

# BELGIAN ECOSYSTEMS LISTED IN THE HABITATS DIRECTIVE

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## 1. THE HABITATS DIRECTIVE

This chapter gives an overview of the Belgian ecosystems listed in the EU ‘Habitats Directive’. The Habitats Directive<sup>1</sup> is a legislative instrument in the field of nature conservation that was adopted by the European Community in 1992. It establishes a common framework for the conservation of wild animal and plant species and natural habitats of Community importance.

The Habitats Directive provides for the creation of a coherent ecological network of Special Areas of Conservation, called Natura 2000, to “maintain and restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest”. In order to make this huge task manageable, it focuses on rare and threatened habitats and species, which are listed as annexes within the Directive. Annex I contains 198 habitats (originally 164) and Annex II lists 200 animal and 435 plant species for which Special Areas of Conservation are to be designated. In addition, a series of Annex I habitats and Annex II species are afforded priority status as these are judged to be in particular danger of disappearance.

Unlike other pieces of legislation that protect wildlife, the Habitats Directive has two special features: it covers both terrestrial and marine habitats and it takes into account economic, cultural, social and recreational needs of local communities.

The Natura 2000 network also includes the Special Protection Areas designated under the ‘Birds Directive’. This directive<sup>2</sup>, adopted by the European Community in 1979, is concerned with the conservation of all species of naturally occurring birds in the wild within the territory of member states.

## 2. CORINE BIOTOPE CLASSIFICATION

Annex I is based on the hierarchical classification of European habitats developed by the CORINE Biotopes project (1985-1990) since it was the only existing classification of habitats at European level. In December 1991, while the Directive was being adopted, a thorough revision of the CORINE classification was published (DEVILLERS *et al.* 1991). This revision introduced numerous changes within codes and habitat types, in particular involving the division into subtypes. Consequently, Annex I codes no longer correspond

<sup>1</sup> Council Directive 92/43/EEC

<sup>2</sup> Council Directive 79/409/EEC

fully to the codes and descriptive content of the various categories of CORINE, resulting in considerable ambiguities in the interpretation of Annex I on the basis of the CORINE classification. In this chapter, the current CORINE classification is given for each of the habitats.

### 3. PALAEARCTIC CLASSIFICATION

With time, the CORINE biotope classification has been expanded at pan-European level under the Council of Europe, in order to cover Central European, Eastern European and Baltic countries. The new classification is called the Palaeartic habitat classification (DEVILLERS & DEVILLERS-TERSCHUREN 1993). It has been used in the framework of the Emerald programme, which aim is to develop a network of areas of special conservation interest at pan-European level. For EU member states, Emerald network sites are those of the Natura 2000 network. The implementation phase of the Emerald network started in 1999 for non-EU states.

### 4. EUNIS CLASSIFICATION

The EUNIS habitat classification has been developed by the European Environment Agency to facilitate harmonised description and collection of data across Europe through the use of criteria for habitat identification.

It is a comprehensive pan-European system, covering all habitats from natural to artificial, from terrestrial to freshwater and marine types (MOSS & DAVIES 2002). It is built to link to and correspond with other major habitat systems in Europe:

- it cross-references to all EU Habitats Directive habitat types used for EU Member States and can be used as a basis for EU Habitats Directive extension for Accession Countries;
- it builds on the CORINE and Palaeartic habitat classifications. It will continue to include the Palaeartic habitat classification's most detailed units as they are further developed over Europe for the Emerald network (Resolution no. 4);
- it contains and will continue to include relevant marine habitat types as they are developed in collaboration with the OSPARCOM marine work;
- it cross-references to the CORINE Land Cover classification, to some regional and national classifications, and to other systems such as the European Vegetation Survey.

The EUNIS web application (<http://mrw.wallonie.be/dgrne/sibw/EUNIS/home.html>) gives access to the whole pan-European EUNIS habitat classification and all information about the hierarchy and definition of classes (with diagrams), text and code keys to be used for identifying specific classes.

### 5. BIOLOGICAL EVALUATION MAP OF BELGIUM

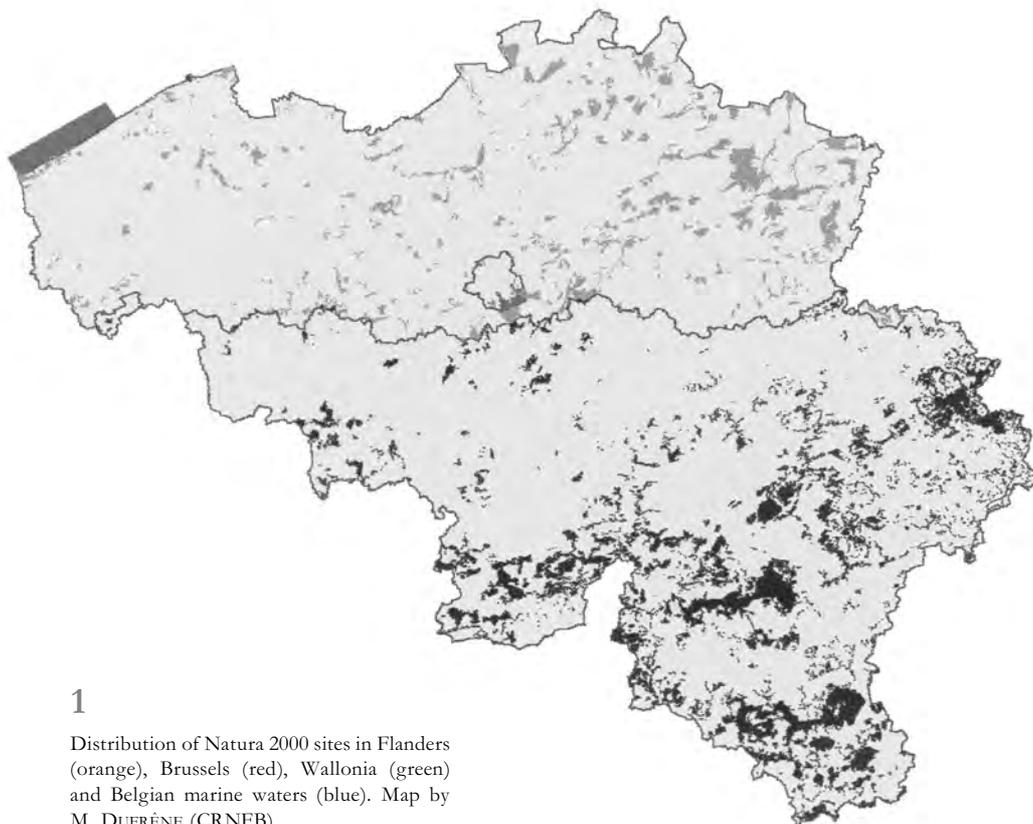
The Biological Evaluation Map (BWK) is based on a standardised, uniform survey and evaluation of the biotic environment of Belgium (DE BLUST *et al.* 1985a, b; KUIJKEN & HEIRMAN 1984). The mapping scale is 1:25,000. The maps are published in sets of eight, covering 640 km<sup>2</sup>. A monograph is published with each set of maps, in which the biotic, abiotic and cultural-historical landscape characteristics of the region are described.

In 1978, the Minister of Public Health asked scientific institutes and universities to set up a national mapping project for the biotic environment. Within a year the project started. However, in 1986 the project ended as a national one. Since then, the regions have been supposed to finish the remaining fieldwork and update and publish the remaining maps. In the Walloon Region, there has been no continuation until now. In the Flemish Region, the Institute of Nature Conservation carried on with the mapping project. DE BLUST *et al.* (1994) give a full description of the Biological Evaluation Map, while the biannual report on the status of nature in Flanders presents an assessment of the area of all (semi-)natural habitats occurring in Flanders (KUIJKEN 1999). The Brussels Capital Region also finalised the project. It achieved this with the help of the Flemish Region, as its territory is embedded within Flemish territory (map IGN31). The map and monograph for Brussels were published in 2000 (BRICHAU *et al.* 2000).

An English translation of all units of the Biological Evaluation Map of Belgium is given in annex 2.

## 6. THE NATURA 2000 NETWORK IN BELGIUM

The Natura 2000 network (figure 1) includes Special Protection Areas (SPAs) under the Birds Directive and Special Conservation Areas (SCAs) under the Habitats Directive. Table 1 details the state of advancement of designations for Belgium (December 2002). Designations have been made by the three regions and at the federal level, for a marine site within the Belgian territorial waters of the North Sea.



Sites in the Brussels Capital Region and in Belgian territorial waters have been designated only under the Habitats Directive (table 1). Due to their importance for biodiversity, some sites in the other two regions have been designated under both Habitats and Birds Directives. For these regions, the Natura 2000 network currently totals (including sites with overlapping status):

- 97,745 ha for SPAs and 101,891 ha for SACs in Flanders, and
- 82,483 ha for SPAs and 196,617 ha for SACs in Wallonia.

Table 1. The Natura 2000 network per Region, as of December 2002. Special Protection Areas are designated under the Birds Directive and Special Areas of Conservation under the Habitats Directive. Areas with both status correspond to sites designated under both Directives.

|                            | Special Protection Areas only (ha) | Special Areas of Conservation only (ha) | Areas with both status (ha) | Total area (ha) | % of the territory |
|----------------------------|------------------------------------|---|-----------------------------|-----------------|--------------------|
| Brussels Capital Region    | –                                  | 2,321                                   | –                           | 2,321           | 14% <sup>(1)</sup> |
| Flemish Region             | 61,149                             | 65,295                                  | 36,596                      | 163,040         | 12% <sup>(1)</sup> |
| Walloon Region             | 20,923                             | 135,057                                 | 61,560                      | 217,540         | 13% <sup>(1)</sup> |
| Belgian territorial waters | –                                  | 18,120                                  | –                           | 18,120          | 5% <sup>(2)</sup>  |
| Total                      | 82,072                             | 220,793                                 | 98,156                      | 401,021         | 12% <sup>(3)</sup> |

<sup>(1)</sup> Percentage of the area of the Region

<sup>(2)</sup> Percentage of the area of the Belgian marine waters

<sup>(3)</sup> Percentage of the total area of Belgium (including marine waters)

## 7. BELGIAN ECOSYSTEMS LISTED IN THE HABITATS DIRECTIVE

Fifty-eight Annex I habitats are legally protected under regional laws in Belgium, including twelve priority types. A full description of all habitats listed in the Habitats Directive is given in the ‘Interpretation Manual of European Union Habitats’ (European Commission 1999).

The **descriptions** of the Belgian habitats in this chapter are adapted from this manual. They refer specifically to the Belgian situation and not to the characterisation of the habitats in the European context. For each habitat, cross-references are made to the different habitat classifications in use in Europe. Habitats are listed following the codes given by the EU interpretation manual (European Commission 1999). An asterisk between brackets (\*) indicates a priority habitat.

An overview is also given of designated **sites** in the different regions of Belgium. These sites have been selected following a procedure that differed from one region to another. The main objective of this chapter is to bring all existing information together. The area given is the estimated total cover of the habitat in a given site; it has been approximated to the nearest tenth of hectare. This rough estimation may change when detailed assessments of the Natura 2000 sites will have been carried out. The number of sites containing the habitat is given between brackets.

Names of sites in Belgium enumerated as examples for a given habitat have been selected using a quantitative criterion: only the 10 sites with the largest area for the habitat are cited when there are more than 10 sites containing the habitat in a given region. This does not mean that these sites are qualitatively the most important for the habitat. Sites are listed in decreasing order of size.

**Maps** are also provided for each habitat. They illustrate the locations of all Natura 2000 sites hosting the habitat. An idea of the relative cover of the habitats in the sites is given through the size of the dots. Five sizes of dots correspond to an increasing cover of the habitat: 0-5%, 5-10%, 11-25%, 26-50% and 51-100% of the site, respectively.

It should be clear that most sites contain more than one habitat. If the text mentions that a specific habitat is found at a certain site, this site will certainly contain other habitats. These latter habitats can be part of the list given in this chapter, but they can also correspond to other (less or not threatened) habitats not included here. For example, habitat 2310: 'dry sand heaths with *Calluna* and *Genista*' can be found at the following sites:

- Flemish Region: De Maten, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Demervallei, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Valleien van de Winge en de Motte met valleihellingen, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Heesbossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Bossen van het zuidoosten van de Zandleemstreek, Vennen, heiden en moerassen rond Turnhout, Kalmthoutse Heide, Klein en Groot Schietveld, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden en heiden, Hageven met Dommelvallei, Beverbeekse heide, Warmbeek en Wateringen, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode
- Walloon Region: Affluents brabançons de la Senne (Braine-l'Alleud, Braine-le-Château, Ittre, Tubize), Vallée de l'Escaut en aval de Tournai (Celles, Estaimpuis, Pecq), Bois de La Houssière (Braine-le-Comte, Ittre), Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Vallée de la Trouille (Estinnes, Frameries, Mons, Quévy), Vallée de l'Ourthe entre Hamoir et Comblain-au-Pont (Anthistes, Comblain-au-Pont, Ferrières, Hamoir, Ouffet), Camp militaire de Lagland (Arlon, Etalle, Saint Léger)

This does not mean that only dry sand heaths with *Calluna* and *Genista* are found on the sites. The first site mentioned in the list for the Flemish Region is 'De Maten'. Other Annex I habitats are also found there: habitat 2330 'inland dunes with open *Corynephorus* and *Agrostis* grasslands' and habitat 3110 'oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)'. Furthermore, 'De Maten' also houses a multitude of other habitats not listed in Annex I of the Habitats Directive.

