Implementation of Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora and Council Directive 79/409/EEC on the Conservation of Wild Birds in Bulgaria through the Biological Diversity Act

Comparative Analysis of the Scope with Reference to the European Ecological Network NATURA 2000

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- **Translation:**
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  Cover page 1
  1. Stalyo Stalev – Big and Small Kamenitca peaks (Pirin mountain)
  2. Anton Vorauer, WWF – Grass snake, Vardim oak
  3. Ivan Hristov – Little bittern

  Cover page 4
  Anton Vorauer, WWF – Danube river landscape, Black-headed gulls

Content

Foreword

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora is a basic piece of legislation within the EU biological diversity conservation policy framework. It provides for the establishment of the European Ecological Network NATURA 2000 that includes areas of conservation of natural habitats and of wild flora and fauna. Coacting with Council Directive 79/409/EEC on the Conservation of Wild Birds, it provides for the European natural heritage conservation for future generations.

The accession of Bulgaria to the European Union involves transposition of the European Directives into the national legislation. Regarding the nature conservation and the implementation of the aforementioned Directives, this has been implemented through elaboration and adoption of the Biological Diversity Act, in force since 2002. The Act provides for the establishment of a National Ecological Network that is to include areas of conservation, protected areas and buffer zones surrounding the protected areas. The areas of conservation are established with the purpose of conservation of natural habitat types included in Annex I to the Biological Diversity Act and of habitats of species listed in Annex II.

This report presents the results of the expert analysis, elaborated to assess the extent to which both European Directives are completely and adequately transposed in line with the country's commitments for establishment of the European Ecological Network NATURA 2000, as well as the scope of the National Environmental Network as provided for in the Act. Aiming comprehensiveness, the report is structured into several sections – conservation of the natural habitats, conservation of the habitats of wild fauna and flora, conclusions and recommendations. In addition, 11 tables are appended to illustrate the analysis and its conclusions, thus creating feasibility for comparison of the scope of both Directives and the Biological Diversity Act.

We hope you find it useful.

1. Conservation of the natural habitats

In the list of Annex I to the Biological Diversity Act are included 106 habitat types, which are a core element of the future National Ecological Network. These habitat types are identified according to the 1996 Classification of Palearctic Habitats. The codes of NATURA 2000 were not used in the Annex and therefore it is difficult to outline the scope of the Act in comparison with the scope of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora.

Further complications arise from the lack of a national system for classification of the habitats in Bulgaria and the lack of national mapping. Until now, generally applied for identifying the vegetation in the country has been the dominant method, and the definitions of a large number of basic habitat types have not been updated.

In the process of developing the present analysis the authors have adhered to the Interpretation Manual of European Union Habitats (1999 edition), while using the correlation between the Classification of Palearctic Habitats and the NATURA 2000 Classification, and adopting the codes of NATURA 2000 as basic. To establish the correlation with the Biological Diversity Act, the authors have also interpreted the uniformity between the codes of NATURA 2000 and those of the Classification of Palearctic Habitats. The interpretation is presented in eight tables.

Designed as a basis for the analysis, Table №1 provides a list of all types of natural habitats potentially occurring in Bulgaria, which are included in Annex 1 to Directive 92/43/EEC. By the authors' assessment, these natural habitat types are 78, few of them being disputable. In line with the EU Interpretation Manual, the four-digit code of NATURA 2000 was agreed basic, and the code of the Classification of Palearctic Habitats was also indicated in search of their relation and uniformity with Annex I of the Biological Diversity Act. As far as the codes and the definitions under the codes of the BDA and the Council Directive 92/43/EEC are not fully overlapping, four of the tables have been designed to indicate the various links between the two documents.

Summarized in Table №2 are the types of natural habitats that are fully corresponding to the Biological Diversity Act and to Directive 92/43/EEC in terms of codes and definitions. These natural habitat types are 24 in total.

For a considerable number of natural habitats, there is a slight difference between the codes of the Classification of Palearctic Habitats, included in the Classification of NATURA 2000, and the ones indicated in Annex I of the BDA. In this case, distinction is made by: a) habitat types consisting a larger group in Annex I of Directive 92/43/EEC, and b) habitat types consisting a smaller group in the Directive in comparison to Annex I of the BDA. The first types of natural habitats are outlined in Table №3 to distinguish the correspondence between the larger group of habitats listed in Annex I of Directive 92/43/EEC and the group of more detailedly itemized natural habitat types listed in Annex I of the BDA. The number of these habitat types listed in Annex I of Directive 92/43/EEC is 21, corresponding to 38 habitat types of Annex I to the BDA. However, it has to be emphasized that apart from the 38 types listed in Annex I of the BDA, there are other natural habitat types in Bulgaria, which are included in the larger group of the Directive, but are not indicated in the BDA Annex. Since these habitat types are part of the types included in Annex I to Directive 92/43/EEC, the authors consider their omission a shortfall of the legislative framework.

In the second case, where Annex I to the Biological Diversity Act comprises the larger group of natural habitats indexed by the Classification of Palearctic Habitats, the authors have explored their correlation with the smaller and more detailed groups of Annex I to Directive 92/43/EEC. This is summarized in Table №4. Accordingly, 7 of the natural habitat types indicated in the Act correspond to 12 of the types listed in Annex I to Directive 92/43/EEC. The authors believe it is necessary to review in detail the natural habitat types included in the Directive and to indicate the ones applicable for Bulgaria. However, the authors have outlined some of the groups (for example group 16.2 Dunes) comprising natural habitat types that are highly disputable and are not pretending of comprehensiveness. For this group in particular, a more elaborated and complex research is extremely necessary.

Furthermore, there are 21 more types of natural habitats, which are not included in Annex I to the Biological Diversity Act, but are present in Annex I to Directive 92/43/EEC and exist in Bulgaria. The authors consider these habitat types important and their inclusion in the BDA obligatory in view of the full transposition of the European legislation into the national one. These natural habitats are summarized in Table №5 and comprise a part of the 78 natural habitats of Table №1, which is the core of the draft Annex.

Differentiated in Table №6 are the types of natural habitats that are not present in Annex I to Directive 92/43/EEC, but are included in Annex I to the BDA. Their number is 31 according to the Classification of Palearctic Habitats. It is highly probable to find correlation between some of these types and the main groups of habitats included in the Directive, but that would need more comprehensive analysis of the different habitat types. Since part of these natural habitats are unique for Bulgaria and are also of importance and high value for the establishment of a National Ecological Network, they should be subject to special consideration, as well as research and mapping. Besides, some of these types have already been detailedly researched and their identification as an element of the National Ecological Network will not require additional endeavors (e.g. 31.636 Rhodope *Potentilla fruticosa* thickets, 64.A. Standing stone inland dunes). Other natural habitat types, such as the Stranja beech hornbeam lime forests (41.H1111) and the Stranja beech – *Quercus polycarpa* forests (*Quercus polycarpa* – Fagus orientalis) (41.H1112) have already been included in protected area (Strandzha Nature Park) and their itemization has been developed together with the Park Management Plan. There is a similar example in the Rila and Pirin Mountains, where the forests of Macedonian pine are located within the borders of the Rila and Pirin National Parks.

The analysis of natural habitats listed in Annex I to the BDA and Annex I to Directive 92/43/EEC have revealed that several habitat types coincide in both documents, but the authors' opinion is that they do not occur in Bulgaria. Such an example is type (9540) 42.8 Mediterranean pine woods. According to its definition in the EU Interpretation Manual, this type comprises of species nonexistent in Bulgaria *(Pinus pinaster, Pinus pinea, Pinus halepensis, Pinus brutia)*. Indicated as accompanying species for this natural habitat type is *Pinus leucodermis* – the Bosnian Pine, but the definition of the type itself is generally incompatible with the Bosnian Pine forests in Bulgaria. Besides, there is another habitat type included in the Biological Diversity Act under code 42.716 – Rhodopide white – barked pine forests in Pirin and Slavyanka, which will be taken into account in the development of the National Ecological Network. In this respect, the authors believe that type 42.8 should be excluded from Annex I to the BDA. Correspondingly, Table №7 outlines 5 more types of habitats that authors consider rather disputable and possibly nonexistent in Bulgaria, which should therefore be excluded from Annex I to the BDA.

2. Conservation of the natural habitats of wild flora and fauna

Annex II to the Biological Diversity Act provides a list of animal and plant species whose habitats are subject to conservation within the frame of the National Ecological Network. In this Annex of the Act are listed species included in Annex II to the Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora and in Annex I to the Council Directive 79/409/EEC on the Conservation of Wild Birds.

