

HABITATS AND BIRDS DIRECTIVES: GUIDANCE JUNE 2000

ERRATA

- Contents Page Annex D I 'List of Classified and Proposed SPAs'
Annex D II 'List of Candidate and Proposed SACs'
- Page 27: Habitats Directive Annexes, amended version attached.
- Page 72: Heading should read 'Proposed Special Protection Areas'
- Page 72: The Skye eagle site is within the Highland local authority area, not Eilean Siar as listed.
- Page 73 to 76: Candidate SAC sites listed as being within 'Aberdeen' local authority should be listed against 'Aberdeenshire' local authority.

Scottish Executive Rural Affairs Department
Wildlife and Habitats Unit

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Scottish Executive Rural Affairs Department
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COUNCIL DIRECTIVE 97/62/EC

of 27 October 1997

adapting to technical and scientific progress Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

THE COUNCIL OF THE EUROPEAN UNION

Having regard to the Treaty establishing the European Community,

Having regard to Directive 92/43/EEC (1) and in particular the first paragraph of Article 19 thereof,

Having regard to the proposal from the Commission,

Whereas certain natural habitat types and species in Annexes I and II to Directive 92/43/EEC should be adapted to technical and scientific progress,

Whereas the Interpretation Manual of European Union Habitats (EUR 15 version of April 1996) includes the new Natura 2000 codes which identify each natural habitat type; whereas the reference to the Corine code in Annex I to Directive 92/43/EEC should be replaced by a reference to the Natura 2000 code,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annexes I and II to Directive 92/43/EEC shall be replaced by the text in the Annex to this Directive.

Article 2

Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 31 December 1997. They shall forthwith inform the Commission thereof.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

Article 3

This Directive shall enter into force on the 20th day following that of its publication in the Official Journal of the European Communities.

Article 4

This Directive is addressed to the Member States.

Done at Luxembourg, 27 October 1997.

For the Council

The President

R. GOEBBELS

(1) OJ L 206, 22. 7. 1992, p. 7. Directive as amended by the 1994 Act of Accession.

ANNEX I

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

Interpretation

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

The code corresponds to the Natura 2000 code.

The sign "*" indicates priority habitat types.

1. COASTAL AND HALOPHYTIC HABITATS

2. COASTAL SAND DUNES AND INLAND DUNES

3. FRESHWATER HABITATS

4. TEMPERATE HEATH AND SCRUB

5. SCLEROPHYLLOUS SCRUB (MATORRAL)

6. NATURAL AND SEMI-NATURAL GRASSLAND FORMATIONS

7. RAISED BOGS AND MIRES AND FENS

8. ROCKY HABITATS AND CAVES

9. FORESTS

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

residual, and/or hosting species of Community interest

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 all the 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 it 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 blythii
 Myotis capaccinii
 Myotis dasycneme
 Myotis emarginatus
 Myotis myotis
 RODENTIA
 Sciuridae
 * Pteromys volans (Sciuropterus ruscicus)
 Spermophilus citellus (Citellus citellus)
 Castoridae
 Castor fiber (except the Finnish and Swedish populations)
 Microtidae
 Microtus cabrerai
 * Microtus oeconomus arenicola
 CARNIVORA
 Canidae
 * Alopex lagopus
 * Canis lupus (Spanish populations: only those south of the Duero; Greek populations: only south of the 39th parallel; Finnish populations excepted)
 Ursidae
 * Ursus arctos (except the Finnish and Swedish populations)
 Mustelidae
 * Gulo gulo
 Lutra lutra
 Mustela lutreola
 Felidae
 Lynx lynx (except the Finnish populations)
 * Lynx pardinus
 Phocidae
~~Halichoerus grypus (V)~~
~~Monachus monachus~~
 Phoca hispida botnica (o)
 * Phoca hispida saimensis
~~Phoca vitulina (V)~~

