant ministerial officies.

In 1994, the area of Nadmorski landscape park was extended. A large segment of a well-preserved strip shore was incorporated into the park area, thereby extending the park to 18,804 ha. However, the marine borders of the park have remained unchanged.

# RUSSIAN FEDERATION

## PROTECTED COASTAL AND MARINE AREAS IN THE RUSSIAN FEDERATION: *NATIONAL CATEGORIES*

The following national categories are used for designation of protected areas in the Russian Federation, including the Leningrad and Kaliningrad oblasts:

**State nature reserve, including biosphere reserve** *(Zapovednik)*
Strict Nature Reserve. Protected, scientific research area for research and conservation of the natural course of ecosystem processes, and the gene pool of plants and animals of typical and unique ecosystems. IUCN category I a.

In a *zupovednik,* biodiversity is to be conserved and protected ecosystems maintained in natural conditions; scientific research and ecological monitoring to be carried out; ecological education, and training of scientific personnel and specialists in nature conservation, to be organized.

A *zupovednik* is established on land excluded from economic utilization, including agriculture and forestry, and surrounded by an area of semi-protected land to provide a buffer to the adjacent countryside.

**National park** *(Natsional 'nyi park)*
Protected natural area established in natural wilderness or altered landscape (including arable land), although mainly on state forest property. Designated for recreation as well as for nature protection and, as in the case of protected lakeshore, differs from a state nature reserve in that tourism is allowed. IUCN category II.

The area is divided into different zones: areas in which economic activities are controlled; nature reserves containing fine examples of original natural habitats, where economic activity and public entry is forbidden; nature sanctuaries where tourism is allowed but economic activities are strictly forbidden; and peripheral buffer areas of economic activity.

**Federal or Regional state nature reserve** *(Zakaznik)*
Areas of federal or regional importance (federally or regionally owned), where partial limitations on land use are introduced to preserve natural ecosystems. IUCN categories I b, VI and V.

The objective of a *zakazniki* is the preservation of natural ecosystems, outstanding landscapes and individual species (including rare plants and breeding colonies of threatened species); preservation, reproduction and restoration of natural resources; and maintenance of the ecological balance.

Federal *zakazniki* are areas of moderate protection but with strict protection of core areas of the reserve. These reserves are protected for different reasons, for example as

– landscape reserves (the most important category, providing moderate protection for all environmental components of the area);
– geological reserves;
– hydrological reserves;
– botanical reserves;
– zoological reserves.

Nature reserves in the Russian Federation are, generally, placed under stricter protection than is usually the case for this category. However, the protection status is given temporarily (for example, a decade at a time) and can be changed.

**Nature park** *(Prirodniy park)*
The protection status is very similar to that of a national park. A nature park, which is usually regionally owned, is an area of special ecological, historical and aesthetic value, and intended for use in environmental, recreational, educational, scientific and cultural activities. In a nature park, historic and cultural monuments and other objects of cultural heritage should be conserved; conditions for regulated ecological tourism and recreation in the natural environment to be created; ecological education for local people organized; and scientific methods for protecting natural and cultural heritage to be developed.

**Natural monument** *(Pamyatnik prirody)*
An individual valuable natural object of federal or regional importance and protected in order to maintain its natural condition. Protection of a natural monument is, principally, carried out by the land user of the protected area. IUCN category III.

Existing federal/regional state nature reserves for the protection of coastal and marine areas in the Leningrad oblast of the Russian Federation are presented in **Area Table 21** and **Map 19.**

## PROTECTED COASTAL AND MARINE AREAS IN THE RUSSIAN FEDERATION: *INTERNATIONAL CATEGORIES*

The following international categories are used for protection of coastal and marine areas in the Russian Federation, including the Leningrad and Kaliningrad oblasts:

**Ramsar site**
Wetland of international importance, designated in accordance with the 197 1 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

Ramsar sites in the coastal zone of the Leningrad oblast, and Baltic Sea Protected Areas in the Leningrad and Kaliningrad oblasts, respectively, are presented in **Area Table 22** and **Maps 20** and 16 **(**Curonian Spit and Vistula Spit).

Vyborgsky, Kurgalsky and Lebiazhje are the Russian Ramsar sites established in the coastal zone of the Baltic. Two additional areas – Lammin-Suo and Strelninsky bereg – have been proposed as new Ramsar sites.

The Russian part of the inner Gulf of Finland – including the Kurgalsky Peninsula and the islands of Gogland, Northern and Southern Virgin Islands, Maliy Tuters, Great and Little Tuters, and Seskar – has been proposed as a Baltic Sea Protected Area in the Leningrad oblast. The southern part of the Curonian Spit (shared between the Russian Federation and Lithuania), and the northern part of the Vistula Spit (shared between the Russian Federation and Poland), are the two BSPAs proposed in the Kaliningrad oblast.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP OF THE RUSSIAN FEDERATION

(See also Annex 1.) In the Russian Federation, there is no general law concerning the protection of the coastal strip. However, the use of coastal zones is regulated by some statutory regulations from the Soviet time and still in force. The basic legal document for the protection of the coastal strip is the Rules of the Protection of the Coastal Waters of the Sea, from 1984. In this document, a coastal zone of two km is defined from the highest water level ever observed. In that zone, all kinds of work which could have a harmful effect on the marine habitats can only be carried out after special authorization of the ministries concerned.

Some coastal areas belong to a resort zone. Land use in these areas is regulated by the Statement of the Council of Ministers of the Russian Federation of 1982 and the 1995 Federal Law on Protected Areas. In these resort zones, building, extraction of soil, and many other activities, are forbidden within a 100 m wide strip measured from the shoreline.

In the Kaliningrad region, there is also a local statutory regulation of 1979 concerning the protection of the coast. According to that document, a one km wide zone outside urbanized areas is protected. Within it, all kinds of constructions, as well as many other installations and activities, are prohibited.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN THE LENINGRAD OBLAST

Coastal or marine areas for which which protection is planned or proposed in the Leningrad oblast are listed in **Area Table 23.**

# SWEDEN

The sea meets land along half of the long Swedish border. The Swedish sea coast is by far the longest and most varied one in the entire Baltic region. The straight coastline, including that on the west-coast facing the Skagerrak in the North Sea, measures some 2,500 km. With bays and inlets, the coastline is approximately 7,600 km. However, like the indented Finnish coast with its archipelagos and numerous islets and skerries, the total Swedish coast is really much longer, in the range of some 70,000 km if all islands, islets and skerries – some 25,000 of them in the Stockholm archipelago alone – are also included. Along more than half of the Swedish coast there are skerries of varying size and character,

The Swedish sea coast varies greatly in terms of nature and natural characteristics, as well as in seabed topography, currents, water exchange, salinity, flora and fauna in the respective sea areas. The rocky, bare and rough nature in the Skagerrak and the northern Kattegat areas is replaced by long,

shallow boulder beaches and dunes in the southern Kattegat area, the Belt Sea, and the southern Baltic Proper. Further on, a coast of more tightly clustered archipelagos – often with laverish coastal deciduous forests as well as boulder and shingle beaches – is found all the way up to Åland Sea.

Nature and the coastal zone on the islands of Gland, Gotland and surrounding islands is especially characterized by limestone soils and cliffs, boulder beaches and sandy reefs. Also, the alvars, a special type of dry meadows on thin soils (pseudo-steppes), can only be found here and in Estonia.

Beginning already in the Åland Sea, the Gulf of Bothnia part of the Swedish coastline is, similarly to that on the Finnish side, characterized by the continuously ongoing process of land elevation at a rate of 6-9 mm per year. On the Bothnian Sea on the Swedish side there are coastal plains and estuaries, inlets and wide deltas of the rivers. The sea and the mighty forests meet at what is referred to as the "High Coast". The 200-300 m high cliffs rising as if right out of the sea are very obvious examples of majestic land elevation: the highest coastline was once found at the 285 m high mountain Skuleberget. The Quark Area on the Swedish side is markedly affected by land elevation, as is the case on the Finnish side, with the Archaean, bare primary rocks rising from the sea.

In the far north, in the Bothnian Bay, there are again archipelago areas, with almost Arctic-type nature, as well as coastal plains and stretches of sandy beaches. On the Swedish-Finnish border, off Haparanda, remarkable capes and bars of sand and gravel occur. The Haparanda Archipelago national park was recently established to protect this very particular and constantly changing area as far up north in the Baltic Sea as one can get.

There are several wildlife sanctuaries along the Swedish coast. About half of the grey seals and 75 per cent of the harbour seals in the Baltic are regularly counted in the Swedish coastal zone. Major bird sanctuaries are found in the outer Stockholm Archipelago, as well as on the islands of Great and Small Karlsö to the west of the island of Gotland.

Sweden's total area is 45 million ha, some 65 per cent of which is forested. Less than five per cent is arable land. Around one fifth of the territory is covered by wetlands, predominated by mires (bogs) covering some 6,4 million ha. Although Sweden in figures is among the ten countries in the world richest in wetlands, inventories have shown that less than 20 per cent of them can be classified as intact. An estimated one third of the original wetlands may already have been drained. In the southern and central parts of the country, as well as in the coastal areas in the north, almost all wetlands are affected in some way or another by human activities, including peat extraction. In the most intensively cultivated areas in the southern and central parts, as well as on the islands of Gland and Gotland, 90 per cent of all wetlands are gone.

Practically all of Sweden is included in the Baltic Sea drainage area. Sweden's large sea area (including about 40 per cent of the Baltic Sea Area) corresponds to approximately 40 per cent of the country's land area. Lakes cover altogether nine per cent of the land area. Some 70 per cent of the rivers have already been regulated.

## PROTECTED COASTAL AND MARINE AREAS IN SWEDEN: *NATIONAL CATEGORIES*

*The* following national categories are used for designation of protected areas and habitats in Sweden:

**National park** *(Nationalpark)*

Individual sites must be approved by separate Acts of Parliament in a lengthy administrative process. The degree of protection is to some degree dependent on the by-laws drawn up for each site.

National parks can only be designated on land owned by the Crown (state-owned). Although regulations governing the use of national parks may vary, there are usually strict controls preventing forest felling, hunting, trapping, damage to soil or other vegetation and camping and lighting fires outside authorized sites.

**Nature reserve** *(Naturreservat)*
Nature reserves are selected by the county administration and the criteria for selection are varied: scientific reasons include the protection of well-developed representative biotopes and the protection within each province of as wide a range of plant formations as possible. Other reserves are set up more because of the outdoor recreational value or aesthetic beauty, in which case historical interest might simply be considered as a 'bonus'.

Nature reserves may be established on Crown land or on privately owned land. The reason for designation must be stated and restrictions deemed necessary for protection of the site must be enumerated. Typically, the landowner is not allowed to erect buildings or to use pesticides in the area. Hunting might also be restricted or forbidden.

There are rules for public access to prevent damage or destruction of the natural environment, as well as restrictions on camping, use of vehicles (including boats) and causing of noise. In addition, the public is usually reminded in national legislation of relevant restrictions that apply in these areas. Many nature reserves are managed according to a non-interference policy, but some are actively managed to maintain their scientific interest.

Before designation, the county administration must consult with persons and organizations whose interests may be affected by the proposal. Owners may be compensated for the restrictions placed on their land. Occassionally the county administration (County Administrative Board) may agree to purchase the land from the owner, although it is normally reluctant to use its powers of compulsory purchase.

**Natural monument** *(Naturminne)*
Usually small or very small sites. Many objects are individual trees, isolated boulders, etc. In recent years, more effort has been put into the preservation of areas rather than single objects. Accordingly, the number of natural monuments is decreasing.

**Wildlife sanctuary** *(Djurskyddsområde)*
Provides refuges for birds and/or seals. In a majority of these areas, people are not allowed access at certain times of the year (during breeding, nesting, etc.). With such strict restrictions, the animals are to be afforded protection against egg collecting, shooting, hunting, photographing or other sources of disturbance. There is no general strategy covering the overall policy of wildlife sanctuary designation. They are normally not subject to special management regimes, nor are they specifically protected against exploitation or risks from land. Bird sanctuaries are included in this category.

**Nature conservation area/Nature management area** *(Naturvårdsområde)*
A category introduced in 1974 through amendments to the Nature Conservation Act. It provides a less restrictive form of protection. Various management measures can be taken in agreement with the landowner. No compensation can be paid to landowners since regulations do not significantly hinder current land-use practices.

Existing national parks, nature reserves, nature conservation areas and wildlife sanctuaries for the protection of coastal and marine areas in Sweden are presented in **Area Table 24** and **Maps 21-25.**

Not surprisingly, Sweden with its very long coastline has set aside a considerable number of protected areas, many of which are found in the archipelagos. The total protected land and sea area in coastal and archipelago areas corresponds to around 380,000 ha, of which 37 per cent in the counties of Stockholm and southward Södermanland and Östergötland in the Baltic region, and the county of Göteborg and Bohus in the Skagerrak region.

In accordance with the Nature Conservation Act, the Swedish coast is subject to general regulations for shoreline protection. There are also provisions for coastal habitat protection (see below).

Sweden has three marine reserves – Holmöarna, Västra Kullaberg, and Salvorev-Kopparstenarna –

**in the sense understood in this report (areas set aside primarily for the protection of the marine environment).**

In accordance with a parliamentary decision and the Nature Resources Act, the remaining four large unregulated rivers in the far north of Sweden – Vindelilven, Kalixälven, Tomeilven and Piteälven (the latter not completely intact) – are excluded from future hydropower exploitation.

## PROTECTED COASTAL AND MARINE AREAS IN SWEDEN: *INTERNATIONAL CATEGORIES*

The following international categories are or will be used for protection of coastal and marine areas in Sweden:

**Ramsar site**
Wetland of international importance, designated in accordance with the 1971 Convention on Wetlands of International Importance, especially as Waterfowl Habitats.

**Baltic Sea Protected Area**
Area to be set aside for the protection of representative ecosystems in the Baltic Sea Area, as well as to guarantee sustainable use of natural resources as an important contribution to ensure ample provident protection of environment and biodiversity (HELCOM Recommendation 15/5).

**EC Bird Directive Area**
Special Protected Area (SPA) for the conservation of wild birds and their habitats, to be set aside in accordance with Council Directive 79/409/EEC.

Ramsar sites and Baltic Sea Protected Areas in the coastal zone of Sweden are presented in Area **Table 25** and **Maps 2630.** As a new EU Member State, Sweden has submitted a list of proposed EC Bird Directive Areas. Additional areas will be proposed by the County Administrative Boards.

## GENERAL PRINCIPLES FOR PROTECTION OF THE COASTAL STRIP AND COASTAL HABITATS IN SWEDEN

*(See also Annex I .)*

***Protection of the coastal strip***
The Nature Conservation Act of 1974 includes provisions on general protection of the shoreline. The original aim was to safeguard public access to the water for bathing and other kinds of recreation. By an amendment of the Act in 1994, the purpose of preserving good living conditions for wild flora and fauna was added.

The protected belt generally stretches 100 m from the mean water mark, inland and offshore. The County Administrative Boards can, where needed for fulfilling the purposes of the Act, extend the protected belt up to 300 m from the shoreline in both directions. It is also within theirjurisdiction to exclude an area from shore protection if the area is unimportant for the purposes of the Act.

In the Act on Nature Resources, from 1987, it is stipulated that all Swedish coasts from the Norwegian border to the northern part of the Åland Sea, as well as some parts of the coast along the Bothnian Sea and Bothnian Bay, are of national interest. These coasts comprise altogether about 70 per cent of the Swedish coastline. The possibility to enlarge the protected belt to up to 300 m has very often been used in these areas by the County Administrative Boards. This holds true, for instance, in most parts of the archipelagos.

It is, furthermore, stipulated in the Act on Nature Resources that areas which are of national interest for nature conservation, outdoor recreation or cultural environmental protection are to be protected against measures that cause considerable damage to the natural environment. There are about 100 such areas along the Swedish Baltic coast.

In the protected belt it is forbidden to construct new buildings, change the use of existing buildings, extract substances from soil, and build fences which could prevent people from walking along the shore. Constructions necessary for farming, fishing or forestry (not dwelling houses) are excluded from the shore protection.

The County Administrative Board can, for special reasons, grant exceptions from the shore protection. This right can be and largely has been transferred to the municipalities, and about 70 per cent of them are now authorized to grant such exceptions. However, in areas of national interest (like most of the coastline), this right has remained in the hands of state authorities.

According to the justifications of the law, there should be great restrictions in granting exceptions. The Swedish Environmental Protection Agency can appeal to the Government (in practice, to the Ministry of the Environment) when it considers an exception has been made on insufficient grounds.

The protected belt must be taken into account in all planning. In areas intended for inclusion into a detailed plan or covered by legally binding provisions, the County Administrative Board can, if special reasons apply, exclude an area from the shore protection.

***Protection of coastal habitats***

A new article concerning habitat protection was added to the Nature Conservation Act in 1991. According to that article, activities which might cause damage to the natural surroundings are not allowed within minor terrestrial or marine areas which are habitats for endangered species of flora or fauna, or which for other reasons are particularly worthy of protection.

The habitats which enjoy protection are listed in the Nature Conservation Decree of 1994. Some of the habitats are protected directly under the Decree, whereas others need to be demarcated by the County Administrative Board or the Regional Board of Forestry before the protection status enters into force. As many of these habitats can also be found near the coast, the Decree is clearly of relevance for coastal conservation. Most of the protected habitats are

- certain types of forests or groups of trees;
- springs:
- other minor waters;
- wetlands;
- certain swamps and mires;
- natural meadows or pastures.

The Nature Conservation Act also restricts drainage. Generally, a permit issued by the County Administrative Board is required for drainage activities. The Government can also directly forbid drainage activities in areas where the preservation of wetlands is particularly essential. In several provinces, municipalities and other areas, drainage is prohibited through the Nature Conservation Decree. These areas include most of the remaining coastal wetlands in the southern part of Sweden up to and including the province of Uppland.

## COASTAL AND MARINE AREAS FOR WHICH PROTECTION IS PLANNED OR PROPOSED IN SWEDEN

Areas for which protection as marine reserves is planned or proposed in Sweden can be found in **Area Table 26.**

A majority of these planned or proposed reserves are to be established in connection with already

protected nature reserves on land. In addition, the protection status of national park has also been proposed for the Bullerö-Bytta area (12,200 ha) in the southern outer Stockholm archipelago, the islands of Little and Big Karlsö (about 2,800 ha) off the island of Gotland, and some 7,400 ha of the alvar land on the island of Gland.

The current protection of coastal and archipelago areas is considered to be adequate, and such areas have not been appointed highest priority in future nature conservation work in Sweden. There are, however, certain coastal and archipelago nature types which may also in the future deserve special attention from a nature conservation or recreational point of view.

It has been pointed out in the Swedish Action Plan for Biodiversity that "there is a need for increased knowledge about biodiversity in the marine environment. The present lack of knowledge makes it difficult to specify goals and measures in terms of biotopes, species and the genetical species composition. Thus, it is important to continue the compilation of documented knowledge and to develop methodology for marine nature inventories aimed at creating more efficient nature inventories in the marine environment".

Following this conclusion, a number of measures are suggested:

– Investigation into the need and options for the establishment of a marine resource database for the Swedish coastal and marine areas.
– Development and evaluation of relevant methods for nature inventories in the marine environment. Elaboration of a plan for such inventories in marine areas, including priorities of geographical areas and ecosystems/biotopes. The importance of Baltic co-operation is underlined.
– Establishment of more marine reserves in accordance with plans already made. References are also made to Sweden's international commitments in accordance with, e.g., the Helsinki Convention and the EC Habitats/FFH Directive.
– Investigation into the diffuse input of oil into the Baltic, improved surveillance and follow-up of the protection measures against marine oil pollution in order to prevent oil damage to marine organisms.
– Initiatives contributing to the elaboration of internationally binding agreements on measures to prevent undesirable introduction of non-indigenous species into marine areas surrounding Sweden.