Among the species of vascular plants, included in Annex I to Directive 92/43/EEC, 8 are occurring in Bulgaria. They are listed in Table №9 of the present analysis. Actually, for the last 20 years the occurrence of only 4 of these species in the country has been confirmed. One of these species – *Aldrovanda vesiculosa* – requires further research. Three species are considered extinct: *Caldesia parnassifolia, Liparis loeselii* and *Eleocharis carniolica*. The latter species it is very propable to be re-considered for the country because of the wide distribution of its' habitats – alluvial riverbank drifts – along the Danube. The species *Astragalus centralpinus* is now considered as a subordinate taxon of *Astragalus alopecurus*, nonetheless we should accept its' occurance in Bulgaria for the purposes of the NATURA 2000 establishment.

Among the nonvascular plant species indicated in Annex II to Directive 92/43/EEC, occurring in Bulgaria are 4 species of moss, which are included in Annex II to the Biological Diversity Act.

Among the animal taxa (excl. birds) listed in Annex II to Directive 92/43/EEC, there are 75 species occurring in Bulgaria, which are included in Table №10 of the present analysis. 15 of these are disputable – extinct taxa and species of indeterminate status. Among the animal taxa (excl. birds) listed in Annex II to Directive 92/43/EEC, 30 species occur in Bulgaria but are not included in Annex II to the BDA. 10 of these pertain to above-mentioned disputable taxa, but the other 20 are actually occurring in Bulgaria and some of them are widely spread, like the Balkan barbel *(Barbus meridionalis)*, the Spined loach *(Cobitis taenia)* and *Morimus funereus*. On the other hand, 42 species are included in Annex II to the BDA, but are not listed in Annex II to Directive 92/43/EEC.

Ten of the priority species (excl. birds) included in Annex II to Directive 92/43/EEC occur in Bulgaria. According to Annex II of the BDA, only 4 of these are priority species – Brown Bear *(Ursus arctos)*, Monk seal *(Monachus monachus)*, Sturgeon *(Acipenser sturio)* and *Rosalia alpina*. Yet, another 40 taxa of no priority status included in Annex II to Directive 92/43/EEC are designated priority in Annex II of the BDA.

On the basis of proposals made by the EU Candidate Countries, draft amendments to Annex II to Directive 92/43/EEC and Annex I to Directive 79/409/EEC were prepared. 25 more taxa (excl. birds) occurring in Bulgaria are included in the draft. Among these taxa, 3 have an indeterminate status for Bulgaria, 16 are not included in Annex II to the Biological Diversity Act, and 8 are of priority status according to Annex II to the BDA.

Among the taxa listed in Annex I to Directive 79/409/EEC, 129 occur in Bulgaria. 105 of these are included in the analogous Annex II to the Biological Diversity Act and are differentiated in Table №11 of the present analysis. Among the 24 species that are not included in the Act, 13 are singularly occurring in Bulgaria or have become extinct and could not be considered species of the Bulgarian bird fauna. Some of the remaining 11 taxa are common

for Bulgaria and their habitats could be designated conservation measures. Such taxa are Black throuted diver *(Gavia arctica)*, Little bustard *(Tetrax tetrax)*, Great snipe *(Gallinago media)*, Terek sandpiper *(Xenus cinereus* or *Tringa cinerea)* and Moustached warbler *(Acrocephalus melanopogon)*, being part of the selection criteria for Special Protection Areas proposed by the Bulgarian Society for the Protection of Birds. In addition, omitting the species of Lanner falcon *(Falco biarmicus)* and Red-spotted bluethroat *(Luscinia svecica)* stands beyond reason. Further deliberation could also be given to the Red troated diver *(Gavia stellata)*, Slavonian grebe *(Podiceps auritus)*, Flamingo *(Phoenicopterus ruber)* and Bar-tailed godwit *(Limosa lapponica)* species.

Annex II of the Biological Diversity Act includes 28 taxa that are not listed in Annex II to Directive 92/43/EEC (summarized also in Table №11 of the present analysis). Five of these are included in the draft ammendments to Annex I of Directive 79/409/EEC – Red-footed falcon *(Falco vespertinus)*, Saker falcon *(Falco cherrug)*, Kentish plover *(Charadrius alexandrinus)*, Pied wheatear *(Oenanthe pleschanka)* and Masked shrike *(Lanius nubicus)*. Three species of the Bulgarian bird fauna that are not listed in Annex II to the BDA *(Puffinus yelkouan, Calidris alpina schinzii* and *Larus minutus)* are included within the above-mentioned draft.

Annex I to Directive 79/409/EEC does not indicate any bird species of priority status, whereas Annex II to the BDA indicates 6 taxa – Black vulture *(Aegypius monachus)*, Short-toed eagle *(Circaetus gallicus)*, Great bustard *(Otis tarda)*, Redshank *(Tringa totanus)*, Redstart *(Phoenicurus phoenicurus)*, and Black-eared wheatear *(Oenanthe hispanica)*. Among these, the Short-toed eagle *(Circaetus gallicus)* is listed twice in Annex II of the BDA – once as a priority species, and once – not.

The way it is defined, the list of national priority species is neither complete, nor balanced in reference to the status of species and therefore would not lead to objective results.

3. Conclusions

The chosen scheme for defining the natural habitat types included in the BDA Annex by the Classification of Palearctic Habitats assists the establishment of the National Ecological Network, but hinders the implementation of Directive 92/43/EEC in Bulgaria.

The implementation of Directive 92/43/EEC in the country is additionally complicated by the lack of national mapping and national habitat classification systems, close to the Classifications of Palearctic Habitats and NATURA 2000, and – last, but not least – by the limited number of experts in this area.

The part of the Biological Diversity Act, referring to the types of natural habitats that will be protected by the National Ecological Network, does not entirely respond to the requirements for implementation of Directive 92/43/EEC. In regard of its adequate transposition into the national legislation, the proposed addition of 30 habitat types to Annex I is quite necessary. Concerning the implementation of this part of Directive 92/43/EEC, its correspondence with the BDA could be generally estimated to 60 per cent.

On the basis of comparative analysis and detailed review of the descriptions of habitat types in Bulgaria, the authors consider that the establishment of the NATURA 2000 European Ecological Network would be more expedient if based on the proposed 78 natural habitat types that exist in Bulgaria and are included in Directive 92/43/EEC. It is important to note that some of these types are disputable and could be subject to addition and amendments. This applies mostly to the natural habitats of the Black Sea Biogeographical Region, which have to be adequately and thoroughly researched by an interdisciplinary team of specialists. It is quite achievable to define the natural habitat types of community interest within this region and it is important that competent national authorities in the face of MOEW initiate the inclusion of these new types into Annex I of Directive 92/43/EEC, which will be a unique contribution of the Black Sea Countries.

Regarding the fauna, the BDA is generally in line with Directives 92/43/EEC and 79/409/EEC. Nevertheless, there are some considerable differences, e.g. the species included in Annex II to Directive 92/43/EEC and Annex I to Directive 79/409/EEC occur in Bulgaria, but are not included in Annex II of the BDA. In addition, the above-mentioned gaps in the list of species of national priority should be dully considered, for applying the list in its present form would lead to subjective and inconsistent results.

4. Reccomendations for applying the provisions of Directive 92/43/EEC regarding the conservation of natural habitats in Bulgaria

The recommendations below are based on the results of the present analysis, the lack of national mapping and national habitat classification systems, close to the Classification of NATURA 2000, the limited number of experts in this area and the limited funds for establishment of the National Ecological Network (the funds of the Bulgarian-Dutch Project "Conservation of Species and Habitats in Bulgaria: EU Approximation" are also taken into account).

1. Recognizing that the analyses and assessments presented herewith are not final and undisputable, we recommend that the analysis of natural habitat types distribution be subject to open discussion with the interdisciplinary participation of experts and specialists.
2. Whereas some of the habitats included in Annex I to the BDA are not among the ones considered as priority for the establishment of NATURA 2000, we recommend that the Classification of Palearctic Habitats or the more advanced EUNIS classification be used in the future elaboration of legislation.
3. We propose that the BDA be amended to exclude the types of natural habitats nonexistent in Bulgaria (summarized in Table №7 of the analysis)
4. We propose that Annex I to the BDA be amended to include the habitat types of Directive 92/43/EEC that exist in the country, but are not listed in the BDA (Tables №5 and №8 of the analysis).
5. We recommend that the implementation of the Act be carried out in two steps. The first would be identification of the sites that could be part of the European Network NATURA 2000, and the second – later on – of those that protect habitat types of national priority.