ARTIODACTYLA
 Cervidae
 * Cervus elaphus corsicanus
 Rangifer tarandus fennicus (o)
 Bovidae
 Capra aegagrus (natural populations)
 * Capra pyrenaica pyrenaica
 Ovis gmelini musimon (Ovis ammon musimon) (natural populations - Corsica and Sardinia)
 * Rupicapra pyrenaica ornata (Rupicapra rupicapra ornata)
 Rupicapra rupicapra balcanica
 CETACEA
 Phocoena phocoena
 Tursiops truncatus
 REPTILES
 CHELONIA (TESTUDINES)
 Testudinidae
 Testudo graeca
 Testudo hermanni
 Testudo marginata
 Cheloniidae
 * Caretta caretta
 Emydidae
 Emys orbicularis
 Mauremys caspica
 Mauremys leprosa
 SAURIA
 Lacertidae
 Gallotia galloti insulanaga
 * Gallotia simonyi
 Lacerta bonnali (Lacerta monticola)
 Lacerta monticola
 Lacerta schreiberi
 Podarcis lilfordi
 Podarcis pityusensis
 Scincidae
 Chalcides somonyi (Chalcides occidentalis)
 Gekkonidae
 Phyllodactylus europaeus
 OPHIDIA (SERPENTES)
 Colubridae
 Elaphe quatuorlineata
 Elaphe situla
 Viperidae
 * Macrovipera schweizeri (Vipera lebetina schweizeri)
 Vipera ursinii

AMPHIBIANS**CAUDATA**

Salamandridae

*Chioglossa lusitanica**Mertensiella luschani* (*Salamandra luschani*)* *Salamandra atra aurorae**Salamandrina terdigitata**Triturus carnifex* (*Triturus cristatus carnifex*)*Triturus cristatus* (*Triturus cristatus cristatus*)*Triturus dobrogicus* (*Triturus cristatus dobrogicus*)*Triturus karelinii* (*Triturus cristatus karelinii*)

Proteidae

Proteus anguinus

Plethodontidae

*Hydromantes (Speleomantes) ambrosii**Hydromantes (Speleomantes) flavus**Hydromantes (Speleomantes) genei**Hydromantes (Speleomantes) imperialis**Hydromantes (Speleomantes) strinatii**Hydromantes (Speleomantes)**supramontes***ANURA**

Discoglossidae

* *Alytes muletensis**Bombina bombina**Bombina variegata**Discoglossus galganoi* (including*Discoglossus "jeanneae"*)*Discoglossus montalentii**Discoglossus sardus*

Ranidae

Rana latastei

Pelobatidae

* *Pelobates fuscus insubricus***FISH****PETROMYZONIFORMES**

Petromyzonidae

Eudontomyzon spp. (o)*Lampetra fluviatilis* (V) (except the Finnish and Swedish populations)*Lampetra planeri* (o) (except the Finnish and Swedish populations)*Lethenteron zanandreaei* (V)*Petromyzon marinus* (o) (except the Swedish populations)**ACIPENSERIFORMES**

Acipenseridae

* *Acipenser naccarii** *Acipenser sturio***CLUPEIFORMES**

Clupeidae

Alosa spp. (V)**SALMONIFORMES**

Salmonidae

Hucho hucho (natural populations) (V)*Salmo macrostigma* (o)*Salmo marmoratus* (o)*Salmo salar* (only in fresh water) (V) (except the Finnish populations)

