Number 26 – July 2009

NATURA 2000

natura 2000

ISSN 1026-6151

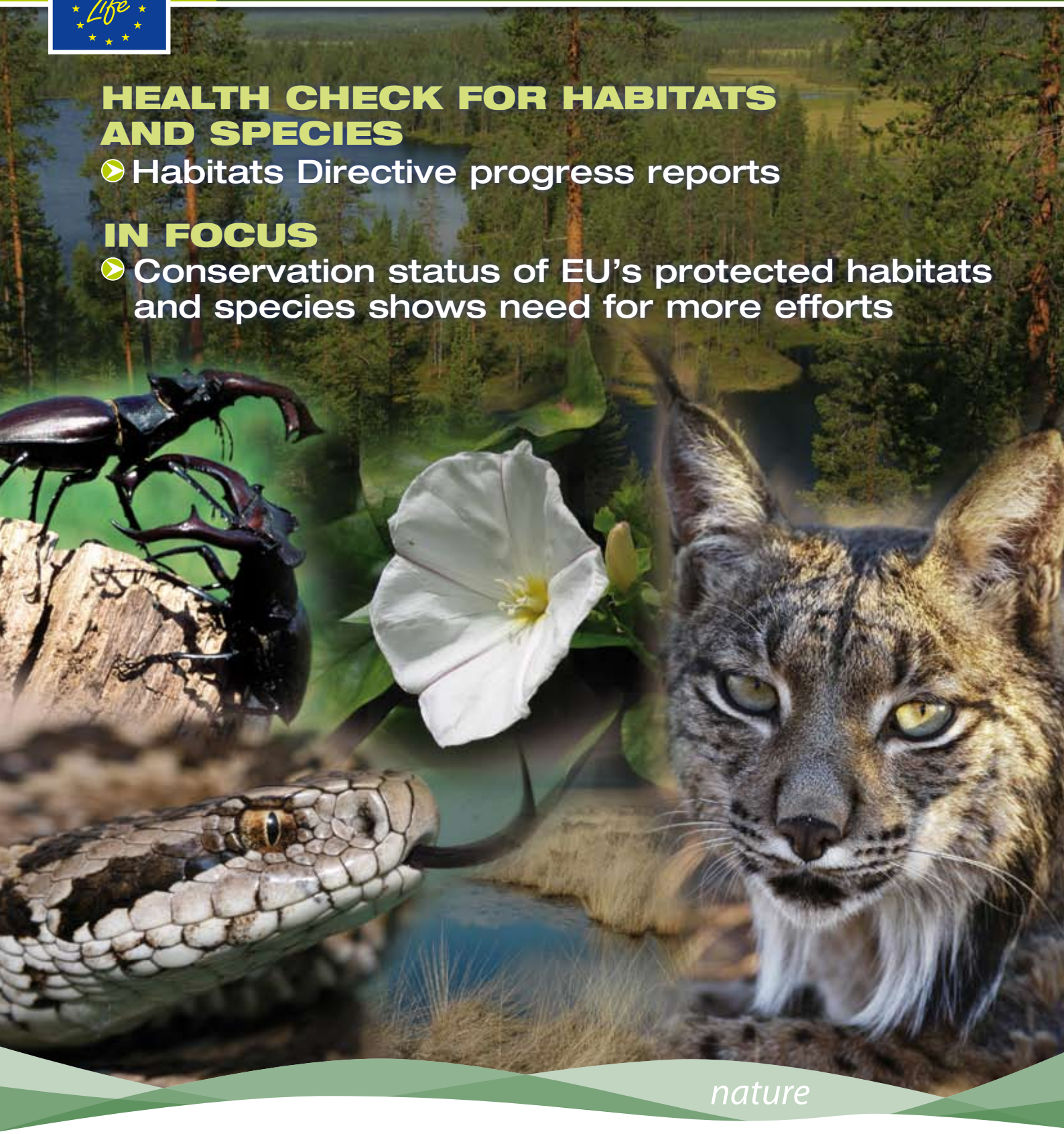
EUROPEAN COMMISSION DG ENV NATURE NEWSLETTER

HEALTH CHECK FOR HABITATS AND SPECIES

- Habitats Directive progress reports

IN FOCUS

- Conservation status of EU's protected habitats and species shows need for more efforts



nature

EUROPEAN COMMISSION

environment

Number 26 - July 2009

CONTENTS

The Natura 2000 Newsletter is produced by the LIFE and Nature & Biodiversity Units of the Environment Directorate General (DG ENV) of the European Commission.

Cover photos: Habitats Directive species (left to right) Lucanus cervus, Vipera ursinii, Convolvulus massonii, Lynx pardinus
Design: Daniel Renders

Theme of this issue:

HEALTH CHECK FOR HABITATS AND SPECIES

Editorial

Further efforts needed to restore our endangered habitats and species

Photo: LIFE99 NAT/IT/0006245

*Stag beetle (*Lucanus cervus*) assessed as 'unfavourable' in three biogeographical regions*

Achieving "favourable conservation status" for all habitats and species of Community interest is the ultimate objective of the Habitats Directive. More than 15 years since the adoption of the directive the first systematic assessment of the conservation status has been carried out in a collaborative effort between Member States and the European Commission.

Effective policy needs to be based on a reliable measure of the status and trends in biodiversity. The assessment was urgently needed to support the implementation work under the Habitats Directive. It is also a valuable contribution to understanding the extent to which the European Union is on track with its political objective of halting biodiversity loss in the EU by 2010.

First snap-shot

The results show that across the biogeographical and marine regions of Europe, only a small proportion of the habitats and species assessed have a favourable conservation status. It is important to remember that it often takes considerable time for restoration efforts to show a positive impact. For a variety of species and habitats that currently have unfavourable status, conservation action is already underway and positive trends have been reported. But the unavoidable conclusion it that we need to step up our efforts and increase the volume of conservation measures.

There are still important gaps in our knowledge, but this assessment is vitally important because it provides our first snap-shot of the health status of our habitats and species. The findings should be a wake-up call to show that business as usual is not working and that therefore we need to place a greater political priority on conservation actions.

Stavros Dimas
Environment Commissioner, European Commission

Conservation status of EU's protected habitats and species shows need for more efforts to implement Biodiversity Strategy

The first ever systematic assessment of the conservation status of Europe's most endangered habitats and species has been carried out by the Member States, as part of the regular reporting on the implementation of the EU Habitats Directive. The results, covering 2001-2006, show that only a small proportion of the habitats and species of Community interest are in a favourable conservation status. The findings highlight the critical importance of conservation actions at EU level, both in the establishment and development of the Natura 2000 network and beyond, and suggest the need to urgently intensify ecological restoration efforts both at national and at European levels.

In 2007, Member States delivered the first comprehensive information on the conservation status of the habitats and species of Community interest in so-called 'Article 17' reports, named after the article in the Habitats Directive that gave rise to them. The results[1] – compiled and assessed by the European Topic Centre on Biological Diversity (ETC/BD)[2] on behalf of the European Commission – indicate that overall, across the different biogeographical zones and marine regions of Europe, only 17% of habitats and species assessments show a favourable condition; while 18% of habitats and 31% of species assessments are classified as 'unknown' due to a lack of information (see figs 1 and 2).