5. Reccomendations for applying the provisions of Directives 79/409/EEC and 92/43/EEC regarding the conservation of habitats of species in Bulgaria

On the basis of the results of the present analysis have been elaborated the following recommendations:

1. The distribution and extent of the populations of plant species included in Annex II to Directive 92/43/EEC should be clarified and their habitats should be mapped so that the optimal boundaries of the future protected areas could be identified.
2. Annex II to the BDA and Annex II to Directive 92/43/EEC, as well as Annex I to Directive 79/409/EEC should be updated with taxa occurring in Bulgaria. Taxa that should be subject to discussion are identified under Item 2 (Conservation of the natural habitats of wild flora and fauna) and Tables №10 and №11 of the present analysis.
3. In the process of planning the establishment of NATURA 2000 in Bulgaria, due consideration should be given to the Bulgarian faunal species which are included in the proposal for amendments of the Annexes to Directives 79/409/EEC and 92/43/EEC, but are still to be included in the European and Bulgarian pieces of legislation.
4. The list of priority species included in Annex II to the BDA should be revised.

List of Acronyms

BDA	Biological Diversity Act
CPH	Classification of Palearctic Habitats
Directive 92/43/EEC	Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora
Directive79/409/EEC	Council Directive 79/409/EEC on the Conservation of Wild Birds
EU	European Union
MOEW	Ministry of Environment and Water

Table №1: List of habitats potentially occuring in Bulgaria

NATURA 2000		Classification of Palearctic Habitats		Biological Diversity Act	
Code	**Name**	**Code**	**Name**	**Code**	**Name**
1110	Sandbanks which are slightly covered by sea water all the time	11.125	Shoals		
		11.22	Subtittoral soft seabeds		
		11.31	Atlantic eelgrass meadows	11.3	Sea grass meadows
1130	Estuaries	13.2	Estuaries	13.2	Estuaries
		11.2	Benthic communities		
1140	Mud flats and sand flats not covered by seawater at low tide	14	Mud flats and sand flats	14	Mud flats and sand flats
1150	Coastal lagoons	21	Coastal lagoons	21	Coastal lagoons
1170	Reefs	11.24	Sublittoral rocky seabeds and kelp forests		
		11.25	Sublittoral organogenic concretions		
1210	Annual vegetation of drift lines	17.2	Shingle beach drift lines	17.2	Annual vegetation of drift lines
1220	Perennial vegetation of stony banks	17.3	Sea kale communities	17.3	Perennial vegetation of stony banks
1240	Vegatated sea cliffs of the Mediteranean coasts with endemic *Limonium* ssp.	18.22	Mediterraneo-Pontic sea-cliff communities	18.22	Vegatated sea cliffs of the Mediteranean coasts
1310	*Salicornia* and other annuals colonising mud and sand	15.1	Annual salt pioneer swards	15.115	Continental glasswort swards
				15.14	Inland salt meadows
1340	Inland salt meadows	15.4	Suboceanic inland salt meadows	15.14	Inland salt meadows
1410	Mediterranean salt meadows *(Juncetalia maritimi)*	15.5	Mediterranean salt meadows		
1530	Pannonic salt steppes and salt marshes	15.A1	Pannonic salt steppes and salt marshes	15.A	Continental salt steppes and salt marshes
2110	Embryonic shifting dunes	16.211	Embryonic dunes	16.2	Dunes
2120	Shifting dunes along the shoreline with	16.212	White dunes		

	Ammophila arenaria (white dunes)				
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)	16.221to 16.227			
2160	Dunes with *Hippophae rhamnoides*	16.251	Sea-buckthorn dune thickets		
2180	Wooded dunes of the Atlantic, Continental and Boreal region	16.29	Wooded dunes		
2190	Humid dune slacks	16.3	Humid dune slacks	16.3	Humid dune slacks
2340	Pannonic inland dunes	64.71	Pannonic inland dunes		
3130	Oligotrophic and mesotrophic standing waters vegetation of *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*	22.12 x	Mesotrophic waterbodies		
		(22.31 and	Euro-Siberian perennial amphibious communities	22.3113	Euro-Siberian quillwort swards
		22.32)	and Euro-Siberian dwarf annual amphibious swards		
3140	Hard oligo-meso-trophic waters with benthic vegetation of *Chara* spp.	(22.12 or	Mesotrophic waterbodies or	22.12 and 22.44	Hard oligo-meso- trophic waters with benthic vegetation of *Chara* spp.
		22.15) x	Lime-rich oligo-mesotrophic waterbodies		
		22.44	Chandalier algae submerged carpets		
3150	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation	22.13 x	Eutrophic waterbodies	22.13	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* type vegetation
		(22.41 or	Free-floating vegetation or	22.412	Frogbit rafts *(Hydrocharus morsus-ranae)*
				22.413	Water–soldier fafts *(Stratiotes aloides)*
				22.414	Bladderwort colonies
				22.415	Salvinia covers *(Salvinia natans)*
				22.416	*Aldrovanda* communities

NATURA 2000		Classification of Palearctic Habitats		Biological Diversity Act	
Code	**Name**	**Code**	**Name**	**Code**	**Name**
		22.421)	Large pondweed beds		
3160	Natural dystrophic lakes and ponds	22.14	Dystrophic waterbodies	22.14	Natural dystrophic lakes and ponds
3220	Alpine rivers and the herbaceous vegetation along their banks	24.221 and	Boreo-alpine stream gravel communities	24.221 and 24.222	Alpine rivers and the herbaceous vegetation along their banks
		24.222	Montane river gravel communities		
3260	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	24.4	Euhydrophytic river vegetation	24.4	Water courses of plain to montane levels with the *Ranunculion* fluitantis and *Callitricho-Batrachion* vegetation
3270	Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation	24.52	Euro-Siberian annual river mud communities		
4030	European dry heaths	31.2	European dry heaths	31.22C	Pontic ling heaths
4060	Alpine and Boreal heaths	31.4	Alpine and Boreal heaths	31.4251	Balkan Range Kotschy's alpenrose heaths
				31.4252	Rila Kotschy's alpenrose heaths *(Rhododendron myrtifolium)*
				31.461	Rhodopide *Bruckenthalia* heaths
				31.4631	Balkan range *Bruckenthalia* heaths
				31.47	Alpide bearberry heaths
4070	Bushes with *Pinus mugo* and *Rododendron hirsutum (Mugo-Rododendretum hirsuti)*	31.5	Dwarf pine scrub	31.58	Balkano-Rhodopide dwarf mountain pine scrub
4090	Endemic oro-Mediterranean heaths with gourse	31.7	Hedgehog-heaths	31.7J1	Northern Thracian tragacanth hedgehog heaths
5130	*Juniperus communis* formations on heaths or calcareous grasslands	31.88	Common juniper scrub	31.88	*Juniperus communis* formations on heaths or calcareous grasslands
5210	Arborescent matorral with *Juniperus* spp.	32.131 to 32.136		32.131 to 32.135	Arborescent matorral with *Juniperus* spp.

6110	Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*	34.11	Middle European rock debris swards	34.11	Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*
6120	Xeric sand calcareous grassland	34.12	Middle European pioneer calcareous sand swards		
6170	Alpine and subalpine calcareous grasslands	36.7 36.38 36.41 to 36.43		36.41 to 36.43	Alpine and subalpine calcareous grasslands
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (Important Orchid sites)	34.31 to 34.34		34.31	Sub-continental steppic grasslands
				34.311	Helleno-Balkanic savory steppes
				34.34	Central European calcaro-siliceous grasslands
6220	Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*	34.5	Mediterranean xeric grasslands	34.532	Helleno-Balkanic short grass and therophyte communities
6230	Specias rich *Nardus* grassland on silecious substrates in mountain areas and submountain areas in Continental Europe	35.1	Atlantic mat-grass swards and related communities		
		36.31	Alpic mat-grass swards and related communities		
6240	Sub-pannonic steppic grasslands	34.315	Sub-pannonic steppic grasslands		
6250	Pannonic loess steppic grasslands	34.91	Pannonic loess steppic grasslands	34.911	Pannonic loess steppes
				34.921	Western Pontic steppes
6410	*Molinia* meadows oncalcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)*	37.31	Purple moorgrass meadows and related communies		
6420	Mediterranean tall humid herb grassland of the *Molinio-Holoschoenion*	37.4	Mediterranian tall humid grasslands		
6430	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	37.7 and	Humid tall herb fringes and		
		37.8	Subalpine and alpine tall herb communities		

