



# **Natura 2000 Biogeographical Process**

## **Continental, Pannonian, Black Sea and**

### **Steppic Biogeographical Regions**

#### **Habitats, Species and Issues Selection Document**

**Draft, 26 February 2014**

**Document for discussion at the First Steering Committee Meeting (Brussels, 5 March 2014)**

An initiative  
of the





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## 1 Introduction

This information is based on the replies of all 15 Member States included in the Continental / Black Sea / Pannonian / Steppic process, NGOs represented by the European Habitats Forum and land users and owners of the Natura 2000 Users Platform, represented by ELO.

For each of the three Biogeographical regions (Black Sea and Steppic, both only shared by Bulgaria and Romania, have been considered together), the first selection of 20 habitats was made by the European Topic Centre on Biodiversity on the basis of Article 17 data, and using a methodology based on three criteria, further explained in the pre-scoping document (uploaded on the CIRCA website).

Each Member State, NGO and N2K Users Group was invited to select a maximum 20 habitats from the list of habitats identified in the pre-scoping exercise, of which at least 15 needed to be chosen from the short list prepared by ETC/BD. In addition each participant could suggest a maximum of five other habitats, as long as the total number of selected habitats did not exceed 20.

By 26 February 2014, responses were received from the following 15 Member States:

- Austria
- Belgium
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- France
- Germany
- Hungary
- Italy
- Luxembourg
- Poland
- Romania
- Slovakia
- Slovenia
- Sweden

Responses were also received from the following NGOs, through the European Habitats Forum:

- N2K Users: Helmholtz Centre for Environmental Research - UFZ
- European Habitats Forum: Butterfly Conservation Europe (BCE)
- European Habitats Forum: Deutscher Verband für Landschaftspflege e.V.
- European Habitats Forum: Bulgaria Biodiversity Foundation
- European Habitats Forum: Polish Naturalists' Club

## 2 Results for the Continental region

### Continental habitats

The consolidated habitat selection results are presented in Table 1. It shows all the habitats ranked from highest to lowest scores (first by frequency of nomination by MS; second by 'Score ETC/BD'); in the column 'Sum MS' the result is given for Member States only. The 'ETC BD score' column represents the scores according to the calculation  $A*(B+C)$  as explained in the pre-scoping document. Table 2 presents all the additional habitats proposed by the Member States, NGOs and Natura 2000 users. Habitat selection details per Member State, N2K User and NGO are given in the Annex. Scoring by the Steering Committee members did not alter the top 20 habitats, only their relative position in the list.

Table 1 The top 20 Continental habitats (according to the ETC BD scoring) ranked according to the scores given by the Member States

| Habitat  | ETC BD score | Habitat group           | Sum MS | Sum Users | Total sum |
|--|--------------|-------------------------|--------|-----------|-----------|
| 6410 - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)  | 403          | Grasslands              | 13     | 4         | 17        |
| 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)                                     | 351          | Grasslands              | 13     | 5         | 18        |
| 3130 - Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea                                  | 286          | Rivers & lakes          | 13     | 2         | 15        |
| 91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)  | 198          | Forests                 | 13     | 5         | 18        |
| 7230 - Alkaline fens   | 338          | Mires & bogs            | 12     | 4         | 16        |
| 6510 - Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)   | 312          | Grasslands              | 11     | 6         | 17        |
| 7140 - Transition mires and quaking bogs   | 299          | Mires & bogs            | 11     | 4         | 15        |
| 6230 - Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)                                       | 275          | Grasslands              | 11     | 4         | 15        |
| 3150 - Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation  | 260          | Rivers & lakes          | 11     | 1         | 12        |
| 7220 - Petrifying springs with tufa formation (Cratoneurion)   | 221          | Mires & bogs            | 10     | 1         | 11        |
| 3140 - Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.   | 180          | Rivers & lakes          | 10     | 0         | 10        |
| 4030 - European dry heaths   | 240          | Grasslands              | 9      | 4         | 13        |
| 91F0 - Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) | 231          | Forests                 | 9      | 5         | 14        |
| 91D0 - Bog woodland  | 198          | Forests                 | 9      | 2         | 11        |
| 3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation  | 195          | Rivers & lakes          | 9      | 1         | 10        |
| 5130 - Juniperus communis formations on heaths or calcareous grasslands  | 216          | Heaths & scrubs         | 8      | 4         | 12        |
| 9110 - Luzulo-Fagetum beech forests  | 182          | Forests                 | 8      | 3         | 11        |
| 3160 - Natural dystrophic lakes and ponds  | 200          | Rivers & lakes          | 6      | 1         | 7         |
| 7150 - Depressions on peat substrates of the Rhynchosporion  | 170          | Sparsely vegetated land | 6      | 2         | 8         |
| 7110 - Active raised bogs  | 171          | Mires & bogs            | 5      | 2         | 7         |

Table 2 Additional habitats proposed by the Member States, the NGOs and the N2K users for consideration within the Continental process, ordered by decreasing importance according to the ranking from the Member States

| Habitat   | ETC BD score | Habitat group           | Sum MS | Sum Users | Total sum |
|---|--------------|-------------------------|--------|-----------|-----------|
| 3270 - Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation                                | 165          | Rivers & lakes          | 5      | 0         | 5         |
| 6120 - Xeric and calcareous grasslands  | 133          | Grasslands              | 3      | 1         | 4         |
| 9160 - Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i>                                     | 99           | Forests                 | 3      | 0         | 3         |
| 6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels  | 169          | Grasslands              | 2      | 1         | 3         |
| 6110 - Rupicolous calcareous or basophilic grasslands of the <i>Alyso-Sedion albi</i>   | 168          | Sparsely vegetated land | 2      | 1         | 3         |
| 7210 - Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>                                    | 165          | Mires & bogs            | 2      | 0         | 2         |
| 6520 - Mountain hay meadows   | 162          | Grasslands              | 2      | 4         | 6         |
| 9170 - <i>Galio-Carpinetum</i> oak-hornbeam forests   | 150          | Forests                 | 2      | 1         | 3         |
| 9180 - <i>Tilio- Acerion</i> forests of slopes, screes and ravines  | 132          | Forests                 | 2      | 0         | 2         |
| 8310 - Caves not open to the public   | 120          | Sparsely vegetated land | 2      | 0         | 2         |
| 1340* - Inland salt meadows-problematic protection of this habitat because of its marginal occurrence                                 | 98           | Grasslands              | 2      | 0         | 2         |
| 6440 - Alluvial meadows of river valleys of the <i>Cnidion dubii</i>  | 98           | Grasslands              | 2      | 0         | 2         |
| 9110 - Euro-Siberian steppic woods with <i>Quercus</i> spp.   | 45           | Forests                 | 2      | 1         | 3         |
| 91H0 - Pannonian woods with <i>Quercus pubescens</i>  | 30           | Forests                 | 2      | 1         | 3         |
| 40C0 - Ponto-Sarmatic deciduous thickets  | #N/A         | Heaths & scrubs         | 1      | 1         | 2         |
| 91AA - Eastern white oak woods  | #N/A         | Forests                 | 1      | 2         | 3         |
| 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> )                        | 351          | Grasslands              | 1      | 1         | 2         |
| 1220 - Perennial vegetation of stony banks  | 176          | Marine                  | 1      | 0         | 1         |
| 1330 - Atlantic Salt Marshes  | 156          | Marine                  | 1      | 0         | 1         |
| 2330 - Inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands  | 144          | Grasslands              | 1      | 1         | 2         |
| 7120 - Degraded raised bogs still capable of natural regeneration   | 128          | Mires & bogs            | 1      | 2         | 3         |
| 4010 - Northern Atlantic wet heaths with <i>Erica tetralix</i>  | 102          | Heaths & scrubs         | 1      | 0         | 1         |
| 9190 - Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains   | 96           | Forests                 | 1      | 0         | 1         |
| 1150 - Coastal lagoons  | 66           | Marine                  | 1      | 0         | 1         |
| 2130 - Fixed dunes with herbaceous vegetation   | 55           | Grasslands              | 1      | 0         | 1         |
| 1210 - Annual vegetation of stony banks   | 42           | Marine                  | 1      | 0         | 1         |
| 6240 - Sub-Pannonic steppic grasslands  | 40           | Grasslands              | 1      | 1         | 2         |
| 92A0 - <i>Salix alba</i> and <i>Populus alba</i> galleries  | 24           | Forests                 | 1      | 2         | 3         |
| 91T0 - Central European lichen Scots pine forests   | 18           | Forests                 | 1      | 0         | 1         |
| 1530 - Pannonic salt steppes and salt marshes   | 15           | Grasslands              | 1      | 2         | 3         |
| 91U0 - Sarmatic steppe pine fores   | 10           | Forests                 | 1      | 0         | 1         |
| 6260 - Pannonic sand steppes  | 6            | Grasslands              | 1      | 2         | 3         |
| 9560 * Endemic forests with <i>Juniperus</i> spp.   | #N/A         | Forests                 | 0      | 1         | 1         |
| 91M0 - Pannonian-Balkan turkey oak –sessile oak forests   | #N/A         | Forests                 | 0      | 2         | 2         |
| 91Z0 Moesian Silver lime woods  | #N/A         | Forests                 | 0      | 1         | 1         |
| 6230 - Species-rich <i>Nardus</i> grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe) | 275          | Grasslands              | 0      | 1         | 1         |
| 5130 - <i>Juniperus communis</i> formations on theaths or calcareous grasslands   | 216          | Heaths & scrubs         | 0      | 1         | 1         |
| 8230 - Siliceous rock with pioneer vegetation of the <i>Sedo-Scleranthion</i> or of the <i>Sedo albi-Veronicion dillenii</i>          | 110          | Sparsely vegetated land | 0      | 1         | 1         |
| 6220 - Pseudo-steppe with grasses and annuals of the <i>Thero-Brachypodietaea</i>   | 12           | Grasslands              | 0      | 1         | 1         |
| 2310 - Dry sand heaths with <i>calluna</i> and <i>genista</i>   | 10           | Heaths & scrubs         | 0      | 1         | 1         |
| 2340 - Pannonic inland dunes  | 6            | Grasslands              | 0      | 1         | 1         |
| 6250 * Pannonic loess steppic grasslands  | 6            | Grasslands              | 0      | 1         | 1         |
| 6150 - Siliceous alpine and boreal grasslands in Appennine  | 3            | Grasslands              | 0      | 1         | 1         |