# 3. Legislation, management and conflicts of interest

## DENMARK

### EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN DENMARK

The primary incitament to carry out nature protection or conservation measures in Denmark is existing or anticipated threats to natural and cultural historic values or interests. The need for conservation is based on threats, whereas avertive actions must defy or rely on 'political' considerations.

Conservation is based on a broad philosophy of long-term planning and protection. Legislation on protected areas does not operate within the formalized structure of national parks and equivalent reserves. Thus, it is not possible to categorize reserves in the same way as in many other countries. Although specified protected areas do exist, equally large areas are covered by legislation relating to the protection of specified biotopes. There are also strict controls on physical planning throughout the rural environment.

In general terms, nature conservation under the 1969 Conservation of Nature Act (which was substantially amended in 1975, 1978, 1984 and 1992, when it was renamed the Protection of Nature Act) is based on two kinds of measures: individual conservation orders; and general conservation measures.

Individual conservation orders, with a detailed set of rules, may be applied to a particular area with the object of protecting such an area against, for instance, further cultivation or the use of chemical insecticides, or to open it up for outdoor recreational purposes. Categories protected under individual conservation orders may be termed nature reserves, major conservation areas, or areas of national biological importance. Typically, the aim of these areas is to maintain and preserve them in their existing condition, in which case they are protected under *status quo* conservation orders.

Each nature reserve and major conservation area is protected under an individual conservation order, on a case-by-case basis. Protection might be imposed for scenic, scientific, historical, cultural or recreational reasons, or for a combination of these, hence the degree of protection varies widely, both between areas and within them. There are several thousand such conservation orders. Regulations are drawn up specifically for each area, but in general existing uses including farming, forestry and hunting may well continue and farming methods are usually not restricted. Typical regulations could ban cultivation, planting, disturbance or destruction of flora and fauna, changes in land forms, extraction of raw materials such as clay, limestone, sand and gravel, and construction work. These areas are usually well protected from industrial activities, water and road developments, and the establishment of power lines. Regulations are also set down for the management of these areas; they can close, restrict or open a site for public access; they can also enforce the removal of plantations, or other vegetation or the removal of buildings and other constructions. Conservation orders can also demand the expropriation of private land for the establishment of a protected area, although this right is rarely used.

General conservation measures include buffer zone strips around certain features and protected biotopes.

Thus, the most important national and international legislation in Denmark with regard to nature conservation in coastal and marine areas includes:

- The 1992 Protection of Nature Act;
- The 1991 Planning Act;
- The EC Bird Directive (79/409/EEC), and the Council Resolution 1979 concerning the Directive;
- The EC Habitats/FFH Directive of 1992;
- The 1993 Hunting and Game Management Act.

Consideration for nature protection should, thus, be evident from the 1992 Danish Protection of Nature Act and from the general policy elaborated in 1989 by the National Forest and Nature Agency (see below). It should also be an integral part of all relevant legislation. Only when such legislation is insufficient, § 51 (Protection in state-owned areas and in the territorial waters) of the 1992 Protection of Nature Act should be utilized:

§ 5 1. For the purpose of the objectives mentioned in §1, the Minister of the Environment can through statuary order implement protection in state-owned areas, as well as in the territorial waters and in the fishery zone as laid down in the Act on the Danish fishery zone.

Section 2. For the purpose of the objectives mentioned in § 1, decisions on protection of terrestrial areas can be extended to include protection of adjacent shallow parts of the territorial waters, when there is particular reason to include these areas.

The Protection of Nature Act (§ 22-29) is also aimed at giving the general public better access to nature, as well as better opportunities for recreation.

The Planning Act is "based on an integrated evaluation of Denmark's areas and natural resources", and provides for comprehensive physical planning. The purpose is not to have one plan for the entire nation, but rather to ensure that general principles of land use and consideration for nature are incorporated in regional or local planning. The Planning act was amended in 1994. An additional objective is added which states that the open coasts should continue to constitute an essential nature and landscape resource. Concerning planning in the coastal zone it is emphasized in the amendment, *inter alia*, that new summer house areas should not be allowed and that existing areas should not be transformed into permanent housing areas. In addition, public access to the coast should be secured and strengthened.

The EC Bird Directive and Resolution regulate the protection of wild birds, particularly migrating birds, and their eggs, nests and habitats. EU Member States are obliged through this Directive to maintain the populations of all wild bird species occurring naturally within the EC area on a level meeting ecological, scientific and cultural demands while simultaneously giving consideration to economic and recreational factors. A number of particularly vulnerable species, for which extraordinary protection measures are laid down, are included in an annex to the Directive, whereas other and less stringent restrictions apply to species included in other annexes.

In addition, various legislation on forestry, environmental protection and purchase of property are also of relevance for nature conservation and protection of valuable areas.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN DENMARK

**The** National Forest and Nature Agency *(Skov- og Naturstyrelsen)* under the Ministry of Environment and Energy *(Miljø- og Energiministeriet)* is responsible on the central, national level for nature protection and conservation in terrestrial as well as in marine areas. It is responsible for monitoring work in areas of national and international importance (nature reserves, Ramsar sites, EC Bird Directive Areas, etc.) and for the management of wildlife (game) reserves and the declaration of areas of national biological importance. The Agency also decides about protection and management of forest areas under the Forestry Act.

On the regional and local level there is a Nature Conservancy Board *(Fredningsnævn)* for each of the 14 counties *(amter).* Each Board is composed of a chairman with a legal background, appointed by the Minister, and two local representatives elected by the municipal and regional authorities respectively. These Boards are independent from the Ministry and are, in effect, courts concerned exclusively with conservation matters and administration of the Protection of Nature Act. They are responsible for placing areas under conservation orders and also have powers for protection of beach conservation areas. The Conservation Board of Appeal *(Naturklagenævnet)* is the final administrative

authority concerning the conservation of nature. This Board consists of Members of Parliament and judges from the Danish Supreme Court.

In cases where the Ministry of Agriculture and Fisheries or other governmental or non-governmental bodies are the owners of particular protected areas, they are responsible for the administration and management of these areas.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN DENMARK

Coastal wetlands along the Danish North Sea and Baltic Sea coasts – salt marshes, reed swamps, meadows, mud flats and dunes systems – are extremely important habitat types in Denmark. However, large areas in Denmark have been drained and embanked for agriculture, and this has severely affected biodiversity in the coastal zone. Coastal meadows and shallow bays have been claimed and, in all, over 400 $km^2$ of marine and brackish water areas along the entire Danish coast – about one fifth of the less than two meters deep original coastal waters – have been claimed.

Consequently, conflicts of interest between agriculture – the backbone of Danish economy – and nature conservation in coastal areas are common and likely to arise also in the future. One example of possible conflicts is that existing farming and forestry are also allowed to continue within the coastal protected strip.

The conflict has many sides to it. Besides being a general problem of land use, it also entails the problem of nitrogen leaching from agriculture. Eutrophication of coastal waters, caused by nitrogen loads from agricultural runoff, as well as deposition of air pollutants from combustion, is a major problem along the Danish coast, whereas phosphorus loads from municipal sewage have dropped significantly in recent years.

Extraction of sand and gravel is another economic activity which has caused conflicts of interest in Danish coastal areas. Bottom trawling in sensitive bottom areas close to the shore is another source of conflicts between economic activities and nature conservation.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN DENMARK

The management of protect coastal and marine areas in general in Denmark is well in hand under the jurisdiction of the Ministry of Environment and Energy and the counties, as is the management of a number of privately owned areas on land, including fresh water localities subsidized by private funding.

## EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN DENMARK

**The** Ministry of Environment and Energy, in conjunction with the counties, maintain a well established system of Nature Schools run by "rangers" (Nature Guides). In these Nature Schools, children can be well tutored concerning the ways of nature. Pamphlets are issued giving information on public as well as private protected and/or valuable areas and on access to them. At the actual locations, signs are put up. Since 1988, an annual public meeting has been arranged by the Nature Monitoring Section (now the Nature Management Section) of the National Forest and Nature Agency, where a number of experts present the latest knowledge concerning and their views on management – exploitation, protection, monitoring – of certain parts of nature, as for example the sea, the coast or the forest. These lectures and discussions are published and much used in schools. Non-governmental organizations, such as the

Danish Ornithological Socicety, the Danish Society for Conservation of Nature, and Greenpeace, play an active role in informing the public and creating public awareness.

# ESTONIA

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN ESTONIA

All legislation in Estonia is based on the Constitution of the Republic of Estonia, which was adopted in June, 1992.

From an environmental and nature conservation point of view, the most relevant parts of the Constitution are Article 53 according to which "every person shall be obliged to preserve the human and natural environment and to compensate for damages caused by him or her to the environment . ..", and Article 12 on private ownership which stipulates that "every person shall have the right to freely possess, use and control his or her property. Restrictions shall be established by law."

The framework Act on the Protection of Nature in Estonia of 1990 lays down general principles for environmental protection, although its articles concerning nature management and the role of local authorities are out of date.

**The** Act on Protected Natural Objects was passed in 1994. This act establishes the procedure for taking natural objects (protected areas, single natural objects, protected species) under protection. It determines the rights and obligations of landowners, land users and other persons with regard to such objects.

The act stipulates procedures for establishment of environmental restrictions to property, and the obligations of owners concerning different types of protection zones. All possible restrictions and obligations are stipulated in the act while these may be specified and implemented in particular cases (partly through leaving out the irrelevant restrictions) by the Government of Estonia through protection rules.

According to the act, a protected area is a terrestrial or water area which is taken under protection, to be protected from human activities, or managed in accordance with nature protection requirements, within which objects of nature, objects with cultural value, plant, fungus and animal species, associations, ecosystems, landscapes or their diversity is protected, studied and promoted. The act also defines the classification categories, and determines protection regimes and zoning.

Objects of nature will be placed under protection by Parliament and the Government (Ministry of the Environment). It is stated in the act that the Estonian central Government should, if necessary, be authorized to take an object of nature under temporary protection for two months. During that time it should be decided whether the area or object in question is to remain under protection or whether it could be given back to its previous status and use. No activities contrary to the reason(s) for which the object was placed under temporary protection are allowed during these two months.

Various forms of ownership of protected areas are also provided for in the act: state-owned, owned by local governments or privately owned. The same legal protection should be granted for protected areas, regardless of ownership. The authority placing an area under protection will be responsible for the elaboration of a protection regime for the area, including appropriate zoning, but the regime (including aims, protection measures, administration and management, economic restrictions, etc.) is laid down in the Law and Protection Rules for each area.

The Act also includes provisions for financial compensation to landowners for the restrictions in land use in protected areas. This will apply both in the case of permanently placing an area under protection, and in the case of temporary restrictions (see above). The compensation is granted via reduction of the land tax.

In general, free public access to protected areas should be granted, unless restrictions are specified

in the protection regime for the area. Access will, however, not be allowed if it is likely to cause damage to the landowner.

The Act on Protected Objects of Nature also contains detailed provision for the protection of stationary as well as migratory species. The latter refers, e.g., to bird species migrating along the East Atlantic Flyway across Estonian territory.

Regulations for special species protection areas are also laid down in the Act. Such areas should be established if an already protected area does not cover the habitat or other area of a protected species. A protection zone of at least 200 m should then be established around the place of growth or the place of recruitment or nesting.

Furthermore, regulations for monitoring and the storage and compilation of data are covered by the act. It also establishes the principles concerning possible problems related to the need to harmonize Estonian legislation with international agreements and conventions.

In order to implement the act, the following governmental regulations have been approved:

– the procedure for taking natural objects into protection;
– the list of animal, plant species and fungus species, and fossils of Protection Category II; and
– the protection rules of the Karula and Soomaa national parks, the Alam–Pedja, Nigula and Viidumäe nature reserves, and the Naissaare and Haanja nature parks.
– in April 1996, the Estonian Government approved the establishment of a Nature Conservation Register. It is based on GIS and will consist of one central data base of nature conservation objects and data bases in every country environmental department.

The Minister of Environment has approved:

– the procedure for provding compensation for damage caused by protected species;
– the procedure for import and export from the Estonian customs territory of species included in the Annexes of the CITES Convention; and
– the list of animal, plant and fungi species, and fossils of Protection Category III.

Other acts and regulations of relevance to nature conservation in Estonia are:

• The Act on Hunting Management, which entered into force in 1994. This act includes procedures for regulating the abundance of game within national parks and nature reserves.
• **The** Act of Protection of Marine and Freshwater Coasts, Shores and Banks, approved in February 1995.
• The Act on Sustainable Development, approved in February 1995. The act lays down the principles of the national strategy for sustainable development and provides the legal basis for implementation of the principles of sustainable development in practice.
• The Forest Act of 1993.
• The Water Act, approved in May 1994. The objectives of the act is to guarantee the purity of inland water, boundary water and groundwater and the ecological balance in water bodies, and to regulate the use and protection of water resources, and relations between different water users.
. The Act on Bowels of the Earth of 1994. This act provides the legal basis for research, management and the protection of the bowels of the earth of Estonia. Its main emphasis is on issues like right to research, right to mine and right to construct underground facilities.
• The Requirements Concerning Discharge of Waste Water into Water Bodies and Soils, approved by a regulation of the Government in December, 1994. This act provides a legal basis for organization of waste management, implementation of waste policies, and establishment of norms within these areas. The act was amended in October 1994, giving the local authorities a leading role in organization of waste management.

In Estonia, provisions concerning environmental impact assessment are regulated by a special Government Regulation issued in November, 1992. Based on this regulation, the Minister of Environment, in March 1994, issued a decree on Methodological Guidelines for the Carrying out of Environmental Impact Assessment in Estonia, where particular guidelines are given both to the object of EIA and to the responsibilities of the competent authorities for organization of the EIAs. A new act on EIA is presently being elaborated to replace the existing governmental regulation of similar content.

The Act on Planning and Building was approved in June 1995. It governs the comprehensive land-use planning system, and defines environmental protection goals as one of its main objectives.

An Act on Landscape Protection is presently under preparation. There are also a need to revise, as soon as possible, the Forest Act, the Game Act and the Water Act.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN ESTONIA

Environmental and nature conservation authorities in Estonia include the Ministry of the Environment (*Keskkonnaministeerium*) with its subdivisions and 17 environmental protection departments (in 15 counties, and in the towns of Tallinn and Narva), which have been relatively independent since 1991.

The Ministry of Environment serves as the principal institution for the country's environmental policy system, together with the Forest Board, the Fisheries Board and the Land Board. These four institutions form the policy level of the system responsible for legislation, information systems, regulation and control.

The implementation level for environmental monitoring and control includes environmental departments in 15 counties and the towns of Tallinn and Narva, the Institute of Hydrology and Meteorology, four environmental laboratories, the Nature Protection Inspectorate, the Sea Protection Inspectorate, the Environmental Data Centre, and the newly founded Nature Conservation Bureau.

The Ministry of Environment is responsible for the decisions in management of environmental legislation and standards; in setting environmental priorities and strategy; in the co-ordination of management of natural resources; in organizing environmental monitoring, statistical data and applied research; and in co-ordinating international activities. The Ministry is also responsible for the financing of environmental programmes and projects at state level, as well as for EIA, spatial planning and land reform decisions.

County Environmental Departments are responsible for making decisions on issuing of permits and licenses concerning the emissions of pollutants and use of natural resources, on imposing and collecting emission charges, for organizing international co-operation on local/regional level, and for managing environmental impact assessment within their area of jurisdiction.

Many direct functions are delegated to local municipalities. They are responsible for financing projects through local budgets or the Estonian Environmental Fund, and prepare applications for financing regional projects and arrange relevant jobs concerning data collection, licenses on natural resources, pollution and land use permits.

The body responsible for enforcement of environmental legislation is the Nature Protection Inspectorate, which inspects and arbitrates decisions of the county environmental protection departments concerning the enforcement of laws, regulations and standards. The Sea Protection Inspectorate has similar functions regarding the marine environment.

The Forest and Land Departments are responsible for their sectors.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN ESTONIA

**The** ongoing privatization of land in Estonia, and other problems of transition from the system of a planned economy to that of a market economy is a source of major conflicts between private ownership and nature conservation for the general good of the country. This is, of course, equally true for Latvia and Lithuania. Issues of ownership and property are at the bottom of everything, including the future of nature conservation.

During the Soviet period, all Estonian protected areas were owned by the state. After the land reform, 50 per cent of these areas will be privately owned. In the Act on Nature Conservation the possi-

bility to maintain protection regimes in the protected areas established before the land reform is foreseen. When the land was exclusively owned by the state, it was relatively easy to establish protected areas. However, the weakness of the present nature reserves is that management plans are generally insufficient or lacking altogether.

Conflicts have already arisen between nature conservation and economic interests of private landowners, especially in protected coastal or archipelago areas with great/significant recreational values, e.g., Islets near Hiiumaa.

However, the most serious conflicts are connected with forest management, equally in privately and state-owned forests (Lahemaa and Soomaa national parks). According to the Act on Protected Natural Objects, only improvement cutting and selective cutting depending on the main function of the forest as set out in the Protection Rules are permitted within protected areas (except in strict nature reserves). Unless otherwise specified in the Protection Rules, final felling is prohibited even in a limited management zone.

Serious conflicts have occurred in Saaremaa between the interests of nature conservation and those of the local population. Every year, around 100,000 barnacle geese visit Estonia on their way to the Arctic. Among these, about 60,000 stop in Saaremaaa. When feeding for six weeks in the three-kilometre wide belt of southern and western Saaremaa and Hiiumaa, the birds destroy crops and pastures within a total area of about 3,000 hectares. Small farmers are particularly affected.

In 1994, the Procedure for Providing Compensation for Damages Caused by Protected Wild Animal Species, and Methodical Guidelines for Assessment of Damages Caused by the Barnacle Goose and for Determining Compensation for Damage, were approved. However, at present the financial resources for paying compensation for all damages are very limited. In order to mitigate the conflict, barnacle goose was excluded in July 1996 from the II category of protected species.

Large numbers of seals are damaging coastal fishing by very often causing fishermen to lose their basket traps. The damage goes both ways, though. Once the seals are caught in the traps they cannot get out of them. The seals drown and the traps are destroyed.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN ESTONIA

The Nature Conservation Department of the Ministry of Environment has a staff of only six persons, who are assisted by the Nature Conservation Bureau. The Chief Inspector of Nature Protection Office, with the responsibility of supervision, staffs ten people. It goes without saying that such a lack of personnel seriously hampers the efficiency and range of activity of the responsible authorities, regardless of the ambitions and present competence within these agencies.

There is a serious lack of financial resources in Estonia today, and this affects all aspects of environmental protection and nature conservation. As described above, the lack of money leads to problems with the implementation of legislation – no matter how appropriate it is – as well as problems with the elaboration of a good management system for protected areas and implementation of these systems.

Moreover, without sufficient financial resources the Government cannot compensate landowners for restrictions imposed upon them in protected areas. Nor can compensation be paid to people whose property or livelihood is damaged by wildlife (see above).

Consequently, additional resources are needed in terms of money and people. Additional resources are needed for inventories; monitoring; the elaboration of management plans as well as actual management of the areas; compensation to landowners; training and education of personnei on all levels; for general as well as targetted information.

## EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN ESTONIA

Regarding information and public awareness there is a double need. An increased understanding of the values of nature conservation – including the possible long-term profits from ecotourism, etc. – must be promoted among landowners and other major actors in the financial structure of the country. At the same time, such an understanding must also be made to increase among the general public, and groups of local population affected in protected areas, in order to create a basic support and interest among them for environmental protection and nature conservation as a general good for everybody.

