The EU Biodiversity Strategy to 2020





Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number (*):

00 800 6 7 8 9 10 11

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed

More information on the European Union is available on the Internet (http://europa.eu)

Cataloguing data can be found at the end of this publication

Luxembourg: Publications Office of the European Union, 2011

ISBN 978-92-79-20762-4 doi: 10.2779/39229 © European Union, 2011 Reproduction is authorised provided the source is acknowledged *Printed in Belgium*

PRINTED ON RECYCLED PAPER THAT HAS BEEN AWARDED THE EU ECO-LABEL FOR GRAPHIC PAPER (HTTP://EC.EUROPA.EU/ECOLABEL)

Contents

| Foreword | 4 |
|--------------------------------------------------------------------------------|----|
| The EU 2020 Biodiversity Strategy | 5 |
| Introduction | 7 |
| The Six Targets of the Biodiversity Strategy | 11 |
| TARGET 1 Fully implement the Birds and Habitats Directives | |
| TARGET 2 Maintain and restore ecosystems and their services | 14 |
| TARGET 3 Increase the contribution of agriculture and forestry to biodiversity | 16 |
| TARGET 4 Ensure the sustainable use of fisheries resources | 18 |
| TARGET 5 Combat Invasive Alien Species | 20 |
| TARGET 6 Step-up action to tackle the global biodiversity crisis | 21 |
| Implementation of the EU 2020 Biodiversity Strategy | |
| Further reading | 27 |

Foreword by Commissioner Potočnik

Biodiversity – the variety of life on the planet – is essential for our economy and for our well-being. But ever greater pressure on this most precious natural resource means that we now find ourselves at a turning point, where we risk losing many of the vital services we depend upon. Conserving biodiversity is not just about protecting species and habitats for their own sake. It is also about maintaining nature's capacity to deliver the goods and services that we all need, and whose loss comes at a high price.

In May 2011, the European Union adopted a new strategy to halt biodiversity loss in the EU, restore ecosystems where possible, and step up efforts to avert global biodiversity loss. The strategy is in line with the commitments made by EU leaders in March 2010 and the international commitments adopted by 193 countries, including the EU and all its Member States, in the conference of the Parties to the Convention on Biological Diversity in Nagoya, Japan, in 2010.



The new biodiversity strategy is built around six measurable targets that focus on the main drivers of biodiversity loss. Each target is accompanied by a corresponding set of actions. The main challenges ahead include the full and efficient implementation of nature protection legislation – especially the effective management and restoration of areas of high biodiversity value in Natura 2000 – tackling invasive alien species and protecting ecosystem services.

Biodiversity policies will also need to be integrated to sectoral policies and be taken into account in wider policy concerns. This is why increasing the contribution of fisheries, agricultural and forestry policies to protecting biodiversity will be key to its success. Efforts have already been made in that direction by making the biodiversity strategy an integral part of Europe's wider 2020 Strategy for smart, inclusive and sustainable growth. The new strategy also fully acknowledges the economic value of ecosystem services and the need to restore them for the benefit of the economy.

Biodiversity loss is one of the main environmental challenges facing the planet. With this new strategy, the EU is striving to ensure that its natural capital is managed sustainably for the benefit of future generations. Biodiversity has been one of my top priorities since taking up office and I will do all in my power to make sure that the ambitious targets set in the new strategy are reached. It is a pledge I will stand behind – we cannot afford to miss them.

The EU 2020 Biodiversity Strategy

The Mediterranean – a global biodiversity hotspot



Sand dune habitats are under increasing threat in the EU

The 2050 vision

By 2050, European Union biodiversity and the ecosystem services it provides – its natural capital – are protected, valued and appropriately restored for biodiversity's intrinsic value and for their essential contribution to human well-being and economic prosperity, and so that catastrophic changes caused by the loss of biodiversity are avoided.

2020 headline target

Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss.

Introduction

The EU Biodiversity Strategy to 2020

On 3 May 2011, the European Commission adopted a new strategy to halt the loss of biodiversity and improve the state of Europe's species, habitats, ecosystems and the services they provide over the next decade, while stepping up the EU's contribution to averting global biodiversity loss. It focuses on six major targets to address the main pressures on nature and ecosystem services in the EU and beyond, and lays down the policy foundations for EU-level action over the next ten years.

A strong political mandate

The strategy responds to two important political mandates adopted by the 27 European Heads of State in 2010. The first mandate stems from the conclusion that the current EU biodiversity policy was not achieving its targets, despite a number of major successes in some areas. The EU leaders therefore decided to adopt a new long-term vision and headline target to give impetus to redoubling efforts to conserve Europe's increasingly threatened biodiversity.

The second mandate results from international commitments which the EU and all its Member States signed up to at the biodiversity summit in Nagoya, Japan in October 2010. At that meeting, 193 Parties to the Convention on Biological Diversity adopted a series of landmark agreements. As a Party to the Convention, the EU is required to bring its own biodiversity policy into line with these international commitments.

New focus on ecosystem services

The 2020 Biodiversity Strategy follows on from the 2006 EU Biodiversity Action Plan, learning lessons from its implementation and raising the level of ambition for 2020. Consequently, in addition to halting the loss of biodiversity, the new strategy also highlights, for the first time, the immense value of ecosystem services and the urgent need to maintain and restore these for the benefit of both nature and society.

Although action to halt biodiversity loss requires money, the cost of inaction is expected to be even higher. Biodiversity loss is in fact very costly for society, particularly for sectors that depend heavily on ecosystem services. Many farmers, for instance, depend on insect pollination for their harvests. Within the EU as a whole, the estimated economic value of insect pollination is €15 billion a year.



