# **National Summary for Article 17 - Hungary**

#### 1 General information

#### 1.1 Number of SCIs and SACs

The table below provides the total number and total area of sites proposed and designated under the Habitats Directive (Sites of Community Importance, SCIs & Special Areas of Conservation, SACs), terrestrial area of sites and number and area of marine sites (i.e. any site with a marine component).

Empty cells in tables mean that the component requested is not applicable.

		All	Terrestrial	Marine			
	No.	Area (km²)	Area (km²)	No.	Area (km²)		
SCIs & SACs	479	14443.6	14443.6	0	0		
SACs only*	477	14437.1	14437.1	0	0		
Date of database used: 31-10-2012							

<sup>\*</sup>Hungary reports that total number of SACs is 479 as two pending SCIs were adopted in 2013

#### 1.2 Number of sites with comprehensive management plans (Art. 6(1))

Number of sites for which comprehensive management plans have been adopted: 27

Percentage of network area covered by comprehensive management plans: 5%

Number of sites for which management plans are under preparation (optional): 243

### 2. Number of habitats and species/subspecies

The table in this section gives the number of habitat types and species/subspecies in each Annex of the Habitats Directive by biogeographical and marine regions in Hungary. The species and habitats with the following presence status are included in the table: 'present', species of which taxonomy is not clear (SR TAX), species where the link to the corresponding name in the Habitats Directive is not clear (LR), species extinct after the Directive came into force (EX) and optional reports (OP).

Region	HABI	HABITATS		SPECIES							
Region	Ann	Annex I		Annex II		Annex IV		Annex V			
	Non-priority	Priority	Non-priority	Priority	Including those in Annex II	Excluding those in Annex II	Including those in Annex II	Excluding those in Annex II			
Number of habitats &	28	18	123	15	154	49	26	18			
species in the MS	4	6	13	88	15	54	2	6			
Pannonian	28	18	123	15	154	49	26	18			

#### Additional information:

Number of assessments of marginal habitat types: none

Number of assessments of marginal & occasional species: 1

Number of assessments of newly arriving species: **none** 

Number of species regionally extinct prior the Habitats Directive came into force: none

Number of species regionally extinct after the Habitats Directive came into force: 1

Number of species globally extinct after the Habitats Directive came into force: **none** Number of assessments of species/habitat types for which no reports received: **none** 

#### 3. Information on Conservation status

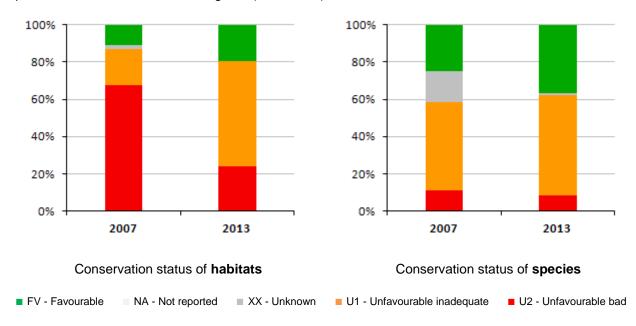
Please note that the figures shown for 2001-2006 and 2007-2012 are not necessarily directly comparable because there can be differences in number of assessments between the reporting rounds, changes in how some features were allocated in biogeographical regions etc.

The following have been excluded from all statistics under section 3:

- Habitats reported as marginal (MAR) or with scientific reserve (SR)
- Species reported as marginal (MAR), occasional (OCC), newly arriving (ARR), regionally extinct
  before the Habitats Directive came into force (PEX) and introduced species (INT). In addition
  reports that give only an information about species without evaluation of the conservation status
- Redundant reports provided for both marine and terrestrial regions for habitats and species and species for which only one, either terrestrial or marine report was expected (IRM).

### 3.1 a) Overall assessment of conservation status of habitats and species (%)

These figures show the percentage of biogeographical assessments in each category of conservation status for habitats and species, respectively. The information on which these figures are based are presented in the table below the figures (real values).



Year of		ı	HABITATS					SPECIES	i	
assessment	FV	NA	xx	U1	U2	FV	NA	xx	U1	U2
2007	5		1	9	31	52		34	98	23
2013	9			26	11	75		3	110	17

# 3.1 b) Percentage of assessments where the conservation status has changed between the reporting periods

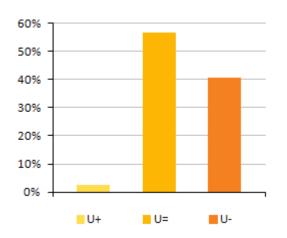
This table shows the percentage of assessments where the Member State has indicated a change between two reporting rounds (2001-2006 and 2007-2012) and the percentages of all reported changes where the change has been reported as a genuine change. Change can be either a change from one

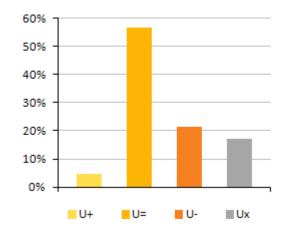
conservation status category to another or a change within the same category (within the qualifiers '-', '+'. '=', 'x'). Data have been taken from the 'audit trail table' where the Member State indicates the nature of change. The Member State's results on this audit trail are shown under section 7.

	SPECIES	HABITAT TYPES
% of assessments that changed	47%	59%
% of total changes considered genuine	9%	7%

# 3.2 Improving/deteriorating trends of habitats and species with an unfavourable conservation status (%)

These figures show the proportion of unfavourable assessments (U1 & U2) which are improving, deteriorating, stable or unknown.





Habitats - overall trend in Conservation Status

Species – overall trend in Conservation Status

U (+) = unfavourable (inadequate and bad) improving, U (=) = unfavourable stable, U (-) = unfavourable declining,

U (x) = unfavourable unknown trend

This table shows trends in conservation status of habitats & species separately for those cases where the overall conclusion is unfavourable inadequate (U1) and unfavourable bad (U2).

Qualifiers of CS	U1+	U1=	U1-	U1x	U2+	U2=	U2-	U2x
Habitats	1	17	8			4	7	
Species	5	68	20	17	1	4	7	5

**Note:** U1+ = unfavourable-inadequate improving, U1= = unfavourable-inadequate stable, U1- = unfavourable-inadequate declining, U1x = unfavourable-inadequate trend unknown, U2+ = unfavourable-bad improving, U2= = unfavourable-bad stable, U2- = unfavourable-bad declining, U2x = unfavourable-bad trend unknown

# 3.3 Overall assessment of conservation status of habitats and species by biogeographical/marine region (%)

These figures show the percentage of assessments in each of conservation status category by biogeographical and marine region, for habitats and species, respectively.