An important aspect on management and information is the fact that many people in Estonia still believe that protection always entails non-activity. However, many of the important habitats in Estonia, including coastal ones, need management in the form of, ***inter alia***, traditional farming practices. That kind of training and information needs to be promoted and disseminated, otherwise there is little point in setting aside, e.g., coastal meadows for protection.

Although primarily directed towards national parks, the Association of Baltic National Parks (ABNP), established in June 1991, could be mentioned in this context. To date, six national parks are members of the Association – Lahemaa in Estonia; Gauja in Latvia; and Aukstaitija, Dzukija, Trakai and Zemaitija in Lithuania. The secretariat is based in Estonia (Lahemaa) and members meet once a year.

NGOs known to be involved in biodiversity conservation activities in Estonia can be divided into the following groups:

***Professional** NGOs*
Estonian Fund for Nature (ELF)
Union of Protected Areas of Estonia (UPEA)
Association of Baltic National Parks (ABNP)

***Academic** NGOs*
Estonian Naturalist Society
Estonian Ornithological Society
Estonian Geological Society
Estonian Geographical Society

***Public** NGOs*
Estonian Green Movement
Save the Estonian Sea!
Estonian Society for Nature Conservation
Tallinn Society for Nature Conservation

The professional NGOs are active in nature conservation issues at the national level, assisting in the technical and legal aspects of new legislation, and new statutes and regulations for the national parks and protected areas. The scientific NGOs are participating by providing detailed information and expertise in their particular fields. The Nature Conservation Commission of the Academy of Sciences is currently responsible for preparing a new version of the Red Data Book. The public NGOs have been involved in concrete projects regarding the Baltic Sea, pollution, and education.

# FEDERAL REPUBLIC OF GERMANY

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN GERMANY

Due to the federal system of Germany, the legislative competence is shared between the Federation *(Bund)* and the federal states (tinder). For many subjects, infer *alia*, most of the land-use regulations like forestry, water management, fisheries and nature conservation, the legislative competence of the Federation is restricted to framework legislation, whereas the concrete regulations are issued by the *Länder. They* can expand the national framework laws, provided that their provisions are not in conflict with federal law.

For other subjects like military defence, major federal roads, federal waterways or air traffic, the competence is assigned to the Federal Government.

Following this constitutional division of responsibilities, the appropriate ministries and authorities in the *Länder* are in charge of designation and management of protected areas. Municipalities and administrative districts are autonomous with regard to local matters, as long as their decisions do not go against the laws established by *Bund* and *Länder.*

*The* basic legislation concerning protected areas in the Federal Republic of Germany is the 1976 Federal Nature Conservation Act (most recently amended in 1993), which was also implemented in the five new *tinder* in 1990.

Like all European Union Member States, the Federal Republic of Germany is obliged to comply with the 1985 EC Directive on Environmental Impact Assessment (EIA). According to this Directive, public or private development projects which are likely to have significant effect on the environment should be submitted to the competent authority for evaluation. This authority is to take into consideration both the information and opinions it receives on the project before deciding whether the project is compatible with environmental and nature conservation requirements.

At the federal level, the Ministry of Environment, Nature Conservation and Nuclear Safety *(Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit)* – especially its Department for Nature Conservation and Environment – has the overall responsibility for the administration of nature conservation, as far as it is not the task of the *Länder.* For example, international issues fall within the responsibility of the Ministry. The Nature Conservation and Environment Department has two subdivisions; one dealing with nature conservation and landscape planning; one with environment, soil protection and chemicals.

The administrative structure of the *Länder varies* from *Lund* to *Land.* It consists of two or three levels:
- the ministerial level;
- the regional offices *(Regierungspräsidenten)*; and
- the lower authorities of administrative districts *(Kreise)* and municipalities *(Gemeinde).*

The intermediate level *(Regierungspräsidenten)* may be lacking, as is the case in Mecklenburg–Vorpommern and Schleswig-Holstein. With respect to nature conservation in Mecklenburg-Vorpommern on the regional level, there are six Regional Agencies for Environment and Nature *(Staatliche Ämter für Umwelt und Natur)*, which are directly subordinated to the Ministry for Construction, Physical Planning and Environment *(Ministerium für Bau, Landesentwicklung und Umwelt).*

### *Schleswig-Holstein and Mecklenburg–Vorpommern*

*The* elaboration of legislation at *Länder* level in Mecklenburg-Vorpommern is still in progress. The first Act on Nature Conservation, which came into effect in January 1992, regulates the most important issues, like protection of biotopes, protected areas, coastal strip, general protection of alleys, etc. It was supplemented in May 1992 with some articles on landscape planning.

The main legislative Acts of relevance to physical planning, land-use activities and nature conservation in Mecklenburg-Vorpommern and Schleswig-Holstein are:

*Physical Planning*

- Physical Planning Act of Mecklenburg-Vorpommem (from 3 1 March 1992);
- Physical Planning Act of Schleswig-Holstein (amended 10 June 1992).

*Nature Conservation and Landscape Planning*

- First Nature Conservation Act of Mecklenburg-Vorpommem (from 10 January 1992, amended 21 May 1992; since this act is a provisional one and not a comprehensive one the Federal Nature Conservation Act has direct validity for all subjects which are not yet regulated by the First Nature Conservation Act);
- Nature Conservation Act of Schleswig-Holstein (amended 16 June 1993);
- Act on the Protection of the Wadden Sea of Schleswig-Holstein (from 14 February 1985).

*Water Management*

- Water Act of Mecklenburg-Vorpommem (from 30 November 1992);
- Water Act of Schleswig-Holstein (amended 17 February 1992);
- Act on a Charge on Exploitation of Underground Water Resources of Schleswig-Holstein (from 14 February 1994).

*Forestry*

- Act on the Forests of Mecklenburg-Vorpommem (from 8 February 1993);
- Act on the Forests of Schleswig-Holstein (amended 11 August 1994).

*Fishery and Hunting*

- Fishery Act of Mecklenburg-Vorpommem (from 6 December 1993);
- Fishery Act of Schleswig-Holstein (from 10 February 1996);
- Hunting Act of Mecklenburg-Vorpommem (from 10 February 1992);
- Hunting Act of Schleswig-Holstein (amended 10 June 1993).

*Roads and Traffic*

- Federal Act on Major Roads (in its new form from 19 April 1994);
- Federal Act on Constructions of New Major Roads (in its new form from 15 November 1993);
- Act of Roads and Paths of Mecklenburg-Vorpommem (from 13 January 1993);
- Act on Roads and Paths of Schleswig-Holstein (amended 6 December 1989);
- Act on Federal Waterways (in its form from 17 December 1993);
- Act on Water Traffic Mecklenburg-Vorpommem (in its form from 17 February 1993).

*Constructions*

- Federal Building Act (in its form from 27 December 1993).

*Water Management and Deposits*

- Waste Management and Deposit Act of Mecklenburg-Vorpommem (from 4 August 1992);
- Waste Management and Deposit Act of Schleswig-Holstein (from 6 December 1991).

*Rural Development and Land Use Patterns*

- Federal Act on Land Consolidation (in its form from 12 February 1991).

*Protection from Harmful Emissions*

- Federal Act on the Protection from Harmful Effects from Pollutants and Noise (in its new form from 22 April 1993).

***Historical Monuments***

- Act on the Preservation of Historical Monuments and Buildings of Mecklenburg-Vorpommem (from 30 November 1993).

***Environmental Impact Assessment***

- Federal Act on Environmental Impact Assessment (from 12 February 1990).

In Mecklenburg-Vorpommem, according to the coalition agreement between the governing parties for the current legislative period (1994–1998), the Government was obliged to present a draft of a Nature Conservation Act to the Parliament before the end of 1995. The approval of a comprehensive Nature Conservation Act, therefore, can be expected in 1997. A draft of an Act on National Parks and Large Protected Areas has to be presented to the Parliament before the end of 1996. A ***tinder*** legislation on environmental impact assessment is planned to be passed during the current legislative period.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN GERMANY

### *Schleswig-Holstein*

The responsibilties for implementation and administration concerning nature conservation at the ministerial level is assigned to the Ministry for Environment, Nature and Forestry ***(Ministerium für Umwelt, Nature and Forsten).*** Within the Ministry, there are two departments concerned with nature conservation:

- the Nature Conservation Department ***(Abteilung Naturschutz);***
- ***the*** Department for Water Management and Nature Conservation ***(Abteilung Wasserwirtschaft und Naturschutz in und an Gewässern).***

As an advisory body to the Ministry, as well as to local authorities, there is the Agency for Nature and Environment ***(Landesamt für Natur und Umwelt),*** which has the status of an upper authority. The lower authorities are the districts ***(Kreise und kreisfreie Städte).*** Some tasks are carried out by the six Regional Agencies for Agriculture and Water Management ***(Ämter für Land-und Wasserwirtschaft).***

A large national park has been established on the Schleswig-Holstein Wadden Sea Area. For this area the responsible authority on the upper and lower adminstrative level is the National Park Agency.

### *Mecklenburg- Vorpommern*

At the ministerial level, there is the Ministry for Agriculture and Nature Conservation ***(Ministerium für Landwirtschaf und Naturschutz Mecklenburg-Vorpommem).*** Unfortunately, after the elections in 1994, nature conservation was split from the other environmental issues like water management, protection from harmful emissions, and waste management, which were integrated into the Ministry for Construction, Physical Planning and Environment ***(Ministerium für Bau, Landesentwicklung und Umwelt).***

The advisory and managing function is fulfilled by the Agency for Environment and Nature Conservation ***(Landesamt für Umwelt und Natur),*** which has the status of an upper expert authority. The tasks of the lower authorities are shared between the Regional Agencies for Environment and Nature ***(Staatliche Ämter für Umwelt und Natur),*** which are directly responsible to the Ministry, and the nature conservation authorities of the districts ***(Kreise),*** which mainly fulfil1 the administrative tasks.

In the five large protected areas which were established by Decree of the last Parliament of the former German Democratic Republic (the three national parks, the biosphere reserve Südost–Rügen and the nature park Schaalsee), the State National Park Agency ***(Landesnationalparkamt Mecklenburg–Vorpommem)*** is the responsible authority on the upper and lower (administrative) level. In the provisionally established nature parks consulting bodies are installed, run by the Agency.

The most comprehensive management programme of Mecklenburg-Vorpommern is the Greenland Programme of the Ministry for Agriculture and Nature Conservation. Farmers receive financial support with up to 400 DM per hectare if they use their grasslands in accordance with the requirements of nature conservation.

Management plans will be established for every national park and biosphere reserve.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN GERMANY

Concerning conservation of marine and coastal areas, one of the main conflicts arises from tourism. This holds especially true for Mecklenburg-Vorpommem, which is well known for its natural beauty. Of major concern are building sites and road constructions in or near to ecologically sensitive areas. During the last years, a considerable number of projects related to tourism have been the subject of controversial public discussion, e.g., recreation centres, hotels, marinas and golf courses. Of the huge and most conflicting projects, the majority have been given up for different reasons and only a few have been built. However, new projects are being proposed. Therefore, the figures of conflicting planning is always very variable.

Another problem that arises from tourism is the disturbance of wild flora and fauna due to all kinds of recreational activities, such as boating, surfing, camping and fishing, but also private air traffic. Such impacts can also be observed in nature reserves. For some areas – especially the large *Bodden* areas – more stringent regulations are needed.

Conflicting planning may also refer to excavation of minerals (sand and gravel), traffic projects (especially roads), extension of shipping lanes, etc. In many cases, the impact on the environment can be minimized during the planning process (e.g., second-road connection to the island of Rügen, extension of the shipping lane in the Peenestrom), and appropriate solutions or measures to reduce negative effects can be found. Some plannings were stopped or postponed (e.g., new border crossing point to Poland for cars on the island of Usedom).

There are still problems resulting from agriculture and fishery in some areas. Intensive agriculture on fens, in connection with dikes and artificial drainage, still heavily contributes to pollution of coastal waters by leaching of nutrients. On the other hand, water pollution from municipalities has been drastically reduced by construction of waste-water treatment plants during the last few years.

Fish farming, in GDR times a considerable polluter of the coastal waters, currently does not exist in Mecklenburg-Vorpommem, but new plans for fish farms are alarming the population of sea resorts (e.g., a fish farm near Binz). Bottom trawling was prohibited in the coastal waters of Mecklenburg-Vorpommem by a Governmental Decree in 1994. Some conflicts between fisheries and nature conservation, however, are produced by setnet fishing in the *Bodden* areas, especially during the spring herring season when some tens of thousands of marine birds are resting here and a considerable number die by drowning in the nets.

In Schleswig-Holstein, fish farming does not exist, except for one facility. Bottom-trawling is not allowed within a three-nautical mile wide zone from the shoreline, and setnet fishery is forbidden within a 200 meter strip. A study performed in the 1970's indicated that every winter about 15,000 sea ducks died by drowning in setnets. A follow up study is planned for the coming years. Also experiments with different types of nets are being carried out by a research institute of the Federal Government.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED AREAS IN GERMANY

Obviously, if the ambitious protection programme of Mecklenburg-Vorpommem is to be upheld there is an urgent need for both money and staff for practical everyday administration and management of

the protected areas, as well as for long-term elaboration of ways and means of combining the conflicting interests without compromising the idea of preserving valuable areas for the future benefit of all of Germany and the whole Baltic Sea Region. More money is also needed for restoration of affected areas, especially wetland restoration.

### EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN GERMANY

Furthermore, additional resources are needed for information, education and measures to raise public awareness of the problems and options. In many cases, the NGOs must be given more support, because they are strongly involved in all kinds of activities concerning nature conservation at the coast.

In Schleswig-Holstein, the two NGOs mainly involved in education and management of nature reserves along the coast are Naturschutzbund Deutschland (NABU) and Verein Jordsand zum Schutz der Seevogel und der Natur.

## FINLAND

### EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN FINLAND

The Finnish nature conservation legislation comprises:

- the 1923 Nature Conservation Act (one of the oldest such acts in Europe). It has been subsequently amended several times, including some major changes in 1991 when new provisions concerning endangered species were added;
- Acts and Decrees on establishing national parks and nature reserves;
- the Act on the Protection of Rapids; and
- the Act on Wilderness Reserves.

In addition to that, the Outdoor Recreation Act, the Off-Road Traffic Act, and the Land Extraction Act deal with matters related to nature conservation. Other legislation – particularly the Water Act and the Planning and Building Act – also include provisions relevant to nature conservation.

The over 70 years old Finnish Nature Conservation Act is hopelessly obsolete, and a complete revision of the nature conservation legislation has been in process since 1993. The need for a thorough revision of the Finnish legislation in this respect has been obvious for many reasons, among them the fact that Finland as a new EU Member State has an obligation to incorporate into national Finnish legislation the EC Bird Directive and Habitats/FFH Directive.

In 1995, the Working Group on Revision of the Nature Conservation Act, presented its proposal to the Finnish Government. The Working Group suggests, inter *alia*, that planning should become mandatory in the coastal zone. The concept of "coastal zone" is not defined in detail in the proposed text of the new legislation, but judging from the motivations presented it could be assumed that the coastal zone would be measured between 100 and 200 m from the shore line. A general plan or detailed plan would be required for permission to be granted for the erection of new buildings, or extraction of soil. Certain exceptions would apply, such as building for the purpose of agriculture, forestry or fisheries, as well as the building of saunas in connection with existing dwelling-houses.

The proposal also comprises stipulations about biotope protection and landscape conservation. In coastal areas, sandy beaches in their natural state, treeless sand dunes and coastal meadows would be generally protected habitat types. Measures that could jeopardize their characteristic features would not be allowed.

The above proposal has been revised after having been out for public hearings on two separate occasions. The Government will decide on it during 1996. It is still unclear what will finally happen with the proposed provisions concerning coastal planning.

The Province of Åland has its own legislation, but it is basically the same as in other parts of Finland. One exception is that shore plans as a planning instrument is not used in Åland (see Annex 1).

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN FINLAND

The Ministry of the Environment *(Ympäristöministeriö)* is the highest authority responsible for protected areas in Finland. Nature conservation legislation is prepared by the Ministry, which also provides more detailed instructions to those bodies in charge of management. These management bodies are subordinate to the Ministry of Agriculture and Forestry, but as far as nature conservation is concerned they get their guidelines and financial resources from the Ministry of the Environment.

The Ministry of the Environment has a right to give guidelines for the two agencies that manage protected areas: the Finnish Forest and Park Service *(Metsähallitus;* formerly National Board of Forestry), and the Finnish Forest Research Institute (METLA). Most of the state-owned protected areas in Finland are managed by the Forest and Park Service, which is in charge of 27 of the 30 national parks (including all four in the Baltic Region), 14 strict nature reserves and 365 other protected areas. It has a special division for nature protection, with six districts and a national development unit.

NGOs such as the Finnish Association for Protection of Nature, Nature and Environment, BirdLife Finland, and WWF-Finland, are involved in management of and research in both state-owned and privately owned protected areas.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN FINLAND

The landowner's right of development (building, etc.), in combination with the lack of general shore protection, is a major source of conflict between nature conservation and financially strong interests in building and other forms of exploitation in Finland. Every landowner in the coastal area, or along a lake or river, has the legal right to build 3-5 houses per kilometre of shore, throughout the entire country. Since the landowner must be compensated for the potential revenue he could have had from such development, it has been estimated that the conservation of one kilometre of coastline on the mainland of southern Finland would cost about one million FIM.

Between 7,000 and 9,000 new summer houses are built every year in Finland. The overwhelming majority of them are located on the shores of Finland's tens of thousands of inland lakes, on the coastline along the Gulf of Bothnia, the Archipelago Sea and the Gulf of Finland, and on the shores of the islands in the archipelagos. More than 400,000 summer houses are already in place, and by the turn of the century there could very well be over half a million of them.

In fact, over 37 per cent of the Finnish (excluding the Åland Islands) coastal zone – within 100 m or less from the shoreline – is occupied by buildings. On the Åland Islands, the corresponding figure is 11.7 per cent. The percentage of developed coast on the mainland, including the islands with road or frequent ferry connection to the mainland, is 42 (26 on Åland). When more than half of a coastal *area* is occupied by buildings, the landscape is in practice dominated by these constructions. In the open archipelago areas in Finland, already a ten-per cent coverage with buildings affects the landscape.

The possibility to use the free (i.e., geographically and physically exploitable) shores is also determined by the lenght of the shore. If only at least 500 m long free stretches of coasts are taken into account, the percentage of developed coast is 52. If free shores are calculated as at least 1,000 m long, the figure rises to 70 per cent.

The Finnish EU membership has increased the strong concern among conservationists on this matter. If Finland maintains its almost total lack of regulations for shore protection, the Finnish shores – and the coast along the Baltic Sea in particular – will be open for purchase by millions of Europeans who have strict restrictions against building on the shores in their own countries.

Eutrophication is a major problem in archipelagos and other shallow, enclosed areas along the Finnish coast. Agricultural runoff from intensive farming, as well as deposition of air pollutants (airborne nitrogen compounds) and inadequately treated sewage, cause eutrophication in these areas where water exchange is slow. Fish farms are also a major source of nutrients contributing to eutrophication. The production of farmed fish has doubled in Finland in recent years. The number of fish farms have remained about the same in the Åboland archipelago in the south (the Archipelago Sea), whereas it has increased considerably in the Åland archipelago and in the Quark area (especially the Vaasa archipelago). In parts of these areas, fish farms account for an estimated 50 per cent of the total input of nitrogen and phosphorus to the shallow sea areas.

Large-scale forestry used to be practically impossible on the islands in the archipelagos in both Finland and Sweden. Forests with high natural values have, thus, been left alone in many of the smaller islands. However, with the emergence of seabome machinery, logging has increased rapidly. Consequently, some conflicts have emerged between nature conservation and forestry represented by companies and landowners.