## Continental species

The consolidated list of species whose conservation is linked to the habitats for priority consideration in the Continental process is presented in Table 3. It shows the 62 species proposed by Member States, NGOs and N2K users ranked according to their scores (frequency of nomination by Member State).

Table 3 Species proposed for consideration within the Continental NBP whose conservation is linked to the management of the selected priority habitats

| Species  | N2K code | ETC BD score | Habitat group           | Habitat group 2 | Sum MS | Sum Users | Total sum |
|--|----------|--------------|-------------------------|-----------------|--------|-----------|-----------|
| 1029 <i>Margaritifera margaritifera</i> (1029, II, IV)                       | 1029     | 224          | Rivers & lakes          |                 | 3      | 0         | 3         |
| 1059 <i>Maculinea teleius</i> (1059, II, IV)                                 | 1059     | 176          | Mires & bogs            | Grasslands      | 3      | 2         | 5         |
| 1032 <i>Unio crassus</i> (1032, II, IV)                                      | 1032     | 348          | Rivers & lakes          |                 | 2      | 0         | 2         |
| 1084 <i>Osmoderma eremita</i> (1084, II*, IV)                                | 1084     | 297          | Forests                 |                 | 2      | 0         | 2         |
| 1193 <i>Bombina variegata</i> (1193, II, IV)                                 | 1193     | 220          | Mires & bogs            | Forests         | 2      | 0         | 2         |
| 1363 <i>Felis silvestris</i> (1363, IV)                                      | 1363     | 126          | Heaths & scrubs         | Forests         | 2      | 0         | 2         |
| A060 <i>Aythya nyroca</i> (A060-B)   | A060     |              |                         |                 | 2      | 0         | 2         |
| 1058 <i>Maculinea arion</i> (1058, IV)                                       | 1058     | 444          | Sparsely vegetated land | Grasslands      | 1      | 1         | 2         |
| 1065 <i>Euphydryas aurinia</i> (1065, II)                                    | 1065     | 416          | Mires & bogs            | Grasslands      | 1      | 2         | 3         |
| 1203 <i>Hyla arborea</i> (1203, IV)  | 1203     | 275          | Rivers & lakes          | Mires & bogs    | 1      | 0         | 1         |
| 1202 <i>Bufo calamita</i> (1202, IV)   | 1202     | 270          | Mires & bogs            |                 | 1      | 0         | 1         |
| 1308 <i>Barbastella barbastellus</i> (1308, II, IV)                          | 1308     | 260          | Heaths & scrubs         | Forests         | 1      | 0         | 1         |
| 1166 <i>Triturus cristatus</i>   | 1166     | 253          | Mires & bogs            | Forests         | 1      | 0         | 1         |
| 1283 <i>Coronella austriaca</i> (1283, IV)                                   | 1283     | 242          | Sparsely vegetated land | Heaths & scrubs | 1      | 0         | 1         |
| 1304 <i>Rhinolophus ferrumequinum</i>  | 1304     | 209          | Heaths & scrubs         | Forests         | 1      | 0         | 1         |
| 1323 <i>Myotis bechsteinii</i> (1323, II, IV)                                | 1323     | 180          | Heaths & scrubs         | Forests         | 1      | 0         | 1         |
| 1188 <i>Bombina bombina</i> (1188, II, IV)                                   | 1188     | 171          | Mires & bogs            | Forests         | 1      | 0         | 1         |
| 1339 <i>Cricetus cricetus</i> (1339, IV)                                     | 1339     | 160          | Grasslands              |                 | 1      | 0         | 1         |
| 1083 <i>Lucanus cervus annex 2 habitats</i>                                  | 1083     | 154          | Forests                 |                 | 1      | 0         | 1         |
| 1355 <i>Lutra lutra</i> (1355, II, IV)                                       | 1355     | 154          | Rivers & lakes          | Mires & bogs    | 1      | 0         | 1         |
| 1214 <i>Rana analis</i> (1214, IV)   | 1214     | 152          | Mires & bogs            | Forests         | 1      | 0         | 1         |
| 1061 <i>Maculinea nausithous</i>   | 1061     | 144          | Mires & bogs            | Grasslands      | 1      | 0         | 1         |
| 1037 <i>Ophiogomphus cecilia</i>   | 1037     | 140          | Rivers & lakes          | Mires & bogs    | 1      | 0         | 1         |
| 1088 <i>Cerambyx cerdo</i> (1088, II, IV)                                    | 1088     | 135          | Forests                 |                 | 1      | 0         | 1         |
| 1093 <i>Austropotamobius torrentium</i> (1093, II, IV)                       | 1093     | 128          | Rivers & lakes          | Mires & bogs    | 1      | 0         | 1         |
| 1361 <i>Lynx lynx</i> (1361, II, IV)   | 1361     | 126          | Forests                 |                 | 1      | 0         | 1         |
| 1163 European bullhead <i>Cottus gobio</i> Habitat Directive                 | 1163     | 120          | Rivers & lakes          |                 | 1      | 1         | 2         |
| 1428 <i>Marsilea quadrifolia</i>   | 1428     | 105          | Rivers & lakes          | Mires & bogs    | 1      | 0         | 1         |
| 1106 <i>Salmo salar</i> (1106, II, IV)                                       | 1106     | 91           | Rivers & lakes          |                 | 1      | 0         | 1         |
| 4068 <i>Adenophora lilifolia</i>   | 4068     | 65           | Forests                 |                 | 1      | 0         | 1         |
| 1335 European ground squirrel <i>Spermophilus citellus</i> Habitat Directive | 1335     | 55           | Grasslands              |                 | 1      | 1         | 2         |
| 1105 <i>Hucho hucho</i> (1105, II, IV)                                       | 1105     | 40           | Rivers & lakes          |                 | 1      | 0         | 1         |
| 1114 <i>Rutilus rutilus</i>  | 1114     | 36           | Rivers & lakes          |                 | 1      | 0         | 1         |
| 2511 <i>Gobio kessleri</i>   | 2511     | 25           | Rivers & lakes          |                 | 1      | 0         | 1         |
| 1993 <i>Triturus dobrogicus</i>  | 1993     | 18           | Mires & bogs            | Forests         | 1      | 0         | 1         |
| 2011 <i>Umbra krameri</i>  | 2011     | 15           | Rivers & lakes          |                 | 1      | 0         | 1         |
| 1091 <i>Astacus astacus</i> (1091, V)  | 1091     |              |                         |                 | 1      | 0         | 1         |
| 1109 <i>Thymallus thymallus</i> (1109, V)                                    | 1109     |              |                         |                 | 1      | 0         | 1         |
| 1762 <i>Amica montana</i> (1762, V)  | 1762     |              |                         |                 | 1      | 0         | 1         |
| A030-B <i>Ciconia nigra</i> (A030-B, I)                                      | A030     |              |                         |                 | 1      | 0         | 1         |
| A055 <i>Anas querquedula</i> (A055)  | A055     |              |                         |                 | 1      | 0         | 1         |
| A074 <i>Milvus milvus</i> (A074, I)  | A074     |              |                         |                 | 1      | 0         | 1         |
| A089 <i>Aquila pomarina</i> (A089, I)  | A089     |              |                         |                 | 1      | 0         | 1         |
| A122 <i>Crex crex</i> (A122, I)  | A122     |              |                         |                 | 1      | 0         | 1         |
| A168 <i>Actitis hypoleucos</i> (A168)  | A168     |              |                         |                 | 1      | 0         | 1         |
| A229 <i>Alcedo atthis</i> (A229, I)  | A229     |              |                         |                 | 1      | 0         | 1         |
| A231 <i>Coracias garrulus</i>  | A231     |              |                         |                 | 1      | 0         | 1         |
| A236 <i>Dryocopus martius</i> (A 236, I)                                     | A236     |              |                         |                 | 1      | 0         | 1         |
| A238 <i>Dendrocopos medius</i> (A238, I)                                     | A238     |              |                         |                 | 1      | 0         | 1         |
| A239 <i>Dendrocopos leucotos</i> White backed woodpecker Bird Directive      | A239     |              |                         |                 | 1      | 1         | 2         |
| A241 <i>Picoides tridactylus</i> (A241, I)                                   | A241     |              |                         |                 | 1      | 0         | 1         |
| A247 <i>Alauda arvensis</i> (A247)   | A247     |              |                         |                 | 1      | 0         | 1         |
| A264 <i>Cinclus cinclus</i> (A264)   | A264     |              |                         |                 | 1      | 0         | 1         |
| A409 <i>Tetrao tetrix</i>  | A409     |              |                         |                 | 1      | 0         | 1         |
| A644 <i>Perdix perdix</i> (A644, II/1)                                       | A644     |              |                         |                 | 1      | 0         | 1         |
| A688 <i>Botaurus stellaris</i> (A688-B, I)                                   | A688     |              |                         |                 | 1      | 0         | 1         |
| A719 <i>Porzana parva</i> (A719, I)  | A719     |              |                         |                 | 1      | 0         | 1         |
| A768 <i>Numenius arquata</i> (A768)  | A768     |              |                         |                 | 1      | 0         | 1         |
| 1056 <i>Parnassius mnemosyne</i> - Annex IV                                  | 1056     | 207          | Heaths & scrubs         | Grasslands      | 0      | 1         | 1         |
| 1052 <i>Hypodryas maturna</i>  | 1052     | 144          | Forests                 |                 | 0      | 1         | 1         |
| 1060 <i>Lycaena dispar</i> (II, IV DH) (habitat 6430)                        | 1060     | 99           | Mires & bogs            | Grasslands      | 0      | 1         | 1         |
| 1071 <i>Coenonympha oedippus</i> (II, IV DH); (habitat 6410)                 | 1071     | 75           | Mires & bogs            | Grasslands      | 0      | 1         | 1         |

