[F1 ANNEX I

NATURAL HABITAT TYPES OF COMMUNITY INTEREST WHOSE CONSERVATION REQUIRES THE DESIGNATION OF SPECIAL AREAS OF CONSERVATION

Textual Amendments

F1 Substituted by Council Directive 2013/17/EU of 13 May 2013 adapting certain directives in the field of environment, by reason of the accession of the Republic of Croatia.

Interpretation

Guidance on the interpretation of habitat types is given in the *Interpretation Manual of European Union Habitats* as approved by the committee set up under Article 20 ('Habitats Committee') and published by the European Commission[(1)].

The code corresponds to the Natura 2000 code.

The sign '*' indicates priority habitat types.

1. COASTAL AND HALOPHYTIC HABITATS

11. **Open sea and tidal areas**

1110	Sandbanks which are slightly covered by sea water all the time
1120	* *Posidonia* beds (*Posidonion oceanicae*)
1130	Estuaries
1140	Mudflats and sandflats not covered by seawater at low tide
1150	* Coastal lagoons
1160	Large shallow inlets and bays
1170	Reefs
1180	Submarine structures made by leaking gases

12. **Sea cliffs and shingle or stony beaches**

1210	Annual vegetation of drift lines
1220	Perennial vegetation of stony banks
1230	Vegetated sea cliffs of the Atlantic and Baltic Coasts
1240	Vegetated sea cliffs of the Mediterranean coasts with endemic *Limonium* spp.
1250	Vegetated sea cliffs with endemic flora of the Macaronesian coasts

13. **Atlantic and continental salt marshes and salt meadows**

1310	*Salicornia* and other annuals colonizing mud and sand
1320	*Spartina* swards (*Spartinion maritimae*)
1330	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
1340	* Inland salt meadows

14. **Mediterranean and thermo-Atlantic salt marshes and salt meadows**

1410	Mediterranean salt meadows (*Juncetalia maritimi*)
1420	Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)
1430	Halo-nitrophilous scrubs (*Pegano-Salsoletea*)

15. **Salt and gypsum inland steppes**

1510 * Mediterranean salt steppes (*Limonietalia*)
1520 * Iberian gypsum vegetation (*Gypsophiletalia*)
1530 * Pannonic salt steppes and salt marshes

16. **Boreal Baltic archipelago, coastal and landupheaval areas**

1610 Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation
1620 Boreal Baltic islets and small islands
1630 * Boreal Baltic coastal meadows
1640 Boreal Baltic sandy beaches with perennial vegetation
1650 Boreal Baltic narrow inlets

2. COASTAL SAND DUNES AND INLAND DUNES

21. **Sea dunes of the Atlantic, North Sea and Baltic coasts**

2110 Embryonic shifting dunes
2120 Shifting dunes along the shoreline with *Ammophila arenaria* (‘white dunes’)
2130 * Fixed coastal dunes with herbaceous vegetation (‘grey dunes’)
2140 * Decalcified fixed dunes with *Empetrum nigrum*
2150 * Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)
2160 Dunes with *Hippophaë rhamnoides*
2170 Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*)
2180 Wooded dunes of the Atlantic, Continental and Boreal region
2190 Humid dune slacks
21A0 Machairs (* in Ireland)

22. **Sea dunes of the Mediterranean coast**

2210 *Crucianellion maritimae* fixed beach dunes
2220 Dunes with *Euphorbia terracina*
2230 *Malcolmietalia* dune grasslands
2240 *Brachypodietalia* dune grasslands with annuals
2250 * Coastal dunes with *Juniperus* spp.
2260 *Cisto-Lavenduletalia* dune sclerophyllous scrubs
2270 * Wooded dunes with *Pinus pinea* and/or *Pinus pinaster*

23. **Inland dunes, old and decalcified**

2310 Dry sand heaths with *Calluna* and *Genista*
2320 Dry sand heaths with *Calluna* and *Empetrum nigrum*
2330 Inland dunes with open *Corynephorus* and *Agrostis* grasslands
2340 * Pannonic inland dunes

3. FRESHWATER HABITATS

31. **Standing water**

3110 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)
3120 Oligotrophic waters containing very few minerals generally on sandy soils of the West Mediterranean, with *Isoetes* spp.
3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*
3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.

