

ANNEX II

ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST WHOSE CONSERVATION REQUIRES
THE DESIGNATION OF SPECIAL AREAS OF CONSERVATION

Interpretation

(a) Annex II follows on from Annex I for the establishment of a consistent network of special areas of conservation.

(b) The species listed in this Annex are indicated:

- by the name of the species or subspecies, or
- by the body of species belonging to a higher taxon or to a designated part of that taxon.

The abbreviation 'spp.' after the name of a family or genus designates all the species belonging to that family or genus.

(c) *Symbols*

An asterisk (*) before the name of a species indicates that the species is a priority species.

Most species listed in this Annex are also listed in Annex IV.

Where a species appears in this Annex but does not appear in either Annex IV or Annex V, the species name is followed by the symbol (o); where a species which appears in this Annex also appears in Annex V but does not appear in Annex IV, its name is followed by the symbol (V).

(a) **ANIMALS****VERTEBRATES****MAMMALS****INSECTIVORA***Talpidae*

Galemys pyrenaicus

CHIROPTERA*Rhinolophidae*

Rhinolophus blasii
Rhinolophus euryale
Rhinolophus ferrumequinum
Rhinolophus hipposideros
Rhinolophus mehelyi

Vespertilionidae

Barbastella barbastellus
Miniopterus schreibersi
Myotis bechsteini
Myotis blythi
Myotis capaccinii
Myotis dasycneme
Myotis emarginatus
Myotis myotis

RODENTIA*Sciuridae*

Spermophilus citellus

Castoridae

Castor fiber

Microtidae

Microtus cabreræ
**Microtus oeconomus arenicola*

CARNIVORA*Canidae*

- **Canis lupus* (Spanish populations: only those south of the Duero; Greek populations: only those south of the 39th parallel)

Ursidae

- **Ursus arctos*

Mustelidae

- Lutra lutra*
- Mustela lutreola*

Felidae

- Lynx lynx*
- **Lynx pardina*

Phocidae

- Halichoerus grypus* (V)
- **Monachus monachus*
- Phoca vitulina* (V)

ARTIODACTYLA*Cervidae*

- **Cervus elaphus corsicanus*

Bovidae

- Capra aegagrus* (natural populations)
- **Capra pyrenaica pyrenaica*
- Ovis ammon musimon* (natural populations — Corsica and Sardinia)
- Rupicapra rupicapra balcanica*
- **Rupicapra ornata*

CETACEA

- Tursiops truncatus*
- Phocoena phocoena*

REPTILES**TESTUDINATA***Testudinidae*

- Testudo hermanni*
- Testudo graeca*
- Testudo marginata*

Cheloniidae

- **Caretta caretta*

Emydidae

- Emys orbicularis*
- Mauremys caspica*
- Mauremys leprosa*

SAURIA*Lacertidae*

- Lacerta monticola*
- Lacerta schreiberi*
- Gallotia galloti insulanagae*
- **Gallotia simonyi*
- Podarcis lilfordi*
- Podarcis pityusensis*

Scincidae

- Chalcides occidentalis*

Gekkonidae

- Phyllodactylus europaeus*

OPHIDIA*Colubridae*

- Elaphe quatuorlineata*
- Elaphe situla*

Viperidae

- **Vipera schweizeri*
- Vipera ursinii*

AMPHIBIANS**CAUDATA***Salamandridae*

- Chioglossa lusitanica*
- Mertensiella luschani*
- **Salamandra salamandra aurorae*
- Salamandrina terdigitata*
- Triturus cristatus*

Proteidae

- Proteus anguinus*

Plethodontidae

- Speleomantes ambrosii*
- Speleomantes flavus*
- Speleomantes genei*
- Speleomantes imperialis*
- Speleomantes supramontes*

ANURA*Discoglossidae*

- Bombina bombina*
- Bombina variegata*
- Discoglossus jeanneae*
- Discoglossus montalentii*
- Discoglossus sardus*
- **Alytes muletensis*

Ranidae

- Rana latastei*

Pelobatidae

- **Pelobates fuscus insubricus*

FISH**PETROMYZONIFORMES***Petromyzonidae*

- Eudontomyzon* spp. (o)
- Lampetra fluviatilis* (V)
- Lampetra planeri* (o)
- Lethenteron zanandrai* (V)
- Petromyzon marinus* (o)

ACIPENSERIFORMES*Acipenseridae*

- **Acipenser naccarii*
- **Acipenser sturio*

ATHERINIFORMES*Cyprinodontidae*

- Aphanius iberus* (o)
- Aphanius fasciatus* (o)
- **Valencia hispanica*

SALMONIFORMES*Salmonidae*

- Hucho hucho* (natural populations) (V)
- Salmo salar* (only in fresh water) (V)
- Salmo marmoradus* (o)
- Salmo macrostigma* (o)

Coregonidae

**Coregonus oxyrhynchus* (anadromous populations in certain sectors of the North Sea)

CYPRINIFORMES

Cyprinidae

Alburnus vulturius (o)
Alburnus albidus (o)
Anaocypris hispanica
Aspius aspius (o)
Barbus plebejus (V)
Barbus meridionalis (V)
Barbus capito (V)
Barbus comiza (V)
Chalcalburnus chalcoides (o)
Chondrostoma soetta (o)
Chondrostoma polylepis (o)
Chondrostoma genei (o)
Chondrostoma lusitanicum (o)
Chondrostoma toxostoma (o)
Gobio albipinnatus (o)
Gobio uranoscopus (o)
Iberocypris palaciosi (o)
**Ladigesocypris ghigii* (o)
Leuciscus lucomonis (o)
Leuciscus souffia (o)
Phoxinellus spp. (o)
Rutilus pigus (o)
Rutilus rubilio (o)
Rutilus arcasii (o)
Rutilus macrolepidotus (o)
Rutilus lemmingii (o)
Rutilus friesii meidingeri (o)
Rutilus alburnoides (o)
Rhodeus sericeus amarus (o)
Scardinius graecus (o)

