

It is difficult to give precise numbers on the vegetation cover at the national level. More precise data is available for those habitats listed under the European Union's Habitats Directive. In Belgium, 58 habitats types are protected under the Habitats Directive. The table below presents the 15 most frequent ones, based on the total area and the number of occurrences in the country. The sign * indicates priority habitat types for conservation.

Table 2. Fifteen most frequent habitats in Belgium following the EU Habitats Directive (Biodiversity in Belgium, 2003).

| Code | Habitat |
|------|--|
| 1110 | Sandbanks which are slightly covered by sea water all the time |
| 4010 | Northern Atlantic wet heaths with <i>Erica tetralix</i> |
| 4030 | European dry heaths |
| 6410 | Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) |
| 6430 | Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels |
| 6510 | Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) |
| 9110 | Luzulo-Fagetum beech forests |
| 9120 | Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robur-petraeae</i> or <i>Ilici-Fagenion</i>) |
| 9130 | Asperulo-Fagetum beech forests |
| 9150 | Medio-European limestone beech forests of the <i>Cephalanthero-Fagion</i> |
| 9160 | Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> |
| 9180 | * <i>Tilio-Acerion</i> forests of slopes, screes and ravines |
| 9190 | Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains |
| 91D0 | * Bog woodland |
| 91E0 | * Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) |

2.3. Protected areas: the Natura 2000 network in Belgium

Natura 2000 supports an ecosystem approach for biodiversity conservation, i.e. the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. The Natura 2000 network comprises the 'Special Protection Areas' (SPA) designated under the EU Birds Directive and the 'Sites of Community Importance' (SCI) under the EU Habitats Directive.

Designating the sites is just the first stage in setting up the Natura 2000 network. Each site will be the subject of a designation order which specifies the following, backed up by maps: (i) the perimeters of the sites, (ii) the intended species or habitats which are present there, (iii) the objectives of the active management system to be put in place, and (iv) the means suggested to reach them.

Table 3. Surface of Natura 2000 in the Brussels-Capital Region, Flemish Region, Walloon Region and the Belgian part of the North Sea (updated in 2013).

| | territory (ha) | Natura 2000 | |
|-------------------------------|----------------|------------------------|--------------------|
| | | surface (ha) | % of the territory |
| Brussels | 16 200 | 2 375 | 14.7% |
| Flanders | 1 352 200 | 166 322 ⁽¹⁾ | 12.3% |
| Wallonia | 1 684 400 | 220 945 | 13.1% |
| Belgian part of the North Sea | 346 200 | 124 929 | 34.2% |
| Total | 3 399 000 | 514 571 | 15.1% |

(1) When including the Flemish Ecological Network, which is covered by a similar to more strict protective legal framework, the total surface comes to 193 268 ha and 14.3% (areas belonging to the Natura 2000 network as well as to the Flemish Ecological Network are only counted once).

2.3.1. Flemish Region

In 2005 a 24th Special Protection Area under the Birds Directive was designated in the port area of Zeebrugge: Baai van Heist, bringing the total surface to 98,243 ha (ca 7.3% of the surface of Flanders), giving focus to 28 breeding bird species and 26 non-breeding bird species of annex I of the Birds Directive. On 15 February 2008 the Flemish Government approved 2 additional zones under the Habitats Directive: the water zone of the estuary of the IJzer and of the estuary of the Schelde. In 2012 there was an expansion of the SCI site 'Uiterwaarden langs de Limburgse Maas en Vijverbroek. Taking into account these additions the 38 SCI sites under the Habitats Directive cover now a surface of 105,022 ha (7.8% of the surface of the Flemish region), giving focus to 47 habitat types and 59 species of the annexes of the Habitats Directive. The total surface of Natura 2000 in Flanders covers 166,322 ha or 12.3% of the surface. 37.7% of the Flemish Ecological Network is situated within the Natura 2000 network.

An Executive Law of 2004 on site-based management stipulates general measures for Natura 2000 sites concerning conservation, management aspects and derogation issues. For each of the sites a Nature Objectives Plan has to be developed highlighting the objectives for the habitats and species concerned and indicating possible measures for restoration and management. The development of the site specific plans is carried out in consultation with land owners and users and relevant local authorities. Draft plans are also put in public consultation before final approval. Based on the experience the procedure is shown to be too complex and is now being revised. A new Executive Law giving the procedures for the formal designation of the sites and the development and adoption of the site specific conservation objectives has been approved in May 2009.