# LATVIA

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN LATVIA

The Latvian Ministry of Environmental Protection and Regional Development (*Vides Aizsardzibas Ministrija*) was founded in 1993 on the basis of the Environmental Protection Committee and the Ministry of Architecture and Building. The purpose of the re-organization was to balance the development of regions in Latvia in a sustainable way, based upon not environmental protection only but also upon spatial planning as an intersectorial activity.

The principal Latvian legislation for nature conservation and protection of biodiversity includes the 1991 Law on Environmental Protection and the 1993 Law on Particularly Protected Nature Areas. Other laws of relevance are the Law on Spatial Planning (1994), the Law on Nature Resources Taxation (1990), and the Law on Hazardous Wastes (1993).

Laws on building, on the conservation of species and habitats, and on protection belts are being drafted.

The aim of introducing new legal instruments in Latvia are to shift the emphasis from a repressive to an offensive approach to environmental protection; from fighting the consequences to preventing the causes; from mere environmental protection to integrated regional development. In order to safeguard legal aspects of environmental protection, the new legislation is developed in accordance with the new economic situation.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN LATVIA

The Ministry of Environmental Protection and Regional Development is divided into six departments. Issues of nature conservation and management plans are primarily the responsibility of the Environmental Protection Department. However, concerns for nature and biodiversity also indirectly fall under

some of the other departments (e.g., the Department for Regional Development, responsible for spatial planning, tourism, etc.; the Projects Department, responsible for scientific and educational projects; and the Division of Natural Resources and State Cadastres, responsible for the design and management of governmental issues on sustainable use of national natural resources).

Subordinate to the Ministry are, inter *alia*, nine Regional Environmental Protection Committees, the Tourism Council, the Slitere state reserve, the Teiči state reserve, and the North Vidzeme Regional Nature Protection Complex.

If, as a rule, there is no specific administration in a given protected area, the responsibility for its management is undertaken by the Regional Environmental Protection Committee. The Committee is then responsible for management of flora and fauna, for supervison and monitoring. Very often, though, there are not sufficient resources (money or staff) available to carry out those tasks.

It has been suggested that a National Conservation Agency should be established in Latvia. Such an Agency should be responsible for the management of protected areas, especially those of national and international importance, as well as for environmental impact assessments of land-use activities in forestry and agriculture.

A certain conflict between the interests of the national and community level has been pointed out. In the Law on Districts it is stated that the use and protection of land, forest and other natural resources is to be administered by the communities of the districts. However, the term "administer" has no legal content and does not demonstrate the division of responsibilities.

The Law on Spatial Planning is, generally, considered compatible with the ideas and ambitions expressed in the legislation on nature conservation and biodiversity. Environmental impact assessments are increasingly used in Latvia as an instrument to evaluate the possible effects of land use (other than nature conservation) on areas of high natural value and biodiversity.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN LATVIA

The problems of land privatization and transition, from the system of a centrally planned economy to a market economy, are similar in Estonia, Latvia and Lithuania. The following quotations, from the various answers given in reply to the questionnaire on which the first version of the present report was based in 1993, describe the problems of nature conservation in Latvia, inland as well as in the coastal zone:

*"Local authorities give more* generous *permissions for land use and exploitation than they are allowed to do. Agreements should be drawn up with the new landowners on restrictions in their use of the land, but this is sabotaged by the local authorities."*

*"Conflicts arise when the local communites act in favour of commercial use of the protected areas – development offorestry, agriculture, fisheries, land reclamation, etc. Detailed plans for the management ofprotected areas to regulate activities of the land users are now lacking. Many disputes originate from the shortage of adequate information for local authorities and society as a whole.*

*"Our lack of administrative experience on different levels is a problem. Various Acts adopted by the Parliament often contain controversies as far as nature conservation is concerned. The Land Commissions that carry out the land reform at the local community level are often violating their responsibilities. They distribute land without caring about nature conservation interests, although it is stated in the Act on Environment Protection that* ***priority*** *should be given to the protection of natural values."*

*"Right now conflicts arise due to land reform and landowner activities. Also, conflicts arise because of basic economic laws. For example, with different use of natural resources too little happens in the interest of nature conservation."*

*"The commercial rights are being developed faster than nature conservation legislation."*

*"Unfortunately, there is a gap between legislation and the actual social and economical situation in Latvia. Many Acts and other pieces of legislation are therfore hardly realized or simply do not work. One must also take into consideration the insufficient level of environmental awareness not only among the general public but also among local authorities. As a result of this lack of knowledge, environmental and nature conservation problems are ignored."*

*"We need regulations that allow private landowners the advantages of lower taxes on* ***their properties,*** *in cases where existing protected nature objects or objects in need of protection are located."*

*"It is stated that protected areas are managed by state authorities. Actually, they are not managed at all. Only Gauja National Park, the North Vidzeme Regional Nature Protection Complex, and strict nature reserves Slitere and Teici, have their own administration. All other protected areas are simply declarations on paper without a single management plan, any authority (staff) responsible for the management and supervision of these areas. etc."*

*"What is rather difficult for many people in Latvia to realize is that nature conservation in most cases is a question of action. Action to maintain the natural functioning of the ecosystems. Action to protect representative biotopes and habitats to safeguard all local species from extinction. Action to implement sustainable management practices and methods in forestry and agriculture. The protection of threatened species is actually only a very small part of nature conservation in Latvia today."*

However, it is important to note that local authorities that are willing to prepare management plans and implement them are, in fact, discouraged due to lack of funds.

A common experience of tourism in picturesque rural areas is that the tourist agencies ignore the local, rural authorities and sign agreements on the use of facilities around such areas. As a result, the rural authorities get no income from tourism, only the responsibility to maintain the areas.

Among the obvious conflicts are violations of protection regimes in already protected areas. Poaching in North Vidzeme Regional Nature Protection Complex is one example of this.

The establishment of "gardening co-operative societies" (alotment areas) in valuable coastal areas is another. Increasing tourism in old military areas on the coast is yet another threat to the valuable nature that the protection zone is intended to safeguard.

A conflict could be arising in the Limbazi district (part of the North Vidzeme Regional Nature Protection Complex), where the District Authority has issued rules on the use of the coastal zone. These rules will imply certain limitations to public access to the most fragile coastal areas, as well as a clear prohibition against the use of water scooters along the coast. This decision by the Limbazi District Authority was the first of its kind in Latvia, and it will be a kind of pilot case in terms of possible conflicts due to such active local/regional measures to protect the coastal zone.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN LATVIA

**The** conflicts due to intensified land use in formerly closed areas, and the increase in privateland ownership, could be mitigated or altogether avoided through stronger, more coherent legislation. As an example of that it is pointed out in the (still valid) answers to the questionnaire that the legal options to obtain land should be completely changed. It is also stressed that clarification of where the conflicts primarily originate is often of great importance.

As can be concluded from the quotations above, lack of trained personnel (managers in the field as well as administrators and others in authorities on various levels) and lack of information raising

awareness of the problems among the general public as well as the responsible local and regional authorities are evident shortcomings. Additional resources are, therefore, needed to provide education and information. This is, thus, expressed in two of the answers to the 1993 questionnaire:

*"First **of all we** need possibilities to train our personnel and representatives **of** local authorities. We need to introduce them to the concept **of** environmental problems and demonstrate ways and means to solve these problems. In order to reach this goal we need literature dealing with environmental and nature conservation problems; if possible, have such literature translated into Latvian. So far the situation has been desperate in terms **of** such literature in our schools. If the educational problem can be solved today, we hope to achieve a well-educated society tomorrow, with trained and educated wardens and authorities that are genuinely interested in environmental and nature conservation **issues,"***

*"Firstly, we need well-trained personnel that can work in coastal regions and keep in good contact with local inhabitants. Secondly, we need to expand research work in order to work out management plans for concrete protected areas or areas that need to be protected. Thirdly, we need financial resources in general."*

Resources are also badly needed for the elaboration of workable management plans for already protected areas, as well as a new strategy for the future protection of biotopes and habitats in general. A more efficient supervision is also called for, which requires better resources.

### EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN LATVIA

Such activities are mainly generated through various non-governmental organizations, for example, the Latvian branch of Coalition Clean Baltic (CCB), Children's Environmental School, the Ecological Centre of the Latvian State University, and the Baltic Sea Project (a UNESCO-associated school project).

Daugavpils and Liepāja State Pedagogical University, Latvian State University, and the Latvian Technical University provide courses in environmental protection issues. There is, however, still an urgent need for information and trained specialists in this sector.

## LITHUANIA

### EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN LITHUANIA

At present, there are about 40 laws or governmental regulations in Lithuania related to environmental protection and use of natural resources, including conservation of biodiversity.

The most important laws concerning environmental protection and nature conservation are:

- The 1992 Law on Environmental Protection;
- The 1991 Law on Taxes on State-Owned Natural Resources;
- The 1995 Law on Taxes on Environmental Pollution;
- The 1993 Law on Protected Areas;
- The 1995 Law on Territorial Planning;
- The 1993 Government Regulation No 1640 on Special requirements for land and forest use.
- The 1994 Law on Land;
- The 1994 Law on Forests;

- The *198* 1 Law on Protection and Utilization of Animals.

Several draft laws have been approved by the Lithuanian Government and are now pending approval by the Parliament. Examples of such legislation are the Law on Waste Management, the Law on Environmental Impact Assessment, the Law on Water, the Law on Wild Fauna and the Law on Protected Species and Communities.

Protection and utilization of flora and fauna in protected areas is established through regulations for these areas. Regulations approved in the Soviet period for all kinds of managed reserves and natural monuments are still valid. Individual regulations for all national parks were approved in 1992 and the individual regulations for regional parks are being approved during 1996. Since 1993, use of land and forest in private land plots is regulated.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN LITHUANIA

The Ministry of Environmental Protection *(Aplinkos apsaugos ministerija)* is the national authority responsible for development and implementation of environmental policy, including nature conservation and preservation of biodiversity. The Ministry is responsible for the preparation of environmental legislation and standards, environmental territorial planning documents, development and implementation of strategies, establishment and management of the system of protected areas, co-ordination of management of natural resources, organization of environmental monitoring, collection of statistical data, organization of relevant applied research, and co-ordination of international activities. Furthermore, the Ministry is responsible for financing environmental programmes and projects at the national level, and for organizing environmental impact assessments for objects of national importance.

The Land Management and Biodiversity Department of the Ministry is responsible for the conservation of biodiversity throughout Lithuania.

Regional departments and district agencies are subordinated to the Ministry of Environmental Protection to implement environmental and nature conservation policies. There are staff in each regional department to work with issues of landscape and biodiversity protection.

The conservation of biodiversity largely depends on the preparation and implementation of general and special territorial planning documents. In 1986, an Integrated Scheme for Nature Protection up to the year 2000 – including the system for protected areas, and ideas for the concept of a nature frame – was approved by the Government and has played a significant role in the conservation efforts.

In recent years, some gaps have revealed themselves in the preparation of projects for territorial planning (management plans). Too much attention has been given to the preparation of land reform plans and following from that is a lack of planning for agricultural land use and forest management projects.

At present, only two national parks – Kuršių Nerija being one of them – have management plans approved by the Government. Merely two regional parks had management plans elaborated prior to their establishment. Plans are prepared for another live regional parks. Strict nature reserves, managed reserves and natural monuments are, at the moment, not subjected to management plans.

The system of protected areas created before the start of land reform provides a good background for the conservation of landscape and biodiversity, but there is a need for concrete action and special programmes and management plans as no protection can be guaranteed just by pronouncing an area as protected.

There are no privately owned reserves in Lithuania, but protected areas include privately owned land. Only strict nature reserves and the Kuršių Nerija national park can never be privatized, whereas private ownership is possible in other areas with special restrictions on the use of land and forests.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN LITHUANIA

The lack of a legal foundation and management plans causes some problems for the implementation of nature conservation policies in Lithuania. The same holds true for the irrational process of land reform, which undergoes frequent changes and is unbalanced from both a land management and ecological perspective. Other problems concern a general short-sighted economic and technocratic approach by decision-makers in relation to the use of natural resources, the lack of qualitifed specialists in landscape geography and landscape architechture, ecology and management, and the lack of concern and financing for nature conservation and biodiversity protection. Furthermore, existing laws and regulations are regularly violated.

The greatest impact on the protected areas and the Nature frame areas is caused by

- the privatization of land, the restoration of former landownership rights, and extensive constructions following the new ownership;
- the increasing use of forests;
- the weakening of administrative procedures and responsibility;
- the lack of information and lack of management plans;
- the insufficient inventories of biota components.

These factors pose serious threats to the values embraced by the protected areas, as these activities or lack of initiatives enhance the degradation of the natural landscape and its biodiversity. The problems are already obvious in regional parks without management plans and responsible administrative structures, as well as in less controlled managed reserves.

Despite these threats, the general environmental conditions in Lithuanian protected areas are still satisfactory. However, measures must be taken to prevent the situation from deteriorating. Lithuania has a sufficient system for nature conservation, and a good scientific basis for the creation of a protected area system and for the protection of nature and biodiversity. It has proved much more difficult to actually establish protected areas and explain their values to the general public, however. There is a big lack of general understanding of the value of these areas, indeed a lack of tradition to look favourably upon nature protection.

Often, the new landowners do not realize the full meaning of private ownership, i.e., they do not comprehend the value of their land. Without a comprehensive education programme, a majority of the landowners, and people in general, will presumably not realize the meaning of natural values. There is a strong belief among Lithuanian conservationists that such an education programme would give good results in a short time.

There is also a need to change public opinion about wetlands. The general feeling among Lithuanians today is that wetlands are wastelands and should be eliminated. The conservation of wetlands meets with very little understanding.

Although control of forest use has improved, regulations have been violated in protected forest areas, due to rising timber prices and lack of wood. Clear-cuttings have been carried out in spite of forest management projects, even in protected zones in nature conservation reserves. The most valuable stands of broad-leaved forets are devastated. The fellings have often been made without any kind of permission. Pine tapping has taken place in core zones of protected areas.

*Conflicts on the Lithuanian coast*

One of the main problems is water pollution. The water quality of the Baltic Sea is affected by River Nemunas and other rivers. Conserquently, 85 per cent of the Curonian Lagoon area and 45 per cent of the Baltic Sea coastal zone are heavily polluted. The lagoon is the recipient of all waste waters from inland cities and industries located along River Nemunas in Lithuania and Belarus.

Other existing or perceived threats vary between various coastal zones. In the Klaipėda–Palanga region, the most important threats include:

– building activities at the coast (the construction of the Būtingė oil terminal north of Palanga, possible enlargement of the the Klaipėda harbour, building of summer houses);
– pollutants carried by River Nemunas and dischare of sewage from the Klaipėda sewage treatment plant, which lead to pollution of the bathing areas at Giruliai and Palanga;
– recreational activities;
– potential risk of pollution from passing ships;
– military activities; and
– uncontrolled extraction of amber on the beach near Giruliai.

Conservation of the Curonian Spit is mainly threatened by:
– expansion of summer villages;
– pressure from tourism in the national park;
– potential risk from offshore oil extraction near Nida;
– oil spills from ships; and
– technical shoreline protection of the Curonian Spit on the Curonian Lagoon shore

Threats to the Curonian Lagoon comprise:
– increasing pollution of the lagoon, eutrophication and oxygen deficiency;
– disturbance of wildlife by hunting, fishing, tourism and poaching; and
– intensification of agriculture and fishing, extension of the polder system in the delta of River Nemunas.

# POLAND

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN POLAND

The Polish legislation does not comprise laws specific for the protection of marine and coastal areas.

In 1991, a new Nature Conservation Law was introduced in Poland regarding the protection of nature. The act defines the principles of nature conservation in Poland and introduces a new type of planning – it is mandatory to make Protection Plans for nature reserves, national parks and landscape parks and their buffer zones. Such a plan is superior to any town or country planning or forestry management planning. The recordings of the plan have to be taken into account in any local planning.

Three new categories of protected areas – environmentally valuable element; natural landscape complex; documentation spot – are defined in the 199 1 Nature Conservation Law.

In 1994, a new law concerning municipal and country spatial planning was issued. The law defines the scope and principles of procedure concerning the assignment of grounds for specific purposes and the principles of planning. Eco-development is accepted as the value on which these activities should be based.

There are, at present, no plans to introduce any significant changes in the Polish legislation on nature conservation. However, there is a need to improve the legislation due to the fact that it fails to introduce modern laws concerning protection of biodiversity, and a system for compensation to landowners for accepting restrictions following the designation of their land as protected area.

In the legislation now in force, principal rules are defined for national parks only.

Introducing new legislation could, however, be difficult. For new legislation to be accepted, a prolonged legal procedure is required. Most importantly, though, a specific atmosphere of considering nature conservation and conservation of biodiversity as important issues is needed. Presently in Poland, economic and political problems and the fight against unemployment are the predominating issues.

Additionally, a number of national laws other than the ones aimed at nature conservation have an impact on the possibilities to protect nature and natural values. Such legislation includes:

- The Law on Environmental Protection and Transformation (1990);
- The Law on Forestry (1991);
- The Law on Spatial Planning (1994);
- The Building Law (1994):
- The Law on the State Board for Natural Environmental Protection (1991);
- The Law on Husbandry ( 199 1);
- The Law on Protection of Game (199 1);
- The Law on Protection of Arable Grounds and Forests (1982);
- The Water Economy Law ( 1974);
- The Law on Marine Fisheries (1963);
- The Geological and Miners Law ( 1994);
- The Law on Marine Regions of the Polish Republic and Maritime Administration (1991).

Besides these, there are executive acts like

– the Act of the Cabinet on the Principles of Boundary Determination for Technical and Protective Zone (1993);

– the Act of the Minister of Environmental Protection, Natural Resources and Forestry on Enterprises Harmful to the Environment and Human Health (1995);

– the Act of the Minister of Environmental Protection, Natural Resources and Forestry on Environmental Impact Assessment (1995);

– the Act of the Minister of Environmental Protection, Natural Resources and Forestry on Plant Species Protection (1995).

The Act on Spatial Planning is a modern legal act, generally compatible with the ideas and requirements of nature conservation. With the new Building Law as a supplement, they form a background for the proper administration of land and supervison of building, which should incorporate the results of studies on conditions and directions of municipal spatial planning. Particularly important is the record explaining that the local spatial planning has to be supplemented by a prognosis on the effects of the plan on the natural environment.

In accordance with the Law on Protection of Arable Grounds and Forests, land use should be planned with concern for conservation of ecosystems and natural values.

Environmental impact assessment is currently used in Poland almost as a routine instrument. Providing the EIA is made by a group comprising professional naturalists, it meets the aims.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN POLAND

### *Administration*

The following ***administrative institutions are*** responsible for nature conservation in Poland:

– Minister of Environmental Protection, Natural Resources and Forestry;
– Voivodship Governor;
– Director of a national park.

The organizational and administrative structures comprise the ministerial level, the regional level, the voivodship level, and the municipal level.

*Ministerial level*

1. Ministry of Environmental Protection, Natural Resources and Forestry *(Ministerstwo Ochrony Środowiska Zasobów Naturalnych i Leśnictwa)*. Included are various ministerial departments (responsible for nature conservation; forestry; water management; ecology policy, etc.) and the State Board of National Parks.
2. Ministry of Transport and Maritime Economy, which is the administrative body responsible for the coastal strip and for open sea water areas.
3. General Directorate of State Forestry.
4. National Inspection for Natural Environmental Protection.

Advisory bodies at the ministerial level are the National Council for Nature Conservation; the National Council for Environmental Protection; the Forestry Council; the Commission for Sustainable Development; and the Commission for Environmental Impact Assessment.

