



Environment fact sheet:

nature and biodiversity



- Europe is faced with an unprecedented loss of biological diversity, which threatens to undermine European Union environmental, economic and social goals.
- The European Union (EU) has put in place legislation to protect the natural environment since the 1970s. It has been implementing a biodiversity strategy since 1998. Yet biodiversity continues to decline.
- World leaders have made the commitment to significantly reduce the rate of biodiversity loss by 2010.
- EU leaders want to *halt* biodiversity loss in Europe by 2010.
- The European Commission is developing priority measures and mobilising key actors to meet these ambitious goals.



Spanish lynx, the most threatened cat species in Europe due to habitats fragmentation and decline in the number of preys. The EU has co-financed several protection projects to save it.

Europe's disappearing species and habitats

Europe is estimated to be home to more than 200 000 animal and plant species. Western Europe's population density and level of industrialisation have seriously impaired biodiversity.

There are 335 vertebrate species at risk of extinction — including the Iberian lynx, brown bear and all our sea mammals. Also threatened are 38 % of our bird species, 45 % of our butterfly species and 5 % of mollusc species. Around 80 % of our fish stocks face collapse or are of unknown status. In the wild, 64 endemic plant species have become extinct, and a further 800 plant species occurring in Europe are threatened with global extinction. As many as 97 breeds of domestic animals have become extinct in recent times. Almost 30 % of surviving breeds are currently at risk.

Our ecosystems are equally at risk. The EU has lost more than half of its once biodiverse and species-rich wetlands. Only a very small proportion of the natural forest which once covered Europe remains untouched and the loss of old and semi-natural woodlands continues. Species-rich agricultural habitats in Europe have declined considerably during recent decades. And many European marine ecosystems are disrupted.

Fact 1: Biodiversity matters

Biodiversity means the diversity of life in all its forms — the diversity of species, of genetic variations within species, and of ecosystems. It provides mankind with a wide range of benefits, such as important goods (like timber and medicinal products) and essential services (like carbon cycling and storage, clean water, climate mitigation, mitigation of natural hazards, and pollination).

The financial value of the goods and services provided by ecosystems and species — by life on earth — has been estimated at EUR 26 trillion per year — more than half the value of what humans produce each year.

The conservation and sustainable use of biodiversity is essential to poverty eradication in economically developing countries, and to sustainable livelihoods and sustained economic growth in Europe and worldwide.

From nature, we also derive pleasure, fulfilment, inspiration and solace. Nature is fundamental to our culture, language and psychological and spiritual well-being.

Fact 2: Biodiversity loss has accelerated to an unprecedented level

Yet biodiversity is increasingly affected by mankind. Worldwide, the current global species extinction rate is estimated to be 50 to 1 000 times higher than the natural background extinction rate. This rate of loss is projected to accelerate 10-fold by 2050.

The principle causes of this loss are changes in habitats because of human development (such as intensive production systems, construction, and extractive industries), invasions of alien species, over-exploitation (fishing, hunting and collecting), pollution, and global climate change.

Fact 3: The EU plays a leading role worldwide

The global scale of the biodiversity issue demands concerted international action. The framework for this action is the United Nations (UN) Convention on Biological Diversity (CBD), which the EU ratified in 1993. The EU plays a leading role worldwide in furthering the objectives of the convention.

In 1998, the EU adopted a biodiversity strategy. Four biodiversity action plans were adopted under this strategy in 2001 (conservation of natural resources, agriculture, fisheries, economic and development cooperation).

Today, nature and biodiversity are one of the four priorities of the EU's sixth environment action programme (2002–12), together with climate change, resource and waste management and health in relation to the environment.

Fact 4: The EU tackles the most pervasive threat — habitat loss and degradation

EU biodiversity policy is based on two main pieces of legislation — the 1979 birds directive and the 1992 habitats directive — and benefits from a specific financial instrument, the LIFE-Nature fund (see box). Its priorities are to create the European ecological network of special areas of conservation, called Natura 2000, and to integrate nature protection requirements into other EU policies such as agriculture, fisheries, regional development and transport.

The Natura 2000 network comprises over 18 000 sites, covers around 17.5 % of the territory of the 15 'old' EU Member States (an area almost as large as France) and is now being extended to the new Member States. The EU has been split into seven bio-geographical regions, for which lists of protected sites are being finalised. The Commission is also working to extend Natura 2000 to the marine environment. Action plans have been completed for 47 threatened bird species and appear to be facilitating species recoveries. Man-

agement plans are in place for 16 bird species which can be hunted.

A ground-breaking agreement was signed in October 2004 on sustainable hunting between the hunting and bird conservation communities. They agree to support the establishment of the Natura 2000 network. They recognise the importance of effective habitat protection and active management of biodiversity conservation and that 'in principle the Natura 2000 designation is not incompatible with hunting'.

A set of biodiversity indicators is under development, which will reveal and communicate trends in biodiversity, pressures on biodiversity and the effectiveness of policy responses, for example an indicator of population trends of selected species characteristic of the main European ecosystem (forests, wetlands, etc.), an indicator of invasive alien species, and indicators for biodiversity integration in agriculture and fisheries, etc.

Fact 5: Implementation of EU environmental law remains an issue

Progress has been made on the integration of biodiversity into EU environmental law.