1 The web-based Article 17 Technical Report (2001-2006) http://biodiversity.eionet.europa.eu/article17
2 One of the European Topic Centres of the European Environment Agency

Photo: LIFE03 NAT/IR/000107

*The conservation status of the otter (*Lutra lutra*) although 'unfavourable' is improving*

As the habitats and species listed in the annexes of the Habitats Directive were chosen largely because they were known to be threatened – these results come as no surprise. They highlight the challenge we face to halt the loss of biodiversity by 2010, as European governments have committed themselves to. This major first evaluation effort will help to prioritise habitats and species that require action.

For many of these habitats and species conservation action is already underway, and several countries have

Figure 1: **Assessment of conservation status for habitats* (the percentage relates to the number of assessments made)**

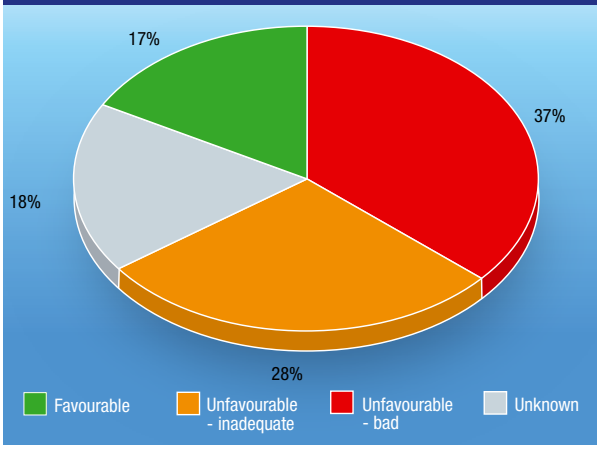
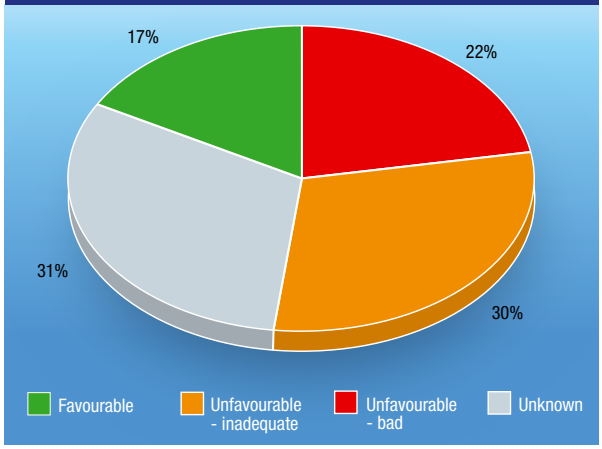


Figure 2: **Assessment of conservation status of species* (the percentage relates to the number of assessments made)**



Source: ETC/BD, Paris 2009

** Natural habitat types and species of Community interest (Annex I, II, IV, V)*

Habitats Directive – the background

The Habitats Directive*, adopted in 1992, together with the earlier Birds Directive**, form the cornerstone of Europe's nature conservation policy. It is also a key component of the EU Biodiversity Action Plan, which aims to halt the decline of EU biodiversity by 2010 and beyond***.

The directive is built upon two pillars: the Natura 2000 network of protected sites (which also includes sites under the Birds Directive) and a strict system of species protection. Its objective is that a set of over 200 habitats and 1 000 species will reach and maintain what is defined as 'favourable conservation status' so that their long-term future will be secured.

The directive is made up of a series of articles and annexes. The articles outline the aim of conserving biodiversity and the means to achieve that. The annexes are lists of habitats and species of Community interest in need of different forms of protection.

Article 1 defines 'conservation status' as the sum of the influences on habitats or species that affect their long-term distribution, structure and function, or abundance. It defines 'favourable' conservation status in terms including stability of range, and viability.

Article 11 specifies that the habitats and species of Community importance must be monitored to provide a clear picture of their actual conservation status and trends.

Photo: LIFE04 NAT/IE/000125

Species-rich grassland, The Burren, Ireland

Article 17 specifies that reports must be made based on monitoring every six years, to cover the implementation of the directive. The first Article 17 reports, for the period 1994-2000, prioritised the transposition of the directive into national laws and designating Special Areas of Conservation. The current reports, covering 2001-2006, are the first to include conservation status assessments of the habitats and species of Community interest. The Article 17 reports can be viewed as a 'health check' for the habitats and species covered by the directive – showing where the greatest need for action is and whether the directive is effective.

** Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22 July 1992, p. 7)*
*** Council Directive 79/409/EEC on the conservation of wild birds (OJ L 103, 5 April 1979, p. 1)*
**** http://ec.europa.eu/environment/nature/biodiversity/comm2006/index_en.htm*

reported that the conservation status of a particular habitat or species, although unfavourable, is improving. Those noted include several that have been the subject of projects funded by the EU's LIFE Nature programme. Examples include projects targeting the large carnivore, brown bear (*Ursus arctos*) – once found all over Europe, now extinct in many areas – as well as endemic species such as the highly-endangered Lake Constance forget-me-not (*Mysotis rehsteineri*) in Austria; and habitats such as the priority habitat types bog woodland (91D0*) and Caledonian forest (91C0*) both in the United Kingdom. Many of the plant 'micro-reserves' (small botanical reserves) that have been established in several EU countries have also been created as part of LIFE projects. See pages 12-13 for more information on successful ecological restoration funded by LIFE Nature.

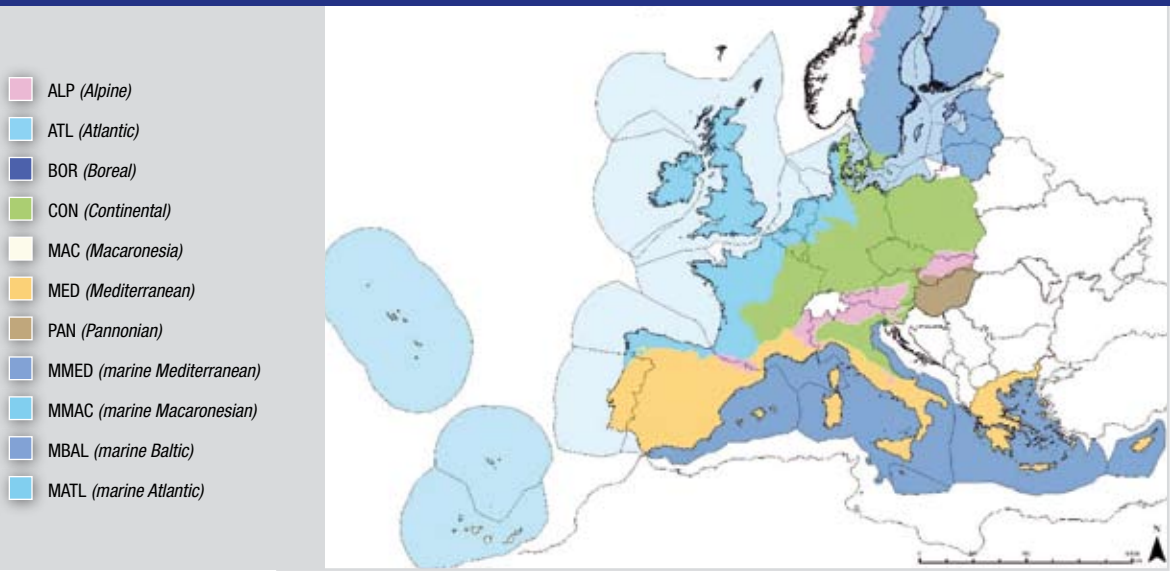
Assessment, monitoring and reporting

The Paris-based ETC/BD has produced regional assessments of conservation status for each habitat and species listed in the directive's annexes. It has used the Member State's reported data to assess conservation status across seven terrestrial biogeographical zones and four marine regions of Europe[3] (see Fig. 3).

