| inbo | Note |
|---|---|
| Date | 16-09-2009 |
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| To | ETC – BD, Marita Arvela and Dough Evans (for the Sub workgroup WP 1 of the EC expert group on reporting) |
| Concerns | Article 17 Report under the Habitats Directive: Belgian approach for the criteria "Habitat for the species" and "Suitable Habitat for the species" |
| Status | Discussion note |
| Number of document | INBO-A2009.208 |

**Article 17 Report under the Habitats Directive: Belgian approach for the criteria "Habitat for the species" and "Suitable Habitat for the species"**

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**1. The criterion "Habitat for the species" in the report 2007** (see annex 1)

The criterion is function of three sub criteria according to the evaluation matrix (DocHab-04-03/03 rev. 3, annex C):

1. Is the habitat area sufficiently large for long term survival? ("area estimation")
2. Is the habitat area stable or increasing? ("trend")
3. Is the quality of the habitat suitable for the long term survival? (no field present in the reporting format).

**<u>The Belgian approach to this criterion</u>**

For fauna species, a description of the habitat is given but for most of them **the area could not be estimated due** to absence of any liable information. Further elaboration of the criterion was in those cases not possible. Reasons for this are e.g.:

- we have knowledge of the habitat of the species, but this can not be approached by translating it to the legend units of our land cover map (**lack of data**) (e.g. for many amfibians we know more or less which combination of water types and surrounding habitats is needed, but were this occur and with which area is hard to approach);
- we have no idea which are the key environmental criteria for the species (e.g. rare dragon flies at the edge of their natural range, were a lot of habitats which seems appropriate for them are not used at this moment) (**lack of knowledge about the habitat key factors**);
- the habitat of the species is so broad (they occur in all different kind of habitats) that it is very difficult to give a good definition of the habitat of the species (**generalists at the level of habitat choice**).

A quality assessment was only done when an area estimation was available, but also then this was not always possible.
In some cases, an overall assessment (favourable, unfavourable-inadequate, unfavourable-bad) is given, based only on the trend which originated in those cases mostly from expert opinion.

***Habitat area***

In Table 1, we provide an overview of how the habitat area was estimated, if provided. A few approaches were used:

**(1)** When clear links exist between the habitat requirements of a species and the presence of particular habitat types (especially Annex I habitat types), a species' (potential) habitat area was estimated by adding up the known areas of the habitat types. This approach is used for plants, bryophytes and lichens.

For Vertigo moulinsiana a comparable approach was uses, but in this case it concerns also non annex I habitat types (large sedge vegetations = Magnocaricion + sedge rich subtype of 91E0) which also can be derived from the Belgian land cover map.

**(2)** For only one species (Lucanus cervus), the results of a specific and elaborated research programme could be adopted thanks to extensive surveys of habitat requirements in Atlantic Belgium. The habitat area of existing populations was calculated in GIS after modelling of the collected habitat data.

**(3)** For other species, especially those requiring very large habitat areas, (potential) habitat area was cartographically mapped based on expert opinion. For most of these species (carnivores), current distribution and area use is very hard to assess.

E.g.:

- for marine mammals the total Belgian marine area was considered as range = area = suitable habitat;
- mammal carnivores need a very large area and are very mobile: it is very difficult to distinguish between areas really occupied by the species and suitable habitat ➔ are considered the same.

**(4)** Habitat area of species with only a limited number of populations that are fully covered by existing monitoring programmes, is estimated based on the results of the intensive monitoring.

The methodology applied (see above) for each species is mentioned in Table 1. For species not listed in the table it was impossible to determine the habitat area (see above).

*Table 1. Species whose habitat area was determined as part of the first report under the Habitats Directive in 2007.*

| Species | Biogeographic region | 2.5.2. Area estimation (km²) | Approach used for area estimation (see text above) *** |
|---|---|---|---|
| Cladonia spp. (subgenus Cladina) | Atlantic | 56* | 1 (2310, 4030, 5130) |
| Cricetus cricetus | Atlantic | 150 | 4 |
| Drepanocladus vernicosus | Atlantic | 0,5* | 1 |
| Euphydryas aurinia | Continental | 5 | 4 |
| Halichoerus grypus | Atlantic ocean | 3451 | 3** |
| Leucobryum glaucum | Atlantic | 324* | 1 |
| Liparis loeselii | Atlantic | 0,1* | 1 (7230 + ?2190?) |
| Lucanus cervus | Atlantic | 121 | 2 |
| Luronium natans | Atlantic | 5 | 1 (3130, 3260) |
| Lutra lutra | Atlantic | 3460* | 3 |
| Lycaena dispar | Continental | 50 | 4 |
| Lycaena helle | Continental | 20 | 4 |
| Lycopodium spp. | Atlantic | 45* | 1 |
| Margaritifera margaritifera | Continental | 540 | 4 |
| Martes martes | Atlantic | 6450* | 3 |
| Muscardinus avellanarius | Atlantic | 30 | 4 |
| Mustela putorius | Atlantic | 18828* | 3 |
| Phoca vitulina | Atlantic ocean | 3451 | 3 |
| Phocoena phocoena | Atlantic ocean | 3451 | 3 |
| Sphagnum spp. | Atlantic | 25* | 1 (4010, 7110, 7140, |