Coregonidae

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

Cyprinidae

Alburnus albidus (o) (*Alburnus vulturius*)*Anaocypris hispanica**Aspius aspius* (o) (except the Finnish populations)*Barbus comiza* (V)*Barbus meridionalis* (V)*Barbus plebejus* (V)*Chondrostoma genei* (o)*Chondrostoma lusitanicum* (o)*Chondrostoma polylepis* (o) (including *C. willkommi*)*Chalcalburnus chalcoides* (o)*Chondrostoma soetta* (o)*Chondrostoma toxostoma* (o)*Gobio albipinnatus* (o)*Gobio uranoscopus* (o)*Iberocypris palaciosi* (o)* *Ladigesocypris ghigii* (o)*Leuciscus lucumonis* (o)*Leuciscus souffia* (o)*Phoxinellus* spp. (o)*Rhodeus sericeus amarus* (o)*Rutilus alburnoides* (o)*Rutilus arcasii* (o)*Rutilus frisii meidingeri* (o)*Rutilus lemmingii* (o)*Rutilus macrolepidotus* (o)*Rutilus pigus* (o)*Rutilus rubilio* (o)

- Scardinius graecus* (o)
 Cobitidae
Cobitis taenia (o) (except the Finnish populations)
Cobitis trichonica (o)
Misgurnus fossilis (o)
Sabanejewia aurata (o)
Sabanejewia larvata (o) (*Cobitis larvata* and *Cobitis conspersa*)
SILURIFORMES
 Siluridae
Silurus aristotelis (V)
ATHERINIFORMES
 Cyprinodontidae
Aphanius iberus (o)
Aphanius fasciatus (o)
 * *Valencia hispanica*
 * *Valencia letourneuxi* (*Valencia hispanica*)
PERCIFORMES
 Percidae
Gymnocephalus schraetzer (V)
Zingel spp. [(o) except *Zingel asper* and *Zingel zingel* (V)]
 Gobiidae
Knipowitschia (*Padogobius*) *panizzae* (o)
Padogobius nigricans (o)
Pomatoschistus canestrini (o)
SCORPANIFORMES
 Cottidae
Cottus gobio (o) (except the Finnish populations)
Cottus petiti (o)
INVERTEBRATES
ARTHROPODS
CRUSTACEA
 Decapoda
Austropotamobius pallipes (V)
INSECTA
 Coleoptera
Agathidium pulchellum (o)
Boros schneideri (o)
Buprestis splendens
 * *Carabus menetriesi pacholei*
 * *Carabus olympiae*
Cerambyx cerdo
Corticaria planula (o)
Cucujus cinnaberinus
Dytiscus latissimus
Graphoderus bilineatus
Limoniscus violaceus (o)
Lucanus cervus (o)
Macroplea pubipennis (o)
Mesosa myops (o)
Morimus funereus (o)
 * *Osmoderma eremita*
Oxyporus mannerheimii (o)
Pytho kolwensis (o)
 * *Rosalia alpina*
Stephanopachys linearis (o)
Stephanopachys substriatus (o)
Xyletinus tremulicola (o)
 Hemiptera
Aradus angularis (o)
 Lepidoptera
Agriades glandon aquilo (o)
 * *Callimorpha* (*Euplagia*, *Panaxia*) *quadripunctaria* (o)
Clossiana improba (o)
Coenonympha oedippus
Erebia calcaria
Erebia christi
Erebia medusa polaris (o)
Eriogaster catax
Euphydryas (*Eurodryas*, *Hypodryas*) *aurinia* (o)
Graellsia isabellae (V)
Hesperia comma catena (o)
Hypodryas maturna
Lycaena dispar
Maculinea nausithous
Maculinea teleius
Melanargia arge
Papilio hospiton
Plebicula golgus
Xestia borealis (o)
Xestia brunneopicta (o)
 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
ARACHNIDA
Pseudoscorpiones

Anthrenochernes stellae (o)

MOLLUSCS

GASTROPODA

Caseolus calculus

Caseolus commixta

Caseolus sphaerula

Discula leacockiana

Discula tabellata

Discus guerinianus

Elona quimperiana

Geomalacus maculosus

Geomitra moniziana

* *Helicopsis striata austriaca* (o)

Idiomela (Helix) subplicata

Leiostyla abbreviata

Leiostyla cassida

Leiostyla corneocostata

Leiostyla gibba

Leiostyla lamellosa

Vertigo angustior (o)

Vertigo genesii (o)

Vertigo geyeri (o)

Vertigo moulinesiana (o)

BIVALVIA

Unionoida

Margaritifera durrovensis (Margaritifera margaritifera) (V)

Margaritifera margaritifera (V)

Unio crassus

(b) PLANTS

PTERIDOPHYTA

ASPLENIACEAE

Asplenium jahandiezii (Litard.) Rouy

BLECHNACEAE

Woodwardia radicans (L.) Sm.

