■ INTRODUCTION

EUROPE'S ENVIRONMENT

■ Pressure

The 20th century has seen profound changes in the European environment. Across most of the continent, man's use of the land and sea continues to intensify, driven by technological innovations, market forces, and political and socio-economic changes. Very few areas have escaped the impact of recent developments in agriculture, forestry, fisheries, transport, energy, industry and urbanization, and associated pollution.

In particular, the intensification since 1950 of the two most widespread land-uses in Europe, agriculture and forestry, has led to the 'simplification' of ecosystems across vast areas, giving man greater control over natural variations in the productivity of farmland and forests, but also markedly reducing the biological diversity and complexity of these habitats. Increasingly efficient but indiscriminate harvesting methods are reducing the populations of many marine and freshwater organisms in Europe's rivers and seas, altering food-webs in the process. Under these pressures, less intensive forms of natural-resource use have not been able to compete economically, and have been widely abandoned (Pain and Pienkowski 1997, EEA 1998). Many other semi-natural habitats, such as inland wetlands and dry grasslands, have also been greatly reduced in extent and diversity by man's activities, with the remaining fragments increasingly isolated from each other (Tucker and Evans 1997).

■ Status

These changes in land-use have had a highly detrimental impact on Europe's biodiversity (EEA 1998). About 12% of vertebrate species in Europe are threatened with global extinction (WCMC 1997) and, at least for birds (the only group for which there is adequate data), a much larger proportion of the total (38% of regularly occurring bird species) have an unfavourable conservation status on the continent, most of these species having undergone significant reductions in abundance or range since 1970 (Box 1). Man's activities are implicated as the driving factor in most of these declines. The intensifying use of the environment has also had damaging effects on society within and beyond Europe, e.g. through massive loss of rural livelihoods, over-dependence on subsidies, and the socio-economic impacts of food surpluses and food-safety issues (EEA 1998).

■ Response

Future directions and policies for land-use in Europe are still decided by the orthodox application of economic theory. As yet, mainstream economics do not take into account the full benefits of biodiversity, nor the long-term costs to society of intensification, in terms of biodiversity loss (UNEP 1995). As a result, decisions relevant to future land-use still ignore many of the projected impacts on biodiversity and society, and the phenomenon of biodiversity loss still receives insufficient attention from most sectors of the economy and society.

Although biodiversity is not yet valued in strict economic terms, it is now widely recognized that these negative environmental trends cannot be allowed to continue indefinitely, since the direct and indirect costs to society will be too great (UNEP 1995). The challenge is to find more sustainable ways of using the environment, so-called 'sustainable development'.

At the governmental level, the world community has responded with initiatives such as *Agenda 21* and the Convention on Biological Diversity (Biodiversity Convention), both products of the 'Earth Summit'—the United Nations Conference on Environment and Development—at Rio de Janeiro in 1992. At the European level, the *Pan-European Biological and Landscape Diversity Strategy* has received unanimous endorsement from Europe's environment ministers (McCloskey 1997), and the European Community has responded with *Towards Sustainability*, the fifth environmental action programme of the European Commission (CEC 1993), followed more recently by the *EC Biodiversity Strategy* (CEC 1998).

These international initiatives, whether master-plans, conventions or policy documents, all share similar objectives, that is to promote, within and between nations, the conservation of biodiversity and the sustainable use of natural resources, through the integration of environmental issues and concerns into all sectors of society (including the economy), encouraging closer cooperation between sectors, and advocating a more participatory form of environmental policy-making.

At the local level, one of the ways that individual citizens can participate in policy-making, and help to solve problems in society, is through creating or supporting non-governmental organizations (NGOs). The number and size of NGOs that address environmental problems have increased enormously in recent years, in Europe and elsewhere, indicating the rising level of concern in society world-wide. The combined membership of such NGOs in Europe alone runs into many millions, and gives these bodies authority and democratic basis when seeking to influence governments, businesses and other powerful sectors of society. Indeed, through their research, publicity and action, these groups of like-minded people are a crucial partner to governments in the search for more sustainable forms of development.

THE NEED FOR BIRD CONSERVATION IN EUROPE

Birds are one of the best-researched and most reliable indicators of biodiversity loss in Europe (Tucker and Heath 1994, Tucker and Evans 1997). Nearly 40% of bird species in Europe currently have an unfavourable conservation status (Box 1), mainly as a result of man's intensifying use of the environment and because of other, more direct threats from people, such as disturbance, persecution and excessive hunting (Tucker and Heath 1994). Faced with these rare or declining populations, the conservation of Europe's birds and other biodiversity has become an increasingly important and necessary activity, requiring coordination on an international scale.