3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* — type vegetation
3160 Natural dystrophic lakes and ponds
3170 * Mediterranean temporary ponds
3180 * Turloughs
3190 Lakes of gypsum karst
31A0 * Transylvanian hot-spring lotus beds

32. **Running water — sections of water courses with natural or semi-natural dynamics (minor, average and major beds) where the water quality shows no significant deterioration**

3210 Fennoscandian natural rivers
3220 Alpine rivers and the herbaceous vegetation along their banks
3230 Alpine rivers and their ligneous vegetation with *Myricaria germanica*
3240 Alpine rivers and their ligneous vegetation with *Salix elaeagnos*
3250 Constantly flowing Mediterranean rivers with *Glaucium flavum*
3260 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
3280 Constantly flowing Mediterranean rivers with *Paspalo-Agrostidion* species and hanging curtains of *Salix* and *Populus alba*
3290 Intermittently flowing Mediterranean rivers of the *Paspalo-Agrostidion*
32A0 Tufa cascades of karstic rivers in the Dinaric Alps

4. TEMPERATE HEATH AND SCRUB

4010 Northern Atlantic wet heaths with *Erica tetralix*
4020 * Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*
4030 European dry heaths
4040 * Dry Atlantic coastal heaths with *Erica vagans*
4050 * Endemic macaronesian heaths
4060 Alpine and Boreal heaths
4070 * Bushes with *Pinus mugo* and *Rhododendron hirsutum* (*Mugo-Rhododendretum hirsuti*)
4080 Sub-Arctic *Salix* spp. Scrub
4090 Endemic oro-Mediterranean heaths with gorse
40A0 * Subcontinental peri-Pannonic scrub
40B0 Rhodope *Potentilla fruticosa* thickets
40C0 * Ponto-Sarmatic deciduous thickets

5. SCLEROPHYLLOUS SCRUB (MATORRAL)

51. **Sub-Mediterranean and temperate scrub**

5110 Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.)
5120 Mountain *Cytisus purgans* formations
5130 *Juniperus communis* formations on heaths or calcareous grasslands
5140 * *Cistus palhinhae* formations on maritime wet heaths

52. **Mediterranean arborescent matorral**

5210 Arborescent matorral with *Juniperus* spp.
5220 * Arborescent matorral with *Zyziphus*

5230 * Arborescent matorral with *Laurus nobilis*

53. **Thermo-Mediterranean and pre-steppe brush**

5310 *Laurus nobilis* thickets
5320 Low formations of Euphorbia close to cliffs
5330 Thermo-Mediterranean and pre-desert scrub

54. **Phrygana**

5410 West Mediterranean clifftop phryganas (*Astragalo-Plantaginetum subulatae*)
5420 *Sarcopoterium spinosum phryganas*
5430 Endemic phryganas of the *Euphorbio-Verbascion*

6. NATURAL AND SEMI-NATURAL GRASSLAND FORMATIONS

61. **Natural grasslands**

6110 * Rupicolous calcareous or basophilic grasslands of the *Alysso-Sedion albi*
6120 * Xeric sand calcareous grasslands
6130 Calaminarian grasslands of the *Violetalia calaminariae*
6140 Siliceous Pyrenean *Festuca eskia* grasslands
6150 Siliceous alpine and boreal grasslands
6160 Oro-Iberian *Festuca indigesta* grasslands
6170 Alpine and subalpine calcareous grasslands
6180 Macaronesian mesophile grasslands
6190 Rupicolous pannonic grasslands (*Stipo-Festucetalia pallentis*)

62. **Semi-natural dry grasslands and scrubland facies**

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites)
6220 * Pseudo-steppe with grasses and annuals of the *Thero-Brachypodietea*
6230 * Species-rich *Nardus* grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)
6240 * Sub-Pannonic steppic grasslands
6250 * Pannonic loess steppic grasslands
6260 * Pannonic sand steppes
6270 * Fennoscandian lowland species-rich dry to mesic grasslands
6280 * Nordic alvar and precambrian calcareous flatrocks
62A0 Eastern sub-Mediterranean dry grasslands (*Scorzoneratalia villosae*)
62B0 * Serpentinophilous grassland of Cyprus
62C0 * Ponto-Sarmatic steppes
62D0 Oro-Moesian acidophilous grasslands