The overall conservation status is assessed by combining the results of

3 Given Bulgaria and Romania's recent accession to the EU, the Steppic region and the Black Sea are not included. Four marine regions were added for the purpose of Article 17 reporting.

Figure 3: **Biogeographical zones and marine regions used for Article 17 reporting**



Source: ETC/BD, Paris 2009

the following parameters in accordance with an agreed method[4].

Species	Habitats
Range	Range
Population	Area
Suitable habitat	Structure & functions
Future prospects	Future prospects

Each of these parameters is reported as one of the following classes:

Favourable	
Unfavourable - inadequate	
Unfavourable - bad	
Unknown	

For further details, see: http://ec.europa.eu/environment/nature/knowledge/rep_habitats/index_en.htm

In total, 2 756 separate reports were submitted electronically by national authorities for habitat types, 6 064 for species, with 16 000 associated maps. These were to cover 216 Annex I habitat types and 1 180 species (including sub-species and genera) in Annexes II, IV, and V of the Habitats Directive[5]. The data presented in the Member States' reports and in the biogeographical analysis are based on the number of assessments of habitats and species, not the number of habitats and species themselves. These detailed reports are invaluable. However, in order to provide an overview, this article focuses at the broader biogeographical scale.

For further details, see: http://biodiversity.eionet.europa.eu/article17

Data quality

As this was a first experience for this type of assessment, the data submitted by the different Member States varied considerably both in quality and in the period gathered. In many instances data does not exist, this is particularly the case for trends and future prospects. Overall, some 13% of regional habitat assessments and 27% of regional species assessments were reported by Member States as 'unknown'. The number of 'unknown' classifications was particularly high for species in Southern Europe and in the marine area.

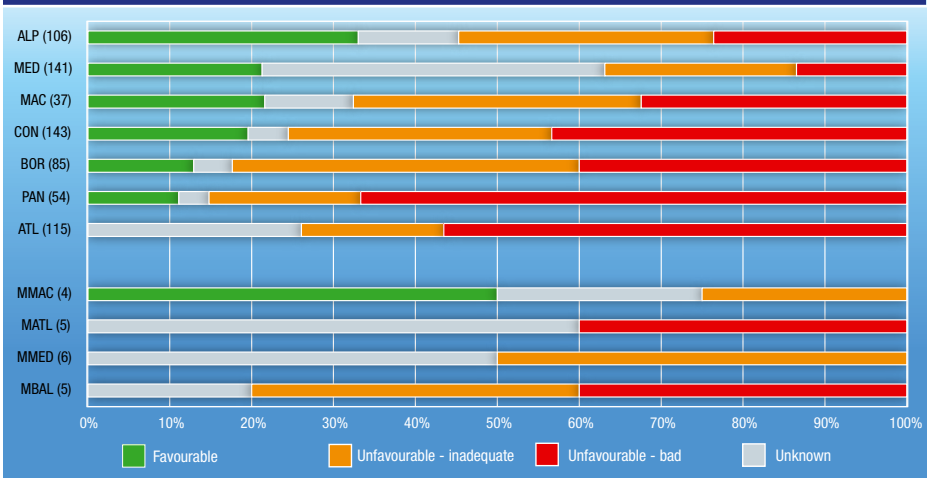
Habitat assessments

Overall 37% of the 701 habitat assessments indicate an unfavourable-bad condition, and a further 28% indicate an unfavourable-inadequate condition (see Fig. 1). Only 17% of assessments are favourable. Underlying this figure are substantial variations across the biogeographical regions. For example, three of the four marine regions and one terrestrial region don't have any habitats assessed as in favourable condition (see fig. 4).

The Alpine biogeographical region has the highest proportion of habitats assessed as favourable and the Atlantic the lowest. The Pannonian and Atlantic biogeograhical regions have the highest proportion of unfavourable-bad assessments.

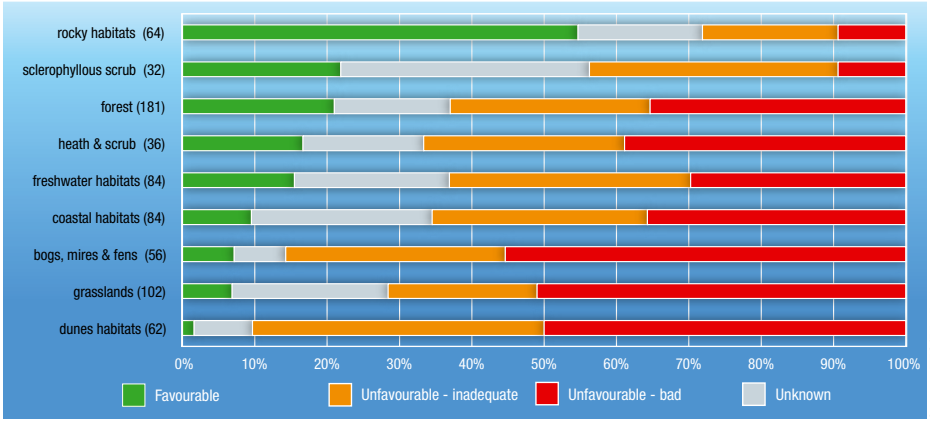
It is possible to analyse conservation for groups of related habitat groups, such as forests or grasslands (see Fig. 5). Dunes, bogs/mires/fens and grasslands are the habitat groups with the worst conservation status. Rocky habitats, such as scree slopes or caves have the best conservation status. A higher

Figure 4: **Assessment of conservation status of habitats in the different biogeographical regions (numbers in the brackets indicate the number of assessments)**



ALP *(Alpine)*, ATL *(Atlantic)*, BOR *(Boreal)*, CON *(Continental)*, MAC *(Macaronesia)*, MED *(Mediterranean)*, PAN *(Pannonian)*, MMED *(marine Mediterranean)*, MMAC *(marine Macaronesian)*, MBAL *(marine Baltic)*, MATL *(marine Atlantic)*

Figure 5: **Assessment of conservation status of habitats by habitat group (the number in brackets indicates the number of assessments in each group)**



Source: ETC/BD, Paris 2009

4 Agreed with the Habitats Committee, made up of experts from the Member States
5 Further habitats and species were added to the annexes in January 2007, see http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

Photo: LIFE03 NAT/IRL/000107

Aerial view of Murrough wetlands, Co. Wicklow, Ireland – coastal habitats report the highest number of 'unfavourable-bad' assessments

percentage of 'priority' habitats[6] were evaluated as in bad status, compared with non-priority habitats. This was most noticeable in coastal habitats. 'Future prospects' is one of the four parameters of conservation status. It was assessed as unfavourable for more than 50% of the habitat assessments. Habitat area trends were negative in over 20% of the assessments.

For more information, see:
http://biodiversity.eionet.europa.eu/article17/habitatsreport

6 Habitats for which the need for conservation action is thought to be particularly high

Species assessments

Of the 2 240 species assessments, 22% indicate an unfavourable-bad condition and a further 30% indicate inadequate (see Fig. 2). The proportion of species assessments indicating unfavourable-bad is over 20% in most biogeographical regions (see Fig. 6) and is more than 30% for the molluscs and arthropods, with molluscs the worst. Half of the assessments of the subgroups of marine and freshwater molluscs are unfavourable-bad; the conservation status of terrestrial snails seems to be better. Note however, that the mollusc group is relatively small (81 assessments). The highest percentage of the favourable assessments is for vascular plants. In general there are negligible differences between the conservation status of priority and non-priority Annex II species.

