

# ANNEX 1

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## A Marine habitats

### A1 Littoral rock and other hard substrata

#### A1.1 High energy littoral rock

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A1.112 *Chthamalus* spp. on exposed upper eulittoral rock

A1.1121 *Chthamalus montagui* and *Chthamalus stellatus* on exposed upper eulittoral rock

A1.1122 *Chthamalus* spp. and *Lichina pygmaea* on steep exposed upper eulittoral rock

A1.113 *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock

A1.1131 *Semibalanus balanoides*, *Patella vulgata* and *Littorina* spp. on exposed to moderately exposed or vertical sheltered eulittoral rock

A1.1132 *Semibalanus balanoides*, *Fucus vesiculosus* and red seaweeds on exposed to moderately exposed eulittoral rock

A1.1133 *Semibalanus balanoides* and *Littorina* spp. on exposed to moderately exposed eulittoral boulders and cobbles

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A1.122 *Corallina officinalis* on exposed to moderately exposed lower eulittoral rock

A1.1221 *Corallina officinalis* and *Mastocarpus stellatus* on exposed to moderately exposed lower eulittoral rock

A1.1222 *Corallina officinalis*, *Himantalia elongata* and *Patella ulyssiponensis* on very exposed lower eulittoral rock

A1.123 *Himantalia elongata* and red seaweeds on exposed lower eulittoral rock

A1.124 *Palmaria palmata* on very exposed to moderately exposed lower eulittoral rock

A1.125 *Mastocarpus stellatus* and *Chondrus crispus* on very exposed to moderately exposed lower eulittoral rock

A1.126 *Osmundea pinnatifida* on moderately exposed mid eulittoral rock

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A1.134 Association with *Lithophyllum papillosum* and *Polysiphonia* spp.

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A1.143 Association with *Lithophyllum byssoides*

A1.144 Association with *Tenarea undulosa*

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A1.152 *Fucus serratus*, sponges and ascidians on tide-swept lower eulittoral rock

A1.153 *Fucus serratus* with sponges, ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata

#### A1.2 Moderate energy littoral rock

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A1.212 *Fucus spiralis* on full salinity exposed to moderately exposed upper eulittoral rock

A1.213 *Fucus vesiculosus* and barnacle mosaics on moderately exposed mid eulittoral rock

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## A2 Littoral sediment

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- A2.545 *Halimione portulacoides* low-mid saltmarshes
- A2.546 *Puccinellia maritima* low-mid saltmarshes
- A2.547 Sub-communities of *Puccinellia maritima* saltmarsh with *Limonium vulgare* and *Armeria maritima*; *P. maritima* with *Glaux maritima* co-dominant in species-poor vegetation; *Puccinellia maritima* with *Plantago maritima* and/or *Armeria maritima*
- A2.548 Annual *Salicornia*, *Suaeda* and *Puccinellia maritima* low-mid saltmarshes
- A2.55 Pioneer saltmarshes
  - A2.551 *Salicornia*, *Suaeda* and *Salsola* pioneer saltmarshes
    - A2.5511 Biocenosis of beaches with slowly-drying wracks under glassworts
    - A2.5512 *Suaeda maritima* pioneer saltmarshes
    - A2.5513 *Salicornia* spp. pioneer saltmarshes
    - A2.5514 *Salicornia veneta* swards
    - A2.5515 Black Sea annual *Salicornia*, *Suaeda* and *Salsola* saltmarshes
    - A2.5516 Low-shore Mediterranean glasswort swards
  - A2.552 Mediterranean coastal halo-nitrophilous pioneer communities
  - A2.553 Atlantic *Sagina maritima* communities
  - A2.554 Flat-leaved *Spartina* swards
    - A2.5541 *Spartina anglica* pioneer saltmarshes
    - A2.5542 *Spartina alterniflora* with *Spartina anglica*, *Puccinellia maritima* and *Aster tripolium*
    - A2.5543 *Spartina maritima* pioneer saltmarshes
  - A2.555 *Spartina densiflora* swards
  - A2.556 Rayed *Aster tripolium* pioneer saltmarshes
  - A2.557 *Aster tripolium* var. *discoides* pioneer saltmarshes
  - A2.558 *Arthrocnemum perenne* pioneer saltmarshes, sometimes with *Halimione*, *Puccinellia* and *Suaeda*
- A2.6 Littoral sediments dominated by aquatic angiosperms
  - A2.61 Seagrass beds on littoral sediments
    - A2.611 Mainland Atlantic *Zostera noltii* or *Zostera angustifolia* meadows
      - A2.6111 *Zostera noltii* beds in littoral muddy sand
    - A2.612 Macaronesian *Zostera noltii* meadows
    - A2.613 Mediterranean *Zostera noltii* beds
    - A2.614 Mediterranean *Zostera hornemanniana* beds
    - A2.615 Pontic *Zostera marina* and *Zostera noltii* meadows
    - A2.616 *Ruppia maritima* on lower shore sediment
  - A2.62 Marine *Cyperaceae* beds
    - A2.621 *Eleocharis* beds
      - A2.6211 *Eleocharis parvula* beds
      - A2.6212 Bothnian *Eleocharis acicularis* beds
- A2.7 Littoral biogenic reefs
  - A2.71 Littoral *Sabellaria* reefs
    - A2.711 *Sabellaria alveolata* reefs on sand-abraded eulittoral rock
  - A2.72 Littoral *Mytilus edulis* beds on sediment
    - A2.721 *Mytilus edulis* beds on littoral sediments
      - A2.7211 *Mytilus edulis* beds on littoral mixed substrata
      - A2.7212 *Mytilus edulis* beds on littoral sand
      - A2.7213 *Mytilus edulis* beds on littoral mud
- A2.8 Features of littoral sediment
  - A2.81 Methane seeps in littoral sediments
  - A2.82 Ephemeral green or red seaweeds (freshwater or sand-influenced) on mobile substrata
    - A2.821 Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata
  - A2.83 Hydrolittoral stony substrata
    - A2.831 Hydrolittoral stony substrata: level bottoms with little or no macrophyte vegetation



- A2.832 Hydrolittoral stony substrata: level bottoms dominated by macrophyte vegetation
- A2.833 Hydrolittoral stony substrata: reefs
- A2.84 Hydrolittoral gravel substrata
  - A2.841 Hydrolittoral gravel substrata: level bottoms with little or no macrophyte vegetation
  - A2.842 Hydrolittoral gravel substrata: level bottoms dominated by macrophyte vegetation
  - A2.843 Hydrolittoral gravel substrata: banks
- A2.85 Hydrolittoral sandy substrata
  - A2.851 Hydrolittoral sandy substrata: level bottoms with little or no macrophyte vegetation
  - A2.852 Hydrolittoral sandy substrata: level bottoms dominated by macrophyte vegetation
  - A2.853 Hydrolittoral sandy substrata: bars
  - A2.854 Hydrolittoral sandy substrata: banks
- A2.86 Hydrolittoral muddy substrata
  - A2.861 Hydrolittoral muddy substrata: with little or no macrophyte vegetation
  - A2.862 Hydrolittoral muddy substrata: dominated by macrophyte vegetation
- A2.87 Hydrolittoral mixed sediment substrata
  - A2.871 Hydrolittoral mixed sediment substrata: with little or no macrophyte vegetation
  - A2.872 Hydrolittoral mixed sediment substrata: dominated by macrophyte vegetation

### A3 Infralittoral rock and other hard substrata

- A3.1 Atlantic and Mediterranean high energy infralittoral rock
  - A3.11 Kelp with cushion fauna and/or foliose red seaweeds
    - A3.111 *Alaria esculenta* on exposed sublittoral fringe bedrock
      - A3.1111 *Alaria esculenta*, *Mytilus edulis* and coralline crusts on very exposed sublittoral fringe bedrock
      - A3.1112 *Alaria esculenta* and *Laminaria digitata* on exposed sublittoral fringe bedrock
    - A3.112 *Alaria esculenta* forest with dense anemones and crustose sponges on extremely exposed infralittoral bedrock
    - A3.113 *Laminaria hyperborea* forest with a faunal cushion (sponges and polyclinids) and foliose red seaweeds on very exposed infralittoral rock
    - A3.114 Sparse *Laminaria hyperborea* and dense *Paracentrotus lividus* on exposed infralittoral limestone
    - A3.115 *Laminaria hyperborea* with dense foliose red seaweeds on exposed infralittoral rock
      - A3.1151 *Laminaria hyperborea* forest with dense foliose red seaweeds on exposed upper infralittoral rock
      - A3.1152 *Laminaria hyperborea* park with dense foliose red seaweeds on exposed lower infralittoral rock
      - A3.1153 Mixed *Laminaria hyperborea* and *Laminaria ochroleuca* forest on exposed infralittoral rock
    - A3.116 Foliose red seaweeds on exposed lower infralittoral rock
      - A3.1161 Foliose red seaweeds with dense *Dictyota dichotoma* and/or *Dictyopteris membranacea* on exposed lower infralittoral rock
    - A3.117 *Laminaria hyperborea* and red seaweeds on exposed vertical rock
    - A3.118 Turf of articulated *Corallinaceae* on exposed to sheltered infralittoral bedrock and boulders
  - A3.12 Sediment-affected or disturbed kelp and seaweed communities
    - A3.121 *Saccorhiza polyschides* and other opportunistic kelps on disturbed upper infralittoral rock
    - A3.122 *Laminaria saccharina* and/or *Saccorhiza polyschides* on exposed infralittoral rock
    - A3.123 *Laminaria saccharina*, *Chorda filum* and dense red seaweeds on shallow unstable infralittoral boulders and cobbles
    - A3.124 Dense *Desmarestia* spp. with filamentous red seaweeds on exposed infralittoral cobbles, pebbles and bedrock
    - A3.125 Mixed kelps with scour-tolerant and opportunistic foliose red seaweeds on scoured or sand-covered infralittoral rock
    - A3.126 *Halidrys siliquosa* and mixed kelps on tide-swept infralittoral rock with coarse sediment
    - A3.127 *Polyides rotundus*, *Ahnfeltia plicata* and *Chondrus crispus* on sand-covered infralittoral rock
  - A3.13 Mediterranean communities of infralittoral algae very exposed to wave action
    - A3.131 Overgrazing facies with incrustant algae and sea urchins
    - A3.132 Association with *Cystoseira amentacea* (var. *amentacea*, var. *stricta*, var. *spicata*)
    - A3.133 Facies with *Vermetus* spp.

- A3.134 Facies with *Mytilus galloprovincialis*
- A3.135 Association with *Corallina elongata* and *Herposiphonia secunda*
- A3.136 Association with *Corallina officinalis*
- A3.137 Association with *Schottera nicaeensis*
- A3.14 Encrusting algal communities
- A3.15 Frondose algal communities (other than kelp)
  - A3.151 *Cystoseira* spp. on exposed infralittoral bedrock and boulders
- A3.2 Atlantic and Mediterranean moderate energy infralittoral rock
  - A3.21 Kelp and red seaweeds (moderate energy infralittoral rock)
    - A3.211 *Laminaria digitata* on moderately exposed sublittoral fringe rock
      - A3.2111 *Laminaria digitata* on moderately exposed sublittoral fringe bedrock
      - A3.2112 *Laminaria digitata* and under-boulder fauna on sublittoral fringe boulders
      - A3.2113 *Laminaria digitata* and piddocks on sublittoral fringe soft rock
    - A3.212 *Laminaria hyperborea* on tide-swept, infralittoral rock
      - A3.2121 *Laminaria hyperborea* forest, foliose red seaweeds and a diverse fauna on tide-swept upper infralittoral rock
      - A3.2122 *Laminaria hyperborea* park with hydroids, bryozoans and sponges on tide-swept lower infralittoral rock
    - A3.213 *Laminaria hyperborea* on tide-swept infralittoral mixed substrata
      - A3.2131 *Laminaria hyperborea* forest and foliose red seaweeds on tide-swept upper infralittoral mixed substrata
      - A3.2132 *Laminaria hyperborea* park and foliose red seaweeds on tide-swept lower infralittoral mixed substrata
    - A3.214 *Laminaria hyperborea* and foliose red seaweeds on moderately exposed infralittoral rock
      - A3.2141 *Laminaria hyperborea* forest and foliose red seaweeds on moderately exposed upper infralittoral rock
      - A3.2142 *Laminaria hyperborea* park and foliose red seaweeds on moderately exposed lower infralittoral rock
      - A3.2143 Grazed *Laminaria hyperborea* forest with coralline crusts on upper infralittoral rock
      - A3.2144 Grazed *Laminaria hyperborea* park with coralline crusts on lower infralittoral rock
    - A3.215 *Sabellaria spinulosa* with kelp and red seaweeds on sand-influenced infralittoral rock
    - A3.216 Dense foliose red seaweeds on silty moderately exposed infralittoral rock
    - A3.217 *Laminaria hyperborea* on moderately exposed vertical rock
    - A3.218 *Hiatella arctica* and seaweeds on vertical limestone / chalk
  - A3.22 Kelp and seaweed communities in tide-swept sheltered conditions
    - A3.221 *Laminaria digitata*, ascidians and bryozoans on tide-swept sublittoral fringe rock
    - A3.222 Mixed kelp with foliose red seaweeds, sponges and ascidians on sheltered tide-swept infralittoral rock
    - A3.223 Mixed kelp and red seaweeds on infralittoral boulders, cobbles and gravel in tidal rapids
    - A3.224 *Laminaria saccharina* with foliose red seaweeds and ascidians on sheltered tide-swept infralittoral rock
    - A3.225 Filamentous red seaweeds, sponges and *Balanus crenatus* on tide-swept variable-salinity infralittoral rock
  - A3.23 Mediterranean communities of infralittoral algae moderately exposed to wave action
    - A3.231 Association with *Codium vermilara* and *Rhodymenia ardissoni*
    - A3.232 Association with *Dasycladus vermicularis*
    - A3.233 Association with *Alsidium helmenthochorton*
    - A3.234 Association with *Cystoseira tamariscifolia* and *Saccorhiza polyschides*
    - A3.235 Association with *Gelidium spinosum* v. *hystrix*
    - A3.236 Association with *Lobophora variegata*
    - A3.237 Association with *Ceramium rubrum*
    - A3.238 Facies with *Cladocora caespitosa*
    - A3.239 Association with *Cystoseira brachycarpa*
    - A3.23A Association with *Cystoseira crinita*
    - A3.23B Association with *Cystoseira crinitophylla*
    - A3.23C Association with *Cystoseira sauvageauana*
    - A3.23D Association with *Cystoseira spinosa*
    - A3.23E Association with *Sargassum vulgare*
    - A3.23F Association with *Dictyopteris polyodioides*
    - A3.23G Association with *Calpomenia sinuosa*

- A3.23H** Association with *Rhodymenia ardissoni* and *Rhodophyllis divaricata*
- A3.23I** Facies with *Astroides calycularis*
- A3.23J** Association with *Flabellia petiolata* and *Peyssonnelia squamaria*
- A3.23K** Association with *Halymenia floresia* and *Halarachnion ligatum*
- A3.23L** Association with *Peyssonnelia rubra* and *Peyssonnelia* spp.
- A3.24** Faunal communities on moderate energy infralittoral rock
  - A3.241** *Halopteris filicina* with coralline crusts on moderately exposed infralittoral rock
- A3.3** Atlantic and Mediterranean low energy infralittoral rock
  - A3.31** Silted kelp on low energy infralittoral rock with full salinity
    - A3.311** Mixed *Laminaria hyperborea* and *Laminaria ochroleuca* forest on moderately exposed or sheltered infralittoral rock
    - A3.312** Mixed *Laminaria hyperborea* and *Laminaria saccharina* on sheltered infralittoral rock
      - A3.3121** Mixed *Laminaria hyperborea* and *Laminaria saccharina* forest on sheltered upper infralittoral rock
      - A3.3122** Mixed *Laminaria hyperborea* and *Laminaria saccharina* park on sheltered lower infralittoral rock
      - A3.3123** Grazed, mixed *Laminaria hyperborea* and *Laminaria saccharina* on sheltered infralittoral rock
    - A3.313** *Laminaria saccharina* on very sheltered infralittoral rock
      - A3.3131** *Laminaria saccharina* and *Laminaria digitata* on sheltered sublittoral fringe rock
      - A3.3132** *Laminaria saccharina* forest on very sheltered upper infralittoral rock
      - A3.3133** *Laminaria saccharina* park on very sheltered lower infralittoral rock
      - A3.3134** Grazed *Laminaria saccharina* with *Echinus*, brittlestars and coralline crusts on sheltered infralittoral rock
    - A3.314** Silted cape-form *Laminaria hyperborea* on very sheltered infralittoral rock
    - A3.315** *Sargassum muticum* on shallow slightly tide-swept infralittoral mixed substrata
  - A3.32** Kelp in variable salinity on low energy infralittoral rock
    - A3.321** *Codium* spp. with red seaweeds and sparse *Laminaria saccharina* on shallow, heavily-silted, very sheltered infralittoral rock
    - A3.322** *Laminaria saccharina* and *Psammechinus miliaris* on variable salinity grazed infralittoral rock
    - A3.323** *Laminaria saccharina* with *Phyllophora* spp. and filamentous green seaweeds on variable or reduced salinity infralittoral rock
  - A3.33** Mediterranean submerged fucoids, green or red seaweeds on full salinity infralittoral rock
    - A3.331** Association with *Stypocaulon scoparium* (= *Halopteris scoparia*)
    - A3.332** Association with *Trichosolen myura* and *Liagora farinosa*
    - A3.333** Association with *Cystoseira compressa*
    - A3.334** Association with *Pterocliadiella capillacea* and *Ulva laetevirens*
    - A3.335** Facies with large Hydrozoa
    - A3.336** Association with *Pterothamnion crispum* and *Compsothamnion thuyoides*
  - A3.34** Submerged fucoids, green or red seaweeds (low salinity infralittoral rock)
    - A3.341** Mixed fucoids, *Chorda filum* and green seaweeds on reduced salinity infralittoral rock
    - A3.342** *Ascophyllum nodosum* and epiphytic sponges and ascidians on variable salinity infralittoral rock
    - A3.343** *Polyides rotundus* and/or *Furcellaria lumbricalis* on reduced salinity infralittoral rock
    - A3.344** *Fucus ceranoides* and *Enteromorpha* spp. on low salinity infralittoral rock
  - A3.35** Faunal communities on low energy infralittoral rock
    - A3.351** *Codium elisabethae*, *Halopteris filicina* and coralline crusts on sheltered infralittoral bedrock
  - A3.36** Faunal communities on variable or reduced salinity infralittoral rock
    - A3.361** *Mytilus edulis* beds on reduced salinity infralittoral rock
    - A3.362** *Cordylophora caspia* and *Electra crustulenta* on reduced salinity infralittoral rock
    - A3.363** *Hartlaubella gelatinosa* and *Conopeum reticulum* on low salinity infralittoral mixed substrata
  - A3.4** Baltic exposed infralittoral rock
  - A3.5** Baltic moderately exposed infralittoral rock
  - A3.6** Baltic sheltered infralittoral rock
  - A3.7** Features of infralittoral rock
    - A3.71** Robust faunal cushions and crusts in surge gullies and caves
      - A3.711** Foliose seaweeds and coralline crusts in surge gully entrances

- A3.712 Anemones, including *Corynactis viridis*, crustose sponges and colonial ascidians on very exposed or wave surged vertical infralittoral rock
- A3.713 Crustose sponges and colonial ascidians with *Dendrodoa grossularia* or barnacles on wave-surfed infralittoral rock
- A3.714 *Dendrodoa grossularia* and *Clathrina coriacea* on wave-surfed vertical infralittoral rock
- A3.715 Crustose sponges on extremely wave-surfed infralittoral cave or gully walls
- A3.716 Coralline crusts in surge gullies and scoured infralittoral rock
  - A3.7161 *Balanus crenatus* and/or *Pomatoceros triqueter* with spirorbid worms and coralline crusts on severely scoured vertical infralittoral rock
  - A3.7162 Coralline crusts and crustaceans on mobile boulders or cobbles in surge gullies
- A3.72 Infralittoral fouling seaweed communities
- A3.73 Vents and seeps in infralittoral rock
  - A3.731 Freshwater seeps in infralittoral rock
  - A3.732 Oil seeps in infralittoral rock
  - A3.733 Vents in infralittoral rock

#### A4 Circalittoral rock and other hard substrata

- A4.1 Atlantic and Mediterranean high energy circalittoral rock
  - A4.11 Very tide-swept faunal communities on circalittoral rock
    - A4.111 *Balanus crenatus* and *Tubularia indivisa* on extremely tide-swept circalittoral rock
    - A4.112 *Tubularia indivisa* on tide-swept circalittoral rock
      - A4.1121 *Tubularia indivisa* and cushion sponges on tide-swept turbid circalittoral bedrock
      - A4.1122 *Alcyonium digitatum* with dense *Tubularia indivisa* and anemones on strongly tide-swept circalittoral rock
  - A4.12 Sponge communities on deep circalittoral rock
    - A4.121 *Phakellia ventilabrum* and axinellid sponges on deep, wave-exposed circalittoral rock
  - A4.13 Mixed faunal turf communities on circalittoral rock
    - A4.131 Bryozoan turf and erect sponges on tide-swept circalittoral rock
      - A4.1311 *Eunicella verrucosa* and *Pentapora foliacea* on wave-exposed circalittoral rock
      - A4.1312 Mixed turf of bryozoans and erect sponges with *Dysidia fragilis* and *Actinothoe sphyrodeta* on tide-swept wave-exposed circalittoral rock
      - A4.1313 Mixed turf of bryozoans and erect sponges with *Sagartia elegans* on tide-swept circalittoral rock
    - A4.132 *Corynactis viridis* and a mixed turf of crisiids, *Bugula*, *Scrupocellaria*, and *Cellaria* on moderately tide-swept exposed circalittoral rock
    - A4.133 Mixed turf of hydroids and large ascidians with *Swiftia pallida* and *Caryophyllia smithii* on weakly tide-swept circalittoral rock
    - A4.134 *Flustra foliacea* and colonial ascidians on tide-swept moderately wave-exposed circalittoral rock
      - A4.1341 *Polyclinum aurantium* and *Flustra foliacea* on sand-scoured tide-swept moderately wave-exposed circalittoral rock
      - A4.1342 *Flustra foliacea*, small solitary and colonial ascidians on tide-swept circalittoral bedrock or boulders
      - A4.1343 *Flustra foliacea* and colonial ascidians on tide-swept exposed circalittoral mixed substrata
    - A4.135 Sparse sponges, *Nemertesia* spp., and *Alcyonidium diaphanum* on circalittoral mixed substrata
    - A4.136 *Suberites* spp. with a mixed turf of crisiids and *Bugula* spp. on heavily silted moderately wave-exposed shallow circalittoral rock
    - A4.137 *Flustra foliacea* and *Haliclona oculata* with a rich faunal turf on tide-swept circalittoral mixed substrata
    - A4.138 *Molgula manhattensis* with a hydroid and bryozoan turf on tide-swept moderately wave-exposed circalittoral rock
    - A4.139 Sponges and anemones on vertical circalittoral bedrock
  - A4.2 Atlantic and Mediterranean moderate energy circalittoral rock
    - A4.21 Echinoderms and crustose communities on circalittoral rock
      - A4.211 *Caryophyllia smithii* and *Swiftia pallida* on circalittoral rock
        - A4.2111 *Caryophyllia smithii*, *Swiftia pallida* and *Alcyonium glomeratum* on wave-sheltered circalittoral rock

- A4.2112** *Caryophyllia smithii*, *Swiftia pallida* and large solitary ascidians on exposed or moderately exposed circalittoral rock
- A4.212** *Caryophyllia smithii*, sponges and crustose communities on wave-exposed circalittoral rock
  - A4.2121** Brittlestars overlying coralline crusts, *Parasmittina trispinosa* and *Caryophyllia smithii* on wave-exposed circalittoral rock
  - A4.2122** *Caryophyllia smithii* and sponges with *Pentapora foliacea*, *Porella compressa* and crustose communities on wave-exposed circalittoral rock
- A4.213** *Urticina felina* and sand-tolerant fauna on sand-scoured or covered circalittoral rock
- A4.214** Faunal and algal crusts on exposed to moderately wave-exposed circalittoral rock
  - A4.2141** *Flustra foliacea* on slightly scoured silty circalittoral rock
  - A4.2142** *Alcyonium digitatum*, *Pomatoceros triqueter*, algal and bryozoan crusts on wave-exposed circalittoral rock
  - A4.2143** *Alcyonium digitatum* with *Securiflustra securifrons* on tide-swept moderately wave-exposed circalittoral rock
  - A4.2144** Brittlestars on faunal and algal encrusted exposed to moderately wave-exposed circalittoral rock
  - A4.2145** Faunal and algal crusts with *Pomatoceros triqueter* and sparse *Alcyonium digitatum* on exposed to moderately wave-exposed circalittoral rock
  - A4.2146** *Caryophyllia smithii* with faunal and algal crusts on moderately wave-exposed circalittoral rock
- A4.215** *Alcyonium digitatum* and faunal crust communities on vertical circalittoral bedrock
- A4.22** *Sabellaria* reefs on circalittoral rock
  - A4.221** *Sabellaria spinulosa* encrusted circalittoral rock
    - A4.2211** *Sabellaria spinulosa* with a bryozoan turf and barnacles on silty turbid circalittoral rock
    - A4.2212** *Sabellaria spinulosa*, didemnid and small ascidians on tide-swept moderately wave-exposed circalittoral rock
- A4.23** Communities on soft circalittoral rock
  - A4.231** Piddocks with a sparse associated fauna in sublittoral very soft chalk or clay
  - A4.232** *Polydora* sp. tubes on moderately exposed sublittoral soft rock
  - A4.233** *Hiatella*-bored vertical sublittoral limestone rock
- A4.24** Mussel beds on circalittoral rock
  - A4.241** *Mytilus edulis* beds with hydroids and ascidians on tide-swept exposed to moderately wave-exposed circalittoral rock
  - A4.242** *Musculus discors* beds on moderately exposed circalittoral rock
- A4.25** Circalittoral faunal communities in variable salinity
  - A4.251** Cushion sponges and hydroids on turbid tide-swept sheltered circalittoral rock
    - A4.2511** Cushion sponges, hydroids and ascidians on turbid tide-swept sheltered circalittoral rock
    - A4.2512** Cushion sponges and hydroids on turbid tide-swept variable salinity sheltered circalittoral rock
  - A4.252** *Halichondria bowerbanki*, *Eudendrium arbusculum* and *Eucratea loricata* on reduced salinity tide-swept circalittoral mixed substrata
- A4.26** Mediterranean coralligenous communities moderately exposed to hydrodynamic action
  - A4.261** Association with *Cystoseira zosteroides*
  - A4.262** Association with *Cystoseira usneoides*
  - A4.263** Association with *Cystoseira dubia*
  - A4.264** Association with *Cystoseira corniculata*
  - A4.265** Association with *Sargassum* spp.
  - A4.266** Association with *Mesophyllum lichenoides*
  - A4.267** Algal bioconcretion with *Lithophyllum frondosum* and *Halimeda tuna*
  - A4.268** Association with *Laminaria ochroleuca*
  - A4.269** Facies with *Eunicella cavolinii*
  - A4.26A** Facies with *Eunicella singularis*
  - A4.26B** Facies with *Paramuricea clavata*
  - A4.26C** Facies with *Parazoanthus axinellae*
  - A4.26D** Coralligenous platforms
- A4.27** Faunal communities on deep moderate energy circalittoral rock
- A4.3** Atlantic and Mediterranean low energy circalittoral rock

- A4.31** Brachiopod and ascidian communities on circalittoral rock
  - A4.311** Solitary ascidians, including *Ascidia mentula* and *Ciona intestinalis*, on wave-sheltered circalittoral rock
    - A4.3111** Solitary ascidians, including *Ascidia mentula* and *Ciona intestinalis*, with *Antedon* spp. on wave-sheltered circalittoral rock
    - A4.3112** Dense brittlestars with sparse *Ascidia mentula* and *Ciona intestinalis* on sheltered circalittoral mixed substrata
  - A4.312** Large solitary ascidians and erect sponges on wave-sheltered circalittoral rock
  - A4.313** *Antedon* spp., solitary ascidians and fine hydroids on sheltered circalittoral rock
  - A4.314** *Neocrania anomala* and *Protanthea simplex* on sheltered circalittoral rock
    - A4.3141** *Neocrania anomala* and *Protanthea simplex* on very wave-sheltered circalittoral rock
    - A4.3142** *Neocrania anomala*, *Dendrodoa grossularia* and *Sarcodictyon roseum* on variable salinity circalittoral rock
- A4.32** Mediterranean coralligenous communities sheltered from hydrodynamic action
  - A4.321** Association with *Rodriguezella strafforelli*
  - A4.322** Facies with *Lophogorgia sarmentosa*
- A4.33** Faunal communities on deep low energy circalittoral rock
- A4.4** Baltic exposed circalittoral rock
- A4.5** Baltic moderately exposed circalittoral rock
- A4.6** Baltic sheltered circalittoral rock
- A4.7** Features of circalittoral rock
  - A4.71** Communities of circalittoral caves and overhangs
    - A4.711** Sponges, cup corals and anthozoans on shaded or overhanging circalittoral rock
    - A4.712** Caves and overhangs with *Parazoanthus axinellae*
    - A4.713** Caves and overhangs with *Corallium rubrum*
    - A4.714** Caves and overhangs with *Leptopsammia pruvoti*
    - A4.715** Caves and ducts in total darkness (including caves without light or water movement at upper levels)
  - A4.72** Circalittoral fouling faunal communities
    - A4.721** *Alcyonium digitatum* and *Metridium senile* on moderately wave-exposed circalittoral steel wrecks
    - A4.722** *Ascidiella aspersa* on circalittoral artificial substrata
  - A4.73** Vents and seeps in circalittoral rock
    - A4.731** Freshwater seeps in circalittoral rock
    - A4.732** Oil seeps in circalittoral rock
    - A4.733** Vents in circalittoral rock

## **A5 Sublittoral sediment**

- A5.1** Sublittoral coarse sediment
  - A5.11** Infralittoral coarse sediment in reduced salinity
    - A5.111** Baltic level gravel bottoms of the infralittoral photic zone with little or no macrophyte vegetation
    - A5.112** Baltic gravel banks of the infralittoral photic zone
    - A5.113** Baltic shell gravel bottoms in the infralittoral photic zone
  - A5.12** Infralittoral coarse sediment
    - A5.121** Sparse fauna on highly mobile sublittoral shingle (cobbles and pebbles)
    - A5.122** *Halocampa chrysanthellum* and *Edwardsia timida* on sublittoral clean stone gravel
    - A5.123** *Moerella* spp. with venerid bivalves in infralittoral gravelly sand
    - A5.124** *Hesionura elongata* and *Microphthalmus similis* with other interstitial polychaetes in infralittoral mobile coarse sand
    - A5.125** *Glycera lapidum* in impoverished infralittoral mobile gravel and sand
    - A5.126** Cumaceans and *Chaetozone setosa* in infralittoral gravelly sand
    - A5.127** Dense *Lanice conchilega* and other polychaetes in tide-swept infralittoral sand and mixed gravelly sand
    - A5.128** Association with rhodoliths in coarse sands and fine gravels mixed by waves
    - A5.129** Facies with *Gouania wildenowi*
    - A5.12A** Greenland cockle *Serripes* in shallow coarse sand (influenced by warm low-salinity melt water) of the Arctic
  - A5.13** Circalittoral coarse sediment

- A5.131 *Pomatoceros triqueter* with barnacles and bryozoan crusts on unstable circalittoral cobbles and pebbles
- A5.132 *Mediomastus fragilis*, *Lumbrineris* spp. and venerid bivalves in circalittoral coarse sand or gravel
- A5.133 *Protodorvillea kefersteini* and other polychaetes in impoverished circalittoral mixed gravelly sand
- A5.134 *Neopentadactyla mixta* in circalittoral shell gravel or coarse sand
- A5.135 *Branchiostoma lanceolatum* in circalittoral coarse sand with shell gravel
- A5.136 Scallops on shell gravel and sand with some sand scour
- A5.14 Deep circalittoral coarse sediment
  - A5.141 *Glyceria lapidum*, *Thyasira* spp. and *Amythasides macroglossus* in offshore gravelly sand
  - A5.142 *Hesionura elongata* and *Protodorvillea kefersteini* in offshore coarse sand
  - A5.143 Baltic gravel bottoms of the aphotic zone
  - A5.144 Baltic shell gravel bottoms of the aphotic zone
- A5.2 Sublittoral sand
  - A5.21 Sublittoral sand in low or reduced salinity
    - A5.211 Baltic level sandy bottoms of the infralittoral photic zone with little or no macrophyte vegetation
    - A5.212 Baltic sand bars of the infralittoral photic zone
    - A5.213 Baltic sand banks of the infralittoral photic zone
    - A5.214 *Macoma balthica* in brackish environment (seasonally ice-covered)
  - A5.22 Sublittoral sand in variable salinity (estuaries)
    - A5.221 Infralittoral mobile sand in variable salinity (estuaries)
    - A5.222 *Nephtys cirrosa* and *Macoma balthica* in variable salinity infralittoral mobile sand
    - A5.223 *Neomysis integer* and *Gammarus* spp. in fluctuating low salinity infralittoral mobile sand
  - A5.23 Infralittoral fine sand
    - A5.231 Infralittoral mobile clean sand with sparse fauna
    - A5.232 *Sertularia cupressina* and *Hydrallmania falcata* on tide-swept sublittoral sand with cobbles or pebbles
    - A5.233 *Nephtys cirrosa* and *Bathyporeia* spp. in infralittoral sand
    - A5.234 Semi-permanent tube-building amphipods and polychaetes in sublittoral sand
    - A5.235 Mediterranean communities of fine sands in very shallow waters
      - A5.2351 Facies with *Lentidium mediterraneum*
    - A5.236 Mediterranean communities of well sorted fine sands
  - A5.24 Infralittoral muddy sand
    - A5.241 *Echinocardium cordatum* and *Ensis* spp. in lower shore and shallow sublittoral slightly muddy fine sand
    - A5.242 *Fabulina fabula* and *Magelona mirabilis* with venerid bivalves and amphipods in infralittoral compacted fine muddy sand
    - A5.243 *Arenicola marina* in infralittoral fine sand or muddy sand
    - A5.244 *Spisula subtruncata* and *Nephtys hombergii* in shallow muddy sand
    - A5.245 *Turritella* in muddy sands
    - A5.246 *Ervillia castanea* beds in infralittoral sand
  - A5.25 Circalittoral fine sand
    - A5.251 *Echinocyamus pusillus*, *Ophelia borealis* and *Abra prismatica* in circalittoral fine sand
    - A5.252 *Abra prismatica*, *Bathyporeia elegans* and polychaetes in circalittoral fine sand
    - A5.253 Medium to very fine sand, 100-120 m, with polychaetes *Spiophanes kroyeri*, *Amphiplectene auricoma*, *Myriochele* sp., *Aricidea wassi* and amphipods *Harpinia antennaria*
  - A5.26 Circalittoral muddy sand
    - A5.261 *Abra alba* and *Nucula nitidosa* in circalittoral muddy sand or slightly mixed sediment
    - A5.262 *Amphiura brachiata* with *Astropecten irregularis* and other echinoderms in circalittoral muddy sand
  - A5.27 Deep circalittoral sand
    - A5.271 Maldanid polychaetes and *Eudorellopsis deformis* in deep circalittoral sand or muddy sand
    - A5.272 *Owenia fusiformis* and *Amphiura filiformis* in deep circalittoral sand or muddy sand
    - A5.273 Baltic sandy bottoms of the aphotic zone
  - A5.28 Mediterranean communities of superficial muddy sands in sheltered waters
    - A5.281 Facies with *Callianassa tyrrhena* and *Kellia corbuloides*