Cobitidae

Cobitis conspersa (o)
Cobitis larvata (o)
Cobitis trichonica (o)
Cobitis taenia (o)
Misgurnis fossilis (o)
Sabanejewia aurata (o)

PERCIFORMES

Percidae

Gymnocephalus schraetzer (V)
Zingel spp. [(o) except *Zingel asper* and *Zingel zingel* (V)]

Gobiidae

Pomatoschistus canestrini (o)
Padogobius panizzai (o)
Padogobius nigricans (o)

CLUPEIFORMES

Clupeidae

Alosa spp. (V)

SCORPAENIFORMES

Cottidae

Cottus ferruginosus (o)
Cottus petiti (o)
Cottus gobio (o)

SILURIFORMES

Siluridae

Silurus aristotelis (V)

INVERTEBRATES

ARTHROPODS

CRUSTACEA

Decapoda

Austropotamobius pallipes (V)

INSECTA

Coleoptera

Buprestis splendens

*Carabus olympiae

Cerambyx cerdo

Cucujus cinnaberinus

Dytiscus latissimus

Graphoderus bilineatus

Limonicus violaceus (o)

Lucanus cervus (o)

Morimus funereus (o)

*Osmoderma eremita

*Rosalia alpina

Lepidoptera

*Callimorpha quadripunctata (o)

Coenonympha oedippus

Erebia calcaria

Erebia christi

Eriogaster catax

Euphydryas aurinia (o)

Graellsia isabellae (V)

Hypodryas maturna

Lycaena dispar

Maculinea nausithous

Maculinea teleius

Melanagria arge

Papilio hospiton

Plebicula golgus

Mantodea

Apteromantis aptera

Odonata

Coenagrion hylas (o)

Coenagrion mercuriale (o)

Cordulegaster trinacriae

Gomphus graslinii

Leucorrhina pectoralis

Lindenia tetraphylla

Macromia splendens

Ophiogomphus cecilia

Oxygastra curtisii

Orthoptera

Baetica ustulata

MOLLUSCS

GASTROPODA

Caseolus calculus

Caseolus commixta

Caseolus sphaerula

Discula leacockiana

Discula tabellata

Discus defloratus

Discus guerinianus

Elona quimperiana

Geomalacus maculosus

Geomitra moniziana

Helix subplicata

Leiostyla abbreviata
Leiostyla cassida
Leiostyla corneocostata
Leiostyla gibba
Leiostyla lamellosa
Vertigo angustior (o)
Vertigo genesii (o)
Vertigo geyeri (o)
Vertigo moulinsiana (o)

BIVALVIA*Unionoida*

Margaritifera margaritifera (V)
Unio crassus

(b) PLANTS**PTERIDOPHYTA****ASPLENIACEAE**

Asplenium jahandiezii (Litard.) Rouy

BLECHNACEAE

Woodwardia radicans (L.) Sm.

DICKSONIACEAE

Culcita macrocarpa C. Presl

DRYOPTERIDACEAE

**Dryopteris corleyi* Fraser-Jenk.

HYMENOPHYLLACEAE

Trichomanes speciosum Willd.

ISOETACEAE

Isoetes boryana Durieu
Isoetes malinverniana Ces. & De Not.

MARSILEACEAE

Marsilea batardae Launert
Marsilea quadrifolia L.
Marsilea strigosa Willd.

OPHIOGLOSSACEAE

Botrychium simplex Hitchc.
Ophioglossum polyphyllum A. Braun

GYMNOSPERMAE**PINACEAE**

**Abies nebrodensis* (Lojac.) Mattei

ANGIOSPERMAE**ALISMATACEAE**

Caldesia parnassifolia (L.) Parl.
Luronium natans (L.) Raf.

AMARYLLIDACEAE

Leucojum nicaeense Ard.
Narcissus asturiensis (Jordan) Pugsley
Narcissus calcicola Mendonça
Narcissus cyclamineus DC.
Narcissus fernandesii G. Pedro
Narcissus humilis (Cav.) Traub

- **Narcissus nevadensis* Pugsley
- Narcissus pseudonarcissus* L.
 - subsp. *nobilis* (Haw.) A. Fernandes
- Narcissus scaberulus* Henriq.
- Narcissus triandrus* (Salisb.) D. A. Webb
 - subsp. *capax* (Salisb.) D. A. Webb.
- Narcissus viridiflorus* Schousboe

BORAGINACEAE

- **Anchusa crispa* Viv.
- **Lithodora nitida* (H. Ern) R. Fernandes
- Myosotis lusitanica* Schuster
- Myosotis rehsteineri* Wartm.
- Myosotis retusifolia* R. Afonso
- Omphalodes kuzinskyana* Willk.
- **Omphalodes littoralis* Lehm.
- Solenanthes albanicus* (Degen & al.) Degen & Baldacci
- **Symphytum cycladense* Pawl.

CAMPANULACEAE

- Asyneuma giganteum* (Boiss.) Bornm.
- **Campanula sabatia* De Not.
- Jasione crispa* (Pourret) Samp.
 - subsp. *serpentinica* Pinto da Silva
- Jasione lusitanica* A. DC.

