

# TERRESTRIAL PANNONIAN REGION

## Reference List



Reference Lists include protected habitat types (Habitats Directive Annex I) and species (Habitats Directive Annex II) present in the bio-geographical region by Member State and for which the Member States have to propose Natura 2000 sites. The Reference Lists derive from the conclusions of bio-geographical seminars and are updated when new scientific information becomes available.

**TERRESTRIAL PANNONIAN REGION**  
**REFERENCE LIST 2010**

Symbo	Definition
X	Habitats / Species present on the biogeographical territory of the Member State
?	The presence of the habitat / species on the biogeographical territory of the Member State is not certain and needs further examination (scientific reserve)
Ex	Habitats / species is now extinct on the biogeographical territory of the Member State
e	Exception : habitats / species present in the Member State but not covered by Annex I / Annex II

**ANNEX I HABITAT TYPES**

Code	P	Description	CZ	HU	SK	RO
1310		Salicornia and other annuals colonizing mud and sand	Ex			
1340	*	Inland salt meadows	X		X	
1530	*	Pannonic salt steppes and salt marshes		X	X	X
2330		Inland dunes with open Corynephorus and Agrostis grasslands	X			
2340	*	Pannonic inland dunes		X	X	X
3130		Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoeto-Nanojuncetea	X	X	X	X
3140		Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	X		X	
3150		Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation	X	X	X	X
3160		Natural dystrophic lakes and ponds		X	X	X
31A0	*	Transylvanian hot-spring lotus beds				X
3260		Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	X	X	X	X
3270		Rivers with muddy banks with Chenopodium rubri p.p. and Bidention p.p. vegetation	X	X	X	X
4030		European dry heaths	X	X	X	
40A0	*	Subcontinental peri-Pannonic scrub	X	X	X	X
5130		Juniperus communis formations on heaths or calcareous grasslands	X	X	X	
6110	*	Rupicolous calcareous or basophilic grasslands of the Alysso-Sedion albi	X	X	X	
6120	*	Xeric sand calcareous grasslands			X	
6190		Rupicolous pannonic grasslands (Stipo-Festucetalia pallentis)	X	X	X	
6210	*	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia) (*important orchid sites)	X	X	X	
6230	*	Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas in Continental Europe)		X		

Code	P	Description	CZ	HU	SK	RO
6240	*	Sub-Pannonic steppic grassland	X	X	X	
6250	*	Pannonic loess steppic grasslands	X	X	X	X
6260	*	Pannonic sand steppes	X	X	X	X
6410		Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	X	X	X	X
6430		Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	X	X	X	X
6440		Alluvial meadows of river valleys of the Cnidion dubii	X	X	X	X
6510		Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	X	X	X	X
6520		Mountain hay meadows		X		
7110	*	Active raised bogs		X		
7140		Transition mires and quaking bogs		X	X	
7150		Depressions on peat substrates of the Rhynchosporion		ex	X	
7210	*	Calcareous fens with Cladium mariscus and species of the Caricion davallianae		X	X	
7220	*	Petrifying springs with tufa formation (Cratoneurion)		X		
7230		Alkaline fens	X	X	X	
8150		Medio-European upland siliceous screes		X	X	
8160	*	Medio-European calcareous screes of hill and montane levels	X	X	X	
8210		Calcareous rocky slopes with chasmophytic vegetation	X	X	X	
8220		Siliceous rocky slopes with chasmophytic vegetation	X	X	X	
8230		Siliceous rock with pioneer vegetation of the Sedo-Scleranthion or of the Sedo albi-Veronicion dillenii	X	X	X	
8310		Caves not open to the public	X	X	X	
9110		Luzulo-Fagetum beech forests		X	X	
9130		Asperulo-Fagetum beech forests		X	X	
9150		Medio-European limestone beech forests of the Cephalanthero-Fagion		X	X	
9170		Galio-Carpinetum oak-hornbeam forests	X			
9180	*	Tilio-Acerion forests of slopes, screes and ravines	X	X	X	
9190		Old acidophilous oak woods with Quercus robur on sandy plains	X		X	
91E0	*	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	X	X	X	
91F0		Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)	X	X	X	X
91G0	*	Pannonic woods with Quercus petrae and Carpinus betulus	X	X	X	
91H0	*	Pannonian woods with Quercus pubescens	X	X	X	
91I0	*	Euro-Siberian steppe woods with Quercus spp.	X	X	X	X