DICKSONIACEAE

Culcita macrocarpa C. Presl

DRYOPTERIDACEAE

Diplazium sibiricum (Turcz. ex Kunze)

Kurata

* *Dryopteris corleyi* Fraser-Jenk.

Dryopteris fragans (L.) Schott

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

* *Alisma wahlenbergii* (Holmberg) Juz.

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 L. subsp. *capax* (Salisb.) D. A. Webb.

Narcissus viridiflorus Schousboe

BORAGINACEAE

* *Anchusa crispa* Viv.

* *Lithodora nitida* (H. Em) R. Fernandes

Myosotis lusitanica Schuster

Myosotis rehsteineri Wartm.

Myosotis retusifolia R. Afonso

Omphalodes kuzinskyanae 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 ciliata L. ssp. *pseudofrigida*

Ostenf. & O.C. Dahl

Arenaria humifusa Wahlenberg

* *Arenaria nevadensis* Boiss. & Reuter

Arenaria provincialis Chater & Halliday

Dianthus arenarius L. subsp. *arenarius*

Dianthus cintranus Boiss. & Reuter

subsp. *cintranus* Boiss. & Reuter

Dianthus marizii (Samp.) Samp.

- Dianthus rupicola* Biv.
- * *Gypsophila papillosa* P. Porta
- Herniaria algarvica* Chaudhri
- * *Herniaria latifolia* Lapeyr. subsp. *litardierei* Gamis
- Herniaria lusitanica* (Chaudhri) subsp. *berlengiana* Chaudhri
- Herniaria maritima* Link
- Moehringia lateriflora* (L.) Fenzl.
- Moehringia tommasinii* Marches.
- Petrocoptis grandiflora* Rothm.
- Petrocoptis montsicciana* O. Bolos & Rivas Mart.
- Petrocoptis pseudoviscosa* Fernandez Casas
- Silene furcata* Rafin. ssp. *angustiflora* (Rupr.) Walters
- * *Silene hicesiae* Brullo & Signorello
- Silene hifacensis* Rouy ex Willk.
- * *Silene holzmanii* Heldr. ex Boiss.
- Silene longicilia* (Brot.) Otth.
- Silene mariana* Pau
- * *Silene orphanidis* Boiss.
- * *Silene rothmaleri* Pinto da Silva
- * *Silene velutina* Pourret ex Loisel.
- CHENOPODIACEAE
- * *Bassia* (*Kochia*) *saxicola* (Guss.) A. J. Scott
- * *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 & Rozeira
- COMPOSITAE
- * *Anthemis glaberrima* (Rech. f.) Greuter
- Artemisia campestris* L. subsp. *bottnica* A.N. Lundström ex Kindb.
- * *Artemisia granatensis* Boiss.
- * *Artemisia laciniata* Willd.
- Artemisia oelandica* (Besser) Komaror
- * *Artemisia pancicii* (Janka) Ronn.
- * *Aster pyrenaicus* 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. Blanca
- * *Centaurea horrida* Badaro
- * *Centaurea kalambakensis* Freyn & Sint.
- Centaurea kartschiana* Scop.
- * *Centaurea lactiflora* Halacsy
- Centaurea micrantha* Hoffmanns. & Link subsp. *herminii* (Rouy) Dostal
- * *Centaurea niederi* Heldr.
- * *Centaurea peucedanifolia* Boiss. & Orph.
- * *Centaurea pinnata* Pau
- Centaurea pulvinata* (G. Blanca) G. Blanca
- Centaurea rothmalerana* (Arènes) Dostal
- Centaurea vicentina* Mariz
- * *Crepis crocifolia* Boiss. & Heldr.
- Crepis granatensis* (Willk.) B. Blanca & M. Cueto
- Crepis tectorum* L. subsp. *nigrescens*
- 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 siculus* (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 jacobea* L. subsp. *gotlandicus* (Neuman) Sterner
- Senecio nevadensis* Boiss. & Reuter
- CONVOLVULACEAE
- * *Convolvulus argyrothamnus* Greuter
- * *Gonvolvulus fernandesii* 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.
Braya linearis Rouy
* *Coincya rupestris* Rouy
* *Coronopus navasii* Pau
Diplotaxis ibicensis (Paul) Gomez-Campo
* *Diplotaxis siettiana* Maire
Diplotaxis vicentina (P. Cout.) Rothm.
Draba cacuminum Elis Ekman
Draba cinerea Adams
Erucastrum palustre (Pirona) Vis.