*Regional level*

- Regional Directorate of State Forestry;
- District Directorate of Water Management;
- Regional Board of Water Management;
- National Park Directorate, with their advisory body the Scientific Council of National Parks.

*Voivodship level*

- Acting on behalf of the Voivodship Governor: the Voivodship Nature Conservator; the Section for Environmental Protection (of the Voidvodship Administration); the Board of Landscape Parks.
- Voivodship Inspectorate of Environmental Protection, a body independent from the voivodship administration, subordinate to the National Inspection for Natural Environmental Protection.

Advisory bodies at the voivodship level are the Voivodship Commission for Nature Conservation, and the Scientific-Social Council of the Director of Landscape Parks.

*Municipal level*

*The* administration of big cities and certain municipalities includes a Section for Environmental Protection, or a permanent post for a specialist in the field of environmental protection. There is, however, generally a lack of professional administrators of environmental protection at the municipal level.

*Administrative bodies responsible for the establishment of protected areas are:*

- For national parks and nature reserves: Ministry of Environmental Protection, Natural Resources and Forestry (by the act of a minister).
- For landscape parks, protected landscape areas, environmentally valuable elements, and natural landscape complexes: Voivodship Governor.
- For the establishment of protected landscape areas, natural landscape complexes, documentation spots and environmentally valuable elements within their borders: Municipalities.

*Responsible for management of protected areas are:*

- National parks: the Directors of the parks.
- Nature reserves, landscape parks, protected landscape areas: the Voivodship Nature Conservator together with the Section for Environmental Protection (of the Voidvodship Administration). In the case of a landscape park, the governing body also includes a Board of Landscape Park.
- Protected landscapes and other protected areas established by the municipalities: the local administrations, the municipalities.

All kinds of protected areas are, additionally, administered by Directorates of State Forestry, local administrations, private owners and, in the case of the Baltic Sea coastal strip, also by the Maritime Offices.

***Responsible for management of flora and fauna in protected areas are*** the Minister of Environmental Protection, Natural Resources and Forestry, the Directors of national parks, the Voivodship nature conservators and the Forestry Directorates.

Responsible for ***supervision of protected areas*** in Poland are:
– Ministry of Environmental Protection, Natural Resources and Forestry, assisted by the State Board of National Parks (responsible for the administration of the parks).
– Voivodship Govemer, assisted by the Voivodship Nature Conservator and the Section for Environmental Protection, is responsible for nature reserves, landscape parks and protected landscape areas;
– Municipalities, for protected areas established in their region by municipal instruction.

By definition, monitoring of protected areas forms an integral part of the National Programme of Natural Environmental Monitoring, which is financed and conducted by the National Inspection for Natural Environmental Protection. The Programme comprises a sub-programme – Integrated Monitoring of the Natural Environment – and the station network wihin the Programme includes 12 background station of which seven in the national parks.

### *Implementation*

The laws on nature conservation and biodiversity are implemented in Poland. It can be assumed that the objectives of the legislation will be reached, in some cases in quite near a future, in other cases in a rather more distant one.

The near-future target is the establishment of new protected areas (formal subsistence). The distant-future targets are as follows:

- Elaboration of effective methods and instruments of protected area management;
- Broad-range ecological education/information; stimulating people's interest in the natural environment in their neighbourhood, in its values (including curiosities, unique features), potentials, investment possibilities, etc.; and activating a willingness to work for their environment and nature.
- Funds to be used for nature protection activities: Technical activities, pro-ecological infrastructure; repurchase of land; donations; incentives; credits; basic arrangements for ecological education; promotion; publications; research (including basic research); monitoring; fundamental functions of protected areas (special funds for top professional personnel, who require top salaries); a system for compensation and financial benefits to landowners for accepting restrictions following the designation of their land as protected area.
- Funds for the elaboration of nature conservation plans.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN POLAND

It should be noted that the national Polish legislation on land ownership, the right to private property, is generally substantially stronger than the legislation on nature conservation and biodiversity.

The most intense conflicts result from the clash of interests between nature conservation and various economic activities. This is particularly frequent in the terrestrial–coastal areas. In the present economic situation in Poland, a country in transition, where a considerable amount of state enterprises have gone bankrupt and where there are many unemployed people, it is understandable that people take any opportunity to make money. Quick profit predominates, regardless of natural values at stake and even regardless of the risk of destroying the basis for making money also in the future. A complete lack of

rational thinking can be observed. Few are capable of a rational approach to the administration of natural resources, recognizing nature as the value governing economic development and the basis for long-term, sustainable gains in the future.

Today people, usually coming from other places, buy land within protected areas for specific, snobbish but very profitable use. They start a business of ecological recreational settlements, high-standard hotels, sporting grounds, horse riding, wind surfing, yachting, tennis courts, golf clubs, etc. Due to the lack of appropriate supervision of building, coupled with ineffective restrictions on, e.g., demolition of existing buildings, the land is divided into small construction fields and new constructions are swiftly completed without the necessary technical infrastructure and permissions. Such "wild" constructions are then legalized *post factum* by the local administration in the form of municipal/country planning "actualization".

Conflicts in the coastal zone also arise from prospecting and mining activities for aggregates, peat, crude oil, gas, etc.

The local inhabitants in the coastal zone are usually willing to exert unlimited possibilities for development, and the larger and faster the profit, the better. Thus, people oppose restrictions on the use of their property and express the opinion that protected areas have been established without consultation. Planned areas for protection are, therefore, envisaged only as instruments of undesired restrictions.

Thus far, these conflicts have not been handled well by the responsible authorities. At present, groups of experts have been set up in some protected areas (like Nadmorski landscape park). They discuss conflicts with local groups and carry out broad ecological education.

Conflicts are likely to arise everywhere in the future, unless the state authorities accept a policy to avoid them, including measures such as the following:

– Promotion of protective measures (development plans, economic incentives, donations, credits, and legislation).
– Financial support that renders nature protection effective: repurchase of land, pro-ecological investments, construction of selected facilities for the purpose of recreation and tourism, scientific research, monitoring and environmental education.
– Creation of an atmosphere of encouragement and interest in the protected areas.
– Education of the general public, particularly of the youth. publications, films, exhibitions, educational programmes, training of local administrative staff, nature camps, green schools, etc.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN POLAND

(See distant-future targets.) Additonal resources are needed in Poland to maintain or build an effective management system for nature conservation, e.g., for

– re-naturalization of affected areas;
– elaboration of nature protection plans;
– computerization of nature protection services and centres of ecological education;
– training of staff working with local groups (teaching ecology), as well as effective management of the protected areas by hiring professional staff and well-educated trainers to assist the staff,
– funding training, repurchase of land, donations, preferential credits, financial promotion, etc.

## EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN POLAND

There seems to be a better understanding today among decision-makers of the importance of nature conservation. Also, there is a more active interest in local groups. Frequent public discussions, and

well-presented ecological educational programmes bring about quick and measurable results in awareness and commitment.

Responsible for activities aimed at providing information and raising public awareness about the importance of nature conservation, biodiversity and protected areas are governmental agencies, local administrations, educational and scientific institutions, as well as the media and the schools.

The Ministry of Environmental Protection, Natural Resources and Forestry is taking an increasingly active role in the process of education, information and public awareness. Financial support is provided for training, inter *alia*, local authorities, and for the production of publications. There is a more active involvement both nationally and internationally (for instance, in the HELCOM PITF PA&EE Working Group).

The Ecological Education Divison working within the Ministry has, in co-operation with other ministries, prepared a national Programme of Ecological Education, concentrated on issue like protection and management of water; energy and conservation of resources; nature conservation, especially protection of biodiversity. Important goals of the Programme are to inform the general public about environmental protection and sustainable development; and to promote the integration of environmental protection and economic activities.

The Ministry of Education has incorporated some ideas regarding nature conservation in the coastal zone and the sea. A more active approach is, however, needed.

Regional authorities responsible for environmental protection are, unfortunately, less involved in public awareness and environmental education activities. Local authorities, on the other hand, take a more active part in such activities, for example by supporting and organizing public contests about Agenda 21, by organizining conferences and by organizating events like Days of the Sea (the city of Gdynia has a long tradition in this respect).

Non-governmental organizations are becoming increasingly important in the process of offering education and/or raising public awareness about nature conservation and biodiversity.

National parks (e.g., Wolinski and Słowiński) and landscape parks have their educational centres. Their educational activities have recently been formalized as their new statutes require certain procedures regarding preparation of park plans with participation of local groups.

Some of the Regional Environmental Education Centres are located in the coastal zone, but a more active approach towards the issue of protection of the coastal zone and marine areas would be desired.

# RUSSIAN FEDERATION

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN THE RUSSIAN FEDERATION

In recent years, national legislation in the Russian Federation on nature conservation has been completely re-designed. A number of important federal Laws and Acts have been introduced:

- The 1991 Law on Natural Environment Conservation;
- The 1992 Act on State Management Institutions Commissioned on the Protection of Natural Environment;
- The 1991 Act on State Environment Expert Commission;
- The 1995 Law on Fauna:
- The 1995 Law on Special Protected Areas;
- The 1995 Law on Flora;
- The 1995 Water Codex Law.
- The 1996 Law on Environmental Expertise.
- The 1996 Presidental Decree on the Russian Federation Sustainable Development Concept.

Five main achievements should be mentioned:
– The principle of mandatory environmental impact assessment for any level of industrial, agricultural, urban, military or any other human activity;
– Improvement of the legislation on a national system of protected areas;
– The implementation of the global 1992 Convention of Biological Diversity has become a special task of national environmental policy;
– The right of information on, for example, physical planning for improved public awareness has been declared, and the right of public participation in the management of protected areas has been granted;
– It has been declared that international laws and agreements have priority in cases where there is contradiction between them and national legislation.

However, some disparity between different acts in Russian legislation make implementation problematic in some cases. During 1996, a new Forest Codex Law and a new Land-Use Codex Law are to be approved. In the proposed Land-Use Codex Law, all protected areas will be placed in a special category as "conservation land". Conservation land areas, including regional protected areas, are be state-owned only. If so-called "partial cutting" (reconstructional cutting) is permitted in regional *zakazniki* and national parks, as indicated in the proposed Forest Codex Law, that could pose a problem in protected areas.

Environmental impact assessments are not yet fully carried out in the Russian Federation, but the objective of the 1996 Law on Environmental Expertise is to address this issue.

New regional legislation for the Leningrad Administrative Region and for the city of St. Petersburg is needed for management of coastal and marine areas and for improved land use. Consultations on this issue are going on between some non-governmental organizations and the Leningrad Administrative Region Government.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN THE RUSSIAN FEDERATION

A national system of management of protected areas in the Soviet Union was established in the early 1920's. It was finally revised under Russian Federation legislation in 1995.

Some main categories of protected areas are placed under supervision of the federal governments. Among them are state nature reserves areas *(zapovedniki)* and federal nature reserves ***(federal zakazniki),*** which are administrated by the Ministry for Environmental Protection and Natural Resources of the Russian Federation.

The administration of each *zapovednik* and its Director are supervised by the Moscow-based Federal Department of Protected Areas of the above ministry. Usually, federal ***zakuzniki*** do not have any special administration. They are placed under the Regional Committee of the Ministry. In some cases, for example, in the Leningrad Administrative Region, the Committee of Hunting Service of the Ministry of Agriculture of the Russian Federation is administrating the territory of the federal *zakaznik* Mshinskoe Boloto.

The National Park system is controlled by the Federal Forest Service. The administration and staff of national parks are working under the control of the National Parks Board of the Federal Forest Service. However, the financial control in national park budgeting is carried out by regional committees of the Service.

In practice, only landscape reserves and zoological ***zakazniki*** have special staff under the supervision of the Regional Committee of Hunting Service. All other sub-categories are controlled by inspection groups from the Regional Committee of the Ministry for Environmental Protection and Natural Resources. Some botanical and landscape ***zakazniki are*** manged by local officers of the Federal Forest Service. Some of the hydrological reserves are managed by the Neva-Ladoga Regional Board of the Ministry of Water Management.

Natural monuments do not have any administration. Their protection status is only controlled from time to time by inspection groups from the Regional Committee of the Ministry for Environmental Protection and Natural Resources.

The nature parks system is governed by regional authorities. Usually, nature parks are administered by the Regional Ministry (Board) for Environmental Protection or a corresponding body, or by the Regional Board of Tourism. Currently, there are no nature parks in the Leningrad Administrative Region.

Since 1995, federal legislation provides a new possibility for the development of a regional protected area system. Federal laws make possible the improvement of a regional system of protected areas. However, in the Leningrad region this legislation is only under preparation.

Existing federal protected areas – state nature reserves, federal *zakazniki* and national parks – include aquatic resources and territories the use of which has been granted for all eternity. The federal State Administration is to be the guarantor for this. State nature reserves with regional protection status, as well as natural monuments, are usually guaranteed in this respect for a given period of time. The effective period can be prolonged by the regional government, after consultation and agreement with landowners and the local administration.

There should be a special phase of consultations with the general public and interest groups in the case of proposed or planned protected areas. In practice, only local governments can determine whether this procedure should be implemented or not. The preliminary decision by the local governments should be based upon a scientific description of the area for which protection is planned. Inquiries regarding the proposed area should be made with all landowners, those responsible for water supply, hunting service men and fishermen, local officers of the Federal Forest Service, and municipalities.

The final decision of the local government should then be based on the position taken by a majority of landowners and municipalities. This decision will form the basis of regional governmental action. The regional government should make its own decision with regard to the establishment of regional protected areas, or make a request to the federal government to establish a new *zapovednik,* federal *zakaznik* or national park. The federal government, in turn, has the authority to reduce or eliminate a protected area with regional status with reference to "federal needs", i.e., for the construction of federal railways or roads, harbours or military bases.

The Ministry for Environmental Protection and Natural Resources of the Russian Federation is responsible for the supervision, management and monitoring in *zupovedniki* and federal *zakazniki*. *The same* responsibility and tasks rest with the Federal Forest Service for the national parks. In this respect, some federal legislation in the Russian Federation is superordinate.

Some federal Acts are supervised by the State Programme of Environmental Monitoring, which is operated under the federal Committee of Hydrometeorology of the Russian Federation. In some other documents, the right of monitoring of protected areas accrue to the Ministry for Environmental Protection and Natural Resources of the Russian Federation only. In practice, authorities of the Ministry of Natural Resource Use and Environmental Security of the Leningrad region, the St. Petersburg State University, the Botanical Institute of the Russian Academy of Sciences, and some NGOs, have independent monitoring programmes for some protected areas.

Generally, the administration of protected areas with regional status is, in practice, divided between different federal and regional, even local, authorities. For example, game fauna and the monitoring thereof falls under the Hunting Service Committee of the Ministry of Agriculture, whereas the rest is controlled by the Regional Committee of the Ministry for Environmental Protection and Natural Resources of the Russian Federation. Flora management in protected areas is the duty of the Ministry for Environmental Protection and Natural Resources, but in regional protected areas the role of the Federal Forest Service is also importance in flora management.

The protected area Govemer (the Ministry for Environmental Protection and Natural Resources, the Hunting Service Committee of the Ministry of Agriculture, or the Federal Forest Service) is in charge of construction and transport maintenance. In most protected areas with regional status, the landowner or land user – be it an individual, a company, a municipal or local authority, a federal government, or

an institutions – can have buildings, roads and other property constructed. Up til now, there has been no construction of recreational facilities in protected areas.

The Ministry for Environmental Protection and Natural Resources, the Hunting Service Committee of the Ministry of Agriculture, and the Federal Forest Service, have an independent system of personnel training for work in protected areas. Only some new courses are prepared for such staff in protected areas in the Russian Federation, for example, in Puscino State University (near Moscow). Some disciplines and specialization in the Forest Academy of St. Petersburg and in the St. Petersburg State University can be included in such training. That also holds true for the special training programmes conducted by some NGOs for personnel working in protected areas.

Some changes in the regional legislation on status of protected areas in the Leningrad Administrative Region will affect the management system of protected areas a few years from now, after the approval of the Regional Law on Protected Areas System. The Law will be prepared by the Leningrad Regional Council in late 1996 or in 1997. In addition, the St. Petersburg City Council is preparing an Act on Protected Areas.

Some regulations were issued during 1995 by the central office of the Ministry for Environmental Protection and Natural Resources. These regulations should be implemented through a special administration for each regional protected area, but due to 1996 budget limitations the establishment of such administrations is still in an initial phase.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN THE LENINGRAD OBLAST

Conflicts between coastal and marine nature conservation on the one hand and economic activities on the other will to a large extent be connected with the oversea oil transport schemes proposed for the Leningrad Administrative Region. Conflicts could be expected in existing and planned protected areas, when the local population as well as the responsible authorities consider investments in oil harbours as necessary for economic sustainability. Such plans are put forward by major both Russian and international oil companies.

Other possible or existing sources of conflicts relate to the distribution of land and of responsibility for management.

Some governmental regulations in support of a previous Land-Use Codex Law, issued in 1987-94, gave the right to ownership of agricultural and forest land to private farmers. This private property could not be separated without agreement with the owner. In recent years, extensive parts of regional protected areas have, thus, become private property without prior consultation with specialists and environmental managers, even without the control of the Ministry for Environmental Protection and Natural Resources. New private landowners often lack information about protection measures or regulations concerning conservation.

The 1995 Law on Local Authorities transfers more responsibility for nature conservation management onto local and municipal authorities, regardless of the fact that even administrations at regional level still lack trained specialists in some fields of biodiversity conservation and sustainable land use.

National land-use planning, as mentioned in the 1991 Law on Natural Environment Conservation, should be aimed at environmental protection measures. Furthermore, the Russian Federation Sustainable Development Concept presupposes that physical planning should be based on environmental conservation and sustainability. In practice, however, only some of the steps spelled out have been taken or announced.

According to the Concept, the Russian Federation should continue the efforts of biodiversity protection, forest protection and restoration, as well as restoration, development and improvement of a protected areas system. Furthermore, a normalization of the environment of the catchment areas of the Baltic Sea, Black Sea, Aszov Sea, and the Caspian Sea should be strived for.

In the Leningrad Administrative Region, for example, a General Scheme of Physical Planning was

prepared in 1993-95. This scheme, as announced, was to be based on environmental sustainability. Only in late 1995, those responsible for the scheme turned their attention to the existing protected areas system, where previously a majority of urban and industrial development plans were accepted.

Only some local authorities, for example, the Kingisepp Administrative District Goverment in the Leningrad region, have paid attention to physical planning as a means to enhance environmental protection and sustainability in protected areas.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN THE LENINGRAD OBLAST

Serious lack of resources is, currently, a common feature of the system of protected areas in the Russian Federation. The total allocation of the *zapovedniks* infrastructural program for the fiscal year 1996 is only 1.8 billion roubles, or approximately 360,000 USD. In 1993 and 1994, between 15 and 25 per cent of the biodiversity conservation projects in the whole Russian Federation was supported by grants from foreign international sources, including the Global Environmental Facility (GEF), various European Union programmes, UNESCO, World Wide Fund for Nature, etc.

In the protected areas of the city of St. Petersburg and the Leningrad Administrative Region, the financial problems presently have the following consequences:

- There is not enough resources to cover costs for personnel and essential transport and communication systems for federal protected areas:
- Resources are lacking for the establishment of groups of mobile environmental officers to supervise and inspect regional protected areas;
- Resources are lacking for biodiversity studies and land-use improvement in areas with a moderate protection level.

Special attention should be given to coastal zone management and land-and-sea tax evaluation based on geobiodiversity measurements.

It is important to underline that, unfortunately, the main part of international support in the Baltic region of the Russian Federation is directed to measures for water and air quality improvement, whereas little of that support is aimed at coastal zone management. Only some decision-makers at regional and local level in the Leningrad oblast are sufficiently aware of the problem of insufficient coastal zone management, although a majority of them are in favour of an improved administrative system for regional protected areas.