In response, BirdLife International, the world-wide partnership of national NGOs devoted to the conservation of birds and their habitats (Box 2), pursues a programme of research, publicity and action in Europe, designed to:

- Prevent the extinction of any bird species.
- Reduce the number of bird species that are globally threatened.
- Maintain and where possible enhance the conservation status of all bird species.
- Conserve sites and habitats important for birds.

> **Box 1.** The status of birds in Europe (Tucker and Heath 1994).
>
> A total of 515 bird species occur regularly in Europe, comprising thousands of millions of individuals which depend on the continent as a breeding, staging or wintering ground. On a world scale, Europe is particularly important for 136 species, supporting the majority of their global population at some stage of their annual cycle.
>
> Nearly 40% of the continent's bird species have an unfavourable conservation status in Europe, based on their rarity or their rate of population decline since 1970. Of these 195 species, 20 are globally threatened with extinction (Collar *et al*. 1994) and a further 15 are also of global conservation concern.
>
> Most bird species in Europe occur widely across the continent, with populations in many different countries. Additionally, the great majority of bird species in Europe are migratory in at least part of their range, crossing many national frontiers, with some species regularly reaching not only southern Africa but also as far as Canada, east Siberia, India and the sub-Antarctic. An international perspective is therefore all-important for most bird-conservation initiatives in Europe.

BirdLife International consists, in Europe, of 32 Partner organizations with a combined membership of over 2 million people and staff of more than 1,700. In addition, 22 other national organizations in Europe are affiliated to the Partnership, as Representatives or Associates.

BirdLife International, through seeking to conserve all bird species and their habitats on earth, works for the world's biodiversity and for the sustainability of human use of natural resources.

Why birds?

Birds play a special and unique role in connecting humanity to biodiversity and the environment. They occupy almost all habitats on the earth's surface, and are widely dispersed in all countries and regions. They are the best known and documented major taxonomic group of organisms in the world.

Birds are important to society because:

- They are valuable in their own right
- They are sensitive indicators of biological richness and environmental condition
- They are vital for ecological functions in the natural environment
- They have a direct and indirect economic and cultural value to people
- They provide a useful means to improve our scientific knowledge and understanding of the environment
- They are beautiful and inspirational, and a source of happiness and pleasure for many people
- They are very useful for promoting conservation awareness
- Like all species, they have a moral right to a continued existence on Earth.

PRIORITIZATION OF CONSERVATION ACTION

BirdLife International approaches the conservation of birds, in Europe as elsewhere, in three different ways:

1. Conservation of species
2. Conservation of sites
3. Conservation of habitats

Each approach is essential for the effective conservation of a large number of species and, while different, each is complementary and interdependent. Box 3 summarizes the rationale behind each approach.

BirdLife attaches great importance to the identification of priorities, to set targets and guide conservation action on species, sites and habitats. The BirdLife International Partnership has therefore conducted baseline studies across Europe to identify the conservation priorities for species, sites and habitats (Box 3). This publication defines the priority sites for bird conservation in Europe.

THE CONSERVATION OF SITES FOR BIRDS— IMPORTANT BIRD AREAS

Some areas in Europe are particularly important for birds:

- Sites for globally threatened species (Collar *et al.* 1994) and other species of European conservation concern and of European Union concern (Tucker and Heath 1994, CEC 1994).
- Sites for migratory species which congregate in high numbers (Rose and Scott 1997).
- Sites for species unique to a small region (Stattersfield *et al.* 1998).
- Sites that support a species assemblage that is highly representative of a distinct biome.

BirdLife International classifies such sites as Important Bird Areas (IBAs), where a significant part of these species' populations can be found on a regular basis. The protection and management of these high-priority sites, in a network across all relevant countries

in the world, could contribute greatly to the effective conservation of these species. One of the main aims of BirdLife International is to build such a global network, through its IBA Programme (Box 4).

Legal mechanisms exist within Europe to protect the ecological integrity of these sites, at a variety of geographical scales. All European countries have legal and institutional frameworks for the designation and management of protected areas, and the perspective beyond national borders (so important for highly mobile organisms such as birds) is provided by a number of international conventions and initiatives that explicitly encourage the designation of international networks of sites that serve a shared conservation purpose (see in Box 2, 'Overview of results' chapter). However, despite this relatively well-developed statutory 'infrastructure', implementation has often been relatively slow, and many IBAs remain without official protection or recognition.

1. Conservation of species

This is the protection of species through conservation action, which may take many forms, such as legislation, monitoring, research, prioritization, management of populations, and the acquisition and management of land. Such an approach is often taken for species of economic or cultural importance, and increasingly for species that are threatened with extinction at a local, national or global level.

BirdLife International has identified those species that are threatened with global extinction (Collar *et al.* 1994) or that are otherwise of conservation concern in Europe (Tucker and Heath 1994), and has recently coordinated the production of up-to-date, international action plans for the conservation of the most threatened species in Europe (Heredia *et al.* 1996, CoE in prep.).