- Establishment of the conservation objectives and designation of the SCI

* legal and policy framework: Executive law of the Flemish Government of 3 april 2009 'on the procedure for the designation of special areas of conservation and the establishment of conservation objectives'

For each habitat and species of European importance the objectives on the regional level of Flanders were determined in the regional conservation objectives (G-IHD). The G-IHD indicate when a specific species or habitat in Flanders reaches a favorable conservation status and what areas are essential for this goal. This is when for a species the area, the population size and the quality of the habitat or for a habitat type, the total area and quality is sufficiently large or good enough to survive in a sustainable way. The G-IHD were approved by the Flemish Government on July 23, 2010.

Based on the G-IHD the site specific objectives (S-IHD) were developed, scientifically screened and brought in consultation with stakeholders and actors. On the basis of the S-IHD, the priority measures for

each site were established and integrated in the draft designation acts. End of 2012 the S-IHD and designation acts for all 38 SCI and overlapping SPA passed the 1st principle adoption by the Flemish Government and were submitted to the formal advisory councils.

For the protection and management of species a new Executive law for species protection was adopted 15th May 2009 that includes horizontal measures for the management and protection of species with specific attention to species of European interest. For the development of species protection programmes a format, procedure and prioritization of species was prepared.

* consultation process: an extensive consultation and participation process was set up with all relevant actors, both the socio-economic groups that are active in the open space in the 'IHD-discussion group' (agriculture, nature management, hunting, land owners, economic sectors and forest managers) and the relevant authorities in the 'IHD-project group'. To enable the socio-economic actors to participate in the consultation process in a professional manner, resources were also provided for capacity-building within each participating organization. The framework for the consultation process in the IHD-discussion group was set out in a letter of intent that was signed in 2009 by all organizations involved.

<http://www.natura-2000.be/overlegproces>

http://www.natuurenbos.be/nl-BE/Natuurbeleid/Natuur/Natura_2000/In_samenwerking.aspx

- Policy and management in relation to Natura 2000:

The implementation of the conservation objectives of Natura 2000 is one of the three strategic projects of the Agency for Nature and Forests ANB. The existing instruments were evaluated by the Mina Council (Advisory Board of target groups) and, where necessary, proposals for changes for a more effective and more efficient implementation are being prepared.

In the various processes of the ANB policy priority attention is given to the conservation objectives and Natura 2000:

* The management of nature and forest areas located in Natura 2000 is further tuned to achieving the conservation objectives. The surface with an approved management plan in Natura 2000 came the end of 2012 to 40.916 ha, about 25% of the total area of Natura 2000. All existing management plans are being screened and where needed the focus on the conservation objectives will be enhanced. Besides a new approach has been developed for multifunctional management with an integrated management plan for larger areas together with several landowners and managers and a division of tasks in realisation of objectives and appropriate stimulating policies.

For the concrete guidance of measures on site a vade-mecum on management measures was in collaboration with the INBO.

* For acquisition of land priority is given to areas with vulnerable nature values and areas located in Natura 2000. In the period 2007-2012 a surface of 5.749 ha was purchased whereby the total area of land owned by ANB came to 37.335 ha of which 63% is located in Natura 2000.

* Protection provisions: For the screening of projects/plans with potential impact on Natura 2000 an overall approach was developed to make 'the appropriate assessment' more tailored and more accessible. For this purpose, the development of an on-line pre-screening system was initiated.

* Nature development projects are initiated to restore and extend natural values and develop infrastructure for public access. Of the 24 selected projects started during the reporting period about 50% of the total surface of the project areas (ca 9400 ha) is located in Natura 2000.

* Cooperation: for the realisation of Natura 2000 the establishment of cooperation with other Governments and stakeholders is crucial. In the framework of the IHD-process the establishment of engagements with the various actors was initiated. Existing cooperation programmes provide the example of good practices, such as:

-with the Ministry of Defense: with the management of Natura 2000 on military domains the investment of the project Danah is continued on a long term: <http://www.DANAH.be>

-with the authority of the port of Antwerp and the NGO Natuurpunt a site specific species protection programme for the Antwerp port area was established in 2011: <http://www.portofantwerp.com/nl/natuur>. The objective is to preserve and manage up to 5% of the port area, about 600 ha, as suitable habitat for the species of European importance.