Please note that some habitats reported as terrestrial in 2001-2006 have been reported as marine in 2007-2012 (e.g. estuaries). Some species (e.g. seals, marine turtles) which in some cases were reported for both marine and terrestrial regions were only reported for one region in 2007-2012 (this statement only applies to Member States with marine regions).

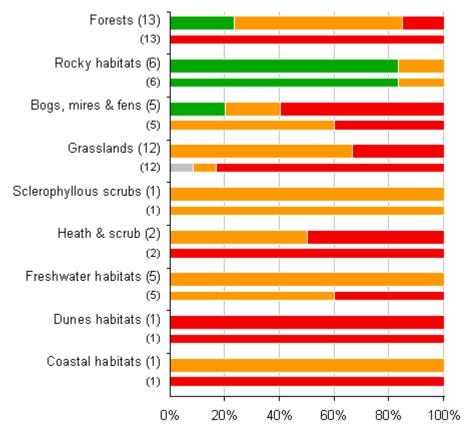
The graphs for HU are the same as under 3.1.

#### 3.4 Overall assessment of conservation status by habitat category/species group (%)

These figures show the percentage of biogeographical and marine assessments in each conservation status category by habitat category and by taxonomic group, for habitats and species, respectively.

The figures show the proportion of assessments in each conservation status class for 2007-2012 (upper bar) and 2001-2006 (lower bar). The information (number of assessments) on which these figures are based are presented in the tables below each figure (real values).

#### **Habitats**



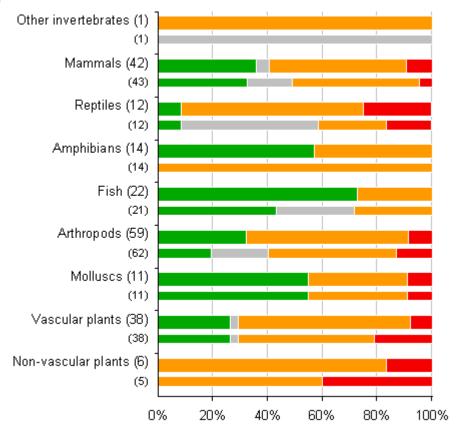
Conservation status of habitats in biogeographical and marine regions

**Note:** wide bar corresponds to the 2007-2012 reporting period, and the narrow bar to the 2001-2006 reporting period. The number in brackets corresponds to the number of biogeographical assessments in the category.

0	Year of		HABITATS					
Group	assessment	FV	NA	XX	U1	U2		
Forests	2007					13		
	2013	3			8	2		
Rocky habitats	2007	5			1			
	2013	5			1			
Bogs, mires & fens	2007				3	2		
	2013	1			1	3		
Grasslands	2007			1	1	10		
	2013				8	4		
Sclerophyllous scrubs	2007				1			
	2013				1			
Heath & scrub	2007					2		
	2013				1	1		
Freshwater habitats	2007				3	2		
	2013				5			
Dunes habitats	2007					1		
	2013					1		
Coastal habitats	2007					1		
	2013				1			

NB: Coastal habitats cover coastal and halophytic habitats (code 1xxx) and Dunes habitat types cover coastal sand dunes and inland dunes (code 2xxx) as listed in the Habitats Directive

## **Species**



Conservation status of **species** in biogeographical and marine regions

**Note:** wide bar corresponds to the 2007-2012 reporting period, and the narrow bar to the 2001-2006 reporting period. The number in brackets corresponds to the number of biogeographical assessments in the category.

Croup	Year of			SPECIES		
Group	assessment	FV	NA	XX	U1	U2
Other invertebrates	2007			1		
	2013				1	
Mammals	2007	14		7	20	2
	2013	15		2	21	4
Reptiles	2007	1		6	3	2
	2013	1			8	3
Amphibians	2007				14	
	2013	8			6	
Fish	2007	9		6	6	
	2013	16			6	
Arthropods	2007	12		13	29	8
	2013	19			35	5
Molluscs	2007	6			4	1
	2013	6			4	1
Vascular plants	2007	10		1	19	8
	2013	10		1	24	3
Non-vascular plants	2007				3	2
	2013				5	1

#### 3.5 Reasons for change in reported values of parameters (%)

This table provides information on reasons for changes of values reported for the parameters 'Range', 'Area (habitat)', 'Population' and 'Habitat for the species' between reporting periods 2001-2006 and 2007-2012. The table gives the percentage of habitats/species assessments for which a particular reason for change in values was reported. The reporting format lists three principal reasons for change: genuine change, better knowledge/data and use of different method.

Reason for change	Hab	itats	Species/subspecies			
	Surface area of range	Surface area of habitat	Surface area of range	Population size	Area of habitat for the species	
Genuine change	9	15	6	22	15	
Better knowledge/data	100	100	75	81	77	
Use of different method	28	22	43	36	35	

Note: More than one reason for change can be reported for each habitat and species.

# 4 Frequency of main pressures and threats (%) 1

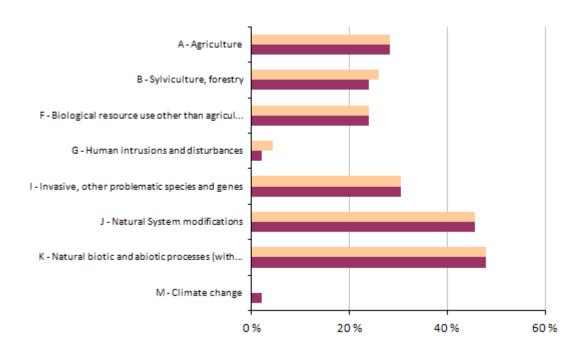
This section provides information on the relative importance of pressures and threats (aggregated to level 1) reported for habitats and species. The figures show the percentage of biogeographical assessments reported as being affected by one or more pressures or threats categorised as of 'high importance'. The information for the number of pressures and threats on which these figures are based are presented in the tables below the figures.

<sup>&</sup>lt;sup>1</sup> The following have been excluded:

Habitats reported as marginal or with scientific reserve.

Species reported as marginal, occasional, newly arriving, regionally extinct before the Habitats Directive came into force and introduced species. In addition reports that give only an information about species without evaluation of the conservation status.

Redundant reports provided for both marine and terrestrial regions for habitats and species and species for which only
one, either terrestrial or marine report was expected.