Special training is needed for personnel to be in charge of protection and management of coastal areas. Also, municipal decision-makers need targeted education to learn about evaluation of protected areas.

## EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN THE RUSSIAN FEDERATION

The Russian Federation has a wide range of university specialists who are well qualified to teach different aspects of environmental sciences.

A majority of the specialists working in the ***zupovednik*** system have a diploma degree (M.Sc.) in biology, geography, forestry, etc. Administrators and high-level staff usually have a faculty degree in a speciality far from management of protected areas.

There are, presently, two systems for special education in conservation sciences:

- The state university system of high education in special fields such as environment, forestry or hunting service. This system produces about 50 M.Sc. graduates each year for the whole Russian

Federation, especially in St. Petersburg, Puscino, Ekaterinburg, Kazan and Irkutsk;
– Non-governmental university and non-university training courses for postgraduates, usually aimed at environmental officers (some of them with a M.Sc. degree) working in Moscow or other places. This system covers about 60 persons a year.

A third system, reaching about 30 persons a year and organized in St. Petersburg, has been destroyed in recent years. It was a state university postgraduate system for environmental science as a speciality, supporting continuous education for municipal and business needs.

Considering these circumstances, an improvement and re-establishment of a training system for environmental administrators in coastal and marine nature protection and conservation of biological diversity is needed. Such a system could be realized in St. Petersburg, both within the state university and in co-operation with competent non-govermental organizations.

At present, only a handful NGOs work to increase public awareness on coastal and marine conservation problems in the Russian Federation. Usually, NGOs are working towards raising the awareness of specialists and decision-makers, not that of the general public. Financial limitations and a hostile policy demonstrated by officials are the main reasons for the lack of NGO activity to increase public awareness.

# SWEDEN

## EXISTING AND PLANNED LEGISLATION ON NATURE CONSERVATION AND PROTECTION OF BIODIVERSITY IN SWEDEN

The most important component of legislation for the protection of nature in Sweden is the 1964 Nature Conservation Act, notably amended in 1973, 1976 and 1987. The Act lays down which national parks, nature reserves and natural monuments that are to be established and managed, and defines methods by which plants and animals may be protected. Principles and measures for the establishment of nature conservation (management) areas were added in 1974, and regulations dealing with wildlife sanctuaries were included in 1976. Only the Parliament can decide about the establishment of new national parks.

The Act provides certain protection against drainage of wetlands. Besides giving the opportunity to protect valuable wetlands within nature reserves or national parks, the Act since 1986 also regulates that no drainage of wetlands is allowed unless a permission has been granted by the County Administrative Board. The Government may, further to this, identify specific areas where protection is especially urgent. In Guidelines from the Swedish Environmental Protection Agency, it is stated that drainage should not take place in wetlands with documented values of different kinds.

A new provision (199 1) in the Act states that "exploitations and other harmful activities may not be carried out in smaller land or water areas (biotopes) which are habitats for endangered species of flora or fauna or which in other respects are especially worthy of protection". No general biotope protection has yet been established, but among biotopes that the Swedish Environmental Protection Agency in co-operation with the National Board of Forestry have given top priority for general protection are old hazel groves, alder forests, large broad-leaf trees, rows of willows, alleys, and small pools in forests and agricultural areas (Nature Conservation Decree, 1994).

The Right of Public Access *(Allemansrätten)* is a principle of common law, but it is also established in the Swedish constitution and in the Nature Conservation Act.

A number of provision for nature conservation are also included in the forestry legislation. In addition, there are more general requirements in legislation regulating both forestry and agriculture that conservation interests should be considered in everyday activities in modem forestry and agriculture.

The Natural Resources Act of 1987 provides a limited form of protection to wide areas of the country. This Act deals with the long-term use of natural resources and attempts to strike a balance between

different interests. Areas of national importance – like the coastal areas, see Annex 1 – are designated under the Natural Resources Act. Major projects and activities that could harm the natural environment could be prohibited in accordance with this Act. One recent example is the legal procedures in connection with the construction of the Öresund Bridge between Sweden and Denmark. The large, unregulated rivers also enjoy protection under the Natural Resources Act.

A parliamentary committee has recently presented a number of proposals for an integration of environmental and nature conservation legislation in a common overall piece of legislation.

Being a Contracting Party to the Convention on Biological Diversity, Sweden is, according to the provisions of the Convention, obliged to elaborate a country study on the present status of biological diversity and its conservation; and a national action plan for the conservation and sustainable use of biological diversity.

The Swedish country study and action plan were presented in 1994 and 1995, respectively. The National Action Plan comprises a wide range of proposals, including new or revised legislation, with the purpose to further enhance the conservation of biological diversity in Sweden. The proposals include, among others:

– introduction of a legal definition of the concept of biological diversity into the new Environment Act;
– integration of provisions concerning biological diversity into other environmental and sectorial legislation;
– introduction of species protection (for specifically identified species) with the purpose of protecting the species and their habitats;
– clarification of the role and responsibility of the local municipalities regarding nature conservation and biological diversity, and particularly for the conservation of these values within or close to the urban areas;
– introduction of economic incentives/disincentives by, e.g., making the Polluter-Pays-Principle applicable also to activities which have an effect on the biological diversity;
– ensuring that experts in biological diversity are involved in cases that are handled according to the Water Law.

## PRESENT AND FUTURE IMPLEMENTATION AND ADMINISTRATION OF NATURE CONSERVATION IN SWEDEN

The Ministry of Environment *(Miljödepartementet)* has the highest responsibility for nature conservation issues in Sweden. In cases of nature conservation in forestry and agriculture, that responsibility is shared with the Ministry of Agriculture and Forestry ***(Jurdbruksdepartementet).***

***The*** Swedish Environmental Protection Agency *(Naturvårdsverket)* is the central administrative authority responsible for nature conservation – administration and management of protected areas – and the overall elaboration of nature conservation strategies, guidelines and general advice to regional and local authorities, land-owners and the general public. The Agency administers the Nature Conservation Fund, which essentially provides the Agency with the responsibility for the management of national parks and all other protected areas on state-owned land, in close consultation with the County Administrative Boards (*länsstyrelser*). It issues regulations concerning national parks and designates management authorities; it formulates management policy and issues instructions regarding management and utilization of the areas; it is the central authority responsible for information about protected areas; and it is responsible for the provision of state grants regarding land-use and resources management and buildings, and landscape conservation.

On the regional county level, the altogether 24 County Administrative Boards, in consultation with the Swedish Environmental Protection Agency, have the responsibility for establishing and managing nature reserves, nature conservation/management areas, natural monuments and wildlife sanctuaries. Furthermore, following certain changes in 1992, the management of the national parks has been trans-

ferred from the Agency to the county administrations, which issue managment regulations and designate management authorities responsible for the day-to-day management of protected areas. The County Administrative Boards also apply for and allocate grants from the Agency for the management of protected areas. The county administrations are to make up overall nature conservation plans for their respective region. The Agency has recommended them to integrate the administration of management of protected areas and, as far as possible, make agreements with local people or organizations to conduct the practical management.

A number of nature reserves are privately-owned. The Swedish Society for Nature Conservation owns more than 20 sites across the country and is responsible for the management of a number of others. About half of them have been formally recognized as nature reserves by the relevant county administration.

## ACTUAL AND POSSIBLE CONFLICTS OF INTEREST IN COASTAL AND MARINE AREAS IN SWEDEN

Increased eutrophication of shallow, sensitive sea areas – particularly in enclosed bays and archipelago areas – is a major problem. Agricultural runoff from intensively farmed areas, as well as inadequate sewage treatment (insufficient removal of nitrogen) and heavy deposition of airborne nitrogen compounds mainly from traffic, are the principal diffuse pollution sources. Heavy point sources, however, are rare. Eutrophication poses several threats to the coastal and marine areas, inter *alia*, long-term destruction of biotopes/habitats on bottoms and in the water body, as well as the destruction of these areas for recreation.

Fish farming is another source of eutrophication, as well as an acitivity requiring much space in the coastal areas. Currently, there are almost 200 fish farms in coastal areas in Sweden. Sport fishing, bathing and other activities are prevented in areas with fish farms.

Lately, forestry has caused conflicts along the coast and among the island in archipelago areas. Many islands were only used as grazing land during the first half of this century, and were not used after that. Now the timber of these mature, aging forests never affected by modem forestry is of high value and forest companies have acquired the felling rights. With seabome machinery, felling has been made possible even on very small islands, and there is a very clear conflict between this and other forms of land use. There are about 45,000 ha of productive land now ripe for coastal forestry within a 500 m wide zone on the coastal mainland and the islands. This comprises two per cent of Sweden's total forest area. In order to save as much as possible of the remaining coastal forests, it has been suggested that clear-cutting should be prohibited on small islands with less than five ha of productive forest land. Furthermore, on larger islands all poorly-growing forest should be excluded from any kind of forestry.

Nature conservation and the construction of recreational factilities are also strongly conflicting interests. The increased use of private, high-speed and high-power leisure crafts in all coastal areas, in particular in the archipelago areas, is a steady source of conflict and clashes. People do not respect wildlife sanctuaries, which results in damage during breeding and nesting seasons in bird and seal reserves. Those using their boats without consideration for nature or the peace and quiet in the archipelagos seriously disturb for others who wish to experience these special values. In addition, the "muscle boats" cause pollution of air and water, and also contribute to coastal erosion in sensitive areas.

Much controversy has arisen over the ever larger ferries trafficing routes between Sweden and Åland, and between Sweden and the Finnish mainland, respectively. New routes in sensitive parts of the Stockholm archipelago have been requested by the ferry companies, but nature conservation interests – pointing to the damage already done by these ferries in terms of coastal erosion and pollution – oppose such plans fiercely.

There is, moreover, several examples of conflicts between the general regulations of shore protection and the many requests for exemptions from the regulations. Many and bitter conflicts can be envisaged in the future, as regional and local authorities continue to make more and more exceptions

from the regulations. The shore protection regime was once established when it became clear in the late 1960's that it was impossible to enjoy natural bathing and outdoor activities along as much as half of the Swedish coast (with the exception of Gotland and the northern parts of the country) due to reeds, steep cliffs and other such natural mechanical obstacles. However, this was much aggrevated by the fact that a full 40 per cent of the rest was also inaccessible for the general public because of private buildings, mostly weekend houses. There is much concern among nature conservationists today that the days of "privatization bonanza" will return along the most attractive stretches of the Swedish coast.

## ADDITIONAL RESOURCES NEEDED FOR EFFECTIVE MANAGEMENT OF PROTECTED COASTAL AND MARINE AREAS IN SWEDEN

Another approximately five million SEK are required during three years for the implementation of the marine part of the Swedish Action Programme for Biodiversity.

## EDUCATION, INFORMATION AND PUBLIC AWARENESS REGARDING NATURE CONSERVATION IN COASTAL AND MARINE AREAS IN SWEDEN

It is, generally, easier to gain public understanding and to obtain funding in Sweden for protection of new areas than for the continuous management of already protected areas and habitats.

The Swedish general public has good access to information about nature conservation, protection of biodiversity and natural values in coastal and marine areas. The Swedish Environmental Protection Agency provides a wide range of publications, films and other forms of information material on a variety of general and specific issues in connection with nature conservation.

Information on nature conservation and local and regional natural values is also disseminated by local and regional authorities. Additonally, information and background material for public debate on land use and conflicts between economic activity and nature conservation is provided by several NGOs and other groups.

The informaton is well received among the majority of Swedes with a genuine concern about nature. Unfortunately but not surprisingly, however, those causing the majority of problems in coastal and marine areas – see above on conflicts – are very difficult to reach with any kind of information or arguments.

# 4. International agreements on nature conservation and protection of biodiversity: Integration and impact in the Baltic Sea Region

## DENMARK 1

### INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN DENMARK, AND IMPLEMENTATION THEREOF

**. Convention on Biological Diversity**

Conforming to Article 6 of the Convention on Biological Diversity, Denmark has made a strategy for the conservation and sustainable use of biological diversity, including sections on coastal and marine biodiversity. Since the Convention is a framework convention still in an early phase of implementation, it is not yet possible to make a full evaluation on whether the Danish legislation on land use and activities in the terrestrial-local and marine areas is compatible with the obligations set out in the Convention.

**. Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

The Danish legislation on land use and activities in the terrestrial-local and marine areas is compatible with the obligations set out in the Ramsar Convention. The 27 Danish designated Ramsar sites are implemented in national legislation through Executive Order No 408 of 25 May 1994 (Executive Order on the Demarcation and Administration of EC Bird Directive Areas and Ramsar Sites). The Order lays down binding rules for administration.

**. 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

The Danish legislation on land use and activities in the terrestrial-local and marine areas is compatible also with the obligations set out in the 1992 Helsinki Convention (not yet in force). Denmark is well ahead concerning the protection of a coastal strip, as this has already been done by law. Concerning the coastal and marine Baltic Sea Protected Areas (BSPAs), the areas proposed for Denmark, although not implemented as such, are for the most part well defined and to a great extent protected and managed.

**. Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

These obligations set out in the Bern Convention are implemented in the Danish legislation, especially through the Planning Act, the Protection of Nature Act, and the Environmental Protection Act. Species protection is secured through Executive Orders on Species Protection. A red list of species was published in 1991 and is revised every five years.

### INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN DENMARK

**. HELCOM Recommendation 15/1: Protection of the coastal strip**

**See** p. 10 and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Danish legislation of relevance for the protection of the coastal strip comprises the Protection of Nature Act of 1993, and the Physical Planning Act of 1993, amended by the Act of Protection of the Coastal Areas of 1994.

The width of the terrestrial protected strip "will, outside summer-house areas, be extended from the present 100 m to 300 m inside from where continuous land vegetation begins, when determined by the Ministry of Environment and Energy on the basis of a nation-wide survey done by a special commission."

The protected strip does not extend also seawards from the coastline. "According to the Raw Materials Act of 1977, extraction of materials from the sea bottom is strictly restricted in a zone of 300 m and regulated in a zone of 500 m from the high-water mark."

Other measures taken by Denmark, in effect ensuring the protection of the coast, include conservation orders for certain areas; general protection of coastal meadows, salt marshes and swamps; and dune conservation in certain areas beyond the generally protected strip. Furthermore, there is other legislation on land-use planning and protection of the environment. Restrictions have also been put on trawling within three nautical miles from the low-water mark and prohibition against the use of gill nets within 100 m from the low-water mark. Restrictions on fishing with nets, as well as angling off freshwater outlets and narrow bays also apply. However, when it comes to fisheries, the Ministry for Agriculture and Fisheries can decide on exemptions from the protective measures.

Regarding intensive forestry and intensive farming within the Danish protected strip, existing forests can be managed without restrictions. Afforestation is not allowed without permission, However, no measures have been taken to prevent intensive farming.

Exemptions from the regulations and restrictions that apply within the protected strip can only be granted by special permission. For example, in dune conservation areas in Western Jutland, such exceptions can be granted by the Ministry of Environment and Energy, the authority of which has been delegated to the state forest districts. Generally, the practice in granting permissons has been very restrictive.

A map attached to the Physical Planning Act gives a rough presentation of a generally three km wide planning zone required along the Danish coast. Planning guidelines, including respect for nature and landscape values, are established in the Act.

- **HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

Of the originally 20 areas and sub-areas proposed in 1993, one (Adler Grund) will probably be abolished after having been subjected to closer investigation, while two (Waters around and bubbling reefs at Hirsholmene) are to be combined due to a §5 1 conservation order largely covering both areas. Consequently, ten out of the remaining 18 areas and sub-areas are EC Special Protection Areas (SPAs) for the protection of wild birds and their habitats, and the same ten areas plus another five areas are draft Sites of Community Importances (SCIs; former EC Special Areas for Conservation, SACs), which have been communicated to the European Commission. Four of these are also §5 1 conservation order areas. The remaining areas are termed Areas of Marine Biological Interest.

Management plans have not yet been specifically prepared for the Danish BSPAs.

There are no specific monitoring programmes for these areas, other than bird monitoring. Maps showing the exact position of environmental monitoring stations with accompanying co-ordinate lists are being made. Within most areas, such stations already exist or conditions can be evaluated by interpolation. As a result, it will be possible to describe monitoring in relation to BSPAs in more detail.

No legislative or administrative measures have been taken in Denmark to ensure that HELCOM has the possibility to express its opinion about major changes concerning the Danish BSPAs.

Denmark is presently not planning to make any proposals for additional BSPAs. However, the borders of the proposed areas are not yet final and alternative areas can still be chosen.

- **HELCOM Guidelines for Designating Marine and Coastal Baltic Sea Protected Areas and Proposed Protection Categories**

Denmark has not implemented the guidelines, but in a Conservation Action Plan from 1992 a policy

has been presented concerning designation of protected areas. It is based on threat, and only when other general mitigative measures or integration into other legislative sectors have proven unsuccessful.

### INTEGRATION OF EC DIRECTIVES ON NATURE CONSERVATION IN DENMARK

• The 1992 **Habitats/FFH** Directive, with Natura 2000

Denmark has submitted a draft list of 175 Sites of Community Importance (SCIs) to the European Commission, in accordance with the EC Habitats/FFH Directive. Out of these draft areas, 47 Baltic marine areas include entirely or almost entirely all but five of the 47 Baltic marine SPAs. In two of these areas, the SPA constitutes only minor portion. 14 small marine areas are completely new. 15 of the originally 20 proposed BSPAs have also been drafted as SCIs.

• The 1979 Bird Directive (and current amendments/revisions)

The EC Bird Directive Areas play a major and increasing role in nature and environmental management in Denmark. Dredging for or gathering of stones and boulders in these areas is now prohibited. Other dredging activities for extraction purposes are gradually to be terminated. Dumping of dredged material, except for small amounts of unpolluted material from small harbours, will cease within a few years.

The 111 Danish EC Bird Directive Areas are implemented in national legislation through Executive Order No 408 of 25 May 1994 (Executive Order on the Demarcation and Administration of EC Bird Directived Areas and Ramsar Sites). The order lays down binding rules for administration.

### NATURA 2000 NETWORK AND **BSPAs** IN DENMARK

It should be possible for Denmark to combine the obligations under the Natura 2000 Network with the implementation of the HELCOM Recommendation 15/5 on Baltic Sea Protected Areas. The ultimate goals are the same, although the areas involved are not defined in the same way by the two fora.

### OTHER EC LEGISLATION OR POLICIES AFFECTING NATURE CONSERVATION IN THE COASTAL **ZONE IN DENMARK**

Concerning the impact of common EU policy on agriculture, transport, physical planning, environmental impact assessment, etc., land-use planning in Denmark in relation to nature conservation and protection of biological diversity in the coastal zone is well under way, irrespective of and in compatibility with common EU policy.

## ESTONIA

### INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN ESTONIA, AND IMPLEMENTATION THEREOF

• Convention on Biological Diversity

The main resources of biodiversity in Estonia (and Latvia and Lithuania) occur in the forests and agricultural territories, in the exclusive economic zones of the Baltic Sea, and in the lakes and rivers. Marine resource management and fisheries do not yet influence greatly the economy of the countries.

The experience of preparation of complex nature protection schemes in Estonia, Latvia and Lithuania is significant and can be successfully applied for promotion of the national strategy and action plan for the conservation of biological diversity and its sustainable use in these countries. However, for that to happen a number of steps must be taken, e.g.:

– National biodiversity units should be formed, in which state institutions, scientific bodies, users of the natural resources, local authorities and non-governmental organizations could be represented.

– Strategies and action plans on conservation of national biodiversity and its sustainable use should be developed and confirmed, as well as fund-raising strategies.