-in collaboration with the public administrations competent for the management of waterways, roads and railways attention is given to solve bottlenecks in connectivity so that measures that contribute to connection between Natura 2000 and other nature and forest areas are integrated in the projects or management programmes of infrastructure.

- Life-Nature projects under theme 'Nature' are submitted for the realization the sustainable recovery of habitats and species of European importance and improvement of the landscape and the public access of Natura 2000 sites. In addition, these projects are also important for the development of cooperation with partners in the region and in neighbouring countries (Governments, NGOs, municipalities, provinces, local associations, private owners) and for awareness raising and communication regarding Natura 2000 and biodiversity conservation. Thanks to this co-financing projects specialized equipment could also be purchased and expertise built up in restoring and managing Natura 2000 habitats that are often very vulnerable or that need large-scale overdue management. In the reporting period 10 new LIFE projects for actions in Natura 2000 in Flanders were approved.

<http://www.natuurenbos.be/nl-BE/Over-ons/Projecten.aspx>

http://www.natuurenbos.be/nl-BE/Natuurbeleid/Natuur/Natura_2000/Geen_verre_toekomstmuziek/Life_en_Interreg.aspx

<http://www.natuurpunt.be/nl/natuurbehoud/natura-273.aspx>

* in the scientific research priority attention was given to enhancing knowledge on habitats and species of European interest and the conservation objectives: scientific basis for the determination and evaluation of regional objectives G-IHD and site objectives S-IHD; methodology for a calibration model to optimize the distribution of the objectives over the various Natura 2000 sites and to evaluate effects of the implementation of the objectives on socio-economic processes; development of an on-line system for the pre-screening of the appropriate assessment; scientific basis for the determination of reference values for main effects groups; basis to use population-genetic principles for the analysis of bottlenecks on connectivity between areas and to determine favourable reference values; cost-benefit analysis of Natura 2000; development of plans and methodology for the monitoring of habitats and species .

* Monitoring and reporting: "Nature report 2007: State of nature in Flanders: data for policy" gives a comprehensive reporting of the conservation status and the trends of habitats and species. For the following reporting in 2019 a more focused monitoring is being developed, priorities and inventory networks are determined and methodologies are worked out.

* Communication: For the general communication on Natura 2000 and about the process for establishing the conservation objectives an online newsletter was developed – http://www.natuurenbos.be/nl-BE/Natuurbeleid/Natuur/Natura_2000/Nieuwsbrief.aspx.

The preparation of an umbrella website Natura 2000 was initiated in collaboration with the INBO.

2.3.2. Walloon Region

There are 240 SCI in the Walloon Region, covering 220,944 ha, equivalent to 13% of the Region. The network is based on the hydrological network and is nearly 70% forest (31% of Walloon forests). Grassland, fallow land and orchards on the one hand, and crops on the other, occupy 16% and 2% respectively of the total network, but represent less than 5% of agricultural land. The Walloon Region hosts 44 habitat types, of which 10 priority types, 101 bird species and 31 other animal and plant species listed in the annexes of the directives.

All of the 240 SCI are subject to general measures (AGW dated 24.03.2011). Furthermore, as far as each SCI will be designated to SAC (covered by a designation order), it will be subject to specific measures (AGW dated 19.05.2011) according to the characteristics of the habitats and species. The designation orders have been approved for an initial batch of 8 sites covering just over 3,600 ha. A new adoption process for designation orders has been finalized on January 23rd 2014 for 52 SAC covering 21,852 ha.

<http://biodiversite.wallonie.be/fr/natura-2000.html?IDC=829>.

<http://biodiversite.wallonie.be/fr/accueil.html?IDC=6>

http://etat.environnement.wallonie.be/index.php?mact=tbe.m588bb.default.1&m588bbalias=Natura-2000-network_1&m588bbreturnid=46&page=46

2.3.3. Brussels-Capital Region

The EU Commission has approved the list of Natura 2000 sites proposed for the Brussels-Capital Region in December 2004. Brussels is currently working on the official designation of those sites, including the definition of conservation objectives, according to the new regional legislation (*ordonnance du 1er mars 2012 relative à la conservation de la nature*). Each site (48) will be covered by a management plan that aims to reach the defined objectives.

2.3.4. Belgian part of the North Sea

As mentioned above, the Federal authorities are competent for the environmental policy in the Belgian part of the North Sea.