## Continental management and conservation issues

The issues reported by the Member States, NGOs and Natura 2000 users are reported in detail in Section 5 and in the Annex. For the purpose of establishing a tabular overview and prioritisation of issues, the contributions were reformulated into a limited number of issue categories listed in the table below allowing a scoring of the issues. The issues are shown in decreasing order of importance based on the scores given by the Member States. Scores by the NGOs and N2K Users (column “Sum Users”) are also shown for reference.

Table 4 Continental management issue categories by decreasing order of importance for the selected habitats

| Issues                             | Sum MS | Sum Users | Total sum |
|------------------------------------|--------|-----------|-----------|
| Fragmentation                      | 8      | 1         | 9         |
| Stakeholder involvement            | 4      | 2         | 6         |
| Forest management                  | 2      | 0         | 2         |
| Funding                            | 2      | 0         | 2         |
| Intensification                    | 2      | 0         | 2         |
| Succession                         | 2      | 1         | 3         |
| Abandonment                        | 1      | 1         | 2         |
| Changes in hydrology               | 1      | 0         | 1         |
| Coastal squeeze                    | 1      | 0         | 1         |
| Eutrophication                     | 1      | 1         | 2         |
| Introduction of non native species | 1      | 0         | 1         |
| Nitrogen deposition                | 1      | 0         | 1         |
| River management                   | 1      | 0         | 1         |
| CAP reform                         | 0      | 1         | 1         |
| Guidance and advice                | 0      | 1         | 1         |

### 3 Results for the Pannonian region

The four Pannonian countries – Czech Republic, Hungary, Romania and the Slovak Republic - submitted their proposals for habitats, species and issues for priority consideration within the Natura 2000 Biogeographical Process. No specific selection for the Pannonian region was received from the NGOs and the Natura 2000 Users. General comments were however submitted by the EHF (See section 5).

#### Pannonian habitats

Details of the selection of habitats for priority consideration within the Pannonian NBP are given in Table 5. Both the top 20 suggested by the ETC BD based on the three criteria approach and the additional habitats proposed by the country are included in this table and ordered by decreasing Member State ranking followed by ETC BD score ranking.

Table 5 Habitats proposed for priority consideration within the Pannonian biogeographical region

| Habitats  | ETC BD Score | Habitat group   | Czech Republic | Hungary | Romania | Slovak Republic | Total |
|---|--------------|-----------------|----------------|---------|---------|-----------------|-------|
| 91F0 - Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers ( <i>Ulmion minoris</i> ) | 36           | Forests         | 1              | 1       | 1       | 1               | 4     |
| 91I0 - Euro-Siberian steppic woods with <i>Quercus</i> spp.   | 36           | Forests         | 1              | 1       | 1       | 1               | 4     |
| 6440 - Alluvial meadows of river valleys of the <i>Cnidion dubii</i>  | 32           | Grasslands      | 1              | 1       | 1       | 1               | 4     |
| 40A0 - Subcontinental peri-Pannonic scrub   | 32           | Heaths & scrubs | 1              | 1       | 1       | 1               | 4     |
| 6240 - Sub-Pannonic steppic grasslands  | 24           | Grasslands      | 1              | 1       | 1       | 1               | 4     |
| 3150 - Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation   | 24           | Rivers & Lakes  | 1              | 1       | 1       | 1               | 4     |
| 3130 - Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>   | 20           | Rivers & Lakes  | 1              | 1       | 1       | 1               | 4     |
| 6260 - Pannonic sand steppes  | 44           | Grasslands      | 1              | 1       |         | 1               | 3     |
| 6250 - Pannonic loess steppic grasslands  | 36           | Grasslands      | 1              | 1       |         | 1               | 3     |
| 1530 - Pannonic salt steppes and salt marshes   | 28           | Grasslands      |                | 1       | 1       | 1               | 3     |
| 6510 - Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> )   | 28           | Grasslands      | 1              | 1       | 1       |                 | 3     |
| 3260 - Water courses of plain to montane levels with the <i>Ranuncion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation   | 28           | Rivers & Lakes  | 1              |         | 1       | 1               | 3     |
| 91E0 - Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> ( <i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i> )  | 24           | Forests         | 1              | 1       |         | 1               | 3     |
| 3270 - Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. Vegetation  | 24           | Rivers & Lakes  | 1              |         | 1       | 1               | 3     |
| 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (* important orchid sites)   | 21           | Grasslands      | 1              | 1       |         | 1               | 3     |
| 6410 - <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> )   | 32           | Grasslands      | 1              | 1       |         |                 | 2     |
| 6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels  | 28           | Grasslands      | 1              |         | 1       |                 | 2     |
| 7230 - Alkaline fens  | 24           | Mires & bogs    |                | 1       |         | 1               | 2     |
| 3160 Natural dystrophic lakes and ponds   | 18           | Rivers & Lakes  | 1              |         | 1       |                 | 2     |
| 91M0 Pannonian-Balkan Turkey Oak - Sessile Oak forests  | 18           | Forests         |                | 1       |         | 1               | 2     |
| 91G0 Pannonic woods with <i>Quercus petraea</i> and <i>Carpinus betulus</i>   | 15           | Forests         | 1              |         |         | 1               | 2     |
| 1340 Inland salt meadows  | 12           | Grasslands      | 1              |         |         | 1               | 2     |
| 6120 Xeric and calcareous grasslands  | #N/A         | Grasslands      |                |         |         | 1               | 1     |
| 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> )   | 32           | Grasslands      |                |         | 1       |                 | 1     |
| 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> )  | 21           | Grasslands      |                | 1       |         |                 | 1     |
| 9180 - <i>Tilio-Acerion</i> forests of slopes, screes and ravines   | 18           | Forests         |                | 1       |         |                 | 1     |
| 4030 - European dry heaths  | 18           | Heaths & scrubs | 1              |         |         |                 | 1     |
| 2340 Pannonic inland dunes  | 15           | Grasslands      |                |         | 1       |                 | 1     |
| 91H0 Pannonian woods with <i>Quercus pubescens</i>  | 15           | Forests         |                |         |         | 1               | 1     |
| 6190 Rupicolous Pannonic Grasslands ( <i>Stipo-Festucetalia pallentis</i> )   | 9            | Grasslands      |                | 1       |         |                 | 1     |
| 9130 <i>Asperulo-Fagetum</i> Beech Forests  | 4            | Forests         |                | 1       |         |                 | 1     |



## Pannonian species

Nine species and two species groups were proposed by the Pannonian Member States. As no species was proposed by more than one Member State, they are presented decreasing order of ETC BD score.