2. Conservation of sites

This is the protection of sites to conserve species and habitats and to maintain the integrity of ecosystem processes, by designating areas for the conservation of natural resources, and regulating and managing them according to the needs of the biodiversity which they contain. Apart from the long-term benefits gained by conserving biodiversity, sites also have other important functions for society, including education and research, and have non-material and non-monetary values as well as providing the focus for local or national pride. In moving towards a more sustainable society, all these functions will be increasingly highly valued. The protection and conservation of sites is an integral part of any attempt to achieve sustainability.

The BirdLife International Important Bird Area (IBA) Programme (see Box 4), a world-wide initiative aimed at identifying and protecting a network of critical sites for the world's birds, aims to facilitate the conservation of birds via this approach. This book, which builds upon the first pan-European IBA inventory (Grimmett and Jones 1989), is intended to guide practical on-the-ground conservation management and also to target political and legal mechanisms to achieve adequate protection of Europe's IBAs.

3. Conservation of habitats

A great threat to birds in Europe, and to biodiversity in general, lies in the continuing erosion of the quality and extent of habitats across the entire landscape ('the wider environment'). The loss and degradation is driven by the increasing intensity of human uses of the environment. The conservation of habitat extent and quality across the landscape cannot be achieved solely by the protection of representative areas: a wider approach is needed.

National governments and regional or local authorities can favour and encourage the conservation of the wider environment in the way that they formulate and use their laws, policies, plans, programmes, initiatives, subsidies, taxes, funds, inter-governmental relations and other broad measures. Ideally, these should be fully integrated into land-use policies, regulations and plans, across all sectors of the economy and at all scales. BirdLife International has recently outlined a strategy for conserving birds and their habitats in the wider European environment over the next 20 years (Tucker and Evans 1997).

Box 4. The Important Bird Area Programme of BirdLife International.

- The function of the Important Bird Area (IBA) Programme is to identify, protect and manage a network of sites that are important for the long-term viability of naturally occurring bird populations, across the geographical range of those bird species for which a site-based approach is appropriate.
- The continued ecological integrity of these sites will be decisive in maintaining and conserving such birds. Legal protection, management and monitoring of these crucial sites will all be important targets for action, and many (but not all) bird species may be effectively conserved by these means. Patterns of bird distribution are such that, in most cases, it is possible to select sites that support many species.
- The IBA Programme is global in scale, and it is anticipated that up to 20,000 IBAs will be identified world-wide, using standard, internationally recognized criteria for selection.
- The sites are identified on the basis of the bird numbers and species' complements that they hold, and are selected such that, taken together, they form a network throughout the species' biogeographic distributions.
- This network may be considered as a minimum essential to ensure the survival of these species across their ranges, should there occur a net loss of remaining habitat elsewhere through human, or other, modification. Therefore the consequences of the loss of any one of these sites may be disproportionately large.
- The programme aims to guide the implementation of national conservation strategies, through the promotion and development of national protected-area programmes. It is also intended to assist the conservation activities of international organisations and to promote the implementation of global agreements and regional measures.

There are also, in Europe, many non-statutory protected areas, often smaller, which contribute greatly to biodiversity conservation, such as those owned and/or managed by non-governmental organizations, private bodies, villages, farmers, and urban authorities.

IMPORTANT BIRD AREAS IN EUROPE

The first IBA inventory to cover the whole of Europe was published in 1989 (Grimmett and Jones 1989). *Important Bird Areas in Europe* provided key information on 2,444 high-priority sites in 39 countries or autonomous regions. It represented a major step towards realizing a bird-conservation strategy for Europe, and it accelerated progress in maintaining and enhancing the conservation value of all IBAs. Over the last ten years, BirdLife Partners across 32 countries have increasingly focused their site-conservation activities towards the IBA network, and local volunteers have mobilized at numerous IBAs to help protect, manage or monitor 'their' sites, on the ground. Facilitated since 1990 by a coordinator at the BirdLife International Secretariat and, increasingly, by national IBA coordinators in individual countries, the actions of many individuals have coalesced into a formal IBA programme (Box 4).

As part of this programme, 12 international workshops have been held across Europe, to develop the skills of national IBA coordinators (and their networks of local volunteers and experts) in fund-raising, awareness-raising, monitoring, site management, lobbying, advocacy, dealing with the media, and so on. In addition, the IBA programme has generated hundreds of 'interventions' over the past decade, coordinated actions involving Partners and other NGOs, their members and the general public in concerted lobbying against unsustainable developments at particular sites.