| Species | Biogeographic region | 2.5.2. Area estimation (km²) | Approach used for area estimation (see text above) *** |
|---|---|---|---|
| | | | 7150) |
| Stylurus flavipes | Atlantic | 5 | 4 |
| Tursiops truncatus | Atlantic ocean | 3462* | 3** |
| Vertigo moulinsiana | Atlantic | 22 | 1 (sedge rich 91E0 and Magnocaricion) |

* equals the "suitable habitat area for the species"
** range = favourable reference range = habitat area
*** the listed habitat types for approach 1 are specific for the Belgian situation. In other MS the species can occur in much more or other habitat types

***Habitat trend***
The evaluation of the trend of the habitat area is almost exclusively based on expert judgement since no detailed information about the amount of habitat prior to 2007 was available.

***Habitat quality***
On the official report form for the species of the Habitats Directive, only the first two questions, as stated above, need to be filled in. No assessment of the habitat quality is explicitly asked for, although the suitable habitat area can be filled in as complementary information. Therefore, as now, it remains impossible to discern the relative importance of each of the three questions above within the overall assessment of the criterion.

Note: for transparency reasons it is advisable to add an extra line in the reporting format (Annex B of DocHab-04-03/03 rev. 3) on habitat quality since this information can be needed to understand the overall assessment of the "Habitat for the Species". This can be added in the complementary information, since there are many cases where the overall assessment will be already declared by the area and trend assessment.

**2. Suitable habitat area**

As already mentioned in § 1 it is obvious that for some species the "suitable habitat area" and the "actual habitat area" are the same. E.g.:

- for plants, bryophytes and lichens it is not possible to decide whether or not all places in the habitat types in which they occur can be occupied or not; using approach one (see § 1), both the actual and suitable habitat area is the sum of the area of the annex 1 habitat types as reported for them.

But sometimes it seems feasible now to differentiate more:

E.g. the habitat area of Liparis loeselii is the area of habitat type 7230. In fact, taking into account that the species can occur in Belgium also in habitat type 2190 (which she does no more today) the suitable habitat could be enlarged with the habitat area of this habitat type.

Such an approach is also used for e.g. Luronium natans occurring in habitat types 3130 and 3260. In fact this can be split in:

- actual habitat area: the amount of the habitats area of 3130 and 3260 which is occupied by the species (which is much lesser than the area reported in 2007);
- suitable habitat area: the total amount of these habitat types within the biogeographical region (which was wrongly taken as actual habitat area in 2007).

For (large) very mobile mammals the suitable habitat and actual habitat area has to be considered the same.

**3. Possible scenarios to approve future Belgian reports**

***Habitat area***

The approaches listed in § 1 will be further used, but if this will lead to refined area assessments needed for future trend analysis seems doubtful.

➔ good examples of how this will be approached by other MS, e.g. in their monitoring programmes, could be very helpful!

***Suitable habitat area = lack of knowledge remain for a real scientific approach***

The exact amount of habitat that is needed for the long-term survival of a species is not easy to determine. Theoretically, the needed surface could be obtained if the favourable reference population and the needed area per population unit (individuals, pairs, tussocks, etc.) is known. However, these data are hard to determine (if possible or relevant), both from a practical and scientific point of view. In Belgium, the favourable reference population has not been determined yet for the species of the Habitats Directive. Nor is there an estimate of the area requirements of a population unit. Therefore, we are not able to give a general recommendation as to how the habitat area could be determined.

➔ we have to use practical approaches such as mentioned in § 2 ➔ examples per species (or species group) of how this criterion is approached by MS could be very helpful! ➔ start a type of table listing comparable to "specific structure and functions" and "typical species" as agreed on in Helsinki.

***Habitat trend***

As soon as a rigorous monitoring system has been set up, regular inventories must enable the determination of the trend in habitat area, based on clear standards (see below for proposal).

***Habitat quality***

The Flemish region recently (end 2008) designed matrices to evaluate the local conservation status of annex II and IV species (download here, in Dutch only). This approach is comparable with our system for habitat types and with these of e.g. Germany.