There is less variation between the biogeographical and marine regions for species than for habitats. Of the terrestrial biogeographical regions the Boreal has the highest proportion of species assessments indicating favourable and the Atlantic the lowest. Molluscs and arthropods are among the most threatened groups in most regions. In the Macaronesian region the highest percentage of unfavourable-bad assessments is in the mammal group, whereas in the Pannonian region the highest are vascular and non-vascular plants. The proportion of 'unknowns' is higher for species than for habitats, notably in the Mediterranean and marine biogeographical regions. For the parameter 'future prospects' and analysis of trends of species assessments, the relatively high proportion of 'unknown' assessments limits evaluation at the biogeographical level.

For more information, see:
http://biodiversity.eionet.europa.eu/article17/speciesreport

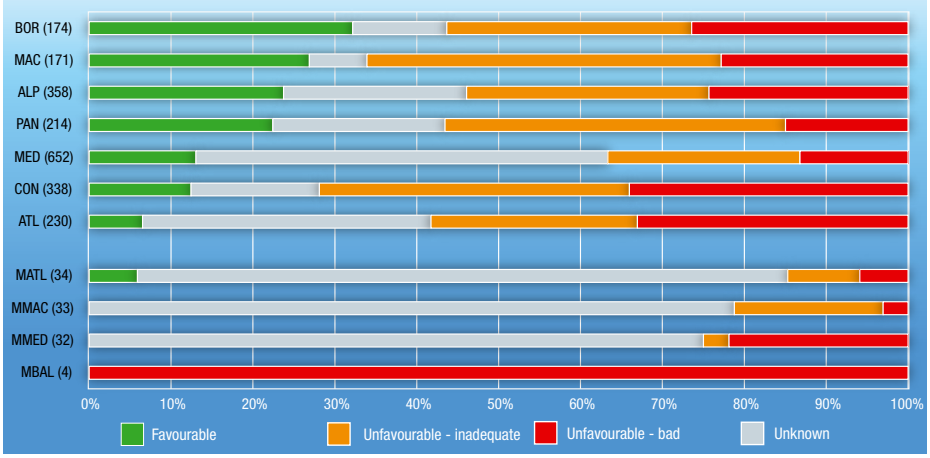
Marine assessments

Marine conservation is still very much a developing area. According to the ETC/BD, a lack of data on marine habitats and species has led to a much higher percentage of 'unknowns' for their assessments than for the terrestrial assessments. (For terrestrial species there are 27% compared with 57% for marine species.) In addition, data quality for marine populations is noted as poor almost twice as often for terrestrial species (60% for marine species, 35% for terrestrial species).

*Loggerhead turtle (*Caretta caretta*) a priority marine species assessed as 'unfavourable-bad', or 'unknown'*

Photo: LIFE95 NAT/GR/001115

Figure 6: **Assessment of conservation status of species in the different biogeographical regions (numbers in the brackets indicate the number of assessments)**



Source: ETC/BD, Paris 2009

ALP *(Alpine)*, ATL *(Atlantic)*, BO*R (Boreal)*, CO*N (Continental)*, MA*C (Macaronesia)*, MED *(Mediterranean)*, PAN *(Pannonian)*, MMED *(marine Mediterranean)*, MMAC *(marine Macaronesian)*, MBAL *(marine Baltic)*, MATL *(marine Atlantic)*

Photo: K. Raftopolou / LIFE98 NAT/GR/005264

The priority habitat palm groves of Phoenix is reported as 'favourable' by Greece, following a LIFE project on the island of Crete

To address these shortcomings, a wealth of experience is being built up through the implementation of EU marine projects co-funded by LIFE. Such projects encourage international cooperation and provide valuable data and know-how on which to base future policy recommendations. For example, the LIFE SCANS projects (LIFE92 ENV/UK/000065 and LIFE04 NAT/UK/000245) to assess the population of small cetaceans in the North Sea and European Atlantic continental shelf waters. For more information on these and other successful marine restoration projects, see the LIFE Focus marine environment publication[7]. LIFE III Nature (and now LIFE+) is also being used to identify and designate new Natura 2000 marine areas.

7 "LIFE and the marine environment – promoting sustainable management of Europe's seas" European Commission (2006) http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/nat.htm#marine

A benchmark for future assessment

For the first time, the conservation status of the EU-25[8] Member States most endangered habitats and species have been assessed using a standard methodology. There has never been a comparable body of work of this scale or importance. With its clear link to legislation and country coverage it is unique and will underpin biodiversity policy for years to come.

The majority of the Member States have welcomed the monitoring and reporting process, recognising that it adds value to their work. However, there are marked gaps in our knowledge, notably in Southern Europe and the marine environment.

As mentioned, most habitats and species of Community interest are not considered to have favourable conservation status. But this is hardly surprising given that only those habitats and species that the Community was most concerned about were included in the annexes to the Habitats Directive in the first place.

8 Bulgaria and Romania were not included in the 2001-2006 report

Moreover, it should be considered that the Natura 2000 network is still under construction (especially for the marine environment) and that restoration measures often take considerable time to show effect on habitats and species. Where there has been a will to make substantial interventions, it is noticeable these have had measurable positive impacts on conservation status. The LIFE programme and other initiatives have championed this approach.

With the knowledge these reports have given us we can now best direct our resources. We know, for example, that dunes, bogs, and grasslands are the habitat groups with the worst conservation status; habitats associated with agriculture are particularly in need of conservation action; climate change was provided as a major reason for trends in half of wetland sites; and threats to invertebrate groups are especially widespread.

Finally, producing these first Article 17 reports, including conservation status assessments has been a difficult exercise. The process will inevitably become easier as monitoring systems will be better placed to address gaps in knowledge. A review is already underway which includes better means to compile and integrate data. The benchmark has now been set. It will be by comparison with this that we will see changes, good or bad, to our invaluable biodiversity.

Micro-reserves on the island of Crete are helping to monitor Androcymbium rechingeri

Photo: LIFE04 NAT/GR/000104

Natura 2000 BAROMETER - December 2008

Nota Bene:

- The Natura Barometer is managed by the European Topic Centre for Biodiversity and based on information officially transmitted by Member States.
- Numerous sites have been designated according to both nature directives, either in their entirety or partially. It is therefore not possible to combine the numbers implemented under the two directives to get an overall figure for Natura 2000.
- The surface area percentage relates only to the terrestrial area that has been designated, which is the overall SPA (Birds Directive), proposed SCI, SCI or SAC (Habitats Directive) area, not including the marine area. Some Member States have designated substantial portions of their marine waters. These are included in the number of sites and areas proposed but not in the percentage surface area. Work is now underway on assessing the sufficiency of national proposals for marine habitats and species for the successful application of Natura 2000 under both directives, including for offshore marine environment.
- Several Member States have proposed large areas including "buffer zones", while others have proposed only the core areas. In both cases, Article 6 of the Habitats Directive also applies to new activities, which are foreseen outside a Natura 2000 site but likely to affect it.
- The 12 new Member States that acceded to the EU on 1 May 2004 and 1 January 2007, had a duty to classify SPAs and propose SCIs by the date of their accession. All countries have submitted their lists and evaluations are ongoing.
- The global assessment of national lists may be revised upwards or downwards, following more complete scientific analysis of the data, particularly at the relevant biogeographical seminars.