Flower-rich grasslands and large blue butterfly – both protected under the EU Habitats Directive



The State of Europe's Biodiversity in 2010

In 2010 the European Environment Agency (EEA), in collaboration with the European Commission, produced an EU Biodiversity Baseline which summarises the latest information on the status and trends of biodiversity and ecosystem components in Europe. This baseline, which is based on a series of indicators, provides a reference point for measuring changes in the state of Europe's biodiversity over the next ten years.

By 2020, a set of biodiversity indicators should help determine whether there has been an overall improvement in the state of Europe's biodiversity, in particular whether the following has been achieved:

• A reduction in the number of species threatened with extinction. Currently almost 25% of European animal species face the risk of extinction.

- An increase in the number of species and habitat types protected under EU nature legislation that are in favourable conservation status. At present only 17% of assessed habitats and species are in a favourable conservation status.
- An improvement in the state of ecosystems and the services they provide. Most of Europe's ecosystems are now assessed to be degraded.
- A strengthening of Europe's green infrastructure. Today, nearly 30% of the EU-27 territory is considered to be highly to moderately fragmented.
- A decline in the over-exploitation of natural resources. Europeans currently consume more than twice what the EU's land and sea can deliver in terms of natural resources.

| Group/IUCN | Species (%) within the EU-27 threatened with | Natura 2000 |
|--------------------------|----------------------------------------------------|-----------------------------------------------------------|
| category | extinction | Areas belonging to both Directives Date from January 2011 |
| Mammals – marine | 25% | Azores |
| Mammals – terrestrial | 15% | |
| Birds | 12% | Sus and a sub- |
| Amphibians | 22% | Madera |
| Reptiles | 21% | |
| Dragonflies | 16% | E. The T. |
| Butterflies | 7% | Canary Islands |

Six targets for 2020

The EU strategy is built around six mutually supportive and inter-dependent targets which address the main drivers of biodiversity loss. They aim to reduce key pressures on nature and ecosystem services in the EU by stepping up efforts to fully implement existing EU nature legislation, anchoring biodiversity objectives into key sectoral policies, and closing important policy gaps. Global aspects are also addressed to ensure the EU contributes fully to implementing international biodiversity commitments.

The six targets covered by the EU strategy focus on:

- 1. The full implementation of the EU nature legislation;
- 2. Better protection and restoration of ecosystems and the services they provide, and greater use of green infrastructure;
- 3. More sustainable agriculture and forestry;
- 4. Better management of EU fish stocks and more sustainable fisheries;
- 5. Tighter controls on Invasive Alien Species; and
- 6. A greater EU contribution to averting global biodiversity loss.

Each target is accompanied by a set of focused, time-bound actions to ensure these ambitions are fully realised. The strategy is also underpinned by an EU 2010 baseline on the state of biodiversity and ecosystems in Europe. This baseline provides a reference point for monitoring and measuring progress over the next ten years and will help assess whether the EU is on track towards meeting the biodiversity targets for 2020.

Extensive consultation

Before its adoption, the Biodiversity Strategy underwent extensive consultation with key stakeholders, Member States and the general public. This not only ensured a transparent decision-making process, but also helped to build interest and support for the strategy amongst a wide range of different sectors of society.

It is clear that biodiversity conservation cannot be achieved without the widespread engagement of society as a whole. The active involvement of stakeholders, key policy sectors and civil society will therefore be fundamental to the success of the new 2020 Biodiversity Strategy.



The estimated economic value of insect pollination within the EU is €15 billion a year



Structure of the EU 2020 Biodiversity Strategy

2050 VISION

2020 headline target

halt biodiversity loss - restore ecosystem services - global contribution

SIX TARGETS



The Six Targets of the 2020 Biodiversity Strategy

Farming practices have a major influence on Europe's biodiversity

Coordinated action to save Europe's most threatened biodiversity

The first target focuses on ensuring the full and timely implementation of the Habitats and Birds Directives. These two Directives are the cornerstones of the EU's biodiversity policy, enabling all 27 EU Member States to work together, within the same legal framework, to conserve Europe's most endangered and valuable species and habitats across their entire natural range within the EU.

They require Member States to designate and manage core areas for the conservation of around 2000 rare and threatened species and habitat types deemed to be of EU importance in view of their vulnerability. These sites, of which there are now 26,000, make up the Natura 2000 Network. The Directives also require Member States to set up a general system of protection for all wild bird species in the EU and for other threatened species listed in the Habitats Directive.

Together, these measures are designed to ensure that the species and habitats they aim to protect are maintained and restored to a favourable conservation status, or analogous state for birds, across their natural range within the EU. The overall objective of the two Directives is not simply to prevent extinction. Instead, it is defined in positive terms, oriented towards a favourable situation which needs to be defined, reached and maintained.

Currently, only 17% of the habitat types and species protected under the Habitats Directive show a favourable conservation status at the EU-biogeographical level, the majority being in an unfavourable-inadequate or unfavourable-bad state. Only 52% of the European bird species are deemed to be in a secure condition at present.

Achieving a favourable conservation status

The new Biodiversity Strategy aim is to achieve a significant and measurable improvement in the conservation status of species and habitats protected under the two nature Directives. Having such a time-bound quantified target will help to speed up implementation. Thus, by 2020, 34% of the habitats and 26% of the species should either have reached a favourable conservation status or shown a significant improvement in their status (e.g. from a bad status to an inadequate one). Similarly for birds, the aim is for 80% of bird species to be either secure or improving by 2020.