– Activities in the field of biodiversity conservation should be co-ordinated between Estonia, Latvia and Lithuania, as well as within the Baltic Sea Region.

A first set of conservation priorities could include, e.g:

– More efficient protection of already existing protected areas, such as strict reserves, national and regional parks, nature reserves, etc.

– Development of a system of protected areas by establishing new protected areas on territories distinguished by biological diversity, including, *inter alia*, former military areas (often well preserved); wooded meadows; coastal meadows and wetlands; old growth forests.

– Development of a nature frame, a system of territories of geological compensation and establishment of land-use regulations in it.

– Establishment of special land-use conditions for privately owned land outside protected areas by issuing land ownership documents on behalf of the State.

– Economic stimulation of conservation of biological diversity on privately owned land.

– Restructuring of national economy taking into account the needs of community and nature's limits of tolerance, in a long-term, local, regional and global perspective.

– Elaboration, adoption and enforcement of national environmental legislation necessary for the conservation of biodiversity and for its sustainable use.

– Development of ecological education and information to motivate public participation and activity of local authorities.

There is also a need for institutional strengthening and capacity building as regards governmental structure and responsibility. Various ministries – responsible for environmental protection, agriculture, forestry, fisheries, construction and urban development, industry, trade, finance, etc. – must individually and together stand up for the protection of biodiversity.

The number of scientists is sufficient – ecologists, botanists, zoologists, geneticists, ethno-botanists, biogeographers, resource economists, sociologists, anthropologists, physicians, etc. – whose efforts will be necessary for the development of the national programme on biological diversity. From a scientific point of view, Estonia has considerable experience in recording and monitoring the components of biological diversity. A vast amount of scientific data is available on biodiversity and the functions of biological systems. However, not enough information is available in a form that can be used by decision-makers.

Much responsibility will, moreover, lie with institutions of local authorities whose participation will be very significant, although with different levels of activity and competence. In addition, non-governmental groups of experts in different fields, as well as the media, have an important role to play when it comes to raising public awareness and mobilizing public involvement in a very effective way.

Estonia, Latvia and Lithuania have a long-lasting tradition in nature conservation, dating back to the beginning of this century. The process of reprivatization of land is a new threat, but all three countries have created new legal instruments for nature protection in general and conservation in particular. The relevant Estonian legislation is Law on Nature Protection and the Law on Protected Natural Objects.

The legislation is there, but all three countries need improved economic resources to establish management plans for protected areas, for compensation to landowners, and for establishing and maintaining administration of the areas.

**. Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

Estonia has prepared proposals about a large number of new Ramsar sites. The national Estonian priorities for the implementation of the Ramsar Convention are as follows:

– Detailed inventory of Estonian coastal areas (formerly closed military areas) that are important bird sites.

– Practical protection of semi-natural habitats. Estonian coastal meadows, pastures and grasslands are unique in a Northern European perspective for the biological diversity.

– Rendering importance to natural habitats, especially to natural marshes and swamps, as well as to natural water bodies (rivers and lakes).

**. Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

**The** implementation in Estonia of the Bern Convention is facilitated by the fact that its principles coincide to a large extent with the national environmental understanding. Rare plants, animals and their habitats have traditionally been protected in Estonia. Most of the methods for trapping listed in the Bern Convention were prohibited in Estonia already in the 1930's. Estonia also has a long history of practice of general protection of flora and fauna.

However, a major complication in fulfilling the demands of the Bern Convention is the state of some animals in Estonia. For example, wolf and bear are listed as strictly protected in the Bern Convention, but are considered game in Estonia because of their abundance. Estonia has, thus, asked for an exception from the rules of the Convention in this respect. The same holds true for an illuminary used for wildboar hunting in Estonia (listed as prohibited equipment in the Convention). In addition, Estonia wants the special right to hunt lynx and use a special trap for hunting beaver.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN ESTONIA

**. HELCOM Recommendation 15/1: Protection of the coastal strip**

**See** p. 15 and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Estonian legislation of relevance for the protection of the coastal strip is the 1995 Act on the Protection of Marine and Freshwater Coasts, Shores and Banks.

The width of the terrestrial protected strip: 'The strip is divided into one water protection **zone, one zone** where construction is forbidden, and one general coastal zone. The zone where construction is prohibited extends 100 m on the mainland and 200 m on islands, counted from the mean water mark. In densely populated areas (towns and villages), the width is 50 m. The exact borders of the zones is determined by general plans taking into account recognizable natural borders. The zones may thus be extended up to 100 m, but they can also be diminished but only by permisson of the Ministry of the Environment."

The protected strip does not extend also seawards from the coastline. That issue is regulated by the Water Act of 1994.

Concerning administrative measures (governmental decisions, etc.) to protect the coastal strip, additional governmental and ministerial regulations will be required in Estonia, particularly concerning densely populated areas.

Other measures taken by Estonia to ensure the protection of the coast include land-use plans that have been prepared in 1992-94 for all coastal areas. These will be subject to revision in accordance with procedures established by law. The Land Cadastre Act was approved in 1995. Restrictions based on the Shore Act must be marked on all cadastral maps. In addition, an Act on Planning and Building was approved in 1995, and an Act on Landscape Protection is presently under preparation.

Regarding intensive forestry and intensive farming within the Estonian protected strip, clear-cutting

is forbidden and the Ministry of the Environment can prohibit cattle grazing, prevent the use of land for agricultural purposes and reduce loads in order to protect soil or plants from being damaged.

Exceptions from the regulations and restrictions that apply within the protected strip can only be granted by a general plan approved by the Ministry of the Environment (see also above). The County Governments approve land-use plans that are legally binding for towns and municipalities and, thus, determines the borders of the protected strip. New dense development may be established only with the approval of the Government.

Off the coastal strip, land-use planning is also regulated on the basis of the Act on Planning and Building, and will be specified by the Act on Landscape Protection.

• HELCOM **Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

**Three** Estonian areas – Lahemaa, Matsalu and Vilsandi – have been proposed as Baltic Sea Protected Areas. Another two areas – Kõpu Peninsula and Islets of Hiiumaa, both of them included in the West-Estonian Archipelago Biosphere Reserve – are planned to be established as BSPAs.

# FEDERAL REPUBLIC OF GERMANY

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN GERMANY, AND IMPLEMENTATION THEREOF

• **Convention on Biological Diversity**

**The** Convention on Biological Diversity has been ratified by the Federal Republic of Germany. In the law on the ratification, it is stated that no further legal acts are necessary for the implementation. Instruments for implementation are strategies, action plans and programmes for nature conservation and sustainable use. Instruments for solving conflicts include environmental impact assessment studies and a special landscape planning obligation within the general land-use planning hierarchies. Problems identified for the implementation of the Convention are lack of public awareness and the absence of a published national strategy.

• **Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

The Ramsar Convention is implemented through national areas placed under protection or protection of areas under the Natura 2000 Network. Furthermore, there is the directive on wise use of wetlands, a wetland conservation fund, increasing state ownership of areas or parts of them, etc. However, sufficient financial resources are lacking.

• **1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

The Federal Republic of Germany has ratified the Convention and the German legislation – the National Water Law and the Water Laws of the *Länder* – is considered to be compatible with the obligations set out in the Helsinki Convention.

. **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

**The** Federal Republic of Germany has ratified the Convention and the obligations thereof are reflected through the EC Habitats/FFH Directive and the national German Directive on Species Protection ***(Bundesartenschutzverordnung).***

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN GERMANY

### . HELCOM Recommendation 15/1: Protection of the coastal strip

**See** p. **20** and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The German legislation of relevance for the protection of the coastal strip comprises for Schleswig-Holstein the Nature Conservation Act, amended in 1993, and for Mecklenburg-Vorpommem the First Nature Conservation Act of 1992 and the Water Act of 1992.

The width of the terrestrial protected strip is 100 m from the shoreline in Schleswig-Holstein and 200 m from the shoreline in Mecklenburg-Vorpommem. The protected strip does not extend also seawards from the coastline in either Schleswig-Holstein or Mecklenburg-Vorpommem.

Other measures taken by the Federal Republic of Germany to ensure the protection of the coast include the following:

– Schleswig-Holstein: The Nature Conservation Act contains provisions for general protection of most coastal habitats like sandbanks, reeds, salt marshes, coastal dunes, coastal grasslands, heaths and wetlands, moraine cliffs, pools and wet forests. The use of setnets for fishing is forbidden within a 200 m wide strip from the coastline. Trawling is forbidden.

– ***Mecklenburg-Vorpommern:*** More than 90 per cent of the coastline is covered by some protective designation (national park, nature reserve or landscape reserve). Coastal biotopes like cliffs, dunes, boulder beaches, marine boulder fields, beach ridges. etc., are strictly protected by the legal biotope protection of the Nature Conservation Act. Trawling is forbidden within a three-nautical miles (almost five kilometres) wide zone from the coastline.

Regarding intensive forestry and intensive farming within the German protected strip, the following applies:

– ***Schleswig-Holstein:*** With the Forestry Act, amended in 1993, nature-oriented forestry was introduced and clear-cutting strongly restricted. No restrictions on intensive farming, however, financial support is granted farmers who manage their wet and coastal grasslands with low intensity (no heavy grazing, no fertilizers, no plowing). Almost all salt meadows are presently managed according to these principles.

– ***Mecklenburg-Vorpommern:*** According to the Forestry Act of 1993, coastal forests can be given the status of Coastal Protective Forest in which all measures that could negatively affect their protective function are forbidden. No restrictions on intensive farming, however, financial support is granted to farmers who manage their wet and coastal grasslands with low intensity (no heavy grazing, no fertilizers, no plowing). Almost all salt meadows are presently managed according to these principles.

Exceptions from the regulations and restrictions that apply within the protected strip can only be granted according to the following:

– ***Schleswig-Holstein:*** Construction of new buildings outside settlements on areas covered by a building plan is only permitted for certain “priviliged projects”, like farm buildings or buildings with a public-supply function. Other projects can be permitted in single cases, but only if public interests like nature protection and landscape protection are not affected.

– ***Mecklenburg-Vorpommern:*** Exceptions can be made for certain projects listed in the Nature Conservation Act. These include installations established on the basis of a plan-assessment procedure. Decisions on exceptions are made by the district authorities in agreement with the state authorities for environment and nature.

Regarding the requirements for a planning zone along the German coast, the following applies:

– ***Schleswig-Holstein:*** According to the Physical Planning Act of 1992, land use is based on physical planning programmes on state level. These programmes have the character of legal decrees, i.e., they are legally binding. Coastal zones are integrated in these programmes. Thus, there is no need for a special coastal planning zone.

– ***Mecklenburg-Vorpommern:*** According to the Physical Planning Act of 1992, land use is based on

physical planning programmes on two levels, state-wide and regional (for four regions). These programmes have the character of legal decrees, i.e., they are legally binding. Coastal zones are integrated in these programmes. Thus, there is no need for a special coastal planning zone.

- **HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

*Schleswig-Holstein*
Small parts of the proposed BSPAs have the status of nature reserves. No management plans have been implemented for the BSPAs, but management plans are being prepared for Geltinger Birk und Noor mit Kalkgrund, and for Oehe-Schleimiinde mit Fachwasserzonen. A monitoring programme for the BSPAs will soon be in place. No legislative or administrative measures have been taken to ensure that HELCOM has the possibility to express its opinion on major changes concerning the BSPAs. No more areas have been proposed.

*Mecklenburg-Vorpommern*
Several of the BSPAs – in full or parts of – are Special Protected Areas according to the EC Bird Directive and the Habitats/FFH Directive. Others are included in Ramsar sites. Furthermore, two national parks, a large number of nature reserves and landscape reserves are included in the BSPAs. No management plans have been implemented for the BSPAs, but management plans are being prepared for the two national parks Jasmund and Vorpommersche Boddenlandschaft.

Monitoring of wintering waterfowl is taking place annually in coastal waters, including the marine parts of the proposed BSPAs. There is also a monitoring programme including different physical, chemical and biological parameters in over 30 monitoring stations in the BSPAs. In 12 selected stations, an extended monitoring programme is executed including zooplankton, phytoplankton and macro benthos, respectively.

No legislative or administrative measures have yet been taken to ensure that HELCOM has the possibility to express its opinion on major changes concerning the BSPAs. No more areas have been proposed.

## INTEGRATION OF EC DIRECTIVES ON NATURE CONSERVATION IN GERMANY

- **The 1992 Habitats /FFH Directive, with Natura 2000**

EC Bird Directive Areas in the coastal zone of Mecklenburg-Vorpommem and Schleswig-Holstein are also included in the Natura 2000 Network, within the framework of the EC Habitats/FFH Directive, a protection status which will prohibit or at least strongly restrict alterations of the areas.

- **The 1979 Bird Directive (and current amendments/revisions)**

**21** EC Bird Directive Areas are located on the coast of Schleswig-Holstein and seven such areas are found in the coastal zone of Mecklenburg-Vorpommem.

# FINLAND

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN FINLAND, AND IMPLEMENTATION THEREOF

- **Convention on Biological Diversity**

The Finnish national legislation on land use and activities in terrestrial-coastal and marine areas is considered to be compatible with the obligations set out in Convention on Biological Diversity.

**. Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

**The** same holds true for the Ramsar Convention. There are eleven coastal Ramsar sites in Finland, five of which in Åland.

**. 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

**The** Finnish legislation is also compatible with the Helsinki Convention, except **for Article** 15 on nature conservation and biodiversity.

**. Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

The Finnish legislation is in agreement with the obligations set out in the Bern Convention.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN FINLAND

**. HELCOM Recommendation 15/1: Protection of the coastal strip**

**See** p. 25 and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

No legislative measures have been taken in Finland to ensure the protection of the coastal strip for the implementation of the Recommendation.

Concerning administrative measures (governmental decisions, etc.), the Shore Protection Programme, including 2.6 per cent of the coastline, was approved by the Government in 1990. It indicates intensions, but has no legal effect. Additionally, about three per cent of the Finnish coastline has been placed under protection as national parks or nature reserves.

Other measures taken by Finland to ensure the protection of the coast include municipal land-use plans for a few coastal stretches. A narrow coastal strip, usually 20-30 m, is generally partly protected through a municipal building bylaw. Exceptions can be made by a land-use plan approved by the municipality and sanctioned in most cases by the Regional Environment Centre, which can also grant exceptions from the plan.

No measures have been taken in Finland regarding restrictions on intensive forestry, but some on intensive farming in the coastal zone.

There are no provisions in the Finnish legislation for establishing a planning zone along the coast.

**. HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

Parts of the Finnish BSPAs enjoy protection as national parks or nature reserves. Management plans have only been implemented for the national parks included. Some management plans are under preparation within the framework of the BSPAs. Legislative measures to ensure that HELCOM has the possibility to express its opinion on major changes concerning the BSPAs have been proposed as part of the new Nature Conservation Act. Proposals for additional Finnish BSPAs could be expected during 1997.

## INTEGRATION OF EC DIRECTIVES ON NATURE CONSERVATION IN FINLAND

**. The 1992 Habitat Directive, with Natura 2000**

The proposal for a new Nature Conservation Act includes the necessary provisions for the integration of the EC Habitats/FFH Directive into Finnish legislation. The Government will decide on this during the spring of 1996.

• **The 1979 Bird Directive (and current amendments/revisions)**
**See** above.

### NATURA 2000 NETWORK AND BSPAs IN FINLAND

The obligations under the Natura 2000 Network and the implementation of the HELCOM Recommendation on Baltic Sea Protected Areas will be possible to combine in Finland. The process of preparing a national list for Natura 2000 and the process of proposing additions and amendments to the list of proposed BSPAs have been formally linked. The decisions are expected to be taken at the turn of the year 1996/97.

## LATVIA

### INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN LATVIA, AND IMPLEMENTATION THEREOF

• **Convention on Biological Diversity**
**The** Latvian legislation on land use and activities in terrestrial-coastal and marine areas is, in general, compatible with the obligations set out in the Convention (which was ratified by Latvia in 1995).

The main resources of biodiversity in Latvia ( and in Estonia and Lithuania) occur in the forests and agricultural territories, in the exclusive economic zones of the Baltic Sea, and in the lakes and rivers. Marine resource management and fisheries do not yet influence greatly the economy of the countries.

The experience of preparation of complex nature protection schemes in Estonia, Latvia and Lithuania is significant and can be successfully applied for promotion of the national strategy and action plan of the conservation of biological diversity and its sustainable use in these countries. However, for that to happen a number of steps must be taken, e.g.:
– National biodiversity units should be formed, in which state institutions, scientific bodies, users of the natural resources, local authorities and non-governmental organizations could be represented.
– Strategies and action plans on conservation of national biodiversity and its sustainable use should be developed and confirmed, as well as fund-raising strategies.
– Activities in the field of biodiversity conservation should be co-ordinated between Estonia, Latvia and Lithuania, as well as within the Baltic Sea Region.

A first set of conservation priorities could include, e.g:
– More efficient protection of already existing protected areas, such as strict reserves, national and regional parks, nature reserves, etc.
– Development of a system of protected areas by establishing new protected areas on territories distinguished by biological diversity, including, inter *alia*, former military areas (often well preserved); wooded meadows; coastal meadows and wetlands; and old growth forests.
– Development of a nature frame, a system of territories of geological compensation and establishment of land-use regulations in it.
– Establishment of special land-use conditions for privately owned land outside protected areas by issuing land ownership documents on behalf of the State;
– Economic stimulation of conservation of biological diversity on privately owned land.
– Restructuring of national economy taking into account the needs of community and nature's limits of tolerance, in a long-term, local, regional and global perspective.
– Elaboration, adoption and enforcement of national environmental legislation necessary for the conservation of biodiversity and for its sustainable use.

– Development of ecological education and information to motivate public participation and activity of local authorities.

There is also a need for institutional strengthening and capacity building as regards the governmental structure and responsibility. Various ministries – responsible for environmental protection, agriculture, forestry, fisheries, construction and urban development, industry, trade, finance, etc. – must individually and together stand up for the protection of biodiversity.

The number of scientists is sufficient – ecologists, botanists, zoologists, geneticists, ethno-botanists, biogeographers, resource economists, sociologists, anthropologists, physicians, etc. – whose efforts will be necessary for the development of the national programme on biological diversity. From a scientific point of view, Latvia has considerable experience in recording and monitoring the components of biological diversity. A vast amount of scientific data are available on biodiversity and the functions of biological systems. However, not enough information is available in a form that can be used by decision-makers.

Much responsibility will, moreover, lie with institutions of local authorities whose participation will be very significant, although with different levels of activity and competence. In addition, non-governmental societies of experts in different fields, as well as the media, have an important role to play when it comes to raising public awareness and mobilizing public involvement in a very effective way.

Institutional aspects on the implementation can cover a wide spectrum ranging from ways to organize the work, division of responsibilities and roles to play, forms of co-operation both nationally and internationally, capacity building, to the development of more formal institutions. The legal aspects of implementation include both the legal obligations under the Convention, and whether national legal instruments are necessary to make implementation of these obligations possible in the respective country.

Implementation of the Convention on Biological Diversity can be carried out step-wise, whereby strategies, plans and actions can be gradually improved on the way. First steps can be taken by building on already existing knowledge and existing instruments. Furthermore, implementation of the Convention in Latvia will demand an effort and a willingness to seek new ways and it has been stressed that the Convention offers a unique chance to work out overall, integrated environmental policies.

A super-imposed policy instrument – such as a co-ordinated, comprehensive national action plan which establishes sectoral responsibility – is a basic tool for implementation. It is underlined in the Latvian Environmental Policy Plan that the maintenance of biological diversity, including the preservation of internationally threatened species and habitats, is a priority goal for Latvia. Environmental policy is integrated with nature protection policy and the principle of sustainable development is interwoven throughout the plan. A balanced economy is to be developed, implying that the principle of maintaining biodiversity is supposed to be implemented in all relevant sectoral policy plans in Latvia. Also, the principle of wise use of wetlands has been integrated. A National Biodiversity Action Plan has been elaborated.