- **Agriculture:** Recent developments in the common agricultural policy (CAP) should help mitigate the damaging trends of intensification and of abandonment of high-nature-value farmland. The IRENA project, launched in 2002, has produced a set of 35 agri-environment indicators. They will help transform data about the interaction between human activities and the state of the environment into decision-supporting information, and thus make for better informed policy-making.
- **Fisheries:** Considerable progress has been made in the integration of biodiversity concerns in the common fisheries policy (CFP). This policy was reformed in 2002, after having failed to deliver fully both on preserving fish stocks and on ensuring the viability of the fisheries sector. The old short-term (annual) decision-making approach has been replaced by multiannual recovery plans for those stocks that are in danger of collapsing and multiannual management plans for healthy stocks. The new policy aims to reduce the size of the fishing fleet and to promote environment-friendly fishing methods.
- **Research:** Under the sixth EU research framework programme (2002–06), European research in the field of biodiversity is directed towards assessing and forecasting changes in biodiversity and understanding the dynamics of ecosystems, particularly marine ecosystems. In addition, the relationship with society and the economy are being investigated to understand what options are available to mitigate any harmful effects and to assess possible impacts on human health and society. Through this research, better risk assessments can be made and biodiversity and ecosystems can be managed, conserved and rehabilitated in a sustainable manner for future generations.

However, 38 % of the cases opened by the European Commission for bad implementation of EU law in the area of environment relate to nature protection.

Some new EU legal instruments offer considerable promise for the conservation and sustainable use of biodiversity. For example:

- the environmental liability directive (due to be transposed into the national legislation of EU Member States by 30 April 2007), which implements the 'polluter pays' principle and covers damage to species and natural habitats protected under the 1992 habitats and 1979 birds directives;
- the strategic environmental assessment directive (the transposition deadline was 21 July 2004), which provides for assessment of the environmental impacts of certain programmes and plans;

LIFE — EU funding for Natura 2000

Limited but effective co-financing of Natura 2000 has been provided through the LIFE-Nature fund. For 2005–06, LIFE has a budget of around EUR 150 million a year, and almost half of this is earmarked for nature protection.

From 2007, a new LIFE+ programme has been proposed, while EU rural and development funds should offer significantly more finance for the management of Natura sites.



Bloody cranebill — a typical species of limestone pavements, a priority habitat type under EU legislation.



Cara Caretta — a marine turtle highly sensitive to disturbances of beaches where nesting occurs.



Toad — recent assessments of amphibians show that a significant percentage is threatened by extinction.



Little egret — formerly persecuted, is benefitting from full protection and conservation action under the EU Birds Directive. It is expanding its range Northwards, although the role of climate change in this has still to be ascertained.

The message from Malahide: 18 priority objectives and concrete targets

More than 200 stakeholder representatives from the 25 EU countries and from various NGOs agreed in May 2004 at Malahide, Ireland, on 18 priority objectives and concrete targets on which the European institutions, Member States and civil society can work together towards reaching the EU target to stop the loss of biodiversity by 2010. The importance of the 'message' was subsequently acknowledged by the EU's environment ministers.

The main point was: we cannot reach the 2010 target without substantially reinforced efforts and the pulling together of all key players on the agreed set of priorities. These priorities include: direct actions for priority sites and species; better integration of biodiversity needs into broader environmental policy such as strategic environmental assessment and environmental impact assessment; better integration into key sectors such as agriculture, fisheries, regional development, transport and energy; and better integration of biodiversity concerns into economic and development cooperation, trade, and international governance towards meeting the global commitment.



Corncrake — globally threatened by farming systems.

- the water framework directive from 2000, which has established an EU framework for the protection of all water bodies in the EU in order to prevent and reduce pollution, promote sustainable water use, protect the aquatic environment, improve the status of aquatic ecosystems and mitigate the effects of floods and droughts; and
- provisions for access to environmental information and public participation and access to justice in environmental matters (ratification by the EU of the Aarhus international convention; transposition deadline was 14 February 2005).

Currently, the European Commission is finalising seven thematic strategies on soil protection, protection and conservation of the marine environment, the sustainable use of pesticides, air pollution, the urban environment, sustainable use and management of resources, and waste prevention and recycling, offering opportunities for further integration of biodiversity concerns. These strategies, which fall under the sixth environment action programme, deal with complex themes that deserve a holistic and long-term (20–25 years) approach, rather than single pollutants or specific economic activities.

Fact 6: The EU has committed itself to halting the loss of biodiversity by 2010

At the UN World Summit on Sustainable Development, at Johannesburg in 2002, governments committed themselves to significantly **reducing** the rate of biodiversity loss by 2010. The EU has committed itself to **halting** the loss of biodiversity in the EU by 2010.

Beyond these commitments, EU Heads of State or Government have endorsed the EU sustainable development strategy, which further requires the EU to 'protect and restore habitats and natural systems'. This requirement to 'restore' recognises that much of Europe's biodiversity is in a severely depleted state and that halting loss alone is not sufficient.

In view of these commitments, the European Commission has undertaken a year-long consultative assessment of implementation, effectiveness and appropriateness of the biodiversity strategy and the biodiversity action plans. This review culminated in the Malahide conference in Ireland in 2004, which resulted in an unprecedented degree of consensus on priority objectives and related targets towards achieving the 2010 commitments. The European Commission will make recommendations in a forthcoming biodiversity communication for a prioritised set of measures — as the next steps in the battle to halt biodiversity decline.

Further reading

- **European Commission nature and biodiversity website**
<http://europa.eu.int/comm/environment/nature/home.htm>
- **Natura 2000 newsletter**
http://europa.eu.int/comm/environment/nature/nature_conservation/useful_info/newsletter_natura/index_en.htm
- **EU biodiversity strategy**
<http://europa.eu.int/comm/environment/docum/9842sm.htm>
- **Message from Malahide**
Report of the Malahide Conference
http://biodiversity-chm.eea.eu.int/convention/cbd_ec/F1067953781

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