The Strategy also pays particular attention to ensuring the effective management of Natura 2000 sites. It calls in particular for the establishment and timely implementation of site management plans and the further integration of species and habitat management requirements into key land and water use policies wherever possible.

Other specific actions which have been identified to achieve this target include:

- the completion of the Natura 2000 Network, especially in the marine environment;
- the provision of adequate financing for the conservation measures required for Natura 2000 sites at both EU and national/regional level;
- the integration of species and habitat protection and management requirements into key land and water policies, both within and outside Natura 2000;
- the promotion and sharing of experience, good practice and crossborder collaboration on the management of Natura 2000; and
- increased cooperation with key sectors and stakeholder groups to improve the enforcement of the two directives.

The EU Natura 2000 Network protects Europe's rarest and most threatened species, over 26,000 sites have been designated so far across the EU



Target 1 Fully implement the Birds and Habitats Directives

To halt the deterioration in the status of all species and habitats covered by EU nature legislation and achieve a significant and measurable improvement in their status so that, by 2020, compared to current assessments:

- 100% more habitat assessments and 50% more species assessments under the Habitats Directive show an improved conservation status; and
- 50% more species assessments under the Birds Directive show a secure or improved status.

Action 1 Complete the establishment of the Natura 2000 Network and ensure good management

- 1a) Member States and the Commission will ensure that the phase to establish Natura 2000, including in the marine environment, is largely complete by 2012.
- 1b) Member States and the Commission will further integrate species and habitat protection and management requirements into key land and water use policies, both within and beyond Natura 2000 areas.
- 1c) Member States will ensure that management plans or equivalent instruments which set out conservation and restoration measures are developed and implemented in a timely manner for all Natura 2000 sites.
- 1d) The Commission, together with Member States, will establish by 2012 a process to promote the sharing of experience, good practice and cross-border collaboration on the management of Natura 2000, within the biogeographical frameworks set out in the Habitats Directive.

Action 2 Ensure adequate financing of Natura 2000 sites

2) The Commission and Member States will provide the necessary funds and incentives for Natura 2000, including through EUfunding instruments, under the next Multi-annual Financial Framework. The Commission will set out its views in 2011 on how Natura 2000 will be financed under the next Multi-annual Financial Framework.

Action 3 Increase stakeholder awareness and involvement and improve enforcement

- 3a) The Commission, together with Member States, will develop and launch a major communication campaign on Natura 2000 by 2013.
- 3b) The Commission and Member States will improve cooperation with key sectors and continue to develop guidance documents to improve their understanding of the requirements of EU nature legislation and its value in promoting economic development.
- 3c) The Commission and Member States will facilitate enforcement of the nature directives by providing specific training programmes on Natura 2000 for judges and public prosecutors, and by developing better compliance promotion capacities.

Action 4 Improve and streamline monitoring and reporting

- 4a) The Commission, together with Member States, will develop by 2012 a new EU bird reporting system, further develop the reporting system under Article 17 of the Habitats Directive and improve the flow, accessibility and relevance of Natura 2000 data.
- 4b) The Commission will create a dedicated ICT tool as part of the Biodiversity Information System for Europe to improve the availability and use of data by 2012.

The new Biodiversity Strategy aims for a significant and measurable improvement in the conservation status of protected species and habitats



A strategic approach to restoring Europe's ecosystems

The second target focuses on maintaining and enhancing ecosystem services, and restoring degraded ecosystems across the EU, in line with the global goal set in 2010 to restore at least 15% of degraded ecosystems.

Healthy ecosystems provide a stream of goods and services vital to society, such as food, fibres, clean water, healthy soils, protection against floods and erosion. Unfortunately, many of Europe's ecosystems are now heavily degraded which drastically reduces their ability to deliver these valuable services. The problem is further exacerbated by the fact that these services are often public goods, and their economic value is not recognised by the markets; consequently their true economic worth is not reflected in society's decision-making and accounts.

The study on The Economics of Ecosystems and Biodiversity (TEEB), co-financed by the Commission, provides real-world examples of the cost of biodiversity loss. For example, the annual loss of opportunity due to the current over-exploitation of global fisheries is estimated at US\$ 50 billion. On the other hand, global business opportunities from investing in biodiversity could be worth up to US\$ 6 trillion by 2050.

The strategy proposes that a strategic framework be developed by Member States, assisted by the Commission, to set priorities for ecosystem restoration at EU, national and subnational level by 2014. It will be supported by work to map and assess the state of ecosystems and their services, and to better integrate the value of ecosystem services into national and EU accounting and reporting systems.

Promoting a European green infrastructure

The strategy also calls for the development of a green infrastructure for Europe. The EU is one of the most fragmented continents in the world. Thirty percent of the land is moderately to highly fragmented due to urban sprawl, infrastructure developments and changing land uses. This not only affects biodiversity but also undermines the many services that healthy ecosystems provide society, such as a clean water supply, protection against floods and erosion etc.

Building a green infrastructure can help overcome many of these challenges. It can reconnect fragmented natural areas and improve their functional connectivity within the wider countryside. It can also encourage a better use of naturebased approaches to tackle climate change and to improve resource efficiency, for instance through more integrated spatial planning and the development of multifunctional zones that are capable of delivering benefits to both biodiversity, the land user, and to society at large. The Commission intends, therefore, to put forward a new strategy on an EU-wide green infrastructure by 2012.