- A5.282 Facies with fresh water resurgences with *Cerastoderma glaucum* and *Cyathura carinata*
- A5.283 Facies with *Loripes lacteus*, *Tapes* spp.
- A5.284 Association with *Caulerpa prolifera* on superficial muddy sands in sheltered waters
- A5.285 Facies of hydrothermal oozes with *Cyclope neritea* and nematodes
- A5.3 Sublittoral mud
  - A5.31 Sublittoral mud in low or reduced salinity (lagoons)
    - A5.311 Baltic brackish water sublittoral muddy biocenoses influenced by varying salinity
      - A5.3111 Baltic muds of the infralittoral photic zone with little or no macrophyte vegetation
      - A5.3112 Boreal Baltic narrow inlets with soft mud substrate
  - A5.32 Sublittoral mud in variable salinity (estuaries)
    - A5.321 *Polydora ciliata* and *Corophium volutator* in variable salinity infralittoral firm mud or clay
    - A5.322 *Aphelochaeta marioni* and *Tubificoides* spp. in variable salinity infralittoral mud
    - A5.323 *Nephtys hombergii* and *Tubificoides* spp. in variable salinity infralittoral soft mud
    - A5.324 Infralittoral fluid mobile mud
    - A5.325 *Capitella capitata* and *Tubificoides* spp. in reduced salinity infralittoral muddy sediment
    - A5.326 Oligochaetes in variable or reduced salinity infralittoral muddy sediment
    - A5.327 *Limnodrilus hoffmeisteri*, *Tubifex tubifex* and *Gammarus* spp. in low salinity infralittoral muddy sediment
  - A5.33 Infralittoral sandy mud
    - A5.331 *Nephtys hombergii* and *Macoma balthica* in infralittoral sandy mud
    - A5.332 *Sagartiogeton undatus* and *Asciidiella aspersa* on infralittoral sandy mud
    - A5.333 *Mysella bidentata* and *Abra* spp. in infralittoral sandy mud
    - A5.334 *Melinna palmata* with *Magelona* spp. and *Thyasira* spp. in infralittoral sandy mud
    - A5.335 *Ampelisca* spp., *Photis longicaudata* and other tube-building amphipods and polychaetes in infralittoral sandy mud
    - A5.336 *Capitella capitata* in enriched sublittoral muddy sediments
  - A5.34 Infralittoral fine mud
    - A5.341 *Cerastoderma edule* with *Abra nitida* in infralittoral mud
    - A5.342 *Arenicola marina* in infralittoral mud
    - A5.343 *Philine aperta* and *Virgularia mirabilis* in soft stable infralittoral mud
    - A5.344 *Ocnus planci* aggregations on sheltered sublittoral muddy sediment
    - A5.345 *Astarte crenata* beneath high salinity cold polar water
    - A5.346 Oligochaetes in mobile mud
  - A5.35 Circalittoral sandy mud
    - A5.351 *Amphiura filiformis*, *Mysella bidentata* and *Abra nitida* in circalittoral sandy mud
    - A5.352 *Thyasira* spp. and *Nuculoma tenuis* in circalittoral sandy mud
    - A5.353 *Amphiura filiformis* and *Nuculoma tenuis* in circalittoral and offshore muddy sand
    - A5.354 *Virgularia mirabilis* and *Ophiura* spp. with *Pecten maximus* on circalittoral sandy or shelly mud
      - A5.3541 *Virgularia mirabilis* and *Ophiura* spp. with *Pecten maximus*, hydroids and ascidians on circalittoral sandy or shelly mud with shells or stones
    - A5.355 *Lagis koreni* and *Phaxas pellucidus* in circalittoral sandy mud
  - A5.36 Circalittoral fine mud
    - A5.361 Seapens and burrowing megafauna in circalittoral fine mud
      - A5.3611 Seapens, including *Funiculina quadrangularis*, and burrowing megafauna in undisturbed circalittoral fine mud
    - A5.362 Burrowing megafauna and *Maxmuelleria lankesteri* in circalittoral mud
    - A5.363 *Brissopsis lyrifera* and *Amphiura chiajei* in circalittoral mud
    - A5.364 Silty sediments > 140 m with polychaetes *Lumbrineris fragilis*, *Levinsenia gracilis* and amphipods *Eriopisa elongata*
    - A5.365 *Spiochaetopterus* beneath high salinity Atlantic water
    - A5.366 *Macoma calcarea* in deep-water soft clayey mud
  - A5.37 Deep circalittoral mud
    - A5.371 *Ampharete falcata* turf with *Parvicardium ovale* on cohesive muddy sediment near margins of deep stratified seas
    - A5.372 Foraminiferans and *Thyasira* spp. in deep circalittoral soft mud
    - A5.373 *Styela gelatinosa*, *Pseudamussium septemradiatum* and solitary ascidians on sheltered deep circalittoral muddy sediment



- A5.374 *Capitella capitata* and *Thyasira* spp. in organically-enriched offshore circalittoral mud and sandy mud
- A5.3741 *Capitella capitata*, *Thyasira* spp. and *Ophryotrocha dubia* inorganically-enriched offshore circalittoral mud or sandy mud
- A5.375 *Levinsenia gracilis* and *Heteromastus filiformis* in offshore circalittoral mud and sandy mud
- A5.376 *Paramphinome jeffreysii*, *Thyasira* spp. and *Amphiura filiformis* in offshore circalittoral sandy mud
- A5.377 *Myrtea spinifera* and polychaetes in offshore circalittoral sandy mud
- A5.378 Baltic muddy bottoms of the aphotic zone
- A5.38 Mediterranean communities of muddy detritic bottoms
- A5.381 Facies with *Ophiothrix quinquemaculata*
- A5.39 Mediterranean communities of coastal terrigenous muds
- A5.391 Facies of soft muds with *Turritella tricarinata communis*
- A5.392 Facies of sticky muds with *Virgularia mirabilis* and *Pennatula phosphorea*
- A5.393 Facies of sticky muds with *Alcyonium palmatum* and *Stichopus regalis*
- A5.4 Sublittoral mixed sediments
- A5.41 Sublittoral mixed sediment in low or reduced salinity (lagoons)
- A5.411 Baltic level mixed sediment bottoms of the infralittoral photic zone with little or no macrophyte vegetation
- A5.42 Sublittoral mixed sediment in variable salinity (estuaries)
- A5.421 *Aphelocheata* spp. and *Polydora* spp. in variable salinity infralittoral mixed sediment
- A5.422 *Crepidula fornicata* and *Mediomastus fragilis* in variable salinity infralittoral mixed sediment
- A5.43 Infralittoral mixed sediments
- A5.431 *Crepidula fornicata* with ascidians and anemones on infralittoral coarse mixed sediment
- A5.432 *Sabella pavonina* with sponges and anemones on infralittoral mixed sediment
- A5.433 *Venerupis senegalensis*, *Amphipholis squamata* and *Apseudes latreilli* in infralittoral mixed sediment
- A5.434 *Limaria hians* beds in tide-swept sublittoral muddy mixed sediment
- A5.435 *Ostrea edulis* beds on shallow sublittoral muddy mixed sediment
- A5.44 Circalittoral mixed sediments
- A5.441 *Cerianthus lloydii* and other burrowing anemones in circalittoral muddy mixed sediment
- A5.4411 *Cerianthus lloydii* with *Nemertesia* spp. and other hydroids in circalittoral muddy mixed sediment
- A5.442 Sparse *Modiolus modiolus*, dense *Cerianthus lloydii* and burrowing holothurians on sheltered circalittoral stones and mixed sediment
- A5.443 *Mysella bidentata* and *Thyasira* spp. in circalittoral muddy mixed sediment
- A5.444 *Flustra foliacea* and *Hydrallmania falcata* on tide-swept circalittoral mixed sediment
- A5.445 *Ophiothrix fragilis* and/or *Ophiocomina nigra* brittlestar beds on sublittoral mixed sediment
- A5.446 Sandy mixed sediment with *Alcyonidium diaphanum*
- A5.45 Deep mixed sediments
- A5.451 Polychaete-rich deep *Venus* community in offshore mixed sediments
- A5.452 Baltic mixed sediment bottoms of the aphotic zone
- A5.46 Mediterranean communities of coastal detritic bottoms
- A5.461 Association with rhodolithes on coastal detritic bottoms
- A5.462 Association with *Peyssonnelia rosa-marina*
- A5.463 Association with *Arthrocladia villosa*
- A5.464 Association with *Osmundaria volubilis*
- A5.465 Association with *Kallymenia patens*
- A5.466 Association with *Laminaria rodriguezii*
- A5.467 Facies with *Ophiura texturata*
- A5.468 Facies with Synascidies
- A5.469 Facies with large Bryozoa
- A5.47 Mediterranean communities of shelf-edge detritic bottoms
- A5.471 Facies with *Neolampas rostellata*
- A5.472 Facies with *Leptometra phalangium*
- A5.5 Sublittoral macrophyte-dominated sediment
- A5.51 Maerl beds

- A5.511** *Phymatolithon calcareum* maerl beds in infralittoral clean gravel or coarse sand
  - A5.5111** *Phymatolithon calcareum* maerl beds with red seaweeds in shallow infralittoral clean gravel or coarse sand
  - A5.5112** *Phymatolithon calcareum* maerl beds with *Neopentadactyla mixta* and other echinoderms in deeper infralittoral clean gravel or coarse sand
- A5.512** *Lithothamnion glaciale* maerl beds in tide-swept variable salinity infralittoral gravel
- A5.513** *Lithothamnion corallioides* maerl beds on infralittoral muddy gravel
- A5.514** *Lithophyllum fasciculatum* maerl beds on infralittoral mud
- A5.515** Association with rhodolithes in coarse sands and fine gravels under the influence of bottom currents
- A5.52** Kelp and seaweed communities on sublittoral sediment
  - A5.521** *Laminaria saccharina* and red seaweeds on infralittoral sediments
    - A5.5211** Red seaweeds and kelps on tide-swept mobile infralittoral cobbles and pebbles
    - A5.5212** *Laminaria saccharina* and robust red algae on infralittoral gravel and pebble
    - A5.5213** *Laminaria saccharina* and filamentous red algae on infralittoral sand
    - A5.5214** *Laminaria saccharina* with red and brown seaweeds on lower infralittoral muddy mixed sediment
  - A5.522** *Laminaria saccharina* and *Chorda filum* on sheltered upper infralittoral muddy sediment
  - A5.523** *Laminaria saccharina* with *Psammechinus miliaris* and/or *Modiolus modiolus* on variable salinity infralittoral sediment
  - A5.524** *Laminaria saccharina*, *Gracilaria gracilis* and brown seaweeds on full salinity infralittoral sediment
  - A5.525** *Laminaria saccharina* and *Gracilaria gracilis* with sponges and ascidians on variable salinity infralittoral sediment
  - A5.526** Mats of *Trailiella* on infralittoral muddy gravel
  - A5.527** Loose-lying mats of *Phyllophora crispa* on infralittoral muddy sediment
  - A5.528** Filamentous green seaweeds on low salinity infralittoral mixed sediment or rock
  - A5.529** Facies with *Ficopomatus enigmaticus*
  - A5.52A** Association with *Gracilaria* spp.
  - A5.52B** Association with *Chaetomorpha linum* and *Valonia aegagropila*
  - A5.52C** Association with *Halopitys incurva*
  - A5.52D** Association with *Ulva laetevirens* and *Enteromorpha linza*
  - A5.52E** Association with *Cystoseira barbata*
  - A5.52F** Association with *Lamprothamnium papulosum*
  - A5.52G** Association with *Cladophora echinus* and *Rytiphloea tinctoria*
- A5.53** Sublittoral seagrass beds
  - A5.531** *Cymodocea* beds
    - A5.5311** Macaronesian *Cymodocea* beds
    - A5.5312** Lusitanian *Cymodocea* beds
    - A5.5313** Mediterranean *Cymodocea* beds
      - A5.53131** Association with *Cymodocea nodosa* on well sorted fine sands
      - A5.53132** Association with *Cymodocea nodosa* on superficial muddy sands in sheltered waters
  - A5.532** *Halophila* beds
    - A5.5321** Canary Island *Halophila* beds
    - A5.5322** Mediterranean *Halophila* beds
  - A5.533** *Zostera* beds in full salinity infralittoral sediments
    - A5.5331** *Zostera marina/angustifolia* beds on lower shore or infralittoral clean or muddy sand
    - A5.5332** Association with *Zostera noltii* in euryhaline and eurythermal environment
    - A5.5333** Association with *Zostera marina* in euryhaline and eurythermal environment
    - A5.5334** Association with *Zostera noltii* on superficial muddy sands in sheltered waters
  - A5.534** *Ruppia* and *Zannichellia* communities
    - A5.5341** Middle European *Ruppia* and *Zannichellia* communities
    - A5.5342** Tethyan marine *Ruppia* communities
    - A5.5343** *Ruppia maritima* in reduced salinity infralittoral muddy sand
  - A5.535** *Posidonia* beds
    - A5.5351** Ecomorphosis of striped *Posidonia oceanica* meadows
    - A5.5352** Ecomorphosis of "barrier-reef" *Posidonia oceanica* meadows
    - A5.5353** Facies of dead "mattes" of *Posidonia oceanica* without much epiflora
    - A5.5354** Association with *Caulerpa prolifera* on *Posidonia* beds

- A5.54** Angiosperm communities in reduced salinity
  - A5.541** Vegetation of brackish waters dominated by *Phragmites australis*
  - A5.542** Association with *Potamogeton pectinatus*
  - A5.543** Vegetation of brackish waters dominated by *Ranunculus baudotii*
  - A5.544** Vegetation of brackish waters dominated by *Scirpus lacustris* or *Scirpus tabernaemontani*
  - A5.545** *Zostera* beds in reduced salinity infralittoral sediments
- A5.6** Sublittoral biogenic reefs
  - A5.61** Sublittoral polychaete worm reefs on sediment
    - A5.611** *Sabellaria spinulosa* on stable circalittoral mixed sediment
    - A5.612** *Sabellaria alveolata* on variable salinity sublittoral mixed sediment
    - A5.613** *Serpula vermicularis* reefs on very sheltered circalittoral muddy sand
  - A5.62** Sublittoral mussel beds on sediment
    - A5.621** *Modiolus modiolus* beds with hydroids and red seaweeds on tide-swept circalittoral mixed substrata
    - A5.622** *Modiolus modiolus* beds on open coast circalittoral mixed sediment
    - A5.623** *Modiolus modiolus* beds with fine hydroids and large solitary ascidians on very sheltered circalittoral mixed substrata
    - A5.624** *Modiolus modiolus* beds with *Chlamys varia*, sponges, hydroids and bryozoans on slightly tide-swept very sheltered circalittoral mixed substrata
    - A5.625** *Mytilus edulis* beds on sublittoral sediment
    - A5.626** *Hiatella arctica* beds on silty clay with small pebbles and shells
    - A5.627** Baltic mussel beds in the infralittoral photic zone
      - A5.6271** Baltic mussel beds in the infralittoral photic zone with little or no macrophyte vegetation
      - A5.6272** Baltic mussel beds of the infralittoral photic zone dominated by macrophyte vegetation
  - A5.63** Circalittoral coral reefs
    - A5.631** Circalittoral *Lophelia pertusa* reefs
- A5.7** Features of sublittoral sediments
  - A5.71** Seeps and vents in sublittoral sediments
    - A5.711** Bubbling reefs in the sublittoral euphotic zone
      - A5.7111** Bubbling reefs in the sublittoral euphotic zone with little or no macrophyte vegetation
      - A5.7112** Bubbling reefs in the sublittoral euphotic zone dominated by macrophyte vegetation
    - A5.712** Bubbling reefs in the aphotic zone
    - A5.713** Freshwater seeps in sublittoral sediments
    - A5.714** Methane seeps in sublittoral sediments
    - A5.715** Oil seeps in sublittoral sediments
    - A5.716** Vents in sublittoral sediments
  - A5.72** Organically-enriched or anoxic sublittoral habitats
    - A5.721** Periodically and permanently anoxic sublittoral muds
      - A5.7211** *Beggiatoa* spp. on anoxic sublittoral mud
- A6 Deep-sea bed**
  - A6.1** Deep-sea rock and artificial hard substrata
    - A6.11** Deep-sea bedrock
    - A6.12** Deep-sea artificial hard substrata
    - A6.13** Deep-sea manganese nodules
    - A6.14** Boulders on the deep-sea bed
  - A6.2** Deep-sea mixed substrata
    - A6.21** Deep-sea lag deposits
    - A6.22** Deep-sea biogenic gravels (shells, coral debris)
    - A6.23** Deep-sea calcareous pavements
    - A6.24** Communities of allochthonous material
      - A6.241** Communities of macrophyte debris
  - A6.3** Deep-sea sand
    - A6.31** Communities of bathyal detritic sands with *Grypheus vitreus*
  - A6.4** Deep-sea muddy sand
  - A6.5** Deep-sea mud
    - A6.51** Mediterranean communities of bathyal muds

- A6.511** Facies of sandy muds with *Thenea muricata*
- A6.512** Facies of fluid muds with *Brissopsis lyrifera*
- A6.513** Facies of soft muds with *Funiculina quadrangularis* and *Apporhais seressianus*
- A6.514** Facies of compact muds with *Isidella elongata*
- A6.52** Communities of abyssal muds
- A6.6** Deep-sea bioherms
  - A6.61** Communities of deep-sea corals
    - A6.611** Deep-sea *Lophelia pertusa* reefs
  - A6.62** Deep-sea sponge aggregations
    - A6.621** Facies with *Pheronema grayi*
- A6.7** Raised features of the deep-sea bed
  - A6.71** Permanently submerged flanks of oceanic islands
  - A6.72** Seamounts, knolls and banks
    - A6.721** Summit communities of seamount, knoll or bank within euphotic zone
    - A6.722** Summit communities of seamount, knoll or bank within the mesopelagic zone, i.e. interacting with diurnally migrating plankton
    - A6.723** Deep summit communities of seamount, knoll or bank (i.e. below mesopelagic zone)
    - A6.724** Flanks of seamount, knoll or bank
    - A6.725** Base of seamount, knoll or bank
      - A6.7251** Moat around base of seamount, knoll or bank
  - A6.73** Oceanic ridges
    - A6.731** Communities of ridge flanks
    - A6.732** Communities of ridge axial trough (i.e. non-vent fauna)
    - A6.733** Oceanic ridge without hydrothermal effects
  - A6.74** Abyssal hills
  - A6.75** Carbonate mounds
- A6.8** Deep-sea trenches and canyons, channels, slope failures and slumps on the continental slope
  - A6.81** Canyons, channels, slope failures and slumps on the continental slope
    - A6.811** Active downslope channels
    - A6.812** Inactive downslope channels
    - A6.813** Alongslope channels
    - A6.814** Turbidites and fans
  - A6.82** Deep-sea trenches
- A6.9** Vents, seeps, hypoxic and anoxic habitats of the deep sea
  - A6.91** Deep-sea reducing habitats
    - A6.911** Seeps in the deep-sea bed
      - A6.9111** Cold seep benthic communities of hadal zone
    - A6.912** Gas hydrates in deep-sea
    - A6.913** Cetacean and other carcasses on the deep-sea bed
  - A6.92** Deep-sea bed influenced by hypoxic water column
  - A6.93** Isolated 'oceanic' features influenced by hypoxic water column
  - A6.94** Vents in the deep sea
    - A6.941** Active vent fields
    - A6.942** Inactive vent fields

## **A7 Pelagic water column**

- A7.1** Neuston
  - A7.11** Temporary neuston layer
  - A7.12** Permanent neuston layer
- A7.2** Completely mixed water column with reduced salinity
  - A7.21** Completely mixed water column with reduced salinity and short residence time
    - A7.211** Baltic outer unenclosed seasonally stratified coastal water
  - A7.22** Completely mixed water column with reduced salinity and medium residence time
    - A7.221** Baltic inner unenclosed seasonally stratified coastal water
  - A7.23** Completely mixed water column with reduced salinity and long residence time
    - A7.231** Water body of Baltic eutrophic coastal lakes
    - A7.232** Water body of Baltic mesotrophic coastal lakes
    - A7.233** Water body of Baltic eutrophic glo-lakes
    - A7.234** Water body of Baltic mesotrophic glo-lakes
- A7.3** Completely mixed water column with full salinity

- A7.31 Completely mixed water column with full salinity and short residence time
- A7.32 Completely mixed water column with full salinity and medium residence time
- A7.33 Completely mixed water column with full salinity and long residence time
- A7.4 Partially mixed water column with reduced salinity and medium or long residence time
  - A7.41 Partially mixed water column with reduced salinity and medium residence time
  - A7.42 Partially mixed water column with reduced salinity and long residence time
- A7.5 Unstratified water column with reduced salinity
  - A7.51 Euphotic (epipelagic) zone in unstratified reduced salinity water
  - A7.52 Mesopelagic zone in unstratified reduced salinity water
  - A7.53 Bathypelagic zone in unstratified reduced salinity water
  - A7.54 Abyssopelagic zone in unstratified reduced salinity water
- A7.6 Vertically stratified water column with reduced salinity
  - A7.61 Water column with ephemeral thermal stratification and reduced salinity
  - A7.62 Water column with seasonal thermal stratification and reduced salinity
  - A7.63 Water column with permanent thermal stratification and reduced salinity
  - A7.64 Water column with ephemeral halocline and reduced salinity
  - A7.65 Water column with seasonal halocline and reduced salinity
  - A7.66 Water column with permanent halocline and reduced salinity
    - A7.661 Baltic offshore deep water above the halocline
    - A7.662 Baltic offshore deep water below the halocline
  - A7.67 Water column with ephemeral oxygen stratification and reduced salinity
  - A7.68 Water column with seasonal oxygen stratification and reduced salinity
  - A7.69 Water column with permanent oxygen stratification and reduced salinity
- A7.7 Fronts in reduced salinity water column
  - A7.71 Ephemeral fronts in reduced salinity water column
  - A7.72 Seasonal fronts in reduced salinity water column
  - A7.73 Persistent fronts in reduced salinity water column
- A7.8 Unstratified water column with full salinity
  - A7.81 Euphotic (epipelagic) zone in unstratified full salinity water
  - A7.82 Mesopelagic zone in unstratified full salinity water
  - A7.83 Bathypelagic zone in unstratified full salinity water
  - A7.84 Abyssopelagic zone in unstratified full salinity water
- A7.9 Vertically stratified water column with full salinity
  - A7.91 Water column with ephemeral thermal stratification and full salinity
  - A7.92 Water column with seasonal thermal stratification and full salinity
  - A7.93 Water column with permanent thermal stratification and full salinity
  - A7.94 Water column with ephemeral halocline and full salinity
  - A7.95 Water column with seasonal halocline and full salinity
  - A7.96 Water column with permanent halocline and full salinity
  - A7.97 Water column with ephemeral oxygen stratification and full salinity
  - A7.98 Water column with seasonal oxygen stratification and full salinity
  - A7.99 Water column with permanent oxygen stratification and full salinity
    - A7.991 Anoxic water column in water with permanent oxygen stratification and full salinity
- A7.A Fronts in full salinity water column
  - A7.A1 Ephemeral fronts in full salinity water column
  - A7.A2 Seasonal fronts in full salinity water column
  - A7.A3 Persistent fronts in full salinity water column

## **A8 Ice-associated marine habitats**

- A8.1 Sea ice
  - A8.11 Seasonal pack-ice
  - A8.12 Permanent pack-ice
  - A8.13 Ice floes
- A8.2 Freshwater ice
  - A8.21 Large tabular iceberg
  - A8.22 Medium iceberg
  - A8.23 Small iceberg
  - A8.24 Bergy bit
  - A8.25 Growler
- A8.3 Brine channels

- A8.31 Brine channels in first year ice
- A8.32 Brine channels in multi-year ice
- A8.4 Under-ice habitat
  - A8.41 Under-ice habitat in first-year ice
  - A8.42 Under-ice habitat in multi-year ice

## **B Coastal habitats**

### **B1 Coastal dunes and sandy shores**

- B1.1 Sand beach driftlines
  - B1.11 Boreo-Arctic sand beach annual communities
  - B1.12 Middle European sand beach annual communities
    - B1.121 Baltic sand beach annual communities
  - B1.13 Tethyan sand beach driftline communities
    - B1.131 Western Tethyan sand beach annual communities
    - B1.132 Pontic sand beach annual communities
    - B1.133 Pontic sand beach perennial communities
- B1.2 Sand beaches above the driftline
  - B1.21 Unvegetated sand beaches above the driftline
    - B1.211 Baltic unvegetated spits and bars above the driftline
    - B1.212 Baltic unvegetated sandy beaches above the driftline
  - B1.22 Biocenosis of supralittoral sands
    - B1.221 Facies of depressions with residual humidity
    - B1.222 Facies of quickly-drying wracks
    - B1.223 Facies of tree trunks which have been washed ashore
    - B1.224 Facies of phanerogams which have been washed ashore (upper part)
  - B1.23 Boreo-arctic sand beach perennial communities
    - B1.231 North Sea sand beach perennial communities
    - B1.232 Baltic sand beach perennial communities
    - B1.233 Boreo-Bothnian sand beach perennial communities
    - B1.234 Icelandic sand beach perennial communities
    - B1.235 Beach ridges consisting of algal or other plant material
  - B1.24 Sandy beach ridges with no or low vegetation
  - B1.25 Sandy beach ridges dominated by shrubs or trees
- B1.3 Shifting coastal dunes
  - B1.31 Embryonic shifting dunes
    - B1.311 Atlantic embryonic dunes
    - B1.312 Western Tethyan embryonic dunes
    - B1.313 Pontic embryonic dunes
    - B1.314 Large migrating dunes with no or low vegetation
  - B1.32 White dunes
    - B1.321 Atlantic white dunes
      - B1.3211 Coastal dunes: white dunes (sensu strictu)
      - B1.3212 Coastal dunes: green dunes
    - B1.322 Western Tethyan white dunes
    - B1.323 Canario-Saharan white dunes
    - B1.324 Pontic white dunes
  - B1.33 Young boreo-arctic dunes
- B1.4 Coastal stable dune grassland (grey dunes)
  - B1.41 Northern fixed grey dunes
    - B1.411 Crested-hairgrass dune communities
    - B1.412 Grey-hairgrass dune communities
    - B1.413 Mouse-ear dune communities
  - B1.42 Biscay fixed grey dunes
  - B1.43 Mediterraneo-Atlantic fixed grey dunes
  - B1.44 East Mediterranean fixed grey dunes
  - B1.45 Atlantic dune *Mesobromion* grassland
  - B1.46 Atlantic dune thermophile fringes
  - B1.47 Dune fine-grass annual communities

- B1.48** Tethyan dune deep sand therophyte communities
- B1.49** Dune Mediterranean xeric grassland
- B1.4A** Thermo-Atlantic succulent and semi-fixed dunes
- B1.4B** Pontic fixed dunes
  - B1.4B1** Western Pontic fixed dunes
    - B1.4B11** Southwestern Pontic fixed dunes
    - B1.4B12** Northwestern Pontic fixed dunes
  - B1.4B2** Eastern Pontic fixed dunes
  - B1.4B3** Southern Pontic fixed dunes
- B1.4C** Boreo-arctic grey dunes
- B1.5** Coastal dune heaths
  - B1.51** *Empetrum* brown dunes
  - B1.52** *Calluna vulgaris* brown dunes
    - B1.521** East Anglian ling coastal dune heaths
    - B1.522** French ling coastal dune heaths
    - B1.523** British bell heather coastal dune heaths
    - B1.524** French bell heather coastal dune heaths
    - B1.525** French Dorset heath coastal dune heaths
    - B1.526** Iberian green heather coastal dune heaths
    - B1.527** Iberian Dorset heath coastal dune heaths
    - B1.528** Northern ling coastal dune heaths
- B1.6** Coastal dune scrub
  - B1.61** Coastal dune thickets
    - B1.611** *Hippophae rhamnoides* dune thickets
    - B1.612** Western nemoral mixed dune thickets
  - B1.62** *Salix arenaria* mats
  - B1.63** Dune *Juniperus* thickets
    - B1.631** Dune prickly juniper thickets
    - B1.632** Lycian juniper thickets
    - B1.633** Rufescent juniper thickets
    - B1.634** Common juniper dune thickets
  - B1.64** Dune sclerophyllous scrubs and thickets
- B1.7** Coastal dune woods
  - B1.71** Coastal brown dunes covered with natural or almost natural coniferous forest, e.g. *Pinus silvestris*
  - B1.72** Coastal brown dunes covered with deciduous forest (*Fagus*, *Betula*, *Quercus*)
- B1.8** Moist and wet dune slacks
  - B1.81** Dune-slack pools
  - B1.82** Dune-slack pioneer swards
  - B1.83** Dune-slack fens
  - B1.84** Dune-slack grassland and heaths
  - B1.85** Dune-slack reedbeds, sedgebeds and canebeds
  - B1.86** Coastal dunes: wet dune slacks: dominated by shrubs or trees
- B1.9** Machair

## **B2 Coastal shingle**

- B2.1** Shingle beach driftlines
  - B2.11** Boreo-arctic gravel beach annual communities
  - B2.12** Atlantic and Baltic shingle beach drift lines
  - B2.13** Gravel beach communities of the mediterranean region
  - B2.14** Biocenosis of slowly drying wracks
- B2.2** Unvegetated mobile shingle beaches above the driftline
- B2.3** Upper shingle beaches with open vegetation
  - B2.31** Baltic *Crambe maritima* communities
  - B2.32** Channel *Crambe maritima* communities
  - B2.33** Atlantic *Crambe maritima* communities
- B2.4** Fixed shingle beaches, with herbaceous vegetation
  - B2.41** Euro-Siberian gravel bank grasslands
- B2.5** Shingle and gravel beaches with scrub
  - B2.51** Euro-Siberian gravel bank heaths

**B2.6** Shingle and gravel beach woodland

**B3** Rock cliffs, ledges and shores, including the supralittoral

**B3.1** Supralittoral rock (lichen or splash zone)

**B3.11** Lichens or small green algae on supralittoral and littoral fringe rock

**B3.111** Yellow and grey lichens on supralittoral rock

**B3.112** *Prasiola stipitata* on nitrate-enriched supralittoral or littoral fringe rock

**B3.113** *Verrucaria maura* on littoral fringe rock

**B3.1131** *Verrucaria maura* and sparse barnacles on exposed littoral fringe rock

**B3.1132** *Verrucaria maura* on very exposed to very sheltered upper littoral fringe rock

**B3.114** *Blidingia* spp. on vertical littoral fringe chalk

**B3.115** *Ulothrix flacca* and *Urospora* spp. on freshwater-influenced vertical littoral fringe soft rock

**B3.116** Association with *Entophysalis deusta* and *Verrucaria amphibia*

**B3.12** Rock stacks and islets above high tide level in splash zone

**B3.2** Unvegetated rock cliffs, ledges, shores and islets

**B3.21** High Arctic sea-cliffs and rocky shores

**B3.22** Atlantic low Arctic sea-cliffs and rocky shores

**B3.23** Temperate Atlantic sea-cliffs and rocky shores

**B3.24** Unvegetated Baltic rocky shores and cliffs

**B3.241** Baltic boulder beaches

**B3.242** Baltic unvegetated gently sloping limestone rocky shores

**B3.243** Baltic unvegetated gently sloping sandstone rocky shores

**B3.244** Baltic unvegetated gently sloping crystalline bedrock shores

**B3.245** Baltic unvegetated coastal limestone cliffs and caves

**B3.246** Baltic unvegetated coastal sandstone cliffs and caves

**B3.247** Baltic unvegetated coastal crystalline bedrock cliffs and caves

**B3.25** Subtropical Atlantic sea-cliffs and rocky shores

**B3.26** Mediterraneo-Pontic sea-cliffs and rocky shores

**B3.27** Rock stacks and islets above splash zone

**B3.3** Rock cliffs, ledges and shores, with angiosperms

**B3.31** Atlantic sea-cliff communities

**B3.32** Vegetated Baltic gently sloping rocky shores and cliffs

**B3.321** Baltic gently sloping limestone rocky shores with low vegetation

**B3.322** Baltic gently sloping limestone rocky shores dominated by shrubs or trees

**B3.323** Baltic gently sloping sandstone rocky shores with low vegetation

**B3.324** Baltic gently sloping sandstone rocky shores dominated by shrubs or trees

**B3.325** Baltic gently sloping crystalline bedrock shores with low vegetation

**B3.326** Baltic gently sloping crystalline bedrock shores dominated by shrubs or trees

**B3.327** Baltic coastal limestone cliffs and caves with low vegetation

**B3.328** Baltic coastal limestone cliffs and caves dominated by shrubs or trees

**B3.329** Baltic coastal sandstone cliffs and caves with low vegetation

**B3.32A** Baltic coastal sandstone cliffs and caves dominated by shrubs or trees

**B3.32B** Baltic coastal crystalline bedrock cliffs and caves with low vegetation

**B3.32C** Baltic coastal crystalline bedrock cliffs and caves dominated by shrubs or trees

**B3.33** Tethyan sea-cliff communities

**B3.331** Western Tethyan sea-cliff communities

**B3.332** Pontic sea-cliff communities

**B3.3321** Western Pontic herbaceous sea-cliff communities

**B3.3322** Western Pontic sea-cliff *Ficus* thickets

**B3.3323** Western Pontic low cliff communities

**B3.3324** Eastern Pontic sea-cliff communities

**B3.3325** Southern Pontic sea-cliff communities

**B3.34** Canary Island and Madeiran sea-cliff communities

**B3.35** Azorean sea-cliff communities

**B3.36** Coastal lagoon cliff communities

**B3.361** Pantellerian lagoon cliff communities

**B3.362** Pontic saline lagoon cliffs

**B3.4** Soft sea-cliffs, often vegetated

**B3.41** Baltic chalk and moraine cliffs



- B3.411** Baltic unvegetated coastal chalk cliffs and caves
- B3.412** Baltic coastal chalk cliffs and caves with low vegetation
- B3.413** Baltic coastal chalk cliffs and caves dominated by shrubs or trees
- B3.414** Baltic unvegetated coastal moraine cliffs and caves
- B3.415** Baltic unvegetated coastal moraine cliffs and caves with low vegetation
- B3.416** Baltic unvegetated coastal moraine cliffs and caves dominated by shrubs or trees

## **C Inland surface waters**

### **C1 Surface standing waters**

- C1.1** Permanent oligotrophic lakes, ponds and pools
  - C1.11** Benthic communities of oligotrophic waterbodies
  - C1.12** Rooted submerged vegetation of oligotrophic waterbodies
  - C1.13** Rooted floating vegetation of oligotrophic waterbodies
    - C1.131** Oligotrophic pondweed communities
  - C1.14** Charophyte submerged carpets in oligotrophic waterbodies
    - C1.141** *Chara* carpets
    - C1.142** *Nitella* carpets
  - C1.15** Peatmoss and *Utricularia* communities of oligotrophic waterbodies
- C1.2** Permanent mesotrophic lakes, ponds and pools
  - C1.21** Benthic communities of mesotrophic waterbodies
  - C1.22** Free-floating vegetation of mesotrophic waterbodies
    - C1.221** Duckweed covers
    - C1.222** Floating *Hydrocharis morsus-ranae* rafts
    - C1.223** Floating *Stratiotes aloides* rafts
    - C1.224** Floating *Utricularia australis* and *Utricularia vulgaris* colonies
    - C1.225** Floating *Salvinia natans* mats
    - C1.226** Floating *Aldrovanda vesiculosa* communities
  - C1.23** Rooted submerged vegetation of mesotrophic waterbodies
    - C1.231** Large pondweed beds
    - C1.232** Small pondweed communities
  - C1.24** Rooted floating vegetation of mesotrophic waterbodies
    - C1.241** Floating broad-leaved carpets
      - C1.2411** Waterlily beds
        - C1.24111** *Nuphar* beds
        - C1.24112** Northern *Nymphaea* beds
        - C1.24113** Transylvanian hot-spring lotus beds
      - C1.2412** Water chestnut carpets
      - C1.2413** Fringed waterlily carpets
      - C1.2414** Broad-leaved pondweed carpets
      - C1.2415** Amphibious bistort carpets
      - C1.2416** *Nelumbo nucifera* beds
    - C1.25** Charophyte submerged carpets in mesotrophic waterbodies
    - C1.26** Peatmoss and *Utricularia* communities of mesotrophic waterbodies
  - C1.3** Permanent eutrophic lakes, ponds and pools
    - C1.31** Benthic communities of eutrophic waterbodies
    - C1.32** Free-floating vegetation of eutrophic waterbodies
    - C1.33** Rooted submerged vegetation of eutrophic waterbodies
    - C1.34** Rooted floating vegetation of eutrophic waterbodies
      - C1.341** Shallow-water floating communities
        - C1.3411** *Ranunculus* communities in shallow water
        - C1.3412** Water starwort communities
        - C1.3413** *Hottonia palustris* beds in shallow water
  - C1.4** Permanent dystrophic lakes, ponds and pools
    - C1.41** Benthic communities of dystrophic waterbodies
    - C1.42** Rooted submerged vegetation of dystrophic waterbodies
    - C1.43** Rooted floating vegetation of dystrophic waterbodies
    - C1.44** Charophyte submerged carpets in dystrophic waterbodies
    - C1.45** Peatmoss and *Utricularia* communities of dystrophic waterbodies

- C1.46** Raised bog pools
  - C1.461** Bog eye (kolk)
  - C1.462** Lesser bog pools
- C1.47** Lagg
- C1.5** Permanent inland saline and brackish lakes, ponds and pools
  - C1.51** Athalassic saline lakes
    - C1.511** Salt basins and salt basin pelagic communities
      - C1.5111** Boreal, nemoral and arctic salt lakes
      - C1.5112** Mediterranean salt lakes
      - C1.5113** Ponto-Pannonic salt lakes
    - C1.512** Submerged charophyte carpets in inland saline or hypersaline waterbodies
    - C1.513** Salt basin benthic communities
  - C1.52** Athalassic saline euhydrophyte communities
    - C1.521** Submerged macrophyte communities of inland saline and brackish waters
      - C1.5211** Athalassic tasselweed communities
      - C1.5212** Athalassic seagrass communities
    - C1.523** Brackish water floating vegetation
- C1.6** Temporary lakes, ponds and pools
  - C1.61** Lime-deficient oligotrophic temporary waters
  - C1.62** Mesotrophic temporary waters
  - C1.63** Eutrophic temporary waters
  - C1.64** Dystrophic temporary waters
  - C1.65** Lime-rich oligo-mesotrophic temporary waters
  - C1.66** Temporary inland saline and brackish waters
  - C1.67** Turlough and lake-bottom meadows
  - C1.68** Benthic communities of temporary waters
  - C1.69** Rooted floating vegetation of temporary waterbodies
- C1.7** Permanent lake ice