The local conservation status applies to a single population of a certain species and is evaluated by two criteria: population status and habitat quality. Both criteria can be described as being good, sufficient (corresponding both with a favourable conservation status) or bad (unfavourable) by means of several species-specific habitat indicators that are thought to be crucial for species survival and for which threshold values were determined based on scientific knowledge. In this way, the habitat quality matrices can be used to assess habitat quality locally. These scores can then be statistically aggregated across populations to answer the question: "is the habitat quality suitable to guarantee the long term survival of the species?" At the same time, the indicators allow one to specify a species' most important habitat requirements for the determination of the "amount of suitable habitat" (i.e. the area a species could potentially occupy), which has to be reported as complementary information in the report form.

The same set of indicators (eventually after generalization) could also be used directly to assess conservation status at the biogeographical level if detailed information about single populations is lacking or obsolete.

Here, as an example, we provide a generic overview of relevant indicators for the local assessment of habitat quality for amphibian species, as used in the Flemish matrices to evaluate local conservation status (Table 2).

*Table 2. Indicators for the assessment of habitat quality for amphibian species. As an example, the corresponding threshold values for* Triturus cristatus *between a favourable and unfavourable conservation status are mentioned in the last column.*

| Habitat | Indicator | example of threshold value (favourable/unfavourable) for *Triturus cristatus* |
|---|---|---|

| Habitat | Indicator | example of threshold value (favourable/unfavourable) for *Triturus cristatus* |
|---|---|---|
| Water | | |
| | Pool number and size | complex of 3-5 permanent small (<100m²) or one large (>250m²) pond |
| | Nutrient richness | mesotrophic to slightly eutrophic |
| | pH | 6-8 |
| | Vegetation | 10-50% of the water surface covered by dense floating or submerged vegetation |
| | Light conditions | <33% shadow |
| | Water permanence | pond contains water until begin august ánd stands clear only 1 year in 4 before begin august |
| | Predator presence | low abundance of fish |
| Land | | |
| | Biotope description | small-scale landscape with forest, tall herbs, wooded banks, etc. |
| | Distance to water habitat | 300-500m |
| | Disturbance | traffic roads present but seldomly used |

A similar generic scheme of relevant habitat indicators for bats is given in Table 3.

*Table 3. Indicators for the assessment of habitat quality for bat species. As an example, the corresponding threshold values for* Barbastella barbastellus *between a favourable and unfavourable conservation status are mentioned in the last column.*

| Habitat | Indicator | example of threshold value (favourable/unfavourable) for *Barbastella barbastellus* |
|---|---|---|
| Winter | | |
| | Temperature | 0-10°C |
| | Presence microhabitat | present |
| | Humidity | >80% |
| | Air circulation | draught free |
| | Additional habitat requirements (e.g. hollow trees) | >2% hollow trees with dbh >40cm, and 30-50% deciduous forest with understorey within 1km radius from winter quarter |
| | disturbance | none, starting from august |
| Summer | | |
| | Temperature | no data |
| | Presence microhabitat (e.g. crevices) | crevices 40cm depth |
| | Accessibility | not applicable |
| | Disturbance – noise | none |
| | Disturbance – light | not applicable |
| Hunting | | |
| | Habitat | forest landscape with ≥3 features a.o.:<br>• clearings<br>• uneven aged, mixed forest stands<br>• internal + external forest fringes<br>• wet zones |
| | Distance to summer habitat | no data |
| | Small landscape elements along hunting route | present, interruptions <25m |

*Annex I. Report under the Habitats Directive for the species of the Belgian Atlantic and Continental Biogeographical region for the year 2007 (see http://biodiversity.eionet.europa.eu/article17/speciesreport).*