* *Iberis arbuscula* Runemark
Iberis procumbens Lange subsp.
microcarpa Franco & Pinto da Silva
* *Jonopsidium acaule* (Desf.) Reichenb.
Jonopsidium savianum (Caruel) Ball ex Arcang.
Rhynchosinapis erucastrum (L.) Dandy ex Clapham subsp. *cintrana* (Coutinho) Franco & P. Silva [*Coincya cintrana* (P. Cout.) Pinto da Silva]
Sisymbrium cavanillesianum Valdes & Castroviejo
Sisymbrium supinum L.
- CYPERACEAE
Carex holostoma Drejer
* *Carex panormitana* Guss.
Eleocharis carniolica Koch
- DIOSCOREACEAE
* *Borderea chouardii* (Gaussen) Heslot
- DROSERACEAE
Aldrovanda vesiculosa L.
- EUPHORBIACEAE
* *Euphorbia margalidiana* Kuhbier & Lewejohann
Euphorbia transtagana Boiss.
- GENTIANACEAE
* *Centaurium rigualii* Esteve
* *Centaurium somedanum* Lainz
Gentiana ligustica R. de Vilm. & Chopinet
Gentianella anglica (Pugsley) E. F. Warburg
- GERANIACEAE
* *Erodium astragaloides* Boiss. & Reuter
Erodium paularense Fernandez-Gonzalez & Izco
* *Erodium rupicola* Boiss.
- GLOBULARIACEAE
* *Globularia stygia* Orph. ex Boiss.
- GRAMINEAE
Arctagrostis latifolia (R. Br.) Griseb.
Arctophila fulva (Trin.) N. J. Anderson
Avenula hackelii (Henriq.) Holub
Bromus grossus Desf. ex DC.
Calamagrostis chalybaea (Laest.) Fries
Cinna latifolia (Trev.) Griseb.
Coleanthus subtilis (Tratt.) Seidl
Festuca brigantina (Markgr.-Dannenb.) Markgr.-Dannenb.
Festuca duriotagana Franco & R. Afonso
Festuca elegans Boiss.
Festuca henriquesii Hack.
Festuca summilusitanica 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 phryganodes (Trin.) Scribner + Merr.
Puccinellia pungens (Pau) Paunero
* *Stipa austroitalica* Martinovsky
* *Stipa bavarica* Martinovsky & H. Scholz
* *Stipa styriaca* Martinovsky
* *Stipa veneta* Moraldo
Trisetum subalpestre (Hartman) Neuman
- GROSSULARIACEAE
* *Ribes sardoum* Martelli
- HIPPURIDACEAE
Hippuris tetraphylla L. Fil.
- HYPERICACEAE
* *Hypericum aciferum* (Greuter) N.K.B. Robson
- JUNCACEAE
Juncus valvatus Link
Luzula arctica Blytt
- 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 lotocephalus G. López & R.
Morales (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 (Linum
maritimum muelleri)
- LYTHRACEAE
* Lythrum flexuosum Lag.
- MALVACEAE
Kosteletzkya pentacarpos (L.) Ledeb.
- NAJADACEAE
Najas flexilis (Willd.) Rostk. & W.L.
Schmidt
Najas tenuissima (A. Braun) Magnus
- ORCHIDACEAE
Calypso bulbosa L.
- * Cephalanthera cucullata Boiss. & Heldr.
Cypripedium calceolus L.
Gymnigritella runei Teppner & Klein
Liparis loeselii (L.) Rich.
* Ophrys lunulata Parl.
Platanthera obtusata (Pursh) subsp.
oligantha (Turez.) Hulten
- PAEONIACEAE
Paeonia cambessedesii (Willk.) Willk.
Paeonia parnassica Tzanoudakis
Paeonia clusii F.C. Stern subsp. rhodia
(Stearn) Tzanoudakis
- PALMAE
Phoenix theophrasti Greuter
- PAPAVERACEAE
Corydalis gotlandica Lidén
Papaver laestadianum (Nordh.) Nordh.
Papaver radicum Rottb. subsp.
hyperboreum Nordh.
- PLANTAGINACEAE
Plantago algarbiensis Sampaio (Plantago
bracteosa (Willk.) G.
Sampaio)
Plantago almogravensis Franco
- PLUMBAGINACEAE
Armeria berlangensis Daveau
* Armeria helodes Martini & Pold
Armeria neglecta Girard
Armeria pseudarmeria (Murray)
Mansfeld
* Armeria rouyana Daveau
Armeria soleirolii (Duby) Godron
Armeria velutina Welw. 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
Persicaria foliosa (H. Lindb.) Kitag.
Polygonum praelongum Coode & Cullen
Rumex rupestris Le Gall
- PRIMULACEAE
Androsace mathildae Levier
Androsace pyrenaica Lam.