CARYOPHYLLACEAE

- **Arenaria nevadensis* Boiss. & Reuter
- Arenaria provincialis* Chater & Halliday
- Dianthus cintronus* Boiss. & Reuter
 - subsp. *cintronus* Boiss. & Reuter
- Dianthus marizii* (Samp.) Samp.
- Dianthus rupicola* Biv.
- **Gypsophila papillosa* P. Porta
- Herniaria algarvica* Chaudri
- Herniaria berlingiana* (Chaudhri) Franco
- **Herniaria latifolia* Lapeyr.
 - subsp. *litardierei* gamis
- Herniaria maritima* Link
- Moehringia tommasinii* Marches.
- Petrocoptis grandiflora* Rothm.
- Petrocoptis montsiciana* O. Bolos & Rivas Mart.
- Petrocoptis pseudoviscosa* Fernandez Casas
- Silene cintrana* Rothm.
- **Silene hicesiae* Brullo & Signorello
- Silene hifacensis* Rouy ex Willk.
- **Silene holzmanii* Heldr. ex Boiss.
- Silene longicilia* (Brot.) Orth.
- Silene mariana* Pau
- **Silene orphanidis* Boiss.
- **Silene rothmaleri* Pinto da Silva
- **Silene velutina* Pourret ex Loisel.

CHENOPODIACEAE

- **Bassia saxicola* (Guss.) A. J. Scott
- **Kochia saxicola* Guss.
- **Salicornia veneta* Pignatti & Lausi

CISTACEAE

- Cistus palhinhae* Ingram
- Halimium verticillatum* (Brot.) Sennen
- Helianthemum alypoides* Losa & Rivas Goday
- Helianthemum caput-felis* Boiss.
- **Tuberaria major* (Willk.) Pinto da Silva & Roseira

COMPOSITAE

- **Anthemis glaberrima* (Rech. f.) Greuter
- **Artemisia granatensis* Boiss.
- **Aster pyrenaeus* Desf. ex DC.
- **Aster sorrentinii* (Tod) Lojac.
- **Carduus myriacanthus* Salzm. ex DC.

- **Centaurea alba* L.
 subsp. *heldreichii* (Halacsy) Dostal
- **Centaurea alba* L.
 subsp. *princeps* (Boiss. & Heldr.) Gugler
- **Centaurea attica* Nyman
 subsp. *megarensis* (Halacsy & Hayek) Dostal
- **Centaurea balearica* J. D. Rodriguez
- **Centaurea borjae* Valdes-Berm. & Rivas Goday
- **Centaurea citricolor* Font Quer
- Centaurea corymbosa* Pourret
- Centaurea gadorensis* G. Bianca
- **Centaurea horrida* Badaro
- **Centaurea kalambakensis* Freyn & Sint.
- Centaurea kartschiana* Scop.
- **Centaurea lactiflora* Halacsy
- Centaurea micrantha* Hoffmanns. & Link
 subsp. *herminii* (Rouy) Dostál
- **Centaurea niederi* Heldr.
- **Centaurea peucedanifolia* Boiss. & Orph.
- **Centaurea pinnata* Pau
- Centaurea pulvinata* (G. Bianca) G. Bianca
- Centaurea rothmalerana* (Arènes) Dostál
- Centaurea vicentina* Mariz
- **Crepis crocifolia* Boiss. & Heldr.
- Crepis granatensis* (Willk.) B. Bianca & M. Cueto
- Erigeron frigidus* Boiss. ex DC.
- Hymenostemma pseudanthemis* (Kunze) Willd.
- **Jurinea cyanoides* (L.) Reichenb.
- **Jurinea fontqueri* Cuatrec.
- **Lamyropsis microcephala* (Moris) Dittrich & Greuter
- Leontodon microcephalus* (Boiss. ex DC.) Boiss.
- Leontodon boryi* Boiss.
- **Leontodon sculus* (Guss.) Finch & Sell
- Leuzea longifolia* Hoffmanns. & Link
- Ligularia sibirica* (L.) Cass.
- Santolina impressa* Hoffmanns. & Link
- Santolina semidentata* Hoffmanns. & Link
- **Senecio elodes* Boiss. ex DC.
- Senecio nevadensis* Boiss. & Reuter

CONVOLVULACEAE

- **Convolvulus argyrothamnus* Greuter
- **Convolvulus Fernandes Pinto da Silva & Teles*

CRUCIFERAE

- Alyssum pyrenaicum* Lapeyr.
- Arabis sadina* (Samp.) P. Cout.
- **Biscutella neustriaca* Bonnet
- Biscutella vincentina* (Samp.) Rothm.
- Boleum asperum* (Pers.) Desvaux
- Brassica glabrescens* Poldini
- Brassica insularis* Moris
- **Brassica macrocarpa* Guss.
- Coincya cintrana* (P. Cout.) Pinto da Silva
- **Coincya rupestris* Rouy
- **Coronopus navasii* Pau
- Diplotaxis ibicensis* (Pau) Gomez-Campo
- **Diplotaxis siettiana* Maire
- Diplotaxis vicentina* (P. Cout.) Rothm.
- Erucastrum palustre* (Pirona) Vis.
- **Iberis arbuscula* Runemark
- Iberis procumbens* Lange
 subsp. *microcarpa* Franco & Pinto da Silva
- **Ionopsidium acaule* (Desf.) Reichenb.
- Ionopsidium savianum* (Caruel) Ball ex Arcang.
- Sisymbrium cavanillesianum* Valdes & Castroviejo
- Sisymbrium supinum* L.

CYPERACEAE

- **Carex panormitana* Guss.
- Eleocharis carniolica* Koch

DIOSCOREACEAE

- **Borderea chouardii* (Gausson) Heslot

DROSERACEAE

- Aldrovanda vesiculosa* L.

EUPHORBIACEAE

- **Euphorbia margalidiana* Kuhbier & Lewejohann
- Euphorbia transtagana* Boiss.