| Regio | Naam | Range (km2) | | | | | Population | | | | | Habitat (km2) | | | | | Future | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Surface* | *%XR* | *Trend* | *Ref.* | | *Size&Unit* | *%XP* | *Trend* | *Ref.* | | *Area* | *%XH* | *Trend* | *Suitable* | | prosp. | |
| Atl | Alytes obstetricans | 3875 | 2,1 | = | 3875 | 1 | 83 - 83 grids | N/A | = | 83 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Bufo calamita | 6025 | 2,7 | = | 6025 | 1 | 94 - 94 grids | N/A | = | 94 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Coronella austriaca | 2250 | 1,8 | = | 2250 | 1 | 25 - 25 grids | N/A | - | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Hyla arborea | 875 | 0,4 | - | 875 | 3 | 9 - 9 grids | N/A | - | >>9 | 3 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Atl | Pelobates fuscus | 400 | 0,6 | - | 400 | 3 | 6 - 6 grids | N/A | - | >>6 | 3 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Atl | Rana arvalis | 1700 | 1,8 | = | 1700 | 1 | 34 - 34 grids | N/A | = | 34 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Rana esculenta | 18829 | 14,4 | = | 18829 | 1 | 585 - 585 grids | N/A | = | 585 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Rana lessonae | 4207 | 7 | X | >4207 | 0 | 62 - 62 grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Rana ridibunda | N/A | N/A | X | >> | 0 | N/A grids | N/A | X | >> | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Rana temporaria | 18829 | 3 | = | 18829 | 1 | 713 - 713 grids | N/A | = | 713 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Triturus cristatus | 11852 | 3,3 | - | 16848 | 3 | 157 - 157 grids | N/A | - | >>157 | 3 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Atl | Alosa fallax fallax | 204,8 | 0,2 | + | 400 | 3 | 4 - 4 grids | N/A | = | >>4 | 3 | N/A | N/A | + | N/A | 3 | Bad | 3 |
| Atl | Barbus barbus | 487,3 | 0,4 | + | 487,3 | 1 | (200) - 200 area | N/A | + | >200 | 1 | N/A | N/A | + | N/A | 2 | Poor | 2 |
| Atl | Cobitis taenia | 2335,9 | 2,3 | + | 2335,9 | 1 | 36 - 36 grids | N/A | + | >36 | 2 | N/A | N/A | + | N/A | 2 | Good | 1 |
| Atl | Cottus gobio | 3774,7 | 1,7 | + | 3774,7 | 1 | 34 - 34 grids | N/A | + | >34 | 2 | N/A | N/A | + | N/A | 2 | Good | 1 |
| Atl | Lampetra fluviatilis | 1595,9 | 0,8 | + | 3650 | 3 | 23 - 23 grids | N/A | + | >>23 | 3 | N/A | N/A | + | N/A | 2 | Good | 1 |
| Atl | Lampetra planeri | 1379,3 | 0,6 | = | 2375 | 3 | 23 - 23 grids | N/A | = | >23 | 2 | N/A | N/A | = | N/A | 3 | Poor | 2 |
| Atl | Misgurnus fossilis | 700 | 1,8 | = | 2225 | 3 | 12 - 12 grids | N/A | = | >>12 | 3 | N/A | N/A | = | N/A | 3 | Poor | 2 |
| Atl | Petromyzon marinus | 150 | 0,1 | + | 1225 | 3 | 2 - 2 indiv. | N/A | + | >>2 | 3 | N/A | N/A | + | N/A | 3 | Poor | 2 |
| Atl | Rhodeus sericeus amarus | 7551,5 | 11,8 | = | 7551,5 | 1 | 102 - 102 grids | N/A | + | 102 | 1 | N/A | N/A | + | N/A | 1 | Good | 1 |
| Atl | Salmo salar | 50 | 0 | = | 2925 | 3 | 2 - 2 grids | N/A | = | >>2 | 3 | N/A | N/A | X | N/A | 2 | Good | 1 |
| Atl | Anisus vorticulus | 300 | 2,6 | X | >300 | 0 | 3 - (3) grids | N/A | X | >3 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Callimorpha quadripunctaria | 5325 | 7,8 | + | 5325 | 1 | 30 - 30 grids | N/A | + | 30 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Helix pomatia | 593 | 1,7 | X | >593 | 0 | 24 - (24) grids | N/A | X | >24 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Hirudo medicinalis | 37 | 0,1 | X | >37 | 0 | 2 - 2 grids | N/A | X | >2 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Leucorrhinia pectoralis | 2960 | 8,3 | = | 5844 | 3 | 10 - 10 grids | N/A | = | >>10 | 3 | N/A | N/A | = | N/A | 0 | Poor | 2 |
| Atl | Lucanus cervus | 3494 | 1,7 | = | 3494 | 1 | 44 - 44 grids | N/A | - | >>44 | 3 | 121 | 1 | X | N/A | 2 | Poor | 2 |
| Atl | Gomphus flavipes | 259,6 | 1,9 | + | 259,6 | 1 | 4 - 4 grids | N/A | + | >4 | 2 | 5 | 0,4 | + | N/A | 2 | Good | 1 |
| Atl | Unio crassus | N/A | N/A | = | >> | 0 | N/A indiv. | N/A | = | >> | 0 | N/A | N/A | = | N/A | 0 | Unk. | 0 |
| Atl | Vertigo angustior | 900 | 6,1 | = | >900 | 2 | 11 - 11 grids | N/A | = | 39 | 3 | N/A | N/A | X | N/A | 2 | Poor | 2 |
| Atl | Vertigo moulinsiana | 1275 | 4,9 | = | >1275 | 2 | 70 - 100 loc. | N/A | = | 94 | 2 | 22 | 2 | - | 330 | 2 | Poor | 2 |
| Atl | Barbastella barbastellus | 156 | 0,1 | = | ~156 | 1 | 1 - 10 indiv. | N/A | X | >10 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Castor fiber | 811,6 | 2,5 | + | 811,6 | 1 | 60 - (60) indiv. | N/A | + | >60 | 2 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Atl | Cricetus cricetus | 612 | 5,8 | = | 650 | 2 | 80 - 80 x | 13.4 | = | >>80 | 3 | 150 | 3,8 | = | N/A | 2 | Bad | 3 |
| Atl | Eptesicus serotinus | 18784 | 4,9 | = | 18784 | 1 | 6000 - 6000 indiv. | N/A | + | 6000 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Lutra lutra | 2672 | 0,5 | = | 3467 | 3 | - 7 grids | N/A | = | >>20 | 3 | 3460 | 10 | + | 3460 | 3 | Bad | 3 |
| Atl | Martes martes | 6502 | 1,6 | + | 6502 | 1 | 30 - 50 indiv. | N/A | + | >>200 | 3 | 6502 | 12,9 | + | 6502 | 2 | Poor | 2 |