notably insufficient

incomplete

largely complete

recent significant progress

Photo: LIFE NAT/GR/000849

SPECIAL PROTECTION AREAS (SPAs) Birds Directive

MEMBER STATES	Number of sites	Total area sites (km²)	Terrestrial area (%)*	Number of marine sites	Marine area (km²)	Progress
BELGIË/BELGIQUE	234	3,282	9.7	4	315	
BULGARIA	114	23,217	20.4	14	539	
ČESKÁ REPUBLIKA	38	9,653	12.2	-	-	
DANMARK	113	14,709	5.9	59	12,173	
DEUTSCHLAND	734	59,556	12.2	15	16,061	
EESTI	67	12,592	13.1	26	6,654	
ÉIRE/IRELAND	131	2,815	2.9	66	810	
ELLÁDA	163	16,755	12.3	16	567	
ESPAÑA	567	97,318	19.2	23	634	
FRANCE	371	46,194	7.8	62	3,260	
ITALIA	594	43,827	13.6	42	2,719	
KÝPROS**	7	788	13.4	1	21	
LATVIJA	98	6,766	9.7	4	520	
LIETUVA	77	5,435	8.1	1	171	
LUXEMBOURG	12	139	5.4	-	-	
MAGYARORSZÁG	55	13,519	14.5	-	-	
MALTA***	12	14	4.5	0	0	
NEDERLAND	77	10,125	12.6	6	4,895	
ÖSTERREICH	96	9,867	11.8	-	-	
POLSKA	124	50,407	14.1	4	6,463	
PORTUGAL	50	9,956	10.1	10	622	
ROMÂNIA****	108	0	0	1	0	
SLOVENIJA	27	4,656	23.0	1	3	
SLOVENSKO	38	12,236	25.1	-	-	
SUOMI	468	30,838	7.5	66	5,567	
SVERIGE	531	29,857	6.2	108	4,018	
UNITED KINGDOM	268	16,253	6.3	4	901	
EU	**5,174**	**530,774**	**10.8**	**533**	**66,913**	

Photo: LIFE NAT/IE/090125

SITES OF COMMUNITY IMPORTANCE (SCIs) Habitats Directive

Number of sites	Total area sites (km²)	Terrestrial area (%)*	Number of marine sites	Marine area (km²)	Progress	MEMBER STATES
280	3,269	10.1	2	198		BELGIUM
228	33,430	29.6	14	592		BULGARIA
858	7,251	9.2	-	-		CZECH REPUBLIC
254	11,136	7.4	118	7,959		DENMARK
4,622	54,343	9.9	53	19,134		GERMANY
498	11,429	16.8	36	3,854		ESTONIA
423	13,553	10.7	96	6,010		ÉIRE/IRELAND
239	27,641	16.4	102	5,998		GREECE
1,434	123,716	23.4	94	5,548		SPAIN
1,334	52,174	8.5	94	5,688		FRANCE
2,286	45,211	14.2	160	2,243		ITALY
36	711	11.5	5	50		CYPRUS**
331	7,663	11.0	6	562		LATVIA
267	6,664	9.9	2	171		LITHUANIA
48	399	15.4	-	-		LUXEMBOURG
467	13,929	15.0	-	-		HUNGARY
27	48	12.6	1	8		MALTA***
142	7,552	8.4	10	4,067		THE NETHERLANDS
168	8,978	10.7	-	-		AUSTRIA
364	28,904	8.1	6	3,594		POLAND
94	16,503	17.4	23	490		PORTUGAL
273	32,833	13.2	6	1,353		ROMANIA
259	6,360	31.4	3	0.2		SLOVENIA
382	5,739	11.8	-	-		SLOVAKIA
1,715	48,552	12.7	98	5,460		FINLAND
3,981	64,449	13.7	334	7,506		SWEDEN
623	29,066	6.8	49	12,409		UNITED KINGDOM
21,633	**661,503**	**13.3**	**1,312**	**92,893**		**EU**

- notably insufficient
- incomplete
- largely complete
- recent significant progress

The Natura 2000 Barometer: commentary on progress

The existing barometer monitors progress in the implementation of both the Habitats and the Birds Directives in all 27 countries up to December 2008.

Regarding SPAs the key change is that Germany has significantly extended its network. It has also extended its list of SCIs. Sweden and United Kingdom have also extended their SCI networks, most notably for the marine environment.

There is now increased focus on completing the Natura 2000 network for the marine environment. To facilitate this, a first biogeographical seminar for the Atlantic marine region was held in Galway, Ireland, from 24 to 25 March 2009.

With regard to evaluating the completeness of national SPA networks, there is no biogeographical screening process, but the Commission makes use of different scientific references, including national inventories, where they exist, and the Important Bird Areas' (IBAs) publications of BirdLife International.

** % of SCI or SPA terrestrial area compared to MS terrestrial area*

*** The area of the MS and the % corresponds to the area of Cyprus where the Community acquis applies at present, according to protocol 10 of the Accession Treaty of Cyprus*

**** Several marine sites, but no information on marine areas provided in the database*

***** No surface areas provided in the Romanian database*

Agriculture and conservation status – challenges to be faced

Habitats associated with traditional agricultural practices are particularly in need of conservation – according to the latest data compiled by the European Topic Centre on Biological Diversity (ETC/BD).

Agriculture is the mainstay of rural economies across Europe. It is a source of food and biomaterial, rural employment and even renewable energy. Although modern intensive farming is seen as a dominant negative pressure on the conservation status of habitats and species, some forms of agriculture (for example low intensity grazing) can be essential to managing extensive areas of valuable habitat. However, in general the main ETC/BD[1] findings[2] indicate that habitats linked to agriculture show a worse conservation status than non-agricultural habitats, with only 7% of 'favourable' assessments compared to 21% for other types of habitats (see Fig. 7a).

None of the Member States in the Atlantic region report habitats dependent on agriculture as favourable (this may be linked to pressures from the high proportion of intensively farmed land). Apart from Macaronesia, which has very few habitats dependent on agriculture, the highest percentage of farmland habitats in favourable status is found in the Continental region, with 9%, followed by the Alpine and Boreal regions, which both have 7%.

For habitats dependent on agriculture, abandonment of pastures, over

Photo: LIFE02 NAT/D/008461

Conservation-friendly farming – sheep grazing at the Mäuerchenberg site in Germany

or under-grazing, unbalanced fertilisation and the use of pesticides, changing cultivation practices, ploughing up and afforestation of grasslands and removal of landscape features are the most frequently cited pressures and threats.

For agricultural grasslands, the proportion of 'unfavourable-bad' assessments approaches or exceeds 80% in the Atlantic, Boreal and Pannonian biogeographical regions. In both the Atlantic and Pannonian regions none of the grassland habitats are in 'favourable' status (see Fig 4 page 5).

Already, much is known about how to maximise the conservation status of grasslands. They usually require appropriate levels of grazing (with low inputs and low stocking densities)[3] or late mowing. So in this case it is not necessarily a lack of technical knowledge that constitutes a constraint to reaching favourable status. It is more about making conservation-friendly farming, as identified by the LIFE programme and others, financially sustainable. This is why biodiversity concerns have now become an important component of agricultural policy.