- * *Primula apennina* Widmer
- Primula nutans* Georgi
- Primula palinuri* Petagna
- Primula scandinavica* Bruun
- Soldanella villosa* Darracq.
- RANUNCULACEAE
- * *Aconitum corsicum* Gayer (*Aconitum napellus* subsp. *corsicum*)
- 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
- Pulsatilla vulgaris* Hill. subsp. *gotlandica* (Johanss.) Zaemelis & Paegle
- Ranunculus lapponicus* L.
- * *Ranunculus weyleri* Mares
- RESEDACEAE
- * *Reseda decursiva* Forssk.
- ROSACEAE
- Agrimonia pilosa* Ledebour
- Potentilla delphinensis* Gren. & Godron
- Sorbus teodori* Liljefors
- 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 osloënsis* Knaben
- Saxifraga tombeanensis* Boiss. ex-Engl.
- SCROPHULARIACEAE
- Antirrhinum charidemi* Lange
- Chaenorhinum serpyllifolium* (Lange) Lange
- subsp. *lusitanicum* R. Fernandes
- * *Euphrasia genargentea* (Feoli) Diana
- Euphrasia marchesettii* Wettst. ex Marches.
- Linaria algarviana* Chav.
- Linaria coutinhoi* Valdés
- * *Linaria ficvalhoana* Rouy
- Linaria flava* (Poirét) 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. Gustavsson
- 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 conioides* Lange
- Petagnia saniculifolia* Guss.
- Rouya polygama* (Desf.) Coincy
- * *Seseli intricatum* Boiss.
- Thorella verticillatinundata* (Thore) Briq.
- VALERIANACEAE
- Centranthus trinervis* (Viv.) Beguinot
- VIOLACEAE
- * *Viola hispida* Lam.
- Viola jaubertiana* Mares & Vigineix
- Viola rupestris* F.W. Schmidt subsp. *relicta* Jalas
- Lower plants
- BRYOPHYTA
- Bruchia vogesiaca* Schwaegr. (o)
- Bryhnia novae-angliae* (Sull & Lesq.) Grout (o)
- * *Bryoerythrophyllum campylocarpum* (C. Müll.) Crum.
- (*Bryoerythrophyllum machadoanum* (Sergio) M. O. Hill) (o)
- Buxbaumia viridis* (Moug.) Moug. & Nestl. (o)
- Cephalozia macounii* (Aust.) A. ust. (o)