| Regio | Naam | Range (km2) | | | | | Population | | | | | Habitat (km2) | | | | | Future | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Surface* | *%XR* | *Trend* | *Ref.* | | *Size&Unit* | *%XP* | *Trend* | *Ref.* | | *Area* | *%XH* | *Trend* | *Suitable* | | prosp. | |
| Atl | Muscardinus avellanarius | 352,4 | 0,3 | - | >>352,4 | 3 | (8) - 8 grids | N/A | - | >>8 | 3 | 30 | 0,4 | - | N/A | 3 | Bad | 3 |
| Atl | Mustela putorius | 18829 | 3,6 | = | 18829 | 1 | 746 - 746 grids | N/A | - | >746 | 2 | 18828 | 34 | = | 18828 | 2 | Poor | 2 |
| Atl | Myotis bechsteini | 301,5 | 0,2 | = | 301,5 | 1 | 1 - 10 indiv. | N/A | = | >10 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Myotis brandtii | 18829 | 7,6 | = | 18829 | 1 | 800 - (800) indiv. | N/A | + | 800 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Myotis dasycneme | 18829 | 19,5 | = | 18829 | 1 | 1 - 80 indiv. | N/A | + | N/A | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Myotis daubentonii | 18829 | 3 | = | ~18829 | 1 | (3900) - 3900 indiv. | N/A | + | ~3900 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Myotis emarginatus | 18829 | 10,6 | = | 18829 | 1 | 1 - 370 indiv. | N/A | + | 370 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Myotis myotis | 996,1 | 0,4 | = | 996,1 | 1 | 1 - 20 indiv. | N/A | X | >20 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Myotis mystacinus | 18829 | 4 | = | 18829 | 1 | 1 - 1470 indiv. | N/A | + | 1470 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Myotis nattereri | 18829 | 3,5 | = | 18829 | 1 | (1580) - 1580 indiv. | N/A | + | 1580 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Nyctalus leisleri | 324,8 | 0,1 | = | 324,8 | 1 | 20 - (20) indiv. | N/A | X | >20 | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Nyctalus noctula | 18829 | 5,4 | = | 18829 | 1 | 1300 - (1300) indiv. | N/A | X | >1300 | 2 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Pipistrellus nathusii | 18786 | 8,8 | = | 18786 | 1 | 1 - 4000 indiv. | N/A | X | >4000 | 2 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Pipistrellus pipistrellus | 18682 | 2,8 | = | 18682 | 1 | (375000) - 375000 indiv. | N/A | = | 375000 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Plecotus auritus | 18829 | 3,3 | = | 18829 | 1 | 3500 - (3500) indiv. | N/A | + | 3500 | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Plecotus austriacus | 18829 | 10,1 | = | 18829 | 1 | 100 - (100) indiv. | N/A | + | >100 | 2 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Atl | Rhinolophus ferrumequinum | 98,5 | 0 | = | >>98,5 | 3 | 1 - 2 indiv. | N/A | = | >>2 | 3 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Atl | Rhinolophus hipposideros | N/A | N/A | = | >> | 3 | N/A indiv. | N/A | = | >> | 3 | N/A | N/A | X | N/A | 3 | Bad | 3 |