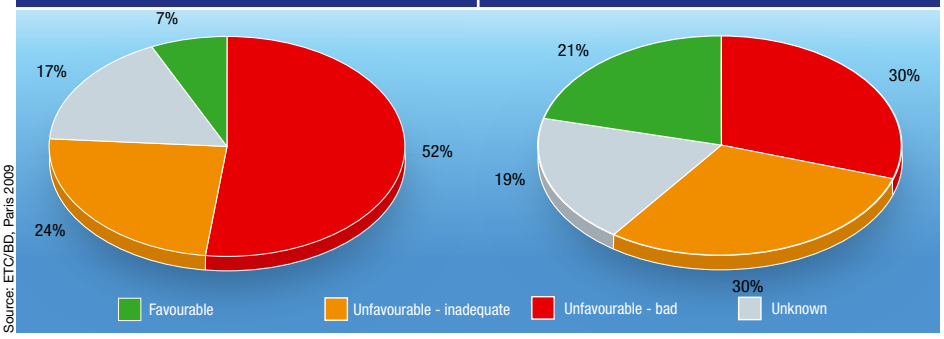
The recent reforms of the Common Agriculture Policy (CAP)[4] have progressively de-coupled payments to farmers from production, allowing lower stocking levels and less intensive practices generally. Some of these payments are also redirected to compensating farmers for providing useful environmental services. Such initiatives need to be further supported through national and regional Rural Development Programmes to improve conservation status.

1 The web-based Article 17 Technical Report (2001-2006) http://biodiversity.eionet.europa.eu/article17
2 Some specific analysis on conservation status p.2

3 LIFE and Europe's grasslands: Restoring a forgotten habitat
4 http://ec.europa.eu/agriculture/healthcheck/index_en.htm

Figure 7a: **Habitats dependent on agriculture (204 assessments)**

Figure 7b: **Habitats not dependent on agriculture (497 assessments)**



Source: ETC/BD, Paris 2009

For more information see:
LIFE on the farm: Supporting environmentally friendly agriculture
http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/documents/agriculture.pdf
LIFE and agri-environment supporting Natura 2000: Experience from the LIFE programme
http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/documents/agrienvironment_en.pdf

Habitats and species influenced by climate change

Climate change adds an additional threat to biodiversity and ecosystems. It interacts with other existing pressures. Shifting climatic zones will cause complex changes to the distribution and functioning of habitats and species[1]. Changes in ecosystem composition in many cases have important implications for the interactions between the biosphere and the climate system, as well as for other ecosystem services on which society depends.

1 For more information, see: http://www.eea.europa.eu/publications/eea_report_2008_4 (EEA report) and http://royalsociety.org/displaypagedoc.asp?id=29026 (Royal Society Report on Biodiversity - Climate change interaction)

Although climate change was not included as such in the list of possible threats and pressures for the Article 17 reports, Member States were asked to give major reasons for any reported trends in range, area and population. Climate change was one of the suggested options and was indicated as a reason for 42 habitats (19%) and 144 species (12%).

As Table 1 shows, bogs, mires and fens as a group are being strongly influenced by climate change. In addition, data on four more wetland habitats reported in other habitat groups (2170 dunes, 91D0 *bog woodland, 91E0 *alluvial forests and 92B0 riparian formations) suggest that wetlands in general are being influenced by climate change more than any other group of habitats. Dune habitats are also frequently noted as declining due to climate change and this is probably linked with rising sea levels.

Photo: LIFE04 NAT/DE/000028

*Climate change adds an additional threat to endangered amphibians such as the fire-bellied toad (*Bombina bombina*)*

Although the group of rocky habitats only includes two habitats where climate change is given as a reason for trends, it includes habitat type (8340) permanent glaciers. This is probably the Annex I habitat most directly threatened by changing climate and where the link to changing climate is well established.

Of 1 158 species assessed there were 12% for which climate change was indicated by one or more Member states as a reason for reported trends in range and/or population. The figure is highest for the amphibian species group (45%). Amphibians are strongly associated with wetlands and have been widely identified as being particularly sensitive to climate change. Fish and vascular plants are notable as rarely having climate change reported as a reason for trends (4% and 3% respectively).

Only habitats and species where trends are already being influenced by climate change have been noted by the Member States. It is likely that as climate change becomes more noticeable, and habitats and species have more time to react to it, more habitats and species listed in the Habitats Directive annexes will show an impact. To help identify the impact, if any, of climate change on conservation status, the ETC/BD web-based findings recommend that the method used for reporting threats and pressures should be modified for the next reporting cycle.

Table 1: **Assessment of the impact of climate change on habitats***

Habitat group	N° influenced by climate change	N° of habitats in group	% affected
Bogs, mires & fens	6	12	50
Dunes	6	21	29
Forests	16	72	22
Heaths	2	10	20
Sclerophyllous scrub	2	13	15
Coastal	4	28	14
Rocky habitats	2	14	14
Grasslands	3	29	10
Freshwater	1	19	5
All habitats	**42**	**218**	**19**

Source: ETC/BD, Paris 2009

**Number of the habitats per habitat group for which climate change was noted by one or more Member State as a reason for reported trends in range and/or area.*

Photo: LIFE04 NAT/IE/000125

Farm Demo Day July 2008, western Ireland – organised by the 'Burren LIFE' farming for conservation project

LIFE improving conservation status

Across the EU, the positive contribution of the LIFE Nature programme to nature conservation has been demonstrated in different types of habitat and species, under different pressures and threats. The conservation status assessment reports confirm the positive impact of dedicated conservation and restoration projects funded by LIFE.

Several countries have reported that the conservation status of a particular habitat or species, although unfavourable, is improving. Those noted in this category include several which have been the subject of projects funded by LIFE Nature. Not only do LIFE projects have a direct impact via the measures they implement, but dedicated project managers (and beneficiaries in general) have shown best practices in species/ habitat conservation applied successfully in one or more project areas that can be applied in other European regions with similar problems.

Examples highlighted in the data compiled by the European Topic Centre on Biological Diversity (ETC/BD)[1] include plant species such as the endemic and highly-endangered Lake Constance forget-me-not (*Myosotis rehsteineri*) in Austria (see Natura 2000 newsletter – December 2007[2]); and habitat types such as the priority habitats bog woodland (91D0*) and Caledonian forest (91C0*), both in the United Kingdom.

1 The web-based Article 17 Technical Report (2001-2006) http://biodiversity.eionet.europa.eu/article17

2 Natura 2000. Number 23 - Endangered plants, p. 11 http://ec.europa.eu/environment/life/publications/lifepublications/natura2000/index.htm

Photo: LIFE98 GR/005279

Gizani, a priority species, is only found on the Greek island of Rhodes

Fresh hopes for gizani in Greece

Gizani (*Ladigesocypris ghigii*) is one of the most endangered European fresh water fish. It is found exclusively in streams, springs and reservoirs of the Greek island of Rhodes.

The project's overall aim was to aid the recovery and conservation of gizani populations at two Natura 2000 sites through a variety of actions (including the establishment of a fish reserve, artificial reproduction and the creation of fish stocks to preserve genetic diversity).

The project surpassed its objective and in addition to the populations already known at project launch, four new sites (containing six new populations in other streams) were identified and put forward to the Greek authorities as pSCIs (proposed sites of Community interest).

A post-project follow-up study carried out in 2007 concluded that the project had "significantly improved" the chances of survival of the key populations of the target species and guaranteed the species' survival ex-situ through the creation of breeding stocks.

Project reference: LIFE98 NAT/GR/005279

Photo: E. Laguna

Helianthemum caput-felis*, Spain, is benefitting from the micro-reserve model*

Many of the plant 'micro-reserves' (small botanical reserves included in Natura 2000 sites) that have been established in several EU countries have been created as part of LIFE projects - including the two Spanish projects that led to their development: LIFE93 NAT/E/011100 (1st phase) and LIFE95 NAT/E/000856 (2nd phase). This 'micro-reserve' plant conservation model is now being adopted by other Spanish territories and beyond, as a valuable management tool of the Habitats Directive and is helping in the implementation of the Natura 2000 network. For example, networks of micro-reserves have been established on the island of Minorca, in the Kraški rob region of Slovenia, and in Crete, Greece.