## **C2 Surface running waters**

- C2.1** Springs, spring brooks and geysers
  - C2.11** Soft water springs
    - C2.111** Fennoscandian mineral-rich springs and springfens
  - C2.12** Hard water springs
    - C2.121** Petrifying springs with tufa or travertine formations
  - C2.13** Geysers
  - C2.14** Thermal springs
    - C2.141** Mediterranean thermal springs
    - C2.142** Macaronesian thermal springs
    - C2.143** Icelandic thermal springs
    - C2.144** Peri-Alpine thermal springs
    - C2.145** Peri-Caucasian hot springs
  - C2.15** Saline springs
  - C2.16** Crenal streams (spring brooks)
  - C2.17** Thermal spring brooks
  - C2.18** Acid oligotrophic vegetation of spring brooks
  - C2.19** Lime-rich oligotrophic vegetation of spring brooks
  - C2.1A** Mesotrophic vegetation of spring brooks
  - C2.1B** Eutrophic vegetation of spring brooks
- C2.2** Permanent non-tidal, fast, turbulent watercourses
  - C2.21** Epirhithral and metarhithral streams
  - C2.22** Hyporhithral streams
  - C2.23** Glacial meltwaters
  - C2.24** Waterfalls
  - C2.25** Acid oligotrophic vegetation of fast-flowing streams
  - C2.26** Lime-rich oligotrophic vegetation of fast-flowing streams
  - C2.27** Mesotrophic vegetation of fast-flowing streams
  - C2.28** Eutrophic vegetation of fast-flowing streams
- C2.3** Permanent non-tidal, smooth-flowing watercourses
  - C2.31** Epipotamal streams

- C2.32 Metapotamal and hypopotamal streams
- C2.33 Mesotrophic vegetation of slow-flowing rivers
- C2.34 Eutrophic vegetation of slow-flowing rivers
- C2.4 Tidal rivers, upstream from the estuary
  - C2.41 Brackish water tidal rivers
  - C2.42 Freshwater tidal rivers
  - C2.43 Mesotrophic vegetation of tidal rivers
  - C2.44 Eutrophic vegetation of tidal rivers
- C2.5 Temporary running waters
- C2.6 Films of water flowing over rocky watercourse margins

### **C3 Littoral zone of inland surface waterbodies**

- C3.1 Species-rich helophyte beds
  - C3.11 Beds of small helophytes of fast-flowing waters
- C3.2 Water-fringing reedbeds and tall helophytes other than canes
  - C3.21 *Phragmites australis* beds
    - C3.211 Flooded *Phragmites* beds
      - C3.2111 Freshwater *Phragmites* beds
  - C3.22 *Scirpus lacustris* beds
  - C3.23 *Typha* beds
    - C3.231 *Typha latifolia* beds
    - C3.232 *Typha angustifolia* beds
  - C3.24 Medium-tall non-graminoid waterside communities
    - C3.241 Arrowhead communities
    - C3.242 Neglected bur-reed communities
    - C3.243 Erect bur-reed communities
    - C3.244 Sweet flag communities
    - C3.245 Flowering rush communities
    - C3.246 Water dropwort-great yellowcress communities
    - C3.247 Water horsetail beds
    - C3.248 Water parsnip communities
    - C3.249 Maretail beds
    - C3.24A Common spikerush beds
    - C3.24B Iris beds
  - C3.25 Water-fringe medium-tall grass beds
    - C3.251 Sweetgrass beds
    - C3.252 Eurasian *Leersia* beds
    - C3.253 Eurasian *Scolochloa* beds
    - C3.254 Water-fringe *Calamagrostis* beds
  - C3.26 *Phalaris arundinacea* beds
  - C3.27 Halophile *Scirpus* beds
  - C3.28 Riparian *Cladium mariscus* beds
- C3.3 Water-fringing beds of tall canes
  - C3.31 *Saccharum ravennae* communities
  - C3.32 *Arundo donax* beds
- C3.4 Species-poor beds of low-growing water-fringing or amphibious vegetation
  - C3.41 Euro-Siberian perennial amphibious communities
    - C3.411 Shoreweed lawns, lobelia ponds, quillwort swards
      - C3.4111 Shoreweed lawns
      - C3.4112 Lobelia ponds
      - C3.4113 Euro-Siberian quillwort swards
      - C3.4114 Floating bur-reed communities
      - C3.4115 Boreo-Arctic lake mud communities
      - C3.4116 *Myriophyllum alterniflorum* communities
    - C3.412 Spike-rush shallow-water swards
    - C3.413 Acid pool fringe shallow-water swards
      - C3.4131 *Eleocharis multicaulis* communities
      - C3.4132 Dune slack shoreweed swards
      - C3.4133 *Pilularia* swards
      - C3.4134 *Juncus bulbosus* communities



## D Mires, bogs and fens

### D1 Raised and blanket bogs

#### D1.1 Raised bogs

##### D1.11 Active, relatively undamaged raised bogs

##### D1.111 Raised bog hummocks, ridges and lawns

##### D1.1111 Colourful sphagnum hummocks (bulten)

D1.11111 *Sphagnum magellanicum* hummocks

D1.11112 *Sphagnum fuscum* hummocks

D1.11113 *Sphagnum rubellum* hummock wreaths

D1.11114 *Sphagnum rubellum* hummocks

D1.11115 *Sphagnum imbricatum* hummocks

D1.11116 *Sphagnum papillosum* hummocks

D1.11117 *Sphagnum capillifolium* hummocks

D1.11118 *Sphagnum angustifolium* hummocks

##### D1.1112 Bog cottonsedge-sphagnum lawns and green hummock bases

D1.11121 *Eriophorum-Sphagnum tenellum* lawns

D1.11122 *Eriophorum-Sphagnum pulchrum* lawns

D1.11123 *Eriophorum-Sphagnum papillosum* lawns

D1.11124 *Eriophorum-Sphagnum capillifolium* lawns

D1.11125 *Eriophorum-Sphagnum recurvum* lawns

D1.11126 *Eriophorum-Sphagnum fuscum* lawns

D1.11127 *Eriophorum-Sphagnum rubellum* lawns

D1.11128 *Eriophorum-Sphagnum balticum* lawns

D1.11129 *Eriophorum-Sphagnum angustifolium* lawns

D1.1112A *Eriophorum-Sphagnum magellanicum* lawns

##### D1.1113 Dwarf shrub hummocks

D1.11131 Ling dwarf shrub hummocks

D1.11132 Cross-leaved heather shrub hummocks

D1.11133 Crowberry shrub hummocks

D1.11134 *Vaccinium* shrub hummocks

D1.11135 Labrador tea shrub hummocks

D1.11136 Bog myrtle hummocks

D1.11137 Dwarf birch hummocks

D1.11138 Cloudberry hummocks

D1.11139 Leatherleaf hummocks

##### D1.1114 Bog deergrass communities

##### D1.1115 Bog *Erica-Sphagnum* communities

##### D1.1116 Raised bog species-poor cottonsedge communities

##### D1.112 Raised bog hollows (schlenken)

D1.1121 Sphagnum schlenken

D1.1122 Mud-bottom schlenken

##### D1.113 Raised bog seeps and soaks

D1.1131 Bog asphodel seeps

D1.1132 Bog myrtle soaks

##### D1.114 Boreoalpine dwarf-shrub hummocks on raised bogs

##### D1.12 Damaged, inactive bogs

D1.121 Damaged, inactive bogs, dominated by dense *Molinia*

D1.122 Drained raised bogs

D1.123 Ditched raised bogs

##### D1.13 Condensation mires

D1.14 *Myrica gale* scrub on raised bogs

D1.15 Wet bare peat and peat hags on raised bogs

#### D1.2 Blanket bogs

D1.21 Hyperoceanic low-altitude blanket bogs, typically with dominant *Trichophorum*

D1.211 Hiberno-Britannic lowland blanket bog plateaux

D1.212 Hiberno-Britannic lowland blanket bog sphagnum carpets

D1.213 Hiberno-Britannic lowland blanket bog *Trichophorum cespitosum* heaths

D1.214 Western Irish *Drosera intermedia* flush communities

- D1.215 Western Irish *Juncus bulbosus* flush communities
- D1.216 Hiberno-Britannic lowland blanket bog hollows and pools
- D1.22 Montane blanket bogs, *Calluna* and *Eriophorum vaginatum* often dominant
  - D1.221 Hiberno-Britannic *Eriophorum-Calluna* blanket bogs
  - D1.222 Britannic *Eriophorum vaginatum* blanket bogs
  - D1.223 Hiberno-Britannic upland blanket bog sphagnum mats
  - D1.224 Hiberno-Britannic dwarf shrub-*Eriophorum* upland bogs
  - D1.225 Hiberno-Britannic *Rhacomitrium lanuginosum* upland bog hummocks
  - D1.226 Hiberno-Britannic upland blanket bog wet heaths
  - D1.227 Hiberno-Britannic upland blanket bog hollows and pools
- D1.23 Boreo-Atlantic blanket bogs
  - D1.231 Southern boreo-Atlantic *Eriophorum - Calluna* bogs
  - D1.232 Southern boreo-Atlantic *Calluna - Rhacomitrium lanuginosum* moss bogs
  - D1.233 Southern boreo-Atlantic blanket bog hollow communities
  - D1.234 Northern boreo-Atlantic *Calluna - Empetrum - Sphagnum fuscum* blanket bogs
  - D1.235 Northern boreo-Atlantic blanket bog hollow communities
- D1.24 Wet bare peat and peat hags on blanket bogs

## D2 Valley mires, poor fens and transition mires

- D2.1 Valley mires
  - D2.11 Acid valley mires
  - D2.12 Basic and neutral valley mires
- D2.2 Poor fens and soft-water spring mires
  - D2.21 *Eriophorum scheuchzeri* fens
    - D2.211 Alpidic cottonsedge lake girdles
    - D2.212 Boreal *Eriophorum scheuchzeri* fens
  - D2.22 *Carex nigra*, *Carex canescens*, *Carex echinata* fens
    - D2.221 Peri-Alpine black-white-star and tall bog sedge fens
      - D2.2211 Subalpine black sedge fens
      - D2.2212 Central Alpine tall bog sedge fens
    - D2.222 Sub-Atlantic black-white-star sedge fens
      - D2.2221 Sub-Atlantic *Carex* acidic fens
      - D2.2222 Sub-Atlantic *Carex-Juncus* acidic fens
      - D2.2223 Sub-Atlantic *Carex-Sphagnum* fens
      - D2.2224 Sub-Atlantic *Carex-Juncus-Sphagnum* fens
      - D2.2225 Sub-Atlantic *Agrostis-Sphagnum* fens
    - D2.223 British black-white-star sedge acidic fens
    - D2.224 Pyrenean black sedge acidic fens
    - D2.225 Iberian black sedge acidic fens
    - D2.226 Peri-Danubian black-white-star sedge fens
      - D2.2261 Carpathian black-white-star sedge acidic fens
      - D2.2262 Dinaric black-star sedge acidic fens
      - D2.2263 Rhodopide black-star sedge acidic fens
      - D2.2264 Peri-Pannonic black-white-star sedge fens
      - D2.2265 Balkanic black-star sedge fens
      - D2.2266 Moeso-Macedonian black-star sedge fens
  - D2.23 Apennine acidic fens
  - D2.24 *Carex intricata* pozzines (wet depressions surrounding glacial lakes)
    - D2.241 Nevadan Borreguile fens
    - D2.242 Corsican intricatated sedge pozzines
    - D2.243 Nebrodi pozzines
  - D2.25 *Trichophorum cespitosum* and *Narthecium ossifragum* acidic fens
    - D2.251 Perialpine deergrass acidic fens
    - D2.252 Pyrenean deergrass and bog asphodel acidic fens
    - D2.253 Cantabrian deergrass and bog asphodel acidic fens
    - D2.254 Middle European deergrass and bog asphodel acidic fens
    - D2.255 Corsican deergrass fens
  - D2.26 *Eriophorum angustifolium* fens
  - D2.27 Dunal sedge acidic fens
  - D2.28 Illyrio-Moesian acidic fens

- D2.281** Pelagonide fens
  - D2.2811** Pelagonide bog-asphodel fens
  - D2.2812** Pelagonide Macedonian sedge fens
- D2.282** Montenegrine willemetia fens
- D2.283** Illyrian sedge-beak-sedge fens
- D2.29** Boreal acidic sphagnum fens
  - D2.291** Boreal *Eriophorum vaginatum* sphagnum fens
    - D2.2911** *Eriophorum vaginatum*-*Carex pauciflora* sphagnum fens
    - D2.2912** *Eriophorum vaginatum*-deergrass-sphagnum fens
    - D2.2913** Boreal stiff sedge-sphagnum fens
  - D2.292** Boreal purple moorgrass-deergrass fens
    - D2.2921** Boreal purple moorgrass-deergrass-sphagnum fens
    - D2.2922** Boreal purple moorgrass-deergrass-brown moss-sphagnum fens
  - D2.293** Boreoalpine *Sphagnum lindbergii* mires
    - D2.2931** Sedge and cottongrass boreoalpine *Sphagnum lindbergii* mires
    - D2.2932** Deergrass boreoalpine *Sphagnum lindbergii* mires
- D2.2A** *Myrica gale* scrub on poor fens
- D2.2B** Caucasian acidic fens
- D2.2C** Soft water spring mires
  - D2.2C1** Soft water bryophyte springs
    - D2.2C11** Montane soft water moss springs
    - D2.2C12** *Philonotis-Saxifraga stellaris* springs
    - D2.2C13** *Pohlia* springs
    - D2.2C14** Boreoalpine soft water hepatic springs
    - D2.2C15** Britannic *Anthelia* springs
    - D2.2C16** Boreal meadow springs
    - D2.2C17** Soft water lichen springs
    - D2.2C18** Permafrost seeps
  - D2.2C2** Bittercress springs
  - D2.2C3** Oro-Mediterranean soft water spring mires
- D2.3** Transition mires and quaking bogs
  - D2.31** *Carex lasiocarpa* swards
    - D2.311** Brown moss slender-sedge swards
    - D2.312** Sphagnum slender-sedge swards
    - D2.313** Brown moss-sphagnum slender-sedge swards
  - D2.32** *Carex diandra* quaking mires
  - D2.33** *Carex rostrata* quaking mires
    - D2.331** Acidocline bottle sedge quaking mires
    - D2.332** Basicline bottle sedge quaking mires
      - D2.3321** Basicline sphagnum-bottle sedge quaking mires
      - D2.3322** Brown moss-bottle sedge quaking mires
  - D2.34** *Carex limosa* swards
    - D2.341** Brown moss-mud sedge swards
    - D2.342** Sphagnum-mud sedge swards
    - D2.343** Boreal mud sedge swards
  - D2.35** *Carex chordorrhiza* swards
  - D2.36** *Carex heleonastes* swards
  - D2.37** *Rhynchospora alba* quaking bogs
  - D2.38** *Sphagnum* and *Eriophorum* rafts
  - D2.39** *Menyanthes trifoliata* and *Potentilla palustris* rafts
    - D2.391** Boreo-nemoral bog bean and marsh cinquefoil rafts
    - D2.392** Oroboreal bog bean-sphagnum rafts
    - D2.393** Boreoalpine dwarf willow quaking bogs
    - D2.394** Boreal bogbean-brown moss carpets
    - D2.395** Boreal cowbane-willowherb-*Calliargon* quaking bogs
    - D2.396** Fennoscandian *Paludella* spring bogs
  - D2.3A** *Calla palustris* mires
  - D2.3B** Brown moss carpets
  - D2.3C** *Eriophorum vaginatum* quaking bogs
  - D2.3D** *Molinia caerulea* quaking bogs

- D2.3E *Calamagrostis stricta* quaking bogs
- D2.3F *Scirpus hudsonianus* (*Trichophorum alpinum*) quaking bogs
- D2.3G Iberian quaking bogs
- D2.3H Wet, open, acid peat and sand, with *Rhynchospora alba* and *Drosera*
  - D2.3H1 Nemoral bare peat communities
  - D2.3H2 Boreal mud-bottom communities

### D3 Aapa, palsa and polygon mires

- D3.1 Palsa mires
  - D3.11 Palsa mounds
    - D3.111 Northern Fennoscandian palsa mounds
    - D3.112 Icelandic palsa mounds
  - D3.12 *Sphagnum fuscum* pounikko hummocks
  - D3.13 Palsa mire flarks
- D3.2 Aapa mires
  - D3.21 Aapa strings
    - D3.211 *Sphagnum fuscum* aapa strings
    - D3.212 Sedge-*Sphagnum papillosum* aapa strings
    - D3.213 Cottonsedge aapa strings
    - D3.214 Purple moorgrass aapa strings
    - D3.215 Dwarf shrub aapa strings
  - D3.22 Aapa flarks
    - D3.221 Algae and hepatic flarks
    - D3.222 Sphagnum flarks
    - D3.223 Brown moss flarks
    - D3.224 Small sedge mud-bottom flarks
    - D3.225 Small-sedge rich fen flarks
    - D3.226 Small-sedge acidic fen flarks
    - D3.227 Small-sedge transition mire flarks
    - D3.228 Tall sedge flarks
- D3.3 Polygon mires
  - D3.31 Polygon mire ridges
  - D3.32 Polygon mire hollows

### D4 Base-rich fens and calcareous spring mires

- D4.1 Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks
  - D4.11 *Schoenus nigricans* fens
    - D4.111 Hiberno-Britannic black bogrush fens
    - D4.112 Germano-Gallic black bogrush fens
    - D4.113 Central European black bogrush fens
    - D4.114 Illyrian black bogrush fens
    - D4.115 Pannonic black bogrush fens
    - D4.116 Intra-Carpathian black bogrush fens
  - D4.12 *Schoenus ferrugineus* fens
    - D4.121 Peri-Alpine brown bogrush fens
    - D4.122 Scottish brown bogrush fens
    - D4.123 Northern brown bogrush fens
  - D4.13 Subcontinental *Carex davalliana* fens
    - D4.131 Peri-Alpine Davall sedge fens
    - D4.132 Deergass Davall sedge fens
    - D4.133 Bohemio-Pannonic Davall sedge fens
    - D4.134 Carpathian Davall sedge fens
    - D4.135 Northern Davall sedge fens
    - D4.136 Dinaric carnation-tawny sedge fens
  - D4.14 Pyrenean *Carex davalliana* fens
  - D4.15 *Carex dioica*, *Carex pulicaris* and *Carex flava* fens
    - D4.151 British dioecious-yellow sedge fens
    - D4.152 Northern dioecious-yellow-tawny sedge fens
      - D4.1521 Fennoscandian brown moss yellow sedge fens



- D4.1522 Fennoscandian *Sphagnum warnstorffii* yellow sedge fens
- D4.1523 Eastern Baltic tawny sedge fens
- D4.153 Middle European yellow sedge fens
- D4.154 Cantabrian yellow sedge fens
- D4.155 Eastern Iberian rich fens
- D4.156 Flea sedge fens
- D4.16 *Carex nigra* alkaline fens
  - D4.161 Middle European black sedge rich fens
  - D4.162 Boreal black sedge-brown moss fens
  - D4.163 Icelandic black sedge-brown moss fens
- D4.17 *Carex saxatilis* fens
- D4.18 *Carex frigida* fens
- D4.19 British *Carex demissa* - *Saxifraga aizoides* flushes
- D4.1A *Eleocharis quinqueflora* fens
- D4.1B Mediterranean-Turanian small sedge fens
- D4.1C *Carex rostrata* alkaline fens
- D4.1D *Scirpus hudsonianus* (*Trichophorum alpinum*) alkaline fens
- D4.1E *Trichophorum cespitosum* alkaline fens
- D4.1F Middle European *Blysmus compressus* fens
- D4.1G Small herb alkaline fens
- D4.1H Calcareous dunal *Juncus* - sedge fens
- D4.1I Tall herb fens
- D4.1J Icelandic *Carex bigelowii* fens
- D4.1K *Sesleria caerulea* fens
- D4.1L Icelandic *Equisetum palustre* fens
- D4.1M *Myrica gale* scrub on rich fens
- D4.1N Hard water spring mires
  - D4.1N1 Middle European calcareous spring mires
    - D4.1N11 Hard water bryophyte springs
    - D4.1N12 Great horsetail springs
    - D4.1N13 Variegated horsetail springs
    - D4.1N14 Small herb calcareous springs
    - D4.1N15 Polish scurvy-grass springs
    - D4.1N16 Carpathian oriental leopardsbane communities
  - D4.1N2 Boreo-alpine calcareous spring mires
  - D4.1N3 Illyro-Balkan calcareous spring mires
  - D4.1N4 Caucasian calcareous spring mires
  - D4.1N5 Anatolian calcareous spring mires
- D4.2 Basic mountain flushes and streamsides, with a rich arctic-montane flora
  - D4.21 Arctoalpine *Kobresia simpliciuscula* and *Carex microglochin* swards
  - D4.22 Alpine riverine *Carex maritima* (*Carex incurva*) swards
  - D4.23 Arctoalpine riverine *Equisetum*, *Typha* and *Juncus* swards
  - D4.24 British mica flushes
  - D4.25 Boreal *Carex atrofusca* swards
  - D4.26 Boreal marsh-fens
    - D4.261 *Eriophorum* marsh-fens
    - D4.262 Grass and forb marsh-fens
    - D4.263 *Carex* marsh-fens

## D5 Sedge and reedbeds, normally without free-standing water

- D5.1 Reedbeds normally without free-standing water
  - D5.11 *Phragmites australis* beds normally without free-standing water
    - D5.111 Dry freshwater *Phragmites* beds
  - D5.12 *Scirpus lacustris* beds normally without free-standing water
  - D5.13 *Typha* beds normally without free-standing water
    - D5.131 *Typha latifolia* beds normally without free-standing water
    - D5.132 *Typha angustifolia* beds normally without free-standing water
- D5.2 Beds of large sedges normally without free-standing water
  - D5.21 Beds of large *Carex* spp.
    - D5.211 Brown sedge beds

- D5.212** Slender tufted sedge beds and related communities
    - D5.2121** Slender tufted sedge beds
    - D5.2122** Lesser pond sedge beds
    - D5.2123** Inn sedge beds
    - D5.2124** Banat sedge beds
    - D5.2125** Water sedge beds
    - D5.2126** Brotero sedge beds
    - D5.2127** *Carex melanostachya* beds
    - D5.2128** *Carex hispida* beds
  - D5.213** Greater pond sedge beds
  - D5.214** Bottle, bladder and slender sedge beds
    - D5.2141** Bottle sedge beds
    - D5.2142** Bladder sedge beds
    - D5.2143** Slender sedge beds
  - D5.215** Tufted sedge and sward sedge tussocks
    - D5.2151** Tufted sedge tussocks
    - D5.2152** Sward sedge tussocks
  - D5.216** Greater tussock sedge tussocks
  - D5.217** Smaller tussock sedge tussocks
  - D5.218** Cyperus sedge tussocks
  - D5.219** Fox sedge tussocks
    - D5.2191** True fox sedge tussocks
    - D5.2192** False fox sedge tussocks
  - D5.21A** Club sedge beds
  - D5.21B** Icelandic sedge beds
  - D5.22** Tall *Cyperus* beds, other than *Cyperus papyrus*
    - D5.221** Common galingale beds
  - D5.23** *Cyperus papyrus* swamps
    - D5.231** Cyane papyrus swamp
  - D5.24** Fen *Cladium mariscus* beds
  - D5.25** Valencia *Cladium* islands
  - D5.3** Swamps and marshes dominated by *Juncus effusus* or other large *Juncus* spp.
- D6 Inland saline and brackish marshes and reedbeds**
- D6.1** Inland saltmarshes
    - D6.11** Interior European *Puccinellia distans* meadows
    - D6.12** Interior European saltmarsh *Juncus gerardi* and *Elymus repens* beds
    - D6.13** Interior European *Halimione pedunculata* beds
    - D6.14** Swards of Carpathian travertine concretions
    - D6.15** Interior Iberian *Microcnemum* and *Salicornia* swards
      - D6.151** Iberian *Microcnemum* swards
      - D6.152** Iberian interior *Salicornia* swards
    - D6.16** Interior central European and Anatolian *Salicornia*, *Microcnemum*, *Suaeda* and *Salsola* swards
      - D6.161** Pannonic glasswort-seablite-saltwort swards
        - D6.1611** Pannonic glasswort swards
        - D6.1612** Pannonic seablite swards
        - D6.1613** Pannonic saltwort communities
        - D6.1614** Pelagonian seablite swards
      - D6.162** Western Pontic glasswort-seablite-saltwort swards
      - D6.163** Central Eurasian glasswort swards
    - D6.17** Western European continental glasswort beds
  - D6.2** Inland saline or brackish species-poor helophyte beds normally without free-standing water
    - D6.21** Dry halophile *Phragmites* beds
    - D6.22** *Cyperus laevigatus* beds
    - D6.23** Interior Iberian salt pan meadows

## **E Grasslands and lands dominated by forbs, mosses or lichens**

### **E1 Dry grasslands**

- E1.1** Inland sand and rock with open vegetation
  - E1.11** Euro-Siberian rock debris swards
    - E1.111** Middle European stonecrop swards
    - E1.112** *Sempervivum* or *Jovibarba* communities on rock debris
    - E1.113** Middle European grassy rock debris communities
      - E1.1131** *Poa badensis* and garlic rock debris swards
      - E1.1132** *Poa compressa* rock debris swards
      - E1.1133** *Melica ciliata* rock debris swards
    - E1.114** Middle European rock debris small forb communities
    - E1.115** Fenno-Scandian pioneer rock swards
  - E1.12** Euro-Siberian pioneer calcareous sand swards
- E1.2** Perennial calcareous grassland and basic steppes
  - E1.21** Helleno-Balkan *Satureja montana* steppes
  - E1.22** Arid subcontinental steppic grassland (*Festucion valesiaca*)
    - E1.221** Sub-Pannonic steppes
      - E1.2211** Pre-Noric sub-Pannonic steppes
      - E1.2212** Pre-Bohemian sub-Pannonic steppes
      - E1.2213** Central Hungarian sub-Pannonic steppes
      - E1.2214** Pre-Illyrian sub-Pannonic steppes
      - E1.2215** Andropogonid sub-Pannonic steppes
      - E1.2216** Sub-Pannonic rock steppes
    - E1.222** Moesio-Carpathian steppes
      - E1.2221** Moesio-Carpathian feathergrass-fescue steppes
      - E1.2222** Moesio-Carpathian andropogonid steppes
  - E1.23** Meso-xerophile subcontinental meadow-steppes (*Cirsio-Brachypodion*)
    - E1.231** Sub-Pannonic meadow-steppes
    - E1.232** Sub-Pannonic wooded steppe meadows
    - E1.233** Dacio-Pannonic meadow-steppes
    - E1.234** Moesio-Carpathian meadow-steppes
  - E1.24** Central alpine arid grassland (*Stipo-Poion*)
  - E1.25** Alvar steppes
  - E1.26** Sub-Atlantic semi-dry calcareous grassland
    - E1.261** Northwestern semidry calcareous grasslands
      - E1.2611** Fenno-Scandian sub-Atlantic calcicolous grasslands
      - E1.2612** Hibernian dry calcicolous grasslands
      - E1.2613** Scotian dry calcicolous grasslands
      - E1.2614** Britannic *Sesleria* dry calcicolous grasslands
      - E1.2615** Vecto-Cambrian *Festuca-Carlina* grasslands
      - E1.2616** Southern Britannic dry calcicolous grasslands
    - E1.262** Middle European *Bromus erectus* semidry grasslands
      - E1.2621** Mosan *Mesobromion*
      - E1.2622** Low Meuse *Mesobromion*
      - E1.2623** Harz *Mesobromion*
      - E1.2624** Oder *Mesobromion*
      - E1.2625** Paris basin Cretaceous *Mesobromion*
      - E1.2626** Parisian Tertiary *Mesobromion*
      - E1.2627** Paris basin Jurassic *Mesobromion*
      - E1.2628** Middle Rhine *Mesobromion*
      - E1.2629** Upper Rhine *Mesobromion*
      - E1.262A** Black Forest *Mesobromion*
      - E1.262B** Western Jura *Mesobromion*
      - E1.262C** Swabian *Mesobromion*
      - E1.262D** Franconian *Mesobromion*
      - E1.262E** Northwestern pre-Alpine *Mesobromion*

- E1.262F** Eastern peri-Alpine *Mesobromion*
- E1.262G** Ligerian *Mesobromion*
- E1.262H** Aquitanian *Mesobromion*
- E1.262I** Quercy *Mesobromion*
- E1.262J** Western Pyrenean *Mesobromion*
- E1.262K** Western Iberian *Mesobromion*
- E1.262L** Eastern Hercynian *Mesobromion*
- E1.263** Middle European *Brachypodium* semidry grasslands
- E1.264** Alluvial and humid *Mesobromion* grasslands
- E1.265** Middle European *Sesleria* semidry grasslands
- E1.266** Sub-Mediterranean *Mesobromion*
- E1.267** Insubrian *Mesobromion* grasslands
- E1.268** Central Apennine *Mesobromion* grasslands
- E1.269** Illyrian *Mesobromion* grasslands
  - E1.2691** Illyrian brome-plantain grasslands
  - E1.2692** Illyrian *Sesleria* grasslands
  - E1.2693** Illyrian *Molinia-Gladiolus* grasslands
- E1.27** Sub-Atlantic very dry calcareous grassland
  - E1.271** Southern Britannic *Xerobromion* grasslands
  - E1.272** Middle European *Xerobromion* grasslands
    - E1.2721** Mosan *Xerobromion*
    - E1.2722** Harz *Xerobromion*
    - E1.2723** Paris basin Cretaceous *Xerobromion*
    - E1.2724** Parisian Tertiary *Xerobromion*
    - E1.2725** Paris basin Jurassic *Xerobromion*
    - E1.2726** Middle Rhine *Xerobromion*
    - E1.2727** Upper Rhine *Xerobromion*
    - E1.2728** Western Jura *Xerobromion*
    - E1.2729** Swabian *Xerobromion*
    - E1.272A** Franconian *Xerobromion*
    - E1.272B** Northwestern pre-Alpine *Xerobromion*
    - E1.272C** Bavarian *Xerobromion*
    - E1.272D** Ligerian *Xerobromion*
    - E1.272E** Aquitanian *Xerobromion*
    - E1.272F** Quercy *Xerobromion*
    - E1.272G** Pyrenean *Xerobromion*
    - E1.272H** Southwestern Alpine *Xerobromion*
    - E1.272I** Northern Apennine *Xerobromion*
  - E1.273** Hercynio-Jurassic blue moorgrass *Xerobromion*
- E1.28** Central European calcaro-siliceous grassland
  - E1.281** Hercynian calcaro-siliceous stony grasslands
  - E1.282** Central European calcaro-siliceous sand grasslands
    - E1.2821** Calcicline Central European sand grasslands
    - E1.2822** Acidocline Central European sand grasslands
    - E1.2823** Substabilised Central European sand grasslands
- E1.29** *Festuca pallens* grassland
  - E1.291** Calci-orophile pale fescue grasslands
    - E1.2911** Dealpine calciphile pale fescue grasslands
      - E1.29111** Peri-Alpine feathergrass rock grasslands
      - E1.29112** Peri-Alpine blue moorgrass rock grasslands
      - E1.29113** Peri-Carpathian dealpine rock grasslands
      - E1.29114** Pannonic *Sesleria sadleriana* rock grasslands
      - E1.29115** Bohemian dealpine rock grasslands
    - E1.2912** East Carpathian *Sesleria rigida* grasslands
  - E1.292** Calcicline pale fescue grasslands
    - E1.2921** Peri-Hercynian calcicline pale fescue grasslands
    - E1.2922** Circum-Pannonic calcicline pale fescue grasslands
      - E1.29221** Pre-Carpathian pale fescue grasslands
        - E1.292211** Pre-Carpathian Baden meadowgrass pale fescue grasslands
        - E1.292212** Pre-Carpathian *Sesleria hungarica* grasslands

- E1.29222** Central Pannonic pale fescue grasslands
  - E1.292221** Pannonic dwarf sedge pale fescue grasslands
  - E1.292222** Pannonic seseli pale fescue grasslands
  - E1.292223** Pannonic brome pale fescue grasslands
  - E1.292224** Pannonic cinquefoil pale fescue grasslands
- E1.29223** Pre-Dacic pale fescue grasslands
- E1.293** Acidocline pale fescue grasslands
  - E1.2931** Hercynian siliceous pale fescue grasslands
  - E1.2932** Circum-Pannonic siliceous pale fescue grasslands
    - E1.29321** Pannonic siliceous spleenwort-melick rock grasslands
    - E1.29322** Pannonic *Festuca pseudodalmatica* rock grasslands
    - E1.29323** Transylvanian *Festuca pseudodalmatica* rock grasslands
    - E1.29324** Pannonic meadowgrass pale fescue grasslands
- E1.2A** *Brachypodium phoenicoides* swards
- E1.2B** Serpentine steppes
- E1.2C** Pannonic loess steppic grassland
  - E1.2C1** Pannonic loess steppes
  - E1.2C2** Pannonic tall forb meadow-steppes
  - E1.2C3** Pannonic semidesert steppes
  - E1.2C4** Pannonic loess pastures
- E1.2D** Ponto-Sarmatic steppes
  - E1.2D1** Western Pontic steppes
  - E1.2D2** Sarmatic steppes
  - E1.2D3** Eastern Pontic steppes
- E1.2E** Irano-Anatolian steppes
- E1.2F** Pannonic sand steppes
  - E1.2F1** Pannonic sand pioneer swards
    - E1.2F11** Drooping brome pioneer swards
    - E1.2F12** *Corispermum* pioneer swards
    - E1.2F13** Pannonic horsetail pioneer swards
  - E1.2F2** Pannonic open sand steppes
    - E1.2F21** Pannonic calciphile sand steppes
      - E1.2F211** Pannonic calciphile sand fescue steppes
        - E1.2F2111** Central Pannonic calciphile sand fescue steppes
        - E1.2F2112** Eastern Pannonic calciphile sand fescue steppes
        - E1.2F2113** Southern Pannonic calciphile sand fescue steppes
      - E1.2F212** Pannonic feathergrass sand steppes
      - E1.2F22** Pannonic acidophile sand fescue steppes
  - E1.2F3** *Festuca wagneri* sand steppes
    - E1.2F31** Central Pannonic *Festuca wagneri* sand steppes
    - E1.2F32** Deliblat *Festuca wagneri* sand steppes
  - E1.2F4** Pannonic closed sand steppes
  - E1.2F5** Pannonic sand puszta
- E1.2G** Ponto-Sarmatic sand steppes
- E1.2H** Irano-Anatolian sand steppes
- E1.3** Mediterranean xeric grassland
  - E1.31** West Mediterranean xeric grassland
    - E1.311** Retuse torgrass swards
    - E1.312** Crau steppe
    - E1.313** Mediterranean annual communities of shallow soils
      - E1.3131** Western Mediterranean calciphile annual communities
      - E1.3132** Southeastern Iberian pre-desert annual communities
      - E1.3133** Iberian gypsum annual communities
      - E1.3134** Andalusian magnesium annual communities
      - E1.3135** Sicilian saxicolous annual communities
      - E1.3136** Northern Sicilian aster annual communities
      - E1.3137** Calabro-Sicilian esparto annual communities
    - E1.314** Causse dolomitic arenas
  - E1.32** Southwestern Mediterranean perennial pastures
  - E1.33** East Mediterranean xeric grassland