Annex I habitats may sometimes only occupy a very small proportion of the area of the designated site. This is the case for both terrestrial and marine habitats. In particular, the marine sites listed are much larger than the actual distribution of Annex I habitat(s).

If, for a given habitat, no site is mentioned for one of the regions, this does not necessarily mean that the habitat does not occur in that part of the country. It rather indicates that there is no site in the region where this habitat is legally protected.

1110 - Sandbanks which are slightly covered by sea water all the time

Sublittoral non-vegetated sandbanks, permanently submerged. Water depth is seldom more than 20 m below Chart Datum. Sandbanks with vegetation belonging to the *Zosteretum marinae* and *Cymodoceion nodosae* as described by the EU Interpretation Manual of European Union Habitats do not occur anymore near the Belgian coast.

Habitat codes:

- Palearctic Classification: 11.125, 11.22, 11.31
- EUNIS: A4, A2.7/B-LMS.Zos
- CORINE: 11.25
- BWK: no code

Distribution and estimated area:

- Belgian territorial waters: 5100 ha (1 site)

Site:

- Belgian territorial waters: Trapegeer-Stroombank



1130 - Estuaries

Downstream part of a river valley, subject to the tide and extending from the limit of brackish waters. River estuaries are coastal inlets where, unlike 'large shallow inlets and bays', there is generally a substantial freshwater influence. The mixing of fresh water and sea water and the reduced current flows in the shelter of the estuary lead to deposition of fine sediments, often forming extensive intertidal sand and mud flats. Where the tidal currents are faster than flood tides, most sediments deposit to form a delta at the mouth of the estuary.

Habitat codes:

- Palearctic Classification: 13.2, 11.2
- EUNIS: X01
- CORINE: 13.2
- BWK: brackish part of Scheldt and IJzer estuaries

Distribution and estimated area:

- Flemish Region: 637.9 ha (2 sites)

Sites:

- Flemish Region: Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Duingebieden inclusief IJzermonding en Zwin



1140 - Mudflats and sandflats not covered by sea water at low tide

Sands and muds of the coasts of the oceans, their connected seas and associated lagoons, not covered by sea water at low tide, devoid of vascular plants, usually coated by blue algae and diatoms. They are of particular importance as feeding grounds for water birds and waders.

The diverse intertidal communities of invertebrates and algae that occupy them can be used to define subdivisions.

Habitat codes:

- Palaeartic Classification: 14
- EUNIS: A2.2, A2.3
- CORINE: 14
- BWK: dz and ds between patches of da and ds in salt or brackish water part of Scheldt and IJzer estuaries



Distribution and estimated area:

- Flemish Region: 808.7 ha (2 sites)
- Belgian territorial waters: 170.0 ha (1 site)

Sites:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent
- Belgian territorial waters: Trapegeer-Stroombank

#### 1310 - *Salicornia* and other annuals colonising mud and sand

Formations composed mostly or predominantly of annuals, in particular of the *Salicornia 'europaea'* group and/or *Suaeda maritima*, colonising periodically inundated muds and sands of marine or interior salt marshes. Other specific species are *Spergularia marina*, *S. maritima* and *Glaux maritima*.

Habitat codes:

- Palaeartic Classification: 15.1
- EUNIS: A2.65
- CORINE: 15.1
- BWK: parts of ds in marine intertidal areas and parts of da



Distribution and estimated area:

- Flemish Region: 62.0 ha (3 sites)

Sites:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin, Polders, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent

#### 1320 - *Spartina* swards (*Spartinion maritimae*)

Perennial pioneer grasslands of coastal salt muds, formed by *Spartina* or similar grasses. *Spartina maritima* does not exist anymore in Belgium. The species is pushed aside by *Spartina townsendii*.

Habitat codes:

- Palaeartic Classification: 15.2
- EUNIS: A2.65
- CORINE: 15.2
- BWK: parts of ds in brackish areas and parts of da

Distribution and estimated area:

- Flemish Region: 9.7 ha (2 sites)

Sites:

- Flemish Region: Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Duingebieden inclusief IJzermonding en Zwin



### 1330 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

Salt meadows only inundated at spring tide. *Puccinellia maritima* is a typical species on low, muddy meadows while *Halimione portulacoides* is typical on places with fast silting.

Habitat codes:

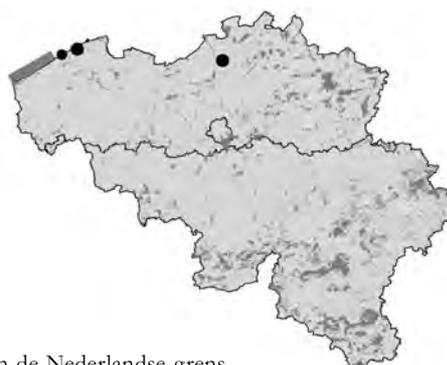
- Palaeartic Classification: 15.3
- EUNIS: A2.6/P-15.3
- CORINE: 15.3
- BWK: da, da in hpr or hpr\*

Distribution and estimated area:

- Flemish Region: 478.8 ha (3 sites)

Sites:

- Flemish Region: Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Duingebieden inclusief IJzermonding en Zwin, Polders



### 2110 - Embryonic shifting dunes

Formations of the coast representing the first stages of dune construction, constituted by ripples or raised sand surfaces of the upper beach or by a seaward fringe at the foot of the tall dunes.

Habitat codes:

- Palaeartic Classification: 16.211
- EUNIS: B1.3/P-16.211
- CORINE: 16.211
- BWK: specific beaches and part of dd or dm

Distribution and estimated area:

- Flemish Region: 3.7 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



2120 - Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)

Mobile dunes forming the seaward cordon or cordons of dune systems of the coast.

Habitat codes:

- Palaeartic Classification: 16.212
- EUNIS: B1.3/P-16.212
- CORINE: 16.212
- BWK: dd

Distribution and estimated area:

- Flemish Region: 485.8 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



2130 - (\*) Fixed coastal dunes with herbaceous vegetation (grey dunes)

Fixed dunes, stabilised and colonised by more or less closed perennial grasslands and abundant carpets of lichens and mosses.

Habitat codes:

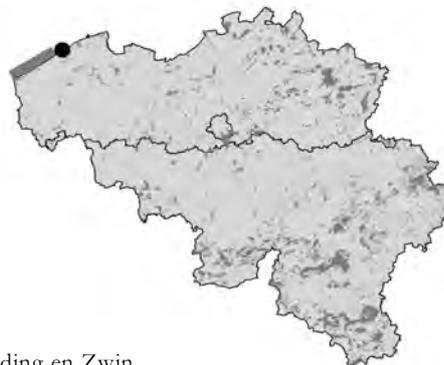
- Palaeartic Classification: 16.221
- EUNIS: B1.4/P-16.221
- CORINE: 16.221-16-227
- BWK: hd, parts of had

Distribution and estimated area:

- Flemish Region: 784.8 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



2150 - (\*) Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

Decalcified dunes colonised by heaths of the alliances *Calluno-Genistion* or *Ulicion minoris*. These alliances are almost not found in Belgium.

Habitat codes:

- Palaeartic Classification: 16.24
- EUNIS: B1.5
- CORINE: 16.24
- BWK: parts of had

Distribution and estimated area:

- Flemish Region: 37.4 ha (1 site)



Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin

2160 - Dunes with *Hippophae rhamnoides*

Sea-buckthorn formations of forest colonisation in both dry and humid dune depressions.

Habitat codes:

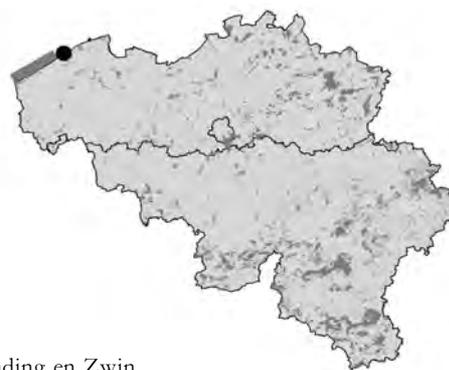
- Palearctic Classification: 16.251
- EUNIS: B1.6/P-16.251
- CORINE: 16.251
- BWK: sd

Distribution and estimated area:

- Flemish Region: 635.3 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



2170 - Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*)

*Salix repens* communities colonising wet dune slacks. Following the lowering of the groundwater table or accumulation of drift sand, these communities may develop into mesophilous communities as the *Pyrolo-Salicetum* (with *Pyrola rotundifolia* and *Viola canina*) or into xerophilous *Salix* communities (with *Carlina vulgaris* and *Thalictrum flavum*) or into *Salix repens* communities with *Mesobromion* elements.

Habitat codes:

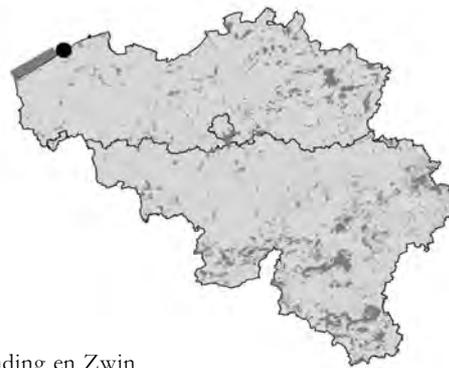
- Palearctic Classification: 16.26
- EUNIS: B1.6
- CORINE: 16.26
- BWK: parts of mp, dd and hd

Distribution and estimated area:

- Flemish Region: 3.7 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



2180 - Wooded dunes of the Atlantic, Continental and Boreal region

Natural or semi-natural forests (long established) of coastal dunes with a well-developed woodland structure and an assemblage of characteristic woodland species. Wooded dunes do not have a natural distribution in Belgium.

Habitat codes:

- Palaeartic Classification: 16.29
- EUNIS: B1.7
- CORINE: 16.29
- BWK: qd, rud, ru in coastal dunes (also other q- and f-forests or sf in the dunes)

Distribution and estimated area:

- Flemish Region: 635.3 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



#### 2190 - Humid dune slacks

Humid depressions of dunal systems. Humid dune slacks are extremely rich and specialised habitats, very threatened by the lowering of water tables.

Habitat codes:

- Palaeartic Classification: 16.3
- EUNIS: B1.8
- CORINE: 16.31-16.35
- BWK: mp and ae, ao, mr, mc, mm, hc, hj in the dunes

Distribution and estimated area:

- Flemish Region: 37.4 ha (1 site)

Site:

- Flemish Region: Duingebieden inclusief IJzermonding en Zwin



#### 2310 - Dry sand heaths with *Calluna* and *Genista*

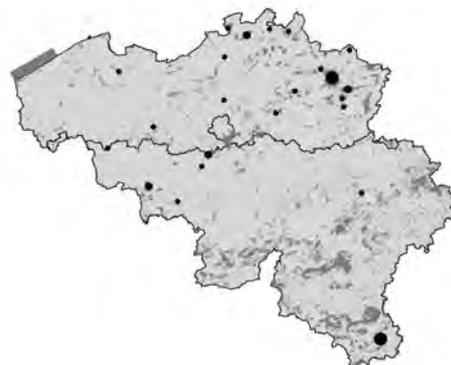
Dunes formed of quartzic sands originating in redeposited and reworked glacial drift and outwash. They are highly siliceous in the Netherlands, northern Belgium and northwestern Germany, progressively slightly less oligotrophic and with a more continental species assemblage in northeastern Germany, Poland and the eastern Baltic plain. The dune systems, particularly the large ones, harbour a unique ensemble of interacting communities and harbour many specialised and localised organisms. They have considerably regressed and the remaining examples are fragile and often threatened. Vegetation is dominated by heaths with *Calluna* and *Genista*.

Habitat codes:

- Palearctic Classification: 64.1 x 31.223
- EUNIS: (E1.9/P-64.11, E1.9/P-64.12, E1.9/P-64.13) x F4.2/P-31.23
- CORINE: 64.1 x 31.223
- BWK: parts of cg and cgb

Distribution and estimated area:

- Flemish Region: 667.2 ha (16 sites)
- Walloon Region: 542.9 ha (7 sites)



Major sites:

- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Klein en Groot Schietveld, Vennen, heiden en moerassen rond Turnhout, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Kalmthoutse Heide, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Heesbossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen
- Walloon Region: Camp militaire de Lagland (Arlon, Etalle, Saint Léger), Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Affluents brabançons de la Senne (Braine-l'Alleud, Braine-le-Château, Ittre, Tubize), Bois de La Houssière (Braine-le-Comte, Ittre), Vallée de la Trouille (Estinnes, Frameries, Mons, Quévy), Vallée de l'Escaut en aval de Tournai (Celles, Estaimpuis, Pecq), Vallée de l'Ourthe entre Hamoir et Comblain-au-Pont (Anthisnes, Comblain-au-Pont, Ferrières, Hamoir, Ouffet)

2330 - Inland dunes with open *Corynephorus* and *Agrostis* grasslands

Open formations found on inland dunes with dry siliceous soils, often species-poor and with a strong representation of annuals. It includes formations of unstable Germano-Baltic fluvio-glacial inland sands with *Corynephorus canescens*, *Carex arenaria*, *Spergula morisonii*, *Teesdalia nudicaulis* and carpets of fruticose lichens (*Cladonia*).