Relevant Latvian legislation for the implementation of the Convention is the Law on Environmental Protection (1991), and the Law on Specially Protected Nature Areas (1993). However, economic resources are scarce and need to be improved to enable Latvia to establish management plans for protected areas, to compensate landowners, and to establish and maintain administration of areas.

In Latvia, a law on spatial planning in the Environmental Policy Plan is recognized as one of the most important instruments for habitat protection and protection of biological diversity outside protected areas. There is, however, general opposition in Latvia – as well as in Estonia and Lithuania – against any restriction on the use of private property, and this must always be taken into account.

- **Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

The Latvian legislation is, in general, also compatible with the Ramsar Convention, ratified by Latvia in 1995. Latvia has designated four areas (Lake Engure, Lake Kaņieris and the peat bogs Teiči and Pelecares) as Ramsar sites. Management plans for the areas are under preparation.

• **1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

**The** principles of the 1992 Helsinki Convention, which has been ratified by Latvia, are included and stressed in the Environmental Policy Plan for Latvia (1995), as well as in updated Acts dealing with environmental issues.

• **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

Latvia is not yet a Contracting Party to the Convention, but the matter of ratification is now dealt with by the Cabinet of Ministers and will be submitted to the Parliament.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN LATVIA

• **HELCOM Recommendation 15/1: Protection of the coastal strip**

See p. 29 and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Latvian legislation of relevance for the protection of the coastal strip comprises the Act on Environmental Protection of 1991, and the Act on Protected Zones (awaiting adoption by the Latvian Parliament).

The width of the terrestrial protected strip is 300 m from the shoreline in a zone with strong restrictions on activities. In addition, there is a zone, 3-5 m (in some places 6 m) from the shoreline, where activities are regulated. The borders of this latter zone are defined on the map according to the natural conditions of the site. The borders of the zone can be changed in territorial development plans which have to be approved by the Ministry of Environmental Protection and Regional Development.

The Latvian protected strip extends also 300 m seawards from the coastline. Administrative measures taken by Latvia to ensure the protection of the coast include governmental regulations concerning protection of the coastline, adopted in 1987 and 1990.

Other measures comprise the following: There are several local/regional regulations adopted by local/regional bodies concerning coastal protection, e.g., rights to visit, restrictions on recreational activities, building regulations with special requirements.The use of jet-skis is forbidden in the coastal zone of the North Vidzeme Regional Nature Protection Complex. In some coastal areas, the use of cars is also restricted. Furthermore, two Ramsar sites are located within the Latvian coastal zone, and the establishment of the Ķemeri national park (bordering the coast) is under preparation.

Regarding intensive forestry and intensive farming within the Latvian protected strip, forests along the coast within a l-5 km wide zone have been declared as anti-erosion forests in which all measures that could negatively affect their protective function are forbidden. Measures to restrict intensive farming in the coastal zone include a prohibition to build new animal-breeding farms (cattle, pigs, etc.).

Exceptions from the regulations and restrictions that apply within the protected strip can be made for certain projects after scrutiny of the state ecological expertise and approval by the state authorities for environment and nature. The practice of granting exceptions has been very restricted.

Land-use planning is not regulated by law in Latvia outside the coastal strip. Major changes in the forests must be approved by the Ministry of Environmental Protection and Regional Development.

• **HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

Decisions by the Cabinet of Ministers on Special Protected Nature Areas and Objects – including BSPAs – are being prepared.

No management plans have thus far been implemented, but such plans are being elaborated (now at an initial stage) for the Kaltene-Engure area and for the North Vidzeme Regional Nature Protection Complex. A monitoring programme is in place for the Pape-Perkone area, but due to financial problems

samples are taken irregularly. For the rest of the BSPAs, monitoring is carried out on an irregular basis.

As decisions concerning the protected coastal strip are taken by the Cabinet of Ministers, HELCOM has the possibility to express its opinion through that channel on major changes concerning the Latvian BSPAs. There are no new Latvian proposals for additional BSPAs.

**• HELCOM Guidelines for Designating Marine and Coastal Baltic Sea Protected Areas and Proposed Protection Categories**

Initial discussions have been taking place with local authorities in North Vidzeme Regional Nature Protection Complex for the preparation of a Territorial Development Plan for the Coastal Area.

# LITHUANIA

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN LITHUANIA, AND IMPLEMENTATION THEREOF

**. Convention on Biological Diversity**

In accordance with Article 6 of the Convention on Biological Diversity, which Lithuania ratified in 1995, Lithuania has elaborated a National Action Plan for the Conservation of Biological Diversity. The plan will be revised at the end of 1996 to include new proposals on coastal and marine biodiversity. The Convention is still in an early stage of implementation, but the Lithuanian legislation on land use and activities in terrestrial and local marine areas is compatible with the obligations of the Convention.

**• Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

The Lithuanian legislation on land use and activities in terrstrial and local marine areas is compatible with the obligations set out in the Ramsar Convention. So far, Lithuania has designated five Ramsar sites, one of which in the coastal zone. Scientific investigations are presently carried out in another nine areas which will be designated as Ramsar sites in the near future. The Lithuanian Ramsar sites are implemented in national legislation through Executive Order No 408 of 25 May 1994.

**• 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

The Lithuanian legislation on land use, landscape protection and activities in terrestrial and local marine areas is compatible with the obligations set out in the Convention. Lithuania is taking a lot of action, based on legislation, to protect coastal areas. The coastal and marine Baltic Sea Protected Areas, and the planned Kuršių Marios Biosphere Polygon (although not implemented as such), are well defined and to a great extent already protected and managed.

**• Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

Lithuania has only recently ratified the Bern Convention. It is not yet possible to fully evaluate whether Lithuanian legislation on landscapes, populations and species is compatible with the obligations set out in the Convention. The Lithuanian Red List of Protected Species was published in 1991 and will be revised in the year 2000.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN LITHUANIA

• **HELCOM Recommendation 15/1: Protection of the coastal strip**

**See** also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Lithuanian legislation of relevance for the protection of the coastal strip will be included in the Act on Protection of the Marine Environment (not yet adopted by the Lithuanian Parliament). Thus far, 66 per cent of the coastline has been protected as a national park or regional parks.

Regarding intensive forestry and intensive farming within the Lithuanian coastal strip, clear-cutting is forbidden within a one-kilometre wide zone. No measures have been taken to prevent intensive farming in the coastal zone.

All of the Lithuanian coast is covered by four units: Kuršių Nerija national park, Pajūris regional park, Klaipėda harbour, or the Palanga resort. There is a general planning instrument for this coastal stretch.

# POLAND

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN POLAND, AND IMPLEMENTATION THEREOF

The Polish national law on land use and activities within the coastal protected areas is compatible to a significant degree with the obligations set out in the international agreements ratified by Poland.

However, this is not the case for marine protected areas. As regards those areas, the legal terms of reference for their establishment are currently being discussed. It is necessary to establish new legal regulations, and they should be agreed between the Ministry of Environmental Protection, Natural Resources and Forestry (responsible for nature conservation and protection of biodiversity) and the Ministry of Transport and Maritime Economy (responsible for supervision of Polish marine territory and the coastal strip).

. **Convention on Biological Diversity**

Poland is a Contracting Party to the Convention. The Ministry of Environmental Protection, Natural Resources and Forestry has requested the elaboration of a strategy for biodiversity conservation. When that document is completed, approriate legislation necessary for the implementation of the Convention will be approved.

• **Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

Poland ratified the Convention in 1978 and is an active Contractive Party as well as a member of the Permanent Committee of the Convention. Thus far, Poland has designated five nature reserves as Ramsar sites, one of which (Lake Swidwie) is located within the coastal zone of the Baltic.

• **1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

Poland has not yet ratified the 1992 Helsinki Convention, but the obligations set out in Article 15, and particularly in the HELCOM Recommendations 15/1 and 15/5 are being implemented (see below).

• **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**
Poland is not yet a Contracting Party to the Convention. The Ministry of Environmental Protection, Natural Resources and Forestry issued an Act on Fauna Species Conservation in **1995.** The Act is implemented by the Ministry and the nature conservators of the voivodships.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN POLAND

• **HELCOM Recommendation 15/1: Protection of the coastal strip**
**See** p. **39** and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Recommendation is, generally, compatible with already existing Polish legislation on coastal strip protection. The Polish legislation of relevance for the protection of the coastal strip comprises the Act on Marine Areas of the Polish Republic and the Act on Marine Administration.

The width of the terrestrial protected strip is determined according to the following. The technical belt, where the protection is stricter, consists of different terrestrial areas. On dune coasts, the protected strip extends up to 200 m from the top of the outer dune. On cliff coasts, it is measured 100 m from the top of the cliff slope. In lagoon areas, the protected strip is 200 m measured from the shoreline or the land between the shoreline and the dike/embankment. The protective belt consists of an area up to two kilometres from the shoreline.

The protected strip does not extend seawards from the coastline.

Concerning administrative measures (governmental decisions, etc.), coastal protection-oriented research and monitoring has been financed. Work has commenced on an Act or set of regulations concerning safety and protection of the coastal zone.

Other measures taken by Poland to ensure the protection of the coast include the fact that more than 68 per cent of the coastline is protected as national parks, nature reserves or protected landscape areas. A long-term programme for coastal protection was approved in 1986 and revised in 1989. Environmental impact assessments are required for all new constructions, as well as land-use and water-use projects.

Regarding restrictions on intensive forestry or intensive farming in the coastal zone, neither intensive forestry nor intensive farming is allowed within the technical belt. Within the protective belt, decisions about forestry and farming must be approved by the appropriate Maritime Office.

Exceptions from the regulations and restrictions that apply in the coastal zone can be made by the director of the appropriate Maritime Office in terms of water-use permits, in agreement with the regional authority (voivodship).

There are not yet any provisions in the Polish legislation for establishing a planning zone along the coast, but work has commenced on an Act or set of regulations concerning safety and protection of the coastal zone (see above).

• **HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**
The Polish legislation does not render possible the establishment of marine protected areas. Presently, the available scientific information on marine areas is not sufficient to carry out a selection of such protected areas. At present, state-of-the-art marine protected areas can only – as is the case with the BSPAs – be established as a near-shore extension of coastal terrestrial protected areas.

Two of the Polish BSPAs has the protection status of national park and two that of landscape park. Nature conservation plans exist for these areas, but there are no complete management plans. Work on management plans is, however, quite advanced for some areas.

Monitoring programmes for different purposes and with regard to different parameters are conducted in the Polish BSPAs.

No legislative or administrative measures have yet been taken in Poland to ensure that HELCOM.

has the possibility to express its opinion about major changes concerning the Polish BSPAs.

Research in order to assess the natural value of the Słupsk Bank as a potential BSPA commenced during 1995.

• HELCOM **Guidelines for Designating Marine and Coastal Baltic Sea Protected Areas and Proposed Protection Categories**

Co-operation within an interdisciplinary group of naturalists and lawyers within the Ministry of Environmental Protection, Natural Resources and Forestry is indispensible.

# RUSSIAN FEDERATION

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN THE RUSSIAN FEDERATION, AND IMPLEMENTATION THEREOF

• **Convention on Biological Diversity**

**The** Russian Federation has ratified the Convention on Biological Diversity.

• **Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

**The** Russian Federation has ratified the Ramsar Convention.

• **1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

**The 1974 Helsinki Convention was ratified by the Soviet Union. The 1992 Helsinki Convention has been signed but not yet ratified by the Russian Federation.**

• **Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)**

**The Russian Federation has signed but not yet ratified the Bern Convention.**

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN THE RUSSIAN FEDERATION

HELCOM Recommendations 15/1 on protection of the coastal strip, and 15/5 on Baltic Sea Protected Areas can be implemented in the Russian Federation, especially in the Leningrad Administrative Region, with some exception, when changes are made in the regional legislation. However, financial support will be needed for the development of the protected areas system, for improvements in land use, for training of decision-makers and personnel, and for better co-ordination.

# SWEDEN

## INTEGRATION OF INTERNATIONAL CONVENTIONS INTO NATIONAL LEGISLATION IN SWEDEN, AND IMPLEMENTATION THEREOF

The conservation of biodiversity is one of the four areas with the highest priority in the Swedish EU environmental policy. Sectors of particular importance in this respect are forestry, agriculture and fisheries. Swedish biodiversity work has a clear international dimension and it has been stressed that Sweden should be especially active within the framework of international conventions such as the Convention on Biological Diversity, the Bonn Convention, the CITES Convention, the Bern Convention, the Ramsar Convention, the Helsinki Convention, the OSPAR Convention and the Geneva Convention.

Following this general principle on the essential importance of biodiversity conservation, Sweden will act in international fora to promote the sectorial approach which has been a cornerstone in Swedish environmental policy for many years. The sectorial approach implies increased integration of environmental – including biodiversity conservation – concern and responsibility into the actual economic sectors of society (forestry, agriculture, traffic, fisheries, energy generation, etc.). This is of vital importance nationally, regionally and, particularly, within the European Union.

Within the EU, Sweden works actively with issues that directly or indirectly affect biodiversity: acidification of soil and water; climate change; air pollution; an environmentally adapted system of transport throughout Europe; rapid reformation of the Common Agricultural Policy (CAP) of the EU; the Baltic Sea environment; and national regulation of the introduction of non-indigenous species and genetic material.

- **Convention on Biological Diversity**

Sweden has elaborated a National Action Plan on Biodiversity, based on the sectorial approach.

As regards marine biodiversity, it has been pointed out in the Plan that "there is a need for increased knowledge about the biodiversity in the marine environment. The present lack of knowledge makes it difficult to specify goals and measures in terms of biotopes, species and the genetical species composition. Thus, it is important to continue the compilation of documented knowledge, as well as to develop methodology for marine nature inventories aimed at creating more efficient nature inventories in the marine environment". Following this conclusion, a number of measures are suggested:

– Investigation into the need and options for the establishment of a marine resource database for the Swedish coastal and marine areas.

– Development and evaluation of relevant methods for nature inventories in the marine environment. Elaboration of a plan for such inventories in marine areas, including priorities of geographical areas and ecosystems/biotopes. The importance of Baltic co-operation is underlined.

– Establishment of more marine reserves in accordance with plans already made. References are also made to Sweden's international commitments in accordance with, e.g., the Helsinki Convention and the EC Habitats/FFH Directive.

– Investigation into the diffuse input of oil into the Baltic, improved surveillance and follow-up of the protection measures against marine oil pollution in order to prevent oil damage to marine organisms.

– Initiatives contributing to the elaboration of internationally binding agreements on measures to prevent undesirable introduction of non-indigenous species into marine areas surrounding Sweden.

- **Convention on Wetlands of International Importance, especially as Waterfowl Habitats (Ramsar Convention)**

Sweden has set aside 12 coastal areas as Ramsar sites, the largest of which is the Outer Stockholm Archipelago.

• **1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention)**

Sweden intends to continue working within the Helsinki Convention to promote action for the conservation of biodiversity.

## INTEGRATION OF HELCOM RECOMMENDATIONS ON NATURE CONSERVATION IN SWEDEN

• **HELCOM Recommendation 15/1: Protection of the coastal strip**

**See** p. 45 and Annex 1 of this report. See also the table compiled by Finland as Lead Country in a report on the implementation of the Recommendation, submitted the HELCOM Environment Committee in September 1995.

The Swedish legislation of relevance for the protection of the coastal strip is the Nature Conservation Act, amended in 199 1/1994 for the purpose of including protection of flora and fauna as an aim of shore protection (besides the original aim, to ensure possibilities for outdoor recreation).

The width of the terrestrial protected strip is generally 100 m from the mean water mark. It can be extended to up to 300 m by the regional authorities (County Administrative Boards); a possibility which has been widely used.

The protected strip in Sweden extends seawards, generally 100 m with a possible extension up to 300 m.

One measure taken by Sweden to ensure the protection of the coast is prohibition to use jet-skis outside specially delimited areas. Regarding intensive forestry or intensive farming in the coastal zone, no special measures have been taken to restrict these activities.

A general exception applies for installations or measures required for agriculture, forestry or fisheries. In other cases, the County Administrative Board can grant exceptions for special reasons. Outside areas of national interest (about 70 per cent of the Swedish coastline is classified as areas of national interest, where nature, landscape and recreational values have high priority), this authority to allow exceptions has been delegated to the municipalities.

Development in all areas must be preceeded by an evaluation from a planning point of view. The Act on the Management of Natural Resources provides guidelines for such decisions. The coastal areas for which the guidelines are valid are determined by a map attached to the Act.

• **HELCOM Recommendation 15/5: Baltic Sea Protected Areas (BSPAs)**

Three of the Swedish BSPAs have the protection status of nature reserves. The terrestrial parts of the BSPAs are partly protected as national parks or nature reserves, whereas the water areas are partly protected as bird reserves.

Management plans have been implemented for the terrestrial parts of three areas (Holmö Islands, Torhamns Archipelago, and Falsterbo Peninsula), and management plans are being prepared for the marine parts of the two latter areas and for Kopparstenarna.

Monitoring programmes are conducted in the Holmö Islands area and are under preparation for Kopparstenarna, Torhamn Archipelago and Falsterbo Peninsula.

No legislative or administrative measures have yet been taken in Sweden to ensure that HELCOM has the possibility to express its opinion about major changes concerning the Swedish BSPAs. Sweden is presently not planning any proposals for additional BSPAs.

## INTEGRATION OF EC DIRECTIVES ON NATURE CONSERVATION IN SWEDEN

The Swedish National Action Programme on Biodiversity includes actions to implement the the EC Bird Directive and the Habitats/FFH Directive. Both directives are considered to offer good possi-

bilities for future nature conservation measures in Sweden.

It has been stressed that Sweden should take very active part in the formulation of the common EU nature conservation policy, e.g., in the creation of the Natura 2000 Network of protected areas. Sweden should, thus, "actively promote the full implementation of the Directives in the EU Member States. To this end, it is essential for Sweden to achieve full national implementation of the Directives in Swedish legislation and nature conservation policy".

- The 1992 **Habitats/FFH** Directive, with Natura 2000

Based on inventories made by the regional County Administrations, the Swedish Environmental Protection Agency originally proposed over 1,200 valuable nature areas to be included in the Natura 2000 Network. Several important bird areas such as Ottenby and Falsterbo-Fotviken were included. The total area of the proposed areas was 5.4 million ha. (The first joint proposal from the 25 Country Administrative Boards was over 2,800 areas.) The estimated protection cost (purchase of land) for the areas not yet protected would amount to approximately one billion SEK (≈ 150 million USD).

One major problem in this work was, and still is, the fact that about 30 very typical and biologically important Swedish habitats are not listed in the Habitats/FFH Directive due to the fact that they were not familiar to other Member States at the time when the directive was negotiated (before Sweden joined the EU). Among those typical habitats rich in biodiversity are natural meadows, pastures, wooded meadows and grazed forest land, as well as many types of small watercourses and their surroundings. Unless a habitat is listed in the directive, a Member State is not allowed to propose areas or species representative of such a habitat.

The same problem is valid for Finland, and there is now a joint Finnish-Swedish proposal to insert some of the most important Scandinavian habitats and species into the directive in order to make it more relevant for the nature actually to be protected within the framework of Natura 2000.

The Swedish Government eventually decided to propose only 563 areas to the EU, and only areas that are already placed under some kind of national protection. Thus, not one of the "new" areas proposed by the County Administrative Boards or the Swedish EPA was included on the Swedish list.

- The 1979 Bird Directive (and current amendments/revisions)

Sweden is in the process of integrating the Bird Directive. A list of EC Bird Directive Areas has been submitted to the EU Commission.