GENTIANACEAE

- **Centaurium rigualii* Esteve Chueca
- **Centaurium somedanum* Lainz
- Gentiana ligustica* R. de Vilm. & Chopinet
- Gentianella angelica* (Pugsley) E. F. Warburg

GERANIACEAE

- **Erodium astragaloides* Boiss. & Reuter
- Erodium paularense* Fernandez-Gonzalez & Izco
- **Erodium rupicola* Boiss.

GRAMINEAE

- Avenula hackelii* (Henriq.) Holub
- Bromus grossus* Desf. ex DC.
- Coleanthus subtilis* (Tratt.) Seidl
- Festuca brigantina* (Markgr.-Dannenb.) Markgr.-Dannenb.
- Festuca duriotagana* Franco & R. Afonso
- Festuca elegans* Boiss.
- Festuca henriquesii* Hack.
- Festuca sumilusitanica* Franco & R. Afonso
- Gaudinia hispanica* Stace & Tutin
- Holcus setiglumis* Boiss. & Reuter
- subsp. *duriensis* Pinto da Silva
- Micropyropsis tuberosa* Romero — Zarco & Cabezudo
- Pseudarrhenatherum pallens* (Link) J. Holub
- Puccinellia pungens* (Pau) Paunero
- **Stipa austroitalica* Martinovsky
- **Stipa bavarica* Martinovsky & H. Scholz
- **Stipa veneta* Moraldo

GROSSULARIACEAE

- **Ribes sardum* Martelli

HYPERICACEAE

- **Hypericum aciferum* (Greuter) N. K. B. Robson

JUNCACEAE

- Juncus valvatus* Link

LABIATAE

- Dracocephalum austriacum* L.
- **Micromeria taygetea* P. H. Davis
- Nepeta dirphyia* (Boiss.) Heldr. ex Halacsy
- **Nepeta sphaciotica* P. H. Davis
- Origanum dictamnus* L.
- Sideritis incana*
- subsp. *glauca* (Cav.) Malagarriga
- Sideritis javalambrensis* Pau
- Sideritis serrata* Cav. ex Lag.
- Teucrium lepicephalum* Pau
- Teucrium turredanum* Losa & Rivas Goday
- **Thymus camphoratus* Hoffmanns. & Link
- Thymus carnosus* Boiss.
- **Thymus cephalotos* L.

LEGUMINOSAE

- Anthyllis hystrix* Cardona, Contandr. & E. Sierra
- **Astragalus algarbiensis* Coss. ex Bunge
- **Astragalus aquilanus* Anzalone
- Astragalus centralpinus* Braun-Blanquet

- *Astragalus maritimus Moris
- Astragalus tremolsianus Pau
- *Astragalus verrucosus Moris
- *Cytisus aeolicus Guss. ex Lindl.
- Genista dorycnifolia Font Quer
- Genista holopetala (Fleischm. ex Koch) Baldacci
- Melilotus segetalis (Brot.) Ser.
 - subsp. fallax Franco
- *Ononis hackelii Lange
- Trifolium saxatile All.
- *Vicia bifoliolata J. D. Rodriguez

LENTIBULARIACEAE

- Pinguicula nevadensis (Lindb.) Casper

LILIACEAE

- Allium grosii Font Quer
- *Androcymbium rechingeri Greuter
- *Asphodelus bento-rainhae P. Silva
- Hyacinthoides vicentina (Hoffmanns. & Link) Rothm.
- *Muscari gussonei (Parl.) Tod.

LINACEAE

- *Linum muelleri Moris

LYTHRACEAE

- *Lythrum flexuosum Lag.

MALVACEAE

- Kosteletzkya pentacarpos (L.) Ledeb.

NAJADACEAE

- Najas flexilis (Willd.) Rostk. & W. L. Schmidt

ORCHIDACEAE

- *Cephalanthera cucullata Boiss. & Heldr.
- Cypripedium calceolus L.
- Liparis loeselii (L.) Rich.
- *Ophrys lunulata Parl.

PAEONIACEAE

- Paeonia cambessedesii (Willk.) Willk.
- Paeonia parnassica Tzanoudakis
- Paeonia clusii F. C. Stern
 - subsp. rhodia (Stearn) Tzanoudakis

PALMAE

- Phoenix theophrasti Greuter

PLANTAGINACEAE

- Plantago algarbiensis Samp.
- Plantago almogravensis Franco

PLUMBAGINACEAE

- Armeria berlengensis Daveau
- *Armeria helodes Martini & Pold
- Armeria neglecta Girard
- Armeria pseudarmeria (Murray) Mansfeld
- *Armeria rouyana Daveau
- Armeria soleirolii (Duby) Godron
- Armeria velutina Welv. ex Boiss. & Reuter
- Limonium dodartii (Girard) O. Kuntze
 - subsp. lusitanicum (Daveau) Franco
- *Limonium insulare (Beg. & Landi) Arrig. & Diana
- Limonium lanceolatum (Hoffmanns. & Link) Franco
- Limonium multiflorum Erben
- *Limonium pseudolaetum Arrig. & Diana
- *Limonium strictissimum (Salzmann) Arrig.

POLYGONACEAE

- Polygonum praelongum Coode & Cullen
- Rumex rupestris Le Gall

PRIMULACEAE

- Androsace mathildae Levier
- Androsace pyrenaica Lam.
- *Primula apennina Widmer
- Primula palinuri Petagna
- Soldanella villosa Darracq.

RANUNCULACEAE

- *Aconitum corsicum Gayer
- Adonis distorta Ten.
- Aquilegia bertolonii Schott
- Aquilegia kitaibelii Schott
- *Aquilegia pyrenaica D. C.
 subsp. cazorlensis (Heywood) Galiano
- *Consolida samia P. H. Davis
- Pulsatilla patens (L.) Miller
- *Ranunculus weyleri Mares

RESEDACEAE

- *Reseda decursiva Forssk.