Habitat codes:

- Palearctic Classification: (64.11 or 64.12) x 35.2
- EUNIS: (E1.9/P-64.11, E1.9/P-64.12) x E1.9
- CORINE: 64.1 x 35.2
- BWK: ha, hab

Distribution and estimated area:

- Flemish Region: 1719.9 ha (20 sites)
- Walloon Region: 37.5 ha (3 sites)



Major sites:

- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Kalmthoutse Heide, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Bos- en heidegebieden ten oosten van Antwerpen, Valleigebied van de Kleine Nete met bronge-

- bieden, moerassen en heiden, Vennen, heiden en moerassen rond Turnhout, Klein en Groot Schietveld, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, De Maten
- Walloon Region: Camp militaire de Lagland (Arlon, Etalle, Saint Léger), Vallée de la Nethen (Beauvechain, Grez-Doiceau), Vallée du Train (Chaumont-Gistoux, Grez-Doiceau)

3110 - Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)

Shallow oligotrophic waters with few minerals and base-poor, with an aquatic to amphibious low perennial vegetation belonging to the *Littorelletalia uniflorae* order, on oligotrophic soils of lake and pond banks (sometimes on peaty soils). This vegetation consists of one or more zones, dominated by *Littorella*, *Lobelia dortmana* or *Isoetes* although all zones may not be found at a given site.

Habitat codes:

- Palaeartic Classification: 22.11 x 22.31
- EUNIS: C1.1 x C3.4/P-2231
- CORINE: 22.11 x 22.31
- BWK: parts of ao (BWK version 1); parts of aom (BWK version 2)



Distribution and estimated area:

- Flemish Region: 476.3 ha (11 sites)
- Walloon Region: 2.5 ha (3 sites)

Major sites:

- Flemish Region: Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Klein en Groot Schietveld, De Maten, Bos- en heidegebieden ten oosten van Antwerpen, Kalmthoutse Heide, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Itterbeek met Brand, Jagersborg en Schootsheide en Bergerven, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Vennen, heiden en moerassen rond Turnhout, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden
- Walloon Region: Haute vallée de la Thure (Beaumont, Sivry-Rance), Vallée de l'Oise et de la Wartoise (Chimay, Momignies), Bois de La Houssière (Braine-le-Comte, Ittre)

3130 - Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*

22.12 x 22.31 - aquatic to amphibious short perennial vegetation, oligotrophic to mesotrophic, of lake, pond and pool banks and water-land interfaces belonging to the *Littorelletea uniflorae* order.

22.12 x 22.32 - amphibious short annual vegetation, pioneer of land interface zones of lakes, pools and ponds with nutrient-poor soils, or which grows during periodic drying of these standing waters: *Isoeto-Nanojuncetea* class.

These two units can grow together in close association or separately. Characteristic plant species are generally small ephemerophytes.

Habitat codes:

- Palearctic Classification: 22.12 x (22.31 and 22.32)
- EUNIS: C1.2 x (C3.4/P-22.31 and C3.4/P-22.32)
- CORINE: 22.12 x (22.31 and 22.32)
- BWK: parts of ao (BWK version 1); parts of aom (BWK version 2)



Distribution and estimated area:

- Flemish Region: 782.4 ha (16 sites)
- Walloon Region: 358.9 ha (36 sites)

Major sites:

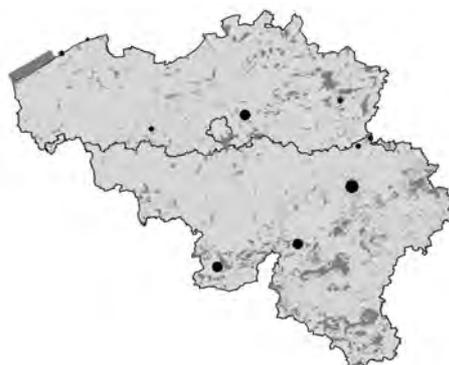
- Flemish Region: Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Klein en Groot Schietveld, De Maten, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Kalmthoutse Heide, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Mechelse Heide en vallei van de Ziepebeek, Itterbeek met Brand, Jagersborg en Schootsheide en Bergerven
- Walloon Region: Vallée de l'Argentine (La Hulpe, Lasne, Rixensart, Waterloo), Vallée de l'Escaut en aval de Tournai (Celles, Estaimpuis, Pecq), Haute-Vierre (Bertrix, Herbeumont, Libramont, Chevigny, Neufchâteau), Vallée de l'Oise et de la Wautoise (Chimay, Momignies), Bois de Bourlers et de Baileux (Chimay, Couvin), Vallée de l'Eau Blanche à Virelles (Chimay, Couvin, Froidchapelle), Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Vallée de la Lasne (Rixensart, Wavre), Vallée de la Hante (Beaumont, Froidchapelle, Sivry-Rance), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny)

3140 - Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.

Lakes and pools with waters fairly rich in dissolved bases (pH often 6-7) (21.12) or with mostly blue to greenish, very clear, waters poor (to moderate) in nutrients, base-rich (pH often > 7.5) (21.15). The bottom of these unpolluted water bodies are covered with charophyte, *Chara* and *Nitella*, algal carpets.

Habitat codes:

- Palearctic Classification: (22.12 or 22.15) x 22.44
- EUNIS: (C1.2 or C1.1) x (C1.1/P-22.44, C1.2/P-22.44, C1.4/P-22.44)
- CORINE: 22.12 x 22.44
- BWK: parts of ae



Distribution and estimated area:

- Flemish Region: 27.4 ha (4 sites)
- Walloon Region: 60.7 ha (5 sites)

Sites:

- Flemish Region: Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Duingebieden inclusief IJzermonding en Zwin, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden

- Walloon Region: Bois d'Anthignes et d'Esneux (Anthignes, Comblain-au-Pont, Esneux, Nandrin, Neupré, Ouffet, Tinlot), Vallée de l'Eau Blanche à Virelles (Chimay, Couvin, Froidchapelle), Bassin de l'Iwène (Ciney, Houyet, Rochefort), Basse vallée du Geer (Bassenge, Juprelle, Oupeye, Visé), Montagne Saint-Pierre (Bassenge, Oupeye, Visé)

### 3150 - Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation

Lakes and ponds with mostly dirty grey to blue-green, more or less turbid, waters, particularly rich in dissolved bases (pH usually > 7), with free-floating surface communities of *Lemna* spp., *Spirodela polyrhiza*, *Wolffia arbizza*, *Azolla filiculoides*, *Ricciocarpus natans* and *Riccia fluitans*, or in deep, open waters, with associations of large pondweeds (*Hydrocharis morsus-ranae*).

Habitat codes:

- Palaeartic Classification: 22.13 x (22.41 or 22.421)
- EUNIS: C1.3 x (C1.3/P-22.41(p) or C1.2/P-22.412)
- CORINE: 22.13 x (22.41 or 22.421)
- BWK: ae\*, aer\*, aev, aev\*, parts of ae



Distribution and estimated area:

- Flemish Region: 402 ha (8 sites)
- Walloon Region: 680.1 ha (42 sites)

Major sites:

- Flemish Region: Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Demervallei, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Vennen, heiden en moerassen rond Turnhout, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel
- Walloon Region: Vallée de la Haine en aval de Mons (Bernissart, Boussu, Hensies, Jurbise, Mons, Quaregnon, Saint-Ghislain), Vallées du Ruisseau de Mellier et de Mandebbras (Habay, Légglise, Neufchâteau), Vallée de la Thyle (Court-Saint-Etienne, Genappe, Les Bons Villers, Villers-la-Ville), Haute-Vierre (Bertrix, Herbeumont, Libramont, Chevigny, Neufchâteau), Bassin fagnard de l'Eau Blanche en aval de Mariembourg (Couvin, Doische, Philippeville), Vallée de la Lys (Comines-Warneton), Haute-Wimbe (Beauraing, Daverdisse, Gedinne, Wellin), Vallée de la Semois en aval d'Alle (Bièvre, Vresse-sur-Semois), Bassin de la Marche (Chiny, Florenville, Meix-devant-Virton), Etangs de Longchamps et de Noville (Bastogne, Bertogne)

### 3160 - Natural dystrophic lakes and ponds

Natural lakes and ponds with brown tinted water due to peat and humic acids, generally on peaty soils in bogs or in heaths with natural evolution toward bogs. pH is often low, 3 to 6.

Habitat codes:

- Palearctic Classification: 22.14
- EUNIS: C1.4
- CORINE: 22.14
- BWK: parts of ao (under investigation)

Distribution and estimated area:

- Walloon Region: 16.4 ha (3 sites)

Sites:

- Walloon Region: Bassin supérieur de l'Ourthe occidentale (Libramont, Chevigny), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Fanges des sources de l'Aisne (La Roche-en-Ardenne, Manhay, Vielsalm)



3260 - Water courses of plain to montane levels with *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation

Water courses of plain to montane levels, with submerged or floating vegetation of the *Ranunculion fluitantis* and *Callitriche-Batrachion* (low water level during summer) or aquatic mosses.

Habitat codes:

- Palearctic Classification: 24.4
- EUNIS: C2.1/P-24.4
- CORINE: 24.4
- BWK: code under investigation

Distribution and estimated area:

- Flemish Region: 107.8 ha (3 sites)
- Walloon Region: 664.4 ha (60 sites)



Major sites:

- Flemish Region: Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Voerstreek
- Walloon Region: Bassin de la Semois de Jamoigne à Chiny (Chiny, Florenville, Herbeumont), Haute vallée de l'Amblève entre Heppenbach et Montenau (Amel), Bassin de la Lomme de Poix-Saint-Hubert à Grupont (Libin, Saint-Hubert, Tellin), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze), Basse vallée de l'Aisne (Durbuy, Erezée, Ferrières, Manhay), Bassin de la Semois du Maka à Bouillon (Bouillon), Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, Léglise, Tintigny), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Basse-Vierre (Chiny, Herbeumont, Léglise, Neufchâteau, Tintigny), Haute-Sambre en amont de Thuin (Lobbes, Merbes-le-Château, Thuin)

3270 - Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidention* p.p. vegetation

Muddy river banks of plain to submontane levels, with annual pioneer nitrophilous vegetation of the *Chenopodium* spp., *Rorippa* spp., *Polygonum* spp., *Xanthium* spp. and the *Bidens* spp. alliances. During the spring and at the beginning of the summer, sites look like

muddy banks without any vegetation (later development in the year). If the conditions are not favourable, this vegetation has a weak development or could be completely absent.

Habitat codes:

- Palaeartic Classification: 24.52
- EUNIS: C3.5/P.24.52
- CORINE: 24.52
- BWK: for muddy banks, parts of ds and/or ku (under investigation)

Distribution and estimated area:

- Walloon Region: 148.7 ha (13 sites)



Major sites:

- Walloon Region: Bassin de la Semois de Jamoigne à Chiny (Chiny, Florenville, Herbeumont), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, L'église, Tintigny), Haute-Vierre (Bertrix, Herbeumont, Libramont, Chevigny, Neufchâteau), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze), Bassin de la Semois de Florenville à Auby (Bertrix, Florenville, Herbeumont), Vallée de la Semois en aval d'Alle (Bièvre, Vresse-sur-Semois), Bassin de la Semois du Maka à Bouillon (Bouillon), Bassin de la Semois de Bouillon à Alle (Bièvre, Bouillon, Paliseul, Vresse-sur-Semois), Vallée de l'Ulf (Burg-Reuland, Gouvy)

#### 4010 - Northern Atlantic wet heaths with *Erica tetralix*

Humid, peaty or semi-peaty heaths, other than blanket bogs, of the Atlantic and sub-Atlantic domains.

Habitat codes:

- Palaeartic Classification: 31.11
- EUNIS: F4.1/P-31.11
- CORINE: 31.11
- BWK: ce, ceb (excluding ces)

Distribution and estimated area:

- Flemish Region: 1499.6 ha (23 sites)
- Walloon Region: 2132.1 ha (47 sites)



Major sites:

- Flemish Region: Klein en Groot Schietveld, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Kalmthoutse Heide, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Vennen, heiden en moerassen rond Turnhout, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Mechelse Heide en vallei van de Ziepbek, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Bos- en heidegebieden ten oosten van Antwerpen, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor
- Walloon Region: Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nasogne, Saint-Hubert, Tellin, Tenneville), Plateau des Hautes-Fagnes (Baelen, Bütgenbach, Jalhay, Malmedy, Waimes), Forêt de Freyr (Libramont, Chevigny, Saint-Hubert, Saint-Ode, Tenneville),

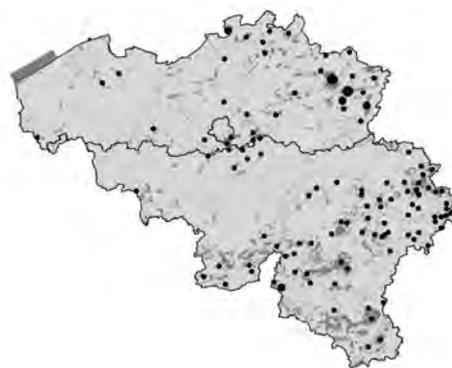
Fagnes de Malchamps et de Stoumont (Aywaille, Spa, Stavelot, Stoumont, Theux), Vallée de la Helle (Baelen, Eupen, Waimes), Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Fagnes de la Polleur et de Malmedy (Malmedy, Waimes), Bassin supérieur de la Salm (Gouvy, Vielsalm), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Vallée de la Hulle (Gedinne)

#### 4030 - European dry heaths

Mesophile or xerophile heaths on siliceous, podsolic soils in moist Atlantic and sub-Atlantic climates of plains and low mountains.