More widely, since 1992 a number of LIFE projects (for example in Italy, Slovenia, Spain, Greece, Austria and France) have been involved in restoring or maintaining populations of the large carnivore species, brown bear (*Ursus arctos*). Once found all over Europe, the species is now extinct in many areas. According to the assessments for the Alpine and Continental biogeographical regions, the conservation status of brown bear, although 'unfavourable-bad', is improving. The species shows an overall positive trend (both population and range) in over half of the Member States' reports.

In some cases Member States mentioned specific LIFE projects in their reports. For example, the priority habitat type raised bog (7110*) which is assessed as 'unfavourable' in all biogeographical regions in which it occurs, and mostly as 'unfavourable-bad', is improving in only one country - the UK - where the Member State report mentions the actions of a three-year LIFE co-funded Scottish raised bog project (LIFE00 NAT/UK/007078), as well as several national initiatives to restore this habitat.

LIFE projects have also been involved in restoring or maintaining some species and habitats that have been assessed as having a favourable conservation status. For example the priority habitat Palm groves of Phoenix (9370*) is reported as 'favourable' by Greece with an increasing population following the project on the island of Crete (LIFE98 NAT/GR/005264). Similar success, also reported by Greece, is noted for a project on the island of Rhodes targeting the endemic riverine fish, gizani (*Ladigesocypris ghigii*) (see page 12).

Grasslands are another area where LIFE has had a demonstrable impact. According to the report, grasslands are among the five of the nine major groups of habitats included in Annex I that have the highest proportion of assessments as 'unfavourable' and the lowest as 'favourable' (also mentioned are sand dunes, bogs, mires and fens). Despite this, there are actions being developed and strengthened by LIFE to reconcile the demands of agriculture (most often linked with grassland habitats) with the objectives of nature conservation policy.

One example is the ongoing LIFE project in the west of Ireland. 'Burren LIFE' (LIFE04 NAT/IE/000125), the country's first major farming for conservation project, is based on a pilot scheme for 20 farms over 3 000 ha. The project aims to develop a blueprint for future farming for conservation measures on areas of high nature value across the whole of Ireland. It is one of a number of highly successful habitat/species restoration projects for Europe's grassland featured in a new Commission publication: "LIFE and Europe's grasslands: Restoring a forgotten habitat"[3].

In general, the contribution of LIFE Nature projects is difficult to quantify and is heavily dependent on the scale and timeframe of the project actions. Some projects only target species and habitats at a local or regional scale (usually on a single Natura 2000 site) while others include the complete distribution range of the species or habitats (e.g. for endemic species or habitats with a restricted distribution). The ETC/BD report recommends therefore, that further investigation is required to assess the extent to which reported improvements in conservation status are a direct result of the work funded by LIFE.

For further information on this, and on other LIFE case studies covering EU forest, plants, wetlands and marine habitats/ species types see the publications section of the LIFE website: http://ec.europa.eu/environment/life

3 European Commission (DG Environment) 2008 http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/nat.htm#grassland

Photo: LIFE03 NAT/CP/IT/000003

Brown bear in Italy

Projects to reintroduce the brown bear (*Ursus arctos*) to Italy's mountains, such as the LIFE URSUS project in the Adamello-Brenta Regional Park, are slowly bearing fruit. A new census of the brown bear population carried out by the National Park of Abruzzo, Lazio and Molise National Park and the Adamello-Brenta reveals that there are now 124 individuals, of which 100 bears are located in the Central Apennines and 24 in the Central Alps.

This encouraging news comes despite the worst efforts of poachers, who have killed 24 specimens of the critically-endangered Apennine brown bear (*Ursus arctos marsicanus*) in the last 10 years, either by shooting or poisoning. Public opinion was outraged when Bernard, the mascot of the Abruzzo National Park, his mate and their two bear cubs, were found poisoned in October 2007.

Fortunately, researchers from 'Protect Orso Marsicano' have seen 10 young bears with their mothers. It is hoped that further cubs will be born this year, helping the Apennine brown bear population towards the safety threshold of over 100 specimens.

Project reference:
LIFE00 NAT/IT/007131
Website: http://www.pnab.it/it/natura_e_territorio/orso/life_ursus.html

natura News

High-level conference to discuss EU post-2010 biodiversity policy

In May 2006, the European Commission adopted its Biodiversity Communication (COM/2006/0216 - final), which provides the framework for EU action to meet the target set by heads of state and governments of halting biodiversity loss by 2010, and to meet international commitments to reduce biodiversity loss worldwide. It includes a Biodiversity Action Plan (BAP) that sets out the specific responsibilities for EU institutions and Member States, as well as indicators to monitor progress and a timetable for achieving this. Following on from this, in December 2008, the Commission issued its mid-term assessment of the implementation of the action plan (COM(2008) 864 final). This concludes that although significant efforts have been made, it is highly unlikely that the EU will achieve the 2010 biodiversity target.

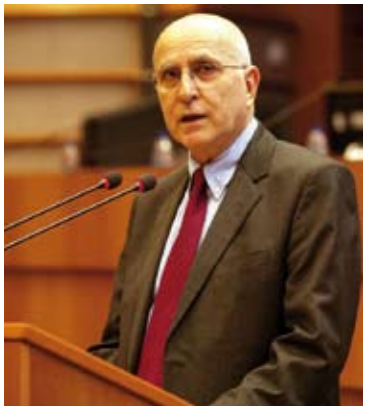


Photo: European Commission

Stavros Dimas
Environment Commissioner

Whatever the outcome, 2010 will undoubtedly be a major milestone for biodiversity policy both in the EU and globally. It is the year of the full evaluation of the implementation of the BAP, and is also the United Nations "International Year for Biodiversity". This means that it is now time for Europe to start preparing a biodiversity policy for the period after 2010. The Commission therefore organised earlier this year, a high-level conference: "Biodiversity Protection – Beyond 2010". Held on 27-28 April 2009 in Athens, Greece, the event brought together all the main actors involved in the development and implementation of EU biodiversity policy, together with international institutions and experts.

Hosted by Environment Commissioner Stavros Dimas, it provided an opportunity for debate on EU biodiversity and on the main issues and policy areas involved in biodiversity protection. The outcome of the Conference was summarised in a "Message from Athens", presenting the Commissioners view on the post-2010 biodiversity policy. For further information, and to read the Message from Athens, see:
http://ec.europa.eu/environment/nature/index_en.htm

EU celebrates 30 years of the Birds Directive

The EU's first nature law, the Birds Directive, celebrated its 30th anniversary in April. The legislation is one of the greatest achievements of European environmental policy and is central to the EU's strategy for halting biodiversity loss. The directive has played a key role in reversing the decline of some of Europe's most threatened birds, particularly through its network of Special Protection Areas (SPAs). Thanks to targeted action by the EU, national governments, conservationists and volunteers to implement it on the ground, many birds now face a much brighter future. These include the Eurasian spoonbill (*Platalea leucorodia*), White-tailed eagle (*Haliaeetus albicilla*) and Spanish Imperial eagle (*Aquila adalberti*). Today there are nearly 5 000 SPAs, covering more than 10% of the EU's land mass. They form an integral part of the Natura 2000 network. The Birds Directive is an excellent example of shared responsibility and cooperation among the 27 EU Member States.