NATURA 2000		Classification of Palearctic Habitats		Biological Diversity Act	
Code	**Name**	**Code**	**Name**	**Code**	**Name**
6440	Alluvial meadows of river valleys of the *Cnidion dubii*	37.23	Subcontinental riverine meadows		
6510	Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)*	38.2	Lowland and collinar hay meadows	38.2521	Moeso-Thracian mesophile floodplain meadows
				38.2522	Moeso-Thracian mesophile foothill meadows
				38.2523	Moeso-Thracian mesophile cold water meadows
6520	Mountain hay meadows	38.31	Alpic mountain hay medows		
7140	Transition mires and quaking bogs	54.5	Transition mires	54.58	Sphagnum and cottongrass rafts
7210	Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*	53.3	Fen-sedge beds	53	Water-fringe vegetation
7220	Petrifying springs with tufa formation *(Cratoneurion)*	54.12	Hard water springs	54.12	Hard water springs
7230	Alkaline fens	54.2	Rich fens		
8110	Siliceous screes of the montane to snow levels *(Androsacetalia alpinae and Galeopsetalia ladani)*	61.1	Alpine and northern siliceous screes	61.11	Alpine siliceous screes
8120	Calcareous and calcshist screes of the montane to alpine levels *(Thlaspietea rotundifolii)*	61.2	Alpine calcareous screes	61.2	Calcareous and calcshist screes of the montane to alpine levels *(Thlaspietea rotundifolii)*
8210	Calcareous rocky slopes with chasmophytic vegetation	62.1	Vegetated calcareous inland cliffs	62.1	Calcareous rocky slopes with chasmophytic vegetation
8220	Siliceous rocky slopes with chasmophytic vegetation	62.2	Vegetated siliceous inland cliffs	62.2	Siliceous rocky slopes with chasmophytic vegetation
8230	Siliceous rock with pioneer vegetation of the *Sedo-Scleranthion* or of the *Sedo albi-Veronicion dillenii*	62.42	Siliceous bare inland cliffs	62.3	Siliceous rock with pioneer vegetation of the *Sedo-Scleranthion* or of the *Sedo albi-Veronicion* dillenii
8240	Limestone pavements	62.3	Pavements		

8310	Caves not open to the public	65	Caves	65	Caves
8330	Submerged or partially submerged sea caves	12.7	Sea-caves	12.7	Sea-caves
		11.26	Sublittoral cave communities		
		11.294	Mediolittoral cave and overhang communities		
9110	*Luzulo-Fagetum* beech forests	41.11	Medio-European acidophilous beech forests	41.11	*Luzulo-Fagetum* beech forests
9130	*Asperulo-Fagetum* beech forests	41.13	Medio-European neutrophile beech forests	41.13	*Asperulo-Fagetum* beech forests
9140	Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*	41.15	Medio-European subalpine beech forests	41.15	Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*
9150	Medio-European limestone beech forests of the *Cephalanthero-Fagion*	41.16	Medio-European limestone beech forests	41.16	Medio-European limestone beech forests of the *Cephalanthero-Fagion*
9170	*Galio-Carpinetum* oak-hornbeam forests	41.261	Wood bedstraw oak-hornbeam forests	41.26	*Galio-Carpinetum* oak-hornbeam forests
9180	*Tilio-Acerion* forests of slopes,screes and ravines	41.4	Mixed ravine and slope forests	41.4	Mixed ravine and slope forests
91D0	Bog woodland	44.A1 to 44.A4			
91E0	Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior (Alno-Pandion, Alnion incanae, Salicion albae)*	44.3	Middle European stream ash-alder woods	44.3211	Stitchwort ash-alder woods *(Fraxinus excelsior – Alnus glutinosa)*
		44.2 and	Boreo-alpine riparian galleries	44.216	Balkan Range grey alder galleries
		44.13	Middle European white willow forests		
91F0	Riparian mixed forests of *Quercus robur, Ulmus laevis* and *Ulmus minor, Fraxinus excelsior* or *F. angustifolia*, along the great rivers *(Ulmenion minoris)*	44.4	Mixed oak-elm-ash forests of great rivers	44.4322	Coastal Bulgarian longos forests
				44.4323	Central Balkan ash-oak-alder forests
91G0	Pannonic woods with *Quecus petraea* and *Carpinus betulus*	41.2B	Pannonic oak-hornbeam forests		
		41.266	Carpathian hairy sedge oak-hornbeam forests		

NATURA 2000		Classification of Palearctic Habitats		Biological Diversity Act	
Code	**Name**	**Code**	**Name**	**Code**	**Name**
		41.267	Sub-Pannonic pimrose oak-hornbeam forests		
91H0	Pannonian woods with *Quercus pubescens*	41.7374	Pannonian white oak woods	41.7	Thermophilous and sub-Mediterranean oak woods
91I0	Euro-Siberian steppic woods with *Quercus* ssp.	41.7A	Euro-Siberian steppe oak woods	41.7	Thermophilous and sub-Mediterranean oak woods
9260	*Castanea sativa* woods	41.9	Chestnut woods		
9270	Hellenic beech forests with *Abies borisii-regis*	41.1A	Hellenic beech forests		
9280	*Quercus frainetto* woods	41.1B	Mediterraneo-Moesian beech forests		
92A0	*Salix alba* and *Populus alba* galleries	44.141 and	Mediterranean white willow galleries	44.1	Riparian willow formations
		44.6	Mediterraneo-Turanian riverine forests		
92C0	*Platanus orientalis* and *Liguidambar orientalis*	44.71 and	Oriental plane woods	44.711	Helleno-Balkanic riparian plane forests
	woods *(Platanion orientalis)*	44.72	Sweet gum woods		*(Platanus orientalis)*
9410	Acidophilous *Picea* forests of the montane to alpine levels *(Vaccinio-Piceetea)*	42.21 to 42.23			
9530	(Sub-) Mediterranean pine forest with	42.61 to			
	endemic blank pines	42.66		42.66	Pallas' pine forests nigra spp. palassiana
9560	Endemic forests with *Juniperus* spp.	42.A2 to 42.A5 and 42.A8		42.A32	Peri-Rhodopide Grecian juniper woods

Table Nº2 Habitat types fully corresponding to the Biological Diversity Act and the Directive 92/43/EEC

BDA	Directive 92/43/EEC		BDA	Directive 92/43/EEC
Code	CPH Code	NATURA 2000 Code	Name	Name
14	14	1140	Mud flats and sand flats	Mud flats and sandflats not covered by seawater at low tide
16.3	16.3	2190	Humid dune-slacks	Humid dune-slacks
17.2	17.2	1210	Annual vegetation of drift lines	Annual vegetation of drift lines
17.3	17.3	1220	Perennial vegetation of stony banks	Perennial vegetation of stony banks
18.22	18.22	1240	Vegatated sea cliffs of the Mediteranea coasts	Vegatated sea cliffs of the Mediteranean coasts
21	21	1150	Coastal lagoons	Coastal lagoons
22.12 and 22.44	22.12 or 22.15 22.44	3140	Hard oligo-meso-trophic waters with benthic vegetation of *Chara* spp.	Hard oligo-meso- trophic waters with benthic vegetation of *Chara* formation
22.14	22.14	3160	Natural dystrophic lakes and ponds	Natural dystrophic lakes and ponds
24.221 and 24.222	24.221 and 24.222	3220	Alpine rivers and the herbaceous vegetation along their banks	Alpine rivers and the herbaceous vegetation along their banks
24.4	24.4	3260	Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation	Floating vegetation of *Ranunculus* of plain submountainous rivers
31.88	31.88	5130	*Juniperus communis* formations on heaths or calcareous grasslands	*Juniperus communis* formations on heaths or calcareous grasslands

BDA	Directive 92/43/EEC		BDA	Directive 92/43/EEC
Code	CPH Code	NATURA 2000 Code	Name	Name
32.131 to 32.135	32.131 to 32.136	5210	Arborescent matorral with *Juniperus* spp.	Arborescent matorral with *Juniperus* spp.
34.11	34.11	6110	Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*	Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*
54.12	54.12	7220	Hard water springs	Petrifying springs with tufa formation *(Cratoneurion)*
61.2	61.2	8120	Calcareous and calcshist screes of the montane to alpine levels *(Thlaspietea rotundifolii)*	Calcareous and calcshist screes of the montane to alpine levels *(Thlaspietea rotundifolii)*
62.1	62.1	8210	Calcareous rocky slopes with chasmophytic vegetation	Calcareous rocky slopes with chasmophytic vegetation
62.2	62.2	8220	Siliceous rocky slopes with chasmophytic vegetation	Siliceous rocky slopes with chasmophytic vegetation
62.3	62.42	8230	Siliceous rocks with pioneer vegetation of the *Sedo-Scle ranthion* or of the *Sedo albi-Veronicion dillenii*	Siliceous rocks with pioneer vegetation of the *Sedo-Scle ranthion* or of the
65	65	8310	Caves	Caves not open to the public
41.11	41.11	9110	*Luzulo-Fagetum* beech forests	*Luzulo-Fagetum* beech forests
41.13	41.13	9130	*Asperulo-Fagetum* beech forests	*Asperulo-Fagetum* beech forests
41.15	41.15	9140	Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*	Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*
41.16	41.16	9150	Medio-European limestone beech forests of the *Cephalanthero-Fagion*	Medio-European limestone beech forests of the *Cephalanthero-Fagion*
41.4	41.4	9180	Mixed ravine and slope forests	*Tilio-Acerion* forests of slopes, screes and ravines