Habitat codes:

- Palearctic Classification: 31.2
- EUNIS: F4.2
- CORINE: 31.2
- BWK: cg, cgb, cv, sgu



Distribution and estimated area:

- Brussels Capital Region: 20.6 ha (1 site)
- Flemish Region: 7799.8 ha (30 sites)
- Walloon Region: 2851.3 ha (88 sites)

Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwood met aangrenzende bosgebieden en Woluwevallei (Zoniënwood / Forêt de Soignes)
- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Mechelse Heide en vallei van de Ziepbek, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Kalmthoutse Heide, Klein en Groot Schietveld, Bos- en heidegebieden ten oosten van Antwerpen, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Bosbeekvallei en aangrenzende bos- en heidegebieden te As-Opglabbeek-Maaseik
- Walloon Region: Vallée de la Houille en amont de Gedinne (Bièvre, Gedinne), Camp militaire d'Elsenborn (Büllingen, Bütgenbach), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Basse vallée de l'Aisne (Durbuy, Erezée, Ferrières, Manhay), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Plateau des Hautes-Fagnes (Baelen, Bütgenbach, Jalhay, Malmedy, Waimes), Bassin supérieur de la Salm (Gouvy, Vielsalm), Vallée de la Hulle (Gedinne), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Vallée de l'Ourthe entre Comblain-au-Pont et Angleur (Chaufontaine, Comblain-au-Pont, Esneux, Liège, Neupré, Sprimont)

#### 5110 - Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.)

Stable xerothermophilous and calcicolous scrubs dominated by *Buxus sempervirens*, of hill and montane levels. These formations correspond to xerothermophilous *Buxus* thickets with their fringe associations of the *Geranion sanguinei* alliance on calcareous or siliceous substratum. They also constitute the natural woodland edge of calcareous dry forests rich with *Buxus*.

Habitat codes:

- Palaeartic Classification: 31.82
- EUNIS: F3.1/P.31.82
- CORINE: 31.82
- BWK: sx

Distribution and estimated area:

- Walloon Region: 452.5 ha (12 sites)

Major sites:

- Walloon Region: Vallée de la Meuse d'Hastière à Dinant (Dinant, Hastière), Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhay, Yvoir), Vallée de la Meuse de Dave à Marche-les-Dames (Namur), La Caestienne entre Frasnes et Doische (Couvin, Doische, Philippeville, Viroinval), Vallée de la Meuse à Huy et vallon de la Solières (Amay, Huy, Wanze), Vallée de la Meuse d'Yvoir à Dave (Anhée, Assesse, Namur, Profondeville, Yvoir), Haute-Sambre en amont de Thuin (Lobbes, Merbes-le-Château, Thuin), Vallée du Ruisseau de Féron (Doische, Florennes, Hastière, Onhay), Vallée de la Chinelle (Florennes, Philippeville), Affluents de la Meuse entre Huy et Flémalle (Amay, Engis, Flémalle, Modave, Nandrin, Neupré)



#### 5130 - *Juniperus communis* formations on heaths or calcareous grasslands

Formations with *Juniperus communis* of plain to montane levels.

Habitat codes:

- Palaeartic Classification: 31.88
- EUNIS: F3.1/P-31.88
- CORINE: 31.88
- BWK: part of cg

Distribution and estimated area:

- Flemish Region: 1.3 ha (2 sites)
- Walloon Region: 29.7 ha (11 sites)

Major sites:

- Flemish Region: Overgang Kempen-Haspengouw, Bosbeekvallei en aangrenzende bos- en heidegebieden te As-Opglabbeek-Maaseik
- Walloon Region: La Caestienne entre Frasnes et Doische (Couvin, Doische, Philippeville, Viroinval), Basse vallée de la Lienne (Lierneux, Stoumont), Fagnes de Malchamps et de Stoumont (Aywaille, Spa, Stavelot, Stoumont, Theux), Forêt de Freyr (Libramont, Chevigny, Saint-Hubert, Saint-Ode, Tenneville), Fagnes de la Crépale et prairies de Malempré (Lierneux, Manhay), Fagnes de Stavelot et vallée de l'Eau Rouge (Jalhay, Malmedy, Stavelot), Bassin de la Lesse entre Villers-sur-Lesse et Chanly (Nassogne, Rochefort, Tellin, Wellin), Vallées de Laclaireau et du Rabais (Etalle, Saint-Léger, Virton), Vallée de la Wimbe (Beauraing, Rochefort, Wellin), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm)



#### 6110 - (\*) Rupicolous calcareous or basophilic grasslands of the *Alyso-Sedion albi*

Open xerothermophile pioneer communities on superficial calcareous or base-rich soils (basic volcanic substrates), dominated by annuals and succulents of the *Alyso alyssoidis*

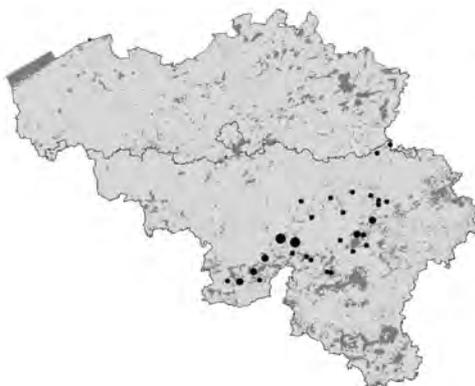
*Sedion albi*. Similar communities may develop on artificial substrates. These should not be taken into account.

Habitat codes:

- Palearctic Classification: 34.11
- EUNIS: E1.1/P-34.11
- CORINE: 34.11
- BWK: parts of hk (under investigation)

Distribution and estimated area:

- Walloon Region: 178.9 ha (30 sites)



Major sites:

- Walloon Region: Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Vallée de la Molinee (Anhée, Florennes, Mettet, Onhaye), Vallée de la Chinelle (Florennes, Philippeville), Vallée de l'Eau Blanche entre Aublain et Mariembourg (Chimay, Couvin), Bassin fagnard de l'Eau Blanche en aval de Mariembourg (Couvin, Doische, Philippeville), Vallée de l'Ourthe entre Bomal et Hamoir (Durbuy, Ferrières, Hamoir, Ouffet), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze), Vallée de la Meuse de Dave à Marche-les-Dames (Namur), Bois calcaires de Nettinne (Somme-Leuze), La Calestienne entre Frasnes et Doische (Couvin, Doische, Philippeville, Viroinval)

#### 6120 - (\*) Xeric sand calcareous grasslands

Dry, frequently open grasslands on more or less calciferous sand with a subcontinental centre of distribution (*Koelerion glaucae*, *Sileno conicae-Cerastion semidecandri*, *Sedo-Cerastion* p.).

Habitat codes:

- Palearctic Classification: 34.12
- EUNIS: E1.12/P-34.12
- CORINE: 3.2.1.
- BWK: hd

Distribution and estimated area:

- Walloon Region: 5.1 ha (2 sites)



Sites:

- Walloon Region: Marais de la Haute Semois et Bois de Heinsch (Arlon, Atttert, Etalle, Habay), Bassin de l'Atttert (Arlon, Atttert, Martelange)

#### 6130 - Calaminarian grasslands of the *Violetalia calaminariae*

Generally open natural or semi-natural grasslands 1) on natural rock outcrops, rich in heavy metals (e.g. zinc, lead); 2) on river gravels and shingles; 3) on old terrils or spoil heaps around mines. These open grasslands are characterised by a highly specialised flora, with subspecies and ecotypes adapted to heavy metals. The threatened endemic taxa are generally absent from the pioneer vegetation of younger terrils. This pioneer vegetation is not considered to be a priority.

Habitat codes:

- Palaeartic Classification: 34.2, 36.44
- EUNIS: E1.B
- CORINE: 34.2
- BWK: hv

Distribution and estimated area:

- Walloon Region: 55.0 ha (5 sites)

Sites:

- Walloon Region: Vallée de la Meuse de Marche-les-Dames à Andenne (Andenne, Ohey), Vallée de la Gueule en aval de Kelmis (Plombières, Welkenraedt), Vallée de l'Ourthe entre Comblain-au-Pont et Angleur (Chaufontaine, Comblain-au-Pont, Esneux, Liège, Neupré, Sprimont), Vallée de la Gueule en amont de Kelmis (Kelmis, Lontzen, Raeren, Welkenraedt), Coteaux calcaires de Theux et Le Rocheux (Theux)



6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (\* important orchid sites)

Dry to semi-dry calcareous grasslands. Important orchid sites should be interpreted as sites that are important on the basis of one or more of the following three criteria:

- (a) the site hosts a rich suite of orchid species;
- (b) the site hosts an important population of at least one orchid species considered not very common on the national territory;
- (c) the site hosts one or several orchid species considered to be rare, very rare or exceptional on the national territory.

Habitat codes:

- Palaeartic Classification: 34.31 to 34.34
- EUNIS: E1.2/P.34.311, E1.22, E1.23, E1.24, E1.2/P.34.317, E1.2/P.34.32, E1.2/P.34.33, E1.2/P.34.34
- CORINE: 34.31-34
- BWK: hk, sk

Distribution and estimated area:

- Flemish Region: 96.2 ha (6 sites)
- Walloon Region: 1167.7 ha (71 sites)



Major sites:

- Flemish Region: Voerstreek, Bossen en kalkgraslanden van Haspengouw, Plateau van Caestert met hellingbossen en mergelgrotten, Jekervallei en bovenloop van de Demervallei, Overgang Kempen-Haspengouw, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen
- Walloon Region: La Caestienne entre Frasnès et Doische (Couvain, Doische, Philippeville, Viroinval), Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Vallée de l'Eau Blanche à Virelles (Chimay, Couvain, Froidchappelle), La Caestienne entre Oppagne et Barvaux (Durbuy, Erezée), Vallée de l'Eau Blanche entre Aublain et Mariembourg (Chimay, Couvain), Vallées des Ruisseaux de Rempeine et de la Scheloupe (Beauraing), Vallée de l'Ourthe entre Bomal et Hamoir (Durbuy, Ferrières, Hamoir, Ouffet), Vallée de la Chinelle (Florennes, Philippeville),

Bassin de la Lesse entre Villers-sur-Lesse et Chanly (Nassogne, Rochefort, Tellin, Wellin), La Famenne entre Eprave et Havrenne (Rochefort)

- 6230 - (\*) Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas (and sub-mountain areas, in Continental Europe)

Closed, dry or mesophile, perennial *Nardus* grasslands occupying siliceous soils in Atlantic or sub-Atlantic or Boreal lowland, hill and montane regions. Vegetation highly varied, but the variation is characterised by continuity. *Nardetalia*: 35.1-*Violo-Nardion* (*Nardio-Galion saxatilis*, *Violon caninae*); 36.31-*Nardion*. Species-rich sites should be interpreted as sites which are remarkable for a high number of species. In general, the habitats which have become irreversibly degraded through overgrazing should be excluded.

Habitat codes:

- Palaeartic Classification: 35.1, 36.31
- EUNIS: E1.7, E4.3/P-36.31
- CORINE: 35.1, 36.31
- BWK: hn and parts of hmo, ce, ha

Distribution and estimated area:

- Flemish Region: 112.8 ha (11 sites)
- Walloon Region: 1045.9 ha (51 sites)



Major sites:

- Flemish Region: Vennen, heiden en moerassen rond Turnhout, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Demervallei, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Mechelse Heide en vallei van de Ziepbek, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel, Itterbeek met Brand, Jagersborg en Schootsheide en Bergerven
- Walloon Region: Camp militaire d'Elsenborn (Büllingen, Bütgenbach), Vallée de la Houille en aval de Gedinne (Beauraing, Gedinne), Haute vallée de l'Ambève entre Heppenbach et Montenau (Amel), Fagnes de Stavelot et vallée de l'Eau Rouge (Jalhay, Malmedy, Stavelot), Vallée de la Warche en amont de Bütgenbach (Büllingen, Bütgenbach), Vallée de l'Emmels (Amel), Basse-Vierre (Chiny, Herbeumont, Léglise, Neufchâteau, Tintigny), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Fagnes de la Roer (Bütgenbach, Waimes), Bassin supérieur de l'Ourthe occidentale (Libramont, Chevigny)

- 6410 - *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

*Molinia* meadows of plain to montane levels, on more or less wet nutrient-poor soils (nitrogen, phosphorus). They stem from extensive management, sometimes with a mowing late in the year, or they correspond to a deteriorated stage of draining peat bogs. Two subtypes can be distinguished:

- on neutro-alkaline to calcareous soils with a fluctuating water table, relatively rich in species. The soil is sometimes peaty and becomes dry in summer;
- on more acid soils of the *Juncus-Molinion* except species-poor meadows, or on degraded peaty soils.