Code	P	Description	CZ	HU	SK	RO
91K0		Illyrian <i>Fagus sylvatica</i> forests (Aremonio-Fagion)		X		
91L0		Illyrian oak-hornbeam forests (Erythronio-carpinion)		X		
91M0		Pannonian-Balkan turkey oak –sessile oak forests		X	X	X
91N0	*	Pannonic inland sand dune thicket ( <i>Junipero-Populetum albae</i> )		X	X	
92A0		<i>Salix alba</i> and <i>Populus alba</i> galleries				X

## ANNEX II SPECIES

CODE	P	SPECIES NAME	CZ	HU	SK	RO
		<b>MAMMALS</b>				
1303		<i>Rhinolophus hipposideros</i>	X	X	X	X
1304		<i>Rhinolophus ferrumequinum</i>		X	X	X
1305		<i>Rhinolophus euryale</i>		X	X	
1307		<i>Myotis blythii</i>	?	X	X	
1308		<i>Barbastella barbastellus</i>	X	X	X	
1310		<i>Miniopterus schreibersi</i>		X	X	
1318		<i>Myotis dasycneme</i>		X	X	X
1321		<i>Myotis emarginatus</i>	X	X	X	
1323		<i>Myotis bechsteini</i>	X	X	X	
1324		<i>Myotis myotis</i>	X	X	X	
1335		<i>Spermophilus citellus</i>	X	X	X	X
1337		<i>Castor fiber</i>	X	X	X	
1352	*	<i>Canis lupus</i>		X	X	
1355		<i>Lutra lutra</i>	X	X	X	X
1356	*	<i>Mustela lutreola</i>		Ex		
1361		<i>Lynx lynx</i>		X	X	
2021		<i>Sicista subtilis</i>		X	?	
2633		<i>Mustela eversmannii</i>		X	X	X
4004	*	<i>Microtus oeconomus mehelyi</i>		X	X	
		<b>REPTILES</b>				
1220		<i>Emys orbicularis</i>		X	X	X
4121		<i>Vipera ursinii rakosiensis</i>		X		
		<b>AMPHIBIANS</b>				
1166		<i>Triturus cristatus</i>	X	X		X
1167		<i>Triturus carnifex</i>	X	X		
1188		<i>Bombina bombina</i>	X	X	X	X
1193		<i>Bombina variegata</i>		X	X	X
1993		<i>Triturus dobrogicus</i>	X	X	X	X
2001		<i>Triturus montandoni</i>				
		<b>FISH</b>				
1098		<i>Eudontomyzon</i> spp.		X	X	
1099		<i>Lampetra fluviatilis</i>	Ex			
1101	*	<i>Acipenser sturio</i>	Ex	Ex		
1105		<i>Hucho hucho</i>	Ex	X	X	
1106		<i>Salmo salar</i>				
1114		<i>Rutilus pigus</i>	Ex	X	X	

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1122		Gobio uranoscopus		X	X	X
1124		Gobio albipinnatus	X	X	X	X
1130		Aspius aspius	X	X	X	X
1134		Rhodeus sericeus amarus	X	X	X	X
1138		Barbus meridionalis		X	X	
1139		Rutilus frisii meidingeri			X	
1145		Misgurnus fossilis	X	X	X	X
1146		Sabanejewia aurata		X	X	X
1149		Cobitis taenia	X	X	X	X
1157		Gymnocephalus schraetzer	X	X	X	X
1159		Zingel zingel	X	X	X	X
1160		Zingel streber	X	X	X	X
1163		Cottus gobio		X	X	
2011		Umbra krameri		X	X	X
2511		Gobio kesslerii		X	X	X
2522		Pelecus cultratus	X	X	X	X
2555		Gymnocephalus baloni	X	X	X	X
		<b>INVERTEBRATES</b>				
1013		Vertigo geyeri		Ex		
1014		Vertigo angustior	X	X	X	?
1015		Vertigo genesii		Ex		
1016		Vertigo moulinsiana	X	X	X	
1032		Unio crassus	X	X	X	X
1037		Ophiogomphus cecilia	X	X	X	X
1042		Leucorrhinia pectoralis		X	X	?
1044		Coenagrion mercuriale			Ex	
1052		Hypodryas matura	?	X	X	X
1059		Maculinea teleius		X	X	X
1060		Lycaena dispar	X	X	X	X
1061		Maculinea nausithous		X	X	
1065		Euphydryas aurinia		X	X	
1071		Coenonympha oedippus		X	Ex	
1074		Eriogaster catax	X	X	X	X
1078	*	Callimorpha quadripunctaria	X	X	X	X
1079		Limoniscus violaceus		X	X	
1081		Dytiscus latissimus			Ex	
1082		Graphoderus bilineatus	Ex	X	X	
1083		Lucanus cervus	X	X	X	X
1084	*	Osmoderma eremita	X	X	X	
1086		Cucujus cinnaberinus	X	X	X	
1087	*	Rosalia alpina		X	X	
1088		Cerambyx cerdo	X	X	X	X
1089		Morimus funereus		X	?	
1093	*	Austropotamobius torrentium		X		
4011		Bolbelasmus unicornis	X	X	X	
4012		Carabus hampei		X		
4013		Carabus hungaricus	X	X	X	X
4014		Carabus variolosus		X	X	
4015		Carabus zawadzskii		X	X	
4016		Dorcadion fulvum cervae		X		
4017		Duvalius gebhardti		X		