Table 6 Species whose conservation is linked to the management of priority habitats within the Pannonian region

| Species   | ETC BD Score | Habitat group       | Czech Republic | Hungary | Romania | Slovak Republic | Total |
|---|--------------|---------------------|----------------|---------|---------|-----------------|-------|
| 1088 - <i>Cerambyx cerdo</i> (Annex II)                               | 135          | Forests             | 1              |         |         |                 | 1     |
| 1335 - <i>Spermophilus citellus</i>                                   | 44           | Grasslands          |                |         | 1       |                 | 1     |
| 4013 - <i>Carabus hungaricus</i> (Annex II)                           | 24           | Grasslands          | 1              |         |         |                 | 1     |
| 4096 - <i>Gladiolus palustris</i>                                     | 21           | Mires & bogs; Grass |                |         | 1       |                 | 1     |
| 4067 <i>Echium russicum</i> - ecology, biology and taxonomy           | 18           | Grasslands          |                |         |         | 1               | 1     |
| 1902 - <i>Cypripedium calceolus</i> (Annex II)                        | 12           | Forests             | 1              |         |         |                 | 1     |
| 2011 - <i>Umbra krameri</i>   | 12           | Rivers & lakes      |                |         | 1       |                 | 1     |
| 4104 <i>Himantoglossum adriaticum</i> - ecology, biology and taxonomy | 10           | Grasslands          |                |         |         | 1               | 1     |
| 2120 <i>Thlaspi jankae</i> - ecology, biology and taxonomy            | 4            | Grasslands          |                |         |         | 1               | 1     |
| Forest dwelling bat species (Habitats Directive Annexes II and IV)    |              | Forests             |                | 1       |         |                 | 1     |
| Large raptor species breeding in forests (Birds Directive Annex I)    |              | Forests             |                | 1       |         |                 | 1     |

## Pannonian management and conservation issues

Some conservation and management issues were proposed but as there is no overlap between the suggestions by the different Member States, they are given in random order.

Table 7 Habitat management and conservation issues for priority consideration within the Pannonian region

| Issues  | Czech Republic | Hungary | Romania | Slovak Republic |
|---|----------------|---------|---------|-----------------|
| Contradiction between enabling natural processes (no-interference management) and maintaining the favourable status of habitat type (biotope) dependent on regular human activities | 1              |         |         |                 |
| Ploughing of grasslands (all kind of grasslands) - general problem in the region  |                |         | 1       |                 |
| Water management  |                |         | 1       |                 |
| Overgrazing of grasslands   |                |         | 1       |                 |
| River and channel management  |                |         | 1       |                 |
| Financing of specific (small-scale) management types  | 1              |         |         |                 |

## 4 Results for the Black Sea & Steppic regions

Both Bulgaria and Romania, the two Member States sharing the Black Sea and Steppic Biogeographical regions, within the EU provided their proposals for habitats, as did the Bulgarian Biodiversity Foundation on behalf of EHF (NGOs).

### Black Sea & Steppic habitats

Table 8 Habitats proposed for priority consideration within the Black Sea and Steppic biogeographical regions

| Habitat   | Habitat group           | Bulgaria | Romania | Total | EHF Bulgaria |
|---|-------------------------|----------|---------|-------|--------------|
| 1150 - Coastal lagoons  | Marine                  | 1        | 1       | 2     | 1            |
| 1530 - Pannonic salt steppes and salt marshes   | Grasslands              | 1        | 1       | 2     | 1            |
| 40C0 - Ponto-Sarmatic deciduous thickets  | Heaths & scrubs         | 1        | 1       | 2     | 1            |
| 62C0 - Ponto-Sarmatic steppes   | Grasslands              | 1        | 1       | 2     | 1            |
| 91M0 - Pannonian-Balkan turkey oak –sessile oak forests   | Forests                 | 1        | 1       | 2     | 1            |
| 91AA - Eastern white oak woods  | Forests                 | 1        | 1       | 2     | 1            |
| 92A0 - Salix alba and Populus alba galleries  | Forests                 | 1        | 1       | 2     | 1            |
| 1310 - Salicornia and other annuals colonizing mud and sand   | Grasslands              | 1        | 1       | 2     |              |
| 2110 - Embryonic shifting dunes   | Sparsely vegetated land | 1        | 1       | 2     | 1            |
| 91X0 - Dobrogean beech forests  | Forests                 |          | 1       | 1     |              |
| 91Y0 - Dacian oak & hornbeam forests  | Forests                 |          | 1       | 1     |              |
| 1130 Estuaries  | Marine                  | 1        |         | 1     | 1            |
| 1410 Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )  | Grasslands              | 1        |         | 1     | 1            |
| 2130 *Fixed coastal dunes with herbaceous vegetation (grey dunes)   | Grasslands              | 1        |         | 1     | 1            |
| 2160 - Dunes with <i>Hippophaë rhamnoides</i>   | Heaths & scrubs         |          | 1       | 1     |              |
| 2190 - Humid dune slacks  | Mires & bogs            | 1        |         | 1     |              |
| 3150 - Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation   | Rivers & lakes          |          | 1       | 1     |              |
| 3260 - Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation   | Rivers & lakes          |          | 1       | 1     |              |
| 91F0 - Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers ( <i>Ulmenion minoris</i> ) | Forests                 | 1        |         | 1     |              |
| 91I0 - Euro-Siberian steppic woods with <i>Quercus</i> spp.   | Forests                 | 1        |         | 1     |              |
| 1160 - Large shallow inlets and bays  | Marine                  |          |         | 0     |              |
| 31A0 - Transylvanian hot-spring lotus beds  | Rivers and Lakes        |          |         | 0     |              |
| 62D0 - Oro-Moesian acidophilous grasslands  | Grasslands              |          |         | 0     |              |
| 91S0 - Western Pontic beech forests   | Forests                 |          |         | 0     | 1            |
| 91V0 - Dacian Beech forests ( <i>Symphyto-Fagion</i> )  | Forests                 |          |         | 0     |              |
| 91W0 - Moesian beech forests  | Forests                 |          |         | 0     |              |
| 91Z0 - Moesian silver lime woods  | Forests                 |          |         | 0     | 1            |
| 91BA - Moesian silver fir forests   | Forests                 |          |         | 0     |              |
| 91CA - Rhodope and Balkan Range Scots pine forests  | Forests                 |          |         | 0     |              |
| 92C0 - <i>Platanus orientalis</i> and <i>Liquidambar orientalis</i> woods ( <i>Platanion orientalis</i> )   | Forests                 |          |         | 0     |              |
| 92D0 - Southern riparian galleries and thickets ( <i>Nerio-Tamaricetea</i> and <i>Securinegion tinctoriae</i> )   | Forests                 |          |         | 0     |              |
| 91E0 Riparian mixed forests of <i>Quercus robur</i> , <i>Ulmus laevis</i> and <i>Ulmus minor</i> , <i>Fraxinus excelsior</i> or <i>Fraxinus angustifolia</i> , along the great rivers ( <i>Ulmenion minoris</i> )   | Forests                 |          |         | 0     | 1            |

## Black Sea & Steppic species

Eight species whose conservation is related to the management of priority habitats in the Black Sea and Steppic regions were proposed by the two Member States and one NGO.

Table 9 Species whose conservation is linked to the management of priority habitats within the Black Sea and Steppic regions

| Habitat   | Habitat group                | Bulgaria | Romania | Total | EHF Bulgaria |
|---|------------------------------|----------|---------|-------|--------------|
| 4125 <i>Alosa immaculata</i>                        | N/A                          | 1        | 1       | 2     |              |
| 1219 <i>Testudo graeca</i>                          | N/A                          |          | 1       | 1     |              |
| 1428 <i>Marsilea quadrifolia</i>                    | Mires & bogs; Rivers & Lakes |          | 1       | 1     |              |
| A396 <i>Branta ruficollis</i> Bird Directive        | N/A                          | 1        |         | 1     | 1            |
| 1293 <i>Elaphe situla</i> HD Annexes II & IV        | N/A                          | 1        |         | 1     |              |
| 4127 <i>Alosa tanaica</i>                           | N/A                          | 1        |         | 1     |              |
| 1335 <i>Spermophilus citellus</i> Habitat Directive | Grasslands                   |          |         | 0     | 1            |
| A442 <i>Ficedula semitorquata</i> Bird Directive    | N/A                          |          |         | 0     | 1            |

## Black Sea & Steppic management and conservation issues

Conservation and management issues for priority consideration within the Natura 2000 biogeographical Process were provided by the two Member states in the region and the Bulgarian Biodiversity Foundation, a member of the EHF.