Habitat codes:

- Palaeartic Classification: 37.31
- EUNIS: E3.5/P-37.31
- CORINE: 37.31
- BWK: hm, parts of hc in sandy regions

Distribution and estimated area:

- Flemish Region: 134.6 ha (10 sites)
- Walloon Region: 2549.1 ha (60 sites)



Major sites:

- Flemish Region: Bos- en heidegebieden ten oosten van Antwerpen, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem, Jekervallei en bovenloop van de Demervallei, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel, Valleien van de Winge en de Motte met valleihellingen, Polders, Bossen van het zuidoosten van de Zandleemstreek
- Walloon Region: Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nasogne, Saint-Hubert, Tellin, Tenneville), Basse-Vierre (Chiny, Herbeumont, Légglise, Neufchâteau, Tintigny), Bassin supérieur de l'Ourthe occidentale (Libramont, Chevigny), Camp militaire de Marche-en-Famenne (Hotton, Marche-en-Famenne, Somme-Leuze), Vallées du Ruisseau de Mellier et de Mandebras (Habay, Légglise, Neufchâteau), Bassin de la Semois de Jamoigne à Chiny (Chiny, Florenville, Herbeumont), Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, Légglise, Tintigny), Haute-Sûre (Fauvillers, Légglise, Libramont, Chevigny, Martelange, Neufchâteau, Vaux-sur-Sûre), Camp militaire d'Elsenborn (Büllingen, Bütgenbach), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny)

6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

37.7 - Wet and nitrophilous tall herb edge communities, along water courses and woodland borders belonging to the *Glechometalia hederaceae* and the *Convolvuletalia sepium* orders (*Senecion fluviatilis*, *Aegopodion podagrariae*, *Convolvulion sepium*, *Filipendulion*).

37.8 - Hygrophilous perennial tall herb communities of montane to alpine levels of the *Betulo-Adenostyletea* class. Belgium does not have well-developed examples of this subtype.

Habitat codes:

- Palaeartic Classification: 37.7 and 37.8
- EUNIS: E5.4, E5.5
- CORINE: 37.7 - 37.8
- BWK: hf, hfb, hfc, hft, parts of hr and ku

Distribution and estimated area:

- Brussels Capital Region: 27.9 ha (3 sites)
- Flemish Region: 2268.2 ha (21 sites)
- Walloon Region: 5552.6 ha (168 sites)



Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwoud met aangrenzende bosgebieden en Woluwevallei (Zoniënwoud / Forêt de

Soignes, Tournay-Solvaypark / Parc Tournay-Solvay, Etang de Boitsfort / Vijver van Bosvoorde, Etang des Silex / Silexvijver, Plateau de la Foresterie / Plateau van de Vorsterie, Bergoje, Parc de Woluwe / Woluwepark, Parc Malou / Maloupark, Hof-ter-Musschen), Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Kinsendaal / Kinsendael, Kriekenput, Herdies, Buysdellevallei / Vallée du Buysdelle, Moensberg, Kauwberg), Les zones boisées et les zones humides de la Vallée du Molenbeek au nord-ouest de la Région bruxelloise / De bosgebieden en vochtige zones van de vallei van de Molenbeek in het noordwesten van het Brussels Gewest (Marais de Jette-Ganshoren / Moeras van Jette-Ganshoren)

- Flemish Region: Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Jekervallei en bovenloop van de Demervallei, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Bosbeekvallei en aangrenzende bos- en heidegebieden te As-Opglabbeek-Maaseik, Bossen en kalkgraslanden van Haspengouw
- Walloon Region: Vallée de la Haine en aval de Mons (Bernissart, Boussu, Hensies, Jurbise, Mons, Quaregnon, Saint-Ghislain), Forêt d'Anlier (Attert, Habay, Léglise, Martelange), Haute-Sûre (Fauvillers, Léglise, Libramont, Chevigny, Martelange, Neufchâteau, Vaux-sur-Sûre), Marais de la Haute Semois et Bois de Heinsch (Arlon, Attert, Etalle, Habay), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Affluents de l'Our entre Setz et Schoenberg (Amel, Saint-Vith), Bassin inférieur de l'Ourthe orientale (Gouvy, Houffalize, La Roche-en-Ardenne), Bassin supérieur de la Vire et du Ton (Aubange, Messancy, Musson, Saint-Léger, Virton), Haute vallée de l'Aisne (Erezée, La Roche-en-Ardenne, Manhay, Rendeux)

#### 6510 - Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

Species-rich hay meadows on lightly to moderately fertilised soils of the plain to submontane levels, belonging to the *Arrhenatherion* and the *Brachypodio-Centaureion nemoralis* alliances. The last alliance is probably not relevant for Belgium. These extensive grasslands are rich in flowers and are cut once or twice a year after grasses flower.

##### Habitat codes:

- Palearctic Classification: 38.2
- EUNIS: E2.2
- CORINE: 38.2
- BWK: hu and parts of hp\* and hpr\*

##### Distribution and estimated area:

- Brussels Capital Region: 1.4 ha (1 site)
- Flemish Region: 1076.1 ha (17 sites)
- Walloon Region: 7063.2 ha (109 sites)



##### Major sites:

- Brussels Capital Region: Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Kauwberg, Engeland)
- Flemish Region: Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Demervallei, Heebossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop, Uiterwaarden langs de Limburgse Maas met Vijverbroek, Schelde- en Durme-estuarium van de

Nederlandse grens tot Gent, Itterbeek met Brand, Jagersborg en Schootsheide en Bergerven, Voerstreek, Bossen en kalkgraslanden van Haspengouw, Valleien van de Winge en de Motte met valleihellingen

- Walloon Region: Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, Léglise, Tintigny), Vallée de la Meuse à Huy et vallon de la Solières (Amay, Huy, Wanze), Bassin de la Semois de Jamoigne à Chiny (Chiny, Florenville, Herbeumont), Basse-Vierre (Chiny, Herbeumont, Léglise, Neufchâteau, Tintigny), Camp militaire de Marche-en-Famenne (Hotton, Marche-en-Famenne, Somme-Leuze), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Vallée de l'Eau Blanche entre Aublain et Mariembourg (Chimay, Couvin), Bassin supérieur de la Chevratte (Meix-devant-Virton, Tintigny, Virton), Vallée de la Semois en aval d'Alle (Bièvre, Vresse-sur-Semois), Vallée de l'Oise et de la Wartoise (Chimay, Momignies)

#### 6520 - Mountain hay meadows

Species-rich mesophile hay meadows of the montane and subalpine levels.

Habitat codes:

- Palaeartic Classification: 38.31
- EUNIS: E2.3/P-38.31
- CORINE: 38.231
- BWK: parts of hu (under investigation)



Distribution and estimated area:

- Walloon Region: 1408.5 ha (54 sites)

Major sites:

- Walloon Region: Bassin supérieur de l'Ourthe occidentale (Libramont, Chevigny), Camp militaire d'Elsenborn (Büllingen, Bütgenbach), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Sources de l'Our et de l'Ensebach (Büllingen), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Haute vallée de l'Amblève entre Heppenbach et Montenau (Amel), Fagnes de la Crépele et prairies de Malempré (Lierneux, Manhay), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Affluents de l'Our entre Setz et Schoenberg (Amel, Saint-Vith), Fagnes de la Roer (Bütgenbach, Waimes)

#### 7110 - (\*) Active raised bogs

Acid bogs, ombrotrophic, poor in mineral nutrients, sustained mainly by rain water, with a water level generally higher than the surrounding water table, with perennial vegetation dominated by *Sphagnum* spp. allowing for the growth of the bog (*Erico-Sphagnetalia magellanici*). The term 'active' must be taken to mean still supporting a significant area of vegetation that is normally peat forming, but bogs where active peat formation is temporarily at a standstill, such as after a fire or during a natural climatic cycle (e.g. a period of drought), are also included.

Habitat codes:

- Palearctic Classification: 51.1
- EUNIS: D1.1/P-51.1
- CORINE: 51.1
- BWK: t, ces, ct

Distribution and estimated area:

- Flemish Region: 27.8 ha (8 sites)
- Walloon Region: 380.6 ha (21 sites)



Major sites:

- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Mechelse Heide en vallei van de Ziepbeek, Vennen, heiden en moerassen rond Turnhout, Klein en Groot Schietveld, Heesbossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop, De Maten
- Walloon Region: Haute-Lomme (Libin, Libramont, Chevigny, Saint-Hubert), Plateau des Hautes-Fagnes (Baelen, Bütgenbach, Jalhay, Malmedy, Waimes), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Marais de la Haute Semois et Bois de Heinsch (Arlon, Attert, Etalle, Habay), Haute-Sûre (Fauvillers, Léglise, Libramont, Chevigny, Martelange, Neufchâteau, Vaux-sur-Sûre), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Bassin supérieur de la Salm (Gouvy, Vielsalm), Noir Ru et vallée du Rechterbach (Malmedy, Saint-Vith, Stavelot, Trois-Ponts), Camp militaire de Lagland (Arlon, Etalle, Saint Léger), Fagnes de Malchamps et de Stoumont (Aywaille, Spa, Stavelot, Stoumont, Theux)

7120 - Degraded raised bogs still capable of natural regeneration

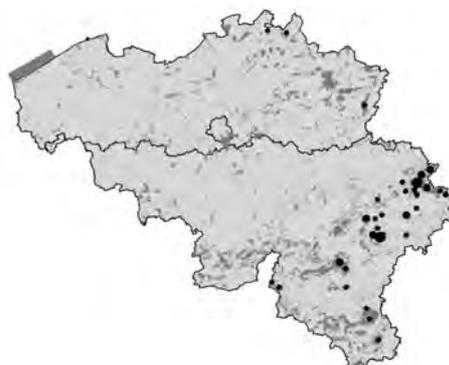
These are raised bogs where there has been disruption (usually anthropogenic) to the natural hydrology of the peat body, leading to surface desiccation and/or species change or loss. Vegetation on these sites usually contains species typical of active raised bogs as the main component, but the relative abundance of individual species is different. Sites judged to be still capable of natural regeneration will include those areas where the hydrology can be repaired and where, with appropriate rehabilitation management, there is a reasonable expectation of re-establishing vegetation with peat-forming capability within 30 years. Sites unlikely to qualify as SACs are those that consist largely of bare peat dominated by agricultural grasses or other crops, or where components of bog vegetation have been eradicated by closed canopy woodlands.

Habitat codes:

- Palearctic Classification: 51.2
- EUNIS: D1.1/P-51.2
- CORINE: 51.2
- BWK: tm, ctm

Distribution and estimated area:

- Flemish Region: 8.0 ha (3 sites)
- Walloon Region: 1687.9 ha (32 sites)



#### Major sites:

- Flemish Region: Mechelse Heide en vallei van de Ziepbek, Vennen, heiden en moerassen rond Turnhout, Heesbossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop
- Walloon Region: Plateau des Hautes-Fagnes (Baelen, Bütgenbach, Jalhay, Malmedy, Waimes), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Fanges des sources de l'Aisne (La Roche-en-Ardenne, Manhay, Vielsalm), Fagnes de la Roer (Bütgenbach, Waimes), Vallée de la Helle (Baelen, Eupen, Waimes), Noir Ru et vallée du Rechterbach (Malmedy, Saint-Vith, Stavelot, Trois-Ponts), Basse vallée de l'Aisne (Durbuy, Erezée, Ferrières, Manhay), Fagnes de Stavelot et vallée de l'Eau Rouge (Jalhay, Malmedy, Stavelot)

#### 7140 - Transition mires and quaking bogs

Peat-forming communities at the surface of oligotrophic to mesotrophic waters, with characteristics intermediate between soligenous and ombrogenous types. They present a large and diverse range of plant communities. In large peaty systems, the most prominent communities are swaying swards, floating carpets or quaking mires formed by medium-sized or small sedges, associated with *Sphagnum* or brown mosses. They are generally accompanied by aquatic and amphibious communities.

#### Habitat codes:

- Palaeartic Classification: 54.5
- EUNIS: D2.3
- CORINE: 54.5
- BWK: md, ms and parts of ce and ao

#### Distribution and estimated area:

- Flemish Region: 188.3 ha (9 sites)
- Walloon Region: 146.1 ha (16 sites)



#### Major sites:

- Flemish Region: Demervallei, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Abeek met aangrenzende moerasgebieden, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Uiterwaarden langs de Limburgse Maas met Vijverbroek, De Maten, Mechelse Heide en vallei van de Ziepbek, Vennen, heiden en moerassen rond Turnhout
- Walloon Region: Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Marais de la Haute Semois et Bois de Heinsch (Arlon, Attert, Etalle, Habay), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Bassin inférieur de l'Ourthe orientale (Gouvy, Houffalize, La Roche-en-Ardenne), Vallée de l'Olefbach (Büllingen), Bassin supérieur de la Salm (Gouvy, Vielsalm), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Plateau des Hautes-Fagnes (Baelen, Bütgenbach, Jalhay, Malmedy, Waimes), Mardelles d'Arbrefontaine et vallons fangeux de Fosse (Lierneux, Trois-Ponts, Vielsalm), Camp militaire d'Elsenborn (Büllingen, Bütgenbach)

7150 - Depressions on peat substrates of the *Rhynchosporion*

Highly constant pioneer communities of humid exposed peat, or sometimes sand, with *Rhynchospora alba*, *R. fusca*, *Drosera intermedia*, *D. rotundifolia*, *Lycopodiella inundata*, forming on stripped areas of blanket bogs or raised bogs, but also on naturally seep- or frost-eroded areas of wet heaths and bogs, in flushes and in the fluctuation zone of oligotrophic pools with sandy, slightly peaty substratum. These communities are similar and closely related to those of shallow bog hollows and of transition mires.

