# COUNCIL DIRECTIVE 92/43/EEC (1)

# http://europa.eu.int/comm/environment/nature/habdir.htm

# of 21 May 1992

# on the conservation of natural habitats and of wild fauna and flora

# THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 130s thereof,

Having regard to the proposal from the Commission  $\frac{(2)}{2}$ ,

Having regard to the opinion of the European Parliament (3),

Having regard to the opinion of the Economic and Social Committee  $\frac{(4)}{}$ ,

Whereas the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora, are an essential objective of general interest pursued by the Community, as stated in Article 130r of the Treaty;

Whereas the European Community policy and action programme on the environment (1987 to 1992)<sup>(5)</sup> makes provision for measures regarding the conservation of nature and natural resources;

Whereas, the main aim of this Directive being to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements, this Directive makes a contribution to the general objective of sustainable development;

Whereas the maintenance of such biodiversity may in certain cases require the maintenance, or indeed the encouragement, of human activities;

Whereas, in the European territory of the Member States, natural habitats are continuing to deteriorate and an increasing number of wild species are seriously threatened; whereas given that the threatened habitats and species form part of the Community's natural heritage and the threats to them are often of a transboundary nature, it is necessary to take measures at Community level in order to conserve them;

Whereas, in view of the threats to certain types of natural habitat and certain species, it is necessary to define them as having priority in order to favour the early implementation of measures to conserve them;

Whereas, in order to ensure the restoration or maintenance of natural habitats and species of Community interest at a favourable conservation status, it is necessary to designate special areas of conservation in order to create a coherent European ecological network according to a specified timetable;

Whereas all the areas designated, including those classified now or in the future as special protection areas pursuant to Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds.<sup>(6)</sup>, will have to be incorporated into the coherent European ecological network;

Whereas it is appropriate, in each area designated, to implement the necessary measures having regard to the conservation objectives pursued;

Whereas sites eligible for designation as special areas of conservation are proposed by the Member States but whereas a procedure must nevertheless be laid down to allow the designation in exceptional cases of a site which has not been proposed by a Member State but which the Community considers essential for either the maintenance or the survival of a priority natural habitat type or a priority species;

Whereas an appropriate assessment must be made of any plan or programme likely to have a significant effect on the conservation objectives of a site which has been designated or is designated in future;

Whereas it is recognised that the adoption of measures intended to promote the conservation of priority natural habitats and priority species of Community interest is a common responsibility of all Member States; whereas this may, however, impose an excessive financial burden on certain Member States given, on the one hand, the uneven distribution of such habitats and species throughout the Community and, on the other hand, the fact that the 'polluter pays' principle can have only limited application in the special case of nature conservation;

Whereas it is therefore agreed that, in this exceptional case, a contribution by means of Community cofinancing should be provided for within the limits of the resources made available under the Community's decisions;

Whereas land-use planning and development policies should encourage the management of features of the landscape which are of major importance for wild fauna and flora;

Whereas a system should be set up for surveillance of the conservation status of the natural habitats and species covered by this Directive;

Whereas a general system of protection is required for certain species of flora and fauna to complement Directive 79/409/EEC;

Whereas provision should be made for management measures for certain species, if their conservation status so warrants, including the prohibition of certain means of capture or killing, whilst providing for the possibility of derogation's on certain conditions;

Whereas, with the aim of ensuring that the implementation of this Directive is monitored, the Commission will periodically prepare a composite report based, inter alia, on the information sent to it by the Member States regarding the application of national provisions adopted under this Directive;

Whereas the improvement of scientific and technical knowledge is essential for the implementation of this Directive;

Whereas it is consequently appropriate to encourage the necessary research and scientific work;

Whereas technical and scientific progress mean that it must be possible to adapt the Annexes; whereas a procedure should be established whereby the Council can amend the Annexes;

Whereas a regulatory committee should be set up to assist the Commission in the implementation of this Directive and in particular when decisions on Community co-financing are taken;

Whereas provision should be made for supplementary measures governing the reintroduction of certain native species of fauna and flora and the possible introduction of non-native species;

Whereas education and general information relating to the objectives of this Directive are essential for ensuring its effective implementation,

HAS ADOPTED THIS DIRECTIVE:

# Definitions

# Article 1

For the purpose of this Directive:

(a) *conservation* means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status as defined in (e) and (i);

(b) *natural habitats* means terrestrial or aquatic areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural;

(c) *natural habitat types of Community interest* means those which, within the territory referred to in Article 2:

(i) are in danger of disappearance in their natural range;

or

(ii) have a small natural range following their regression or by reason of their intrinsically restricted area;

or

(iii) present outstanding examples of typical characteristics of one or more of the six following biogeographical regions: Alpine, Atlantic, Boreal, Continental, Macaronesian and Mediterranean.