Table 10 Habitat management and conservation issues for priority consideration within the Black Sea & Steppic region

| Issue                                      | Bulgaria | Romania | Total | EHF Bulgaria |
|--|----------|---------|-------|--------------|
| Abandonment                                |          | 1       | 1     |              |
| Changes in hydrology                       |          | 1       | 1     | 1            |
| Disappearance of linear landscape elements | 1        |         | 1     |              |
| Drainage                                   | 1        |         | 1     |              |
| Fragmentation                              | 1        |         | 1     | 1            |
| Habitat loss                               | 1        |         | 1     |              |
| Intensification                            |          | 1       | 1     |              |
| Renewable energies                         | 1        |         | 1     |              |
| Tourism                                    |          | 1       | 1     | 1            |

## 5 Comments and observations for habitat, species and issues selection

The comments below are the comments received by individual Member States, NGOs and Natura 2000 Users, together with their habitat, species and issues selections.

### Belgium

Continental conservation and management issues:

- Stakeholder involvement
- Agriculture intensification
- Fragmentation

### Bulgaria

There have been some difficulties with the pre-selected lists on one hand and the regions grouping on the other, since the Steppic region in Romania borders the Continental region in Bulgaria. For example, habitat type 40C0 - Ponto-Sarmatic deciduous thickets, occurs only in the Continental region in BG and in both the Continental and Steppic regions in RO, but has been included in the pre-selection list for the Black Sea and the Steppic regions. We would like to have this habitat type included in the Continental list.

We have also noticed that some of the habitat types we are interested in and would like to be included in the Continental List are with relatively low scores in the Continental region but with much higher scores and even in the pre-selection list for the Pannonian region. These are 1530, 2340, 6240, 6250, 6260, 9110, 91M0.

We have tried to work following the method described in the Draft Pre-scoping document and to propose additional habitats that we would like to be included and in the same time are present in more than 2 countries. For that we have used the Art.17 Check list for the current reporting round. This is the reason why we have not listed 40C0 for the Continental region and 2340 is “under the line”.

Black Sea and Steppic conservation and management issues:

- Tourism
- Fragmentation
- Hydrological changes

## **Croatia**

Continental conservation and management issues:

- Stakeholder involvement
- Fragmentation of habitats
- Financial and other support mechanisms

## **Czech Republic**

Continental conservation and management issues:

- Contradiction between enabling natural processes (no-interference management) and maintaining the favourable status of habitat type (biotope) dependent on regular human activities
- Financing of specific (small-scale) management types

## **Denmark**

The Danish part of the terrestrial Continental Region consists of a rather fragmented landscape when it comes to natural habitats. In a management perspective, a number of more cross cutting issues is very relevant to discuss, especially:

- How to manage fragmented and small habitats, especially grasslands like 6230, and humid meadows and fens (e.g. 6410, 7220, 7230), including the challenges following from defining appropriate (agri-environmental) measures to reduce the impact from the surrounding agricultural activities
- How to create more robust habitats by establishing “network” features, e.g. by “linking” the habitats
- How to deal with airborne pollution, including especially (long distance transport) of nitrogen

However, following the past years problems with storms and high water level at our coastline, the question of how to manage the coastal habitats becomes even more actual (coastal squeeze). This could call for including the following habitats in the work at the seminars:

- 1210 Annual vegetation of stony banks
- 1220 Perennial vegetation of stony banks
- 1330 Atlantic Salt Marshes

Please consider this in the further work.

## Germany

Species selection:

Species linked to habitat quality in forests (with special regard to habitat types 9110, 9170, 91D0\*, 91E0\*, 91F0): (a) Dead wood:

- *Osmoderma eremita* (1084, II\*, IV)
- *Cerambyx cerdo* (1088, II, IV)
- *Myotis bechsteinii* (1323, II, IV)
- *Barbastella barbastellus* (1308, II, IV)
- *Dryocopus martius* (A 236, I)
- *Dendrocopus medius* (A238, I)
- *Picoides tridactylus* (A241, I)

Species linked to habitat quality in forests (with special regard to habitat types 9110, 9170, 91D0\*, 91E0\*, 91F0): (b) Coherence and large, undisturbed habitats:

- *Felis silvestris* (1363, IV)
- *Lynx lynx* (1361, II, IV)
- *Ciconia nigra* (A030-B, I)
- *Aquila pomarina* (A089, I)

Species linked to extensively managed open habitats: (a) Grasslands (with special regard to habitat types 6120\*, 6210\*, 6230\*, 6410, 6440, 6510, 6520):

- *Arnica montana* (1762, V)
- *Euphydryas aurinia* (1065, II)
- *Maculinea teleius* (1059, II, IV)
- *Maculinea arion* (1058, IV)
- *Coronella austriaca* (1283, IV)
- *Crex crex* (A122, I)
- *Numenius arquata* (A768)
- *Milvus milvus* (A074, I)
- *Alauda arvensis* (A247)

Species linked to extensively managed open habitats: (b) Crops:

- *Cricetus cricetus* (1339, IV)
- *Perdix perdix* (A644, II/1)

Species linked to freshwater habitats and their quality/coherence: (a) Rivers and creeks (with special regard to habitat type 3270):

- *Unio crassus* (1032, II, IV)
- *Margaritifera margaritifera* (1029, II, IV)
- *Astacus astacus* (1091, V)
- *Austropotamobius torrentium* (1093, II, IV)

- Thymallus thymallus (1109, V)
- Salmo salar (1106, II, IV)
- Hucho hucho (1105, II, IV)
- Lutra lutra (1355, II, IV)
- Alcedo atthis (A229, I)
- Cinclus cinclus (A264)
- Actitis hypoleucos (A168)

Species linked to freshwater habitats and their quality/coherence: (b) Lakes and ponds (with special regard to habitat types 3130, 3140, 3150):

- Bufo calamita (1202, IV)
- Rana arvalis (1214, IV)
- Bombina variegata (1193, II, IV)
- Bombina bombina (1188, II, IV)
- Hyla arborea (1203, IV)
- Botaurus stellaris (A688-B, I)
- Porzana parva (A719, I)
- Aythya nyroca (A060-B)
- Anas querquedula (A055)

Forest habitat types on secondary sites (e.g. habitat types 9160, 9170)

Continental conservation and management issues:

- Dead wood and old growth stocks and habitats in managed forests
- Biodiversity and area losses by succession/land use changes in extensively managed open land
- Eutrophication including atmospheric nitrogen depositions
- Risks by introduction of non-native tree species into forest habitat types or into habitat types adjacent to protected forests
- Improvement of the Natura 2000 network quality/coherence by:
  - protection of natural processes/wilderness in primary habitats
  - linking of Natura 2000 sites
  - Improvement of habitat quality in watercourses and associated floodplains (biotope complexes)

## Italy

Continental conservation and management issues:

- Fragmentation
- Stakeholder involvement

## Romania

Continental conservation and management issues:

- Forest exploitation during the breeding season of birds are causing nest failure of many sensitive species.
- River management (Eg. artificial barriers on the rivers (dams, reservoirs) are preventing many fish species from migration.
- Linear infrastructure are causing fragmentation of habitats and isolation of many species populations.

## European habitats forum

The top twenty selection for the Continental is generally sufficient. Nevertheless, it must be accented that coastal zone habitats (as dunes, cliffs) are totally skipped. They are not very common and typical for continental region but should be discussed somewhere (I am afraid they - as 'terrestrial' – are not in the scope of marine Seminar either)

The dunes are skipped also from the Black Sea region yet they are among the most important groups of habitats for Bulgaria – there are a lot of problems with them and their protection is clearly very high on the political agenda in Bulgaria.

A methodological remark was made that the table should include the coverage area of the habitats beyond simple presence or absence in a particular country. It could be easily derived from the Natura 2000 designation and reporting documents and would provide information about the importance of the certain habitat.

A methodological remark was made about the species selection. More attention should be paid to some landscape, indicator, umbrella and flagship species, the protection of which would lead to better protection of their habitat. Examples: White-backed Woodpecker and Three-toed Woodpecker can be considered as indicators for healthy amounts of deadwood in their habitats, Souselik is indicator for some open landscapes. Efforts to identify such species should be made.