ROSACEAE

- Potentilla delphinensis Gren. & Godron

RUBIACEAE

- *Galium litorale Guss.
- *Galium viridiflorum Boiss. & Reuter

SALICACEAE

- Salix salvifolia Brot.
 subsp. australis Franco

SANTALACEAE

- Thesium ebracteatum Hayne

SAXIFRAGACEAE

- Saxifraga berica (Beguinot) D. A. Webb
- Saxifraga florulenta Moretti
- Saxifraga hirculus L.
- Saxifraga tombeanensis Boiss. ex Engl.

SCROPHULARIACEAE

- Antirrhinum charidemi Lange
- Chaenorrhinum serpyllifolium (Lange) Lange
 subsp. lusitanicum R. Fernandes
- *Euphrasia genargentea (Feoli) Diana
- Euphrasia marchesettii Wettst. ex Marches.
- Linaria algarviana Chav.
- Linaria coutinhoi Valdés
- *Linaria ficalhoana Rouy
- Linaria flava (Poirot) Desf.
- *Linaria hellenica Turrill
- *Linaria ricardoi Cout.
- *Linaria tursica B. Valdes & Cabezudo
- Linaria tonzigii Lona
- Odontites granatensis Boiss.
- Verbascum litigiosum Samp.
- Veronica micrantha Hoffmanns. & Link
- *Veronica oetaea L.-A. Gustavson

SELAGINACEAE

- *Globularia stygia Orph. ex Boiss.

SOLANACEAE

- *Atropa baetica Willk.

THYMELAEACEAE

- Daphne petraea Leybold
- *Daphne rodriguezii Texidor

ULMACEAE

Zelkova abelicea (Lam.) Boiss.

UMBELLIFERAE

- **Angelica heterocarpa* Lloyd
- Angelica palustris* (Besser) Hoffm.
- **Apium bermejoi* Llorens
- Apium repens* (Jacq.) Lag.
- Athamanta cortiana* Ferrarini
- **Bupleurum capillare* Boiss. & Heldr.
- **Bupleurum kakiskalae* Greuter
- Eryngium alpinum* L.
- **Eryngium viviparum* Gay
- **Laserpitium longiradium* Boiss.
- **Naufraga balearica* Constans & Cannon
- **Oenanthe coniioides* Lange
- Petagnia saniculifolia* Guss.
- Rouya polygama* (Desf.) Coincy
- **Seseli intricatum* Boiss.
- Thorella verticillatinundata* (Thore) Brig.

VALERIANACEAE

Centranthus trinervis (Viv.) Beguinot

VIOLACEAE

- **Viola hispida* Lam.
- Viola jaubertiana* Mares & Vigineix

Lower plants

BRYOPHYTA

- Bruchia vogesiaca* Schwaegr. (o)
- **Bryoerythrophyllum machadoanum* (Sergio) M. Hill (o)
- Buxbaumia viridis* (Moug. ex Lam. & DC.) Brid. ex Moug. & Nestl. (o)
- Dichelyma capillaceum* (With.) Myr. (o)
- Dicranum viride* (Sull. & Lesq.) Lindb. (o)
- Distichophyllum carinatum* Dix. & Nich. (o)
- Drepanocladus vernicosus* (Mitt.) Warnst. (o)
- Jungermannia handelii* (Schiffn.) Amak. (o)
- Mannia triandra* (Scop.) Grolle (o)
- **Marsupella profunda* Lindb. (o)
- Meesia longiseta* Hedw. (o)
- Nothothylas orbicularis* (Schwein.) Sull. (o)
- Orthotrichum rogeri* Brid. (o)
- Petalophyllum ralfsii* Nees & Goot. ex Lehm. (o)
- Riccia breidleri* Jur. ex Steph. (o)
- Riella helicophylla* (Mont.) Hook. (o)
- Scapania massolongi* (K. Muell.) K. Muell. (o)
- Sphagnum pylaisii* Brid. (o)
- Tayloria rudolphiana* (Gasrov) B. & G. (o)

SPECIES FOR MACARONESIA

PTERIDOPHYTA

HYMENOPHYLLACEAE

Hymenophyllum maderensis Gibby & Lovis

DRYOPTERIDACEAE

- **Polystichum drepanum* (Sw.) C. Presl.

ISOETACEAE

Isoetes azorica Durieu & Paiva

MARSILIACEAE

- **Marsilea azorica* Launert & Paiva

ANGIOSPERMAE

ASCLEPIADACEAE

- Caralluma burchardii* N. E. Brown
- **Ceropegia chrysantha* Svent.

BORAGINACEAE

- Echium candicans* L. fil.
- **Echium gentianoides* Webb & Coincy
- Myosotis azorica* H. C. Watson
- Myosotis maritima* Hochst. in Seub.

CAMPANULACEAE

- **Azorina vidalii* (H. C. Watson) Feer
- Musschia aurea* (L. f.) DC.
- **Musschia wollastonii* Lowe

CAPRIFOLIACEAE

- **Sambucus palmensis* Link

CARYOPHYLLACEAE

- Spergularia azorica* (Kindb.) Lebel

CELASTRACEAE

- Maytenus umbellata* (R. Br.) Mabb.

CHENOPODIACEAE

- Beta patula* Ait.

CISTACEAE

- Cistus chinamadensis* Banares & Romero
- **Helianthemum bystropogophyllum* Svent.