% of **habitat assessments** reported as being affected by one or more 'high' importance pressures/threats

■ pressure ■ threat

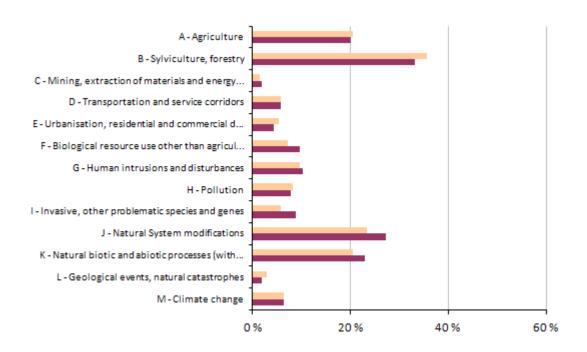
Note: Threats and pressures categories not reported are omitted.

Total number of assessments considered in the calculation: 46

Number of assessments with no high ranking threats (or no threats at all reported): 6

Number of assessment with no high ranking pressures (or no pressures at all): 6

Pressures and threats	НАВІ	TATS
Pressures and trireats	Number of threats	Number of pressures
A - Agriculture	13	13
B - Sylviculture, forestry	11	12
F - Biological resource use other than agriculture & forestry	11	11
G - Human intrusions and disturbances	1	2
I - Invasive, other problematic species and genes	14	14
J - Natural System modifications	21	21
K - Natural biotic and abiotic processes (without catastrophes)	22	22
M - Climate change	1	



% of **species assessments** reported as being affected by one or more 'high' importance pressures/threats

pressure threat

Note: Threats and pressures categories not reported are omitted.

Total number of assessments considered in the calculation: 205

Number of assessments with no high ranking threats (or no threats at all reported): 41

Number of assessment with no high ranking pressures (or no pressures at all): 38

December and thursts	SPE	CIES
Pressures and threats	Number of threats	Number of pressures
A - Agriculture	41	42
B - Sylviculture, forestry	68	73
C - Mining, extraction of materials and energy production	4	3
D - Transportation and service corridors	12	12
E - Urbanisation, residential and commercial development	9	11
F - Biological resource use other than agriculture & forestry	20	15
G - Human intrusions and disturbances	21	20
H - Pollution	16	17
I - Invasive, other problematic species and genes	18	12
J - Natural System modifications	56	48
K - Natural biotic and abiotic processes (without catastrophes)	47	42
L - Geological events, natural catastrophes	4	6
M - Climate change	13	13

## 5 Natura 2000 coverage and conservation measures <sup>2</sup>

Note: The figures under section 5 cover only Annex I habitat types and Annex II species.

## 5.1 Natura 2000 coverage (%)

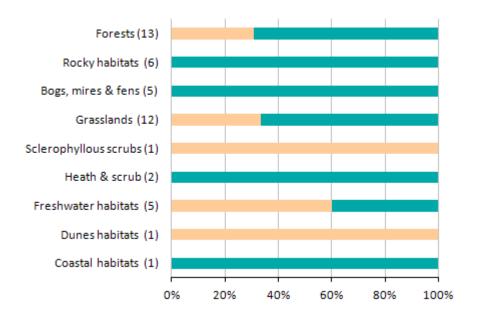
This section presents statistics on the coverage of Annex I habitats and Annex II species in Natura 2000 sites by habitat category/species group. These figures show the percentage of habitats/species assessments in three classes based on coverage by Natura 2000 sites, for habitats and species, respectively. The geometric mean is used if Member States have reported minimum and maximum values. The information for the number of assessments per coverage by Natura 2000 on which these figures are based are presented in the tables below the figures (real values). Please note that these statistics are based on Article 17 data and are independent from the results of the Biogeographical Seminars.

<sup>&</sup>lt;sup>2</sup> The following have been excluded:

<sup>•</sup> Habitats reported as marginal or with scientific reserve.

Species reported as marginal, occasional, newly arriving, regionally extinct before the Habitats Directive came into force and introduced species. In addition reports that give only an information about species without evaluation of the conservation status.

<sup>•</sup> Redundant reports provided for both marine and terrestrial regions for habitats and species and species for which only one, either terrestrial or marine report was expected.

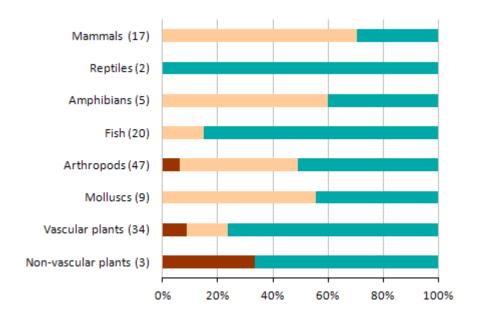


% of habitat assessments in 3 classes of coverage by Natura 2000 sites

coverage by Natura 2000 sites : ■ 0-24% ■ 25-74% ■ 75-100%

Note: The number in brackets corresponds to the number of biogeographical assessments in the habitat category.

		HABITATS							
Group	0-24%	25-74%	75-100%	unknown					
Forests		4	9						
Rocky habitats			6						
Bogs, mires & fens			5						
Grasslands		4	8						
Sclerophyllous scrubs		1							
Heath & scrub			2						
Freshwater habitats		3	2						
Dunes habitats		1							
Coastal habitats			1						



% of species assessments in 3 classes of coverage by Natura 2000 sites

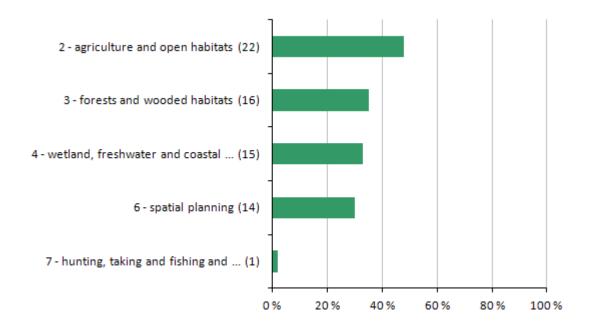
coverage by Natura 2000 sites : ■ 0-24% ■ 25-74% ■ 75-100%

Note: The number in brackets corresponds to the number of biogeographical assessments in the species category.