Specific contributions from NGOs regarding management issues affecting the selected habitats in the Continental region:

- Bulgarian Biodiversity Foundation
  - Promotion of wildlife tourism
- Butterfly Conservation Europe
  - Nutrient input and accumulation
  - Increasing vegetation density (forests, grasslands, bogs and mires, shrubs and heaths) for possibly several reasons (management, nutrients, climate change)



- Deutscher Verband für Landschaftspflege e.V. (Germany)
  - Stakeholder involvement
  - Guidance and advice
- Butterfly Conservation (Italy)
  - Fragmentation
  - Stakeholder involvement
  - Abandonment

Specific contributions from NGOs regarding management issues affecting the selected habitats in the Black Sea region:

- Bulgarian Biodiversity Foundation
  - Wildlife tourism
  - Changes in hydrology
  - Agriculture intensification
  - Lack of agriculture

### **NATURA 2000 Users**

Specific contributions from Natura 2000 users regarding management issues affecting the selected habitats:

- Helmholtz Centre for Environmental Research - UFZ
  - CAP reform

**Annex: details of the Continental selection results**

Remark for the 3 tables: for more details on the column “comments” please see section 5.

Table 11 Selection details for the top 20 Continental habitats (according to the ETC BD scoring) ranked according to the scores given by the Member States

| Habitat  | N2K code | ETC BD score | Habitat group           | Austria | Belgium | Bulgaria | Croatia | Czech Republic | Denmark | France | Germany | Italy | Luxembourg | Poland | Romania | Slovenia | Sweden | Sum MS | EHF / BCE | N2K Users | EHF / Germany | EHF / BCE / Ita | EHF Bulgaria E | EHF Bulgaria E | Sum Users | Total sum | comments                      |
|--|----------|--------------|-------------------------|---------|---------|----------|---------|----------------|---------|--------|---------|-------|------------|--------|---------|----------|--------|--------|-----------|-----------|---------------|-----------------|----------------|----------------|-----------|-----------|-------------------------------|
| 6410 - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)  | 6410     | 403          | Grasslands              | 1       | 1       |          | 1       | 1              | 1       | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 13     | 1         | 1         | 1             | 1               |                |                | 4         | 17        | DK: small size and fragmented |
| 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)                                     | 6210     | 351          | Grasslands              | 1       | 1       | 1        | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 13     | 1         | 1         | 1             | 1               |                | 1              | 5         | 18        |                               |
| 3130 - Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea                                  | 3130     | 286          | Rivers & lakes          | 1       | 1       | 1        | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 13     |           |           |               |                 | 1              | 1              | 2         | 15        |                               |
| 91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)  | 91E0     | 198          | Forests                 | 1       | 1       | 1        | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 13     | 1         | 1         |               | 1               | 1              | 1              | 5         | 18        |                               |
| 7230 - Alkaline fens   | 7230     | 338          | Mires & bogs            | 1       | 1       | 1        | 1       | 1              | 1       | 1      | 1       | 1     |            | 1      | 1       |          | 1      | 12     | 1         | 1         |               |                 | 1              | 1              | 4         | 16        | DK: small size and fragmented |
| 6510 - Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)   | 6510     | 312          | Grasslands              | 1       | 1       | 1        | 1       | 1              |         |        | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 11     |           | 1         | 1             | 1               | 1              | 1              | 6         | 17        |                               |
| 7140 - Transition mires and quaking bogs   | 7140     | 299          | Mires & bogs            | 1       | 1       |          | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 11     | 1         | 1         | 1             | 1               |                |                | 4         | 15        |                               |
| 6230 - Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)                                       | 6230     | 275          | Grasslands              | 1       | 1       |          | 1       | 1              | 1       | 1      | 1       | 1     | 1          | 1      |         |          | 1      | 11     | 1         | 1         | 1             | 1               |                |                | 4         | 15        | DK: small size and fragmented |
| 3150 - Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation  | 3150     | 260          | Rivers & lakes          | 1       | 1       | 1        | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 11     |           |           |               |                 |                | 1              | 1         | 12        |                               |
| 7220 - Petrifying springs with tufa formation (Cratoneurion)   | 7220     | 221          | Mires & bogs            | 1       | 1       |          | 1       | 1              | 1       | 1      |         | 1     | 1          | 1      | 1       | 1        | 1      | 10     | 1         |           |               |                 |                |                | 1         | 11        | DK: small size and fragmented |
| 3140 - Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.   | 3140     | 180          | Rivers & lakes          | 1       |         |          | 1       | 1              |         | 1      | 1       | 1     | 1          | 1      | 1       | 1        | 1      | 10     |           |           |               |                 |                |                | 0         | 10        |                               |
| 4030 - European dry heaths   | 4030     | 240          | Grasslands              | 1       | 1       |          |         | 1              |         | 1      | 1       | 1     | 1          | 1      |         |          | 1      | 9      | 1         | 1         | 1             | 1               |                |                | 4         | 13        |                               |
| 91F0 - Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris) | 91F0     | 231          | Forests                 | 1       |         | 1        | 1       |                |         |        | 1       | 1     |            | 1      | 1       | 1        | 1      | 9      | 1         | 1         |               | 1               | 1              | 1              | 5         | 14        |                               |
| 91D0 - Bog woodland  | 91D0     | 198          | Forests                 | 1       | 1       | 1        |         | 1              |         |        | 1       |       | 1          | 1      | 1       | 1        | 1      | 9      | 1         | 1         |               |                 |                |                | 2         | 11        |                               |
| 3260 - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation  | 3260     | 195          | Rivers & lakes          | 1       | 1       |          | 1       | 1              |         |        |         |       | 1          | 1      | 1       | 1        | 1      | 9      |           | 1         |               |                 |                |                | 1         | 10        |                               |
| 5130 - Juniperus communis formations on heaths or calcareous grasslands  | 5130     | 216          | Heaths & scrubs         | 1       | 1       | 1        | 1       | 1              |         | 1      |         | 1     | 1          | 1      | 1       | 1        | 1      | 8      | 1         | 1         | 1             | 1               |                |                | 4         | 12        |                               |
| 9110 - Luzulo-Fagetum beech forests  | 9110     | 182          | Forests                 | 1       |         | 1        | 1       |                |         |        | 1       | 1     | 1          |        | 1       | 1        | 1      | 8      | 1         | 1         |               |                 |                | 1              | 3         | 11        |                               |
| 3160 - Natural dystrophic lakes and ponds  | 3160     | 200          | Rivers & lakes          | 1       |         |          |         | 1              |         | 1      |         |       | 1          | 1      | 1       | 1        | 1      | 6      | 1         |           |               |                 |                |                | 1         | 7         |                               |
| 7150 - Depressions on peat substrates of the Rhynchosporion  | 7150     | 170          | Sparsely vegetated land | 1       | 1       |          | 1       |                |         | 1      |         | 1     |            | 1      | 1       | 1        | 1      | 6      | 1         | 1         |               |                 |                |                | 2         | 8         |                               |
| 7110 - Active raised bogs  | 7110     | 171          | Mires & bogs            | 1       | 1       |          |         |                |         | 1      | 1       |       |            | 1      |         |          | 1      | 5      | 1         | 1         |               |                 |                |                | 2         | 7         |                               |

Table 12 Selection details for the additional habitats proposed by the Member States, the NGOs and the N2K users for consideration within the Continental process, ordered by decreasing importance according to the ranking from the Member States