COMPOSITAE

- Andryala crithmifolia* Ait.
- **Argyranthemum lidii* Humphries
- Argyranthemum thalassophyllum* (Svent.) Hump.
- Argyranthemum winterii* (Svent.) Humphries
- **Atractylis arbuscula* Svent. & Michaelis
- Atractylis preauxiana* Schultz.
- Calendula maderensis* DC.
- Cheirolophus duranii* (Burchard) Holub
- Cheirolophus ghomerytus* (Svent.) Holub
- Cheirolophus junonianus* (Svent.) Holub
- Cheirolophus massonianus* (Lowe) Hansen
- Cirsium latifolium* Lowe
- Helichrysum gossypinum* Webb
- Helichrysum oligocephala* (Svent. & Bzaww.)
- **Lactuca watsoniana* Trel.
- **Onopordum nogalesii* Svent.
- **Onopordum carduelinum* Bolle
- **Pericallis hadrosoma* Svent.
- Phagnalon benettii* Lowe
- Stemmacantha cynaroides* (Chr. Son. in Buch) Ditt
- Sventenja bupleuroides* Font Quer
- **Tanacetum ptarmiciflorum* Webb & Berth

CONVOLVULACEAE

- **Convolvulus caput-medusae* Lowe
- **Convolvulus lopez-socasii* Svent.
- **Convolvulus massonii* A. Dietr.

CRASSULACEAE

- Aeonium gomeraense* Praeger
- Aeonium saundersii* Bolle
- Aichryson dumosum* (Lowe) Praeg.
- Monanthes wildpretii* Banares & Scholz
- Sedum brissemoretii* Raymond-Hamet

CRUCIFERAE

- *Crambe arborea Webb ex Christ
- Crambe laevigata DC. ex Christ
- *Crambe sventenii R. Petters ex Bramwell & Sund.
- *Parolinia schizogynoides Svent.
- Sinapidendron rupestre (Ait.) Lowe

CYPERACEAE

- Carex malato-belizii Raymond

DIPSACACEAE

- Scabiosa nitens Roemer & J. A. Schultes

ERICACEAE

- Erica scoparia L.
- subsp. azorica (Hochst.) D. A. Webb

EUPHORBIACEAE

- *Euphorbia handiensis Burchard
- Euphorbia lambii Svent.
- Euphorbia stygiana H. C. Watson

GERANIACEAE

- *Geranium maderense P. F. Yeo

GRAMINEAE

- Deschampsia maderensis (Haeck. & Born.)
- Phalaris maderensis (Menezes) Menezes

LABIATAE

- *Sideritis cystosiphon Svent.
- *Sideritis discolor (Webb ex de Noe) Bolle
- Sideritis infernalis Bolle
- Sideritis marmorea Bolle
- Teucrium abutiloides L'Hér
- Teucrium betonicum L'Hér

LEGUMINOSAE

- *Anagyris latifolia Brouss. ex Willd.
- Anthyllis lemanniana Lowe
- *Dorycnium spectabile Webb & Berthel
- *Lotus azoricus P. W. Ball
- Lotus callis-viridis D. Bramwell & D. H. Davis
- *Lotus kunkelii (E. Chueca) D. Bramwell & al.
- *Teline rosmarinifolia Webb & Berthel.
- *Teline salsoloides Arco & Acebes.
- Vicia dennesiana H. C. Watson

LILIACEAE

- *Androcymbium psammophilum Svent.
- Scilla maderensis Menezes
- Semele maderensis Costa

LORANTHACEAE

- Arceuthobium azoricum Wiens & Hawksw

MYRICACEAE

- *Myrica rivas-martinezii Santos.

OLEACEAE

- Jasminum azoricum L.
- Picconia azorica (Tutin) Knobl.

ORCHIDACEAE

- Goodyera macrophylla Lowe

PITTOSPORACEAE

- *Pittosporum coriaceum Dryand. ex Ait.

PLANTAGINACEAE

Plantago malato-belizii Lawalree

PLUMBAGINACEAE

**Limonium arborescens* (Brouss.) Kuntze

Limonium dendroides Svent.

**Limonium spectabile* (Svent.) Kunkel & Sunding

**Limonium sventenii* Santos & Fernandez Galvan

POLYGONACEAE

Rumex azoricus Rech. fil.

RHAMNACEAE

Frangula azorica Tutin

ROSACEAE

**Bencomia brachystachya* Svent.

Bencomia sphaerocarpa Svent.

**Chamaemeles coriacea* Lindl.

Dendriopterium pulidoi Svent.

Marcetella maderensis (Born.) Svent.

Prunus lusitanica L.

subsp. *azorica* (Mouillef.) Franco

Sorbus maderensis (Lowe) Docle

SANTALACEAE

Kunkeliella subsucculenta Kammer

SCROPHULARIACEAE

**Euphrasia azorica* Wats

Euphrasia grandiflora Hochst. ex Seub.

**Isoplexis chalcantha* Svent. & O'Shanahan

Isoplexis isabelliana (Webb & Berthel.) Masferrer

Odontites holliana (Lowe) Benth.

Sibthorpia peregrina L.

SELAGINACEAE

**Globularia ascanii* D. Bramwell & Kunkel

**Globularia sarcophylla* Svent.

SOLANACEAE

**Solanum lidii* Sunding

UMBELLIFERAE

Ammi trifoliatum (H. C. Watson) Trelease

Bupleurum handiense (Bolle) Kunkel

Chaerophyllum azoricum Trelease

Ferula latipinna Santos

Melanoselinum decipiens (Schrader & Wendl.) Hoffm.

Monizia edulis Lowe

Oenanthe divaricata (R. Br.) Mabb.

Sanicula azorica Guthnick ex Seub.