| Atl | Vespertilio murinus | 148 | 0,4 | = | >148 | 2 | 10 - (10) indiv. | N/A | X | >10 | 2 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Atl | Felis silvestris | N/A | N/A | N/A | N/A | | N/A x | N/A | N/A | N/A | | N/A | N/A | N/A | N/A | | N/A | 3 |
| Atl | Apium repens | 96 | 2,4 | = | 96 | 2 | 5 - 6 loc. | N/A | = | >6 | 2 | N/A | N/A | X | N/A | 2 | Poor | 2 |
| Atl | Cladonia spp. (subgenus Cladina) | 2784 | 2,8 | X | 2784 | 1 | 24 - 24 grids | N/A | X | >24 | 3 | 56 | 0,3 | = | 56 | 3 | Bad | 3 |
| Atl | Hamatocaulis vernicosus | 16 | 0,1 | = | >>16 | 3 | 1 - 1 loc. | N/A | X | >>1 | 3 | 0,5 | 0,2 | = | 0,5 | 3 | Bad | 3 |
| Atl | Leucobryum glaucum | 6576 | 5 | = | 6496 | 1 | 151 - 151 grids | N/A | - | 137 | 1 | 324 | 0,6 | = | 324 | 2 | Poor | 2 |
| Atl | Liparis loeselii | 32 | 0,5 | = | >>32 | 3 | 5 - 8 indiv. | N/A | = | >>8 | 3 | 0,1 | 0 | + | 0,1 | 3 | Bad | 3 |
| Atl | Luronium natans | 3409 | 5 | - | 3409 | 1 | 39 - 39 grids | N/A | X | 39 | 3 | 5 | 0,2 | = | 5 | 3 | Bad | 3 |
| Atl | Lycopodium spp. | 4156 | 1,3 | X | 4156 | 1 | 100 - 100 grids | N/A | - | 100 | 2 | 45 | 0,1 | = | 45 | 3 | Poor | 2 |
| Atl | Sphagnum spp. | 8624 | 1 | X | 4960 | 1 | 328 - 328 grids | N/A | X | 312 | 1 | 25 | 0 | - | 25 | 3 | Bad | 3 |
| Cont | Alytes obstetricans | 11200 | 5,7 | = | 11200 | 1 | 680 - 680 grids | N/A | = | 650 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Bufo calamita | 2591 | 0,4 | - | 2591 | 1 | 154 - 154 grids | N/A | = | 200 | 2 | N/A | N/A | N/A | N/A | 0 | Bad | 3 |
| Cont | Coronella austriaca | 8350 | 1,2 | - | 8350 | 2 | 300 - 300 grids | N/A | - | 320 | 2 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Lacerta agilis | 590 | 0,1 | - | 590 | 2 | 500 - 500 indiv. | N/A | - | 5000 | 3 | N/A | N/A | N/A | N/A | 0 | Poor | 2 |
| Cont | Podarcis muralis | 8450 | 2,9 | = | 8450 | 1 | 686 - 686 grids | N/A | + | 500 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Rana esculenta | 10800 | 1,3 | = | 10800 | 1 | 900 - 900 grids | N/A | + | 800 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Rana lessonae | 2378 | 0,5 | X | ~2378 | 0 | 10 - (10) grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Rana temporaria | 11750 | 1,3 | = | 11750 | 1 | 1990 - 1990 grids | N/A | - | 1200 | 2 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Triturus cristatus | 4973 | 0,6 | = | 4973 | 1 | 90 - 90 grids | N/A | - | 300 | 3 | N/A | N/A | N/A | N/A | 0 | Poor | 2 |
| Cont | Barbus barbus | 6195 | 2,1 | + | 6195 | 1 | (3150) - 3150 area | N/A | + | 2500 | 1 | N/A | N/A | + | N/A | 0 | Good | 1 |
| Cont | Cobitis taenia | 50 | 0 | + | 50 | 0 | (50) - 50 area | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Cottus gobio | 11813 | 2,3 | = | 11813 | 1 | (6450) - 6450 area | N/A | = | 4000 | 1 | N/A | N/A | + | N/A | 0 | Good | 1 |
| Cont | Lampetra planeri | 11888 | 3,7 | = | 11888 | 1 | (6425) - 6425 area | N/A | = | >4000 | 1 | N/A | N/A | = | N/A | 0 | Poor | 2 |