*Whinchat (*Saxicola rubetra*), a migratory species breeding in Europe in open rough pasture or similar uncultivated grassland*

Counting down … and up post-2010

Meanwhile, the Countdown 2010 initiative, a network of governments, NGOs and businesses, hosted by the European branch of the IUCN (International Union for Conservation of Nature) and supported by the European Commission, is continuing to closely follow the implementation of the BAP. To this end, in February 2009, it organised – together with the European Bureau for Conservation and Development (EBCD) – a conference at the European Parliament to further debate among stakeholders the findings of the BAP mid-term report. For more information, see the Countdown 2010 website:
http://www.countdown2010.net/

Biodiversity at the Environment Council

Photo: European Commission

European Council spring 2009

The Environment Council conclusions adopted on 2 March 2009 – as a contribution to the Spring European Council – address EU biodiversity policies highlighting the importance of issues such as the impact of climate change, the Biodiversity Action Plan (BAP), the completion of the Natura 2000 network, business and biodiversity (B&B) and of tackling invasive species. They emphasise the major contribution the completion of the Natura 2000 network will play in implementing the BAP and underlined the urgency of stepping up efforts to reach the EU target of halting the loss of biodiversity by 2010, as highlighted by the Commission in its mid-term review of the Biodiversity Action Plan.

A need to make a better case for the value and economic importance of conservation and sustainable use of biodiversity and to create and maintain jobs was also noted. Other key areas of concern noted are the increasing threats and impacts of invasive species, tackled by the recent Communication "Towards an EU strategy on invasive species" [COM (2008) 789 final] and the impacts of climate change on biodiversity – with particular emphasis given to work within the Convention on Biological Diversity (CBD) aiming to identify strategies to integrate biodiversity considerations into efforts to address deforestation and forest degradation.

See the 'biodiversity' section of the Environment Council conclusions: *http://register.consilium.europa.eu/pdf/en/09/st07/st07065.en09.pdf*

Active blanket bog in Wales (UK) – a priority habitat whose conservation status is also potentially threatened by climate change

Photo: LIFE06 NAT/UK/000134

Biodiversity campaign shifts into gear

DG Environment's two-part European communications' campaign on biodiversity is well underway. The campaign's overall objective is to further knowledge among Europeans of biodiversity issues. With a budget of €760 000, part I of the campaign was launched at the end of 2008 focusing on (i) developing a campaign visual identity, or 'look' that would work well in all 23 EU official languages and creating a set of key messages for the general public and specific target audiences, and (ii) developing a communications' strategy focusing on the EU12 new Member States. This latter strategy will include promoting the results of "The Economics of Ecosystems and Biodiversity" (TEEB) joint German/ Commission study. The second part of the campaign, with a budget of €2.3 million was launched in spring 2009, to continue the campaigning and communications activities.

http://ec.europa.eu/environment/funding/calls_en.htm

Science-policy platform on biodiversity

The Commission has welcomed the broad support expressed at the recent United Nations ministerial meeting on climate change for strengthening the science base for policy-making on biodiversity and ecosystem services. At the high-level segment of the conference, held in Nairobi in Kenya on 15-17 November 2008, the UNEP Governing Council (United Nations Environment Programme) announced its decision to organise an intergovernmental and multi-stakeholder meeting in 2009 for this purpose. The idea is that a so-called Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES) would provide information on biodiversity and ecosystem services in a similar way to the Intergovernmental Panel on Climate Change, the UN body that assesses the latest scientific knowledge on climate change.

Marine biogeographic seminar

A first assessment seminar for the Atlantic marine region was held on 24-25 March 2009 in Galway, Ireland, as part of the designation process for marine Natura 2000 sites, in particular in offshore areas. The meeting, hosted by the Irish authorities, was organised by the Commission with the support of the European Topic Centre on Biological Diversity (the latter responsible for the technical and scientific part of the programme).

Participants included the authorities of the Atlantic coastal Member States, conservation NGOs and regional advisory councils for the fisheries sector. Discussions focused on the list of sites of Community importance hosting marine habitat types and species in the Atlantic marine region, which had been proposed by the Member States. Assessments of other marine regions will follow in order to complete the Natura 2000 network. The Baltic Sea is expected to be the next marine region to be addressed.

*Bottlenose dolphin (*Tursiops truncatus*) in the Atlantic*

Photo: LIFE98 NAT/UK/000608

natura News

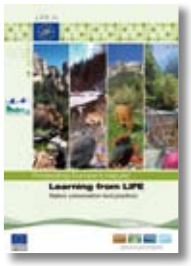
KH-AA-09-001-EN-C

Climatic Risk Atlas of European Butterflies

This publication presents the first ever attempt to model the way butterflies might respond at a European level to climate change. The response of this important group of insects provides a valuable early warning indicator of the impact on insects and biodiversity as a whole. Written by researchers from across Europe, led by Josef Settele from the Helmholtz Centre for Environmental Research (UFZ) in Germany, the publication is published as part of the EU-funded research projects ALARM and MACIS, and is supported by the European Environment Agency. It includes photos of each species, as well as maps showing actual and modelled range under three climate change scenarios.

http://pensoftonline.net/biorisk/index.php/journal/article/view/3/9

Learning from LIFE Nature conservation best practices



This brochure is based on the proceedings of the LIFE Nature thematic conference, "Protecting Europe's Nature: Learning from LIFE", which took place in November 2008 in Brussels. Organised by the Commission's LIFE Unit, the conference covered a wide range of nature conservation issues during its three day programme. Delegates from all over Europe attended the event, which focused in particular on tools and techniques for implementing the EU Birds and Habitats Directives and the Natura 2000 network.

A series of workshops allowed participants to discuss 'best practice' approaches to practical and policy based actions targeting forest, marine, river and grassland habitats, as well as focusing on climate change and invasive alien species.

http://ec.europa.eu/environment/life/news/news-archive2009/march/index.htm#bestnat2009

Commission ends two important legal nature cases against Poland

The Commission has ended two important legal proceedings against Poland. The first case has been ended following a decision by the Polish government not to go ahead with the construction of a bypass through one of Europe's most important nature sites – the Rospuda river valley, designated as a Natura 2000 site under both the Birds and Habitats Directives. The second case has been closed following the completion of Poland's network of Special Protection Areas (SPAs). The Commission started legal proceedings against Poland due to insufficient designation of bird protection areas in April 2006 (when only 72 out of 140 Important Bird Areas (IBAs) were designated as SPAs). When in December 2007, Poland still failed to designate 15 of the IBAs, the Commission referred the case to the Court of Justice. In October 2008 the Polish authorities took the necessary steps to designate the outstanding sites. The designation of 141 SPAs provides sufficient coverage for the habitats of protected bird species in Poland.

LIFE and Europe's grasslands: Restoring a forgotten habitat

Grassland ecosystems hold an important part of Europe's biodiversity. They offer ideal conditions for a vast diversity of habitats and species, are the source of a wide range of public goods and services, and also act as carbon 'sinks'. Changes in agricultural practices and land use pressures mean that grasslands are disappearing at an alarming rate. This publication highlights a selection of LIFE co-funded projects targeting grassland ecosystems within the Natura 2000 network.

http://ec.europa.eu/environment/life/publications/lifepublications/lifefocus/nat.htm#grassland

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The newsletter is produced twice a year and is available in English, French, German, Spanish and Italian. To be added to the mailing list, or to download the electronic version, visit: http://ec.europa.eu/environment/nature/info/pubs/natura2000nl_en.htm

For details on LIFE and LIFE-Nature projects see: http://ec.europa.eu/environment/life/

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ISSN 1026-615-1
9 771026 615004