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4018		Duvalius hungaricus		X	X	
4020		Pilemia tigrina		X		X
4022		Probaticus subrugosus		X	X	
4026		Rhysodes sulcatus		X	X	
4027		Arytrura musculus		X		X
4028		Catopta thrips		X		
4029		Chondrosoma fiduciarium		X	Ex	
4030		Colias myrmidone	Ex	X	X	
4031		Cucullia mixta		X		
4032		Dioszeghyana schmidtii		X	X	X
4033		Erannis ankeraria		X		
4034		Glyphipterix loricatella		X		
4035		Gortyna borelii lunata		X		X
4036		Leptidea morsei	Ex	X	X	
4037		Lignyoptera fumidaria		X		
4038		Lycaena helle	Ex	Ex	Ex	
4039	*	Nymphalis vaualbum	Ex		Ex.	X
4040		Phyllometra culminaria		X		
4041		Polymixis rufocincta isolata		X		
4042		Polyommatus eroides	Ex		X	
4045		Coenagrion ornatum		X	X	X
4046		Cordulegaster heros		X	X	
4048		Isophya costata		X		
4050		Isophya stysi		X	X	
4052		Odontopodisma rubripes		X	X	X
4053		Paracaloptenus caloptenoides		X	X	
4054		Pholidoptera transsylvanica		X		
4055		Stenobothrus eurasius		X	X	
4056		Anisus vorticulus	X	X	X	X
4057		Chilostoma banaticum		X		X
4059		Hygromia kovacsi		X		
4062	*	Paladilhia hungarica		X		
4063		Sadleriana pannonica		X	X	
4064		Theodoxus transversalis		X	Ex	X
		<b>PLANTS</b>				
1379		Mannia triandra		Ex		
1381		Dicranum viride		X		
1386		Buxbaumia viridis		X		
1387		Orthotrichum rogeri		Ex		
1393		Drepanocladus vernicosus		Ex		
1428		Marsilea quadrifolia		X	X	X
1437		Thesium ebracteatum			Ex	
1477		Pulsatilla patens		X	X	
1516		Aldrovanda vesiculosa		X	Ex	X
1614		Apium repens		X	X	
1617		Angelica palustris	Ex	X	X	X
1689		Dracocephalum austriacum	X	X	X	
1758		Ligularia sibirica		Ex		
1832		Caldesia parnassifolia		X		
1898		Eleocharis carniolica		X	Ex	X
1902		Cypripedium calceolus	X	X	X	

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1903		Liparis loeselii	Ex	X	X	
1917	*	Artemisia pancicii	X			
2093		Pulsatilla grandis	X	X	X	
2097		Paeonia officinalis banatica		X		
2120		Thlaspi jankae		X	X	
2156	*	Linum dolomiticum		X		
2170	*	Ferula sadleriana		X		
2188		Vincetoxicum pannonicum		X		
2203	*	Onosma tornensis		X	X	
2285		Colchicum arenarium		X	X	
2327		Himantoglossum caprinum		X	X	
4066		Asplenium adulterinum			?	
4067		Echium russicum	X	X	X	
4068		Adenophora lilifolia		X	X	X
4073	*	Dianthus arenarius bohemicus				
4074		Dianthus diutinus		X		?
4075	*	Dianthus lumnitzeri	X	X	X	
4076	*	Dianthus moravicus	X			
4077		Dianthus plumarius regis-stephani		X		
4081		Cirsium brachycephalum	X	X	X	X
4087	*	Serratula lycopifolia	X	X	Ex	
4091		Crambe tataria	X	X	X	
4096		Gladiolus palustris	X	X	X	
4097		Iris aphylla hungarica		X	X	X
4098		Iris humilis arenaria	X	X	X	X
4104		Himantoglossum adriaticum	Ex	X	X	
4107	*	Cyclamen fatrense				
4110	*	Pulsatilla pratensis hungarica		X	X	X
4111	*	Pulsatilla subslavica			?	
4112	*	Pyrus magyarica		X		
4118		Seseli leucospermum		X		