| Habitat  | N2K code | ETC BD score | Habitat group           | Austria | Belgium | Bulgaria | Croatia | Czech Republic | Denmark | France | Germany | Italy | Luxembourg | Poland | Romania | Slovenia | Sweden | Sum MS | EHF / BCE | N2K Users | EHF / Germany | EHF / BCE / Ita | EHF Bulgaria E | EHF Bulgaria E | Sum Users | Total sum | comments            |
|--|----------|--------------|-------------------------|---------|---------|----------|---------|----------------|---------|--------|---------|-------|------------|--------|---------|----------|--------|--------|-----------|-----------|---------------|-----------------|----------------|----------------|-----------|-----------|---------------------|
| 3270 - Rivers with muddy banks with Chenopodium rubri p.p. and Bidention p.p. vegetation                                       | 3270     | 165          | Rivers & lakes          |         |         |          | 1       |                |         | 1      | 1       | 1     |            |        |         |          |        | 5      |           |           |               |                 |                |                | 0         | 5         |                     |
| 6120 - Xeric and calcareous grasslands   | 6120     | 133          | Grasslands              |         | 1       |          |         |                |         |        | 1       |       |            |        |         |          | 1      | 3      |           | 1         |               |                 |                |                | 1         | 4         |                     |
| 9160 - Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli                                     | 9160     | 99           | Forests                 |         |         |          | 1       |                |         | 1      |         |       | 1          |        |         |          |        | 3      |           |           |               |                 |                |                | 0         | 3         |                     |
| 6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels                                 | 6430     | 169          | Grasslands              |         |         |          | 1       |                |         |        |         |       | 1          |        |         |          |        | 2      | 1         |           |               |                 |                |                | 1         | 3         |                     |
| 6110 - Rupicolous calcareous or basophilic grasslands of the Alysso-Sedion albi  | 6110     | 168          | Sparsely vegetated land |         |         |          |         |                |         | 1      |         | 1     |            |        |         |          |        | 2      |           | 1         |               |                 |                |                | 1         | 3         |                     |
| 7210 - Calcareous fens with Cladium mariscus and species of the Caricion davallianae   | 7210     | 165          | Mires & bogs            |         |         |          |         |                |         |        |         | 1     |            |        |         |          |        | 2      |           |           |               |                 |                |                | 0         | 2         |                     |
| 6520 - Mountain hay meadows  | 6520     | 162          | Grasslands              |         | 1       |          |         |                |         |        | 1       |       |            |        |         |          |        | 2      | 1         | 1         | 1             | 1               |                |                | 4         | 6         |                     |
| 9170 - Galio-Carpinetum oak-hornbeam forests   | 9170     | 150          | Forests                 |         |         |          |         | 1              |         |        | 1       |       |            |        |         |          |        | 2      | 1         |           |               |                 |                |                | 1         | 3         |                     |
| 9180 - Tilio-Acerion forests of slopes, screes and ravines   | 9180     | 132          | Forests                 |         |         |          |         |                |         |        |         |       |            |        |         | 1        | 1      | 2      |           |           |               |                 |                |                | 0         | 2         |                     |
| 8310 - Caves not open to the public  | 8310     | 120          | Sparsely vegetated land |         |         |          | 1       |                |         |        |         |       | 1          |        |         |          |        | 2      |           |           |               |                 |                |                | 0         | 2         |                     |
| 1340* - Inland salt meadows-problematic protection of this habitat because of its marginal occurrence                          | 1340     | 98           | Grasslands              |         |         |          |         | 1              |         | 1      |         |       |            |        |         |          |        | 2      |           |           |               |                 |                |                | 0         | 2         |                     |
| 6440 - Alluvial meadows of river valleys of the Cnidion dubii  | 6440     | 98           | Grasslands              |         |         |          | 1       |                |         |        | 1       |       |            |        |         |          |        | 2      |           |           |               |                 |                |                | 0         | 2         |                     |
| 9110 - Euro-Siberian steppic woods with Quercus spp.   | 9110     | 45           | Forests                 |         |         |          |         |                |         |        |         |       | 1          | 1      |         |          |        | 2      |           |           |               |                 |                |                | 1         | 3         |                     |
| 91H0 - Pannonian woods with Quercus pubescens  | 91H0     | 30           | Forests                 |         |         | 1        |         |                |         |        |         |       |            |        | 1       |          |        | 2      |           |           |               |                 |                |                | 1         | 3         |                     |
| 40C0 - Ponto-Sarmatic deciduous thickets   | 40C0     | #N/A         | Heaths & scrubs         |         |         |          |         |                |         |        |         |       |            |        | 1       |          |        | 1      |           |           |               |                 |                |                | 1         | 2         |                     |
| 91AA - Eastern white oak woods   | 91AA     | #N/A         | Forests                 |         |         | 1        |         |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 | 1              | 1              | 2         | 3         |                     |
| 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)                          | 6210     | 351          | Grasslands              |         |         |          |         | 1              |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 1         | 2         |                     |
| 1220 - Perennial vegetation of stony banks   | 1220     | 176          | Marine                  |         |         |          |         |                |         | 1      |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         | DK: Coastal squeeze |
| 1330 - Atlantic Salt Marshes   | 1330     | 156          | Marine                  |         |         |          |         |                |         | 1      |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         | DK: Coastal squeeze |
| 2330 - Inland dunes with open Corynephorus and Agrostis grasslands   | 2330     | 144          | Grasslands              |         |         |          |         |                |         |        |         |       | 1          |        |         |          |        | 1      |           | 1         |               |                 |                |                | 1         | 2         |                     |
| 7120 - Degraded raised bogs still capable of natural regeneration  | 7120     | 128          | Mires & bogs            |         |         |          |         | 1              |         |        |         |       |            |        |         |          |        | 1      | 1         | 1         |               |                 |                |                | 2         | 3         |                     |
| 4010 - Northern Atlantic wet heaths with Erica tetralix  | 4010     | 102          | Heaths & scrubs         |         | 1       |          |         |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 9190 - Old acidophilous oak woods with Quercus robur on sandy plains   | 9190     | 96           | Forests                 |         | 1       |          |         |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 1150 - Coastal lagoons   | 1150     | 66           | Marine                  |         |         |          |         |                |         |        |         |       |            |        |         |          | 1      | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 2130 - Fixed dunes with herbaceous vegetation  | 2130     | 55           | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          | 1      | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 1210 - Annual vegetation of stony banks  | 1210     | 42           | Marine                  |         |         |          |         |                |         | 1      |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         | DK: Coastal squeeze |
| 6240 - Sub-Pannonic steppic grasslands   | 6240     | 40           | Grasslands              |         |         |          |         |                |         |        |         |       |            |        | 1       |          |        | 1      |           |           |               |                 |                |                | 1         | 2         |                     |
| 92A0 - Salix alba and Populus alba galleries   | 92A0     | 24           | Forests                 |         |         |          | 1       |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 2         | 3         |                     |
| 91T0 - Central European lichen Scots pine forests  | 91T0     | 18           | Forests                 |         |         |          |         |                |         |        |         |       | 1          |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 1530 - Pannonic salt steppes and salt marshes  | 1530     | 15           | Grasslands              |         |         | 1        |         |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 2         | 3         |                     |
| 91U0 - Sarmatic steppe pine fores  | 91U0     | 10           | Forests                 |         |         |          |         | 1              |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 0         | 1         |                     |
| 6260 - Pannonic sand steppes   | 6260     | 6            | Grasslands              |         |         | 1        |         |                |         |        |         |       |            |        |         |          |        | 1      |           |           |               |                 |                |                | 2         | 3         |                     |
| 9560* - Endemic forests with Juniperus spp.  | 9560     | #N/A         | Forests                 |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               |                 |                |                | 1         | 1         |                     |
| 91M0 - Pannonian-Balkan turkey oak –sessile oak forests  | 91M0     | #N/A         | Forests                 |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               |                 |                |                | 2         | 2         |                     |
| 91Z0 - Moesian Silver lime woods   | 91Z0     | #N/A         | Forests                 |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               |                 |                |                | 1         | 1         |                     |
| 6230 - Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe) | 6230     | 275          | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               | 1               |                |                | 1         | 1         |                     |
| 5130 - Juniperus communis formations on theaths or calcareous grasslands   | 5130     | 216          | Heaths & scrubs         |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           | 1             |                 |                |                | 1         | 1         |                     |
| 8230 - Siliceous rock with pioneer vegetation of the Sedo-Scleranthion or of the Sedo albi-Veronicion dillenii                 | 8230     | 110          | Sparsely vegetated land |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           | 1         |               |                 |                |                | 1         | 1         |                     |
| 6220 - Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea  | 6220     | 12           | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               | 1               |                |                | 1         | 1         |                     |
| 2310 - Dry sand heaths with calluna and genista  | 2310     | 10           | Heaths & scrubs         |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           | 1             |                 |                |                | 1         | 1         |                     |
| 2340 - Pannonic inland dunes   | 2340     | 6            | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               |                 |                |                | 1         | 1         |                     |
| 6250* - Pannonic loess steppic grasslands  | 6250     | 6            | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               |                 |                |                | 1         | 1         |                     |
| 6150 - Siliceous alpine and boreal grasslands in Appennine   | 6150     | 3            | Grasslands              |         |         |          |         |                |         |        |         |       |            |        |         |          |        | 0      |           |           |               | 1               |                |                | 1         | 1         |                     |

Table 13 Selection details for the species proposed for consideration within the Continental NBP whose conservation is linked to the management of the selected habitats