Habitat codes:

- Palearctic Classification: 54.6
- EUNIS: D2.3/P-54.6
- CORINE: 54.6
- BWK: ce

Distribution and estimated area:

- Flemish Region: 47.8 ha (13 sites)
- Walloon Region: 10.9 ha (4 sites)



Major sites:

- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, De Maten, Demervallei, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Mechelse Heide en vallei van de Ziepbek, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Vennen, heiden en moerassen rond Turnhout, Abeek met aangrenzende moerasgebieden, Klein en Groot Schietveld
- Walloon Region: Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Camp militaire de Lagland (Arlon, Etalle, Saint Léger), Bord nord du bassin de la Haine (Beloel, Bernissart, Saint-Ghislain), Haute-Lomme (Libin, Libramont, Chevigny, Saint-Hubert)

7210 - (\*) Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

*Cladium mariscus* beds of the emergent-plant zones of lakes, fallow lands or succession stage of extensively farmed wet meadows in contact with the vegetation of the *Caricion davallianae* or other *Phragmition* species (*Cladietum marisci*). This habitat type is only found in Flanders. However, based on the 'Florabank', the typical species for this habitat, *Carex davalliana*, is not observed in Flanders.

Habitat codes:

- Palearctic Classification: 53.3
- EUNIS: D5.2
- CORINE: 53.3
- BWK: mm

Distribution and estimated area:

- Flemish Region: 51.4 ha (4 sites)



Sites:

- Flemish Region: Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen, Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem

7220 - (\*) Petrifying springs with tufa formation (*Cratoneurion*)

Hard water springs with active formation of travertine or tufa. These formations are found in such diverse environments as forests or open countryside. They are generally small (point or linear formations) and dominated by bryophytes (*Cratoneurion commutati*).

Habitat codes:

- Palearctic Classification: 54.12
- EUNIS: D4.1/P-54.12
- CORINE: 54.12
- BWK: situated in 91E0, vc



Distribution and estimated area:

- Brussels Capital Region: 1.2 ha (1 site)
- Flemish Region: 14.1 ha (4 sites)
- Walloon Region: 32.6 ha (13 sites)

Major sites:

- Brussels Capital Region: Zones boisées et zones humides de la Vallée du Molenbeek dans le nord-ouest de la Région bruxelloise / Bosgebieden en vochtige zones van de vallei van de Molenbeek in het noordwesten van het Brussels Gewest (Bois du Poelbos / Poelbos, Bois du Laerbeek / Laarbeekbos, Bois de Dieleghem / Dielegembos)
- Flemish Region: Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Bossen en kalkgraslanden van Haspengouw, Hallerbos en nabije boscomplexen met brongebieden en heiden
- Walloon Region: Bassin de l'Hermeton en aval de Vodelée (Doische, Florennes, Hastière, Philippeville), Vallées du Hoyoux et du Triffooy (Clavier, Huy, Marchin, Modave, Ohey), Bassin de la Semois de Florenville à Aubry (Bertrix, Florenville, Herbeumont), Vallées de Laclaireau et du Rabais (Etalle, Saint-Léger, Virton), Vallée du Biran (Beauraing, Houyet, Rochefort), Vallée du Ton et Côte bajocienne de Montquinquin à Ruelle (Rouvroy, Virton), Vallées de la Chevratte (Meix-devant-Virton, Rouvroy), Vallée de la Meuse en amont d'Hastière (Beauraing, Doische, Hastière, Houyet), Bassin supérieur de la Chevratte (Meix-devant-Virton, Tintigny, Virton), Vallée de l'Eisch et de Clairefontaine (Arlon)

7230 - Alkaline fens

Wetlands mostly or largely occupied by peat- or tufa-producing small sedge and brown moss communities on permanently waterlogged soils, with a soligenous or topogenous base-rich, often calcareous water supply, and with the water table at, or slightly above or below, the substratum. Peat formation, when it occurs, is infra-aquatic. Calciphile small sedges and other Cyperaceae usually dominate the mire communities, which belong to the *Caricion davallianae*, characterised by a usually prominent 'brown moss' carpet formed by *Campylium stellatum*, *Drepanocladus revolvens*, *Fissidens adiantoides*, *Bryum pseudotriquetrum* and others, a grasslike growth of *Schoenus nigricans*, *Eriophorum latifolium*, *Carex lepidocarpa*,

*C. hostiana*, *Juncus subnodulosus*, *Eleocharis quinqueflora*, and a very rich herbaceous flora including *Dactylorhiza incarnata*, *Herminium monorchis*, *Utricularia intermedia*, *Parnassia palustris* and *Schoenus nigricans*.

Habitat codes:

- Palaeartic Classification: 54.2
- EUNIS: D4.1
- CORINE: 54.2
- BWK: mk and parts of mp

Distribution and estimated area:

- Flemish Region: 99.1 ha (2 sites)
- Walloon Region: 120.4 ha (5 sites)



Sites:

- Flemish Region: Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem
- Walloon Region: Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Vallée du Ruisseau de Breuvanne (Chiny, Florenville, Tintigny), Marais de la Haute Semois et Bois de Heinsch (Arlon, Attert, Etalle, Habay), Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, Léglise, Tintigny), Bassin de la Marche (Chiny, Florenville, Meix-devant-Virton)

#### 8110 - Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsetalia ladani*)

This habitat consists of:

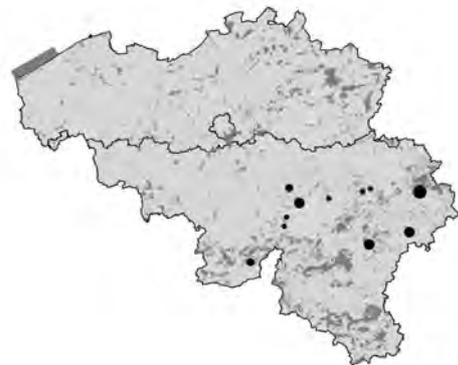
- communities of siliceous scree of the upper montane level to the permanent snow level, growing on more or less moving 'cryoclastic systems' with variable granulometry and belonging to the order *Androsacetalia alpinae*;
- vegetation of the montane level of the west and centre of Europe growing on screes sometimes of artificial origin (extraction of materials). It consists of alpine communities often rich in bryophytes, lichens and sometimes ferns.

Habitat codes:

- Palaeartic Classification: 61.1
- EUNIS: H2.3
- CORINE: 61.1
- BWK: parts of kr (under investigation)

Distribution and estimated area:

- Walloon Region: 79.1 ha (12 sites)



Major sites:

- Walloon Region: Vallée de la Warche et du Bayehon en aval du barrage de Robertville (Malmedy, Waimes), Vallée de l'Ourthe entre Nisramont et La Roche (Houffalize, La Roche-en-Ardenne, Rendoux), Bassin du Samson (Andenne, Assesse, Gesves, Namur, Ohéy), Bassin supérieur de la Salm (Gouvy, Vielsalm), La Calestienne entre Frasnes et Doische (Couvain, Doische, Philippeville, Viroinval), Vallée de la Meuse de Dave à Marche-les-Dames (Namur), Vallée du Bocq (Assesse, Yvoir), Vallée de l'Ourthe entre Hamoir et Comblain-au-Pont (Anthistes),

Comblain-au-Pont, Ferrières, Hamoir, Ouffet), Bassin supérieur de la Salm (Gouvy, Vielsalm), Basse vallée de l'Amblève (Aywaille, Comblain-au-Pont, Sprimont)

#### 8160 - (\*) Medio-European calcareous scree of hill and montane levels

Calcareous or marly screes of the hill and montane levels extending into mountainous regions (subalpine and alpine), often in dry, warm stations in associations with *Stipetalia calamagrostis*.

Habitat codes:

- Palaeartic Classification: 61.313
- EUNIS: H2.6/P-61.313
- CORINE: 61.312
- BWK: parts of kr (under investigation)

Distribution and estimated area:

- Walloon Region: 77.3 ha (12 sites)

Major sites:

- Walloon Region: Vallée de la Lomme de Grupont à Rochefort (Rochefort, Marche-en-Famenne, Nassogne), Vallée de la Molignée (Anhée, Florennes, Mettet, Onhaye), Bassin du Samson (Andenne, Assesse, Gesves, Namur, Ohey), Vallée de la Meuse en amont d'Hastière (Beauraing, Doische, Hastière, Houyet), Vallée de la Chinelle (Florennes, Philippeville), Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Vallée de la Meuse de Dave à Marche-les-Dames (Namur), Vallées du Hoyoux et du Triffoy (Clavier, Huy, Marchin, Modave, Ohey), Vallée de la Meuse d'Yvoir à Dave (Anhée, Assesse, Namur, Profondeville, Yvoir), Vallée de l'Ourthe entre Hamoir et Comblain-au-Pont (Anthisnes, Comblain-au-Pont, Ferrières, Hamoir, Ouffet)



#### 8210 - Calcareous rocky slopes with chasmophytic vegetation

Vegetation of fissures of limestone cliffs belonging essentially to the *Potentilletalia caulescentis* and *Asplenietalia glandulosi* orders.

Habitat codes:

- Palaeartic Classification: 62.1
- EUNIS: H3.2
- CORINE: 62.1
- BWK: parts of kr and km, eventually also of hk and kk (under investigation)

Distribution and estimated area:

- Walloon Region: 452.6 ha (41 sites)

Major sites:

- Walloon Region: Vallée de la Meuse de Dave à Marche-les-Dames (Namur), Vallée de la Meuse d'Hastière à Dinant (Dinant, Hastière), Vallée de la Molignée (Anhée, Florennes, Mettet, Onhaye), Vallées des ruisseaux de Fenffe et du Vachau (Ciney, Houyet, Rochefort), Vallée de la Semois en aval d'Alle (Bièvre, Vresse-sur-Semois), Vallée de la Meuse de Marche-les-Dames à Andenne



(Andenne, Ohey), Vallée de la Meuse d'Yvoir à Dave (Anhée, Assesse, Namur, Profondeville, Yvoir), Bassin de la Semois de Bouillon à Alle (Bièvre, Bouillon, Paliseul, Vresse-sur-Semois), Vallées de la Chevratte (Meix-devant-Virton, Rouvroy), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze)

8220 - Siliceous rocky slopes with chasmophytic vegetation

Vegetation of fissures of siliceous inland cliffs, which presents many regional subtypes. Typical vegetation in Belgium includes *Androsacetalia vandellii*, *Asplenietalia lanceolata-obovati*, *Asplenietalia billotii*.

Habitat codes:

- Palaearctic Classification: 62.2
- EUNIS: H3.1
- CORINE: 62.2
- BWK: parts of kr and km (under investigation)

Distribution and estimated area:

- Walloon Region: 247.8 ha (31 sites)

Major sites:

- Walloon Region: Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Vallée de la Semois en aval d'Alle (Bièvre, Vresse-sur-Semois), Bassin du Ruisseau du Ru au Moulin (Bièvre, Gedinne, Vresse-sur-Semois), Vallée du Bocq (Assesse, Yvoir), Vallées du Hoyoux et du Triffoy (Clavier, Huy, Marchin, Modave, Ohey), Vallée du Ruisseau des Aleines (Bertrix, Bouillon, Paliseul), Bassin de la Semois de Bouillon à Alle (Bièvre, Bouillon, Paliseul, Vresse-sur-Semois), Bassin inférieur de l'Ourthe orientale (Gouvy, Houffalize, La Roche-en-Ardenne), Bassin de l'Hermeton en aval de Vodelée (Doische, Florennes, Hastière, Philippeville), Bassin de l'Iwène (Ciney, Houyet, Rochefort)



8230 - Siliceous rock with pioneer vegetation of the *Sedo-Scleranthion* or of the *Sedo albi-Veronicion dillenii*

Pioneer communities colonising superficial soils of siliceous rock surfaces. As a consequence of drought, this open vegetation is characterised by mosses and lichens (*Rhizocarpon*, *Umbilicaria*, *Ramalina*, *Cornicularia*, *Rhizoplaca*).