Croup		SPECIES							
Group	0-24%	25-74%	75-100%	unknown					
Mammals		12	5						
Reptiles			2						
Amphibians		3	2						
Fish		3	17						
Arthropods	3	20	24	1					
Molluscs		5	4						
Vascular plants	3	5	26						
Non-vascular plants	1		2						

## 5.2 Main conservation measures (%)

This section provides information on the relative importance of conservation measures at level 1 implemented during the reporting period 2007-2012 for Annex I habitats and Annex II species. The figures show the percentage of biogeographical assessments for which one or more 'high importance' conservation measures was implemented. Measures not reported are omitted.

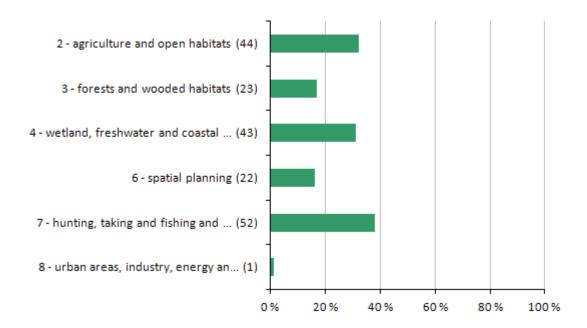


% of **habitat assessments** for which one or more 'high' importance measures were reported

**Note:** Numbers in brackets correspond to the number of assessments where measure 1, 2, etc. is noted as being of high importance. Occasional and extinct habitat types have been included in calculations.

Total number of assessments considered in the calculation: 46

Number of assessments with no high ranking conservation measures or no conservation measures at all reported: 1



% of **species assessments** for which one or more 'high' importance measures were reported

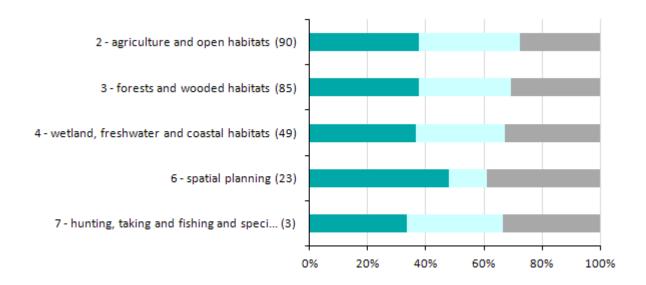
**Note:** Numbers in brackets correspond to the number of assessments where measure 1, 2, etc. is noted as being of high importance. Occasional and extinct species have been included in calculations.

Total number of assessments considered in the calculation: 138

Number of assessments with no high ranking conservation measures or no conservation measures at all reported: 23

#### 5.3 Impact of conservation measures (%)

This section provides information on the effects of implemented conservation measures for each level 1 measure category. The figures show, for each level 1 measure category, the frequency of reported effects. The information for the number of assessments per measure category on which these figures are based are presented in the tables below the figures (full names of the measures are shown in the tables).

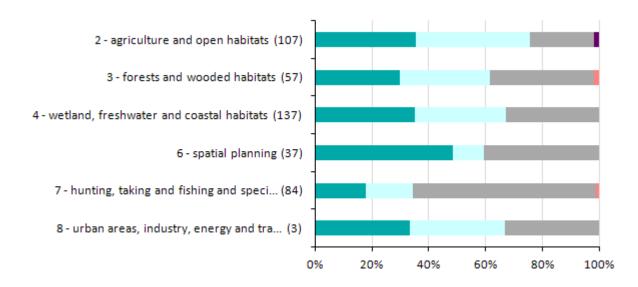


% of **habitat assessments** for which a particular effect of a measure was reported

■ maintain ■ enhance ■ longterm ■ no effect ■ unknown or not evaluated

**Note**: The numbers in brackets correspond to the numbers of biogeographical assessments for which one or more 'high' importance measure was reported.

		HABITATS					
Measure	maintain	enhance	longterm		unknown or not evaluated		
2 - Measures related to agriculture and open habitats	34	31	25				
3 - Measures related to forests and wooded habitats	32	27	26				
4 - Measures related to wetland, freshwater and coastal habitats	18	15	16				
6 - Measures related to spatial planning	11	3	9				
7 - Measures related to hunting, taking and fishing and species management	1	1	1				



% of **species assessments** for which a particular effect of a measure was reported

■ maintain ■ enhance ■ longterm ■ no effect ■ unknown or not evaluated

**Note**: The numbers in brackets correspond to the numbers of biogeographical assessments for which one or more 'high' importance measure was reported.

Measure		SPECIES					
		enhance	longterm		unknown or not evaluated		
2 - Measures related to agriculture and open habitats	38	43	24		2		
3 - Measures related to forests and wooded habitats	17	18	21	1			
4 - Measures related to wetland, freshwater and coastal habitats	48	44	45				
6 - Measures related to spatial planning	18	4	15				
7 - Measures related to hunting, taking and fishing and species management	15	14	54	1			
8 - Measures related to urban areas, industry, energy and transport	1	1	1				

# 6 Data quality and completeness <sup>3</sup>

The aim of this section is to provide an overview of the data gaps in the report; most of these gaps are due to insufficient knowledge. This section does not refer to potential errors or technical problems in the Member State's report and concentrates on what is relevant for evaluating data completeness.

The tables give percentages of habitats/species assessments with unknown or missing information for components of conservation status and conclusions.

<sup>3</sup> The statistics on missing information take into account that for the plant species listed in Annex V at the genus level only 'Overall assessment of conservation status' and 'Overall trend' are mandatory. The same approach was used for the species extinct after the Habitats Directive came into force.

# 6.1 a) Percentage of mandatory information that is missing (%)

## **Habitats**

	Area	0
Lighitat ranga	Trend	0
Habitat range	Reference value	0
	Conclusion	0
	Area	0
Habitat area	Trend	0
nabilal alea	Reference value	0
	Conclusion	0
Structure & functions	Conclusion	0
Future prospects	Conclusion	0
Pressures	s & threats	0
Natura 2000	Coverage	0
Natura 2000	Measures	0
	Conclusion	0
Overall	Trend	0
	Maps	0

# **Species**

	Area	0
Charles rongs	Trend	0
Species range	Reference value	0
	Conclusion	0
	Size	0
0	Trend	0
Species population	Reference value	0
	Conclusion	0
	Area	0
Habitat fan an arlan	Trend	0
Habitat for species	Area of suitable habitat*	0
	Conclusion	0
Future prospects	Conclusion	0
Pressures	s & threats	0
Noture 2000	Coverage	0
Natura 2000	Measures	0
	Conclusion	0
Overall	Trend	0
	Maps	0