Ensuring no net loss of biodiversity and ecosystem services

Finally, action under this target will also seek to promote a wider no net loss approach to biodiversity and ecosystem services. This will be achieved by 'biodiversity-proofing' EU-funded projects, plans and programmes wherever possible, and by ensuring that any unavoidable residual impacts are compensated for or offset.

Healthy natural ecosystems provide a range of goods and services to society – such as cork oak, clean water and carbon storage, insect pollination



Target 2 Maintain and restore ecosystems and their services

By 2020, ecosystems and their services are maintained and enhanced by establishing green infrastructure and restoring at least 15% of degraded ecosystems.

Action 5 Improve knowledge of ecosystems and their services in the EU

5) Member States, with the assistance of the Commission, will map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.

Action 6 Set priorities to restore and promote the use of green infrastructure

6a) By 2014, Member States, with the assistance of the Commission, will develop a strategic framework to set priorities for ecosystem restoration at sub-national, national and EU level.

6b) The Commission will develop a Green Infrastructure Strategy by 2012 to promote the deployment of green infrastructure in the EU in urban and rural areas, including through incentives to encourage up-front investments in green infrastructure projects and the maintenance of ecosystem services, for example through better targeted use of EU funding streams and Public Private Partnerships.

Action 7 Ensure no net loss of biodiversity and ecosystem services

- 7a) In collaboration with the Member States, the Commission will develop a methodology for assessing the impact of EU-funded projects, plans and programmes on biodiversity by 2014.
- 7b) The Commission will carry out further work with a view to proposing by 2015 an initiative to ensure there is no net loss of ecosystems and their services (e.g. through compensation or offsetting schemes).

However, many of Europe's ecosystems are becoming degraded and fragmented which substantially reduces their ability to deliver these valuable services



Farming and forestry: a major influence

The third target focuses on improving the integration of biodiversity conservation into key policies for agriculture and forestry. These two sectors combined concern almost 72% of the land in the EU and play a major role in Europe's biodiversity.

Farming has been a major contributor to Europe's biodiversity, thanks to centuries of diverse farming traditions which have resulted in the wide range of agricultural landscapes we see today. However, as elsewhere in the world, farming practices have changed dramatically over the years. Many farms intensified their activities and became highly mechanised, whilst those who could not do so became increasingly marginalised and were sometimes forced to abandon their land, with equally devastating consequences for biodiversity.

Today, only 15–25% of Europe's once extensive high nature value farmland remains and only 7% of habitats and 3% of species protected by the Habitats Directive that depend on agricultural practices have a favourable conservation status. Farmland bird populations have also decreased by around 50% since 1980 but have since levelled off, whereas farmland butterfly populations have decreased by 70% since 1990 and show no sign of recovery.

The trend for Europe's forests is equally worrying. Most of the productive forests continue to be managed as commercial plantations with only limited biodiversity value. Only 21% of forest habitats and 15% of forest species protected under the Habitats Directive have a favourable conservation status and just 1–3% of Europe's forests are still in an entirely natural and unmanaged state.

Integrating biodiversity needs into the CAP

The European Commission and Member States have already made efforts to integrate biodiversity into the Common Agricultural Policy. However, despite the benefits that biodiversity and ecosystem services bring for all concerned, it will be important to step up these efforts for greater integration.

The current reform of the CAP, and the new Multi-annual Financial Framework for 2014–2020, present important opportunities to further enhance synergies and maximise coherence between the objectives of biodiversity conservation and those of farming and forestry.

The actions foreseen in the biodiversity strategy are designed to tap into these opportunities as much as possible in order to increase the positive contribution that agriculture and forestry can make to maintaining and enhancing Europe's biodiversity while remaining viable businesses. In particular, it is foreseen that direct payments will be adjusted to better reward the delivery of environmental public goods which go beyond cross-compliance and the potential for rural development measures to also deliver biodiversity conservation objectives will be improved.

In the case of forestry, the actions aim to encourage forest holders to adopt forest management plans that integrate biodiversity measures, and foster innovative mechanisms to finance the maintenance and restoration of ecosystem services that are generated by sustainably managed multifunctional forests.

Creating positive incentives for farmers and forest holders to deliver biodiversity objectives is the backbone to achieving this target. Particular attention will therefore be paid to engaging stakeholders in the delivery of this target.



Forestry and farming activities cover 72% of the EU territory

Target 3 Increase the contribution of agriculture and forestry to maintaining and enhancing biodiversity

3A) Agriculture: By 2020, maximise areas under agriculture across grasslands, arable land and permanent crops that are covered by biodiversity-related measures under the CAP so as to ensure the conservation of biodiversity and to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by agriculture and in the provision of ecosystem services as compared to the EU2010 Baseline, thus contributing to enhance sustainable management.

3B) Forests: By 2020, Forest Management Plans or equivalent instruments, in line with Sustainable Forest Management (SFM), are in place for all forests that are publicly owned and for forest holdings above a certain size (to be defined by the Member States or regions and communicated in their Rural Development Programmes) that receive funding under the EU Rural Development Policy so as to bring about a measurable improvement in the conservation status of species and habitats that depend on or are affected by forestry and in the provision of related ecosystem services as compared to the EU 2010 Baseline.

Action 8 Enhance direct payments for environmental public goods in the EU Common Agricultural Policy

- 8a) The Commission will propose that CAP direct payments will reward the delivery of environmental public goods that go beyond cross-compliance (e.g. permanent pasture, green cover, crop rotation, ecological set-aside, Natura 2000).
- 8b) The Commission will propose to improve and simplify the GAEC (Good Agricultural and Environmental Conditions) cross-compliance standards and consider including the Water Framework Directive within the scope of cross-compliance once the Directive has been implemented and the operational obligations for farmers have been identified in order to improve the state of aquatic ecosystems in rural areas.