Table №3 Habitat types consisting a larger group in Annex I to Directive 92/43/EEC

BDA	Directive 92/43/EEC		BDA	Directive 92/43/EEC
Code	CPH Code	NATURA 2000 Code	Name	Name
1130	13.2, 11.2	13.2	Estuaries	Estuaries
1310	15.1	15.115	Inland salt meadows Continental glasswort swards	*Salicornia* and other annuals colonizing mud and sand
		15.14	Continental glasswort swards	
3130	22.12 x (22.31 and 22.32)	22.3113	Euro-Siberian quillwort swards	Oligotrophic and mesotrophic standing waters vegetation of *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*
3150	22.13 x (22.41 or 22.421)	22.13	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – *type vegetation*
		22.412	Frogbit rafts	
		22.413	Water-soldier rafts	
		22.414	Bladderwort colonies	
		22.415	Salvinia covers *(Salvinia natans)*	
		22.416	*Aldrovanda* communities	
4030	31.2	31.22C	Pontic ling heaths	European dry heaths
4060	31.4	31.4251	Balkan Range Kotschy's alpenrose heaths	Alpine and boreale heaths
		31.4252	Rila Kotschy's alpenrose heaths *(Rhododendron myrtifolium)*	
		31.461	Rhodopide *Bruckenthalia* heaths	
		31.4631	Balkan range *Bruckenthalia* heaths	
		31.47	Alpide bearberry heaths	
4070	31.5	31.58	Balkano-Rhodopide dwarf mountain pine scrub	Bushes with *Pinus mugo* and *Rododendron hirsutum (MugoRhododendretum hirsuti)*
4090	31.7	31.7J1	Northern Thracian tragacanth hedgehogheath	Endemic oro-Mediterranean heats with gorse

BDA	Directive 92/43/EEC		BDA	Directive 92/43/EEC
Code	CPH Code	NATURA 2000 Code	Name	Name
6170	36.41 to 36.45 36.37, 36.38	36.41 to 36.43	Alpine and subalpine calcareous grasslands	Alpine and subalpine calcareous grasslands
6210	34.31 to 34.34	34.31	Sub-continental steppic grasslands	Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (Important Orchid sites)
		34.311	Helleno-Balkanic savory steppes	
		34.34	Central European calcarosiliceous grasslands	
6220	34.5	34.532	Helleno-Balkanic short grass and therophyte communities	Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*
6250	34.91	34.911	Pannonic loess steppes	Pannonic loeses steppic grassland
		34.921	Western Pontic steppes	
6510	38.2	38.2521	Moeso-Thracian mesophile floodplain meadows	Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)*
		38.2522	Moeso-Thracian mesophile foothill meadows	
		38.2523	Moeso-Thracian mesophile cold water meadows	
7140	54.5	54.58	*Sphagnum* and cottongrass rafts	Transition mires and quaking bogs
8110	61.1	61.11	Alpine siliceous screes	Siliceous screes of the montane snow levels
8330	12.7, 11.26, 11.294	12.7	Sea-caves	Submerged or partially submerged sea caves sea caves
91E0	44.3, 44.2, 44.13	44.3211	Stitchwort ash-alder woods *(Fraxinus excelsior – Alnus glutinosa)*	Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*
		44.216	Balkan Range grey alder galleries	
91F0	44.4	44.4322	Coastal Bulgarian longos forests	Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *F. angustifolia*, along the great rivers
		44.4323	Central Balkan ash- oak-alder forests	
92C0	44.71 to 44.72	44.711	Helleno-Balkanic riparian plane forests *(Platanus orientalis)*	*Platanus orientalis* and *Liguidambar rientalis* woods
9530	42.61to 42.66	42.66	Pallas' pine forests	(Sub-) Mediterranean pine forest with endemic blank pines
9560	42.A2 to 42.A5 and 42.A8	42.A32	Peri-Rhodopide Grecian juniper woods	Endemic forests with *Juniperus* spp.

Table Nº4 Habitat types consisting a smaller group in Annex I to Directive 92/43/EEC

BDA	Directive 92/43/EEC		BDA	Directive 92/43/EEC
Code	CPH Code	NATURA 2000 Code	Name	Name
11.3	11.125 11.2 11.31	1110	Sea grass meadows	Sanbanks which are slightly covered by sea water all time
15.A	15.A1	1530	Pannonic salt steppes and salt marshes	Pannonic salt steppes and salt marshes
16.2	16.211	2110	Dunes	Embryonic shifting dunes
	16.212	2120		Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
	16.221 to 16.227	2130		Fixed coastal dunes with herbaceous vegetation
	16.251	2160		Dunes with *Hippophae rhamnoides*
	16.29	2180		Wooded dunes of the Atlantic, Continental and Boreal region
53	53.3	7210	Water-fringe vegetation	Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*
41.26	41.261	9170	*Galio-Carpinetum* oak-hornbeam forests	*Galio-Carpinetum* oak-hornbeam forests
41.7	41.7A	91I0	Thermophilous and sub-Mediterranean oak woods	Euro-Siberian steppic woods with *Quercus* ssp.
	41.7374	91H0		Pannonian woods with *Quercus pubescens*
44.1	44.141 and 44.6	92A0	Riparian willow formations	*Salix alba* and *Populus alba galleries*

Table №5 Habitat types present in Annex I to Directive 92/43/EEC, potentially occuring in Bulgaria, but not listed in the Biological Diversity Act

CPH Code	NATURA 2000 Code	Name
11.24, 11.25	1170	Reefs
15.4	1340	Inland salt meadows
15.5	1410	Mediterranean salt meadows *(Juncetalia maritimi)*
64.71	2340	Pannonic inland dunes
24.52	3270	Rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p. vegetation
34.12	6120	Xeric sand calcareous grassland
35.1, 36.31	6230	Species rich *Nardus* grassland on silecious substrates in mountain areas
34.315	6240	Sub-pannonic steppic grasslands
37.31	6410	*Molinia* meadows on calcareous, peaty or clayey-silt-laden soils
37.4	6420	Mediterranean tall-herb grassland *(Molinio-Holoschoenion)*
37.7 and 37.8	6430	Hydrophilous tall herbs fringe communities of plains and of the montane to alpine levels
37.23	6440	Alluvial meadows of river valleys of the *Cnidion dubii*
38.31	6520	Mountain hay meadows
54.2	7230	Alkaline fens
62.3	8240	Limestone pavements
44.A1 to 44 A4	91D0	Bog woodlands
41.2B, 41.266, 41.267	91G0	Pannonic woods with *Quercus petraea* and *Carpinus betulus*
41.1A	9270	Hellenic beech forests with *Abies borisii-regis*
41.1B	9280	*Quercus frainetto* woods
41.9	9260	*Castanea sativa* woods
42.21 to 42.23	9410	Acidophilous *Picea* forests of the montane to alpine levels *(Vaccinio-Piceetea)*

Table №6 Habitat types listed in Annex I to the Biological Diversity Act, but not included in Directive 92/43/EEC

Code	Name
22.351	Ponto-Pannonic riverbank dwarf sedge communities
23.113	Ponto-Pannonic salt lakes
24.17	Waterfalls
31.636	Rhodope *Potentilla fruticosa* thickets
32.1162	*Quercus coccifera* low woods
32.21A	*Phillyrea* thickets *(Phillyrea latifolia)*
37.242	Flood swards
37.25	Transitional tall herb humid meadows
37.26	Continental humid meadows
41.19	Moesian beech forests
41.1E11	Eastern Balkan Range oriental beech forests
41.1E121	Stranja bearberry tree-oriental beech forests
41.1E122	Stranja rhododendron-oriental beech forests *(Rhododendron ponticum)*
41.2C	South-Eastern European oak-hornbeam forests
41.8	Mixed thermophilous forest
41.H1111	Stranja beech-hornbeam-lime forests