<sup>\*</sup>This field is a mandatory field in the reporting format, however there is an inconsistency between the reporting format and the evaluation matrix as raised in the FAQ dated 14.2.2013

# 6.1 b) Percentage of mandatory information reported as unknown (%)

## **Habitats**

	Area	0
Lighitat ranga	Trend	0
Habitat range	Reference value	0
	Conclusion	0
	Area	0
Habitat area	Trend	4
Habitat alea	Reference value	2
	Conclusion	0
Structure & functions	Conclusion	0
Future prospects	Conclusion	0
Pressures	s & threats	0
Natura 2000	Coverage	0
Natura 2000	Measures	0
	Conclusion	0
Overall	Trend	0
	Maps	0

# **Species**

	Area	0
Charles rongs	Trend	4
Species range	Reference value	3
	Conclusion	1.5
	Size	0
Consiss namulation	Trend	24
Species population	Reference value	4
	Conclusion	7
	Area	0
Habitat fan an asiaa	Trend	8
Habitat for species	Area of suitable habitat*	6
	Conclusion	2
Future prospects	Conclusion	4
Pressures	s & threats	0
Noture 2000	Coverage	0.7
Natura 2000	Measures	0
	Conclusion	1.5
Overall	Trend	17
	Maps	0

<sup>\*</sup>This field is a mandatory field in the reporting format, however there remained an inconsistency between the reporting format and the evaluation matrix as raised in the FAQ dated 14.2.2013

#### 6.2 Methods used to estimate values or trends in Member State reports (%)

This section presents information about the quality of estimated values and trends in habitat and species biogeographical reports. For some parameters and trends, the reporting format requires an indication of which of three methods (complete survey or a statistically robust estimate, partial data with some extrapolation and/or modelling, expert opinion with no or minimal sampling) have been used to estimate the values or trends. The tables in this section present percentage of habitats/species assessments for which values were estimated by each of the three methods mentioned above.

#### **Habitats**

	Мар	Range	Area	Area trend	Str.&Funct.	N2000	Average
Expert opinion (%)	0	0	0	0	0	0	0
Extrapolation (%)	91	89	89	93	96	93	92
Complete survey (%)	9	11	11	7	4	7	8
Absent data (%)	0	0	0	0	0	0	0

#### **Species**

	Мар	Range	Population	Pop. trend	Habitat	N2000*	Average
Expert opinion (%)	13	13	14	12	15	8	12
Extrapolation (%)	64	63	66	69	68	62	66
Complete survey (%)	23	23	20	17	17	29	22
Absent data (%)	0	0	0	2	0	1	0

<sup>\*</sup>This column covers only Annex II species

#### Source of information:

Link to the national general report on CDR

Link to the national report for habitats on CDR

Link to the national report for species on CDR

Other links (national links to be provided by the Member State)

## 7. List of habitats and species reported and their conservation status

This section lists habitats and species reported by the Member State and the overall conclusions on their conservation status for the reporting period 2001-2006 (indicated as 2007) and 2007-2012 (indicated as 2013). Information from the audit trail has been used for this list and its focus is on what was reported in 2013.

There are two tables for habitats and species if relevant for the Member State. The second table includes only habitats or species with a status OCC, SR, MAR etc. Please note that occurrences e.g. OCC if only reported in 2007, are included only in the second table.

In addition the list includes information provided by the Member State on the nature of change in the overall conservation status between the reporting periods.

#### The codes are the following:

- there is a genuine change: the overall conservation status improved (or deteriorated) due to natural or non-natural reasons (management, intervention, etc.)
- b1 = the change observed is due to more accurate data (e.g. better mapping of distribution) or improved knowledge (e.g. on ecology of species or habitat)
- b2 = the change observed is due to a taxonomic review: one taxon becoming several taxa, or vice versa
- c1 = the change observed is due to use of different methods to measure or evaluate individual parameters or the overall conservation status
- c2 = the change observed is mainly due to the use of different thresholds e.g. to fix Favourable reference values
- d = no information about the nature of change
- e = the change observed is due to less accurate or absent data than the one used in the previous reporting period
- nc = no change (e.g. overall trend in conservation status only evaluated in 2013 but assumed to be the same in 2007 or not known)

### **Habitats reported by Hungary**

Group	Name	Code	Year	PAN
·				
Forests	Alluvial forests with Alnus glutinosa	91E0	2013	U1-
	and Fraxinus excelsior (Alno-Padion,		2007	U2
	Alnion incanae. Salicion albae)	9130	2013	c1 FV
	Asperulo-Fagetum beech forests	9130	2013	U2
			2007	c1
	Euro-Siberian steppic woods with	9110	2013	U2-
	Quercus spp.		2007	U2
		0.4160	0010	nc
	Illyrian Fagus sylvatica forests	91K0	2013 2007	U1= U2
	(Aremonio-Fagion)		2007	c1
	Illyrian oak-hornbeam forests	91L0	2013	U1=
	(Érythronio-Carpinion)		2007	U2
	, , ,			c1
	Luzulo-Fagetum beech forests	9110	2013	FV
			2007	U2 c1
	Medio-European limestone beech	9150	2013	FV
	forests of the Cephalanthero-Fagion	3100	2007	U2
				c1
	Pannonian woods with Quercus	91H0	2013	U1=
	pubescens		2007	U2
	Pannonian-Balkanic turkey oak –	91M0	2013	c1 U1-
	sessile oak forests	91100	2013	U2
	Scoolic out forcoto		2007	c1
	Pannonic inland sand dune thicket	91N0	2013	U2-
	(Junipero-Populetum albae)		2007	U2
	Pannonic woods with Quercus	0400	0040	nc
	petraea and Carpinus betulus	91G0	2013 2007	U1=
	petraea and Carpinus betulus		2007	c1
	Riparian mixed forests of Quercus	91F0	2013	U1-
	robur, Ulmus laevis and Ulmus		2007	U2
	minor, Fraxinus excelsior or Fraxinus	2122	2215	c1
	Tilio-Acerion forests of slopes,	9180	2013	U1=
	screes and ravines		2007	U2 b1
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Group	Name	Code	Year	PAN
Rocky habitats	Calcareous rocky slopes with chasmophytic vegetation	8210	2013 2007	FV FV nc
	Caves not open to the public	8310	2013 2007	U1= U1
	Medio-European calcareous scree of hill and montane levels	8160	2013 2007	nc FV FV
	Medio-European upland siliceous screes	8150	2013 2007	nc FV FV
	Siliceous rock with pioneer vegetation of the Sedo-Scleranthion	8230	2013 2007	nc FV FV
	or of the Sedo albi-Veronicion dillenii Siliceous rocky slopes with chasmophytic vegetation	8220	2013 2007	nc FV FV
Bogs, mires & fens	Active raised bogs	7110	2013 2007	nc U2= U1
	Alkaline fens	7230	2013 2007	c1 U2- U2
	Calcareous fens with Cladium mariscus and species of the Caricion davallianae	7210	2013 2007	FV U1 c1
	Petrifying springs with tufa formation (Cratoneurion)	7220	2013 2007	U1+ U1 nc
	Transition mires and quaking bogs	7140	2013 2007	U2= U2 nc
Grasslands	Alluvial meadows of river valleys of the Cnidion dubii	6440	2013 2007	U1- U2 c1
	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	6430	2013 2007	U2= U2 nc
	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	6510	2013 2007	U1= U2 c1
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	6410	2013 2007	U2- U2 a
	Mountain hay meadows	6520	2013 2007	U1- U2 b1
	Pannonic loess steppic grasslands	6250	2013 2007	U2= U2 nc
	Pannonic sand steppes	6260	2013 2007	U1- U2 b1
	Rupicolous calcareous or basophilic grasslands of the Alysso-Sedion albi	6110	2013 2007	U1= XX b1
	Rupicolous pannonic grasslands (Stipo-Festucetalia pallentis)	6190	2013 2007	U1= U1 nc
	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*	6210	2013 2007	U1= U2 c1
	Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in	6230	2013 2007	U2- U2 nc
	Sub-Pannonic steppic grasslands	6240	2013 2007	U1= U2 c1
Sclerophyllous scrubs	Juniperus communis formations on heaths or calcareous grasslands	5130	2013 2007	U1- U1 nc
Heath & scrub	European dry heaths	4030	2013 2007	U2- U2 a