Action 9 Better target Rural Development to biodiversity conservation

9a) The Commission and Member States will integrate quantified biodiversity targets into Rural Development strategies and programmes, tailoring action to regional and local needs.

9b) The Commission and Member States will establish mechanisms to facilitate collaboration among farmers and foresters to achieve continuity of landscape features, protection of genetic resources and other cooperation mechanisms to protect biodiversity.

Action 10 Conserve Europe's agricultural genetic diversity

10) The Commission and Member States will encourage the uptake of agri-environmental measures to support genetic diversity in agriculture and explore the scope for developing a strategy for the conservation of genetic diversity.

Action 11 Encourage forest holders to protect and enhance forest biodiversity

- 11a) Member States and the Commission will encourage the adoption of Management Plans, *inter alia* through use of rural development measures and the LIFE+ programme.
- 11b) Member States and the Commission will foster innovative mechanisms (e.g. Payments for Ecosystem Services) to finance the maintenance and restoration of ecosystem services provided by multifunctional forests.

Action 12 Integrate biodiversity measures in forest management plans

- 12) Member States will ensure that forest management plans or equivalent instruments include as many of the following measures as possible:
 - maintain optimal levels of deadwood, taking into account regional variations such as fire risk or potential insect outbreaks;
 - preserve wilderness areas;
 - ecosystem-based measures to increase the resilience of forests against fires as part of forest fire prevention schemes, in line with activities carried out in the European Forest Fire Information System (EFFIS);
 - specific measures developed for Natura 2000 forest sites;
 - ensuring that afforestation is carried out in accordance with the Pan-European Operational Level Guidelines for SFM, in particular as regards the diversity of species, and climate change adaptation needs.

European seas are heavily overfished

The fourth target aims to combat overfishing and ensure a more sustainable ecosystem-based management of fisheries resources.

Despite important reforms to the EU's Common Fisheries Policy in 2002, most of Europe's commercial fish stocks remain over-exploited. Vessels are catching more fish than can be safely reproduced, thus exhausting individual fish stocks and threatening the marine ecosystem.

Today, on average three out of four stocks are overfished, varying from as much as 82% in the Mediterranean to 63% in the Atlantic. The rate of discards (the dumping of dead, unwanted, undersized fish and other marine organisms) also remains unacceptably high, representing up to 20–60% of the total catch weight in certain fisheries and causing untold damage to the marine ecosystems.

Yet, despite these warning signs, decisions on catch levels remain dominated by short-term thinking, and the catching capacity of the European fleet remains more than twice what is needed to harvest our own fish stocks sustainably.

This is not only a problem for the marine ecosystem but is also bad news for the fishermen themselves, and for all the associated industries which depend upon the wild capture sector. Shrinking catches, rising costs and the need to travel further and fish longer to catch fewer and often less valuable fish mean that, in some sectors of the industry, many boats now operate at, or close to, a loss.

Taking action to combat overfishing and improve marine biodiversity

In recognition of the important relationship between commercial fisheries and the health of Europe's marine ecosystems, the new strategy places special emphasis on improving the management of fished stocks and ensuring that these are restored to healthier, more productive, levels.

The latest reform of the EU Common Fisheries Policy (CFP) proposed by the European Commission in July 2011, and the new Common Fisheries Fund (2014–2020), will be CFP-aims to put an end to the depletion of fish stocks and instead to promote a more coherent ecosystem-based approach for all fisheries. In particular it calls for long-term management plans to be developed for all major fish stocks in line with the principle of 'maximum sustainable yield' (MSY). This is defined as the highest catch that can be safely taken year after year whilst maintaining the fish population size at maximum productivity.

Action is also foreseen to eliminate adverse impacts of commercial fishing on other marine species and habitats, and entire ecosystems, for instance by phasing out of discards and by providing financial incentives for fishermen to adapt their fishing activities. The latter will be designed to encourage fishermen to use more selective fishing gear, diversify their activities and play a more active role in helping to manage and conserve Europe's marine biodiversity.

The new Biodiversity Strategy will also support the implementation of the Marine Strategy Framework Directive which aims to bring all EU marine waters into a good environmental status by 2020.

Most fish stocks in the EU are overfished and the rate of discards remains unacceptably high, causing untold damage to marine ecosystems



Target 4 Ensure the sustainable use of fisheries resources

Achieve Maximum Sustainable Yield (MSY) by 2015. Achieve a population age and size distribution indicative of a healthy stock, through fisheries management with no significant adverse impacts on other stocks, species and ecosystems, in support of achieving Good Environmental Status by 2020, as required under the Marine Strategy Framework Directive.

Action 13 Improve the management of fished stocks

- 13a) The Commission and Member States will maintain and restore fish stocks to levels that can produce MSY in all areas in which EU fish fleets operate, including areas regulated by Regional Fisheries Management Organisations, and the waters of third countries with which the EU has concluded Fisheries Partnership Agreements.
- 13b) The Commission and Member States will develop and implement under the CFP long-term management plans with harvest control rules based on the MSY approach. These plans should be designed to respond to specific time-related targets and be based on scientific advice and sustainability principles.
- 13c) The Commission and Member States will significantly step up their work to collect data to support implementation of MSY. Once this objective is attained, scientific advice will be sought to incorporate ecological considerations in the definition of MSY by 2020.