63. **Sclerophillous grazed forests (dehesas)**

6310 Dehesas with evergreen *Quercus* spp.

64. **Semi-natural tall-herb humid meadows**

6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
6420 Mediterranean tall humid grasslands of the *Molinio-Holoschoenion*
6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

6440 Alluvial meadows of river valleys of the *Cnidion dubii*
6450 Northern boreal alluvial meadows
6460 Peat grasslands of Troodos

65. **Mesophile grasslands**

6510 Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*)
6520 Mountain hay meadows
6530 * Fennoscandian wooded meadows
6540 Sub-Mediterranean grasslands of the *Molinio-Hordeion secalini*

7. RAISED BOGS AND MIRES AND FENS

71. **Sphagnum acid bogs**

7110 * Active raised bogs
7120 Degraded raised bogs still capable of natural regeneration
7130 Blanket bogs (* if active bog)
7140 Transition mires and quaking bogs
7150 Depressions on peat substrates of the *Rhynchosporion*
7160 Fennoscandian mineral-rich springs and springfens

72. **Calcareous fens**

7210 * Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*
7220 * Petrifying springs with tufa formation (*Cratoneurion*)
7230 Alkaline fens
7240 * Alpine pioneer formations of the *Caricion bicoloris-atrofuscae*

73. **Boreal mires**

7310 * Aapa mires
7320 * Palsa mires

8. ROCKY HABITATS AND CAVES

81. **Scree**

8110 Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*)
8120 Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*)
8130 Western Mediterranean and thermophilous scree
8140 Eastern Mediterranean screes
8150 Medio-European upland siliceous screes
8160 * Medio-European calcareous scree of hill and montane levels

82. **Rocky slopes with chasmophytic vegetation**

8210 Calcareous rocky slopes with chasmophytic vegetation
8220 Siliceous rocky slopes with chasmophytic vegetation
8230 Siliceous rock with pioneer vegetation of the *Sedo-Scleranthion* or of the *Sedo albi-Veronicion dillenii*
8240 * Limestone pavements

83. **Other rocky habitats**

8310 Caves not open to the public

8320	Fields of lava and natural excavations
8330	Submerged or partially submerged sea caves
8340	Permanent glaciers

9. FORESTS

(Sub)natural woodland vegetation comprising native species forming forests of tall trees, with typical undergrowth, and meeting the following criteria: rare or residual, and/or hosting species of Community interest

90. **Forests of Boreal Europe**

9010	* Western Taïga
9020	* Fennoscandian hemiboreal natural old broad-leaved deciduous forests (*Quercus, Tilia, Acer, Fraxinus* or *Ulmus*) rich in epiphytes
9030	* Natural forests of primary succession stages of landupheaval coast
9040	Nordic subalpine/subarctic forests with *Betula pubescens* ssp. *czerepanovii*
9050	Fennoscandian herb-rich forests with *Picea abies*
9060	Coniferous forests on, or connected to, glaciofluvial eskers
9070	Fennoscandian wooded pastures
9080	* Fennoscandian deciduous swamp woods

91. **Forests of Temperate Europe**

9110	*Luzulo-Fagetum* beech forests
9120	Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*)
9130	*Asperulo-Fagetum* beech forests
9140	Medio-European subalpine beech woods with *Acer* and *Rumex arifolius*
9150	Medio-European limestone beech forests of the *Cephalanthero-Fagion*
9160	Sub-Atlantic and medio-European oak or oak-hornbeam forests of the *Carpinion betuli*
9170	*Galio-Carpinetum* oak-hornbeam forests
9180	* *Tilio-Acerion* forests of slopes, screes and ravines
9190	Old acidophilous oak woods with *Quercus robur* on sandy plains
91A0	Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
91B0	Thermophilous *Fraxinus angustifolia* woods
91C0	* Caledonian forest
91D0	* Bog woodland
91E0	* Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)
91F0	Riparian mixed forests of *Quercus robur, Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)
91G0	* Pannonic woods with *Quercus petraea* and *Carpinus betulus*
91H0	* Pannonian woods with *Quercus pubescens*
91I0	* Euro-Siberian steppic woods with *Quercus* spp.
91J0	* *Taxus baccata* woods of the British Isles
91K0	Illyrian *Fagus sylvatica* forests (*Aremonio-Fagion*)
91L0	Illyrian oak-hornbeam forests (*Erythronio-Carpinion*)
91M0	Pannonian-Balkanic turkey oak — sessile oak forests
91N0	* Pannonic inland sand dune thicket (*Junipero-Populetum albae*)
91P0	Holy Cross fir forest (*Abietetum polonicum*)
91Q0	Western Carpathian calcicolous *Pinus sylvestris* forests