Habitat codes:

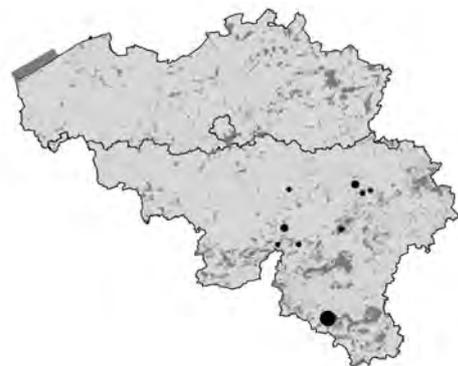
- Palaearctic Classification: 62.42
- EUNIS: H3.1/P-62.42
- CORINE: 62.42
- BWK: parts of kr and km (under investigation)

Distribution and estimated area:

- Walloon Region: 99.1 ha (9 sites)

Sites:

- Walloon Region: Bassin de la Semois de Florenville à Auby (Bertrix, Florenville, Herbeumont), Bois d'Anthisnes et d'Esneux (Anthisnes, Comblain-au-Pont, Esneux,



Nandrin, Neupré, Ouffet, Tinlot), Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Vallée de la Meuse de Dave à Marche-les-Dames (Namur), Camp militaire de Marche-en-Famenne (Hotton, Marche-en-Famenne, Somme-Leuze), Vallée de la Lesse entre Villers-sur-Lesse et Houyet (Houyet, Rochefort), Vallée de la Meuse en amont d'Hastière (Beuraing, Doische, Hastière, Houyet), Vallée de l'Ourthe entre Hamoir et Comblain-au-Pont (Anthisnes, Comblain-au-Pont, Ferrières, Hamoir, Ouffet), Basse vallée de l'Amblève (Aywaille, Comblain-au-Pont, Sprimont)

#### 8310 - Caves not open to the public

Caves not open to the public, including their water bodies and streams, hosting specialised or endemic species, or that are of paramount importance for the conservation of Annex II species (e.g. bats, amphibians).

##### Habitat codes:

- Palaeartic Classification: 65
- EUNIS: H1
- CORINE: 65
- BWK: code under investigation

##### Distribution and estimated area:

- Flemish Region: 66.0 ha (1 site)
- Walloon Region: 34.1 ha (32 sites)



##### Major sites:

- Flemish Region: Plateau van Caestert met hellingbossen en mergelgrotten
- Walloon Region: Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), La Calestienne entre Frasnes et Doische (Couvin, Doische, Philippeville, Viroinval), Bassin de la Lesse entre Villers-sur-Lesse et Chanly (Nassogne, Rochefort, Tellin, Wellin), Basse vallée de l'Aisne (Durbuy, Erezée, Ferrières, Manhay), Vallée du Ton et Côte bajocienne de Montquinquin à Ruette (Rouvroy, Virton), Vallée de la Hante (Beaumont, Froidchapelle, Sivry-Rance), Vallée de la Lesse en aval de Houyet (Dinant, Houyet), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze), Vallées du Hoyoux et du Triffoy (Clavier, Huy, Marchin, Modave, Ohey), Sources de la Hante (Cerfontaine, Froidchapelle)

#### 9110 - *Luzulo-Fagetum* beech forests

*Fagus sylvatica* and, in higher mountains, *Fagus sylvatica-Abies alba* or *Fagus sylvatica-Abies alba-Picea abies* forests on acid soils.

##### Habitat codes:

- Palaeartic Classification: 41.11
- EUNIS: G1.6/P-41.11
- CORINE: 41.11
- BWK: fl

##### Distribution and estimated area:

- Flemish Region: 167.5 ha (3 sites)
- Walloon Region: 40234.7 ha (129 sites)



Major sites:

- Flemish Region: Voerstreek, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Zoniënwoud
- Walloon Region: Forêt d'Anlier (Attert, Habay, Léglise, Martelange), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Bassin de la Lomme de Poix-Saint-Hubert à Grupont (Libin, Saint-Hubert, Tellin), Bassin de la Semois de Florenville à Auby (Bertrix, Florenville, Herbeumont), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Forêt de Freyr (Libramont, Chevigny, Saint-Hubert, Saint-Ode, Tenneville), Massifs forestiers entre Momignies et Chimay (Chimay, Momignies), Bassin de la Semois entre Tintigny et Jamoigne (Chiny, Habay, Léglise, Tintigny), Vallée de l'Amblève du Pont de Targnon à Remouchamps (Aywaille, Stoumont, Theux), Bois de Bourlers et de Baileux (Chimay, Couvin)

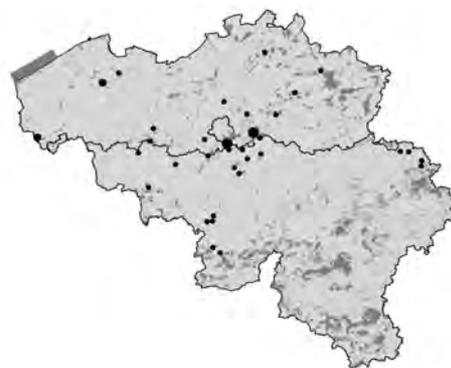
9120 - Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercinion robori-petraeae* or *Ilici-Fagenion*)

Beech forests with *Ilex*, growing on acid soils, of the plain to montane levels under humid Atlantic climate. The acid substrate corresponds to alterations of acid rocks or to silt with flints more or less degraded or to old alluvial deposits. The soils are of acid brown type, leaching or with an evolution towards podsol type. The humus is of moder to dysmoder type. These beech forests present different varieties:

- (a) sub-Atlantic beech-oak forests of the plains and hill levels with *Ilex aquifolium*;
- (b) hyper-Atlantic beech-oak forests of the plains and hill levels with *Ilex* and *Taxus* rich in epiphytes;
- (c) pure beech forests or acidophilous beech-fir forests of the montane level, with *Ilex aquifolium* in the field layer.

Habitat codes:

- Palearctic Classification: 41.12
- EUNIS: G1.6/P-41.12
- CORINE: 41.12
- BWK: large parts of qs and fs, qb on nutrient-rich bottoms, fl outside the 'Voeren' region



Distribution and estimated area:

- Flemish Region: 6929.2 ha (13 sites)
- Walloon Region: 2705.1 ha (21 sites)

Major sites:

- Flemish Region: Zoniënwoud, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel, Westvlaams Heuvelland, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Bos- en heidegebieden ten oosten van Antwerpen, Bossen van het zuidoosten van de Zandleemstreek, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Valleien van de Winge en de Motte met valleihellingen, Valleigebied tussen Melsbroek, Kampenhout, Kortenbergh en Veltem
- Walloon Region: Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Vallée de l'Argentine (La Hulpe, Lasne, Rixensart, Waterloo), Vallées de la Dendre et de la Marcq (Ellezelles, Flobecq, Frasnes-lez-Anvaing, Lessines), Haute-Sambre en aval de Thuin (Charleroi, Courcelles, Fontaine-l'Évêque, Lobbes, Thuin), Sources de la Dyle (Court-Saint-Etienne, Genappe, Ottignies, Louvain-la-Neuve), Vallée de la Thyle (Court-Saint-Etienne, Genappe, Les Bons Villers, Villers-la-

Ville), Vallée de la Lasne (Rixensart, Wavre), Vallée de la Dyle à Ottignies (Ottignies, Louvain-la-Neuve, Wavre), Bois d'Enghien et de Silly (Enghien, Silly), Vallée de la Rhosnes (Flobecq)

#### 9130 - *Asperulo-Fagetum* beech forests

*Fagus sylvatica* and, in higher mountains, *Fagus sylvatica-Abies alba* or *Fagus sylvatica-Abies alba-Picea abies* forests on neutral or near-neutral soils, with mild humus (mull), characterised by a strong representation of species belonging to the ecological groups of *Anemone nemorosa*, of *Lamium* (*Lamium*) *galeobdolon*, of *Galium odoratum* and *Melica uniflora* and, in mountains, various *Dentaria* spp., forming a richer and more abundant herb layer than in the forests of 9110 and 9120.

##### Habitat codes:

- Palaeartic Classification: 41.13
- EUNIS: G1.6/P-41.13
- CORINE: 41.13
- BWK: fm, qe, fe

##### Distribution and estimated area:

- Brussels Capital Region: 204.0 ha (2 sites)
- Flemish Region: 1914.7 ha (8 sites)
- Walloon Region: 11564.9 ha (80 sites)



##### Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwoud met aangrenzende bosgebieden en Woluwevallei (Zoniënwoud / Forêt de Soignes, Ter Kamerenbos / Bois de la Cambre, Tournay-Solvaypark / Parc Tournay-Solvay, Vijver van Bosvoorde / Etang de Boitsfort, Bergoje, Hertoginnedal / Val Duchesse, Woluwpark / Parc de Woluwe, Maloupark / Parc Malou), Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Verrewinkel, Buysdellebos / Bois du Buysdelle)
- Flemish Region: Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Hallerbos en nabije boscomplexen met brongebieden en heiden, Westvlaams Heuvelland, Zoniënwoud, Bossen en kalkgraslanden van Haspengouw, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Bossen van het zuidoosten van de Zandleemstreek, Voerstreek
- Walloon Region: Massif forestier de Cerfontaine (Cerfontaine, Chimay, Couvin, Froidchappelle, Philippeville), Bassin supérieur de la Vire et du Ton (Aubange, Messancy, Musson, Saint-Léger, Virton), Vallée de la Lesse en aval de Houyet (Dinant, Houyet), Bassin de l'Attert (Arlon, Attert, Martelange), Bassin de l'Iwène (Ciney, Houyet, Rochefort), Affluents brabançons de la Senne (Braine-l'Alleud, Braine-le-Château, Ittre, Tubize), Massifs forestiers entre Momignies et Chimay (Chimay, Momignies), Vallée du Ton et Côte bajocienne de Montquinquin à Ruelle (Rouvroy, Virton), Bassin de la Marche (Chiny, Florenville, Meix-devant-Virton), Bois Massart et Forêt de Sivry-Rance (Chimay, Froidchappelle, Sivry-Rance)

#### 9150 - Medio-European limestone beech forests of the *Cephalanthero-Fagion*

Xerothermophile *Fagus sylvatica* forests on calcareous, often superficial, soils, usually of steep slopes, with a generally abundant herb and shrub undergrowth, characterised by sedges (*Carex digitata*, *C. flacca*, *C. montana*, *C. alba*), grasses (*Sesleria albicans*, *Brachypodium*

*pinnatum*), orchids (*Cephalanthera* spp., *Neottia nidus-avis*, *Epipactis leptochila*, *E. microphylla*) and thermophile species, transgressive of the *Quercetalia pubescenti-petraeae*. The bush layer includes several calcicolous species (*Ligustrum vulgare*, *Berberis vulgaris*) and *Buxus sempervirens* can dominate.

Habitat codes:

- Palaeartic Classification: 41.16
- EUNIS: G1.6/P-41.16
- CORINE: 41.16
- BWK: fk

Distribution and estimated area:

- Brussels Capital Region: 20.6 ha (1 site)
- Flemish Region: 21.4 ha (2 sites)
- Walloon Region: 2780.1 ha (36 sites)



Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwood met aangrenzende bosgebieden en Woluwevallei (Zoniënwood / Forêt de Soignes)
- Flemish Region: Plateau van Caestert met hellingbossen en mergelgrotten, Voerstreek
- Walloon Region: Bassin de la Lesse entre Villers-sur-Lesse et Chanly (Nassogne, Rochefort, Tellin, Wellin), Vallée de la Meuse d'Hastière à Dinant (Dinant, Hastière), La Calestienne entre Marenne et Hotton (Hotton), Bois calcaires de Netinne (Somme-Leuze), Vallée de la Lesse en aval de Houyet (Dinant, Houyet), Vallée de l'Ourthe entre Hotton et Barvaux-sur-Ourthe (Durbuy, Hotton, Somme-Leuze), Vallée de la Wimbe (Beauraing, Rochefort, Wellin), Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Bassin de la Lesse entre Villers-sur-Lesse et Chanly (Nassogne, Rochefort, Tellin, Wellin), Vallée de l'Ourthe entre La Roche et Hotton (Erezée, Hotton, La Roche-en-Ardenne, Rendeux)

#### 9160 - Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*

Forests of *Quercus robur* (or *Quercus robur* and *Quercus petraea*) on hydromorphic soils or soils with high water table (bottoms of valleys, depressions or in the vicinity of riparian forests). The substrate corresponds to silts, clayey and silt-laden colluvions, as well as to silt-laden alterations or to siliceous rocks with a high degree of saturation. Forests of *Quercus robur* or natural mixed forests composed of *Quercus robur*, *Quercus petraea* and *Carpinus betulus*.