- E1.331 Eastern retuse torgrass swards
- E1.332 Helleno-Balkan short grass and therophyte communities
- E1.333 Asio-Mediterranean short grass and therophyte communities
- E1.4 Mediterranean tall-grass and *Artemisia* steppes
  - E1.41 *Stipa tenacissima* steppes
  - E1.42 *Lygeum spartum* steppes
    - E1.421 Iberian esparto steppes
    - E1.422 Central Mediterranean esparto steppes
    - E1.423 Cretan esparto steppes
  - E1.43 Mediterranean steppes dominated by tall grasses other than *Stipa tenacissima* or *Lygeum spartum*
    - E1.431 Berceales
    - E1.432 Mediterranean feathergrass steppes
    - E1.433 Diss steppes
    - E1.434 Andropogonid grass steppes
      - E1.4341 Iberian andropogonid grass steppes
      - E1.4342 Provençal andropogonid grass steppes
      - E1.4343 Central Mediterranean andropogonid grass steppes
      - E1.4344 Helleno-Balkan andropogonid grass steppes
      - E1.4345 Mediterraneo-Anatolian andropogonid grass steppes
    - E1.435 Andalusian fescue and oat grasslands
      - E1.4351 Calcicolous fescue and oat grasslands
      - E1.4352 Silicolous fescue and oat grasslands
      - E1.4353 Carrascoy fescue and oat grasslands
  - E1.44 Cane steppes
  - E1.45 Sub-Mediterranean *Artemisia* steppes
- E1.5 Mediterranean-montane grassland
  - E1.51 Mediterraneo-montane steppes
    - E1.511 Mediterraneo-montane *Stipa* steppes
    - E1.512 Mediterraneo-montane *Sesleria* steppes
    - E1.513 Mediterraneo-montane *Festuca-Koeleria* steppes
    - E1.514 Mediterraneo-montane *Artemisia* steppes
  - E1.52 *Aphyllanthes* grassland and supra-Mediterranean steppes
  - E1.53 Iberian *Festuca* frost-influenced grassland
  - E1.54 Central and southern Apennine dry grassland
  - E1.55 Eastern sub-Mediterranean dry grassland
    - E1.551 Lowland savory-chrysopogon dry grasslands
      - E1.5511 Helleno-Paeonian savory-chrysopogon dry grasslands
      - E1.5512 Dalmatian savory-chrysopogon dry grasslands
        - E1.55121 Dalmatian savory-fescue-hairgrass grasslands
        - E1.55122 Dalmatian sage-feathergrass grasslands
        - E1.55123 Dalmatian asphodel-chrysopogon grasslands
        - E1.55124 Dalmatian thrift grasslands
        - E1.55125 Dalmatian *Aethionema* grasslands
        - E1.55126 Dalmatian fescue grasslands
    - E1.552 Mountain savory-chrysopogon dry grasslands
      - E1.5521 Rock knapweed-dwarf sedge grasslands
      - E1.5522 Savory-edraianthus grasslands
      - E1.5523 Mucronated sedge grasslands
      - E1.5524 Triestine knapweed-chrysopogon grasslands
      - E1.5525 Silky greenwood-*Sesleria* grasslands
  - E1.553 Viper's grass dry grasslands
    - E1.5531 Viper's grass-lime sieglingia grasslands
    - E1.5532 Spurge-chrysopogon grasslands
    - E1.5533 Restharrow-brome grasslands
    - E1.5534 Viper's grass-catsear grasslands
    - E1.5535 Lousewort-dwarf sedge grasslands
    - E1.5536 Croatian fescue-meadowgrass grasslands
    - E1.5537 Cleistogenes grasslands
  - E1.554 Bosnian dolomite grasslands

- E1.6** Subnitrophilous annual grassland
  - E1.61** Mediterranean subnitrophilous grass communities
  - E1.62** Meseta subnitrophilous crucifer communities
  - E1.63** Iberian southeastern subnitrophilous herb communities
  - E1.64** Eastern Mediterranean subnitrophilous herb communities
- E1.7** Non-Mediterranean dry acid and neutral closed grassland
  - E1.71** *Nardus stricta* swards
    - E1.711** Insular *Nardus-Galium* grasslands
    - E1.712** Sub-Atlantic *Nardus-Galium* grasslands
    - E1.713** Beskid *Calluna-Nardus* grassland
    - E1.714** Bohemian orchid-matgrass swards
    - E1.715** Illyrian mat-grass swards
  - E1.72** *Agrostis - Festuca* grassland
    - E1.721** Nemoral *Agrostis-Festuca* grasslands
    - E1.722** Boreo-arctic *Agrostis-Festuca* grasslands
      - E1.7221** Boreo-subalpine *Agrostis* grasslands
      - E1.7222** Icelandic *Anthoxanthum-Hierochloe* grasslands
      - E1.7223** Northern boreal *Festuca* grasslands
      - E1.7224** Icelandic *Festuca* grasslands
      - E1.7225** Fenno-Scandian *Avenula pratensis-Festuca rubra* grasslands
  - E1.73** *Deschampsia flexuosa* grassland
  - E1.74** *Calamagrostis epigejos* stands
  - E1.75** *Carex arenaria* grassland
- E1.8** Mediterranean dry acid and neutral closed grassland
  - E1.81** Mediterranean therophytic siliceous grassland
    - E1.811** West Mediterranean siliceous grassland
    - E1.812** Dalmatian siliceous grassland
  - E1.82** Iberian *Festuca elegans* grassland
  - E1.83** Mediterraneo-montane *Nardus stricta* swards
    - E1.831** Iberian montane *Nardus stricta* swards
    - E1.832** Southern Italian *Nardus stricta* swards and related communities
    - E1.833** Balkanic montane *Nardus stricta* swards
- E1.9** Non-Mediterranean dry acid and neutral open grassland, including inland dune grassland
  - E1.91** Dwarf annual siliceous grassland
  - E1.92** Perennial open siliceous grassland
  - E1.93** *Corynephorus* grassland
  - E1.94** Inland dune pioneer grassland
  - E1.95** Inland dune siliceous grassland
  - E1.96** Northern fluviatile dunes
  - E1.97** Southern fluviatile dunes
  - E1.98** Breckland inland dunes
  - E1.99** Rhône riverine dunes
  - E1.9A** Southern Iberian inland dunes
  - E1.9B** Pannonic inland dunes
    - E1.9B1** Pannonic bare sands
    - E1.9B2** Pannonic dune lichen communities
    - E1.9B3** Pannonic dune pioneer grasslands
    - E1.9B4** Pannonic dune open grasslands
    - E1.9B5** Pannonic dune closed grasslands
    - E1.9B6** Pannonic dune thickets and scrubs
    - E1.9B7** Pannonic dune woods
  - E1.9C** Pontic inland dunes
    - E1.9C1** Pontic bare sands
    - E1.9C2** Pontic dune lichen communities
    - E1.9C3** Pontic dune pioneer grasslands
    - E1.9C4** Pontic dune open grasslands
    - E1.9C5** Pontic dune closed grasslands
  - E1.9D** Standing stone inland dunes
  - E1.9E** Irano-Anatolian inland dunes
- E1.A** Mediterranean dry acid and neutral open grassland

- E1.A1** Mediterranean annual deep-sand communities
- E1.A2** Supra-Mediterranean perennial siliceous grasslands
  - E1.A21** Iberian *Festuca - Plantain* swards
  - E1.A22** Helleno-Balkan supra-Mediterranean siliceous grasslands
- E1.B** Heavy-metal grassland
  - E1.B1** Atlantic heavy-metal grassland
    - E1.B11** British heavy metal grasslands
    - E1.B12** Irish heavy metal grasslands
  - E1.B2** Calaminarian grassland
    - E1.B21** *Viola calaminaria* grasslands
    - E1.B22** *Viola guestphalica* grasslands
    - E1.B23** Western calaminarian thrift grasslands
    - E1.B24** Calaminarian pennycress grasslands
  - E1.B3** Central European heavy-metal grassland
  - E1.B4** Calaminarian *Silene vulgaris* grassland
  - E1.B5** Alpine heavy-metal grassland
- E1.C** Dry mediterranean lands with unpalatable non-vernal herbaceous vegetation
  - E1.C1** *Asphodelus* fields
  - E1.C2** Thistle fields
  - E1.C3** *Phlomis* brushes
  - E1.C4** *Ferula* stands

## **E2 Mesic grasslands**

- E2.1** Permanent mesotrophic pastures and aftermath-grazed meadows
  - E2.11** Unbroken pastures
    - E2.111** Ryegrass pastures
    - E2.112** Atlantic *Cynosurus-Centaurea* pastures
    - E2.113** Sub-Atlantic hill pastures
    - E2.114** Continental pastures
  - E2.12** Ditch-broken pastures
  - E2.13** Abandoned pastures
  - E2.14** Species-rich lowland flood meadows
  - E2.15** Macaronesian mesic grassland
- E2.2** Low and medium altitude hay meadows
  - E2.21** Atlantic hay meadows
    - E2.211** Atlantic *Arrhenatherum* grasslands
    - E2.212** Atlantic *Alopecurus-Sanguisorba* grasslands
  - E2.22** Sub-Atlantic lowland hay meadows
    - E2.221** Xero-mesophile medio-European lowland hay meadows
    - E2.222** Hygromesophile medio-European lowland hay meadows
  - E2.23** Medio-European submontane hay meadows
    - E2.231** Western Hercynian submontane hay meadows
    - E2.232** Eastern Hercynio-Baltic submontane hay meadows
    - E2.233** Carpathian submontane hay meadows
      - E2.2331** Western Carpathian gladiolus meadows
      - E2.2332** Western Carpathian vetch-clover meadows
      - E2.2333** Eastern Carpathian yellow oatgrass meadows
    - E2.234** Northern Iberian submontane hay meadows
    - E2.235** Alpic submontane hay meadows
    - E2.236** Jurassic submontane hay meadows
    - E2.237** Illyrian submontane hay meadows
    - E2.238** Southwestern Moesian submontane hay meadows
  - E2.24** Boreal and sub-boreal meadows
    - E2.241** Fenno-Scandian boreal and sub-boreal meadows
    - E2.242** Britannic submontane meadows
  - E2.25** Continental meadows
    - E2.251** Ponto-Pannonic mesophile hay meadows
    - E2.252** Moeso-Thracian mesophile hay meadows
      - E2.2521** Moeso-Thracian mesophile floodplain meadows
      - E2.2522** Moeso-Thracian mesophile foothill meadows



- E2.2523** Moeso-Thracian mesophile cold water meadows
- E2.3** Mountain hay meadows
  - E2.31** Alpic mountain hay meadows
  - E2.32** Ponto-Caucasian hay meadows
- E2.4** Iberian summer pastures (vallicares)
  - E2.41** Perennial vallicares
  - E2.42** Annual vallicares
  - E2.43** Andalusian *Armeria* vallicares
- E2.5** Meadows of the steppe zone
- E2.6** Agriculturally-improved, re-seeded and heavily fertilised grassland, including sports fields and grass lawns
  - E2.61** Dry or moist agriculturally-improved grassland
  - E2.62** Wet agriculturally-improved grassland, often with drainage ditches
  - E2.63** Turf sports fields
  - E2.64** Park lawns
  - E2.65** Small-scale lawns
- E2.7** Unmanaged mesic grassland

### **E3 Seasonally wet and wet grasslands**

- E3.1** Mediterranean tall humid grassland
  - E3.11** Mediterranean tall humid grassland of lowlands
    - E3.111** *Serapias* grassland
  - E3.12** Mediterranean tall humid grassland of mountains
    - E3.121** Peat grasslands of Troodos
- E3.2** Mediterranean short humid grassland
- E3.3** Sub-mediterranean humid meadows
  - E3.31** Helleno-Moesian riverine and humid *Trifolium* meadows
  - E3.32** Apennine humid meadows
  - E3.33** Dalmatian riverine and humid meadows
  - E3.34** Illyrio-Moesian riverine and humid *Trifolium* meadows
  - E3.35** Anatolian supra-Mediterranean humid grassland
- E3.4** Moist or wet eutrophic and mesotrophic grassland
  - E3.41** Atlantic and sub-Atlantic humid meadows
    - E3.411** Cabbage thistle meadows
    - E3.412** Globe flower-brook thistle meadows
    - E3.413** Western tufted hairgrass meadows
      - E3.4131** Atlantic tufted hairgrass meadows
      - E3.4132** Boreal tufted hairgrass meadows
    - E3.414** Marsh ragwort meadows
    - E3.415** Bistort meadows
    - E3.416** Thread rush meadows
    - E3.417** Soft rush meadows
    - E3.418** Blunt-flowered rush meadows
    - E3.419** Wood clubrush meadows
    - E3.41A** Brook thistle meadows
    - E3.41B** Crested dog's tail-rush meadows
    - E3.41C** Marsh thistle meadows
    - E3.41D** Melancholy thistle meadows
    - E3.41E** Chervil wet meadows
    - E3.41F** Calcareous dunal small reed fens
  - E3.42** *Juncus acutiflorus* meadows
  - E3.43** Subcontinental riverine meadows
  - E3.44** Flood swards and related communities
    - E3.441** Tall rush pastures
    - E3.442** Flood swards
      - E3.4421** Marsh foxtail flood swards
      - E3.4422** Creeping bent flood swards
      - E3.4423** Tall fescue flood swards
      - E3.4424** Common couch flood swards
      - E3.4425** Rhenish *Deschampsia media* flood swards

- E3.443 Small rush swards
- E3.45 Recently abandoned hay meadows
- E3.46 Continental humid meadows
  - E3.461 Sub-Pannonic ashy thistle humid meadows
  - E3.462 Peri-Pannonic humid meadows
    - E3.4621 Eastern Carpathian globe flower-cabbage thistle meadows
    - E3.4622 Peri-Pannonic bistort meadows
    - E3.4623 Eastern Carpathian thread rush meadows
    - E3.4624 Eastern Carpathian soft rush meadows
    - E3.4625 Peri-Pannonic wood clubrush meadows
    - E3.4626 Peri-Pannonic brook thistle meadows
  - E3.463 Illyrio-Pannonic riverine and humid meadows
  - E3.464 Ponto-Sarmatic humid meadows
- E3.47 Northern boreal alluvial meadows
- E3.5 Moist or wet oligotrophic grassland
  - E3.51 *Molinia caerulea* meadows and related communities
    - E3.511 Calcicline purple moorgrass meadows
    - E3.512 Acidocline purple moorgrass meadows
    - E3.513 Giant moorgrass swards
    - E3.514 Boreal purple moorgrass meadows
  - E3.52 Heath *Juncus* meadows and humid *Nardus stricta* swards
  - E3.53 Continental oligotrophic humid grassland

## E4 Alpine and subalpine grasslands

- E4.1 Vegetated snow-patch
  - E4.11 Boreo-alpine acidocline snow-patch grassland and herb habitats
    - E4.111 Alpic acid moss snow-patch communities
    - E4.112 Alpic acid cudweed snow-patch communities
    - E4.113 *Luzula spadicca* snow patch communities
    - E4.114 Hercynian acid snow patch communities
    - E4.115 Boreal moss snowbed communities
    - E4.116 Boreo-alpine *Deschampsia-Anthoxanthum* communities
    - E4.117 Boreo-alpine herb-rich acid snowbed communities
    - E4.118 Boreo-alpine acidocline sedge and rush snowbed communities
  - E4.12 Boreo-alpine calcicline snow-patch grassland and herb habitats
    - E4.121 Alpic small herb calcicolous snow-patch communities
      - E4.1211 *Arabis-Gnaphalium* snow-patch communities
      - E4.1212 Carpathian saxifrage snow-patch communities
      - E4.1213 Dinaro-Pelagonide calciphile herbaceous snow-patch communities
    - E4.122 *Distichium capillaceum* snowbed communities
    - E4.123 Snow buttercup snowbed communities
    - E4.124 Snow grass snowbed communities
    - E4.125 Arctic woodrush snowbed communities
    - E4.126 Boreal herb-rich calcicline snowbed communities
    - E4.127 Subarctic small-herb snowbed communities
  - E4.13 Ponto-Caucasian snow-patch grassland
  - E4.14 Boreo-alpine fern snowbed grassland
- E4.2 Moss and lichen dominated mountain summits, ridges and exposed slopes
  - E4.21 Oroboral *Carex bigelowii-Rhacomitrium* moss-heaths
  - E4.22 Rock pavement lichen communities
  - E4.23 Rock pavement, plateau and summital moss heaths
  - E4.24 Icelandic lava flow moss heaths
  - E4.25 Moss and lichen fjell fields
- E4.3 Acid alpine and subalpine grassland
  - E4.31 Alpic *Nardus stricta* swards and related communities
    - E4.311 Pyreneo-Alpine mesophile mat-grass swards
    - E4.312 Pyreneo-Alpine hygrophile mat-grass swards
    - E4.313 Pyreneo-Alpine hygrophile foxtail swards
    - E4.314 Pyrenean closed *Festuca eskia* grassland
    - E4.315 Pyrenean *Poa violacea* swards

- E4.316** Hercynian summital mat-grass swards
  - E4.3161** Hautes Chaumes summital mat-grass swards
  - E4.3162** Black Forest summital mat-grass swards
  - E4.3163** Harz summital mat-grass swards
  - E4.3164** Bohemian Forest summital mat-grass swards
  - E4.3165** Sudeten summital mat-grass swards
- E4.317** Carpathian mat-grass swards
  - E4.3171** Western Carpathian mat-grass swards
  - E4.3172** Eastern Carpathian mat-grass swards
- E4.318** Oro-Moesian mat-grass swards
- E4.319** Dinaride mat-grass swards
- E4.32** Oro-boreal acidocline grassland
- E4.33** Thermo-Alpigenous subalpine acidophilous grassland
  - E4.331** Thermo-Alpigenous *Festuca paniculata* swards
  - E4.332** Pyrenean *Festuca eskia* garland-grasslands
  - E4.333** Arverno-Alpine varicoloured fescue garland-grasslands
- E4.34** Alpigenous acidophilous grassland
  - E4.341** Alpigenous crooked-sedge grasslands
    - E4.3411** Alpine *Carex curvula* grasslands
    - E4.3412** Pyrenean *Carex curvula* grasslands
    - E4.3413** Carpathian *Carex curvula* grasslands
  - E4.342** Alpigenous *Festuca halleri* grasslands
  - E4.343** Alpigenous *Festuca airoides* grasslands
    - E4.3431** Pyrenean *Festuca airoides* grasslands
    - E4.3432** Carpathian *Festuca airoides* grasslands
    - E4.3433** Hercynian *Festuca airoides* grasslands
  - E4.344** Pyrenean *Festuca borderi* swards
  - E4.345** Alpigenous *Oreochloa disticha* swards
    - E4.3451** Alpine *Oreochloa disticha* swards
    - E4.3452** Carpathian *Oreochloa disticha* grasslands
  - E4.346** Hercynio-Carpathian *Juncus trifidus* swards
    - E4.3461** Bohemian Forest *Juncus trifidus* swards
    - E4.3462** Sudeten *Juncus trifidus* swards
    - E4.3463** Carpathian *Juncus trifidus* swards
      - E4.34631** Northern Carpathian *Juncus trifidus* swards
      - E4.34632** Eastern Carpathian *Juncus trifidus* swards
    - E4.3464** Alpine *Juncus trifidus* swards
  - E4.347** Cantabrian *Oreochloa blanka* swards
  - E4.348** Alpigenous *Agrostis rupestris* swards
- E4.35** Oro-Hellenic closed grassland
- E4.36** Oro-Iberian acidophilous grassland
  - E4.361** Oro-Iberian acidophilous stripped grasslands
    - E4.3611** Cantabrian acidophilous stripped grasslands
    - E4.3612** Iberian Range acidophilous stripped grasslands
    - E4.3613** Cordilleran *Festuca* stripped grasslands
    - E4.3614** Cordilleran *Agrostis* stripped grasslands
    - E4.3615** Nevadan *Festuca indigesta* stripped grasslands
    - E4.3616** Nevadan *Agrostis* stripped grasslands
    - E4.3617** Nevadan tall fescue stripped grasslands
    - E4.3618** Nevadan *Festuca clementei* stripped grasslands
    - E4.3619** Nevadan *Trisetum* stripped grasslands
  - E4.362** Oro-Iberian mat-grass swards
    - E4.3621** Cantabrio-Cordilleran oro-Mediterranean mat-grass swards
    - E4.3622** Nevadan borreguiles
- E4.37** Oro-Corsican grassland
- E4.38** Oro-Apennine closed grassland
- E4.39** Oro-Moesian acidophilous grassland
  - E4.391** Oro-Moesian *Festuca paniculata* grasslands
  - E4.392** Oro-Moesian varicoloured fescue grasslands
    - E4.3921** Oro-Moesian *Festuca valida* grasslands

- E4.3922 Balkan *Festuca balcanica* grasslands
- E4.3923 Pelagonide *Festuca varia* grasslands
- E4.393 Oro-Moesian *Poa violacaea* grasslands
- E4.394 Oro-Moesian aeolian grasslands
  - E4.3941 Oro-Moesian crooked sedge grasslands
  - E4.3942 Oro-Moesian Haller fescue grasslands
    - E4.39421 Rhodopide *Festuca riloensis* grasslands
    - E4.39422 Pelagonide *Festuca scardica* grasslands
    - E4.39423 Montenegrine *Festuca riloensis* grasslands
  - E4.3943 Oro-Moesian *Festuca airoides* grasslands
  - E4.3944 Oro-Moesian *Sesleria comosa* grasslands
  - E4.3945 Oro-Moesian *Agrostis rupestris* grasslands
  - E4.3946 Southern Pelagonide aeolian grasslands
  - E4.3947 Montenegrine aeolian fescue grasslands
- E4.3A Western Asian acidophilous alpine grassland
- E4.4 Calcareous alpine and subalpine grassland
  - E4.41 Closed calciphile alpine grassland
    - E4.411 Mesophile evergreen sedge grasslands
      - E4.4111 Alpine evergreen sedge grasslands
      - E4.4112 Pyrenean evergreen sedge grasslands
    - E4.412 Northern rusty sedge grasslands
    - E4.413 Southern rusty sedge grasslands
    - E4.414 Violet fescue swards and related communities
    - E4.415 Cantabrian thrift swards
    - E4.416 Jura summital swards
    - E4.417 Dinaro-Moesian oligophile closed calcicolous grasslands
      - E4.4171 Dinaric oligophile closed calcicolous grasslands
        - E4.41711 Dinaric pungent fescue grasslands
        - E4.41712 Dinaric violet fescue grasslands
        - E4.41713 Dinaric closed evergreen sedge grasslands
      - E4.4172 Rhodo-Pelagonian oligophile closed calcicolous grasslands
        - E4.41721 Rhodopide pungent fescue grasslands
          - E4.417211 Pirin fescue grasslands
          - E4.417212 Slavianka pungent fescue grasslands
        - E4.41722 Pelagonide closed calcicolous feathergrass grasslands
        - E4.41723 Pelagonide closed calcicolous sesleria grasslands
        - E4.41724 Pelagonide closed calcicolous fescue grasslands
      - E4.4173 Balkan oligophile closed calcicolous grasslands
        - E4.41731 Balkan closed calcicolous fescue grasslands
        - E4.41732 Balkan closed erect brome grasslands
        - E4.41733 Balkan closed evergreen sedge grasslands
  - E4.418 Dinaro-Moesian mesophile closed calcicolous grasslands
    - E4.4181 Dinaric rusty sedge grasslands
    - E4.4182 Dinaric bellflower grasslands
    - E4.4183 Western Balkanic calcicolous scabious-fescue grasslands
  - E4.42 Wind edge *Kobresia myosuroides* swards
    - E4.421 Alpine naked-rush swards
    - E4.422 Pyrenean naked-rush swards
    - E4.423 Cantabrian naked-rush swards
    - E4.424 Apennine naked-rush swards
    - E4.425 Carpathian naked-rush swards
    - E4.426 Scandinavian naked-rush swards
    - E4.427 Pirin naked-rush swards
    - E4.428 Pelagonide naked-rush swards
  - E4.43 Calciphilous stepped and garland grassland
    - E4.431 Blue moorgrass-evergreen sedge swards
      - E4.4311 Alpine blue moorgrass-evergreen sedge swards
      - E4.4312 Jura blue moorgrass-evergreen sedge swards
    - E4.432 Southern Alpine oatgrass-blue moorgrass swards
    - E4.433 Cushion sedge carpets

- E4.4331 Alpine cushion sedge carpets
- E4.4332 Western Carpathian cushion sedge carpets
- E4.4333 Eastern Carpathian cushion sedge carpets
- E4.4334 Dinaric cushion sedge carpets
- E4.434 Pyrenean *Festuca gautieri* grasslands
- E4.435 Oro-Iberian calciphilous stripped grasslands
- E4.436 Apennine stripped grasslands
- E4.437 Helleno-Balkanic stripped grasslands
- E4.438 Oro-Moesian calciphile stripped grasslands
  - E4.4381 Dinaric calciphile stripped grasslands
  - E4.4382 Pelago-Rhodopide calciphile stripped grasslands
    - E4.43821 Pelagonide calciphile stripped grasslands
    - E4.43822 Rhodopide *Sesleria klasterskyi* grasslands
  - E4.4383 Balkan Range calciphile stripped grasslands
  - E4.4384 Montenegrine *Oxytropis* grasslands
- E4.439 Carpathian calciphile stepped grasslands
  - E4.4391 West Carpathian calciphile stepped grasslands
    - E4.43911 Tatra sesleria-evergreen sedge grasslands
    - E4.43912 West Carpathian *Festuca versicolor* grasslands
    - E4.43913 Hercynio-Carpathian *Agrostis alpina* grasslands
  - E4.4392 East Carpathian calciphile stepped grasslands
    - E4.43921 East Carpathian sesleria-evergreen sedge grasslands
    - E4.43922 East Carpathian *Festuca versicolor* grasslands
    - E4.43923 East Carpathian *Festuca amethystina* grasslands
    - E4.43924 East Carpathian *Festuca flaccida* grasslands
- E4.44 Ponto-Caucasian alpine grassland
  - E4.441 Pontic alpine grassland
  - E4.442 Caucasian alpine grassland
  - E4.443 Crimean alpine grassland
  - E4.444 Hyrcanian alpine grassland
- E4.5 Alpine and subalpine enriched grassland
  - E4.51 Subalpine *Trisetum flavescens* hay meadows
  - E4.52 *Leontodon hispidus* pastures

## **E5 Woodland fringes and clearings and tall forb stands**

- E5.1 Anthropogenic herb stands
  - E5.11 Lowland habitats colonised by tall nitrophilous herbs
  - E5.12 Weed communities of recently abandoned urban and suburban constructions
  - E5.13 Weed communities of recently abandoned rural constructions
  - E5.14 Weed communities of recently abandoned extractive industrial sites
  - E5.15 Land reclamation forb fields
- E5.2 Thermophile woodland fringes
  - E5.21 Xero-thermophile fringes
  - E5.22 Mesophile fringes
- E5.3 *Pteridium aquilinum* fields
  - E5.31 Sub-Atlantic *Pteridium aquilinum* fields
  - E5.32 Macaronesian *Pteridium aquilinum* fields
  - E5.33 Supra-Mediterranean *Pteridium aquilinum* fields
- E5.4 Moist or wet tall-herb and fern fringes and meadows
  - E5.41 Screens or veils of perennial tall herbs lining watercourses
    - E5.411 Watercourse veils (other than of *Filipendula*)
      - E5.4111 *Angelica archangelica* fluvial communities
      - E5.4112 *Angelica heterocarpa* fluvial communities
      - E5.4113 *Althaea officinalis* screens
    - E5.412 Western nemoral river bank tall-herb communities dominated by *Filipendula*
    - E5.413 Boreal river bank tall-herb communities dominated by *Filipendula*
    - E5.414 Continental river bank tall-herb communities dominated by *Filipendula*
  - E5.42 Tall-herb communities of humid meadows
    - E5.421 Western nemoral tall-herb communities of humid meadows
    - E5.422 Boreal tall-herb communities of humid depressions

- E5.423** Continental tall-herb communities of humid meadows
- E5.43** Shady woodland edge fringes
- E5.44** Mediterranean grasslands on alluvial river banks
- E5.5** Subalpine moist or wet tall-herb and fern stands
- E5.51** Alpic tall-herb communities
  - E5.511** Alpine tall herb communities
  - E5.512** Jura tall herb communities
  - E5.513** Hercynian tall herb communities
  - E5.514** Carpathian tall herb communities
    - E5.5141** Carpathian adenostyles communities
    - E5.5142** Carpathian fern communities
    - E5.5143** Carpathian monkshood communities
      - E5.51431** North Carpathian monkshood communities
      - E5.51432** East Carpathian monkshood communities
    - E5.5144** Carpathian butterbur communities
      - E5.51441** Carpathian white butterbur communities
      - E5.51442** Carpathian glabrous butterbur communities
  - E5.515** Dinaric tall herb communities
  - E5.516** Apennine tall herb communities
- E5.52** Alpigene tall grass communities
- E5.53** Pyreneo-Iberian tall-herb communities
- E5.54** Ibero-Mauritanian tall-herb communities
  - E5.541** Southern Iberian tall herb communities
- E5.55** Corsican *Cymbalaria* tall-herb communities
- E5.56** Corsican *Doronicum* tall-herb communities
- E5.57** Eastern oro-Mediterranean and Balkan tall-herb communities
  - E5.571** Hellenic tall herb communities
  - E5.572** Moesian tall herb communities
    - E5.5721** Moesian Balkan thistle tall herb communities
    - E5.5722** Moesian butterbur tall herb communities
    - E5.5723** Moesian hogweed tall herb communities
    - E5.5724** Moesian scarlet avens tall herb communities
- E5.58** Alpine *Rumex* communities
- E5.59** Oro-boreal tall-herb communities
  - E5.591** Roseroot-cranesbill-woodrush oroboreal communities
  - E5.592** Oroboreal tall forb communities
  - E5.593** Oroboreal tall grass and fern communities
- E5.5A** Ponto-Caucasian tall-herb communities
- E5.5B** Alpine and subalpine fern stands

## **E6 Inland salt steppes**

- E6.1** Mediterranean inland salt steppes
  - E6.11** Mediterranean *Limonium* salt steppes
    - E6.111** Ibero-Tyrrhenian sea-lavender steppes
    - E6.112** Adriatic sea-lavender steppes
    - E6.113** Aegeo-Levantine sea-lavender communities
  - E6.12** Mediterranean *Lygeum spartum* salt steppes
  - E6.13** Mediterranean inland halo-nitrophilous pioneer communities
- E6.2** Continental inland salt steppes
  - E6.21** Pannonic salt steppes and saltmarshes
    - E6.211** Saline puszta
      - E6.2111** Grassy saline puszta
        - E6.21111** Northern grassy saline puszta
        - E6.21112** Southern grassy saline puszta
        - E6.21113** *Agropyron* saline puszta
      - E6.2112** Grassy psammo-saline puszta
      - E6.2113** *Artemisia* saline puszta
      - E6.2114** East Pannonic *Petrosimonia-Artemisia* salt steppes
      - E6.2115** Saline forest-edge meadow-steppe
      - E6.2116** East Pannonic *Limonium-Artemisia* salt steppes

- E6.212** Pannonic saline meadows
  - E6.2121** Pannonic bent-grass saline meadows
  - E6.2122** Pannonic *Beckmannia* saline meadows
  - E6.2123** Pannonic spikerush-foxtail saline meadows
  - E6.2124** Pannonic saltmarsh rush saline meadows
  - E6.2125** Pannonic divided sedge saline meadows
  - E6.2126** Dacian saline meadows
- E6.213** Pannonic solonetz hollows
  - E6.2131** Pannonic *Puccinellia limosa* hollows
  - E6.2132** Pannonic *Camphorosma* hollows
  - E6.2133** Pannonic *Bassia sedoides* hollows
  - E6.2134** Pannonic *Pholiurus-Plantago* hollows
  - E6.2135** Pannonic barley hollows
- E6.214** Pannonic solonchak hollows
  - E6.2141** Pannonic *Lepidium-Puccinellia limosa* hollows
  - E6.2142** Seewinkel *Puccinellia peisonis* swards
  - E6.2143** Pannonic *Lepidium-Camphorosma* hollows
  - E6.2144** Seewinkel *Lepidium* swards
- E6.215** Pelago-Vardarian salt steppes
  - E6.2151** Pelago-Vardarian saline meadows
  - E6.2152** Pelago-Vardarian solonetz hollows
  - E6.2153** Pelago-Vardarian *Camphorosma monspeliaca* flats
  - E6.2154** Central Paeonian salt steppes
- E6.22** Ponto-Sarmatic salt steppes and saltmarshes
  - E6.221** Western Pontic saline steppes
    - E6.2211** Western Pontic *Achillea-Festuca* steppes
    - E6.2212** Western Pontic *Artemisia-Festuca* steppes
    - E6.2213** Western Pontic *Petrosimonia-Artemisia* salt steppes
    - E6.2214** Western Pontic *Peucedanum-Festuca* salt steppes
    - E6.2215** Western Pontic *Limonium-Artemisia* salt steppes
  - E6.222** Western Pontic saline meadows
    - E6.2221** Western Pontic *Zingeria* saline meadows
    - E6.2222** Western Pontic *Beckmannia* saline meadows
    - E6.2223** Western Pontic spikerush-foxtail saline meadows
    - E6.2224** Western Pontic saltmarsh rush saline meadows
    - E6.2225** Western Pontic divided sedge saline meadows
    - E6.2226** Western Pontic arrow-grass sea-aster saline meadows
    - E6.2227** Western Pontic tall grass and rush saline beds
  - E6.223** Western Pontic solonetz hollows
    - E6.2231** Western Pontic *Puccinellia* solonetz swards
    - E6.2232** Western Pontic *Camphorosma annua* hollows
    - E6.2233** Western Pontic *Bassia sedoides* hollows
    - E6.2234** Western Pontic *Pholiurus-Plantago* hollows
    - E6.2235** Western Pontic *Hordeum hystris* swards
  - E6.224** Western Pontic solonchak communities
  - E6.225** Western Pontic salt scrubs
  - E6.226** Sarmatic saline steppes
    - E6.2261** Sarmatic *Artemisia-Festuca* salt steppes
    - E6.2262** Sarmatic *Petrosimonia* salt steppes
    - E6.2263** Sarmatic *Limonium-Festuca* salt steppes
  - E6.227** Sarmatic saline meadows
    - E6.2271** Sarmatic *Beckmannia eruciformis* saline meadows
    - E6.2272** Sarmatic *Leuzea altaica* saline meadows
    - E6.2273** Sarmatic *Iris halophila* saline meadows
    - E6.2274** Sarmatic *Juncus gerardii* saline meadows
    - E6.2275** Sarmatic *Carex distans* saline meadows
  - E6.228** Sarmatic solonetz hollows
  - E6.229** Sarmatic solonchak hollows
- E6.23** Central Eurasian solonchak grassland dominated by *Crypsis*
  - E6.231** Ponto-Pannonic *Acorellus* community

**E6.232** Pontic *Frankenia pulverulenta* communities

## **E7 Sparsely wooded grasslands**

- E7.1** Atlantic parkland
- E7.2** Sub-continental parkland
- E7.3** Dehesa

## **F Heathland, scrub and tundra**

### **F1 Tundra**

- F1.1** Shrub tundra
  - F1.11** Western shrub tundra
- F1.2** Moss and lichen tundra
  - F1.21** *Cladonia* - espalier willow tundra
  - F1.22** Moss tundra

### **F2 Arctic, alpine and subalpine scrub**

- F2.1** Subarctic and alpine dwarf willow scrub
  - F2.11** Boreo-alpine acidocline snow-patch *Salix herbacea* scrub
    - F2.111** Alpic acid dwarf willow snow-patch communities
    - F2.112** Oroboreal moss-dwarf willow snowbed communities
  - F2.12** Boreo-alpine calcicline snow-patch *Salix polaris* scrub
    - F2.121** Boreo-Alpic calcicolous espalier willow snowbed communities
      - F2.1211** Alpic espalier willow snowbed communities
        - F2.12111** Alpic *Salix retusa-reticulata* snowbed communities
        - F2.12112** Carpathian *Salix kitaibeliana* snowbed communities
      - F2.1212** Scandinavian espalier willow snowbed communities
    - F2.122** Polar willow snowbed communities
      - F2.1221** Fenno-Scandian polar willow snowbed communities
      - F2.1222** Spitzbergen polar willow snowbed communities
  - F2.13** Ponto-Caucasian snow-patch dwarf *Salix* scrub
- F2.2** Evergreen alpine and subalpine heath and scrub
  - F2.21** Alpide dwarf ericoid wind heaths
    - F2.211** Alpide dwarf azalea heaths
    - F2.212** Alpide dwarf *Vaccinium* wind heaths
      - F2.2121** Alps dwarf *Vaccinium* wind heaths
      - F2.2122** Carpathian dwarf *Vaccinium* wind heaths
    - F2.213** Rhodopide and Balkan dwarf *Vaccinium* wind heaths
      - F2.2131** Rhodopide dwarf *Vaccinium* wind heaths
      - F2.2132** Balkan Range dwarf *Vaccinium* wind heaths
  - F2.214** Pontic dwarf *Vaccinium* heaths
- F2.22** Alpide acidocline *Rhododendron* heaths
  - F2.221** Alpine rusty alpenrose heaths
  - F2.222** Pyrenean rusty alpenrose heaths
  - F2.223** Dinaric rusty alpenrose heaths
  - F2.224** Carpathian *Rhododendron kotschyi* heaths
  - F2.225** Balkan *Rhododendron kotschyi* heaths
    - F2.2251** Balkan Range Kotschy's alpenrose heaths
    - F2.2252** Rila Kotschy's alpenrose heaths
  - F2.226** Pontic alpenrose heaths
- F2.23** Southern Palaeartic mountain dwarf *Juniperus* scrub
  - F2.231** Mountain *Juniperus nana* scrub
  - F2.232** *Juniperus sabina* scrub
    - F2.2321** Iberian *Juniperus sabina* scrub
    - F2.2322** Alpine *Juniperus sabina* scrub
    - F2.2323** Apennine *Juniperus sabina* scrub
    - F2.2324** Dinarid *Juniperus sabina* scrub
    - F2.2325** Carpatho-Balkan *Juniperus sabina* scrub