VIOLACEAE

Viola paradoxa Lowe

Lower plants**BRYOPHYTA**

**Echinodium spinosum* (Mitt.) Jur. (o)

**Thamnobryum fernandesii* Sergio (o)

ANNEX IV

ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST IN NEED OF STRICT PROTECTION

The species listed in this Annex are indicated:

- by the name of species or subspecies, or
- by the body of species belonging to a higher taxon or to a designated part of that taxon.

The abbreviation 'spp.' after the name of a family or genus designates all the species belonging to that family or genus.

(a) *ANIMALS*

VERTEBRATES

MAMMALS

INSECTIVORA

Erinaceidae

Erinaceus algirus

Soricidae

Crocidura canariensis

Talpidae

Galemys pyrenaicus

MICROCHIROPTERA

All species

RODENTIA

Gliridae

All species except *Glis glis* and *Eliomys quercinus*

Sciuridae

Citellus citellus

Sciurus anomalus

Castoridae

Castor fiber

Cricetidae

Cricetus cricetus

Microtidae

Microtus cabreræ

Microtus oeconomus arenicola

Zapodidae

Sicista betulina

Hystriidae

Hystrix cristata

CARNIVORA

Canidae

Canis lupus (Except Spanish populations north of the Duero and Greek populations north of the 39th parallel)

Ursidae

Ursus arctos

Mustelidae

Lutra lutra

Mustela lutreola

Felidae

Felis silvestris
Lynx lynx
Lynx pardina

Phocidae

Monachus monachus

ARTIODACTYLA

Cervidae

Cervus elaphus corsicanus

Bovidae

Capra aegagrus (natural populations)
Capra pyrenaica pyrenaica
Ovis ammon musimon (natural populations — Corsica and Sardinia)
Rupicapra rupicapra balcanica
Rupicapra ornata

CETACEA

All species

REPTILES

TESTUDINATA

Testudinidae

Testudo hermanni
Testudo graeca
Testudo marginata

Cheloniidae

Caretta caretta
Chelonia mydas
Lepidochelys kempii
Eretmochelys imbricata

Dermochelyidae

Dermochelys coriacea

Emydidae

Emys orbicularis
Mauremys caspica
Mauremys leprosa

SAURIA

Lacertidae

Algyroides fitzingeri
Algyroides marchi
Algyroides moreoticus
Algyroides nigropunctatus
Lacerta agilis
Lacerta bedriagae
Lacerta danfordi
Lacerta dugesi
Lacerta graeca
Lacerta horvathi
Lacerta monticola
Lacerta schreiberi
Lacerta trilineata
Lacerta viridis
Gallotia atlantica
Gallotia galloti
Gallotia galloti insulanagae
Gallotia simonyi
Gallotia stehlini
Ophisops elegans
Podarcis erhardii
Podarcis filfolensis
Podarcis hispanica atrata

Podarcis lilfordi
Podarcis melisellensis
Podarcis milensis
Podarcis muralis
Podarcis peloponnesiaca
Podarcis pityusensis
Podarcis sicula
Podarcis taurica
Podarcis tiliguerta
Podarcis wagleriana

Scincidae

Ablepharus kitaibelli
Chalcides bedriagai
Chalcides occidentalis
Chalcides ocellatus
Chalcides sexlineatus
Chalcides viridianus
Ophiomorus punctatissimus

Gekkonidae

Cyrtopodion kotschy
Phyllodactylus europaeus
Tarentola angustimentalis
Tarentola boettgeri
Tarentola delalandii
Tarentola gomerensis

Agamidae

Stellio stellio

Chamaeleontidae

Chamaeleo chamaeleon

Anguidae

Ophisaurus apodus

OPHIDIA

Colubridae

Coluber caspius
Coluber hippocrepis
Coluber jugularis
Coluber laurenti
Coluber najadum
Coluber nummifer
Coluber viridiflavus
Coronella austriaca
Eirenis modesta
Elaphe longissima
Elaphe quatuorlineata
Elaphe situla
Natrix natrix cetti
Natrix natrix corsa
Natrix tessellata
Telescopus falax

Viperidae

Vipera ammodytes
Vipera schweizeri
Vipera seoanni (except Spanish populations)
Vipera ursinii
Vipera xanthina

Boidae

Eryx jaculus

AMPHIBIANS

CAUDATA

Salamandridae

Chioglossa lusitanica
Euproctus asper
Euproctus montanus

Euproctus platycephalus
Salamandra atra
Salamandra aurorae
Salamandra lanzai
Salamandra luschani
Salamandrina terdigitata
Triturus carnifex
Triturus cristatus
Triturus italicus
Triturus karelinii
Triturus marmoratus

Proteidae

Proteus anguinus

Plethodontidae

Speleomantes ambrosii
Speleomantes flavus
Speleomantes genei
Speleomantes imperialis
Speleomantes italicus
Speleomantes supramontes

ANURA

Discoglossidae

Bombina bombina
Bombina variegata
Discoglossus galganoi
Discoglossus jeanneae
Discoglossus montalentii
Discoglossus pictus
Discoglossus sardus
Alytes cisternasii
Alytes muletensis
Alytes obstetricans

Ranidae

Rana arvalis
Rana dalmatina
Rana graeca
Rana iberica
Rana italica
Rana latastei
Rana lessonae

Pelobatidae

Pelobates cultripipes
Pelobates fuscus
Pelobates syriacus

Bufonidae

Bufo calamita
Bufo viridis

Hylidae

Hyla arborea
Hyla meridionalis
Hyla sarda

FISH

ACIPENSERIFORMES

Acipenseridae

Acipenser naccarii
Acipenser sturio

ATHERINIFORMES

Cyprinodontidae

Valencia hispanica

CYPRINIFORMES

*Cyprinidae**Anaocypris hispanica*

PERCIFORMES

*Percidae**Zingel asper*

SALMONIFORMES

*Coregonidae**Coregonus oxyrhynchus* (anadromous populations in certain sectors of the North Sea)