| Regio | Naam | Range (km2) | | | | | Population | | | | | Habitat (km2) | | | | | Future | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Surface* | *%XR* | *Trend* | *Ref.* | | *Size&Unit* | *%XP* | *Trend* | *Ref.* | | *Area* | *%XH* | *Trend* | *Suitable* | | prosp. | |
| Cont | Rhodeus sericeus amarus | 360 | 0,1 | - | 360 | 2 | (360) - 360 area | N/A | X | 360 | 0 | N/A | N/A | - | N/A | 0 | Poor | 2 |
| Cont | Thymallus thymallus | 6774 | 2,2 | + | 6774 | 1 | (6774) - 6774 area | N/A | + | 6774 | 1 | N/A | N/A | + | N/A | 0 | Good | 1 |
| Cont | Astacus astacus | 11888 | 2,2 | - | 11888 | 3 | (2025) - 2025 area | N/A | - | 25 | 3 | N/A | N/A | - | N/A | 0 | Bad | 3 |
| Cont | Callimorpha quadripunctaria | 5700 | 2,7 | X | 5650 | 0 | 76 - 76 grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Coenagrion mercuriale | 450 | 1 | + | 450 | 1 | 11 - 11 colony | N/A | + | 40 | 3 | N/A | N/A | - | N/A | 3 | Poor | 2 |
| Cont | Eriogaster catax | 25 | 0,1 | X | N/A | 0 | 4 - 4 colony | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Euphydryas aurinia | 1483 | 1,3 | - | 200 | 3 | 10 - 15 grids | N/A | - | 100 | 3 | 5 | 0 | = | 10 | 3 | Bad | 3 |
| Cont | Helix pomatia | N/A | N/A | X | 10000 | 0 | N/A grids | N/A | X | 80 | 0 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Cont | Hirudo medicinalis | N/A | N/A | X | N/A | 0 | N/A colony | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Lucanus cervus | 4627 | 1,8 | - | 4627 | 1 | 52 - 52 grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Lycaena dispar | 680 | 0,1 | + | 680 | 1 | 20 - 46 colony | N/A | + | 40 | 1 | 50 | 0,2 | + | 50 | 1 | Good | 1 |
| Cont | Lycaena helle | 4400 | 3,3 | - | 4950 | 3 | 100 - 125 grids | N/A | - | 200 | 3 | 20 | 0,4 | - | 30 | 2 | Poor | 2 |
| Cont | Maculinea arion | 25 | 0 | = | 700 | 3 | 1 - 1 colony | N/A | = | 60 | 3 | N/A | N/A | N/A | N/A | 2 | Poor | 2 |
| Cont | Margaritifera margaritifera | 1097 | 3,6 | - | 1097 | 3 | (3000) - 3000 x | N/A | - | >3000 | 3 | 540 | 15,2 | - | 540 | 0 | Bad | 3 |
| Cont | Oxygastra curtisii | 390 | 2,7 | = | 390 | 1 | 36 - 36 colony | N/A | + | 20 | 1 | N/A | N/A | N/A | N/A | 1 | Good | 1 |
| Cont | Proserpinus proserpina | 75 | 0 | X | N/A | 0 | 3 - (3) grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Unio crassus | 5600 | 1,5 | X | 5600 | 2 | (2200) - 2200 area | N/A | X | >2200 | 2 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Vertigo moulinsiana | 258 | 0,4 | X | N/A | 0 | 8 - (8) grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Barbastella barbastellus | 316 | 0 | - | ~5000 | 3 | 1 - 3 grids | N/A | - | ~30 | 3 | N/A | N/A | N/A | N/A | 0 | Bad | 3 |
| Cont | Cricetus cricetus | N/A | N/A | - | 350 | 3 | N/A grids | N/A | - | N/A | 3 | N/A | N/A | N/A | N/A | 0 | Bad | 3 |
| Cont | Eptesicus serotinus | 9229 | 1 | = | 9229 | 1 | 20 - (20) grids | N/A | = | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Felis silvestris | 8488 | 4,1 | = | 8400 | 1 | (3300) - 3300 area | N/A | = | 3000 | 2 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Cont | Lutra lutra | 8300 | 1,5 | - | 8300 | 3 | (20) - 20 indiv. | N/A | - | >20 | 3 | N/A | N/A | - | N/A | 0 | Poor | 2 |
| Cont | Martes martes | 9824 | 1 | = | 9673 | 1 | (9673) - 9673 area | N/A | X | 9673 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Muscardinus avellanarius | 11888 | 2,4 | - | 11888 | 2 | (9700) - 9700 area | N/A | - | 9000 | 2 | N/A | N/A | - | N/A | 0 | Poor | 2 |
| Cont | Mustela putorius | 11888 | 1,2 | - | 11800 | 1 | (11500) - 11500 area | N/A | - | 10000 | 2 | N/A | N/A | - | N/A | 0 | Unk. | 0 |
| Cont | Myotis bechsteini | 7056 | 1,3 | = | 7000 | 1 | 30 - (30) grids | N/A | + | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Myotis brandtii | 10925 | 1,6 | = | 10000 | 1 | 60 - 83 grids | N/A | = | 75 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Myotis dasycneme | 4782 | 1,2 | = | 5000 | 1 | 10 - 16 grids | N/A | - | 30 | 3 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Myotis daubentonii | 11349 | 1,2 | = | ~10000 | 1 | 50 - 75 grids | N/A | + | ~75 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Myotis emarginatus | 10561 | 4,3 | = | 10000 | 1 | 30 - 41 grids | N/A | = | 50 | 2 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Myotis myotis | 10392 | 1,3 | = | 10000 | 1 | 40 - 56 grids | N/A | = | 60 | 2 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Myotis mystacinus | 10925 | 1,3 | = | 10000 | 1 | 60 - 83 grids | N/A | = | 75 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Myotis nattereri | 10973 | 1,2 | = | 10000 | 1 | 30 - 44 grids | N/A | = | 50 | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Nyctalus leisleri | 275,9 | 0 | X | N/A | 0 | 1 - 2 grids | N/A | X | N/A | 0 | N/A | N/A | N/A | N/A | 0 | Unk. | 0 |
| Cont | Nyctalus noctula | N/A | N/A | X | N/A | 0 | N/A x | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Pipistrellus nathusii | N/A | N/A | N/A | N/A | 0 | N/A x | N/A | N/A | N/A | 0 | N/A | N/A | N/A | N/A | 0 | N/A | 3 |
| Cont | Pipistrellus pipistrellus | 11293 | 1,2 | = | 10000 | 1 | N/A x | N/A | N/A | 100 | 0 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Plecotus auritus | 10990 | 1,3 | = | 10000 | 1 | 70 - 91 grids | N/A | = | 90 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Plecotus austriacus | 10990 | 1,5 | = | 10000 | 1 | 70 - 91 grids | N/A | = | 90 | 1 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Rhinolophus ferrumequinum | 10230 | 5,7 | = | 10000 | 1 | 30 - 43 grids | N/A | = | 50 | 2 | N/A | N/A | N/A | N/A | 0 | Poor | 2 |