Code	Name
41.H1112	Stranja beech-*Quercus polycarpa* forests *(Quercus polycarpa – Fagus orientalis)*
42.16	Moesian silver fir forests
42.17	Balkano-Pontic fir forests
42.2412	Central Rhodopide spruce forests
42.2413	Moeso-Macedonian spruce forests
42.245	Balkan Range spruce forests
42.5C	South-Eastern European Scots pine forests
42.716	Rhodopide white-barked pine forests
42.723	Rila and Pirin Macedonian pine forests
42.725	Balkan Macedonian pine woods
44.66	Ponto-Sarmatic mixed poplar riverine forests
44.9	Alder, willow, oak, aspen swamp woods
54.42	Black-white-star sedge fens
64.4	Fluviatile dunes
64.A	Standing stone inland dunes

Table №7 Habitat types, which do not occur in Bulgaria, but are included in the Biological Diversity Act

NATURA 2000		Classification of Palearctic Habitats		Biological Diversity Act	
Code	**Name**	**Code**	**Name**	**Code**	**Name**
7110	Active raised bogs	51.1	Near-natural raised bogs	51.1	Active raised bogs
9160	Sub-Atlantic and medio-European oak or oak hornbeam forests of the *Carpinion betuli*	41.24	Sub-Atlantic stitchwort oak-hornbeam forests	41.24	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*
92D0	Southern riparian galleries and thtickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*)	44.81 to 44.84		44.81411	Western Pontic fresh water *Tamarix smyrnensis (+ Tamarix tetranda)* stands
				44.81412	Western Pontic coastal *Tamarix smyrnensis (+ Tamarix tetranda)* stands
9540	Mediterranean pine forests with endemic Mesogean pines	42.8	Mediterranean pine woods	42.8	Mediterranean pine forests with endemic Mesogean pines
9580	Mediterranean *Taxus baccata* woods	42.A72	Corsican yew woods	42.A7	Western Palaearctic yew woods
		and			
		42.A73	Sardinian yew woods		

Table №8 Habitat types, listed in Directive 92/43/EEC, which are omitted from the Biological Diversity Act

Directive 92/43/EEC		Higher number under the Directive's classification	Smaller number of the habitat type omitted from the BDA	Name of the habitat type under the Classification of Palearctic Habitats
Code	Name			
1310	*Salicornia* and other annuals colonising mud and sand	15.1	15.12	Mediterranean halo-nitrophilous pioneer communities
1410	Mediterranean salt meadows *(Juncetalia maritimi)*	15.5	15.5	Mediterranean salt meadows
3130	Oligotrophic and mesotrophic standing waters vegetation of *Litorelletea uniflorae* and/or *Isoeto-Nanojuncetea*	22.32	22.32	Euro-Siberian dwarf annual amphibious swards
3150	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* – type vegetation	22.421	22.421	Large pondweed beds
4060	Alpine and boreal heaths	31.4	31.43 (31.431, 31.4325) 31.4A2 31.4615 31.4917 31.4B, (31.4B2)	Dwarf mountain juniper scrubs Balkano-Hellenic dwarf bilberry scrubs Carpatho-Balkanide Dryas maths Rhodopide mountain avens maths High mountain greenweed heaths *(Chamaecytisus absinthioides)*
4090	Endemic and oro-Mediterranean heaths	31.7	31.782	Moesian *Astragalus angustifolius* hedgehod heaths
6210	Semi-natural dry grasslands and scrubland facies on calcaeous substrates *(Festuco-Brometea)*	34.31 to 34.34	34.316	Balkano-Carpathian stepic grasslands
91E0	Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* *(Alno-Pandion, Alnion incanae, Salicion albae)*	44.2	44.217	Rhodopide grey alder galleries
9560	Endemic forest with *Juniperus* spp.	42.A2 to 42.A5	42.A31	Northern Hellenic Grecian juniper woods

Table №9 Plant species included in the Annexes to the Biological Diversity Act and to Directive 92/43/EEC

Bern Convention	Directive 92/43/EEC Annex №	BDA Annex №	BDA Priority	
				POLYPODIOPHYTA
				Marsileaceae
!	II	II, III	*	*Marsilea quadrifolia*
				MAGNOLIOPHYTA
				Alismataceae
!	II	II, III	*	*Caldesia parnassifolia*
!	II	II, III	*	**Asteraceae** *Ligularia sibirica*
!	II	II, III	*	**Droseraceae** *Aldrovanda vesiculosa*
	IV	II, III		**Violaceae** *Viola delphinantha*
!	II	II, III		**Fabaceae** *Astragalus cenralpinus (Astragalus alopecurus)*
	IV	II, III		**Scrophulariaceae** *Lindernia procumbens*
!	II	II, III	*	**Orchidaceaea** *Cypripedium calceolus*
!	II IV	II, III III	*	*Liparis loeselii* *Ophrys argolica*
	IV IV	II, III II, III		**Liliaceae** *Fritillaria drenovskii* *Fritillaria gussichiae*
!	II	II, III	*	**Cyperaceae** *Eleocharis carniolica*
!	IV	III		**Gesneriaceae** *Ramonda serbica*

Bern Convention	Directive 92/43/EEC Annex №	BDA Annex №	BDA Priority	
				BRYOPHYTA
!	II	II	*	*Buxbaumia viridis*
!	II	II	*	*Dicranum viride*
!	II	II	*	*Drepanocladus vernicosus*
!	II	II	*	*Mannia triandra*

Table №10 Animal species (excl. birds) included in the Annexes to the Biological Diversity Act and to Directive 92/43/EEC

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
VERTEBRATES						
MAMMALS						
CHIROPTERA						
Rhinolophidae						
Rhinolophus blasii			☑	☑	☑	☑
Rhinolophus euryale			☑	☑	☑	☑
Rhinolophus ferrumequinum			☑	☑	☑	☑
Rhinolophus hipposideros			☑	☑	☑	☑
Rhinolophus mehelyi			☑	☑	☑	☑
Vespertilionidae						
Barbastella barbastellus			☑	☑	☑	☑
Eptesicus nilssoni		☐	☑	?		
Eptesicus serotinus		☐	☑	☑		
Hypsugo savii		☐	☑	☑		
Myotis bechsteini			☑	☑		☑
Myotis blythii			☑	☑		☑
Myotis capaccinii			☑	☑	☑	☑
Myotis dasycneme				?		☑
Myotis emarginatus			☑	☑	☑	☑
Myotis myotis			☑	☑	☑	☑
Myotis brandti		☐	☑	☑		
Myotis daubentoni		☐	☑	☑		
Myotis mystacinus		☐	☑	☑		
Myotis nattereri		☐	☑	☑		
Nyctalus lasiopterus		☐	☑	☑		
Nyctalus leisleri		☐	☑	☑		
Nyctalus noctula		☐	☑	☑		
Pipistrellus pipistrellus		☐	☑	☑		
Pipistrellus nathusii		☐	☑	☑		
Pipistrelus kuhlii		☐	☑	?		
Plecotus auritus		☐	☑	☑		
Plecotus austriacus		☐	☑	☑		

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
Vespertilio murinus		☐	☑	☑		
Miniopteridae						
Miniopterus schreibersi			☑	☑		☑
Molossidae						
Tadarida teniotis		☐	☑	☑		
RODENTIA						
Cricetidae						
Cricetus cricetus		☐	☑	☑		
Cricetulus migratorius		☐	☑	☑		
Mesocricetus newtoni		☐	☑	☑		
Gliridae						
Dryomys nitedula		☐	☑	☑	☑	
Myomimus roachi		☐	☑	☑	☑	
Muscardinus avellanarius		☐	☑	☑	☑	
Sciuridae						
Spermophilus citellus (Citellus citellus)			☑	☑	☑	☑
Castoridae						
Castor fiber (except the Finnish, Swedish,						

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
Latvian, Lithuanian and Estonian populations)				?		☑
Zapodidae						
Sicista subtilis		☐		?		☑
CARNIVORA						
Canidae						
* Canis lupus (Spanish populations: only those south of the Duero; Greek populations: only south of the 39th parallel; Finnish, Latvian, Lithuanian, Estonian populations excepted).			☑	☑		☑
Ursidae						
* Ursus arctos (except the Finnish, Swedish and Estonian populations)			☑	☑	☑	☑
Mustelidae						
Lutra lutra			☑	☑	☑	☑
Mustela eversmanii		☐	☑	☑		☑
* Mustela lutreola				?		☑
Vormela peregusna		☐	☑	☑		
Felidae						
Lynx lynx (except the Finnish, Estonian and						