Cynodontium suecicum (H. Arn. & C. Jens.) I. Hag. (o)
Dichelyma capillaceum (Dicks) Myr. (o)
Dicranum viride (Sull. & Lesq.) Lindb. (o)
Distichophyllum carinatum Dix. & Nich. (o)
Drepanocladus (Hamatocaulis) *vernicosus* (Mitt.) Warnst. (o)
Encalypta mutica (I. Hagen) (o)
Hamatocaulis lapponicus (Norrl.) Hedenäs (o)
Herzogiella turfacea (Lindb.) I. Wats. (o)
Hygrohypnum montanum (Lindb.) Broth. (o)
Jungermannia handelii (Schiffn.) Amak. (o)
Mannia triandra (Scop.) Grolle (o)
* *Marsupella profunda* Lindb. (o)
Meesia longiseta Hedw. (o)
Nothothylas orbicularis (Schwein.) Sull. (o)
Orthothecium lapponicum (Schimp.) C. Hartm. (o)
Orthotrichum rogeri Brid. (o)
Petalophyllum ralfsii (Wils.) Nees & Gott. (o)
Plagiomnium drummondii (Bruch & Schimp.) T. Kop. (o)
Riccia breidlerii Jur. (o)
Riella helicophylla (Bory & Mont.) Mont. (o)
Scapania massolongi (K. Müll.) K. Müll. (o)
Sphagnum pylaisii Brid. (o)
Tayloria rudolphiana (Garov) B. & S. (o)
Tortella rigens (N. Alberts) (o)

SPECIES FOR MACARONESIA

PTERIDOPHYTA

HYMENOPHYLLACEAE

Hymenophyllum maderensis Gibby & Lovis

DRYOPTERIDACEAE

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

ISOETACEAE

Isoetes azorica Durieu & Paiva ex Milde

MARSILEACEAE

* *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 & Sund.

Cirsium latifolium Lowe

Helichrysum gossypinum Webb

Helichrysum monogynum Burt & Sund.

Hypochoeris oligocephala (Svent. & Bramw.) Lack

* *Lactuca watsoniana* Trel.

* *Onopordum nogalesii* Svent.

* *Onopordum carduelinum* Bolle

* *Pericallis hadrosoma* (Svent.) B. Nord

Phagnalon benettii Lowe

Stemmacantha cynaroides (Chr. Son. in Buch) Ditt

Sventenia 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.) Buschm.
- Phalaris maderensis* (Menezes) Menezes
- GLOBULARIACEAE
- * *Globularia ascanii* D. Bramwell & Kunkel
- * *Globularia sarcophylla* Svent.
- 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 lemmaniana* 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) Knob.
- 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.
- Dendriopoterium pulidoi* Svent.
- Marcetella maderensis* (Born.) Svent.
- Prunus lusitanica* L. subsp. *azorica* (Mouillef.) Franco
- Sorbus maderensis* (Lowe) Dode
- SANTALACEAE
- Kunkeliella subsucculenta* Kammer
- SCROPHULARIACEAE
- * *Euphrasia azorica* H. C. Watson
- Euphrasia grandiflora* Hochst. in Seub.

- * *Isoplexis chalcantha* Svēt. & O'Shanahan
- Isoplexis isabelliana* (Webb & Berthel.) Masferrer
- Odontites holliana* (Lowe) Benth.
- Sibthorpia peregrina* L.

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)
- (1) "Interpretation manual of European

Union habitats, version EUR
15" adopted by the Habitats Committee on
25 April 1996, European
Commission, DG XI.