Group	Name	Code	Year	PAN
	Subcontinental peri-Pannonic scrub	40A0	2013	U1-
			2007	U2 c1
Freshwater habitats	Natural dystrophic lakes and ponds	3160	2013	U1=
			2007	U2
				b1
	Natural eutrophic lakes with	3150	2013	U1=
	Magnopotamion or Hydrocharition —		2007	U1
	type vegetation Oligotrophic to mesotrophic standing	3130	2013	nc U1=
	waters with vegetation of the	3130	2007	U1
	Littorelletea uniflorae and/or of the			nc
	Rivers with muddy banks with	3270	2013	U1=
	Chenopodion rubri p.p. and Bidention		2007	U1
	p.p. vegetation	3260	2013	nc U1=
	Water courses of plain to montane levels with the Ranunculion fluitantis	3200	2013	U2
	and Callitricho-Batrachion vegetation		2007	c1
Dunes habitats	Pannonic inland dunes	2340	2013	U2-
			2007	U2
				a
Coastal habitats	Pannonic salt steppes and salt	1530	2013	U1=
	marshes		2007	U2 c1

Habitat types reported as scientific reserve (SR), marginal (MAR), invalid report in marine region (IRM) etc. (only listed when a scientific reserve etc has been reported)

Not Applicable

# **Species reported by Hungary**

Group	Name	Code	Year	PAN
Nagarandagalagi	Decide accessing distribution	4000	0040	110
Non-vascular plants	Buxbaumia viridis	1386	2013 2007	U2= U2
		4070	0040	nc
	Cladonia spp. (subgenus Cladina)	1378	2013 2007	U1- U1
			2007	b1
	Dicranum viride	1381	2013	U1=
			2007	U2
	Leucobryum glaucum	1400	2013	c2 U1=
			2007	U1
	Manage to detail due	4070	0040	nc
	Mannia triandra	1379	2013 2007	U1=
			2007	nc
	Sphagnum spp.	1409	2013	U1=
			2007	U1- nc
Vascular plants	Adenophora lilifolia	4068	2013	U2=
'	·		2007	U2
	Aldrovanda vesiculosa	1516	2013	nc U1x
	Aldrovarida vesiculosa	1316	2013	U1+
				nc
	Angelica palustris	1617	2013	U1=
			2007	U2 a
	Apium repens	1614	2013	U1+
			2007	U1
	Caldesia parnassifolia	1832	2013	a U2-
	Οαίσοσια μαιτιασσίιστια	1002	2013	U2
				b1
	Cirsium brachycephalum	4081	2013 2007	FV FV
			2007	nc

Group	Name	Code	Year	PAN
	Colchicum arenarium	2285	2013 2007	U1= U1 nc
	Crambe tataria	4091	2013 2007	U1= U1 nc
	Cypripedium calceolus	1902	2013 2007	U1+ U1 nc
	Dianthus diutinus	4074	2013 2007	U1+ U2+ a
	Dianthus lumnitzeri	4075	2013 2007	U1= U1 b2
	Dianthus plumarius ssp. regis- stephani	4077	2013 2007	U1= XX b2
	Dracocephalum austriacum	1689	2013 2007	FV U1 a
	Echium russicum	4067	2013 2007	U1= FV b1
	Eleocharis carniolica	1898	2013 2007	FV FV
	Ferula sadleriana	2170	2013 2007	FV U1+ c1
	Galanthus nivalis	1866	2013 2007	FV FV nc
	Gladiolus palustris	4096	2013 2007	U1= U2+ a
	Himantoglossum adriaticum	4104	2013 2007	U1= U1 nc
	Himantoglossum caprinum	2327	2013 2007	U1= U1 nc
	Iris aphylla ssp. hungarica	4097	2013 2007	U1- U1 a
	Iris humilis ssp. arenaria	4098	2013 2007	U1- U1 a
	Lindernia procumbens	1725	2013 2007	FV FV nc
	Linum dolomiticum	2156	2013 2007	FV FV nc
	Liparis loeselii	1903	2013 2007	U1= U1+ nc
	Lycopodium spp.	1413	2013 2007	U1- U1- nc
	Marsilea quadrifolia	1428	2013 2007	U1= U2- c1
	Onosma tornensis	2203	2013 2007	U1= U1 nc
	Paeonia officinalis ssp. banatica	2097	2013 2007	FV FV nc
	Pulsatilla grandis	2093	2013 2007	U1= U1 b1
	Pulsatilla patens	1477	2013 2007	U2= U2 a