Action 14 Eliminate adverse impacts on fish stocks, species, habitats and ecosystems

- 14a) The EU will design measures to gradually eliminate discards, to avoid the by-catch of unwanted species and to preserve vulnerable marine ecosystems in accordance with EU legislation and international obligations.
- 14b) The Commission and Member States will support the implementation of the Marine Strategy Framework Directive, including through providing financial incentives through the future financial instruments for fisheries and maritime policy for marine protected areas (including Natura 2000 areas and those established by international or regional agreements). This could include restoring marine ecosystems, adapting fishing activities and promoting the involvement of the sector in alternative activities, such as eco-tourism, monitoring and managing marine biodiversity, and combating marine litter.

The 2020 Biodiversiy Strategy aims to make fishing practices more sustainable and less damaging to wildlife



Tackling the problem of Invasive Alien Species

The fifth target aims to ensure there is a comprehensive and coordinated EU-level response to prevent and control the introduction and spread of harmful Invasive Alien Species (IAS) across the EU. Invasive Alien Species are considered to be a major threat to biodiversity, second only to habitat loss.

Alien species are plants, animals, fungi and micro-organisms that have been transported across ecological barriers and become established in areas outside their natural range. Not all alien species are harmful, but many can become invasive, spreading rapidly across the natural environment, displacing and out-competing native species. As elsewhere in the world, the number of Invasive Alien Species in Europe has grown substantially in recent years.

Invasive Alien Species are also of major economic and social concern. It has been estimated that the costs associated with Invasive Alien Species in Europe amount to some €12.5 billion annually, in terms of health care and animal health costs, crop yield losses, fish stock losses, damage to infrastructure, damage to the navigability of rivers, damage to protected species and so forth.

Under the new Biodiversity Strategy the Commission will propose a dedicated legislative instrument by 2012 to address common challenges associated with IAS in the EU. Particular attention will be paid to establishing an EU-wide early warning system and rapid response mechanism to promptly detect and control the spread of the Invasive Alien Species, and share good practices amongst Member States in their eradication.

Target 5 Combat Invasive Alien Species

By 2020, Invasive Alien Species (IAS) and their pathways are identified and prioritised, priority species are controlled or eradicated, and pathways are managed to prevent the introduction and establishment of new IAS.

Action 15 Strengthen the EU Plant and Animal Health Regimes

 The Commission will integrate additional biodiversity concerns into the Plant and Animal Health Regimes by 2012.

Action 16 Establish a dedicated legislative instrument on Invasive Alien Species

16) The Commission will fill policy gaps in combating IAS by developing a dedicated legislative instrument by 2012.

Harlequin ladybirds and water hyacinth: both invasive alien species that have spread rapidly across the EU



Europe's role in global biodiversity

The last target focuses on the EU's contribution to global biodiversity conservation. The continuing loss of biodiversity around the world demands concerted international action.

Between 12% and 55% of selected vertebrate, invertebrate and plant groups are threatened with extinction. We continue to lose 13 million hectares of tropical rainforest each year, and already 20% of the world's tropical coral reefs have been lost, with an additional 50% at risk. The international community has also failed to achieve the global target agreed in 2002 of significantly reducing biodiversity loss worldwide by 2010.

As a strong supporter of the Convention on Biological Diversity (CBD), the EU is fully committed to helping combat biodiversity loss across the globe and to fulfilling its global commitments under the Convention.

As the world's biggest trader, Europe must also address the impact that its increasingly high consumption patterns are having on the rest of the planet. Europeans rely heavily on the import of a wide range of goods and resources from outside the EU: coffee, tea, bananas, vegetable oils, timber and fish etc. This increasing demand for imports can however encourage exporting countries to over-exploit their resources and deplete their biodiversity.

Supporting international commitments

The actions foreseen in the strategy aim not only to ensure the EU fulfils the commitments it made in Nagoya in 2010 and in other international fora, but also, as the world's biggest trading bloc, to reduce its own biodiversity footprint on the rest of the world and assist developing countries in their efforts to conserve biodiversity and ensure its sustainable use.

Actions foreseen under the strategy will in particular aim to:

- reduce the biodiversity impacts of EU consumption patterns;
- enhance the contribution of trade policy to conserving biodiversity, whilst eliminating as far as possible any negative impacts of EU trade agreements;
- 'biodiversity proof' EU development cooperation programmes and projects in order to minimise their negative impacts on biodiversity;
- provide the right market signals for biodiversity conservation, including work to reform, phase out and eliminate harmful subsidies at both EU and Member State level and to provide positive incentives for biodiversity conservation and sustainable use.

In addition, the EU will aim to mobilise additional resources for global biodiversity conservation from all possible sources, and propose legislation to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation so that the EU can ratify the Protocol as soon as possible.

Over 13 million hectares of tropical rainforest are still lost each year, and already 20% of the world's tropical coral reefs have disappeared



Target 6 Help avert global biodiversity loss

By 2020, the EU has stepped up its contribution to averting global biodiversity loss.

Action 17 Reduce indirect drivers of biodiversity loss

- 17a) Under the EU flagship initiative on resource efficiency, the EU will take measures (which may include demand and/or supply side measures) to reduce the biodiversity impacts of EU consumption patterns, particularly for resources that have significant negative effects on biodiversity.
- 17b) The Commission will enhance the contribution of trade policy to conserving biodiversity and address potential negative impacts by systematically including it as part of trade negotiations and dialogues with third countries, by identifying and evaluating potential impacts on biodiversity resulting from the liberalisation of trade and investment through exante Trade Sustainability Impact Assessments and ex-post evaluations, and seek to include in all new trade agreements a chapter on sustainable development providing for substantial environmental provisions of importance in the trade context including on biodiversity goals.
- 17c) The Commission will work with Member States and key stakeholders to provide the right market signals for biodiversity conservation, including work to reform, phase out and eliminate harmful subsidies at both EU and Member State level, and to provide positive incentives for biodiversity conservation and sustainable use.