In 2005 (Royal Decree of 14 October 2005) three Special Protection Areas (SPAs) were designated in the Belgian part of the North Sea: SBZ1 (in front of the coast of Koksijde): 110.1 km², SBZ2 (in front of the coast of Oostende): 144.80 km² and SBZ3 (in front of Zeebrugge): 50.95 km², as well as two Special Areas of Conservation (SACs): Trapegeer Stroombank, 181.20 km² and Vlakte van de Raan, 19.17 km². By Royal Decree of 6 March 2006, a strict marine reserve (*Gericht marien reservaat*) Baai van Heist, was designated. These marine protected areas (MPAs) were selected on the basis of a scientific study carried out by the MUMM (Royal Belgian Institute of Natural Sciences, RBINS) and the Research Institute for Nature and Forest (INBO). Following a complaint against the designation of the Vlakte van de Raan as SAC, on the ground that the designation of the site was not scientifically underpinned, the Council of State nullified in 2008 the designation of the Vlakte van de Raan as SAC. However, the site is still on the European list of Sites of Community Importance. Policy plans for the marine protected areas have been

drawn up by the competent authority and have been approved by the State Secretary in charge of the marine environment.

The EU-Habitats Directive also applies to the Exclusive Economic Zone. Hence the Special Area of Conservation 'Vlaamse Banken' (1,099 km²) was designated (Royal Decree of 16 October 2012). This new site includes the previously designated Trapegeer Stroombank area and covers a part of the territorial waters and the EEZ. Thanks to the designation of the SAC 'Vlaamse Banken', one third of the Belgian part of the North Sea is now integrated in the Natura 2000 network.

3. Trends in biodiversity

3.1. Trends in species

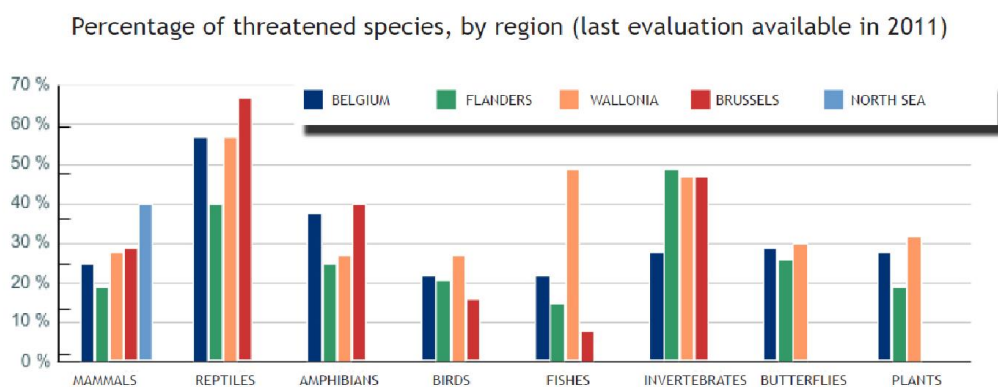


Figure 1. Species status in Belgium, Flanders, Wallonia, Brussels and the Belgian part of the North Sea in 2011 (Source: Statistics Belgium - http://statbel.fgov.be/fr/statistiques/chiffres/environnement/diversite_biolgique/).

Detailed monitoring and thorough comparisons of old collection and observation data with more recent ones show that many species are in decline or even have disappeared. It can be estimated roughly that between 20% and 70% of the species are threatened per main group of organism, depending on the group and the region of the country:

- In Flanders, at least 7% of formerly recorded species are extinct. Of the remaining assessed species, 17% are endangered to critically endangered and 29% are vulnerable to near threatened; only 52% are considered safe or at low risk (for 2% of the assessed species, data are insufficient to define a status).
- In Wallonia, 9% of the animal and plant species have already disappeared and 31% of the animal and plant species are threatened to disappear.
- In the Brussels-Capital Region, 80 higher plant species (out of the ca. 580 indigenous ones recorded before 1950), 12 bird species (out of 103) and half of the amphibian species have disappeared.
- The initial assessment of the Belgian marine waters (2012) describes the current state of the marine habitats and species. The area covered by the Belgian part of the North Sea (BPNS) is part of a larger marine area, affected by sea currents, and as such no clear statement should be made on the state of the population size of species in the BPNS. Commercial fish species are assessed on a EU-level. An increase of invasive species has been identified over the years and some of these invasive species are fairly well inventoried (crustaceans, molluscs, ...). The quality of the structure and function of sandbanks and biogenic reefs have been affected by bottom-disturbing activities.