91R0	Dinaric dolomite Scots pine forests (*Genisto januensis-Pinetum*)
91S0	* Western Pontic beech forests
91T0	Central European lichen Scots pine forests
91U0	Sarmatic steppe pine forest
91V0	Dacian Beech forests (*Symphyto-Fagion*)
91W0	Moesian beech forests
91X0	* Dobrogean beech forests
91Y0	Dacian oak & hornbeam forests
91Z0	Moesian silver lime woods
91AA	* Eastern white oak woods
91BA	Moesian silver fir forests
91CA	Rhodopide and Balkan Range Scots pine forests

92. **Mediterranean deciduous forests**

9210	* Apeninne beech forests with *Taxus* and *Ilex*
9220	* Apennine beech forests with *Abies alba* and beech forests with *Abies nebrodensis*
9230	Galicio-Portuguese oak woods with *Quercus robur* and *Quercus pyrenaica*
9240	*Quercus faginea* and *Quercus canariensis* Iberian woods
9250	*Quercus trojana* woods
9260	*Castanea sativa* woods
9270	Hellenic beech forests with *Abies borisii-regis*
9280	*Quercus frainetto* woods
9290	*Cupressus* forests (*Acero-Cupression*)
92A0	*Salix alba* and *Populus alba* galleries
92B0	Riparian formations on intermittent Mediterranean water courses with *Rhododendron ponticum, Salix* and others
92C0	*Platanus orientalis* and *Liquidambar orientalis* woods (*Platanion orientalis*)
92D0	Southern riparian galleries and thickets (*Nerio-Tamaricetea* and *Securinegion tinctoriae*)

93. **Mediterranean sclerophyllous forests**

9310	Aegean *Quercus brachyphylla* woods
9320	*Olea* and *Ceratonia* forests
9330	*Quercus suber* forests
9340	*Quercus ilex* and *Quercus rotundifolia* forests
9350	*Quercus macrolepis* forests
9360	* Macaronesian laurel forests (*Laurus, Ocotea*)
9370	* Palm groves of *Phoenix*
9380	Forests of *Ilex aquifolium*
9390	* Scrub and low forest vegetation with *Quercus alnifolia*
93A0	Woodlands with *Quercus infectoria* (*Anagyro foetidae-Quercetum infectoriae*)

94. **Temperate mountainous coniferous forests**

9410	Acidophilous *Picea* forests of the montane to alpine levels (*Vaccinio-Piceetea*)
9420	Alpine *Larix decidua* and/or *Pinus cembra* forests
9430	Subalpine and montane *Pinus uncinata* forests (* if on gypsum or limestone)

95. Mediterranean and Macaronesian mountainous coniferous forests

9510	* Southern Apennine *Abies alba* forests
9520	*Abies pinsapo* forests
9530	* (Sub-) Mediterranean pine forests with endemic black pines
9540	Mediterranean pine forests with endemic Mesogean pines
9550	Canarian endemic pine forests
9560	* Endemic forests with *Juniperus* spp.
9570	* *Tetraclinis articulata* forests
9580	* Mediterranean *Taxus baccata* woods
9590	* *Cedrus brevifolia* forests (*Cedrosetum brevifoliae*)
95A0	High oro-Mediterranean pine forests**]**

(**1**) [F1(+) Interpretation Manual of European Union Habitats, version EUR 15/2, adopted by the Habitats Committee on 4 October 1999 and Amendments to the 'Interpretation Manual of European Union Habitats' with a view to EU enlargement (Hab. 01/11b-rev. 1), adopted by the Habitats Committee on 24 April 2002 after written consultation, European Commission, Directorate General for Environment;

Textual Amendments

F1 Substituted by Council Directive 2013/17/EU of 13 May 2013 adapting certain directives in the field of environment, by reason of the accession of the Republic of Croatia.