Group	Name	Code	Year	PAN
	Pulsatilla pratensis ssp. hungarica	4110	2013 2007	U1= U2 c1
	Pyrus magyarica	4112	2013 2007	XX U1 b2
	Ruscus aculeatus	1849	2013 2007	FV FV nc
	Serratula lycopifolia	4087	2013 2007	U1= U1 nc
	Seseli leucospermum	4118	2013 2007	U1= FV c1
	Thlaspi jankae	2120	2013 2007	FV FV nc
	Vincetoxicum pannonicum	2188	2013 2007	U1= U1 nc
Molluscs	Anisus vorticulus	4056	2013 2007	FV FV nc
	Chilostoma banaticum	4057	2013 2007	U1= U1 c1
	Helix pomatia	1026	2013 2007	FV U1 a
	Hygromia kovacsi	4059	2013 2007	FV FV nc
	Paladilhia hungarica	4062	2013 2007	FV FV nc
	Sadleriana pannonica	4063	2013 2007	FV U1 b1
	Theodoxus prevostianus	5102	2013 2007	U2x U2 a
	Theodoxus transversalis	4064	2013 2007	U1= U1- b1
	Unio crassus	1032	2013 2007	FV FV nc
	Vertigo angustior	1014	2013 2007	U1= FV c1
	Vertigo moulinsiana	1016	2013 2007	U1= FV c1
Arthropods	Aeshna viridis	1048	2013 2007	U1= U1 nc
	Apatura metis	1066	2013 2007	U1= U1 nc
	Arytrura musculus	4027	2013 2007	FV U1 b1
	Astacus astacus	1091	2013 2007	U1- U1- nc
	Austropotamobius torrentium	1093	2013 2007	U1= XX b1
	Bolbelasmus unicornis	4011	2013 2007	U1x XX b1
	Callimorpha quadripunctaria	1078	2013 2007	FV FV nc

Group	Name	Code	Year	PAN
	Carabus hampei	4012	2013 2007	FV XX
	Carabus hungaricus	4013	2013 2007	b1 FV FV
	Carabus variolosus	4014	2013 2007	nc U1= U1
	Carabus zawadzkii	4015	2013 2007	FV FV nc
	Catopta thrips	4028	2013 2007	U1= U1- b1
	Cerambyx cerdo	1088	2013 2007	U1= U1 nc
	Coenagrion ornatum	4045	2013 2007	U1= FV c1
	Coenonympha oedippus	1071	2013 2007	U1+ U1 a
	Colias myrmidone	4030	2013 2007	U2- U2 b1
	Cordulegaster heros	4046	2013 2007	FV FV nc
	Cucujus cinnaberinus	1086	2013 2007	FV XX b1
	Dioszeghyana schmidtii	4032	2013 2007	FV U1+ b1
	Dorcadion fulvum cervae	4016	2013 2007	FV FV nc
	Duvalius gebhardti	4017	2013 2007	FV FV nc
	Duvalius hungaricus	4018	2013 2007	FV FV nc
	Erannis ankeraria	4033	2013 2007	U1= XX b1
	Eriogaster catax	1074	2013 2007	U1= U1+ b1
	Euphydryas aurinia	1065	2013 2007	U1x U1 c1
	Gortyna borelii lunata	4035	2013 2007	U1= U1 nc
	Graphoderus bilineatus	1082	2013 2007	FV XX b1
	Hypodryas maturna	1052	2013 2007	U1x U1 nc
	Isophya costata	4048	2013 2007	U1= U1 nc
	Isophya stysi	4050	2013 2007	U1= U1 nc
	Leptidea morsei	4036	2013 2007	U2- U2- nc
	Leucorrhinia caudalis	1035	2013 2007	U1- U2 c1

Group	Name	Code	Year	PAN
	Leucorrhinia pectoralis	1042	2013 2007	U1= U1 nc
	Lignyoptera fumidaria	4037	2013 2007	U1= U1 nc
	Limoniscus violaceus	1079	2013 2007	U1x XX b1
	Lopinga achine	1067	2013 2007	U1x U2- b1
	Lucanus cervus	1083	2013 2007	FV FV nc
	Lycaena dispar	1060	2013 2007	U1= U1 nc
	Maculinea arion	1058	2013 2007	U2- U2- nc
	Maculinea nausithous	1061	2013 2007	U1- U1- nc
	Maculinea teleius	1059	2013 2007	U1= U1 nc
	Morimus funereus	1089	2013 2007	FV XX b1
	Odontopodisma rubripes	4052	2013 2007	U1- U1- nc
	Ophiogomphus cecilia	1037	2013 2007	FV FV
	Osmoderma eremita	1084	2013 2007	U1x U1- nc
	Paracaloptenus caloptenoides	4053	2013 2007	U1= U1 nc
	Parnassius mnemosyne	1056	2013 2007	U1= U1 nc
	Pholidoptera transsylvanica	4054	2013 2007	U1= U1 nc
	Phyllometra culminaria	4040	2013 2007	U1= U1 nc
	Pilemia tigrina	4020	2013 2007	U2- U1 a
	Polymixis rufocincta isolata	4041	2013 2007	U1x U1- nc
	Probaticus subrugosus	4022	2013 2007	U2x XX c1
	Proserpinus proserpina	1076	2013 2007	U1x XX c1
	Rhysodes sulcatus	4026	2013 2007	U1= XX c1
	Rosalia alpina	1087	2013 2007	FV XX c1
	Saga pedo	1050	2013 2007	FV XX b1
	Stenobothrus eurasius	4055	2013 2007	U1- U1- nc

Group	Name	Code	Year	PAN
	Stylurus flavipes	1040	2013 2007	FV FV
	Zerynthia polyxena	1053	2013 2007	FV FV nc
Fish	Acipenser ruthenus	2487	2013 2007	U1= U1 nc
	Aspius aspius	1130	2013 2007	FV FV nc
	Barbus barbus	5085	2013 2007	FV FV nc
	Barbus meridionalis	1138	2013 2007	U1= FV c1
	Cobitis taenia	1149	2013 2007	FV FV nc
	Cottus gobio	1163	2013 2007	U1= U1 b1
	Eudontomyzon danfordi	4123	2013 2007	U1=
	Eudontomyzon mariae	2484	2013 2007	U1=
	Gobio kessleri	2511	2013 2007	FV XX b1
	Gobio uranoscopus	1122	2013 2007	FV XX b1
	Gobio vladykovi	6158	2013 2007	FV FV nc
	Gymnocephalus baloni	2555	2013 2007	FV FV nc
	Gymnocephalus schraetzer	1157	2013 2007	FV U1 b1
	Hucho hucho	1105	2013 2007	FV XX c1
	Misgurnus fossilis	1145	2013 2007	FV FV nc
	Pelecus cultratus	2522	2013 2007	FV XX b1
	Rhodeus sericeus amarus	1134	2013 2007	FV FV nc
	Rutilus virgo	5345	2013 2007	FV XX b1
	Sabanejewia aurata	1146	2013 2007	FV FV nc
	Umbra krameri	2011	2013 2007	U1x U1 b1
	Zingel streber	1160	2013 2007	FV U1+ b1
	Zingel zingel	1159	2013 2007	FV XX b1
Amphibians	Bombina bombina	1188	2013 2007	FV U1 b1