- F2.233 *Juniperus hemisphaerica* scrub
- F2.234 Mountain *Juniperus oxycedrus* scrub
- F2.24 Alpidogenic high mountain *Empetrum* - *Vaccinium* heaths
- F2.25 Boreo-alpine and arctic heaths
  - F2.251 Hiberno-Scotian dwarf mountain heaths
  - F2.252 Britannic chionophilous boreo-montane heaths
  - F2.253 Scotian juniper heaths
  - F2.254 Fenno-Scandian boreo-alpine heaths
  - F2.255 North Atlantic boreo-alpine heaths
  - F2.256 Arctic heaths
- F2.26 *Bruckenthalia* heaths
  - F2.261 Rhodopide *Bruckenthalia* heaths
  - F2.262 Northwestern Hellenide *Bruckenthalia* heaths
  - F2.263 Carpatho-Balkanide *Bruckenthalia* heaths
    - F2.2631 Balkan range *Bruckenthalia* heaths
    - F2.2632 Carpathian *Bruckenthalia* heaths
  - F2.264 Anatolian *Bruckenthalia* heaths
- F2.27 Alpidic *Arctostaphylos uva-ursi* and *Arctostaphylos alpinus* heaths
- F2.28 Alpidic *Rhododendron hirsutum* - *Erica* heaths
  - F2.281 Hairy alpenrose heaths
  - F2.282 Alpine erica heaths
- F2.29 *Dryas octopetala* mats
  - F2.291 Alpidogenic high mountain *Dryas* mats
    - F2.2911 Alpine *Dryas* mats
    - F2.2912 Southwestern high mountain *Dryas* mats
    - F2.2913 Jura *Dryas* mats
    - F2.2914 Apennine *Dryas* mats
    - F2.2915 Carpatho-Balkanide *Dryas* mats
      - F2.29151 Western Carpathian *Dryas* mats
      - F2.29152 Southeastern Carpathian *Dryas* mats
      - F2.29153 Balkan Range *Dryas* mats
    - F2.2916 Dinaro-Hellenide *Dryas* mats
    - F2.2917 Rhodopide mountain avens mats
  - F2.292 Hiberno-Britannic maritime *Dryas* mats
  - F2.293 Boreo-alpine *Dryas* mats
  - F2.294 Arctic *Dryas* heaths
- F2.2A Alpidic high mountain dwarf *Vaccinium* heaths
  - F2.2A1 Central Mediterranean subalpine dwarf bilberry heaths
  - F2.2A2 Balkano-Hellenic dwarf bilberry heaths
  - F2.2A3 Pontic Range dwarf bilberry heaths
- F2.2B Alpidic high mountain *Genista* and *Chamaecytisus* heaths
  - F2.2B1 Rayed broom heaths
  - F2.2B2 Balkano-Rhodopide *Chamaecytisus absinthioides* heaths
  - F2.2B3 Helleno-Balkanide *Chamaecytisus hirsutus* heaths
- F2.3 Subalpine deciduous scrub
  - F2.31 Mountain *Alnus* brush
    - F2.311 Green alder brush
      - F2.3111 Alpine green alder scrub
      - F2.3112 Carpathian green alder scrub
      - F2.3113 Dinaric green alder scrub
      - F2.3114 Balkan range green alder brush
      - F2.3115 Rhodopide green alder brush
    - F2.312 Corsican sweet alder brush
  - F2.32 Subalpine and oroboreal *Salix* brush
    - F2.321 Alpidic willow brush
      - F2.3211 Alpidic small willow brush
      - F2.3212 Alpine prostrate willow brush
      - F2.3213 Alpidic tall willow brush
      - F2.3214 Pyreneo-Cantabric willow brush
      - F2.3215 Hercynio-Carpathian willow brush

- F2.3216 Southeastern alpidogenous willow brushes
  - F2.32161 Dinaride willow brush
  - F2.32162 Balkan Range willow brush
  - F2.32163 Rhodopide willow brush
  - F2.3217 Ponto-Caucasian mountain willow brush
- F2.322 Oroboreal *Salix* scrub
- F2.323 Northern British willow brush
- F2.33 Subalpine mixed brushes
  - F2.331 Subalpine *Sorbus* brush
  - F2.332 Subalpine birch brush
  - F2.333 Subalpine bramble brush
  - F2.334 Subalpine cherry brush
  - F2.335 Subalpine ericaceous brush
  - F2.336 Rhodope *Potentilla fruticosa* thickets
- F2.34 Oroboreal *Betula* scrub
- F2.4 Conifer scrub close to the tree limit
  - F2.41 Inner Alpine *Pinus mugo* scrub
  - F2.42 Outer Alpine *Pinus mugo* scrub
  - F2.43 Southwestern *Pinus mugo* scrub
  - F2.44 Apennine *Pinus mugo* scrub
  - F2.45 Hercynian *Pinus mugo* scrub
  - F2.46 Carpathian *Pinus mugo* scrub
    - F2.461 Carpathian subalpine mountain pine scrub
    - F2.462 Carpathian alpenrose mountain pine scrub
  - F2.47 Pelago-Dinaride *Pinus mugo* scrub
  - F2.48 Balkano-Rhodopide *Pinus mugo* scrub

### **F3 Temperate and mediterranean-montane scrub**

- F3.1 Temperate thickets and scrub
  - F3.11 Medio-European rich-soil thickets
    - F3.111 Blackthorn-bramble scrub
      - F3.1111 Sub-Atlantic blackthorn-bramble scrub
      - F3.1112 Atlantic blackthorn-bramble scrub
    - F3.112 Blackthorn-privet scrub
      - F3.1121 Atlantic and medio-European blackthorn-privet scrub
        - F3.11211 Medio-European blackthorn-privet scrub
        - F3.11212 Atlantic hawthorn-ivy scrub
      - F3.1122 Sub-Mediterranean blackthorn-privet scrub
    - F3.1123 Rock pear scrub
    - F3.1124 Peri-Alpine sea buckthorn-barberry scrub
    - F3.1125 Inner Alpine barberry scrub
    - F3.1126 Iberian barberry scrub
  - F3.12 *Buxus sempervirens* thickets
  - F3.13 Atlantic poor soil thickets
    - F3.131 Bramble thickets
    - F3.132 Alder buckthorn, rowan, honeysuckle thickets
  - F3.14 Temperate *Cytisus scoparius* fields
    - F3.141 Lowland and hill broom fields
    - F3.142 Alpine broom fields
    - F3.143 Central Massif *Cytisus scoparius* fields
    - F3.144 Pyrenean *Cytisus scoparius* fields
  - F3.15 *Ulex europaeus* thickets
  - F3.16 *Juniperus communis* scrub
    - F3.161 Juniper downs
    - F3.162 Sub-Atlantic juniper heaths
    - F3.163 Juniper-wood sorrel woodland
    - F3.164 Sub-Mediterranean common juniper thickets
  - F3.17 *Corylus* thickets
    - F3.171 Atlantic and sub-Atlantic hazel thickets
    - F3.172 Sub-boreal hazel thickets

- F3.173 Peri-Alpine hazel thickets
- F3.174 Subcontinental hazel thickets
- F3.18 Inland dune thickets
  - F3.181 Inland dune juniper scrubs
  - F3.182 Inland dune mixed thickets
- F3.2 Submediterranean deciduous thickets and brushes
  - F3.21 Montane *Cytisus purgans* fields
    - F3.211 Cévennes *Cytisus purgans* fields
    - F3.212 Pyrenean *Cytisus purgans* fields
    - F3.213 Galicio-Cantabrian *Cytisus purgans* fields
    - F3.214 Upper Cordilleran *Cytisus purgans* fields
    - F3.215 Lower Cordilleran *Cytisus purgans* fields
    - F3.216 Galicio-Leonese *Cytisus purgans* fields
    - F3.217 Nevadan *Cytisus purgans* fields
  - F3.22 Southwestern sub-mediterranean deciduous thickets
    - F3.221 Franco-Iberian sub-Mediterranean deciduous thickets
    - F3.222 Western Iberian sub-Mediterranean deciduous thickets
    - F3.223 Central Iberian sub-Mediterranean deciduous thickets
    - F3.224 Oro-Baetic sub-Mediterranean deciduous thickets
    - F3.225 North African sub-Mediterranean deciduous thickets
  - F3.23 Tyrrhenian sub-mediterranean deciduous thickets
  - F3.24 Subcontinental and continental deciduous thickets
    - F3.241 Central European subcontinental thickets
      - F3.2411 Northern Central European ground cherry scrub
      - F3.2412 Subcontinental peri-Pannonic scrub
        - F3.24121 Peri-Pannonic ground cherry scrub
        - F3.24122 Peri-Pannonic dwarf almond scrub
        - F3.24123 Peri-Pannonic burnet rose scrub
        - F3.24124 Peri-Pannonic spiraea scrub
        - F3.24125 Danubian hawthorn scrub
      - F3.2413 Peri-Pannonic thickets
    - F3.242 Illyrio-Adriatic deciduous thickets
      - F3.2421 Illyrio-Adriatic oriental hornbeam thickets
      - F3.2422 Illyrio-Adriatic mixed thickets
      - F3.2423 Illyrio-Adriatic Christ's thorn brush
    - F3.243 Balkano-Hellenic deciduous thickets
      - F3.2431 Moesian oriental hornbeam thickets
        - F3.24311 Thracio-Macedonian oriental hornbeam thickets
        - F3.24312 Central Moesian oriental hornbeam thickets
        - F3.24313 Peri-Carpathian manna ash oriental hornbeam thickets
        - F3.24314 Peri-Carpathian wig tree oriental hornbeam thickets
      - F3.2432 Moesian lilac thickets
        - F3.24321 Central Moesian lilac thickets
        - F3.24322 Danubian lilac thickets
        - F3.24323 Moesio-Hellenic mixed thickets
        - F3.24324 Spleenwort lilac chasm thickets
        - F3.24325 Apuseni *Syringa josikaea* thickets
      - F3.2433 Moesian Christ's thorn brush
    - F3.244 Aegean deciduous thickets
    - F3.245 Eastern Mediterranean deciduous thickets
    - F3.246 Mediterraneo-Euxinian deciduous thickets
    - F3.247 Ponto-Sarmatic deciduous thickets
      - F3.2471 Ponto-Sarmatic steppe brush
      - F3.2472 Ponto-Sarmatic pre-steppe thorn thickets
      - F3.2473 Ponto-Thracian sub-Mediterranean scrub
        - F3.24731 Western Pontic jasmine christ's thorn scrub
        - F3.24732 Thracian christ's thorn scrub
        - F3.24733 Western Pontic wigtree scrub
      - F3.2474 Ponto-Sarmatic steppe-ravine scrub
      - F3.2475 Ponto-Sarmatic pod thickets

- F3.25** Piornales
  - F3.251** White-flowered broom fields
  - F3.252** Northwestern Iberian *Genista florida* fields
  - F3.253** Northwestern Iberian *Cytisus* fields
  - F3.254** Central Iberian *Genista florida* fields
  - F3.255** Upper Cordilleran *Genista cinerea* fields
  - F3.256** Central Iberian *Cytisus* fields
  - F3.257** Andalusian broom fields
- F3.26** Tyrrhenian broom fields
- F3.27** *Genista aetnensis* stands
- F3.28** Canary Island broom fields
- F3.29** Moesian broom fields

#### **F4 Temperate shrub heathland**

- F4.1** Wet heaths
  - F4.11** Northern wet heaths
  - F4.12** Southern wet heaths
  - F4.13** *Molinia caerulea* wet heaths
- F4.2** Dry heaths
  - F4.21** Submontane *Vaccinium* - *Calluna* heaths
    - F4.211** North Atlantic *Vaccinium-Empetrum-Rhacomitrium* heaths
    - F4.212** Sub-boreal *Vaccinium* heaths
    - F4.213** Hercynian *Vaccinium* heaths
    - F4.214** Submontane Alpine *Vaccinium* heaths
    - F4.215** Submontane Pyreneo-Cantabrian *Vaccinium* heaths
    - F4.216** Collinar-montane Carpathian *Vaccinium* heaths
      - F4.2161** Submontane western Carpathian bilberry-cowberry heaths
      - F4.2162** Montane eastern Carpathian bilberry-ling heaths
  - F4.22** Sub-Atlantic *Calluna* - *Genista* heaths
    - F4.221** Northern *Calluna-Genista* heaths
    - F4.222** Subcontinental *Calluna-Genista* heaths
    - F4.223** Campino-Flandrian *Calluna-Genista* heaths
    - F4.224** Campino-Flandrian *Erica cinerea* heaths
    - F4.225** Britannic *Calluna-Genista* heaths
    - F4.226** Montane *Calluna-Genista* heaths
    - F4.227** Southern sub-boreal *Calluna-Empetrum* heaths
    - F4.228** Illyrian heaths
    - F4.229** Po basin heaths
    - F4.22A** *Genista sagittalis* heaths
    - F4.22B** Central European basicline heaths
    - F4.22C** Pontic ling heaths
  - F4.23** Atlantic *Erica* - *Ulex* heaths
    - F4.231** Maritime gorse heaths
    - F4.232** Hiberno-Britannic *Calluna vulgaris-Ulex gallii* heaths
    - F4.233** Irish *Erica mackaiana* heaths
    - F4.234** Northern *Erica vagans* heaths
    - F4.235** Anglo-Armorican *Erica cinerea-Ulex gallii* heaths
    - F4.236** Cantabro-Pyrenean *Erica mackaiana-E. cinerea* heaths
    - F4.237** Cantabro-Pyrenean *Erica vagans-E. cinerea* heaths
    - F4.238** Gallo-Britannic dwarf gorse heaths
    - F4.239** Aquitano-Ligerian dwarf gorse heaths
  - F4.24** Ibero-Atlantic *Erica* - *Ulex* - *Cistus* heaths
    - F4.241** Biscay heaths
      - F4.2411** Aquitanian *Erica-Cistus* heaths
      - F4.2412** Gascony-Sologne arid heaths
      - F4.2413** Northern Iberian heaths
    - F4.242** Luso-Galician heaths
      - F4.2421** Luso-Galician collinar heaths
      - F4.2422** Luso-Galician maritime heaths
    - F4.243** Cabreran heaths

- F4.2431 Cabreran dry whin heaths
- F4.2432 Cabreran mesophile whin heaths
- F4.244 Galicio-Leonese heaths
  - F4.2441 Galicio-Leonese *Erica aragonensis* heaths
  - F4.2442 Galicio-Leonese *Erica umbellata* heaths
  - F4.2443 Galicio-Leonese *Erica cinerea* heaths
- F4.245 Oro-Castillan heaths
  - F4.2451 Western Cordilleran *Erica aragonensis* heaths
  - F4.2452 Ayllon *Erica aragonensis* heaths
  - F4.2453 Villuercan *Erica aragonensis* heaths
- F4.246 Sorian heaths
  - F4.2461 Sorian summital heaths
  - F4.2462 Sorian *Erica aragonensis* heaths
  - F4.2463 Sorian *Erica vagans* heaths
  - F4.2464 Sorian collinar heaths
- F4.247 Cuencan heaths
- F4.248 Luso-Extremaduran heaths
- F4.249 *Erica andevalensis* heaths
- F4.25 Boreo-Atlantic *Erica cinerea* heaths
- F4.26 Inland dune heaths
  - F4.261 Dry sandy heaths with *Empetrum nigrum*
  - F4.262 Dry sandy heaths with *Calluna* and *Genista*
- F4.3 Macaronesian heaths
  - F4.31 Canary Island heaths
    - F4.311 Canary Island *Erica scoparia* heaths
    - F4.312 Canary Island *Erica arborea* heaths
  - F4.32 Madeiran cloud heaths
  - F4.33 Madeiran summital heaths
  - F4.34 Azorean lowland heaths
  - F4.35 Upland Azorean *Erica azorica* and *Juniperus brevifolia* heaths
  - F4.36 Azorean summital heaths

## **F5 Maquis, arborescent matorral and thermo-Mediterranean brushes**

- F5.1 Arborescent matorral
  - F5.11 Evergreen *Quercus* matorral
    - F5.111 Cork-oak matorral
    - F5.112 Acidiphile western Mediterranean holm-oak matorral
    - F5.113 Calciphile western Mediterranean oak matorral
    - F5.114 Eastern Mediterranean oak matorral
    - F5.115 Iberian mixed oak arborescent matorral
    - F5.116 Mediterranean evergreen oak low woods
      - F5.1161 *Quercus ilex* and *Quercus rotundifolia* low woods
      - F5.1162 *Quercus coccifera* and *Quercus alnifolia* low woods
  - F5.12 *Olea europaea* and *Pistacia lentiscus* matorral
    - F5.121 Olive arborescent matorral
    - F5.122 Carob arborescent matorral
    - F5.123 Lentisc and phillyrea arborescent matorral
    - F5.124 Myrtle arborescent matorral
    - F5.125 Canary Island olive-lentisc arborescent matorral
  - F5.13 *Juniper* matorral
    - F5.131 Prickly juniper arborescent matorral
      - F5.1311 *Juniperus oxycedrus* arborescent matorral
      - F5.1312 *Juniperus macrocarpa* arborescent matorral
      - F5.1313 *Juniperus transtagana* arborescent matorral
    - F5.132 *Juniperus phoenicea* and *Juniperus lycia* arborescent matorral
      - F5.1321 *Juniperus phoenicea* arborescent matorral
      - F5.1322 *Juniperus lycia* arborescent matorral
    - F5.133 *Juniperus excelsa* and *Juniperus foetidissima* arborescent matorrals
      - F5.1331 *Juniperus excelsa* arborescent matorral
      - F5.1332 *Juniperus foetidissima* arborescent matorral

- F5.134 *Juniperus communis* arborescent matorral
- F5.135 *Juniperus drupacea* arborescent matorral
- F5.136 *Juniperus thurifera* arborescent matorral
- F5.14 *Pinus* matorral
  - F5.141 Mesogean pine arborescent matorral
  - F5.142 Stone pine arborescent matorral
  - F5.143 Aleppo pine arborescent matorral
  - F5.144 Aegean pine arborescent matorral
  - F5.145 Black pine and scots pine arborescent matorral
- F5.15 *Tetraclinis articulata* matorral
- F5.16 Deciduous *Quercus* matorral
- F5.17 Arid zone matorral
  - F5.171 Iberian arid zone *Ziziphus* matorral
- F5.18 *Laurus nobilis* matorral
- F5.19 *Cupressus* matorral
- F5.1A *Zelkova* matorral
- F5.2 Maquis
  - F5.21 High maquis
    - F5.211 Western Mediterranean high maquis
    - F5.212 Luso-Extremaduran high maquis
    - F5.213 Eastern Mediterranean high maquis
  - F5.22 Low ericaceous maquis
  - F5.23 Tall *Cistus* maquis
    - F5.231 Southwestern Iberian tall cistus maquis
    - F5.232 Central Iberian tall cistus maquis
    - F5.233 Baetic tall cistus maquis
    - F5.234 Tyrrhenian tall cistus maquis
  - F5.24 Low *Cistus* maquis
    - F5.241 *Cistus monspeliensis* maquis
    - F5.242 *Cistus salvifolius* maquis
    - F5.243 *Cistus populifolius* maquis
    - F5.244 *Cistus laurifolius* maquis
    - F5.245 *Cistus psilosepalus* maquis
    - F5.246 *Cistus crispus* maquis
    - F5.247 *Cistus incanus* maquis
    - F5.248 *Cistus albidus* maquis
  - F5.25 Low *Cistus* - *Lavandula stoechas* maquis
    - F5.251 Central Mediterranean lavender maquis
    - F5.252 Central Iberian lavender maquis
    - F5.253 Western Iberian lavender maquis
  - F5.26 Low sparse maquis
  - F5.27 *Cytisus*-dominated maquis
- F5.3 Pseudomaquis
  - F5.31 Helleno-Balkanic pseudomaquis
  - F5.32 Italo-French pseudomaquis
  - F5.33 Iberian pseudomaquis
  - F5.34 Western Asian pseudomaquis
- F5.4 *Spartium junceum* fields
- F5.5 Thermo-Mediterranean scrub
  - F5.51 Thermo-Mediterranean brushes, thickets and heath-garrigues
    - F5.511 Oleo-lentisc brush
    - F5.512 Thermo-Mediterranean heath-garrigues
      - F5.5121 Western *Erica multiflora* heath-garrigues
      - F5.5122 Western *Erica manipuliflora* heath-garrigues
      - F5.5123 Eastern *Erica manipuliflora* heath-garrigues
    - F5.513 Thorny burnet brush
    - F5.514 Lentisc brush
    - F5.515 *Calicotome* brush
    - F5.516 *Laurus* thickets
    - F5.517 Coastal *Helichrysum* garrigues

- F5.5171** Iberian thermo-Mediterranean kermes oak brush
- F5.5172** Tyrrhenian thermo-Mediterranean kermes oak brush
- F5.5173** Hellenic thermo-Mediterranean kermes oak brush
- F5.5174** Anatolian thermo-Mediterranean kermes oak brush
- F5.5175** Cyprian thermo-Mediterranean kermes oak brush
- F5.5176** Levantine thermo-Mediterranean kermes oak brush
- F5.5177** North African thermo-Mediterranean kermes oak brush
- F5.518** Myrtle thickets
- F5.519** Thermo-Mediterranean kermes oak brushes
- F5.51A** *Phillyrea* thickets
  - F5.51A1** Minorcan *lentiscares*
  - F5.51A2** Valencian *mata*
  - F5.51A3** Western *Phillyrea* thickets
  - F5.51A4** Eastern *Phillyrea* thickets
- F5.51B** Buckthorn-asparagus brushes
- F5.51C** *Osyris* brushes
- F5.51D** Storax thickets
- F5.51E** *Buxus balearica* box thickets
- F5.51F** Dwarf oak scrub
- F5.51G** Tall spiny broom brush
- F5.51H** *Corema* brush
- F5.51I** Thermo-Mediterranean juniper brushes
- F5.51J** Thermo-Mediterranean wormwood brushes
- F5.51K** Thermo-Mediterranean Jupiter's beard brushes
- F5.51L** Coastal dwarf leguminous garrigues
- F5.52** *Euphorbia dendroides* formations
- F5.53** *Ampelodesmos mauritanica* -dominated garrigues
- F5.54** *Chamaerops humilis* brush
- F5.55** Mediterranean pre-desert scrub
  - F5.551** Iberian jujube brush
  - F5.552** Sicilian jujube brush
  - F5.553** *Maytenus* brushes
  - F5.554** Iberian *Periploca* scrubs
  - F5.555** Sicilian Channel *Periploca* scrubs
  - F5.556** Iberian tall arid brushes
    - F5.5561** *Salsola webbii* brush
    - F5.5562** *Sideritis* brush
    - F5.5563** Gorse-phlomis scrub
    - F5.5564** *Genista umbellata* garrigues
  - F5.557** Iberian arid garrigues
    - F5.5571** Murcio-Alicantian arid garrigues
    - F5.5572** Almerian arid garrigues
      - F5.55721** *Limonium-Anabasis* arid garrigues
      - F5.55722** Cabo de Gata arid garrigue
      - F5.55723** Tabernas arid garrigues
      - F5.55724** Coastal Almerian arid garrigues
- F5.56** Thermo-Mediterranean broom fields (retamares)
  - F5.561** Yellow retama brush
  - F5.562** Ibero-Mauritanian white retama brush
  - F5.563** *Genista speciosa* broom fields
  - F5.564** *Genista valentina* broom fields
  - F5.565** *Genista retamoides* broom fields
  - F5.566** *Genista haenseleri* broom fields
  - F5.567** *Genista ramosissima* broom fields
  - F5.568** Thermo-mediterranean *Lygos raetam* brush
  - F5.569** Eolian broomfields
  - F5.56A** *Genista ephedroides* broomfields
  - F5.56B** Ibiza broomfields
  - F5.56C** *Genista pseudoretamoides* broom fields
- F5.57** Mediterranean gorse-heaths

- F5.571 Monchique *Ulex argenteus* gorse-heaths
- F5.572 Lusitanian *Ulex densus* gorse-heaths
- F5.573 Morena *Ulex eriocladus* gorse heaths
- F5.574 *Ulex parviflorus* gorse-heaths
- F5.575 *Stauracanthus spectabilis* gorse-heaths
- F5.576 Luso-Extremaduran *Genista hirsuta* gorse-heaths
- F5.58 Iberian thermo-Mediterranean garrigues
  - F5.581 Baetic garrigues
  - F5.582 Ronda *Ononis speciosa* garrigues
  - F5.583 Guadalquivir *Genista equisetiformis* garrigues
  - F5.584 Alboran *Genista equisetiformis* garrigues
  - F5.585 Andalusian magnesium garrigues
    - F5.5851 Ronda dolomite garrigues
    - F5.5852 Ronda serpentine and peridotite garrigues
    - F5.5853 Bermeja *Ulex* garrigues
  - F5.586 Bermeja *Halimium* garrigues
- F5.59 *Stauracanthus boivinii* gorse-heaths
  - F5.591 Aljibe *Stauracanthus boivinii* gorse-heaths
  - F5.592 Algarve *Stauracanthus boivinii* gorse-heaths
  - F5.593 North African *Stauracanthus boivinii* gorse-heaths
- F5.5A Western Tethyan xero-psammitic brushes
  - F5.5A1 Southern Andalusian *monte blanco*
  - F5.5A2 Guadalquivir xero-psammitic brushes
  - F5.5A3 Algarve xero-psammitic brushes
  - F5.5A4 Lusitanian xero-psammitic brushes
  - F5.5A5 Western Mediterranean xero-psammitic brushes
- F5.5B Cabo de Sao Vicente brushes
- F5.5C Thermo-Mediterranean heaths
  - F5.5C1 Dry Andalusian *monte negro*
  - F5.5C2 Humid Andalusian *monte negro*

## F6 Garrigue

- F6.1 Western garrigues
  - F6.11 Western *Quercus coccifera* garrigues
  - F6.12 Western *Rosmarinus officinalis* garrigues
  - F6.13 Western *Cistus* garrigues
  - F6.14 Western *Euphorbia* garrigues
  - F6.15 Western *Juniperus oxycedrus* garrigues
  - F6.16 Western *Lavandula* garrigues
  - F6.17 Western *Teucrium* and other labiate garrigues
  - F6.18 Western *Genista* garrigues
  - F6.19 Western *Calicotome* garrigues
  - F6.1A Western composite garrigues
  - F6.1B Western *Erica* garrigues
  - F6.1C Western *Globularia* garrigues
  - F6.1D Western *Helianthemum* and *Fumana* garrigues
  - F6.1E *Lithodora fruticosa* garrigues
  - F6.1F Western *Thymelaea* garrigues
  - F6.1G Western *Bupleurum* garrigues
  - F6.1H Western *Ulex* garrigues
  - F6.1I Western *Ononis fruticosa* garrigues
  - F6.1J Western *Anthyllis cytisoides* garrigues
  - F6.1K Western *Dictamnus* garrigues
- F6.2 Eastern garrigues
  - F6.21 Eastern *Quercus coccifera* garrigues
  - F6.22 Eastern *Rosmarinus officinalis* garrigues
  - F6.23 Eastern *Cistus* garrigues
  - F6.24 Eastern *Euphorbia* garrigues
  - F6.25 Eastern *Juniperus oxycedrus* garrigues
  - F6.26 Eastern *Lavandula* garrigues



- F6.27** Eastern *Teucrium* and other labiates garrigues
  - F6.271** Eastern tree germander garrigues
  - F6.272** Jerusalem sage garrigues
  - F6.273** Eastern *Salvia* and *Stachys* garrigues
  - F6.274** Eastern dwarf labiate garrigues
- F6.28** Eastern *Paliurus spina-christi* garrigues
- F6.29** Eastern broom garrigues
- F6.2A** *Ebenus cretica* brushes
- F6.2B** Eastern *Helichrysum* and other composite garrigues
- F6.2C** Eastern *Erica* garrigues
- F6.2D** *Arbutus andrachne* garrigues
- F6.2E** Eastern *Globularia* garrigues
- F6.2F** Eastern *Helianthemum* and *Fumana* garrigues
- F6.2G** Eastern *Thymelaea* garrigues
- F6.2H** Eastern *Bupleurum* garrigues
- F6.2I** East Mediterranean pre-desert scrub
- F6.3** Illyrian garrigues
  - F6.31** Illyrian *Quercus coccifera* garrigues
  - F6.32** Illyrian *Rosmarinus officinalis* garrigues
  - F6.33** Illyrian *Cistus* garrigues
    - F6.331** Illyrian *Cistus incanus* garrigues
    - F6.332** Illyrian *Cistus salvifolius* garrigues
    - F6.333** Illyrian *Cistus monspeliensis* garrigues
  - F6.34** Illyrian *Euphorbia* garrigues
  - F6.35** Illyrian *Juniperus oxycedrus* garrigues
  - F6.36** Illyrian *Teucrium* and other labiates garrigues
  - F6.37** Illyrian *Paliurus spina-christi* garrigues
  - F6.38** Illyrian broom garrigues
  - F6.39** Illyrian *Helichrysum* and other composite garrigues
  - F6.3A** Illyrian *Erica* garrigues
- F6.4** Black Sea garrigues
  - F6.41** Crimean garrigues
  - F6.42** South-Euxinian garrigues
  - F6.43** Thracian garrigues
- F6.5** Macaronesian garrigues
- F6.6** Supra-Mediterranean garrigues
  - F6.61** *Lavandula angustifolia* garrigues
  - F6.62** *Genista cinerea* garrigues
  - F6.63** Ibero-Gallic supra-Mediterranean dwarf-shrub garrigues
  - F6.64** Supra-Mediterranean *Buxus sempervirens* scrub
  - F6.65** Italian supra-Mediterranean garrigues
  - F6.66** Balkan peninsula supra-Mediterranean garrigues
    - F6.661** Balkan peninsula supra-Mediterranean shrub garrigues
    - F6.662** Balkan peninsula supra-Mediterranean subshrub garrigues
- F6.7** Mediterranean gypsum scrubs
  - F6.71** Central Iberian gypsum scrubs
    - F6.711** Meseta gypsum scrubs
    - F6.712** Eastern Andalusian gypsum scrubs
    - F6.713** Dueran gypsum scrubs
  - F6.72** Ebro gypsum scrubs
    - F6.721** *Gypsophila hispanica* garrigues
    - F6.722** *Helianthemum squamatum* garrigues
    - F6.723** *Ononis tridentata* garrigues
  - F6.73** Southeastern Iberian gypsum scrubs
- F6.8** Xero-halophile scrubs
  - F6.81** Canary Island xero-halophilous scrubs
    - F6.811** Canary Island coastal scrub
    - F6.812** Canary Island *Zygophyllum* dry scrubs
    - F6.813** Canary Island *Salsola longifolia* dry scrubs
    - F6.814** Selvagen woody seablite scrubs

- F6.82 Mediterranean halo-nitrophilous scrubs
  - F6.821 Ebro sisallares
  - F6.822 Manchegan sisallares
  - F6.823 Catalano-Valencian halo-nitrophilous scrubs
  - F6.824 Southeastern Iberian matojares
  - F6.825 Sicilian halo-nitrophilous scrubs
- F6.83 Interior Iberian salt scrubs
  - F6.831 Interior woody seablite scrubs
  - F6.832 Interior glaucous glasswort scrubs
  - F6.833 Interior creeping glasswort scrubs

## **F7 Spiny Mediterranean heaths (phrygana, hedgehog-heaths and related coastal cliff vegetation)**

- F7.1 West Mediterranean spiny heaths
  - F7.11 West Mediterranean mainland clifftop phrygana
    - F7.111 Calcareous Provence phrygana
    - F7.112 Crystalline Provence phrygana
    - F7.113 West-Mediterranean *Anthyllis* phrygana
    - F7.114 Straits of Bonifacio phrygana
    - F7.115 Cabo de Creus phrygana
    - F7.116 Cabo de Sao Vicente phrygana
  - F7.12 Balearic clifftop phrygana
- F7.2 Central Mediterranean spiny heaths
  - F7.21 Sardinian *Centaurea horrida* phrygana
  - F7.22 Sardinian *Genista acanthoclada* phrygana
  - F7.23 Corsican and Sardinian *Genista* phrygana
  - F7.24 Pantelleria phrygana
  - F7.25 Central Mediterranean *Sarcopoterium* phrygana
  - F7.26 *Hypericum aegyptiacum* phrygana
- F7.3 East Mediterranean phrygana
  - F7.31 Aegean phrygana
    - F7.311 Aegean *Sarcopoterium* phrygana
    - F7.312 Maritime *Centaurea spinosa* phrygana
    - F7.313 Lesbian *Centaurea spinosa* phrygana
    - F7.314 Cycladian *Centaurea* phrygana
    - F7.315 Aegean *Erica manipuliflora* phrygana
    - F7.316 Aegean *Thymus capitatus* phrygana
    - F7.317 Aegean *Genista acanthoclada* phrygana
    - F7.318 Aegean *Satureja thymbra* phrygana
    - F7.319 Aegean *Euphorbia acanthothamnus* phrygana
    - F7.31A Aegean *Lithospermum hispidulum* phrygana
    - F7.31B Aegean *Anthyllis hermanniae* phrygana
  - F7.32 Mid-elevation phrygana of Crete
  - F7.33 Thracian phrygana
    - F7.331 Thracian *Sarcopoterium* phrygana
    - F7.332 Northern Thracian collinar *Astragalus thracicus* phrygana
- F7.34 East Mediterranean bathas
  - F7.341 Cyprian phrygana
  - F7.342 *Sarcopoterium* bathas
  - F7.343 *Thymus capitatus* bathas
  - F7.344 *Salvia triloba* and *Satureja thymbra* bathas
  - F7.345 *Lithospermum hispidulum* bathas
- F7.4 Hedgehog-heaths
  - F7.41 Pyrenean hedgehog-heaths
  - F7.42 Cordilleran hedgehog-heaths
    - F7.421 Gredos hedgehog-heaths
    - F7.422 Bejar-Peña de Francia hedgehog-heaths
    - F7.423 Estrela hedgehog-heaths
    - F7.424 Western Cordilleran secondary hedgehog-heaths

- F7.43** Nevadan hedgehog-heaths
  - F7.431** Lower Nevadan hedgehog-heaths
  - F7.432** Middle Nevadan hedgehog-heaths
  - F7.433** Upper Nevadan hedgehog-heaths
  - F7.434** Nevadan dwarf cushion-heaths
    - F7.4341** Siliceous Nevadan dwarf cushion-heaths
    - F7.4342** Calcareous Nevadan dwarf cushion-heaths
  - F7.435** Nevadan *Genista* hedgehog-heaths
- F7.44** Franco-Iberian hedgehog-heaths
  - F7.441** *Erinacea* hedgehog-heaths
    - F7.4411** Baetic *Erinacea-Vella* hedgehog-heaths
    - F7.4412** Iberian Range *Erinacea* hedgehog-heaths
    - F7.4413** Maestrazgo *Erinacea-Genista* hedgehog-heaths
    - F7.4414** Southeastern *Erinacea* hedgehog-heath
    - F7.4415** Southeastern *Daphne* hedgehog-heaths
  - F7.442** Peri-Nevadan dwarf cushion-heaths
    - F7.4421** Cazorla dwarf cushion-heaths
    - F7.4422** Baza-Tejeda-Ronda dwarf cushion-heaths
    - F7.4423** Magina dwarf cushion-heaths
    - F7.4424** Maria-Maimon dwarf cushion-heaths
  - F7.443** *Echinopartum boissieri* hedgehog-heaths
    - F7.4431** Alcaraz *Echinopartum* hedgehog-heaths
    - F7.4432** Gador *Echinopartum* hedgehog-heaths
    - F7.4433** Baetic *Echinopartum* hedgehog-heaths
  - F7.444** Catalano-Valencian *Erinacea* hedgehog-heaths
  - F7.445** *Genista* cushion-heaths
    - F7.4451** Pyreneo-Cantabrian cushion-heaths
    - F7.4452** *Genista sanabrensis* cushion-heaths
    - F7.4453** *Genista pumila* cushion-heaths
    - F7.4454** *Genista scorpius* cushion-heaths
    - F7.4455** *Genista pseudopilosa* cushion-heaths
    - F7.4456** *Genista lobelii* and *G. pulchella* cushion-heaths
  - F7.446** Collinar *Astragalus* hedgehog-heaths
    - F7.4461** Dueran *Astragalus* hedgehog-heaths
    - F7.4462** Southern Mesetan *Astragalus* hedgehog-heaths
  - F7.447** Summital Balearic labiate hedgehog-heaths
    - F7.4471** Mallorcan hedgehog-heaths
    - F7.4472** Menorcan hedgehog-heaths
- F7.45** Cyrno-Sardinian hedgehog-heaths
- F7.46** Mount Etna hedgehog-heaths
- F7.47** Madonie and Apennine hedgehog-heaths
- F7.48** Helleno-Balkan sylvatic *Astragalus* hedgehog-heaths
  - F7.481** Southern Hellenic montane hedgehog heaths
  - F7.482** Moesian *Astragalus angustifolius* hedgehog-heaths
- F7.49** Hellenic oro-Mediterranean hedgehog-heaths
  - F7.491** Hellenic tragacanth hedgehog-heaths
    - F7.4911** Southern Peloponnese tragacanth hedgehog-heaths
    - F7.4912** Kyllini-Chelmos tragacanth hedgehog-heaths
    - F7.4913** Hellenic mainland tragacanth hedgehog-heaths
  - F7.492** Oro-Hellenic *Astragalus angustifolius* hedgehog-heaths
  - F7.493** Hellenic cushion-heaths
- F7.4A** Hellenic alti-Mediterranean hedgehog-heaths
- F7.4B** Cretan hedgehog-heaths
- F7.4C** Aegean summital hedgehog-heaths
- F7.4D** Southern Hellenic *Genista acanthoclada* hedgehog-heaths
- F7.4E** *Astragalus sempervirens* hedgehog-heaths
- F7.4F** Canary Island cushion-heaths
  - F7.4F1** Tenerife cushion-heaths
  - F7.4F2** La Palma cushion-heaths
- F7.4G** Cyprian hedgehog-heaths