As well as this influence at the grassroots, the inventory has also stimulated advances in statutory or 'top-down' conservation of sites, notably through two judgements of the European Court of Justice, one giving precedent for the legal protection of an IBA (Santoña marshes, Spain, 1993), the other requiring an EU member state to designate a more complete network of Special Protection Areas under the EC Birds Directive, citing the IBA inventory as an example of such a network (case lost by the Netherlands government, 1998). In the same vein, data and data analyses have been used to influence and have strong input into several international legal frameworks for site conservation, notably the EC Birds Directive (leading to Natura 2000), the Ramsar Convention and HELCOM (further details of these instruments are given in Appendix 1).

■ The new IBA inventory

This book represents an update of the first IBA inventory, ten years on. It presents essential information on all known sites of international importance for the conservation of birds in Europe, targeted at a number of audiences:

- decision-makers and policy-makers
- land-use planners and regulators
- funders
- land managers
- conservationists
- birdwatchers and ornithologists
- environmental consultants
- academic and research bodies.

Since 1989 a considerable amount of new data on birds and sites has become available (Box 5), and as much as possible has been included in this book. Thus 3,619 IBAs are listed and described for Europe, a net increase of 50% since 1989. This book, and the computer database from which it was produced, are two products of five years' work by the BirdLife International Partnership in Europe, together with thousands of other ornithologists and birdwatchers, in 51 countries or autonomous regions.

■ Objectives of the inventory

The principal objectives of this book are:

- to identify and promote awareness of the most important sites in Europe for the conservation of birds
- to help direct conservation activity and available funding towards these sites
- to present the ornithological value of each site in a standardized but also reliable way, using numerical criteria
- to provide a tool for planning and management, at practical and political levels, through the presentation of key information on birds, habitats, land-uses, threats, legal protection, and conservation status
- to develop networks of local experts, fieldworkers and volunteers, and motivate them to monitor and protect IBAs
- to stimulate national and international cooperation and co-ordination in conserving Europe's most important sites for birds

Box 5. Progress in identifying and documenting Important Bird Areas in Europe.

1981: The first ever inventory of IBAs is prepared by the International Council for Bird Preservation (ICBP) (now BirdLife International) for the European Commission (Osieck and Mörzer Bruyns 1981), covering 694 sites in the (then) nine member states of the European Community (EC).

1983–1986: Further IBA inventories are prepared by ICBP for the European Commission, covering new member states of the EC, as well as threatened IBAs in the expanded EC.

1989: The first pan-European IBA inventory is published, covering 2,444 sites in 39 countries or autonomous regions (Grimmett and Jones 1989). In the same year, a separate inventory, commissioned by the European Commission, is produced by ICBP on the IBAs in the (then) 12 member states of the EC (Grimmett and Gammell 1989).

1989–2000: Many new IBAs are identified as a result of field surveys, literature review and expert knowledge, especially in the east and south of Europe. National IBA inventories are published in 16 countries, with substantially revised and enhanced data in many cases (listed in Box 1, 'Data collection' chapter).

2000 – Second pan-European IBA inventory (this book) published, covering 3,619 sites in 51 countries or autonomous regions.

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- to establish a more rigorous baseline for measuring Europe's success or failure in conserving its most important sites for birds
- to facilitate the comparison of information at local, national and international scales
- to promote awareness of the value of a site-based approach for the conservation of birds and biodiversity

■ Components of the inventory
This publication is divided into four main sections:

1. Introductory chapters
- Data collection: information on standardized methods and classification schemes.
- Site selection: ascertaining the importance of sites for birds against agreed scientific criteria.
- Data presentation: how to use the book.

2. 'Overview of results' chapter
- Pan-European summary analysis of the data gathered, with conclusions and recommendations.

3. Country chapters: inventory of Important Bird Areas by country
For each country, there is:
- A national overview of the IBAs .
- A detailed site-account for each IBA.

Due to the large number of countries and sites involved, the inventory has been divided into two volumes: each starts with the Introductory chapters and 'Overview of results' chapter (sections 1 and 2, above), followed by a group of country chapters, as follows.

Volume 1: **Northern Europe**—Austria, Belarus, Belgium, Czech Republic, Denmark, Faroe Islands, Greenland, Estonia, Finland, Germany, Iceland, Republic of Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Netherlands, Norway, Svalbard and Jan Mayen, Poland, Russia, Slovakia, Sweden, Switzerland, United Kingdom (including Channel Islands and Isle of Man).

Volume 2: **Southern Europe**—Albania, Andorra, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, France, Georgia, Gibraltar, Greece, Hungary, Italy, Former Yugoslav Republic of Macedonia, Malta, Moldova, Portugal, Azores, Madeira, Romania, Slovenia, Spain (including Canary Islands), Turkey, Ukraine, Yugoslavia.

4. Appendices
A series of Appendices give more detailed information, descriptions and analyses, in support of the introductory and overview chapters (the Appendices are provided in both volumes of the publication).

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