INVERTEBRATES

ARTHROPODS

INSECTA

*Coleoptera**Buprestis splendens*
Carabus olympiae
Cerambyx cerdo
Cucujus cinnaberinus
Dytiscus latissimus
Graphoderus bilineatus
Osmoderma eremita
*Rosalia alpina**Lepidoptera**Apatura metis*
Coenonympha hero
Coenonympha oedippus
Erebia calcaria
Erebia christi
Erebia sudetica
Eriogaster catax
Fabriciana elisa
Hypodryas maturna
Hyles hippophaes
Lopinga achine
Lycaena dispar
Maculinea arion
Maculinea nausithous
Maculinea teleius
Melanagria arge
Papilio alexanor
Papilio hospiton
Parnassius apollo
Parnassius mnemosyne
Plebicula golgus
Proserpinus proserpina
*Zerynthia polyxena**Mantodea**Apteromantis aptera**Odonata**Aeshna viridis*
Cordulegaster trinacriae
Gomphus graslinii
Leucorrhina albifrons
Leucorrhina caudalis
Leucorrhina pectoralis
Lindenia tetraphylla
Macromia splendens
Ophiogomphus cecilia
Oxygastra curtisii
Stylurus flavipes
Sympecma braueri

Orthoptera

Baetica ustulata
Saga pedo

ARACHNIDA

Araneae

Macrothele calpeiana

MOLLUSCS

GASTROPODA

Prosobranchia

Patella feruginea

Stylommatophora

Caseolus calculus
Caseolus commixta
Caseolus sphaerula
Discula leacockiana
Discula tabellata
Discula testudinalis
Discula turricula
Discus defloratus
Discus guerinianus
Elona quimperiana
Geomalacus maculosus
Geomitra moniziana
Helix subplicata
Leiostyla abbreviata
Leiostyla cassida
Leiostyla corneocostata
Leiostyla gibba
Leiostyla lamellosa

BIVALVIA

Anisomyaria

Lithophaga lithophaga
Pinna nobilis

Unionoida

Margaritifera auricularia
Unio crassus

ECHINODERMATA

Echinoidea

Centrostephanus longispinus

(b) **PLANTS**

Annex IV (b) contains all the plant species listed in Annex II (b) ⁽¹⁾ plus those mentioned below

PTERIDOPHYTA

ASPLENIACEAE

Asplenium hemionitis L.

ANGIOSPERMAE

AGAVACEAE

Dracaena draco (L.) L.

AMARYLLIDACEAE

Narcissus longispathus Pugsley
Narcissus triandrus L.

⁽¹⁾ Except bryophytes in Annex II (b).

BERBERIDACEAE

Berberis maderensis Lowe

CAMPANULACEAE

Campanula morettiana Reichenb.

Physoplexis comosa (L.) Schur.

CARYOPHYLLACEAE

Moehringia fontqueri Pau

COMPOSITAE

Argyranthemum pinnatifidum (L.f.) Lowe

subsp. *succulentum* (Lowe) C. J. Humphries

Helichrysum sibthorpii Rouy

Picris willkommii (Schultz Bip.) Nyman

Santolina elegans Boiss. ex DC.

Senecio caespitosus Brot.

Senecio lagascanus DC.

subsp. *lusitanicus* (P. Cout.) Pinto da Silva

Wagenitzia lancifolia (Sieber ex Sprengel) Dostal

CRUCIFERAE

Murbeckiella sousae Rothm.

EUPHORBIACEAE

Euphorbia nevadensis Boiss. & Reuter

GESNERIACEAE

Jankaea heldreichii (Boiss.) Boiss.

Ramonda serbica Pancic

IRIDACEAE

Crocus etruscus Parl.

Iris boissieri Henriq.

Iris marisca Ricci & Colasante

LABIATAE

Rosmarinus tomentosus Huber-Morath & Maire

Teucrium charidemi Sandwith

Thymus capitellatus Hoffmanns. & Link

Thymus villosus L.

subsp. *villosus* L.

LILIACEAE

Androcymbium europeum (Lange) K. Richter

Bellevalia hackelli Freyn

Colchicum corsicum Baker

Colchicum cousturieri Greuter

Fritillaria conica Rix

Fritillaria drenovskii Dogen & Stoy.

Fritillaria gussichiae (Degen & Doerfler) Rix

Fritillaria obliqua Ker-Gawl.

Fritillaria rhodocanakis Orph. ex Baker

Ornithogalum reverchonii Degen & Herv.-Bass.

Scilla beirana Samp.

Scilla odorata Link

ORCHIDACEAE

Ophrys argolica Fleischm.

Orchis scopulorum Simsm. & Merh.

Spiranthes aestivalis (Poir.) L. C. M. Richard

PRIMULACEAE

Androsace cylindrica DC.

Primula glaucescens Moretti

Primula spectabilis Tratt.

RANUNCULACEAE

Aquilegia alpina L.

SAPOTACEAE

Sideroxylon marmulano Banks ex Lowe

SAXIFRAGACEAE

Saxifraga cintrana Kuzinsky ex Willk.

Saxifraga portosanctana Boiss.

Saxifraga presolanensis Engl.

Saxifraga valdensis DC.

Saxifraga vayredana Luizet

SCROPHULARIACEAE

Antirrhinum lopesianum Rothm.

Lindernia procumbens (Krocker) Philcox

SOLANACEAE

Mandragora officinarum L.

THYMELAEACEAE

Thymelaea broterana P. Cout.

UMBELLIFERAE

Bunium brevifolium Lowe

VIOLACEAE

Viola athois W. Becker

Viola cazorlensis Gandoger

Viola delphinantha Boiss.