- F7.4H** Mediterraneo-Anatolian hedgehog-heaths
- F7.4I** Western central Eurasian hedgehog-heaths
  - F7.4I1** Northern Thracian tragacanth hedgehog-heath
  - F7.4I2** Central Anatolian hedgehog-heaths

## **F8 Thermo-Atlantic xerophytic scrub**

- F8.1** Canary Island xerophytic scrub
  - F8.11** Western Canary Island *Euphorbia* communities
    - F8.111** Cardonales
    - F8.112** Spurge tabaibales
    - F8.113** Kleinia tabaibales
    - F8.114** Dragon tree communities
    - F8.115** *Cneorum* cushion communities
    - F8.116** *Plocama* communities
  - F8.12** Western Canary Island saxicolous formations
    - F8.121** Western Canary Island saxicolous labiate communities
    - F8.122** Cardoncillo communities
    - F8.123** Western Canary Island crassulid communities
  - F8.13** Eastern Canary Island xerophytic communities
  - F8.14** Canary Island *Launaea* scrub
- F8.2** Madeiran xerophytic scrub
  - F8.21** Madeiran *Euphorbia* formations
  - F8.22** Madeiran saxicolous formations
  - F8.23** Desertas dry scrub

## **F9 Riverine and fen scrubs**

- F9.1** Riverine scrub
  - F9.11** Orogenous riverine brush
    - F9.111** Pre-Alpine willow-tamarisk brush
    - F9.112** Pre-Alpine willow and sea-buckthorn brush
    - F9.113** Boreo-alpine willow-tamarisk scrub
  - F9.12** Lowland and collinear riverine *Salix* scrub
    - F9.121** Almond willow-osier scrub
    - F9.122** Western Mediterranean purple willow scrub
    - F9.123** Balkan riverine willow scrub
    - F9.124** Ibero-montane riverine willow scrub
    - F9.125** Cantabrian willow scrub
    - F9.126** Iberian sage-leaved willow scrub
    - F9.127** Pedicellated willow scrub
      - F9.1271** Andalusian willow scrub
      - F9.1272** Sardinian pedicellated willow scrub
      - F9.1273** Sicilian pedicellated willow scrub
      - F9.1274** Calabrian pedicellated willow scrub
    - F9.128** Continental riverine willow scrub
      - F9.1281** Pannonic riverine willow scrub
      - F9.1282** Ponto-Sarmatic riverine willow scrub
      - F9.1283** Central Eurasian riverine willow scrub
    - F9.129** Boreal riverine willow scrub
  - F9.13** Montane river gravel low brush
  - F9.14** Gravel bank thickets and woods
- F9.2** *Salix* carr and fen scrub
  - F9.21** Grey willow carrs
    - F9.211** Western grey willow carrs
    - F9.212** Central European grey willow carrs
    - F9.213** Intra-Carpathian grey willow carrs
  - F9.22** Sphagnum willow carrs
  - F9.23** Bay willow carrs
  - F9.24** Dwarf willow mire scrubs
  - F9.25** Boreal sedge willow carrs

- F9.26** Boreo-alpine willow fen scrubs
- F9.3** Southern riparian galleries and thickets
  - F9.31** *Nerium oleander*, *Vitex agnus-castus* and *Tamarix* galleries
    - F9.311** Oleander galleries
    - F9.312** Chaste tree thickets
    - F9.313** Mediterraneo-Macaronesian tamarisk thickets
      - F9.3131** West Mediterranean tamarisk thickets
      - F9.3132** Macaronesian tamarisk thickets
        - F9.31321** Canary Island tamarisk thickets
        - F9.31322** Madeiran tamarisk thickets
      - F9.3133** East Mediterranean tamarisk thickets
      - F9.3134** Hyper-saline Mediterranean tamarisk stands
        - F9.31341** Iberian *Tamarix boveana* stands
        - F9.31342** Saline *Tamarix canariensis* stands
        - F9.31343** Saline eastern tamarisk stands
    - F9.314** Irano-Turanian tamarisk thickets
      - F9.3141** Pontic tamarisk stands
        - F9.31411** Western Pontic fresh water *Tamarix smyrnensis* stands
        - F9.31412** Western Pontic coastal *Tamarix smyrnensis* stands
        - F9.31413** Central and eastern Pontic tamarisk stands
  - F9.32** Southwestern Iberian tamujares, formed by *Securinega tinctoria*
  - F9.33** Lauriphyllous galleries of the Cordillera Oretana
  - F9.34** *Myrica gale* - *Salix* scrub of the Cordillera Oretana

## **FA Hedgerows**

- FA.1** Hedgerows of non-native species
- FA.2** Highly-managed hedgerows of native species
- FA.3** Species-rich hedgerows of native species
- FA.4** Species-poor hedgerows of native species

## **FB Shrub plantations**

- FB.1** Shrub plantations for whole-plant harvesting
- FB.2** Shrub plantations for leaf or branch harvest
  - FB.21** Tea plantations
  - FB.22** Osier beds
- FB.3** Shrub plantations for ornamental purposes or for fruit, other than vineyards
  - FB.31** Shrub and low-stem tree orchards
  - FB.32** Ornamental shrub plantations
- FB.4** Vineyards
  - FB.41** Traditional vineyards
  - FB.42** Intensive vineyards

## **G Woodland, forest and other wooded land**

### **G1 Broadleaved deciduous woodland**

- G1.1** Riparian and gallery woodland, with dominant *Alnus*, *Betula*, *Populus* or *Salix*
  - G1.11** Riverine *Salix* woodland
    - G1.111** Middle European *Salix alba* forests
      - G1.1111** Western European white willow forests
      - G1.1112** Eastern European poplar-willow forests
    - G1.112** Mediterranean tall *Salix* galleries
      - G1.1121** Mediterranean white willow galleries
        - G1.11211** Central Iberian *Salix neotricha* galleries
        - G1.11212** Eumediterranean white and crack willow galleries
      - G1.1122** Olive-leaved and ashy willow riparian woods
        - G1.11221** Iberian olive-leaved willow woods
        - G1.11222** Andalusian olive-leaved willow woods
        - G1.11223** Sardinian olive-leaved willow woods

- G1.11224** Italo-Hellenic ashy willow riparian woods
  - G1.113** Canary Island *Salix* galleries
  - G1.114** Continental *Salix* galleries
    - G1.1141** Pannonic willow and poplar-willow galleries
    - G1.1142** Ponto-Sarmatic steppe willow galleries
      - G1.11421** Lower Danube willow galleries
      - G1.11422** Northern Thracian willow galleries
      - G1.11423** Eastern Ponto-Sarmatic steppe willow galleries
  - G1.12** Boreo-alpine riparian galleries
    - G1.121** Montane *Alnus incana* galleries
      - G1.1211** Alpine grey alder galleries
      - G1.1212** Apennine grey alder galleries
      - G1.1213** Hercynio-Carpathian grey alder galleries
        - G1.12131** Hercynio-Carpathian sage grey alder galleries
        - G1.12132** Hercynio-Carpathian caltha grey alder galleries
      - G1.1214** Eastern Carpathian grey alder galleries
      - G1.1215** Montenegrine grey alder galleries
      - G1.1216** Balkan Range grey alder galleries
      - G1.1217** Rhodopide grey alder galleries
    - G1.122** Dealpine *Alnus incana* galleries
    - G1.123** Boreal *Alnus incana* galleries
    - G1.124** Boreal *Alnus glutinosa* galleries
    - G1.125** Western Siberian *Betula* and pine galleries
    - G1.126** Eastern boreal riverine galleries
    - G1.127** Ponto-Caucasian montane *Alnus* galleries
  - G1.13** Southern *Alnus* and *Betula* galleries
    - G1.131** Southern *Alnus glutinosa* galleries
      - G1.1311** Iberian meso-Mediterranean alder galleries
      - G1.1312** Iberian supra-Mediterranean alder galleries
      - G1.1313** Western Mediterranean alder and ash-alder galleries
      - G1.1314** Aegean alder galleries
    - G1.132** *Rhododendron* - *Alnus* galleries
    - G1.133** Corsican *Alnus cordata* and *Alnus glutinosa* galleries
    - G1.134** Relict *Betula* galleries of Cordillera Oretana
- G1.2** Mixed riparian floodplain and gallery woodland
- G1.21** Riverine *Fraxinus* - *Alnus* woodland, wet at high but not at low water
    - G1.211** *Fraxinus* - *Alnus* woods of rivulets and springs
      - G1.2111** Sedge ash-alder woods
      - G1.2112** Fontinal ash-alder woods
      - G1.2113** Cabbage thistle ash-alder woods
      - G1.2114** Hillside spring ash-alder woods
      - G1.2115** Great horsetail ash-alder woods
      - G1.2116** Dacio-Moesian ash-alder woods
    - G1.212** *Fraxinus* - *Alnus* woods of fast-flowing rivers
      - G1.2121** Collinar stream ash-alder woods
        - G1.21211** Stitchwort ash-alder woods
        - G1.21212** Northeastern stream spruce-ash-alder woods
      - G1.2122** Submontane Hercynian stream ash-alder woods
      - G1.2123** Pre-Carpathian stream ash-alder woods
    - G1.213** *Fraxinus* - *Alnus* woods of slow rivers
      - G1.2131** Central European slow river floodplain woods
        - G1.21311** Central European slow river ash-alder woods
        - G1.21312** Central European spruce-alder woods
        - G1.21313** Moravian oak-beech-alder riverine woods
      - G1.2132** West European tall herb ash-alder woods
      - G1.2133** Ponto-Pannonic tall herb ash-alder woods
      - G1.2134** Eastern Baltic slow river floodplain woods
        - G1.21341** Eastern Baltic enchanter's nightshade ash-alder woods
        - G1.21342** Eastern Baltic slow river spruce-birch-alder woods
      - G1.2135** Sarmatic ash-alder woods

- G1.214** Northern Iberian *Alnus* galleries
  - G1.2141** Galicio-Cantabrian alder galleries
    - G1.21411** Eume near-natural alder galleries
    - G1.21412** Semi-natural Galicio-Cantabrian alder galleries
  - G1.2142** Pyreneo-Cantabrian alder galleries
  - G1.2143** Pyreneo-Catalonian alder galleries
- G1.22** Mixed *Quercus* - *Ulmus* - *Fraxinus* woodland of great rivers
  - G1.221** Great medio-European fluvial forests
  - G1.222** Residual medio-European fluvial forests
  - G1.223** Southeast European *Fraxinus* - *Quercus* - *Alnus* forests
    - G1.2231** Illyrian ash-oak-alder forests
      - G1.22311** Illyrian snow-flake ash-oak forests
      - G1.22312** Illyrian greenweed oak-ash forests
      - G1.22313** Illyrian riparian oak-hornbeam forests
    - G1.2232** Helleno-Balkan ash-oak-alder forests
      - G1.22321** Hellenic ash-oak-alder forests
      - G1.22322** Coastal Bulgarian longos forests
      - G1.22323** Central Balkan ash-oak-alder forests
      - G1.22324** Albanian ash-oak-alder forests
      - G1.22325** Montenegrine ash-oak-alder forests
      - G1.22326** Istrian ash-oak-alder forests
    - G1.2233** Pannonic ash-oak-alder forests
    - G1.2234** Getic oak-elm-ash forests
  - G1.224** Po *Quercus* - *Fraxinus* - *Alnus* forests
  - G1.225** Sarmatic riverine *Quercus* forests
- G1.3** Mediterranean riparian woodland
  - G1.31** Mediterranean riparian *Populus* forests
    - G1.311** Iberian poplar galleries
    - G1.312** Provenço-Languedocian poplar galleries
    - G1.313** Cymo-Sardinian poplar galleries
    - G1.314** Italic poplar galleries
    - G1.315** East Mediterranean poplar galleries
      - G1.3151** Nestos riparian forests
      - G1.3152** Hellenic white poplar riparian forests
      - G1.3153** Northern Hellenic black poplar riparian forests
      - G1.3154** Hellenic downy poplar riparian forests
      - G1.3155** Rhodopide Mediterranean poplar galleries
      - G1.3156** Paeonian poplar galleries
      - G1.3157** East Adriatic poplar galleries
  - G1.32** Mediterranean riparian *Ulmus* forests
  - G1.33** Mediterranean riparian *Fraxinus* woods
    - G1.331** Iberian supra-Mediterranean ash galleries
    - G1.332** Iberian meso-Mediterranean ash galleries
    - G1.333** Baetic ash-maple galleries
    - G1.334** Tyrrhenian ash-alder galleries
    - G1.335** Italic ash galleries
    - G1.336** Hellenic ash galleries
  - G1.34** Mediterranean riverine *Ostrya carpinifolia* galleries
  - G1.35** Mediterraneo-Pontic riverine *Fraxinus* forests
  - G1.36** Ponto-Sarmatic mixed *Populus* riverine forests
    - G1.361** Western Pontic poplar galleries
      - G1.3611** Western Pontic white poplar galleries
      - G1.3612** Western Pontic white-black poplar galleries
    - G1.362** Danube delta galleries
      - G1.3621** Danube delta periploca-poplar-oak-ash galleries
      - G1.3622** Danube delta *Hippophae-Populus canescens* galleries
    - G1.363** Southern Sarmatic poplar and elm galleries
    - G1.364** Central and eastern Pontic poplar forests
    - G1.365** Central European poplar galleries
  - G1.37** Irano-Anatolian mixed riverine forests

- G1.38** *Platanus orientalis* woods
  - G1.381** Helleno-Balkan riparian plane forests
  - G1.382** Hellenic slope plane woods
  - G1.383** Sicilian plane tree canyons
  - G1.384** Anatolian plane forests
  - G1.385** Cyprian plane forests
  - G1.386** Levantine plane forests
- G1.39** *Liquidambar orientalis* woods
- G1.4** Broadleaved swamp woodland not on acid peat
  - G1.41** *Alnus* swamp woods not on acid peat
    - G1.411** Meso-eutrophic swamp alder woods
      - G1.4111** Atlantic greater tussock-sedge alder woods
      - G1.4112** Elongated-sedge swamp alder woods
      - G1.4113** East European swamp alder woods
      - G1.4114** Sub-boreal swamp alder woods
      - G1.4115** Eastern Carpathian *Alnus glutinosa* swamp woods
        - G1.41151** Pre-Carpathian alder swamp woods
        - G1.41152** Intra-Carpathian elongated sedge alder swamp woods
    - G1.412** Oligotrophic swamp alder woods
    - G1.413** Southern Helleno-Balkan swamp alder woods
    - G1.414** Steppe swamp *Alnus glutinosa* woods
      - G1.4141** Pannonic swamp alder-ash woods
      - G1.4142** Sarmatic swamp alder woods
    - G1.415** Boreal swamp alder woods
  - G1.42** *Quercus* swamp woods
  - G1.43** *Populus tremula* swamp woods
  - G1.44** Wet-ground woodland of the Black and Caspian Seas
- G1.5** Broadleaved swamp woodland on acid peat
  - G1.51** Sphagnum *Betula* woods
    - G1.511** Cottonsedge sphagnum birch woods
    - G1.512** Sedge sphagnum birch woods
    - G1.513** Meso-acidophilous birch swamp woods
  - G1.52** *Alnus* swamp woods on acid peat
- G1.6** *Fagus* woodland
  - G1.61** Medio-European acidophilous *Fagus* forests
    - G1.611** Medio-European collinar woodrush beech forests
      - G1.6111** Western Hercynian collinar woodrush beech forests
      - G1.6112** Hercyno-Jurassian collinar woodrush beech forests
      - G1.6113** Peri-Alpine collinar woodrush beech forests
      - G1.6114** Western sub-Pannonic collinar woodrush beech forests
      - G1.6115** Pannonic collinar woodrush beech forests
    - G1.612** Medio-European montane woodrush beech forests
      - G1.6121** Hercyno-Alpine montane woodrush beech forests
      - G1.6122** Western medio-European montane woodrush beech forests
  - G1.62** Atlantic acidophilous *Fagus* forests
    - G1.621** Germano-Baltic acidophilous beech forests
    - G1.622** Sub-Atlantic acidophilous beech forests
    - G1.623** Armorican acidophilous beech forests
    - G1.624** Pyreneo-Cantabrian acidophilous beech forests
    - G1.625** Western Cantabrian acidophilous beech forests
    - G1.626** Galician acidophilous beech forests
    - G1.627** Humid Iberian acidophilous beech forests
    - G1.628** Hyper-humid Iberian acidophilous beech forests
    - G1.629** Ayllon acidophilous beech forests
  - G1.63** Medio-European neutrophile *Fagus* forests
    - G1.631** Medio-European collinar neutrophile beech forests
      - G1.6311** Medio-European wood barley beech forests
      - G1.6312** Medio-European woodruff and hairy sedge beech forests
    - G1.632** Atlantic neutrophile beech forests
      - G1.6321** Calcieline bluebell beech forests



- G1.632** Neutrocline bluebell beech forests
- G1.633** Medio-European montane neutrophile beech forests
  - G1.6331** Jura bittercress beech forests
  - G1.6332** Western Alps bittercress beech forests
  - G1.6333** Austro-Bavarian Alps bittercress beech forests
  - G1.6334** Southeastern Alpine bittercress beech forests
  - G1.6335** Vosges bittercress beech forests
  - G1.6336** Black Forest bittercress beech forests
  - G1.6337** Northern Hercynian bittercress beech forests
  - G1.6338** Bohemian Quadrangle bittercress beech forests
  - G1.6339** Western Carpathian bittercress beech forests
- G1.634** Bohemian lime-beech forests
- G1.635** Pannonic neutrophile beech forests
  - G1.6351** Sub-Pannonic beech forests
  - G1.6352** Pannonic neutrophile collinar beech forests
  - G1.6353** Pannonic neutrophile montane beech forests
- G1.64** Pyreneo-Cantabrian neutrophile *Fagus* forests
  - G1.641** Hygrophile Pyrenean beech forests
  - G1.642** Mesophile Pyrenean beech forests
  - G1.643** Sub-humid oro-Cantabrian beech forests
  - G1.644** Humid Central Massif fir-beech forests
- G1.65** Medio-European subalpine *Fagus* woods
- G1.66** Medio-European limestone *Fagus* forests
  - G1.661** Middle European dry-slope limestone beech forests
    - G1.6611** Medio-European dry slope sedge beech forests
    - G1.6612** Medio-European steep slope yew beech forests
    - G1.6613** Medio-European blue moorgrass beech forests
    - G1.6614** Medio-European naked basiphile beech forests
    - G1.6615** Pannonic limestone beech forests
  - G1.662** Northwestern Iberian xerophile beech woods
- G1.67** Southern medio-European *Fagus* forests
  - G1.671** Alpino-Apennine acidophilous beech forests
  - G1.672** Pyreneo-C,vennian acidophilous beech forest
  - G1.673** Corsican beech forests
  - G1.674** Alpino-Apennine neutrophile beech forests
  - G1.675** Sub-Mediterranean calcicolous beech forests
    - G1.6751** Box beech forests
    - G1.6752** Androsace beech forests
    - G1.6753** Lavender beech forests
    - G1.6754** Sainte-Baume beech forest
  - G1.676** Pre-Alpine hop-hornbeam beech forests
- G1.68** Southern Italian *Fagus* forests
  - G1.681** Gargano beech forest
  - G1.682** Campano-Lucanian beech forests
  - G1.683** Pollino beech forests
  - G1.684** Sila beech forests
  - G1.685** Aspromonte beech forests
  - G1.686** Northern Sicilian beech forests
  - G1.687** Etna beech forests
- G1.69** Moesian *Fagus* forests
  - G1.691** Southwestern Moesian beech forests
    - G1.6911** Southwestern Moesian woodrush-beech forests
    - G1.6912** Southwestern Moesian neutrophile beech forests
      - G1.69121** Southwestern Moesian bedstraw-beech forests
      - G1.69122** Southwestern Moesian fir-beech forests
      - G1.69123** Southwestern Moesian beech-hornbeam forests
    - G1.6913** Southwestern Moesian subalpine beech forests
  - G1.692** Southeastern Moesian beech forests
    - G1.6921** Southeastern Moesian woodrush-beech forests
    - G1.6922** Southeastern Moesian neutrophile beech forests

- G1.69221 Southeastern Moesian bedstraw-beech forests
- G1.69222 Southeastern Moesian fir-beech forests
- G1.69223 Southeastern Moesian beech-hornbeam forests
- G1.6923 Southeastern Moesian subalpine beech forests
- G1.6924 Southeastern Moesian *Ostrya*-beech forests
- G1.693 Balkan Range beech forests
  - G1.6931 Balkan Range acidophile beech forests
    - G1.69311 Balkan Range woodrush-beech forests
    - G1.69312 Balkan Range cherry-laurel beech forests
  - G1.6932 Balkan Range neutrophile beech forests
    - G1.69321 Balkan Range bedstraw-beech forests
    - G1.69322 Balkan Range fir-beech forests
    - G1.69323 Balkan Range beech-hornbeam forests
    - G1.69324 Balkan Range *Festuca drymeja* beech forests
  - G1.6933 Balkan Range subalpine beech forests
  - G1.6934 Balkan Range thermophile beech forests
    - G1.69341 Balkan Range *Ostrya*-beech forests
    - G1.69342 Moesian Constantinople hazel beech forests
- G1.694 South-Dinaric beech forests
- G1.6A Hellenic *Fagus* forests
  - G1.6A1 Pindus Hellenic beech forests
  - G1.6A2 Olympian Hellenic beech forests
- G1.6B Mediterraneo-Moesian *Fagus* forests
- G1.6C Illyrian *Fagus* forests
  - G1.6C1 Illyrian woodrush-beech forests
  - G1.6C2 Illyrian neutrophile beech forests
    - G1.6C21 Illyrian collinar neutrophile beech forests
    - G1.6C22 Illyrian montane fir-beech forests
      - G1.6C221 Illyrian low-montane acidocline fir-beech forests
      - G1.6C222 Illyrian low-montane neutrophile fir-beech forests
      - G1.6C223 Illyrian high-montane fir-beech forests
  - G1.6C3 Illyrian thermophile beech forests
    - G1.6C31 Illyrian coastal beech forests
    - G1.6C32 Illyrian inland calciphile beech forests
      - G1.6C321 Illyrian hop-hornbeam beech forests
      - G1.6C322 Illyrian *Helleborus odorus* beech forests
      - G1.6C323 Illyrian *Acer obtusatum* beech forests
  - G1.6C4 Illyrian subalpine beech forests
- G1.6D Dacian *Fagus* forests
  - G1.6D1 East Carpathian acidophile beech forests
    - G1.6D11 Dacian woodrush-beech forests
    - G1.6D12 Dacian *Galium kitaibelianum* beech forests
    - G1.6D13 Dacian *Galium rotundifolium* beech forests
  - G1.6D2 East Carpathian neutrophile beech forests
    - G1.6D21 Dacian *Symphytum* beech forests
      - G1.6D211 Dacian *Dentaria glandulosa* beech forests
      - G1.6D212 Dacian *Pulmonaria rubra* fir-beech forests
      - G1.6D213 Dacian *Leucanthemum* beech forests
    - G1.6D22 Dacian hairy sedge beech-hornbeam forests
  - G1.6D3 East Carpathian subalpine beech forests
    - G1.6D31 Dacian subalpine beech-spruce forest
    - G1.6D32 Dacian subalpine gooseberry beech forests
  - G1.6D4 East Carpathian calciphile beech forests
  - G1.6D5 South Carpathian thermophilous beech forests
    - G1.6D51 South Carpathian *Aremonia* beech forests
    - G1.6D52 South Carpathian *Corylus colurna* beech forests
    - G1.6D53 South Carpathian *Helleborus odorus* beech forests
    - G1.6D54 South Carpathian *Festuca drymeja* beech forests
- G1.6E Pontic *Fagus* forests
  - G1.6E1 Western Pontic beech forests

- G1.6E11** Eastern Balkan Range oriental beech forests
- G1.6E12** Stranja oriental beech forests
  - G1.6E121** Stranja bearberry tree-oriental beech forests
  - G1.6E122** Stranja rhododendron-oriental beech forests
- G1.6E13** Western Pontic rhododendron-oriental beech forests
- G1.6E14** Western Pontic calciphile beech forests
- G1.6E15** Western Pontic neutrocline fir-beech forests
- G1.6E16** Western Pontic calciphile fir-beech forests
- G1.6E2** Western sub-Pontic beech-oak forests
- G1.6F** Dobrogea *Fagus* forest
- G1.6G** Crimean *Fagus* forests
- G1.6H** Caucasian *Fagus* forests
- G1.6I** Caspian *Fagus* forests
- G1.6J** Eastern oro-Mediterranean *Fagus* forests
- G1.7** Thermophilous deciduous woodland
  - G1.71** Western *Quercus pubescens* woods and related communities
    - G1.711** Western *Quercus pubescens* woods
      - G1.7111** Southwestern *Quercus pubescens* woods
      - G1.7112** Northern *Quercus pubescens* woods
    - G1.712** Sub-Mediterranean *Quercus petraea*-*Q. robur* woods
    - G1.713** *Quercus palensis* woods
    - G1.714** Eu-Mediterranean white oak woods
  - G1.72** Cyrno-Sardinian *Quercus pubescens* woods
  - G1.73** Eastern *Quercus pubescens* woods
    - G1.731** Northern Italic *Quercus pubescens* woods
    - G1.732** Italo-Sicilian *Quercus pubescens* woods
    - G1.733** Hellenic *Quercus pubescens* woods
    - G1.734** Aegean *Quercus anatolica* woods
    - G1.735** Aegean *Quercus brachyphylla* woods
    - G1.736** Dalmatian white oak woods
    - G1.737** Eastern sub-Mediterranean white oak woods
      - G1.7371** Thracian white oak-oriental hornbeam woods
      - G1.7372** Moesian white oak woods
        - G1.73721** Moesian white oak-oriental hornbeam woods
        - G1.73722** Lydian greenweed-white oak woods
        - G1.73723** Moesian *Paeonia peregrina*-white oak woods
        - G1.73724** Moesian *Galium dasypodium*-white oak woods
        - G1.73725** Acanthus white oak woods
        - G1.73726** Moesian *Echinops*-white oak woods
      - G1.7373** Intra-Carpathian insular *Quercus virgiliana* woods
      - G1.7374** Pannonian *Quercus pubescens* woods
        - G1.73741** Pannonian white oak-manna tree woods
        - G1.73742** Pannonian karst white oak low woods
      - G1.7375** Illyrian white oak woods
        - G1.73751** Illyrian hop-hornbeam white oak woods
        - G1.73752** Illyrian oriental hornbeam white oak woods
    - G1.738** Euxinian white oak woods
  - G1.74** Italo-Illyrian *Ostrya carpinifolia* sub-thermophilous *Quercus* woods
    - G1.741** Northern Italian *Quercus cerris* woods
    - G1.742** Dalmatian thermophile turkey oak-sessile oak woods
      - G1.7421** Dalmatian *Quercus cerris* woods
      - G1.7422** Dalmatian *Quercus petraea* woods
    - G1.743** Illyrian thermophile turkey oak-sessile oak woods
      - G1.7431** Illyrian hop-hornbeam mixed oak woods
      - G1.7432** Illyrian black pea sessile oak woods
  - G1.75** Southeastern sub-thermophilous *Quercus* woods
    - G1.751** Southern Italic subthermophilous oak woods
      - G1.7511** Southern Italic *Quercus cerris* woods
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      - G1.7513** Southern Italic *Quercus petraea* woods

- G1.752 Southern Hellenic subthermophilous oak woods
  - G1.7521 Southern Hellenic *Quercus cerris* woods
  - G1.7522 Southern Hellenic *Quercus frainetto* woods
- G1.753 Eastern Mediterranean subthermophilous oak woods
- G1.76 Balkano-Anatolian thermophilous *Quercus* forests
  - G1.761 Helleno-Moesian *Quercus cerris* forests
  - G1.762 Helleno-Moesian *Quercus frainetto* forests
  - G1.763 Helleno-Moesian *Quercus dalechampii* forests.
  - G1.764 Helleno-Moesian montane oak forests
    - G1.7641 Helleno-Moesian *Quercus petraea* forests
    - G1.7642 Rila *Quercus protoroburoides* forests
  - G1.765 Helleno-Moesian *Quercus virgiliana* forests
  - G1.766 Helleno-Moesian *Quercus pedunculiflora* forests
  - G1.767 Helleno-Moesian *Quercus polycarpa* forests
  - G1.768 Moesio-Danubian thermophilous oak forests
    - G1.7681 Moesio-Danubian xerothermal oak forests
      - G1.76811 Moesio-Danubian *Quercus frainetto-Quercus cerris* forests
      - G1.76812 Moesio-Danubian oriental hornbeam *Quercus cerris* forests
      - G1.76813 Moesio-Danubian mixed oak *Quercus frainetto* forests
    - G1.7682 Moesio-Danubian oriental hornbeam-durmast oak forests
      - G1.76821 Central Moesian *Quercus dalechampii*-oriental hornbeam forests
      - G1.76822 Moesio-Danubian bedstraw sessile oak forests
    - G1.7683 Dobrogean oriental hornbeam-lime-oak forests
      - G1.76831 Dobrogean paeonia sessile oak forests
      - G1.76832 Dobrogean sessile oak-lime-oriental hornbeam-ash forests
      - G1.76833 Dobrogean *Quercus pedunculiflora*-lime-oriental hornbeam forests
  - G1.769 Getic sub-continental thermophilous oak woods
    - G1.7691 Getic white cinquefoil *Quercus cerris* forests
    - G1.7692 Getic early sedge *Quercus frainetto* forests
    - G1.7693 Getic crocus *Quercus frainetto-Quercus cerris* forests
    - G1.7694 Getic *Q. frainetto-Q. cerris-Q. petraea* forests
    - G1.7695 Getic *Quercus frainetto-Quercus petraea s.l.* forests
    - G1.7696 Pre-Carpathian *Quercus cerris-Quercus petraea s.l.* forests
- G1.76A Thracian sub-continental thermophilous oak woods
  - G1.76A1 Euxino-Thracian *Quercus frainetto-Quercus cerris* forests
    - G1.76A11 Thracian *Quercus frainetto-Quercus cerris* forests
    - G1.76A12 Sub-Euxinian *Quercus frainetto-Quercus cerris* forests
  - G1.76A2 Thracian *Quercus frainetto-Quercus virgiliana* forests
  - G1.76A3 Thracian *Quercus pedunculiflora* forests
  - G1.76A4 Stranja *Quercus polycarpa* forests
    - G1.76A41 Stranja *Primula rosea-Quercus polycarpa* forests
    - G1.76A42 Stranja *Fagus orientalis-Quercus polycarpa* forests
  - G1.76A5 Southeastern Thracian thermophilous oak forests
- G1.76B Western Anatolian sub-continental thermophilous oak woods
- G1.77 Afro-Iberian thermophilous *Quercus* forests
  - G1.771 Spanish *Quercus faginea* forests
    - G1.7711 Western Spanish *Quercus faginea* forests
    - G1.7712 Central Spanish *Quercus faginea* forests
    - G1.7713 Eastern Spanish *Quercus faginea* forests
    - G1.7714 Baetic *Quercus faginea* forests
    - G1.7715 Valencian *Quercus faginea* forests
  - G1.772 Portuguese *Quercus faginea* forests
  - G1.773 Andalusian *Quercus canariensis* forests
  - G1.774 Catalanian *Quercus canariensis* stands
  - G1.775 Balearic *Quercus faginea* woods
- G1.78 *Quercus trojana* woodland
  - G1.781 Helleno-Balkan Trojan oak woods
  - G1.782 Apulian Trojan oak woods
- G1.79 Mediterranean *Quercus macrolepis* woodland
  - G1.791 Hellenic valonia oak woods

- G1.792** Apulian valonia oak woods
  - G1.7A** Steppe *Quercus* woods
    - G1.7A1** Euro-Siberian steppe *Quercus* woods
      - G1.7A11** White cinquefoil oak woods
        - G1.7A111** Western white cinquefoil sessile oak woods
        - G1.7A112** Pannonic turkey oak-sessile oak woods
        - G1.7A113** Pannonic hairy greenweed sessile oak woods
        - G1.7A114** Sarmatic cinquefoil oak woods
        - G1.7A115** Getic thermophilous sessile oak forests
          - G1.7A1151** Getic-pre-Carpathic *Festuca drymeia* oak forests
          - G1.7A1152** Getic-pre-Carpathic *Aremonia* oak forests
        - G1.7A116** Moravian serpentine oak woods
      - G1.7A12** Tartar maple steppe oak woods
        - G1.7A121** Pannonic steppe oak woods
          - G1.7A1211** Pannonic loess steppe oak woods
          - G1.7A1212** Pannonic alkali steppe oak woods
          - G1.7A1213** Pannonic sand steppe oak woods
        - G1.7A122** Ponto-Sarmatic steppe oak woods
          - G1.7A1221** Pontic *Acer tataricum-Q. pedunculiflora* steppe woods
          - G1.7A1222** Pontic *Acer tataricum-Quercus pubescens* steppe woods
          - G1.7A1223** Pontic *Acer tataricum-Q. cerris-Q. pedunculiflora* steppe woods
          - G1.7A1224** Sarmatic *Acer tataricum-Quercus robur* steppe woods
          - G1.7A1225** Sarmatic *Acer tataricum-Q. robur-Q. petraea* steppe woods
      - G1.7A123** Getic tartar maple steppe oak woods
    - G1.7A13** Sub-Euxinian steppe woods
  - G1.7A2** Irano-Anatolian steppe *Quercus* woods
- G1.7B** *Quercus pyrenaica* woodland
  - G1.7B1** Central Iberian *Quercus pyrenaica* forests
    - G1.7B11** Sub-Atlantic Iberian *Quercus pyrenaica* forests
      - G1.7B111** Sub-Atlantic sub-humid *Quercus pyrenaica* forests
      - G1.7B112** Sub-Atlantic humid *Quercus pyrenaica* forests
    - G1.7B12** Iberian sub-continental *Quercus pyrenaica* forests
      - G1.7B121** Sub-continental sub-humid *Quercus pyrenaica* forests
      - G1.7B122** Sub-continental humid *Quercus pyrenaica* forests
    - G1.7B13** Mariano-Oretanian *Quercus pyrenaica* forests
      - G1.7B131** Lower Mariano-Oretanian *Quercus pyrenaica* forests
      - G1.7B132** Upper Mariano-Oretanian *Quercus pyrenaica* forests
  - G1.7B2** Cantabrian *Quercus pyrenaica* forests
  - G1.7B3** Maestrazgan *Quercus pyrenaica* forests
  - G1.7B4** Baetic *Quercus pyrenaica* forests
  - G1.7B5** French *Quercus pyrenaica* forests
- G1.7C** Mixed thermophilous woodland
  - G1.7C1** *Ostrya carpinifolia* woods
    - G1.7C11** Mesomediterranean Gallo-Italic hop-hornbeam woods
    - G1.7C12** Supra-Mediterranean hop-hornbeam woods
      - G1.7C121** Southwestern Alpine supra-Mediterranean hop-hornbeam woods
      - G1.7C122** Southeastern Alpine supra-Mediterranean hop-hornbeam woods
      - G1.7C123** Eastern Adriatic supra-Mediterranean hop-hornbeam woods
      - G1.7C124** Apennine supra-Mediterranean hop-hornbeam woods
      - G1.7C125** Corsican supra-Mediterranean hop-hornbeam woods
      - G1.7C126** Southern Tyrrhenian supra-Mediterranean hop-hornbeam woods
    - G1.7C13** Montane hop-hornbeam woods
    - G1.7C14** Illyrian hop-hornbeam woods
      - G1.7C141** Illyrian white oak hop-hornbeam woods
      - G1.7C142** Illyrian spring heath hop-hornbeam woods
    - G1.7C15** Anatolian hop-hornbeam woods
  - G1.7C2** *Carpinus orientalis* woods
    - G1.7C21** Inner Illyrian oriental hornbeam woods
    - G1.7C22** Helleno-Balkan oriental hornbeam woods
      - G1.7C221** Helleno-Pelagonide oriental hornbeam woods