Latvian populations)				?		☑
Phocidae						
* Monachus monachus			☑	?	☑	☑
ARTIODACTYLA						
Bovidae						
* Bison bonasus		☐		?		☑
Rupicapra rupicapra balcanica			☑	☑	☑	☑
CETACEA						
Delphinus delphis		☐	☑	☑		
Phocoena phocoena			☑	☑	☑	☑
Tursiops truncatus			☑	☑	☑	☑
REPTILES						
CHELONIA (TESTUDINES)						
Testudinidae						
Testudo hermanni			☑	☑	☑	☑
Testudo graeca			☑	☑	☑	☑
Emydidae						
Emys orbicularis			☑	☑	☑	☑
Mauremys caspica			☑	☑	☑	☑
OPHIDIA (SERPENTES)						
Colubridae						
Elaphe quatuorlineata			☑	☑	☑	☑

Elaphe quatuorlineata quatuorlineata	1	☐	☑	☑	☑	☑
Elaphe quatuorlineata sauromates	1	☐	☑	☑	☑	☑
Elaphe situla			☑	☑	☑	☑
Viperidae						
* Vipera ursinii rakosiensis				?		☑
AMPHIBIANS						
CAUDATA						
Salamandridae						
Triturus alpestris		☐	☑	☑		
Triturus cristatus (Triturus cristatus cristatus)	2		☑	?	☑	☑
Triturus dobrogicus (Triturus cristatus dobrogicus)	2		☑	☑	☑	☑
Triturus karelinii (Triturus cristatus karelinii)	2		☑	☑	☑	☑
ANURA						
Discoglossidae						
Bombina bombina			☑	☑	☑	☑
Bombina variegata			☑	☑	☑	☑
Hylidae						
Hyla arborea		☐	☑	☑		
Ranidae						
Rana dalmatina		☐	☑	☑		
Rana temporaria		☐	☑	☑		

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
Pelobatidae						
Pelobates fuscus		☐	☑	☑		
Pelobates syriacus		☐	☑	☑		
FISHES						
PETROMYZONIFORMES						
Petromyzonidae						
Eudontomyzon spp.				☑		☑
Eudontomyzon danfordii	3	☐		☑		☑
Lampetra planeri (except the Finnish, Swedish and Estonian populations)				?		☑
ACIPENSERIFORMES						
Acipenseridae						
* Acipenser sturio			☑	?	☑	☑
Acipenser gueldenstaedti		☐	☑	☑		
Acipenser nudiventris		☐	☑	?		
Acipenser ruthenus		☐	☑	☑		
Acipenser stellatus		☐	☑	☑		
Huso huso		☐	☑	☑		
CLUPEIFORMES						

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
Clupeidae						
Alosa spp.			☑	☑	☑	☑
Alosa pontica	4	☐	☑	☑	☑	☑
Alosa caspia nordmani	4	☐	☑	☑	☑	☑
Alosa caspia bulgarica	4	☐	☑	☑	☑	☑
Alosa maeotica	4	☐	☑	☑	☑	☑
Alosa fallax	4	☐	☑	☑	☑	☑
SALMONIFORMES						
Salmonidae						
Hucho hucho (natural populations)			☑	?	☑	☑
CYPRINIFORMES						
Cyprinidae						
Aspius aspius (except the Finnish populations)			☑	☑	☑	☑
Barbus meridionalis				☑		☑
Chalcalburnus chalcoides				☑		☑
Gobio albipinnatus			☑	?	☑	☑
Gobio kessleri				?		☑
Gobio uranoscopus			☑	☑	☑	☑
Leuciscus souffia				?		☑

Pelecus cultratus		☐		☑		☑
Rhodeus sericeus amarus			☑	☑	☑	☑
Rutilus frisii meidingeri	5			?		☑
Cobitidae						
Cobitis elongata		☐		☑		☑
Cobitis taenia (except the Finnish populations)				☑		☑
Misgurnus fossilis			☑	☑	☑	☑
Noemacheilus bureschi		☐	☑	☑		
Sabanejewia aurata			☑	☑	☑	☑
PERCIFORMES						
Percidae						
Gymnocephalus baloni		☐		☑		☑
Gymnocephalus schraetzer			☑	☑		☑
Zingel streber	6	☐	☑	☑	☑	☑
SCORPAENIFORMES						
Cottidae						
Cottus gobio (except the Finnish populations)			☑	☑	☑	☑
INVERTEBRATES						
ARTHROPODS						
CRUSTACEA						
Decapoda						
* Austropotamobius torrentium		☐		☑		☑
INSECTA						
Coleoptera						

Carabus hungaricus		☐		☑		☑
* Carabus menetriesi pacholei				?		☑
Carabus variolosus		☐		☑		☑
Cerambyx cerdo				☑		☑
Graphoderus bilineatus				☑		☑
Lucanus cervus			☑	☑	☑	☑
Morimus funereus				☑		☑
* Osmoderma eremita				☑		☑
* Rosalia alpina			☑	☑	☑	☑
Lepidoptera						
* Callimorpha (Euplagia, Panaxia) quadripunctaria				☑		☑
Coenonympha oedippus				☑		☑
Colias balcanica		☐	☑	☑		
Erebia rhodopensis		☐	☑	☑		
Eriogaster catax				☑		☑
Euphydryas (Eurodryas, Hypodryas) aurinia				☑		☑
Hypodryas maturna				☑		☑
Lycaena dispar				☑		☑
Maculinea nausithous				☑		☑
* Nymphalis vaualbum		☐		?		☑
Parnassius apolo		☐	☑	☑		
Perisomena caesigema		☐	☑	☑		
Polyommatus eroides		☐		☑		☑

Animal taxa	Notes	DIR 92/43/EEC Annex II	BDA, Annex II	Occurence in Bulgaria	Priority species	DIR 92/43/EEC, Annex II (draft)
Hymenoptera						
Formica rufa		☐	☑	☑		
Odonata						
Coenagrion mercuriale				☑		☑
Polyommatus eroides		☐		☑		☑
Polyommatus eroides		☐		☑		☑
Leucorrhinia pectoralis				☑		☑
Ophiogomphus cecilia				☑		☑
Orthoptera						
Polyommatus eroides		☐		☑		☑
MOLLUSCS						
GASTROPODA						
Anisus vorticulus		☐		☑		☑
Theodoxus transversalis		☐		☑		☑
Vertigo angustior				☑		☑
Vertigo moulinsiana				☑		☑
BIVALVIA						
Unionoida						
Unio crassus			☑	☑	☑	☑

Explanations to the table:

***** – priority species according to Annex II of Directive 92/43/EEC

Occurence in Bulgaria – A list of taxa occurring in Bulgaria (Popov, 2003; Beshkov, 1994; Nankinov, 1999; the National Action Plan for Biological Diversity Conservation, 1999; Karapetkova and associates, 1995; Karapetkova and associates,1994; Prodanov and associates, 1994).

"?" – disputable taxa

Priority species – Species having a priority status according to Annex I of the Biological Diversity Act

Notes

1. In Annex 2 of the BDA *Elaphe quatuorlineata* sp. has been distinguished by two subspecies - *Elaphe quatuorlineata quatuorlineata* and *Elaphe quatuorlineata sauromates*.
2. In Annex 2 of the BDA *Triturus cristatus* sp. has been used in broad terms and applies to *Triturus cristatus cristatus*, *Triturus cristatus karelinii* and *Triturus cristatus dobrogicus*.
3. Genus *Eudontomyzon* is presented in Bulgaria by the *Eudontomyzon danfordii* sp.
4. Genus *Alosa* is presented in Bulgaria by *Alosa pontica, Alosa caspia nordmani, Alosa caspia bulgarica, Alosa maeotica*, and *Alosa fallax*.
5. Genus *Rutilus frisii* inhabits the rivers along the South Black Sea Coast. The Danubian *Rutilus frisii meidingeri* ssp. has been indicated to occur in Bulgaria, but its status is not clearly defined.