Action 18 Mobilise additional resources for global biodiversity conservation

- 18a) The Commission and Member States will contribute their fair share to international efforts to significantly increase resources for global biodiversity as part of the international process aimed at estimating biodiversity funding needs and adopting resource mobilisation targets for biodiversity at the 10th Conference of the Parties to the Convention on Biological Diversity in 2012.
- 18b) The Commission will improve the effectiveness of EU funding for global biodiversity *inter alia* by supporting natural capital assessments in recipient countries and the development and/ or updating of National Biodiversity Strategies and Action Plans, and by improving coordination within the EU and with key non-EU donors in implementing biodiversity assistance/projects.

Action 19 'Biodiversity-proof' EU development cooperation

19) The Commission will continue to systematically screen its development cooperation action to minimise any negative impact on biodiversity, and undertake Strategic Environmental Assessments and/or Environmental Impact Assessments for actions likely to have significant effects on biodiversity.

Action 20 Regulate access to genetic resources and the fair and equitable sharing of benefits arising from their use

20) The Commission will propose legislation to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the European Union so that the EU can ratify the Protocol as soon as possible and by 2015 at the latest, as required by the global target.

As the world's biggest trader, Europe has a special responsibility for stemming the illegal trade in species and ensuring that the products it imports come from sustainable sources



Implementation of the EU 2020 Biodiversity Strategy

The Natura 2000 Network covers around 18% of the EU territory and protects the habitats of highly endangered species, such as the brown bear Ursus arctus



Achieving the EU 2020 biodiversity targets requires the full engagement of all sectors of society



Mobilising resources

Achieving the objectives of this strategy will depend on the availability and efficient use of financial resources. For some targets, the focus will be on ensuring a more effective takeup and redistribution of existing resources, whilst for others there will be a need to scale up present funding sources and promote new ones.

The Commission and Member States will pay particular attention to securing a better uptake and distribution of EU funds under the current and future Multi-annual Financial Framework for 2014–2020. This should be achieved by rationalising available resources and maximising the combined benefits of the different sources of funding, including funding for agriculture and rural development, fisheries, regional policy and climate change.

This will be especially important for the effective management of the Natura 2000 Network, which is estimated to require an annual investment of around €5.8 billion a year. To achieve this level of funding it is clear that a more strategic approach is needed. Such an approach will not only enable Member States to allocate the necessary resources at national and regional level but also to make better use of EU funds.

In these difficult economic times there will also be a need to examine ways of diversifying funding sources from public and private sources and of developing innovative approaches to funding, such as the use of Payments for Ecosystem Services (PES) which reward those who provide public ecosystem goods and services. The potential of biodiversity offsets to ensure no net loss of biodiversity and ecosystem services will also be explored.

Continuing support from the EU LIFE programme

The LIFE programme is the EU's funding instrument for the environment. Half the budget is dedicated to supporting good practice and demonstration projects that contribute to the implementation of the Birds and Habitats



projects that contribute to the implementation of the Birds and Habitats Directives and the Natura 2000 Network, as well as to wider biodiversity goals. Since 1992, over 1,100 nature conservation projects have been co-funded by the LIFE programme, representing a total expenditure of over €1.7 billion. These projects have made a significant contribution to improving the conservation status of numerous species and habitats protected by the two EU Nature Directives.

In view of the success of the LIFE+ programme (2007–2013) the Commission intends to propose a follow-up programme for the next budgetary period (2014–2020) in order to continue its support for key nature conservation, climate protection and other environmental actions.

Partnerships for biodiversity

Achieving the EU 2020 targets also requires the full engagement and commitment of a wide variety of other stakeholders. Particular efforts will therefore be made during the implementation of the new strategy to reinforce cooperation, and build effective long-lasting partnerships, with key sectors of business and society.

A number of key partnerships will be expanded and promoted to support this strategy. In particular the Commission will:

- further develop the EU Business and Biodiversity Platform, which brings together businesses from different sectors to share their experiences and best practices;
- continue working with other partners to publicise and implement the TEEB recommendations at EU level, and support work on valuation of biodiversity and ecosystem services in developing countries;
- further encourage collaboration between researchers and other stakeholders involved in spatial planning and land use management in implementing biodiversity strategies at all levels, ensuring coherence with relevant recommendations set out in the European Territorial Agenda;
- encourage the active involvement of civil society at all levels of implementation. Citizen science initiatives, for instance, are a valuable means of gathering high-quality data while mobilising citizens to get involved in biodiversity conservation activities;
- work with the outermost regions and overseas countries and territories through the BEST (Biodiversity and Ecosystem Services in Territories of European Overseas) initiative to promote biodiversity conservation and sustainable use;
- support ongoing efforts to improve collaboration, synergies and the establishment of common priorities with the biodiversity-related Conventions;
- reinforce its dialogue and cooperation on biodiversity with key partners, in particular candidate countries and potential candidates, to develop or adjust their policies to meet the 2020 biodiversity targets.