| Regio | Naam | Range (km2) | | | | | Population | | | | | Habitat (km2) | | | | | Future | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Surface* | *%XR* | *Trend* | *Ref.* | | *Size&Unit* | *%XP* | *Trend* | *Ref.* | | *Area* | *%XH* | *Trend* | *Suitable* | | prosp. | |
| Cont | Rhinolophus hipposideros | 2832 | 1 | - | 8000 | 3 | 5 - 13 grids | N/A | - | 50 | 3 | N/A | N/A | N/A | N/A | 0 | Bad | 3 |
| Cont | Vespertilio murinus | N/A | N/A | X | N/A | 0 | N/A x | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Arnica montana | 2153 | 0,8 | - | 4000 | 3 | 40 - 63 grids | N/A | - | N/A | 3 | N/A | N/A | N/A | N/A | 0 | Good | 1 |
| Cont | Bromus grossus | 228 | 0,8 | - | 3000 | 3 | 1 - 8 grids | N/A | - | 40 | 3 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Cont | Cladonia spp. (subgenus Cladina) | 4242 | 0,3 | = | 4000 | 1 | (32) - 32 grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Dicranum viride | 12 | 0 | N/A | N/A | 0 | 1 - (1) grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Hamatocaulis vernicosus | 96 | 0 | X | N/A | 0 | (2) - 2 grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Leucobryum glaucum | 10455 | 1,4 | = | 10000 | 1 | (189) - 189 grids | N/A | = | N/A | 1 | N/A | N/A | X | N/A | 0 | Good | 1 |
| Cont | Liparis loeselii | 16 | 0 | X | N/A | 0 | 1 - (1) grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Cont | Luronium natans | 16 | 0 | X | N/A | 0 | 1 - 1 grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Bad | 3 |
| Cont | Lycopodium spp. | 2830 | 0,3 | - | 5000 | 3 | (69) - 69 grids | N/A | - | 100 | 3 | N/A | N/A | X | N/A | 0 | Unk. | 0 |
| Cont | Sphagnum spp. | 7278 | 0,2 | = | 7000 | 1 | (239) - 239 grids | N/A | - | 300 | 3 | N/A | N/A | - | N/A | 3 | Poor | 2 |
| Cont | Trichomanes speciosum | 248 | 1 | X | N/A | 0 | (7) - 7 grids | N/A | X | N/A | 0 | N/A | N/A | X | N/A | 0 | Unk. | 0 |