| Species   | NZK code | ETC BD score | Habitat group           | Habitat group 2 | Austria | Belgium | Bulgaria | Croatia | Czech Republic | Denmark | France | Germany | Italy | Luxembourg | Poland | Romania | Sweden | Sum MS | EHF / BCE | NZK Users | EHF / Germany | EHF / BCE / Ital | EHF Bulgaria E | EHF Bulgaria E | Sum Users | Total sum | comments                          |
|---|----------|--------------|-------------------------|-----------------|---------|---------|----------|---------|----------------|---------|--------|---------|-------|------------|--------|---------|--------|--------|-----------|-----------|---------------|------------------|----------------|----------------|-----------|-----------|-----------------------------------|
| 1029 Margaritifera margaritifera (1029, II, IV)                       | 1029     | 224          | Rivers & lakes          |                 |         | 1       |          |         |                |         | 1      | 1       |       |            |        |         |        | 3      |           |           |               |                  |                |                | 0         | 3         | D: Rivers & creeks coherence      |
| 1059 Maculinea teleius (1059, II, IV)                                 | 1059     | 176          | Mires & bogs            | Grasslands      |         |         |          | 1       | 1              |         |        | 1       |       |            |        |         |        | 3      | 1         |           |               | 1                |                |                | 2         | 5         | D: Extensively managed grasslands |
| 1032 Unio crassus (1032, II, IV)                                      | 1032     | 348          | Rivers & lakes          |                 |         |         |          |         |                |         |        | 1       |       | 1          |        |         |        | 2      |           |           |               |                  |                |                | 0         | 2         | D: Rivers & creeks coherence      |
| 1084 Osmoderma eremita (1084, II, IV)                                 | 1084     | 297          | Forests                 |                 |         |         |          |         | 1              |         |        | 1       |       |            |        |         |        | 2      |           |           |               |                  |                |                | 0         | 2         | D: Forest dead wood               |
| 1193 Bombina variegata (1193, II, IV)                                 | 1193     | 220          | Mires & bogs            | Forests         |         |         |          |         |                |         | 1      | 1       |       |            |        |         |        | 2      |           |           |               |                  |                |                | 0         | 2         | D: Lakes and ponds coherence      |
| 1363 Felis silvestris (1363, IV)                                      | 1363     | 126          | Heaths & scrubs         | Forests         |         |         |          |         |                |         |        | 1       |       | 1          |        |         |        | 2      |           |           |               |                  |                |                | 0         | 2         | D: Forest coherence               |
| A060 Aythya nyroca (A060-B)   | A060     |              |                         |                 |         |         |          | 1       |                |         |        | 1       |       |            |        |         |        | 2      |           |           |               |                  |                |                | 0         | 2         | D: Lakes and ponds coherence      |
| 1058 Maculinea arion (1058, IV)                                       | 1058     | 444          | Sparsely vegetated land | Grasslands      |         |         |          |         |                |         |        |         |       |            |        |         |        | 1      |           | 1         |               |                  |                |                | 1         | 2         | D: Extensively managed grasslands |
| 1065 Euphydryas aurinia (1065, II)                                    | 1065     | 416          | Mires & bogs            | Grasslands      |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      | 1         |           |               |                  |                |                | 2         | 3         | D: Extensively managed grasslands |
| 1203 Hyla arborea (1203, IV)  | 1203     | 275          | Rivers & lakes          | Mires & bogs    |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| 1202 Bufo calamita (1202, IV)   | 1202     | 270          | Mires & bogs            |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| 1308 Barbastella barbastellus (1308, II, IV)                          | 1308     | 260          | Heaths & scrubs         | Forests         |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| 1166 Triturus cristatus   | 1166     | 253          | Mires & bogs            | Forests         |         |         | 1        |         |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1283 Coronella austriaca (1283, IV)                                   | 1283     | 242          | Sparsely vegetated land | Heaths & scrubs |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| 1304 Rhinolophus ferrumequinum  | 1304     | 209          | Heaths & scrubs         | Forests         |         |         |          |         |                |         |        |         |       | 1          |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1323 Myotis bechsteinii (1323, II, IV)                                | 1323     | 180          | Heaths & scrubs         | Forests         |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| 1188 Bombina bombina (1188, II, IV)                                   | 1188     | 171          | Mires & bogs            | Forests         |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| 1339 Cricetus cricetus (1339, IV)                                     | 1339     | 160          | Grasslands              |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed cropland   |
| 1083 Lucanus cervus annex 2 habitats                                  | 1083     | 154          | Forests                 |                 |         | 1       |          |         |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1355 Lutra lutra (1355, II, IV)                                       | 1355     | 154          | Rivers & lakes          | Mires & bogs    |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 1214 Rana analis (1214, IV)   | 1214     | 152          | Mires & bogs            | Forests         |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| 1061 Maculinea nausithous   | 1061     | 144          | Mires & bogs            | Grasslands      |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1037 Ophiogomphus caecilia  | 1037     | 140          | Rivers & lakes          | Mires & bogs    |         |         |          |         |                |         |        |         | 1     |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1088 Cerambyx cerdo (1088, II, IV)                                    | 1088     | 135          | Forests                 |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| 1093 Austroptamobius torrentium (1093, II, IV)                        | 1093     | 128          | Rivers & lakes          | Mires & bogs    |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 1361 Lynx lynx (1361, II, IV)   | 1361     | 126          | Forests                 |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest coherence               |
| 1163 European bullhead Cottus gobio Habitat Directive                 | 1163     | 120          | Rivers & lakes          |                 |         |         | 1        |         |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                | 1              | 1         | 2         |                                   |
| 1428 Marsilea quadrifolia   | 1428     | 105          | Rivers & lakes          | Mires & bogs    |         |         |          |         |                |         |        |         | 1     |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1106 Salmo salar (1106, II, IV)                                       | 1106     | 91           | Rivers & lakes          |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 4068 Adenophora liliifolia  | 4068     | 65           | Forests                 |                 |         |         |          |         |                |         |        | 1       |       |            |        | 1       |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1335 European ground squirrel Spermophilus citellus Habitat Directive | 1335     | 55           | Grasslands              |                 |         |         | 1        |         |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                | 1              | 1         | 2         |                                   |
| 1105 Hucho hucho (1105, II, IV)                                       | 1105     | 40           | Rivers & lakes          |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 1114 Rutilus pigus  | 1114     | 36           | Rivers & lakes          |                 |         |         |          |         |                |         |        |         | 1     |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 2511 Gobio kessleri   | 2511     | 25           | Rivers & lakes          |                 |         |         |          |         |                |         |        |         |       |            |        |         | 1      | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1993 Triturus dobrocicus  | 1993     | 18           | Mires & bogs            | Forests         |         |         |          |         |                |         |        | 1       |       |            |        |         | 1      | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 2011 Umbra krameri  | 2011     | 15           | Rivers & lakes          |                 |         |         |          | 1       |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| 1091 Astacus astacus (1091, V)  | 1091     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 1109 Thymallus thymallus (1109, V)                                    | 1109     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| 1762 Amica montana (1762, V)  | 1762     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| A030-B Ciconia nigra (A030-B, I)                                      | A030     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest coherence               |
| A055 Anas querquedula (A055)  | A055     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| A074 Milvus milvus (A074, I)  | A074     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| A089 Aquila pomarina (A089, I)  | A089     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest coherence               |
| A122 Crex crex (A122, I)  | A122     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| A168 Actitis hypoleucos (A168)  | A168     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| A229 Alcedo atthis (A229, I)  | A229     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| A231 Coracias garulus   | A231     |              |                         |                 |         |         |          |         |                |         |        |         |       |            | 1      |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| A236 Dryocopus martius (A 236, I)                                     | A236     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| A238 Dendrocopos medius (A238, I)                                     | A238     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| A239 Dendrocopos leucotos White backed woodpecker Bird Directive      | A239     |              |                         |                 |         |         | 1        |         |                |         |        |         |       |            |        |         |        | 1      |           |           |               |                  |                | 1              | 1         | 2         |                                   |
| A241 Picoides tridactylus (A241, I)                                   | A241     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Forest dead wood               |
| A247 Alauda arvensis (A247)   | A247     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| A264 Cinclus cinclus (A264)   | A264     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Rivers & creeks coherence      |
| A409 Tetrao tetrix  | A409     |              |                         |                 |         |         |          |         |                |         |        |         |       |            | 1      |         |        | 1      |           |           |               |                  |                |                | 0         | 1         |                                   |
| A644 Perdix perdix (A644, II/1)                                       | A644     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed cropland   |
| A688 Botaurus stellans (A688-B, I)                                    | A688     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| A719 Porzana parva (A719, I)  | A719     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Lakes and ponds coherence      |
| A768 Numenius arquata (A768)  | A768     |              |                         |                 |         |         |          |         |                |         |        | 1       |       |            |        |         |        | 1      |           |           |               |                  |                |                | 0         | 1         | D: Extensively managed grasslands |
| 1056 Parnassius mnemosyne - Annex IV                                  | 1056     | 207          | Heaths & scrubs         | Grasslands      |         |         |          |         |                |         |        |         |       |            |        |         |        | 0      |           | 1         |               |                  |                |                | 1         | 1         |                                   |
| 1052 Hypodryas maturna  | 1052     | 144          | Forests                 |                 |         |         |          |         |                |         |        |         |       |            |        |         |        | 0      | 1         |           |               |                  |                |                | 1         | 1         |                                   |
| 1060 Lycaena dispar (II, IV DH) (habitat 6430)                        | 1060     | 99           | Mires & bogs            | Grasslands      |         |         |          |         |                |         |        |         |       |            |        |         |        | 0      |           |           |               |                  | 1              |                | 1         | 1         |                                   |
| 1071 Coenonympha oedippus (II, IV DH); (habitat 6410)                 | 1071     | 75           | Mires & bogs            | Grasslands      |         |         |          |         |                |         |        |         |       |            |        |         |        | 0      |           |           |               |                  | 1              |                | 1         | 1         |                                   |