Group	Name	Code	Year	PAN
	Bombina variegata	1193	2013 2007	U1= U1-
	Bufo viridis	1201	2013 2007	b1 FV U1 b1
	Hyla arborea	1203	2013 2007	FV U1 b1
	Pelobates fuscus	1197	2013 2007	FV U1 b1
	Rana arvalis	1214	2013 2007	U1= U1- b1
	Rana dalmatina	1209	2013 2007	FV U1 b1
	Rana esculenta	1210	2013 2007	FV U1
	Rana lessonae	1207	2013 2007	b1 FV U1
	Rana ridibunda	1212	2013 2007	b1 FV U1
	Rana temporaria	1213	2013 2007	b1 U1= U1-
	Triturus carnifex	1167	2013 2007	b1 U1= U1-
	Triturus cristatus	1166	2013 2007	b1 U1= U1-
	Triturus dobrogicus	1993	2013 2007	b1 U1= U1-
Reptiles	Ablepharus kitaibelii	1276	2013 2007	b1 U1x U1-
	Coluber caspius	1278	2013 2007	nc U2x U2
	Coronella austriaca	1283	2013 2007	nc U1x XX b1
	Elaphe longissima	1281	2013 2007	U1x XX b1
	Emys orbicularis	1220	2013 2007	FV FV nc
	Lacerta agilis	1261	2013 2007	U1= XX b1
	Lacerta viridis	1263	2013 2007	U1x XX b1
	Lacerta vivipara pannonica	5037	2013 2007	U2x U1- b1
	Natrix tessellata	1292	2013 2007	U1x XX b1
	Podarcis muralis	1256	2013 2007	U1= XX b1
	Podarcis taurica	1248	2013 2007	U1x U1
	Vipera ursinii rakosiensis	4121	2013 2007	nc U2+ U2 a

Group	Name	Code	Year	PAN
Mammals	Barbastella barbastellus	1308	2013 2007	U1- U1- nc
	Canis aureus	1353	2013 2007	FV XX a
	Castor fiber	1337	2013 2007	FV FV nc
	Cricetus cricetus	1339	2013 2007	U1- U1- nc
	Dryomys nitedula	1342	2013 2007	U1= U1 nc
	Eptesicus nilssonii	1313	2013 2007	XX XX nc
	Eptesicus serotinus	1327	2013 2007	FV FV nc
	Felis silvestris	1363	2013 2007	U2- U2- nc
	Hypsugo savii	5365	2013 2007	FV FV nc
	Lutra lutra	1355	2013 2007	FV FV nc
	Lynx lynx	1361	2013 2007	U2x U2 nc
	Martes martes	1357	2013 2007	XX XX nc
	Microtus oeconomus mehelyi	4004	2013 2007	U1- U1- nc
	Miniopterus schreibersii	1310	2013 2007	U1+ U1 a
	Muscardinus avellanarius	1341	2013 2007	U1= XX b1
	Mustela eversmanii	2633	2013 2007	U2= XX b1
	Mustela putorius	1358	2013 2007	FV XX b1
	Myotis alcathoe	5003	2013 2007	U1x U1 nc
	Myotis bechsteinii	1323	2013 2007	U1- U1- nc
	Myotis blythii	1307	2013 2007	U1- U1- nc
	Myotis brandtii	1320	2013 2007	U1- U1- nc
	Myotis dasycneme	1318	2013 2007	U1= U1 nc
	Myotis daubentonii	1314	2013 2007	U1= U1 nc
	Myotis emarginatus	1321	2013 2007	FV FV nc
	Myotis myotis	1324	2013 2007	U1= FV a

Group	Name	Code	Year	PAN
	Myotis mystacinus	1330	2013 2007	U1= U1- c1
	Myotis nattereri	1322	2013 2007	U1- U1- nc
	Nyctalus lasiopterus	1328	2013 2007	U2- U1- a
	Nyctalus leisleri	1331	2013 2007	U1= U1
	Nyctalus noctula	1312	2013 2007	FV FV nc
	Pipistrellus kuhlii	2016	2013 2007	FV FV nc
	Pipistrellus nathusii	1317	2013 2007	FV FV nc
	Pipistrellus pipistrellus	1309	2013 2007	FV FV nc
	Pipistrellus pygmaeus	5009	2013 2007	FV FV nc
	Plecotus auritus	1326	2013 2007	U1- U1- nc
	Plecotus austriacus	1329	2013 2007	U1- U1
	Rhinolophus euryale	1305	2013 2007	FV FV nc
	Rhinolophus ferrumequinum	1304	2013 2007	U1- U1- nc
	Rhinolophus hipposideros	1303	2013 2007	FV FV nc
	Sicista subtilis	2021	2013 2007	U1= XX b1
	Spermophilus citellus	1335	2013 2007	U1- U1 a
	Vespertilio murinus	1332	2013 2007	FV FV nc
Other invertebrates	Hirudo medicinalis	1034	2013 2007	U1= XX b1

Species reported as occasional (OCC), newly arriving (ARR), extinct prior the Habitats Directive came into force (PEX), marginal (MAR), invalid report in marine region (IRM) or introduced (INT) etc. (only listed when an occasional species etc has been reported). In addition species with optional reports (OP) and scientific reserves (SR) are listed here.

Group	Name	Code	Year	PAN
Arthropods	Chondrosoma fiduciarium	4029	2013	SR U2x
			2007	U2-
				b1
	Cucullia mixta	4031	2013	SR U1x
			2007	U2
				c1
	Glyphipterix loricatella	4034	2013	SR U1x
			2007	U2-
				c1

Group	Name	Code	Year	PAN
Mammals	Canis lupus	1352	2013 2007	OCC U1 U1 nc