Table №11 Species of birds included in the Annexes to the Biological Diversity Act and to Directive 79/409/EEC

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
	GAVIIFORMES				
	Gaviidae				
1	Gavia stellata				☑
2	Gavia arctica				☑
3	Gavia immer				☑
	PODICIPEDIFORMES				
	Podicipedidae				
	Podiceps grisegena	☐	☑		
4	Podiceps auritus				☑
	Podiceps nigricollis	☐	☑		
	PROCELLARIIFORMES				
	Procellariidae				
8	Calonectris diomedea				☑
	Puffinus yelkouan	☐			☑
	Hydrobatidae				
12	Hydrobates pelagicus				☑

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
	PELECANIFORMES				
	Pelecanidae				
15	Pelecanus onocrotalus		☑		☑
16	Pelecanus crispus		☑		☑
	Phalacrocoracidae				
17	Phalacrocorax aristotelis desmarestii		☑		☑
18	Phalacrocorax pygmeus		☑		☑
	CICONIIFORMES				
	Ardeidae				
19	Botaurus stellaris		☑		☑
20	Ixobrychus minutus		☑		☑
21	Nycticorax nycticorax		☑		☑
22	Ardeola ralloides		☑		☑
23	Egretta garzetta		☑		☑
24	Egretta alba (Ardea alba)		☑		☑
25	Ardea purpurea		☑		☑

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
	Ciconiidae				
26	Ciconia nigra		☑		☑
27	Ciconia ciconia		☑		☑
	Threskiornithidae				
28	Plegadis falcinellus		☑		☑
29	Platalea leucorodia		☑		☑
	PHOENICOPTERIFORMES				
	Phoenicopteridae				
30	Phoenicopterus ruber				☑
	ANSERIFORMES				
	Anatidae				
31	Cygnus bewickii		☑		☑
32	Cygnus cygnus		☑		☑
	Anser albifrons	☐	☑		
34	Anser erythropus		☑		☑
	Anser anser	☐	☑		
35	Branta leucopsis				☑
36	Branta ruficollis		☑		☑

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
37	Tadorna ferruginea		☑		☑
	Tadorna tadorna	☐	☑		
38	Marmaronetta angustirostris		☑		☑
39	Aythya nyroca		☑		☑
40	Mergus albellus		☑		☑
41	Oxyura leucocephala		☑		☑
	FALCONIFORMES				
	Accipitridae				
42	Pernis apivorus		☑		☑
43	Elanus caeruleus		☑		☑
44	Milvus migrans		☑		☑
45	Milvus milvus		☑		☑
46	Haliaeetus albicilla		☑		☑
47	Gypaetus barbatus		☑		☑
48	Neophron percnopterus		☑		☑
49	Gyps fulvus		☑		☑
50	Aegypius monachus		☑	☑	☑
51	Circaetus gallicus		☑	☑	☑

52	Circus aeruginosus		☑		☑
53	Circus cyaneus		☑		☑
54	Circus macrourus		☑		☑
55	Circus pygargus		☑		☑
58	Accipiter brevipes		☑		☑
59	Buteo rufinus		☑		☑
60	Aquila pomarina		☑		☑
61	Aquila clanga		☑		☑
62	Aquila heliaca		☑		☑
64	Aquila chrysaetos		☑		☑
65	Hieraaetus pennatus		☑		☑
66	Hieraaetus fasciatus		☑		☑
	Pandionidae				
67	Pandion haliaetus		☑		☑
	Falconidae				
68	Falco naumanni		☑		☑
	Falco vespertinus	☐	☑		☑
69	Falco columbarius		☑		☑
70	Falco eleonorae		☑		☑
71	Falco biarmicus				☑
	Falco cherrug	☐	☑		☑
72	Falco rusticolus				☑
73	Falco peregrinus		☑		☑

	GALLIFORMES				
	Tetraonidae				
74	Bonasa bonasia		☑		☑
76	Lagopus mutus helveticus				☑
77	Tetrao tetrix tetrix				☑
78	Tetrao urogallus		☑		☑
	Alectoris graeca graeca	☐	☑		
	GRUIFORMES				
	Rallidae				
84	Porzana porzana		☑		☑
85	Porzana parva		☑		☑
86	Porzana pusilla		☑		☑
87	Crex crex		☑		☑
	Turnicidae				
	Gruidae				
91	Grus grus		☑		☑
	Otididae				
92	Tetrax tetrax				☑
94	Otis tarda		☑	☑	☑
	CHARADRIIFORMES				
	Recurvirostridae				
95	Himantopus himantopus		☑		☑
96	Recurvirostra avosetta		☑		☑

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
	Burhinidae				
97	Burhinus oedicnemus		☑		☑
	Glareolidae				
99	Glareola pratincola		☑		☑
	Glareola nordmanni	☐	☑		
	Charadriidae				
	Charadrius alexandrinus	☐	☑		☑
100	Charadrius morinellus		☑		☑
101	Pluvialis apricaria		☑		☑
102	Hoplopterus spinosus				☑
	Scolopacidae				
	Calidris alpina schinzii	☐			☑
	Limicola falcinellus	☐	☑		
103	Philomachus pugnax		☑		☑
104	Gallinago media				☑
105	Limosa lapponica				☑
106	Numenius tenuirostris		☑		☑
	Tringa totanus	☐	☑	☑	
107	Tringa glareola		☑		☑
108	Xenus cinereus (Tringa cinerea)				☑
109	Phalaropus lobatus		☑		☑
	Phalaropus fulicarius	☐	☑		
	Laridae				
110	Larus melanocephalus		☑		☑
111	Larus genei		☑		☑
112	Larus audouinii				☑
	Larus minutus	☐			☑
	Sternidae				
113	Gelochelidon nilotica		☑		☑
114	Sterna caspia		☑		☑
115	Sterna sandvicensis		☑		☑
117	Sterna hirundo		☑		☑
118	Sterna paradisaea				☑
119	Sterna albifrons		☑		☑
120	Chlidonias hybridus		☑		☑
121	Chlidonias niger		☑		☑
	Chlidonias leucopterus	☐	☑		
	STRIGIFORMES				
	Strigidae				

129	Bubo bubo		☑		☑
132	Glaucidium passerinum		☑		☑
134	Strix uralensis		☑		☑
135	Asio flammeus		☑		☑
136	Aegolius funereus		☑		☑
	CAPRIMULGIFORMES				
	Caprimulgidae				
137	Caprimulgus europaeus		☑		☑
	CORACIIFORMES				
	Alcedinidae				
139	Alcedo atthis		☑		☑
	Meropidae				
	Merops apiaster	☐	☑		
	Coraciidae				
140	Coracias garrulus		☑		☑
	PICIFORMES				
	Picidae				
141	Picus canus		☑		☑
142	Dryocopus martius		☑		☑
145	Dendrocopos syriacus		☑		☑
146	Dendrocopos medius		☑		☑
147	Dendrocopos leucotos		☑		☑
148	Picoides tridactylus		☑		☑

	PASSERIFORMES				
	Alaudidae				
150	Melanocorypha calandra		☑		☑
151	Calandrella brachydactyla		☑		☑
153	Lullula arborea		☑		☑
	Hirundinidae				
	Riparia riparia	☐	☑		
	Motacillidae				
154	Anthus campestris		☑		☑
	Muscicapidae (Turdinae)				
	Cercotrichas galactotes	☐	☑		
156	Luscinia svecica				☑
	Phoenicurus phoenicurus	☐	☑	☑	
158	Oenanthe leucura				☑
	Oenanthe pleschanka	☐	☑		☑
	Oenanthe hispanica	☐	☑	☑	
	Monticola solitarius	☐	☑		
	Muscicapidae (Sylviinae)				
159	Acrocephalus melanopogon				☑
160	Acrocephalus paludicola		☑		☑
161	Hippolais olivetorum		☑		☑
	Sylvia cantillans	☐	☑		
	Sylvia hortensis	☐	☑		
165	Sylvia nisoria		☑		☑

№	Bird taxa	DIR 79/409/EEC Annex I	BDA, Annex II	Priority species	DIR 79/409/EEC Annex I (draft)
	Muscicapidae (Muscicapinae)				
166	Ficedula parva		☑		☑
167	Ficedula semitorquata		☑		☑
168	Ficedula albicollis		☑		☑
	Sittidae				
	Sitta neumayer	☐	☑		
	Tichodroma muraria	☐	☑		
	Laniidae				
171	Lanius collurio		☑		☑
172	Lanius minor		☑		☑
	Lanius nubicus	☐	☑		☑
	Corvidae				
	Pyrrhocorax graculus	☐	☑		
173	Pyrrhocorax pyrrhocorax				☑
	Passeridae				
	Petronia petronia	☐	☑		
	Emberizidae (Emberizinae)				
180	Emberiza hortulana		☑		☑
181	Emberiza caesia				☑

Explanations to the table:

№ – Item number of the taxa, as provided in Annex I of Directive 79/409/EEC

Priority species – Species having a priority status according to Annex I of the Biological Diversity Act

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