- G1.7C222 Moesian oriental hornbeam woods
- G1.7C223 Lilac oriental hornbeam woods
- G1.7C224 *Oryzopsis* oriental hornbeam woods
- G1.7C225 Eastern Adriatic oriental hornbeam woods
- G1.7C23 Anatolio-Caucasian oriental hornbeam woods
- G1.7C3 Thermophilous *Acer* woods
  - G1.7C31 Andalusian *Acer granatense* woods
  - G1.7C32 Balearic *Acer granatense* woods
  - G1.7C33 North African *Acer monspessulanum* forests
  - G1.7C34 Moesian thermophilous maple woods
- G1.7C4 Thermophilous *Tilia* woods
  - G1.7C41 Silver lime woods
    - G1.7C411 Moesian silver lime woods
    - G1.7C412 Silver lime-hornbeam woods
    - G1.7C413 Voivodinian sand steppe lime woods
  - G1.7C42 Oro-Pannonic steppe ash-lime woods
- G1.7C5 *Celtis australis* woods
- G1.7C6 Thermophilous *Fraxinus* woods
  - G1.7C61 Sicilian narrow-leaved ash woods
  - G1.7C62 Iberian narrow-leaved ash woods
  - G1.7C63 Manna tree woods
- G1.7C7 Pannonic *Juniperus - Populus* steppe woods
  - G1.7C71 Pannonic privet juniper-poplar steppe woods
  - G1.7C72 Pannonic sedge juniper-poplar steppe woods
  - G1.7C73 Pannonic gypsophila juniper-poplar steppe woods
- G1.7C8 Sub-Mediterranean and Pannonic mixed woods
  - G1.7C81 Sub-Mediterranean mixed woods
  - G1.7C82 Pannonic mixed karstic woods
- G1.7C9 Western Asian wild fruit tree steppe woods
- G1.7CA Southern Mediterranean chasm woods
- G1.7D *Castanea sativa* woodland
  - G1.7D1 Helleno-Balkan *Castanea sativa* forests
  - G1.7D2 Aegean *Castanea sativa* forests
  - G1.7D3 Eastern Adriatic *Castanea sativa* forests
  - G1.7D4 Illyrian *Castanea sativa* forests
  - G1.7D5 Liguro-Insubrian *Castanea sativa* forests
  - G1.7D6 Italo-Sicilian *Castanea sativa* forests
  - G1.7D7 Cyrno-Sardinian *Castanea sativa* forests
  - G1.7D8 Galloprovincial *Castanea sativa* forests
  - G1.7D9 Gallo-Iberian *Castanea sativa* forests
  - G1.7DA Euxinian *Castanea sativa* forests
- G1.8 Acidophilous *Quercus*-dominated woodland
  - G1.81 Atlantic *Quercus robur - Betula* woods
  - G1.82 Atlantic acidophilous *Fagus - Quercus* forests
    - G1.821 Sub-Atlantic sessile oak forests
    - G1.822 Armorican acidophile oak forests
    - G1.823 Northern dune oak woods
  - G1.83 Atlantic *Quercus petraea* woods
    - G1.831 Irish sessile oak woods
    - G1.832 British sessile oak woods
  - G1.84 Aquitano-Ligerian *Quercus* forests on podsols
  - G1.85 Aquitano-Ligerian *Quercus* forests on leached or acid soils
  - G1.86 Ibero-Atlantic acidophilous *Quercus* forests
    - G1.861 Pyrenean acidophilous oak forests
    - G1.862 Cantabrian acidophilous oak forests
      - G1.8621 Eastern Cantabrian acidophilous oak forests
      - G1.8622 Western Cantabrian acidophilous oak forests
      - G1.8623 Oro-Cantabrian acidophilous oak forests
    - G1.863 Luso-Galician collinar acidophilous oak forests
      - G1.8631 Mesophile Luso-Galician collinar oak forests

- G1.8632** Humid Luso-Galician collinar oak forests
- G1.864** Luso-Galician montane acidophilous oak forests
- G1.87** Medio-European acidophilous *Quercus* forests
- G1.871** Woodrush oak forests
  - G1.8711** Western Hercynian woodrush-hawksbeard oak forests
  - G1.8712** Central European dyer's greenweed oak forests
    - G1.87121** Central Hercynian dyer's greenweed oak forests
    - G1.87122** Peri-Bohemian dyer's greenweed oak forests
    - G1.87123** Dacian dyer's greenweed oak forests
  - G1.8713** Pre-Carpathian beech-sessile oak forests
  - G1.8714** Central European hygrophile acidophilous oak forests
    - G1.87141** Peri-Bohemian giant moorgrass sessile oak forest
    - G1.87142** Pre-Carpathian quaking sedge-pedunculate oak forests
    - G1.87143** Pre-Carpathian purple moorgrass-pedunculate oak forests
- G1.872** Western Hercynian thermophile acidophilous oak forests
- G1.873** Illyro-Pannonic thermophile acidophilous oak forests
  - G1.8731** Black broom-oak forests
  - G1.8732** Wild service tree-oak forests
  - G1.8733** Illyro-Pannonic chestnut-sessile oak forests
    - G1.87331** Pre-Carpathian chestnut-sessile oak forests
    - G1.87332** Illyrian chestnut-sessile oak forests
    - G1.8734** Illyrian birch-sessile oak acidophilous forests
- G1.88** Insubrian acidophilous *Quercus* forests
- G1.89** Portuguese *Quercus robur* forests
- G1.8A** Continental *Quercus petraea* forests
- G1.9** Non-riverine woodland with *Betula*, *Populus tremula* or *Sorbus aucuparia*
- G1.91** *Betula* woodland not on marshy terrain
  - G1.911** Atlantic lowland and collinar *Betula* woods
    - G1.9111** Humid birch woods
      - G1.91111** Northern humid birch woods
      - G1.91112** Aquitano-Ligerian humid birch woods
    - G1.9112** Medio-European dry acidophilous birch woods
    - G1.9113** Iberian acidophilous birch woods
    - G1.9114** Insubrian acidophilous birch woods
    - G1.9115** Heavy-metal birch woods
    - G1.9116** Dune birch woods
    - G1.9117** Illyrian birch woods
  - G1.912** British sub-boreal *Betula* woods
  - G1.913** Hercynio-Alpine *Betula* woods
    - G1.9131** Alpine timberline birch woods
    - G1.9132** Birch block forests
    - G1.9133** Pyrenean birch woods
    - G1.9134** Apennine birch woods
    - G1.9135** Illyro-Moesian montane birch woods
      - G1.91351** Balkano-Rhodopide birch woods
      - G1.91352** Dinaro-Pelagonide birch woods
    - G1.9136** Carpathian birch woods
      - G1.91361** Carpathian rowan birch woods
      - G1.91362** Carpathian aspen birch woods
    - G1.9137** Intra-Carpathian dune oak-birch woods
  - G1.914** Corsican *Betula* woods
  - G1.915** Montane *Betula celtiberica* woodlands
    - G1.9151** Cantabrian *Betula celtiberica* woodlands
    - G1.9152** Western *Betula celtiberica* woodlands
    - G1.9153** Sorian and Guadarraman *Betula celtiberica* woodlands
  - G1.916** Mount Etna *Betula* stands
  - G1.917** Oroboreal *Betula* woods and thickets
    - G1.9171** Boreo-Atlantic birch woods and thickets
      - G1.91711** Boreo-Atlantic crowberry-bog bilberry birch woods
      - G1.91712** Boreo-Atlantic small fern birch woods

- G1.91713 Icelandic bog bilberry-hairgrass birch woods
- G1.91714 Boreo-Atlantic cranesbill birch woods
- G1.9172 Oro-Scandian birch woods
  - G1.91721 Oro-Scandian crowberry-lichen birch woods
  - G1.91722 Oro-Scandian bilberry-hairgrass birch woods
  - G1.91723 Oro-Scandian bilberry-dwarf cornel birch woods
  - G1.91724 Oro-Scandian small-fern birch woods
  - G1.91725 Oro-Scandian cranesbill-stone bramble birch woods
  - G1.91726 Oro-Scandian tall-herb birch woods
  - G1.91727 Oro-Scandian tall-fern birch woods
- G1.918 Eurasian boreal *Betula* woods
- G1.919 Siberian steppe *Betula* woods
- G1.91A Ponto-Caspian *Betula* woods
- G1.92 *Populus tremula* woodland
  - G1.921 Inner Alpine *Populus tremula* woods
  - G1.922 Lowland nemoral *Populus tremula* woods
  - G1.923 Montane *Populus tremula* stands
  - G1.924 Sub-Mediterranean *Populus tremula* stands
  - G1.925 Boreal *Populus tremula* woods
  - G1.926 Anatolian *Populus tremula* forests
- G1.93 *Sorbus aucuparia* woodland
- G1.94 Inland dune *Quercus* - *Betula* woods
- G1.95 *Populus tremula* and *Betula* woods with *Sambucus*
- G1.A Meso- and eutrophic *Quercus*, *Carpinus*, *Fraxinus*, *Acer*, *Tilia*, *Ulmus* and related woodland
  - G1.A1 *Quercus* - *Fraxinus* - *Carpinus betulus* woodland on eutrophic and mesotrophic soils
    - G1.A11 Mixed Atlantic *Quercus* forests with *Hyacinthoides non-scripta*
    - G1.A12 Aquitanian *Fraxinus* - *Quercus* and *Quercus* - *Carpinus betulus* forests
    - G1.A13 Sub-Atlantic *Fraxinus* - *Quercus* forests with *Primula elatior*
      - G1.A131 Arum ash-oak forests
      - G1.A132 Corydalis ash-oak forests
      - G1.A133 Garlic ash-oak forests
  - G1.A14 Sub-Atlantic *Quercus* - *Carpinus betulus* forests with *Stellaria*
    - G1.A141 Northwestern oak-hornbeam forests
    - G1.A142 Lorraine marl oak-hornbeam forests
    - G1.A143 Burgundy collinar oak-hornbeam forests
    - G1.A144 Burgundy plain oak-hornbeam forests
  - G1.A15 Famennian *Quercus* - *Carpinus betulus* forests
  - G1.A16 Sub-continental *Quercus* - *Carpinus betulus* forests
    - G1.A161 Wood bedstraw oak-hornbeam forests
    - G1.A162 Mixed lime-oak-hornbeam forests
    - G1.A163 Boreonemoral spruce-lime-oak-hornbeam forests
    - G1.A164 Peri-Carpathian lime-oak-hornbeam forests
    - G1.A165 Bohemian oak-hornbeam and oak-lime forests
    - G1.A166 Carpathian hairy sedge oak-hornbeam forests
    - G1.A167 Sub-Pannonic primrose oak-hornbeam forests
    - G1.A168 Central sub-Carpathian oak-hornbeam forests
      - G1.A1681 Waldsteinia oak-hornbeam forests
      - G1.A1682 Scorpion-vetch oak-hornbeam forests
  - G1.A169 Western boreal mixed deciduous forests
  - G1.A16A Northern middle Russian oak-lime forests
  - G1.A17 Sub-Atlantic calciphile *Quercus* - *Carpinus betulus* forests
    - G1.A171 Sub-Atlantic calciphile privet oak-hornbeam forests
    - G1.A172 Sub-Atlantic xerophile *Anthericum* oak-hornbeam forests
    - G1.A173 Sub-Atlantic calciphile squill ash-oak forests
  - G1.A18 Southern Alpine *Quercus* - *Carpinus betulus* forests
  - G1.A19 Pyreneo-Cantabrian *Quercus* - *Fraxinus* forests
  - G1.A1A Illyrian *Quercus* - *Carpinus betulus* forests
    - G1.A1A1 Illyrian sessile oak-hornbeam forests
      - G1.A1A11 Illyrian calcicline sessile oak-hornbeam forests
      - G1.A1A12 Illyrian neutrocline sessile oak-hornbeam forests



- G1.A1A13** Illyrian acidocline sessile oak-hornbeam forests
- G1.A1A2** Illyrian pedunculate oak-hornbeam forests
- G1.A1A3** Illyrian sub-Mediterranean oak-hornbeam forests
- G1.A1B** Pannonic *Quercus* - *Carpinus betulus* forests
  - G1.A1B1** Pannonic hygrophile ash-oak-hornbeam forests
  - G1.A1B2** Peri-Pannonic acidophile oak-hornbeam forests
- G1.A1C** Southeastern European *Quercus* - *Carpinus betulus* forests
  - G1.A1C1** Dacian oak-hornbeam forests
    - G1.A1C11** Dacian *Melampyrum biharensense* oak-hornbeam forests
    - G1.A1C12** Dacian *Lathyrus hallersteinii* oak-hornbeam forests
    - G1.A1C13** Dacian tatar maple oak-hornbeam forests
  - G1.A1C2** Moldo-Muntenian oak-lime-hornbeam forests
  - G1.A1C3** Moesian oak-hornbeam forests
    - G1.A1C31** Moesian mesophile oak-hornbeam forests
    - G1.A1C32** Moesian thermophile oak-hornbeam forests
      - G1.A1C321** Pre-Moesian *Galium kitaibelianum* oak-hornbeam forests
      - G1.A1C322** Moesian *Quercus cerris* oak-hornbeam forests
  - G1.A1C4** Southern Sarmatic oak-lime-hornbeam forests
    - G1.A1C41** Podolic pedunculated oak-hornbeam forests
    - G1.A1C42** Moldavian spindle oak-hornbeam forests
- G1.A2** Non-riverine *Fraxinus* woodland
  - G1.A21** *Fraxinus* - *Sorbus aucuparia* - *Mercurialis perennis* forests
  - G1.A22** British *Fraxinus* - *Acer campestre* - *Mercurialis perennis* forests
  - G1.A23** Pyreneo-Cantabrian *Fraxinus* forests
  - G1.A24** Baltic *Fraxinus* - *Acer pseudoplatanus* forests with *Adoxa moschatellina*
  - G1.A25** Mixed Atlantic *Fraxinus* forests with *Hyacinthoides non-scripta*
  - G1.A26** Aquitanian *Fraxinus* forests
  - G1.A27** Sub-Atlantic *Fraxinus* forests
  - G1.A28** Lutetian calciphile *Fraxinus* forests
  - G1.A29** Post-cultural *Fraxinus* woods
- G1.A3** *Carpinus betulus* woodland
  - G1.A31** Western *Carpinus betulus* woodland
  - G1.A32** Eastern *Carpinus betulus* woodland
    - G1.A321** Illyrian hornbeam forests
    - G1.A322** Dacio-Moesian hornbeam forests
    - G1.A323** Sarmatic hornbeam forests
- G1.A4** Ravine and slope woodland
  - G1.A41** Medio-European ravine forests
    - G1.A411** Calcicline ash-sycamore ravine forests
      - G1.A4111** Hartstongue ash-sycamore ravine forests
      - G1.A4112** Honesty ash-sycamore ravine forests
      - G1.A4113** Corydalis ash-sycamore ravine forests
      - G1.A4114** Goatsbeard ash-sycamore ravine forests
      - G1.A4115** Alpine hepatica-sycamore ravine forests
    - G1.A412** Acidophile ash-sycamore-lime ravine forests
    - G1.A413** Tall herb mixed sycamore forests
  - G1.A42** Hercynian slope forests
  - G1.A43** Peri-Alpine mixed *Fraxinus* - *Acer pseudoplatanus* slope forests
  - G1.A44** Pyreneo-Cantabrian mixed *Ulmus* - *Quercus* forests
  - G1.A45** Thermophilous Alpine and peri-Alpine mixed *Tilia* forests
    - G1.A451** Northern Alpine föhn ash-lime forests
    - G1.A452** Dealpine mixed thermophile oak-maple-lime forests
    - G1.A453** Southern Alpine mixed lime forests
    - G1.A454** Sub-Pannonic mixed lime slope forests
      - G1.A4541** Sub-Pannonic mixed ash-lime slope forests
      - G1.A4542** Sub-Pannonic mixed whitebeam-lime forests
- G1.A46** Southeastern European ravine forests
  - G1.A461** Hellenic ravine and slope forests
  - G1.A462** Moesian ravine and slope forests
    - G1.A4621** Moesian beech-ash-sycamore ravine forests



## **G2 Broadleaved evergreen woodland**

### **G2.1 Mediterranean evergreen *Quercus* woodland**

#### **G2.11 *Quercus suber* woodland**

##### **G2.111 Tyrrhenian *Quercus suber* forests**

**G2.1111** Provençal cork-oak woodland

**G2.1112** Corsican cork-oak woodland

**G2.1113** Sardinian cork-oak forests

**G2.1114** Central Italian cork-oak forests

**G2.1115** Southern Italian cork-oak forests

**G2.1116** Catalan cork-oak woodland

**G2.1117** Valencian cork-oak woodland

**G2.1118** Balearic cork-oak woodland

##### **G2.112 Southwestern Iberian *Quercus suber* forests**

**G2.1121** Thermo-Mediterranean cork-oak woodland

**G2.1122** Aljibian cork-oak forests

**G2.1123** Eastern Andalusian cork-oak woodland

**G2.1124** Extremaduran cork-oak woodland

##### **G2.113 Northwestern Iberian *Quercus suber* woodland**

##### **G2.114 Aquitanian *Quercus suber* woodland**

#### **G2.12 *Quercus ilex* woodland**

##### **G2.121 Meso-Mediterranean *Quercus ilex* forests**

**G2.1211** Northwestern Iberian holm-oak forests

**G2.1212** Catalo-Provençal lowland holm-oak woodland

**G2.1213** Catalo-Provençal hill holm-oak forest

**G2.1214** Balearic holm-oak forests

**G2.1215** Corsican lowland holm-oak woodland

**G2.1216** Corsican hill holm-oak woodland

**G2.1217** Sardinian holm-oak forests

**G2.1218** Northern and central Italian holm-oak forests

**G2.1219** Illyrian holm-oak woodland

**G2.121A** Southern Italian holm-oak forests

**G2.121B** Pantellerian and Maltese holm-oak woodland

**G2.121C** Greek holm-oak woodland

**G2.121D** Cretan holm-oak woodland

##### **G2.122 Supra-Mediterranean *Quercus ilex* forests**

##### **G2.123 Aquitanian *Quercus ilex* woodland**

##### **G2.124 *Quercus rotundifolia* woodland**

**G2.1241** Continental *Quercus rotundifolia* woodland

**G2.12411** Meso-Mediterranean continental encinares

**G2.12412** Supra-Mediterranean Iberian continental encinares

**G2.12413** Northern supra-Mediterranean continental encinares

**G2.12414** Oro-Cantabrian encinares

**G2.1242** Western *Quercus rotundifolia* woodland

**G2.12421** Luso-Extremaduran encinares

**G2.12422** Castilian encinares

**G2.12423** Cordilleran encinares

**G2.12424** Villuercan encinares

**G2.1243** Andalusian *Quercus rotundifolia* woodland

**G2.12431** Meso-Mediterranean basophilous Andalusian encinares

**G2.12432** Supra-Mediterranean basophilous Andalusian encinares

**G2.12433** Silicicolous Andalusian encinares

**G2.1244** Southwestern *Quercus rotundifolia* woodland

**G2.12441** Basophilous southwestern encinares

**G2.12442** Silicicolous southwestern encinares

**G2.1245** Valencian *Quercus rotundifolia* woodland

**G2.1246** Balearic *Quercus rotundifolia* woodland

##### **G2.13 *Quercus coccifera* and *Quercus alnifolia* woodland**

**G2.131** Greek *Quercus coccifera* forests

**G2.132** Italian *Quercus coccifera* woodland

**G2.133** Portuguese *Quercus coccifera* forest

- G2.134** Cyprian *Quercus coccifera* forest
- G2.135** Anatolian *Quercus coccifera* forest
- G2.136** Cyprian *Quercus alnifolia* forests
- G2.2** Eurasian continental sclerophyllous woodland
  - G2.21** Mediterranean-Atlantic *Laurus* - *Quercus* woodland
  - G2.22** Ponto-Hyrcanian sclerophyllous forests
- G2.3** Macaronesian *Laurus* woodland
  - G2.31** Azorean laurisilvas
  - G2.32** Madeiran laurisilvas
  - G2.33** Canary Island laurisilvas
    - G2.331** Laurisilvas of La Gomera
    - G2.332** Laurisilvas of Tenerife
    - G2.333** Laurisilvas of La Palma
    - G2.334** Laurisilvas of Hierro
    - G2.335** Laurisilvas of Gran Canaria
- G2.4** *Olea europaea* - *Ceratonia siliqua* woodland
  - G2.41** Wild *Olea europaea* woodland
  - G2.42** *Ceratonia siliqua* woodland
  - G2.43** Canary Island *Olea europaea* woodland
- G2.5** *Phoenix* groves
  - G2.51** Cretan *Phoenix theophrasti* groves
  - G2.52** Canary Island *Phoenix canariensis* groves
  - G2.53** Anatolian *Phoenix theophrasti* groves
- G2.6** *Ilex aquifolium* woods
- G2.7** Canary Island heath woodland
  - G2.71** Canary Island fayal-brezal
  - G2.72** *Visnea* - *Arbutus* forests
  - G2.73** Hierran fayal
- G2.8** Highly artificial broadleaved evergreen forestry plantations
  - G2.81** *Eucalyptus* plantations
  - G2.82** Evergreen exotic *Quercus* plantations
  - G2.83** Other evergreen broadleaved tree plantations
- G2.9** Evergreen orchards and groves
  - G2.91** *Olea europaea* groves
  - G2.92** Citrus orchards
  - G2.93** *Phoenix* plantations
  - G2.94** Other evergreen orchards

### **G3 Coniferous woodland**

- G3.1** *Abies* and *Picea* woodland
  - G3.11** Neutrophile medio-European *Abies* forests
    - G3.111** Inner Alpine neutrophile fir forests
      - G3.1111** Sorrel fir forests
      - G3.1112** Tall herb fir forests
      - G3.1113** Trochischantes fir forests
    - G3.112** Neutrophile Hercynio-Alpine fir forests
      - G3.1121** Peri-Alpine neutrophile fir forests
        - G3.11211** Peri-Alpine neutrophile spruce fir forests
        - G3.11212** Peri-Alpine neutrophile beech fir forests
      - G3.1122** Illyrian neutrophile fir forests
        - G3.11221** Illyrian neutrophile spruce fir forests
        - G3.11222** Illyrian neutrophile beech fir forests
      - G3.1123** Dacian neutrophile montane fir forests
    - G3.113** Pyrenean fir forests
    - G3.114** East Carpathian high montane fir forests
  - G3.12** Calciphilous *Abies alba* forests
    - G3.121** Inner Alpine calcicolous fir forests
    - G3.122** Outer Alpine calcicolous fir forests
    - G3.123** Jurasso-Hercynian calcicolous fir forests
    - G3.124** Dinaric calcareous block fir forests

- G3.13** Acidophilous *Abies alba* forests
  - G3.131** Inner Alpine acidophile fir forests
  - G3.132** Acidophile Hercynio-Alpine fir forests
    - G3.1321** Peri-Alpine acidophile fir forests
    - G3.1322** Illyrian acidophile fir forests
    - G3.1323** Dacian acidophile beech fir forests
  - G3.133** Alpenrose fir forests
    - G3.1331** Pyrenean alpenrose fir forest
    - G3.1332** Alpine alpenrose fir forests
    - G3.1333** Block alpenrose fir forests
  - G3.134** Holy Cross fir forests
  - G3.135** *Bazzania* fir forests
- G3.14** Corsican *Abies alba* forests
- G3.15** Southern Apennine *Abies alba* forests
- G3.16** Moesian *Abies alba* forests
  - G3.161** Rhodopide fir forests
    - G3.1611** Falakron silver fir forests
    - G3.1612** Rhodope fir forests
    - G3.1613** Western Rhodopide fir forests
  - G3.162** Moeso-Macedonian fir forests
  - G3.163** Balkan Range fir forests
  - G3.164** Pelagonide silver fir forests
- G3.17** Balkano-Pontic *Abies* forests
  - G3.171** King Boris's fir forests
  - G3.172** Bornmueller's fir forests
  - G3.173** Nordmann's fir forests
- G3.18** Aegean *Abies* forests
  - G3.181** Grecian fir forests
  - G3.182** Trojan fir forests
- G3.19** *Abies pinsapo* forests
  - G3.191** Ronda pinsapo fir forests
  - G3.192** Bermeja pinsapo fir forests
- G3.1A** Relict *Abies nebrodensis* stands
- G3.1B** Alpine and Carpathian subalpine *Picea* forests
  - G3.1B1** Bilberry spruce forests
  - G3.1B2** Tall herb subalpine spruce forests
    - G3.1B21** *Adenostyles glabra* subalpine spruce forests
    - G3.1B22** *Adenostyles alliariae* subalpine spruce forests
  - G3.1B3** Moist subalpine spruce forests
  - G3.1B4** Xerophile subalpine spruce forests
  - G3.1B5** Cold station spruce forests
  - G3.1B6** Carpathian spruce forests
    - G3.1B61** Western Carpathian subalpine spruce forests
      - G3.1B611** Western Carpathian acidophilous spruce forests
      - G3.1B612** Carpathian holly-fern spruce forests
    - G3.1B62** Eastern Carpathian subalpine spruce forests
      - G3.1B621** Carpathian subalpine rhododenron spruce forests
      - G3.1B622** Carpathian subalpine Bruckenthalia spruce forests
      - G3.1B623** Carpathian high montane *Hieracium* spruce forests
      - G3.1B624** Carpathian high montane *Bazzania* spruce forests
      - G3.1B625** Carpathian *Leucanthemum* high montane spruce forests
- G3.1C** Inner range montane *Picea* forests
  - G3.1C1** Acidophile montane inner Alpine spruce forests
  - G3.1C2** Calciphile montane inner Alpine spruce forests
  - G3.1C3** Bedstraw montane inner Alpine spruce forests
  - G3.1C4** Tall herb montane inner Alpine spruce forests
  - G3.1C5** Peatmoss montane inner Alpine spruce forests
  - G3.1C6** Inner Carpathian spruce forests
- G3.1D** Hercynian subalpine *Picea* forests
  - G3.1D1** Subalpine spruce forests of the Bayerischer Wald

- G3.1D2** Subalpine spruce forests of the Harz and Erzgebirge
  - G3.1D3** Subalpine spruce forests of the Sudeten
  - G3.1E** Southern European *Picea abies* forests
    - G3.1E1** Southeastern Moesian *Picea abies* forests
      - G3.1E11** Aegeo-Rhodopean spruce forests
      - G3.1E12** Central Rhodopide spruce forests
      - G3.1E13** Moeso-Macedonian spruce forests
    - G3.1E2** Apennine spruce forests
    - G3.1E3** Montenegrine *Picea abies* forests
    - G3.1E4** Pelagonide *Picea abies* forests
    - G3.1E5** Balkan Range *Picea abies* forests
  - G3.1F** Enclave *Picea abies* forests
    - G3.1F1** Subalpine Jura spruce forests
    - G3.1F2** Subalpine Black Forest spruce forests
    - G3.1F3** Peri-Alpine bazzania spruce forests
    - G3.1F4** Hercynio-Alpine montane spruce forests
      - G3.1F41** Medio-European montane spruce forests
      - G3.1F42** Illyrio-Alpine montane beech spruce forests
      - G3.1F43** Dacian beech-spruce forests
    - G3.1F5** Dinaric spruce forests
      - G3.1F51** Illyro-Dinaric cold station spruce forests
      - G3.1F52** Dinaric dolomite spruce forests
      - G3.1F53** Dinaric acidophilous spruce forests
      - G3.1F54** Moeso-Dinaric spruce forests
  - G3.1G** *Picea omorika* forests
  - G3.1H** *Picea orientalis* forests
  - G3.1I** *Abies* reforestation
    - G3.1I1** *Abies alba* reforestation
    - G3.1I2** *Abies borisii-regis* reforestation
    - G3.1I3** *Abies cephalonica* reforestation
    - G3.1I4** *Abies pinsapo* reforestation
    - G3.1I5** *Abies nebrodensis* reforestation
  - G3.1J** *Picea abies* reforestation
- G3.2** Alpine *Larix* - *Pinus cembra* woodland
- G3.21** Eastern Alpine siliceous *Larix* and *Pinus cembra* forests
  - G3.22** Eastern Alpine calcicolous *Larix* and *Pinus cembra* forests
  - G3.23** Western *Larix*, mountain pine and *Pinus cembra* forests
  - G3.24** Alpine secondary *Larix* formations
  - G3.25** Carpathian *Larix* and *Pinus cembra* forests
    - G3.251** Western Carpathian larch and arolla forests
    - G3.252** Inner Carpathian larch and arolla forests
    - G3.253** Eastern Carpathian larch and arolla forests
      - G3.2531** Eastern Carpathian larch forests
      - G3.2532** Eastern Carpathian arolla forests
  - G3.26** *Larix polonica* forests
- G3.3** *Pinus uncinata* woodland
- G3.31** *Pinus uncinata* forests with *Rhododendron ferrugineum*
    - G3.311** Outer Alpine alpenrose mountain pine forests
    - G3.312** Jura alpenrose mountain pine forests
    - G3.313** Pyrenean alpenrose mountain pine forests
  - G3.32** Xerocline *Pinus uncinata* forests
    - G3.321** Inner Alpine mountain pine forests
    - G3.322** Outer Alpine juniper-bearberry mountain pine forests
    - G3.323** Ventoux mountain pine woods
    - G3.324** Pyrenean adret mountain pine forests
      - G3.3241** Speedwell mountain pine forests
      - G3.3242** Pyrenean bearberry mountain pine forests
    - G3.325** Pasqueflower mountain pine forests
    - G3.326** Mountain pine forests of the Iberian Range
      - G3.3261** Urbion mountain pine forests

- G3.3262** Gudar mountain pine forests
- G3.33** *Pinus uncinata* reforestation
- G3.4** *Pinus sylvestris* woodland south of the taiga
- G3.41** Caledonian forest
  - G3.411** Heather Caledonian forest
  - G3.412** Bilberry Caledonian forest
  - G3.413** Moss Caledonian forest
  - G3.414** Woodrush Caledonian forest
  - G3.415** Peatmoss Caledonian forest
- G3.42** Middle European *Pinus sylvestris* forests
  - G3.421** Subcontinental Scots pine forests
    - G3.4211** Central European Scots pine forests
      - G3.42111** Subcontinental moss Scots pine forests
      - G3.42112** Subcontinental lichen Scots pine forests
      - G3.42113** Subcontinental moorgrass Scots pine forests
      - G3.42114** Subcontinental saw-wort Scots pine forests
    - G3.4212** Western lowland Scots pine forests
  - G3.422** Hercynian Scots pine forests
    - G3.4221** Eastern Hercynian Scots pine forests
    - G3.4222** Black Forest Scots pine forests
    - G3.4223** Vosges Scots pine forests
    - G3.4224** Luxembourg sandstone Scots pine forests
    - G3.4225** Pale hawkweed Scots pine forests
    - G3.4226** Lower Austrian block heath pine woods
  - G3.423** Western Eurasian steppe pine forests
    - G3.4231** Rhine steppe pine forests
    - G3.4232** Sarmatic steppe *Pinus sylvestris* forests
    - G3.4233** Carpathian steppe *Pinus sylvestris* woods
    - G3.4234** Pannonic steppe *Pinus sylvestris* woods
  - G3.424** Baltic dune Scots pine woods
  - G3.425** Eastern Alpine acidophilous Scots pine woods
- G3.43** Inner-Alpine *Ononis* steppe forests
- G3.44** Spring heath *Pinus sylvestris* forests
  - G3.441** Alpine spring heath Scots pine forests
  - G3.442** Carpathian relict calcicolous *Pinus sylvestris* forests
- G3.45** Inner Alpine *Minuartia laricifolia* steppe forests
- G3.46** Pyrenean mesophile *Pinus sylvestris* forests
  - G3.461** Pyrenean calcicolous mesophile Scots pine forests
  - G3.462** Pyrenean siliceous mesophile Scots pine forests
- G3.47** Central Massif *Pinus sylvestris* forests
- G3.48** Southwestern Alpine mesophile *Pinus sylvestris* forests
- G3.49** Supra-Mediterranean *Pinus sylvestris* forests
- G3.4A** Iberian calcareous *Pinus sylvestris* woods
  - G3.4A1** Pyrenean hedgehog-heath Scots pine woods
  - G3.4A2** Savin Scots pine forests
    - G3.4A21** Iberian-Range calcicolous Scots pine forests
    - G3.4A22** Baetic calcicolous Scots pine forests
- G3.4B** Iberian silicicolous *Pinus sylvestris* forests
  - G3.4B1** Pyrenean xerophile Scots pine forests
  - G3.4B2** Iberian-Range silicicolous Scots pine forests
  - G3.4B3** Cordilleran silicicolous Scots pine forests
    - G3.4B31** Summital Guadarraman silicicolous Scots pine forests
    - G3.4B32** Lower Cordilleran silicicolous Scots pine forests
  - G3.4B4** Cantabrian Scots pine forests
- G3.4C** Southeastern European *Pinus sylvestris* forests
  - G3.4C1** Thessalo-Macedonian Scots pine forests
  - G3.4C2** Rhodopide Scots pine forests
  - G3.4C3** Balkan Range Scots pine forests
  - G3.4C4** Southwestern Moesian Scots pine forests
    - G3.4C41** Moeso-Macedonian Scots pine forests

- G3.4C42 Pelagonian Scots pine forests
- G3.4C5 Dinaric spring heath Scots pine forests
  - G3.4C51 Dinaric serpentine Scots pine forests
  - G3.4C52 Dinaric dolomite Scots pine forests
- G3.4C6 Dinaric calcicole Scots pine forests
- G3.4C7 Dinaric acidophile Scots pine forests
- G3.4C8 East Carpathian *Sesleria* Scots pine forests
- G3.4C9 East Carpathian bilberry Scots pine forests
- G3.4CA East Carpathian *Daphne blagayana* Scots pine forests
- G3.4D Po terrace *Pinus sylvestris* forests
- G3.4E Ponto-Caucasian *Pinus sylvestris* forests
- G3.4F European *Pinus sylvestris* reforestation
- G3.5 *Pinus nigra* woodland
  - G3.51 Alpino-Apennine *Pinus nigra* forests
    - G3.511 Southern Alpine *Pinus nigra* forests
    - G3.512 Apennine *Pinus nigra* forests
    - G3.513 Lower Austrian *Pinus nigra* forests
    - G3.514 Northwestern Adriatic *Pinus nigra* forests
  - G3.52 Western Balkanic *Pinus nigra* forests
    - G3.521 Dinaro-Pelagonian *Pinus nigra* forests
      - G3.5211 Moeso-Hellenic montane *Pinus nigra* forests
      - G3.5212 Illyrian serpentine *Pinus nigra* forests
      - G3.5213 Illyrian limestone *Pinus nigra* forests
      - G3.5214 Illyrian dolomite *Pinus nigra* forests
      - G3.5215 Illyrian sub-Mediterranean *Pinus nigra* forests
    - G3.522 *Pinus dalmatica* forests
  - G3.53 *Pinus salzmannii* forests
    - G3.531 Causses Salzmann's pine forests
    - G3.532 Pre-Pyrenean Salzmann's pine forests
    - G3.533 Northern-Iberian Salzmann's pine forests
    - G3.534 Cordilleran Salzmann's pine forests
    - G3.535 Southern-Iberian Salzmann's pine forests
    - G3.536 Baetic Salzmann's pine forests
      - G3.5361 Supra-Mediterranean Baetic Salzmann's pine forests
      - G3.5362 Oro-Mediterranean Baetic Salzmann's pine forests
  - G3.54 Corsican *Pinus laricio* forests
  - G3.55 Calabrian *Pinus laricio* forests
  - G3.56 *Pinus pallasiana* and *Pinus banatica* forests
    - G3.561 Helleno-Balkan Pallas' pine forests
      - G3.5611 Taygetos Pallas' pine forests
      - G3.5612 Parnon Pallas' pine forests
      - G3.5613 Northern Peloponnese Pallas' pine forests
      - G3.5614 Southern Pindus Pallas' pine forests
      - G3.5615 Olympian Pallas' pine forests
      - G3.5616 Central Pindus Pallas' pine forests
      - G3.5617 Pelagonide Pallas' pine forests
      - G3.5618 Rhodopide Pallas' pine forests
      - G3.5619 Balkan Range Pallas' pine forests
      - G3.561A Moeso-Macedonian Pallas' pine forests
      - G3.561B Aegean Pallas' pine forests
    - G3.562 Banat pine forests
    - G3.563 Cyprian Pallas' pine forests
    - G3.564 Anatolian Pallas' pine forests
  - G3.57 *Pinus nigra* reforestation
- G3.6 Subalpine mediterranean *Pinus* woodland
  - G3.61 *Pinus leucodermis* forests
    - G3.611 Italian white-barked pine forests
    - G3.612 Pindus white-barked pine forests
    - G3.613 Olympus white-barked pine forests
    - G3.614 Pelagonide white-barked pine forests