Monetising the value of ecosystem services is important to raise awareness of biodiversity values, and to ensure that they are reflected in decision-making at all levels. The Commission will continue working with other partners to publicise and implement the TEEB recommendations at EU level and support work on valuation of biodiversity and ecosystem services in developing countries.





Participatory planning and integrated management are vital for biodiversity conservation





Developing a common implementation framework

The Biodiversity Strategy underlines the need for close coordination between authorities at all levels – EU, national, sub-national – responsible for ensuring the implementation of the Strategy. For this purpose, the Commission will develop, with Member States, a Common Implementation Framework, involving also other key actors, sectors and institutions.

The Common Implementation Framework will be designed to:

- facilitate implementation of the EU 2020 Biodiversity Strategy by putting in place a clear and logical governance framework that is as efficient as possible;
- create common understanding and ownership for the implementation of the Biodiversity Strategy across all relevant policy areas by involving representatives from a wide range of services, ministries and institutions in implementation of the Strategy;
- ensure the involvement of all relevant stakeholders at the appropriate level of policy making, beyond the traditional biodiversity community. The scope of current stakeholder representation should be broadened.
- minimise duplication of effort and maximise synergies between efforts undertaken at different levels and by different actors and stakeholders; share information and best practice and address common challenges.

It will be further supported by an integrated framework for monitoring, assessing and reporting on the 2020 Strategy which will be used to monitor the progress made in achieving the targets of the strategy and improving the state of biodiversity in the EU. It will also enable adjustments to be made to the strategy in light of these findings and as new information becomes available.

New infohub for EU biodiversity

http://biodiversity.europa.eu/

A Biodiversity Information System for Europe (BISE) has been set up. This is the single point of access for consistent, up-to-date and peerreviewed information, data and knowledge on biodiversity in Europe.



Further reading

The EU Biodiversity Strategy to 2020 http://ec.europa.eu/environment/nature/biodiversity/comm2006/2020.htm

EU Vision and Headline Target

EU leaders endorsement 26 March 2010 http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/113591.pdf

2010 EU Biodiversity Baseline

http://www.eea.europa.eu/publications/eu-2010-biodiversity-baseline

The 2006 EU Biodiversity Action Plan and 2010 Assessment

http://ec.europa.eu/environment/nature/info/pubs/docs/2010_bap.pdf

Biodiversity Information System for Europe (BISE) www.biodiversity.europa.eu

Convention on Biological Diversity Outcome of COP 10 Meeting, Nagoya, Japan, October 2010 http://www.cbd.int/cop10/doc/

The Natura 2000 Network http://ec.europa.eu/environment/ nature/natura2000/index_en.htm

European Commission Nature and Biodiversity website

http://ec.europa.eu/environment/nature/index_en.htm

Photo credits

Cover irises ©i-Stockphoto; mountain walkers ©Roca/Shutterstock; bullfinch ©David Kjaer. Page 5 flower-rich grassland ©i-Stockphoto. Page 6 Sand dune ©i-Stockphoto. Page 7 flower-rich grassland ©Paul Hobson/naturepl.com; large blue butterfly ©Jim Asher. Page 8 flower-rich grassland ©Paul Hobson/naturepl.com; dolphin, brown bear ©i-Stockphoto; red-breasted goose ©David Kjaer; tree frog ©LIFE00 A 007055; turtle ©Naturepl.com; dragonfly ©Llaas van Haeringen: large blue butterfly ©Jim Asher. Page 9 beekeeper ©Kirsanov/Shutterstock: bumblebee on foxglove ©Stephen Dalton/ naturepl.com. Page 11 farmland ©Still Pictures. Page 12 red knot flock ©David Kjaer; nature tourism ©i-Stockphoto. Page 13 building a nature trail ©LIFE00_NAT_D_007039; otters ©David Kjaer; large copper ©Jim Asher. Page 14 bogland ©Kerstin Sundseth; orchard ©Nivellen77/Shutterstock: viaduct ©LianeM/Shutterstock. Page 15 mountain lake ©Xalanx/Shutterstock; cork oak ©Robert Paul van Beets/Shutterstock; nature tourism ©Lauku Celotājs. Page 16 forest ©i-Stockphoto; corncrake ©David Kjaer. Page 18 wasted fish

©Sarah Lelong/MarinePhotobank; turtle ©Peter Leahy / Shutterstock; illegal driftnet fishing ©Gavin Parsons/Marine Photobank. Page 19 sustainable fishing/Rock-a-nore fisheries ©MCS/Marine Photobank; nature tourism ©June Scheffel/ Shutterstock. Page 20 harlequin ladybirds © Peter Creed; water hyacinth ©i-Stockphoto. Page 21 deforestation ©i-Stockphoto; coral reef ©i-Stockphoto. Page 22 scarlet macaws/Fair Trade coffee/ harvesting coffee beans ©i-Stockphoto. Page 23 brown bear ©i-Stockphoto, Page 24 EU-LIFE project meeting ©LIFE04 NAT IT 000182; volunteer ©BBOWT/Amy Lewis; restoring a wetland ©LIFE project. Page 25 mountain walkers ©Roca/Shutterstock; marble quarry ©i-Stockphoto; volunteer ©BBOWT/Rachel Hudson. Page 26 EU biodiversity policy meeting ©European Commission; LIFE project site Portugal ©LIFE00 NAT P 007088; stakeholder dialogue ©LIFE02_NAT_E_008624; river restoration ©LIFE00_ NAT A 007069. Page 27 little owl ©David Kjaer; volunteers ©BBOWT/Tom Ryan; orchard fruits © Anna Subbotina/Shutterstock.