Habitat codes:

- Palaeartic Classification: 41.24
- EUNIS: G1.A/P-41.24
- CORINE: 41.24
- BWK: qa, fa

Distribution and estimated area:

- Brussels Capital Region: 297.3 ha (3 sites)
- Flemish Region: 1970.3 ha (17 sites)
- Walloon Region: 21986.0 ha (108 sites)



#### Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwoud met aangrenzende bosgebieden en Woluwevallei (Zoniënwoud / Forêt de Soignes, Ter Kamerenbos / Bois de la Cambre, Drie Linden Taluds / Talus des trois Tilleuls, Domaines St. Anna en Hertoginnedal / Domaines Ste Anne et Val Duchesse, Parmentierpark / Parc Parmentier, Ter Bronnenpark / Parc des Sources, Maloupark / Parc Malou), Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Kriekenput, Buysdellevallei / Vallée du Buysdelle, Fond' Roy), Zones boisées et zones humides de la Vallée du Molenbeek dans le nord-ouest de la Région bruxelloise / Bosgebieden en vochtige zones van de vallei van de Molenbeek in het noordwesten van het Brussels Gewest (Poelbos / Bois du Poelbos, Laarbeekbos / Bois de Laerbeek, Dielegembos / Bois de Dielegem)
- Flemish Region: Bossen en kalkgraslanden van Haspengouw, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Valleien van de Winge en de Motte met valleihellingen, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Zoniënwoud, Bossen van het zuidoosten van de Zandleemstreek, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Demervallei
- Walloon Region: Bassin fagnard de l'Eau Noire (Doische, Hastière, Philippeville), La Famenne entre Eprave et Havrenne (Rochefort), Bois de Grandhan, de Petit Han, de Famenne et de Biron (Durbuy, Erezée, Hotton), Vallée de la Meuse en amont d'Hastière (Beauraing, Doische, Hastière, Houyet), Bassin fagnard de l'Eau Blanche en aval de Mariembourg (Couvin, Doische, Philippeville), Massif forestier de Cerfontaine (Cerfontaine, Chimay, Couvin, Froidchapelle, Philippeville), Camp militaire de Marche-en-Famenne (Hotton, Marche-en-Famenne, Somme-Leuze), Vallée de la Houille en aval de Gedinne (Beauraing, Gedinne), Vallées des ruisseaux de Fenffe et du Vachau (Ciney, Houyet, Rochefort), Bassin de l'Hermeton en aval de Vodelée (Doische, Florennes, Hastière, Philippeville)

9180 - (\*) *Tilio-Acerion* forests of slopes, screes and ravines

Mixed forests of secondary species (*Acer pseudoplatanus*, *Fraxinus excelsior*, *Ulmus glabra*, *Tilia cordata*) of coarse scree, abrupt rocky slopes or coarse colluvions of slopes, particularly on calcareous, but also on siliceous, substrates.

#### Habitat codes:

- Palaeartic Classification: 41.4
- EUNIS: G1.A/P-41.4
- CORINE: 41.4
- BWK: ek, es

#### Distribution and estimated area:

- Walloon Region: 2991.3 ha (89 sites)



#### Major sites:

- Walloon Region: Bassin inférieur de l'Ourthe orientale (Gouvy, Houffalize, La Roche-en-Ardenne), Vallée de la Molinee (Anhée, Florennes, Mettet, Onhaye), Vallée de l'Ourthe entre Bomal et Hamoir (Durbuy, Ferrières, Hamoir, Ouffet), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Vallée de la Houille en aval de Gedinne (Beauraing, Gedinne), Vallée de la Lesse en aval de Houyet (Dinant, Houyet), Vallée de l'Ourthe entre Comblain-au-Pont et Angleur (Chaufontaine, Comblain-au-Pont, Esneux, Liège, Neupré, Sprimont), Basse-Vierre (Chiny, Herbeumont, Légglise, Neufchâteau, Tintigny), Vallée de la Warche et du Bayehon en aval du barrage de Robertville (Malmedy, Waimes), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin)

9190 - Old acidophilous oak woods with *Quercus robur* on sandy plains

Acidophilous forests of the Baltic-North Sea plain, composed of *Quercus robur*, *Betula pendula* and *Betula pubescens*, often mixed with *Sorbus aucuparia* and *Populus tremula*, on very oligotrophic, often sandy (or moraine) and podsolised or hydromorphic soils; the bush layer, poorly developed, includes *Frangula alnus*; the herb layer is formed by *Deschampsia flexuosa* and other grasses and herbs of acid soils (sometimes includes *Molinia caerulea*), and is often invaded by bracken. Forests of this type often prevail in the northern European plain (e.g. Flanders) and occupy more limited edaphic enclaves elsewhere (e.g. Ardenne).

Habitat codes:

- Palearctic Classification: 41.51 and 41.54
- EUNIS: G1.8/P-41.51, G1.8/P-41.54
- CORINE: 41.51 and 41.54
- BWK: qb within the borders of old forest



Distribution and estimated area:

- Brussels Capital Region: 36.0 ha (2 sites)
- Flemish Region: 1767.5 ha (16 sites)
- Walloon Region: 1273.8 ha (31 sites)

Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwoud met aangrenzende bosgebieden en Woluwevallei (Forêt de Soignes / Zoniënwoud), Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Kauwberg, Engeland)
- Flemish Region: Bos- en heidegebieden ten oosten van Antwerpen, Heesbossen en vallei van Marke en Merkske en Ringven met valleigronden langs de Heerlese Loop, Abeek met aangrenzende moerasgebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Bossen, heiden en valleigebieden van zandig Vlaanderen: westelijk deel, Mechelse Heide en vallei van de Ziepebeek, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Valleien van de Laambeek, Zonderikbeek, Slangebeek en Roosterbeek met vijvergebieden, Itterbeek met Brand, Jagersborg en Schootsheide en Bergerven, Demervallei
- Walloon Region: Bord nord du bassin de la Haine (Beloeil, Bernissart, Saint-Ghislain), Bois de Bon-Secours (Bernissart, Péruwelz), Vallée de la Thyle (Court-Saint-Etienne, Genappe, Les Bons Villers, Villers-la-Ville), Sources de la Dyle (Court-Saint-Etienne, Genappe, Ottignies, Louvain-la-Neuve), Vallée de la Lembrée et affluents (Aywaille, Durbuy, Ferrières, Stoumont), Vallée de la Lasne (Rixensart, Wavre), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Fagnes de Stavelot et vallée de l'Eau Rouge (Jalhay, Malmedy, Stavelot), Bois de la Géronstère (Jalhay, Spa), Vallée de la Dyle à Ottignies (Ottignies, Louvain-la-Neuve, Wavre)

91D0 - (\*) Bog woodland

Coniferous and broad-leaved forests on a humid to wet peaty substrate, with the water level permanently high and even higher than the surrounding water table. The water is always very poor in nutrients (raised bogs and acid fens). These communities are generally dominated by *Betula pubescens*, *Frangula alnus*, *Pinus sylvestris*, *Pinus rotundata* and *Picea abies*, with species specific to bogland or, more generally, to oligotrophic environments, such as *Vaccinium* spp., *Sphagnum* spp., *Carex* spp.

Habitat codes:

- Palaeartic Classification: 44.A1 to 44.A4
- EUNIS: G1.5/P-44.1, G3.E/P-44.4
- CORINE: 44.A1 and 44.A4
- BWK: vt

Distribution and estimated area:

- Flemish Region: 43.0 ha (14 sites)
- Walloon Region: 3108.2 ha (54 sites)

Major sites:

- Flemish Region: Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden, Demervallei, Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Valleien van de Dijle, Laan en IJse met aangrenzende bos- en moerasgebieden, Mangelbeek en heide- en vengebieden tussen Houthalen en Gruitrode, Mechelse Heide en vallei van de Ziepbeek, Vennen, heiden en moerassen rond Turnhout, Valleien van de Laambeek, Zonderikbeek, Slangbeek en Roosterbeek met vijvergebieden, Valleien van de Winge en de Motte met valleihellingen, Hageven met Dommelvallei, Beverbeekse Heide, Warmbeek en Wateringen
- Walloon Region: Fagnes de la Polleur et de Malmedy (Malmedy, Waimes), Fagnes de Samrée et de Tailles (Houffalize, La Roche-en-Ardenne, Manhay, Vielsalm), Noir Ru et vallée du Rechterbach (Malmedy, Saint-Vith, Stavelot, Trois-Ponts), Haute-Lomme (Libin, Libramont, Chevigny, Saint-Hubert), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Vallées du Ruisseau de Mellier et de Mandebres (Habay, Léglise, Neuf-château), Vallée de la Hulle (Gedinne), Vallée de l'Amblève entre Montenau et Bagné (Amel, Malmedy, Waimes), Fagnes du Nord-Est (Eupen, Raeren, Waimes), Bassin supérieur de la Salm (Gouvy, Vielsalm)



91E0 - (\*) Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Riparian forests of *Fraxinus excelsior* and *Alnus glutinosa*, of temperate and Boreal Europe lowland and hill watercourses (44.3: *Alno-Padion*); riparian woods of *Alnus incanae* of montane and submontane rivers of the Alps and the northern Apennines (44.2: *Alnion incanae*); arborescent galleries of tall *Salix alba*, *S. fragilis* and *Populus nigra*, along medio-European lowland, hill or submontane rivers (44.13: *Salicion albae*). All types occur on heavy soils (generally rich in alluvial deposits) periodically inundated by the annual rise of the river (or brook) level, but otherwise well drained and aerated during low water. The herbaceous layer invariably includes many large species (*Filipendula ulmaria*, *Angelica sylvestris*, *Cardamine* spp., *Rumex sanguineus*, *Carex* spp., *Cirsium oleraceum*) and various vernal geophytes can occur, such as *Ranunculus ficaria*, *Anemone nemorosa*, *A. ranunculoides*, *Corydalis solida*.

Habitat codes:

- Palaeartic Classification: 44.3, 44.2 and 44.13
- EUNIS: G1.2/P-44.3, G1.1/P-44.2, G1.1/P-44.13
- CORINE: 44.3, 44.2 and 44.13
- BWK: va, vo, vm, vc, vf, vn

Distribution and estimated area:

- Brussels Capital Region: 46.3 ha (3 sites)
- Flemish Region: 4632.5 ha (32 sites)
- Walloon Region: 7199.5 ha (200 sites)



#### Major sites:

- Brussels Capital Region: Forêt de Soignes avec lisières et domaines boisés avoisinants et la Vallée de la Woluwe / Zoniënwoud met aangrenzende bosgebieden en Woluwevallei (Zoniënwoud / Forêt de Soignes, Bergoje, Hertoginnedal / Val Duchesse, Ter Bronnenpark / Parc des Sources, Maloupark / Parc Malou), Zones boisées et ouvertes au sud de la Région bruxelloise / Bosgebieden en open gebieden in het zuiden van het Brussels Gewest (Kinsendaal / Kinsendael, Kriekenput, Herdies, Buysdellebos en -vallei / Vallée et bois du Buysdelle, Fond' Roy), Zones boisées et zones humides de la Vallée du Molenbeek dans le nord-ouest de la Région bruxelloise / Bosgebieden en vochtige zones van de vallei van de Molenbeek in het noordwesten van het Brussels Gewest (Poelbos / Bois du Poelbos, Laarbeekbos / Bois de Laerbeek, Dielegembos / Bois de Dieleghem)
- Flemish Region: Bovenloop van de Grote Nete met Zammelsbroek, Langdonken en Goor, Bossen en heiden van zandig Vlaanderen: oostelijk deel, Valleien van de Winge en de Motte met valleihellingen, Bossen van de Vlaamse Ardennen en andere Zuidvlaamse bossen, Schelde- en Durme-estuarium van de Nederlandse grens tot Gent, Valleigebied tussen Melsbroek, Kampenhout, Kortenberg en Veltem, Valleigebied van de Kleine Nete met brongebieden, moerassen en heiden, Bos- en heidegebieden ten oosten van Antwerpen, Vennen, heiden en moerassen rond Turnhout, Vallei- en brongebied van de Zwarte Beek, Bolisserbeek en Dommel met heide en vengebieden
- Walloon Region: Vallées du Ruisseau de Mellier et de Mandebras (Habay, Légglise, Neufchâteau), Bassin de la Semois d'Etalle à Tintigny (Etalle, Habay, Tintigny), Basse-Vierre (Chiny, Herbeumont, Légglise, Neufchâteau, Tintigny), Marais de la Haute Semois et Bois de Heinsch (Arlon, Attert, Etalle, Habay), Haute vallée de l'Aisne (Erezée, La Roche-en-Ardenne, Manhay, Rendeux), Bassin inférieur de l'Ourthe orientale (Gouvy, Houffalize, La Roche-en-Ardenne), Massif forestier de Daverdisse (Daverdisse, Libin, Tellin, Wellin), Haute-Wamme et Masblette (La Roche-en-Famenne, Marche-en-Famenne, Nassogne, Saint-Hubert, Tellin, Tenneville), Bassin de la Lomme de Poix-Saint-Hubert à Grupont (Libin, Saint-Hubert, Tellin), Vallée de la Hulle (Gedinne)

91F0 - Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmion minoris*)

Forests of hardwood trees of the major part of the river bed, liable to flooding during regular rising of water level or of low areas liable to flooding following the raising of the water table. These forests develop on recent alluvial deposits. The soil may be well drained between inundations or remain wet. Following the hydric regime, the dominating woody species belong to *Fraxinus*, *Ulmus* or *Quercus* genus. The undergrowth is well developed.

#### Habitat codes:

- Palearctic Classification: 44.4
- EUNIS: G1.2/P-44.4
- CORINE: 44.4
- BWK: ru Maas / Meuse valley

#### Distribution and estimated area:

- Flemish Region: 0.6 ha (1 site)
- Walloon Region: 22.6 ha (5 sites)

#### Sites:

- Flemish Region: Uiterwaarden langs de Limburgse Maas met Vijverbroek
- Walloon Region: Vallée de la Meuse de Dinant à Yvoir (Anhée, Dinant, Onhaye, Yvoir), Vallée de la Meuse en amont d'Hastière (Beauraing, Doische, Hastière, Houyet), Vallée de la Lesse en aval de Houyet (Dinant, Houyet), Vallée de la Meuse à Huy et vallon de la Solières (Amay, Huy, Wanze), Vallée de la Sambre en aval de la confluence avec l'Orneau (Floreffe, Namur)



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