- G3.615** South Dinaric white-barked pine forests
- G3.616** Rhodopide white-barked pine forests
- G3.62** *Pinus peuce* woods
  - G3.621** Pelagonide Macedonian pine woods
  - G3.622** Southern Dinaric Macedonian pine woods
  - G3.623** Rila and Pirin Macedonian pine forests
  - G3.624** Rhodope Macedonian pine woods
  - G3.625** Balkan Macedonian pine woods
- G3.7** Lowland to montane mediterranean *Pinus* woodland (excluding *Pinus nigra*)
  - G3.71** Maritime *Pinus pinaster ssp. atlantica* forests
    - G3.711** Charente *Pinus pinaster ssp. atlantica* - *Quercus ilex* forests
    - G3.712** Aquitanian *Pinus pinaster ssp. atlantica* - *Quercus suber* forests
    - G3.713** Landes maritime pine plantations
    - G3.714** Iberian *Pinus pinaster ssp. atlantica* forests
  - G3.72** *Pinus pinaster ssp. pinaster (Pinus mesogeensis)* forests
    - G3.721** Iberian mesogean pine forests
      - G3.7211** Northern-Iberian mesogean pine forests
      - G3.7212** Cordilleran mesogean pine forests
      - G3.7213** Southern-Iberian mesogean pine forests
      - G3.7214** Cazorlan mesogean pine forests
      - G3.7215** Southern Andalusian mesogean pine forests
      - G3.7216** Leonese mesogean pine forests
      - G3.7217** Catalanian mesogean pine forests
    - G3.722** Corbières mesogean pine forests
    - G3.723** Franco-Italian mesogean pine forests
    - G3.724** Corsican mesogean pine forests
    - G3.725** Sardinian mesogean pine forests
    - G3.726** Pantellerian mesogean pine forests
  - G3.73** *Pinus pinea* forests
    - G3.731** Iberian stone pine forests
      - G3.7311** Western Andalusian stone pine forests
      - G3.7312** Lusitanian stone pine forests
      - G3.7313** Castilian stone pine forests
      - G3.7314** Cordilleran stone pine forests
      - G3.7315** Catalanian stone pine forests
      - G3.7316** Morena stone pine forests
      - G3.7317** Manchegan stone pine forests
    - G3.732** Balearic stone pine woods
    - G3.733** Provence stone pine woods
    - G3.734** Corsican stone pine woods
    - G3.735** Sardinian stone pine forests
    - G3.736** Sicilian stone pine forests
    - G3.737** Italic stone pine forests
    - G3.738** Hellenic stone pine forests
    - G3.739** Albanian stone pine forests
    - G3.73A** Dalmatian stone pine forests
    - G3.73B** Pontic stone pine forests
    - G3.73C** Mediterranean Anatolian stone pine forests
  - G3.74** *Pinus halepensis* forests
    - G3.741** Iberian *Pinus halepensis* forests
    - G3.742** Balearic *Pinus halepensis* forests
    - G3.743** Provenço-Ligurian *Pinus halepensis* forests
    - G3.744** Corsican *Pinus halepensis* woods
    - G3.745** Sardinian *Pinus halepensis* woods
    - G3.746** Sicilian *Pinus halepensis* woods
    - G3.747** Italic *Pinus halepensis* forests
      - G3.7471** Gargano *Pinus halepensis* forests
      - G3.7472** Metapontine *Pinus halepensis* forests
      - G3.7473** Umbrian *Pinus halepensis* forests
    - G3.748** Hellenic *Pinus halepensis* forests

- G3.749 Illyrian *Pinus halepensis* forests
- G3.74A East Mediterranean *Pinus halepensis* forests
- G3.75 *Pinus brutia* forests
- G3.8 Canary Island *Pinus canariensis* woodland
- G3.81 *Pinus canariensis* - *Cistus symphytifolius* forests
  - G3.811 Tenerife pine-rockrose forests
  - G3.812 La Palma pine-rockrose forests
  - G3.813 Gran Canaria pine-rockrose forests
  - G3.814 Hierro pine-rockrose forests
- G3.82 *Pinus canariensis* - dry scrub forests
  - G3.821 Tenerife pine-dry scrub woods
  - G3.822 La Palma pine-dry scrub woods
  - G3.823 Gran Canaria pine-dry scrub woods
  - G3.824 Hierro pine-dry scrub woods
- G3.83 *Pinus canariensis* - heath forests
  - G3.831 Tenerife pine-heath forests
  - G3.832 La Palma pine-heath forests
  - G3.833 Gran Canaria pine-heath forests
  - G3.834 Hierro pine-heath forests
- G3.84 *Pinus canariensis* - *Adenocarpus viscosus* woods
  - G3.841 Tenerife pine-broom woods
  - G3.842 La Palma pine-broom woods
- G3.85 *Pinus canariensis* - *Juniperus cedrus* woods
  - G3.851 Tenerife pine-juniper woods
  - G3.852 La Palma pine-juniper woods
- G3.9 Coniferous woodland dominated by *Cupressaceae* or *Taxaceae*
  - G3.91 Western Palaearctic *Cupressus* forests
  - G3.92 Spanish *Juniperus thurifera* woods
    - G3.921 Iberian Spanish juniper forests
    - G3.922 Guadarraman Spanish juniper woods
      - G3.9221 Guadarraman calciphilous Spanish juniper woods
      - G3.9222 Guadarraman silicicolous Spanish juniper woods
    - G3.923 Cantabrian Spanish juniper woods
    - G3.924 Monegros Spanish juniper woods
    - G3.925 Manchegan Spanish juniper woods
    - G3.926 Baetic Spanish juniper woods
    - G3.927 Pyrenean Spanish juniper woods
    - G3.928 Southern Alpine Spanish juniper woods
    - G3.929 Isère Spanish juniper woods
    - G3.92A Corsican Spanish juniper woods
  - G3.93 Greek *Juniperus excelsa* woods
    - G3.931 Northern Hellenic Grecian juniper woods
    - G3.932 Peri-Rhodopide Grecian juniper woods
    - G3.933 Paeonian Grecian juniper woods
    - G3.934 Cyprian Grecian juniper woods
    - G3.935 Anatolian Grecian juniper woods
  - G3.94 *Juniperus foetidissima* woods
  - G3.95 *Juniperus drupacea* woods
  - G3.96 *Tetraclinis articulata* forests
  - G3.97 Western Palaearctic *Taxus baccata* woods
    - G3.971 Atlantic *Taxus baccata* woods
    - G3.972 Corsican yew woods
    - G3.973 Sardinian yew woods
    - G3.974 Italic yew woods
    - G3.975 Iberian yew woods
    - G3.976 Provence yew woods
    - G3.977 Alpino-Carpathian yew woods
    - G3.978 Dinaric yew woods
    - G3.979 Baltic yew woods
    - G3.97A Vitosha yew woods

- G3.98** Macaronesian *Juniperus* woods
  - G3.981** Canary Island juniper woods
  - G3.982** Azorean juniper woods
  - G3.983** Macaronesian Phoenician juniper woods
- G3.99** *Juniperus oxycedrus* woods
- G3.9A** *Juniperus phoenicea* woods
- G3.9B** Hyrcanian *Platycladus orientalis* (*Thuja orientalis*) forests
- G3.9C** *Cedrus* woodland
  - G3.9C1** *Cedrus libani* forests
    - G3.9C11** Lycian Taurus *Cedrus libani* forests
    - G3.9C12** Central Taurus *Cedrus libani* forests
    - G3.9C13** Paphlagonian *Cedrus libani* forests
  - G3.9C2** *Cedrus brevifolia* forests
- G3.A** *Picea* taiga woodland
  - G3.A1** *Vaccinium myrtillus* western *Picea* taiga
    - G3.A11** Subcontinental bilberry western spruce taiga
    - G3.A12** Suboceanic bilberry western spruce taiga
    - G3.A13** Continental bilberry western spruce taiga
    - G3.A14** Boreo-nemoral bilberry western spruce taiga
  - G3.A2** Fern western *Picea* taiga
    - G3.A21** Small fern western spruce taiga
      - G3.A211** Subcontinental small fern western spruce taiga
      - G3.A212** Suboceanic small fern western spruce taiga
      - G3.A213** Continental small fern western spruce taiga
    - G3.A22** Tall fern western spruce taiga
  - G3.A3** Small-herb western *Picea* taiga
    - G3.A31** Subcontinental small-herb western spruce taiga
    - G3.A32** Suboceanic small-herb western spruce taiga
    - G3.A33** Continental small-herb western spruce taiga
    - G3.A34** Boreo-nemoral small-herb western spruce taiga
  - G3.A4** Tall-herb western *Picea* taiga
    - G3.A41** Northern subcontinental tall-herb spruce taiga
    - G3.A42** Southern subcontinental tall-herb spruce taiga
    - G3.A43** Oceanic tall-herb birch-spruce taiga
    - G3.A44** Continental tall-herb western spruce taiga
  - G3.A5** Pretundra *Picea obovata* taiga
- G3.B** *Pinus* taiga woodland
  - G3.B1** *Calluna vulgaris* - *Empetrum* western taiga
    - G3.B11** Ling-crowberry birch-spruce-pine taiga
    - G3.B12** Barbilophozia birch-pine taiga
    - G3.B13** Oceanic *Bazzania* pine taiga
  - G3.B2** *Vaccinium vitis-idaea* *Pinus* and *Picea* - *Pinus* taiga
  - G3.B3** Herb-rich and grassy pine taiga
  - G3.B4** Lichen *Pinus* taiga
    - G3.B41** Maritime lichen pine taiga
    - G3.B42** Southern boreal continental lichen pine taiga
    - G3.B43** Northern boreal lichen pine taiga
    - G3.B44** Boreal rock-outcrop pine woodland
- G3.C** *Larix* taiga woodland
  - G3.C1** *Larix russica* taiga
- G3.D** Boreal bog conifer woodland
  - G3.D1** Boreal *Pinus sylvestris* bog woods
    - G3.D11** Boreal Labrador tea Scots pine bog woods
    - G3.D12** Boreal heath Scots pine bog woods
      - G3.D121** Boreal ling Scots pine bog woods
      - G3.D122** Boreal cowberry Scots pine bog woods
      - G3.D123** Boreal bog rosemary Scots pine bog woods
    - G3.D13** Boreal cottonsedge Scots pine bog woods
  - G3.D2** Boreal sphagnum *Pinus sylvestris* fen woods
    - G3.D21** Boreal globe sedge Scots pine fen woods

- G3.D22** Boreal dwarf scrub Scots pine fen woods
  - G3.D222** Boreal leatherleaf Scots pine fen woods
  - G3.D223** Boreal bog bilberry Scots pine fen woods
- G3.D23** Boreal neutrocline sphagnum Scots pine fen woods
- G3.D3** Boreal brown moss *Pinus sylvestris* fen woods
- G3.D4** Boreal *Picea* and *Picea - Betula* fen and bog woods
  - G3.D41** Boreal acidophile sphagnum spruce woods
  - G3.D42** Boreal neutrocline sphagnum spruce woods
  - G3.D43** Boreal brown moss spruce fen woods
- G3.D5** Boreal *Picea* swamp woods
  - G3.D51** Boreal fern spruce swamp woods
  - G3.D52** Boreal tall-herb spruce swamp woods
  - G3.D53** Boreal sedge-sphagnum spruce swamp woods
  - G3.D54** Boreal heath-horsetail spruce swamp woods
    - G3.D541** Boreal northern bilberry spruce swamp woods
    - G3.D542** Boreal cloudberry spruce swamp woods
    - G3.D543** Boreal horsetail spruce swamp woods
- G3.E** Nemoral bog conifer woodland
  - G3.E1** *Pinus mugo* bog woods
  - G3.E2** Nemoral *Pinus sylvestris* mire woods
    - G3.E21** Northern bilberry Scots Pine mire woods
      - G3.E211** Inland northern bilberry Scots Pine mire woods
      - G3.E212** Coastal northern bilberry Scots Pine mire woods
    - G3.E22** Hercynian Scots pine mire woods
    - G3.E23** Small reed Scots pine mire woods
  - G3.E3** Balkan *Pinus sylvestris* mire woods
    - G3.E31** Illyrian Scots pine mire woods
    - G3.E32** Moesian Scots pine mire woods
  - G3.E4** Steppe *Pinus sylvestris* mire woods
  - G3.E5** Nemoral peatmoss *Picea* woods
    - G3.E51** Peri-Alpine peatmoss spruce woods
    - G3.E52** Sub-boreal fen spruce woods
  - G3.E6** Nemoral bog *Picea* woods
- G3.F** Highly artificial coniferous plantations
  - G3.F1** Native conifer plantations
    - G3.F11** Native fir, spruce, larch, cedar plantations
    - G3.F12** Native pine plantations
    - G3.F13** Native cypress, juniper, yew plantations
  - G3.F2** Exotic conifer plantations
    - G3.F21** Exotic spruce, fir, larch, douglas fir, deodar plantations
    - G3.F22** Exotic pine plantations
    - G3.F23** Other exotic conifer plantations

#### **G4 Mixed deciduous and coniferous woodland**

- G4.1** Mixed swamp woodland
- G4.2** Mixed taiga woodland with *Betula*
- G4.3** Mixed sub-taiga woodland with acidophilous *Quercus*
  - G4.31** Boreonemoral lichen-dwarf shrub mixed forests
  - G4.32** Boreonemoral heath-grass mixed forests
  - G4.33** Boreonemoral herb-rich mixed forests
- G4.4** Mixed *Pinus sylvestris* - *Betula* woodland
- G4.5** Mixed *Pinus sylvestris* - *Fagus* woodland
- G4.6** Mixed *Abies* - *Picea* - *Fagus* woodland
- G4.7** Mixed *Pinus sylvestris* - acidophilous *Quercus* woodland
  - G4.71** Subcontinental nemoral *Pinus* - *Quercus* forests
    - G4.711** Northeastern pine-oak forests
      - G4.7111** Northeastern bilberry-smallreed pine-oak forests
      - G4.7112** Northeastern aspen pine-oak forests
    - G4.712** Cowberry pine-oak forests
    - G4.713** Sheep fescue pine-oak forests

- G4.72 Continental nemoral *Pinus* - *Quercus* forests
- G4.8 Mixed non-riverine deciduous and coniferous woodland
- G4.9 Mixed deciduous woodland with *Cupressaceae* or *Taxaceae*
- G4.A Mixed woodland with *Cupressaceae*, *Taxaceae* and evergreen oak
- G4.B Mixed mediterranean *Pinus* - thermophilous *Quercus* woodland
- G4.C Mixed *Pinus sylvestris* - thermophilous *Quercus* woodland
- G4.D Mixed *Pinus nigra* - evergreen *Quercus* woodland
- G4.E Mixed mediterranean pine - evergreen oak woodland
- G4.F Mixed forestry plantations

## **G5 Lines of trees, small anthropogenic woodlands, recently felled woodland, early-stage woodland and coppice**

- G5.1 Lines of trees
- G5.2 Small broadleaved deciduous anthropogenic woodlands
- G5.3 Small broadleaved evergreen anthropogenic woodlands
- G5.4 Small coniferous anthropogenic woodlands
- G5.5 Small mixed broadleaved and coniferous anthropogenic woodlands
- G5.6 Early-stage natural and semi-natural woodlands and regrowth
  - G5.61 Deciduous scrub woodland
  - G5.62 Mixed scrub woodland
  - G5.63 Coniferous scrub woodland
  - G5.64 Raised bog pre-woods
- G5.7 Coppice and early-stage plantations
  - G5.71 Coppice
  - G5.72 Early-stage broadleaved deciduous plantations
  - G5.73 Early-stage broadleaved evergreen plantations
  - G5.74 Early-stage coniferous plantations
  - G5.75 Early-stage mixed broadleaved and coniferous plantations
  - G5.76 Trees planted for early whole-tree harvesting
- G5.8 Recently felled areas
  - G5.81 Recently felled areas, formerly broadleaved trees
  - G5.82 Recently felled areas, formerly coniferous trees
  - G5.83 Recently felled areas, formerly mixed broadleaved and coniferous trees
  - G5.84 Herbaceous clearings
    - G5.841 Willowherb and foxglove clearings
    - G5.842 Burdock and deadly nightshade clearings
  - G5.85 Shrubby clearings

## **H Inland unvegetated or sparsely vegetated habitats**

### **H1 Terrestrial underground caves, cave systems, passages and waterbodies**

- H1.1 Cave entrances
- H1.2 Cave interiors
  - H1.21 Troglobiont vertebrate caves
    - H1.211 *Proteus anguinus* caves
    - H1.212 Troglobiont fish caves
  - H1.22 Subtroglophile vertebrate caves
    - H1.221 Continental subtroglophile vertebrate caves
    - H1.222 Insular subtroglophile vertebrate caves
  - H1.23 Troglobiont invertebrate caves
    - H1.231 Troglobiont invertebrate temperate caves
    - H1.232 Troglobiont invertebrate ice caves
    - H1.233 Troglobiont invertebrate hydrothermal caves
    - H1.234 Troglobiont invertebrate sulphur caves
  - H1.24 Troglophile invertebrate caves
  - H1.25 Subtroglophile invertebrate caves
  - H1.26 Caves without vertebrates or invertebrates
- H1.3 Dark underground passages

- H1.4** Lava tubes
  - H1.41** Icelandic lava tubes
  - H1.42** Macaronesian lava tubes
  - H1.43** Tethyan lava tubes
- H1.5** Underground standing waterbodies
  - H1.51** Permanent underground standing waterbodies
  - H1.52** Temporary underground standing waterbodies
- H1.6** Underground running waterbodies
  - H1.61** Permanent underground running waterbodies
  - H1.62** Temporary underground running waterbodies
- H1.7** Disused underground mines and tunnels

## **H2** Screes

- H2.1** Cold siliceous screes
- H2.2** Cold limestone screes
- H2.3** Temperate-montane acid siliceous screes
  - H2.31** Alpine siliceous screes
    - H2.311** Mountain sorrel screes
      - H2.3111** Alpine mountain sorrel screes
      - H2.3112** Southwestern Alpine mountain sorrel screes
      - H2.3113** Pyrenean mountain sorrel screes
      - H2.3114** Corsican mountain sorrel screes
      - H2.3115** Carpathian mountain sorrel screes
      - H2.3116** Rhodopide mountain sorrel screes
    - H2.312** Rock jasmine screes
    - H2.313** Brown woodrush screes
      - H2.3131** Alpine woodrush screes
      - H2.3132** Carpathian woodrush screes
      - H2.3133** Rhodopide woodrush screes
    - H2.314** Cold silicate block screes
    - H2.315** Carpatho-Balkan saxifrage-speedwell-ragwort screes
      - H2.3151** Rhodopide ragwort screes
      - H2.3152** Carpathian saxifrage-speedwell acidophilous screes
    - H2.316** Painted fescue screes
  - H2.32** Medio-European upland siliceous screes
- H2.4** Temperate-montane calcareous and ultra-basic screes
  - H2.41** Alpine calcschist screes
  - H2.42** *Thlaspi rotundifolium* screes
  - H2.43** Fine calcareous screes
    - H2.431** Butterbur screes
    - H2.432** Mountain hawkbit screes
  - H2.44** Carpathian calcareous screes
    - H2.441** West Carpathian calcareous screes
    - H2.442** East Carpathian calcareous screes
  - H2.45** Rhodopide calcareous screes
- H2.5** Acid siliceous screes of warm exposures
  - H2.51** Pyreneo-Alpine thermo-siliceous screes
  - H2.52** Oro-Cantabrian siliceous screes
  - H2.53** Ibero-Pyrenean acidophile fern screes
  - H2.54** Carpetano-Iberian siliceous screes
  - H2.55** Nevadan siliceous screes
    - H2.551** Nevadan foxglove screes
    - H2.552** Nevadan violet screes
  - H2.56** Central Mediterranean siliceous screes
  - H2.57** Anatolian siliceous screes
- H2.6** Calcareous and ultra-basic screes of warm exposures
  - H2.61** Peri-Alpine thermophilous screes
    - H2.611** Rough-grass screes
    - H2.612** Submontane calcareous screes
      - H2.6121** Hemp-nettle screes

- H2.6122** French sorrel screes
- H2.6123** Limestone fern screes
- H2.6124** Vincetoxicum screes
- H2.613** Paris Basin screes
- H2.62** Cevenno-Provençal screes
- H2.63** Pyrenean calcareous screes
- H2.64** Oro-Cantabrian calcareous screes
- H2.65** Iberian calciphile fern screes
- H2.66** Southern Iberian calcareous screes
- H2.67** Central Mediterranean calcareous screes
- H2.68** Eastern Mediterranean limestone screes
- H2.69** Eastern Mediterranean serpentine screes
- H2.6A** Cyprian screes
- H2.6B** Illyrian montane calcareous screes
  - H2.6B1** Illyrian fern screes
  - H2.6B2** Illyrian butterbur screes
  - H2.6B3** Illyrian drypis screes
  - H2.6B4** Illyrian candytuft screes
  - H2.6B5** Illyrian toadflax screes
  - H2.6B6** Illyrian mouse-ear screes
  - H2.6B7** Illyrian geranium screes
  - H2.6B8** Pelagonide toadflax-valerian screes
- H2.6C** Illyrian sub-Mediterranean screes
- H2.6D** Illyrian montane serpentine screes
- H2.6E** Illyrian *Achnatherum calamagrostis* screes
- H2.6F** Anatolian calcareous screes

### **H3 Inland cliffs, rock pavements and outcrops**

- H3.1** Acid siliceous inland cliffs
  - H3.11** Middle European montane siliceous cliffs
    - H3.111** Middle European high-altitude siliceous cliffs
    - H3.112** Hercynio-Alpine montane and collinear siliceous cliffs
    - H3.113** Hercynio-Alpine serpentine cliffs
    - H3.114** Carpathian montane siliceous cliffs
  - H3.12** Oro-Iberian siliceous cliffs
    - H3.121** Ibero-Carpetanian siliceous cliffs
    - H3.122** Nevadan siliceous cliffs
  - H3.13** Southwestern Alpine siliceous cliffs
  - H3.14** Cyrno-Sardinian montane and alpine cliffs
  - H3.15** Helleno-Carpatho-Balkan *Silene* siliceous cliffs
    - H3.151** Southern Carpathian campion siliceous cliffs
    - H3.152** Carpatho-Balkano-Rhodopide campion siliceous cliffs
    - H3.153** Pelagonide campion siliceous cliffs
  - H3.16** Peri-Pyrenean montane siliceous cliffs
  - H3.17** Western Iberian siliceous cliffs
  - H3.18** West Mediterranean thermophile siliceous cliffs
  - H3.19** Lowland northern and middle siliceous cliffs
  - H3.1A** Boreal siliceous cliffs
    - H3.1B** Bare siliceous inland cliffs
      - H3.1B1** High altitude and arctic siliceous cliffs
      - H3.1B2** Mountain siliceous cliffs
      - H3.1B3** Boreo-nemoral and boreal siliceous cliffs
      - H3.1B4** Nemoral low altitude siliceous cliffs
      - H3.1B5** Mediterranean siliceous cliffs
    - H3.1C** Disused siliceous quarries
- H3.2** Basic and ultra-basic inland cliffs
  - H3.21** Tyrrheno-Adriatic eumediterranean calcicolous chasmophyte communities
    - H3.211** Petrarch-spleenwort cliffs
    - H3.212** Southeastern Iberian chasmophyte communities
    - H3.213** Balearic calcareous chasmophyte communities

- H3.214** Insular cabbage cliffs
  - H3.2143** West-Mediterranean polypode cliffs
- H3.215** Sicilo-Italic *Dianthus* cliffs
- H3.216** Illyrian chasmophyte communities
  - H3.2161** Istrio-Triestine karst chasmophyte communities
    - H3.21611** Karst knapweed cliffs
    - H3.21612** Istrio-Triestine spurge cliffs
    - H3.21613** Istrio-Triestine moehringia cliffs
  - H3.2162** Liburnian chasmophyte communities
    - H3.21621** Dalmatian knapweed cliffs
    - H3.21622** Austrian viper's grass cliffs
    - H3.21623** Liburnian meadow rue-bellflower cliffs
  - H3.2163** Dalmatian chasmophyte communities
    - H3.21631** Raguse knapweed cliffs
    - H3.21632** Moltkia cliffs
    - H3.21633** *Centaurea cuspidata* cliffs
  - H3.2164** Vardean chasmophyte communities
  - H3.2165** Dalmatian fern-navelwort cliffs
- H3.22** Central Pyrenean calcicolous chasmophyte communities
- H3.23** Liguro-Apennine calcicolous chasmophyte communities
- H3.24** Western mediterraneo-montane chasmophyte communities
  - H3.241** Ibero-montane cinquefoil cliffs
    - H3.2411** Oro-Cantabrian calcareous cliffs
    - H3.2412** Baetic calcareous cliffs
    - H3.2413** Valencian calcareous cliffs
- H3.25** Alpine and sub-mediterranean chasmophyte communities
  - H3.251** Alpine calcareous cliff heliophile communities
  - H3.252** Middle-European calcareous fern cliffs
  - H3.253** Carpathian calcareous cliff heliophile communities
- H3.26** Hellenic eumediterranean calcicolous chasmophyte communities
- H3.27** Aegeo-east-Mediterranean basiphile chasmophyte communities
  - H3.271** Cretan chasmophyte communities
    - H3.2711** Western Cretan chasmophyte communities
    - H3.2712** Eastern Cretan chasmophyte communities
    - H3.2713** High-altitude Cretan chasmophyte communities
  - H3.272** Karpathos chasmophyte communities
  - H3.273** Eastern Aegean chasmophyte communities
  - H3.274** Cyclades chasmophyte communities
  - H3.275** Northern Sporades chasmophyte communities
  - H3.276** Cyprian chasmophyte communities
    - H3.2761** Kyrenia chasmophyte communities
    - H3.2762** Troodos limestone chasmophyte communities
    - H3.2763** Troodos serpentine chasmophyte communities
    - H3.2764** Kythrean chasmophyte communities
- H3.28** Southern Hellenic *Potentilla* cliffs
- H3.29** Central Hellenic *Potentilla* cliffs
- H3.2A** Illyrio-Helleno-Balkan *Potentilla* cliffs
  - H3.2A1** Helleno-Balkan calcicolous chasmophyte communities
    - H3.2A11** Pelagonide calcicolous chasmophyte communities
    - H3.2A12** Rhodope calcicolous chasmophyte communities
      - H3.2A121** Pirin calcicolous chasmophyte communities
      - H3.2A122** Rila calcicolous chasmophyte communities
      - H3.2A123** Rhodope calcicolous chasmophyte communities
    - H3.2A13** Balkan Range calcicolous chasmophyte communities
      - H3.2A131** Balkan range ramonda cliffs
      - H3.2A132** Vrachansky karst chasmophyte communities
  - H3.2A2** Dinaro-Carpathian calcicolous chasmophyte communities
  - H3.2A3** Moist Dinaric calcicolous chasmophyte communities
  - H3.2A4** Balkano-Illyrian shaded calcicolous chasmophyte communities
- H3.2B** Lowland middle European calcareous cliff communities



- H3.2C** Boreal calcareous cliff communities
- H3.2D** Mediterranean-Anatolian calcicolous chasmophyte communities
- H3.2E** Bare limestone inland cliffs
  - H3.2E1** High altitude and arctic limestone cliffs
  - H3.2E2** Mountain limestone cliffs
  - H3.2E3** Boreo-nemoral and boreal limestone cliffs
  - H3.2E4** Nemoral low altitude limestone cliffs
  - H3.2E5** Mediterranean limestone cliffs
- H3.2F** Disused chalk and limestone quarries
- H3.2G** Boreal and arctic serpentine and basaltic cliff communities
- H3.2H** Bare inland basaltic and ultra-basic cliffs
  - H3.2H1** High altitude and arctic basaltic and ultra-basic cliffs
  - H3.2H2** Mountain basaltic and ultra-basic cliffs
  - H3.2H3** Boreo-nemoral and boreal basaltic and ultra-basic cliffs
  - H3.2H4** Nemoral low altitude basaltic and ultra-basic cliffs
  - H3.2H5** Mediterranean basaltic and ultra-basic cliffs
- H3.2I** Temperate serpentine and basaltic cliff communities
- H3.2J** Mediterranean serpentine and basaltic cliff communities
- H3.3** Macaronesian inland cliffs
- H3.4** Wet inland cliffs
  - H3.41** Mediterranean wet inland cliffs
  - H3.42** Northern wet inland cliffs
- H3.5** Almost bare rock pavements, including limestone pavements
  - H3.51** Pavements, rock slabs, rock domes
    - H3.511** Limestone pavements
- H3.6** Weathered rock and outcrop habitats
  - H3.61** Bare weathered rock and outcrop habitats
  - H3.62** Sparsely vegetated weathered rock and outcrop habitats

#### **H4 Snow or ice-dominated habitats**

- H4.1** Snow packs
- H4.2** Ice caps and true glaciers
  - H4.21** Ice sheets and ice caps
  - H4.22** Cirque and valley glaciers
  - H4.23** Glacierets
- H4.3** Rock glaciers and unvegetated ice-dominated moraines
  - H4.31** Rock glaciers
  - H4.32** Ice-core moraines
  - H4.33** Unvegetated glacial moraines in the process of formation

#### **H5 Miscellaneous inland habitats with very sparse or no vegetation**

- H5.1** Fjell fields and other freeze-thaw features with very sparse or no vegetation
  - H5.11** Fjell fields with very sparse or no vegetation
- H5.2** Glacial moraines with very sparse or no vegetation
  - H5.21** Unvegetated young glacial moraines
  - H5.22** Sparsely vegetated glacial moraines
- H5.3** Sparsely- or un-vegetated habitats on mineral substrates not resulting from recent ice activity
  - H5.31** Clay and silt with very sparse or no vegetation
  - H5.32** Stable sand with very sparse or no vegetation
  - H5.33** Lacustrine dunes
    - H5.331** Lake Geneva lacustrine dunes
    - H5.332** Boreo-lacustrine dunes
  - H5.34** Inland non-lacustrine dunes
    - H5.341** Icelandic inland dunes
  - H5.35** Gravel with very sparse or no vegetation
  - H5.36** Shallow rocky soils with very sparse or no vegetation
  - H5.37** Boulder fields
- H5.4** Dry organic substrates with very sparse or no vegetation
- H5.5** Burnt areas with very sparse or no vegetation

- H5.51 Unvegetated recently burnt ground
- H5.52 Sparsely vegetated burnt areas
- H5.6 Trampled areas
- H5.61 Unsurfaced pathways

## **H6 Recent volcanic features**

- H6.1 Active volcanic features
  - H6.11 Italian fumaroles
  - H6.12 Sicilian fumaroles
  - H6.13 Pantelleria fumaroles
  - H6.14 Macaronesian fumaroles
  - H6.15 Icelandic solfataras
  - H6.16 East Mediterranean fumaroles and solfataras
  - H6.17 Peri-Alpine fumaroles, solfataras and mofettes
  - H6.18 Western Asian fumaroles and solfataras
- H6.2 Inactive recent volcanic features
  - H6.21 Teide violet community
  - H6.22 Etna summital communities
  - H6.23 Western Asian orovolcanic communities
  - H6.24 Barren lava fields and flows
    - H6.241 Barren Icelandic lava flows
    - H6.242 Barren Macaronesian lava flows
    - H6.243 Barren Tethyan lava flows
  - H6.25 Volcanic ash and lapilli fields

## **I Regularly or recently cultivated agricultural, horticultural and domestic habitats**

### **I1 Arable land and market gardens**

- I1.1 Intensive unmixed crops
  - I1.11 Large-scale intensive unmixed crops (>25ha)
  - I1.12 Medium-scale intensive unmixed crops (1-25ha)
  - I1.13 Small-scale intensive unmixed crops (<1ha)
- I1.2 Mixed crops of market gardens and horticulture
  - I1.21 Large-scale market gardens and horticulture
  - I1.22 Small-scale market gardens and horticulture, including allotments
- I1.3 Arable land with unmixed crops grown by low-intensity agricultural methods
- I1.4 Inundated or inundatable croplands, including rice fields
- I1.5 Bare tilled, fallow or recently abandoned arable land
  - I1.51 Bare tilled land
  - I1.52 Fallow un-inundated fields with annual weed communities
  - I1.53 Fallow un-inundated fields with annual and perennial weed communities
  - I1.54 Fallow inundated fields with annual weed communities
  - I1.55 Fallow inundated fields with annual and perennial weed communities

### **I2 Cultivated areas of gardens and parks**

- I2.1 Large-scale ornamental garden areas
  - I2.11 Park flower beds, arbours and shrubbery
  - I2.12 Botanical gardens
- I2.2 Small-scale ornamental and domestic garden areas
  - I2.21 Ornamental garden areas
  - I2.22 Subsistence garden areas
  - I2.23 Small parks and city squares
- I2.3 Recently abandoned garden areas

## **J Constructed, industrial and other artificial habitats**

### **J1 Buildings of cities, towns and villages**

- J1.1 Residential buildings of city and town centres
- J1.2 Residential buildings of villages and urban peripheries
- J1.3 Urban and suburban public buildings
- J1.4 Urban and suburban industrial and commercial sites still in active use
  - J1.41 Urban and suburban commercial units
  - J1.42 Urban and suburban factories
- J1.5 Disused constructions of cities, towns and villages
  - J1.51 Urban and suburban derelict spaces
- J1.6 Urban and suburban construction and demolition sites
- J1.7 High density temporary residential units

### **J2 Low density buildings**

- J2.1 Scattered residential buildings
- J2.2 Rural public buildings
- J2.3 Rural industrial and commercial sites still in active use
  - J2.31 Rural commercial units
  - J2.32 Rural industrial sites
- J2.4 Agricultural constructions
  - J2.41 Agricultural buildings (not isolated)
  - J2.42 Isolated agricultural buildings
  - J2.43 Greenhouses
- J2.5 Constructed boundaries
  - J2.51 Fences
  - J2.52 Field walls
  - J2.53 Sea walls
- J2.6 Disused rural constructions
  - J2.61 Derelict spaces of disused rural constructions
- J2.7 Rural construction and demolition sites

### **J3 Extractive industrial sites**

- J3.1 Active underground mines
- J3.2 Active opencast mineral extraction sites, including quarries
- J3.3 Recently abandoned above-ground spaces of extractive industrial sites

### **J4 Transport networks and other constructed hard-surfaced areas**

- J4.1 Disused road, rail and other constructed hard-surfaced areas
- J4.2 Road networks
- J4.3 Rail networks
- J4.4 Airport runways and aprons
- J4.5 Hard-surfaced areas of ports
- J4.6 Pavements and recreation areas
- J4.7 Constructed parts of cemeteries

### **J5 Highly artificial man-made waters and associated structures**

- J5.1 Highly artificial saline and brackish standing waters
  - J5.11 Saline and brackish industrial lagoons and canals
  - J5.12 Saltworks
- J5.2 Highly artificial saline and brackish running waters
- J5.3 Highly artificial non-saline standing waters
  - J5.31 Ponds and lakes with completely man-made substrate
  - J5.32 Intensively managed fish ponds
  - J5.33 Water storage tanks
  - J5.34 Standing waterbodies of extractive industrial sites with extreme chemistry
- J5.4 Highly artificial non-saline running waters

**J5.41** Non-saline water channels with completely man-made substrate

**J5.411** Sewers

**J5.42** Running discharges from extractive industrial sites with extreme chemistry

**J5.43** Subterranean artificial watercourses

**J5.5** Highly artificial non-saline fountains and cascades

## **J6 Waste deposits**

**J6.1** Waste resulting from building construction or demolition

**J6.2** Household waste and landfill sites

**J6.3** Non-agricultural organic waste

**J6.31** Sewage works and sludge beds

**J6.311** Solid organic waste

**J6.4** Agricultural and horticultural waste

**J6.41** Solid agricultural and horticultural waste

**J6.42** Liquid agricultural wastes (manure)

**J6.5** Industrial waste

**J6.51** Mining slag heaps

**J6.52** Industrial scrap and detritus heaps

## **X Habitat complexes**

**X01** Estuaries

**X02** Saline coastal lagoons

**X03** Brackish coastal lagoons

**X04** Raised bog complexes

**X05** Snow patches

**X06** Crops shaded by trees

**X07** Intensively-farmed crops interspersed with strips of semi-natural vegetation

**X09** Pasture woods (with a tree layer overlying pasture)

**X10** Mosaic landscapes with a woodland element (bocages)

**X11** Large parks

**X13** Land sparsely wooded with broadleaved deciduous trees

**X14** Land sparsely wooded with broadleaved evergreen trees

**X15** Land sparsely wooded with coniferous trees

**X16** Land sparsely wooded with mixed broadleaved and coniferous trees

**X18** Wooded steppe

**X19** Wooded tundra

**X20** Treeline ecotones

**X22** Small city centre non-domestic gardens

**X23** Large non-domestic gardens

**X24** Domestic gardens of city and town centres

**X25** Domestic gardens of villages and urban peripheries

**X27** Machair complexes

**X28** Blanket bog complexes

**X29** Salt lake islands

**X30** Benthic-pelagic habitats

**X31** Mosaics of mobile and non-mobile substrata in the littoral zone

**X32** Mosaics of mobile and non-mobile substrata in the infralittoral zone

**X33** Mosaics of mobile and non-mobile substrata in the circalittoral zone