Such habitat types are listed or may be listed in Annex I;

(d) *priority natural habitat types* means natural habitat types in danger of disappearance, which are present on the territory referred to in Article 2 and for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2; these priority natural habitat types are indicated by an asterisk (\*) in Annex I;

(e) *conservation status of a natural habitat* means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species within the territory referred to in Article 2.

The conservation status of a natural habitat will be taken as 'favourable' when:

• its natural range and areas it covers within that range are stable or increasing, and

• the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and

• the conservation status of its typical species is favourable as defined in (i);

(f) *habitat of a species* means an environment defined by specific abiotic and biotic factors, in which the species lives at any stage of its biological cycle;

(g) species of Community interest means species which, within the territory referred to in Article 2, are:

(i) endangered, except those species whose natural range is marginal in that territory and which are not endangered or vulnerable in the western palearctic region; or

(ii) vulnerable, i.e. believed likely to move into the endangered category in the near future if the causal factors continue operating; or

(iii) rare, i.e. with small populations that are not at present endangered or vulnerable, but are at risk. The species are located within restricted geographical areas or are thinly scattered over a more extensive range; or

(iv) endemic and requiring particular attention by reason of the specific nature of their habitat and/or the potential impact of their exploitation on their habitat and/or the potential impact of their exploitation on their conservation status.

Such species are listed or may be listed in Annex II and/or Annex IV or V;

(h) *priority species* means species referred to in (g) (i) for the conservation of which the Community has particular responsibility in view of the proportion of their natural range which falls within the territory referred to in Article 2; these priority species are indicated by an asterisk (\*) in Annex II;

(i) *conservation status of a species* means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2;

The conservation status will be taken as 'favourable' when:

• population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and

• the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and

• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis;

(j) site means a geographically defined area whose extent is clearly delineated;

(k) *site of Community importance* means a site which, in the biogeographical region or regions to which is belongs, contributes significantly to the maintenance or restoration at a favourable conservation status of a natural habitat type in Annex I or of a species in Annex II and may also contribute significantly to the coherence of Natura 2000 referred to in Article 3, and/or contributes significantly to the maintenance of biological diversity within the biogeographic region or regions concerned.

For animal species ranging over wide areas, sites of Community importance shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction;

(1) *special area of conservation* means a site of Community importance designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated;

(m) *specimen* means any animal or plant, whether alive or dead, of the species listed in Annex IV and Annex V, any part or derivative thereof, as well as any other goods which appear, from an accompanying document, the packaging or a mark or label, or from any other circumstances, to be parts or derivatives of animals or plants of those species;

(n) the committee means the committee set up pursuant to Article 20.

# Article 2

1. The aim of this Directive shall be to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.

2. Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest.

3. Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics.

# Conservation of natural habitats and habitats of species

#### Article 3

1. A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range.

The Natura 2000 network shall include the special protection areas classified by the Member States pursuant to Directive 79/409/EEC.

2. Each Member State shall contribute to the creation of Natura 2000 in proportion to the representation within its territory of the natural habitat types and the habitats of species referred to in paragraph 1. To that effect each Member State shall designate, in accordance with Article 4, sites as special areas of conservation taking account of the objectives set out in paragraph 1.

3. Where they consider it necessary, Member States shall endeavour to improve the ecological coherence of Natura 2000 by maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora, as referred to in Article 10.

# Article 4

1. On the basis of the criteria set out in Annex III (Stage 1) and relevant scientific information, each Member State shall propose a list of sites indicating which natural habitat types in Annex I and which species in Annex II that are native to its territory the sites host. For animal species ranging over wide areas these sites shall correspond to the places within the natural range of such species which present the physical or biological factors essential to their life and reproduction. For aquatic species which range over wide areas, such sites will be proposed only where there is a clearly identifiable area representing the physical and biological factors essential to their life and reproduction. Where appropriate, Member States shall propose adaptation of the list in the light of the results of the surveillance referred to in Article 11.

The list shall be transmitted to the Commission, within three years of the notification of this Directive, together with information on each site. That information shall include a map of the site, its name, location, extent and the data resulting from application of the criteria specified in Annex III (Stage 1) provided in a format established by the Commission in accordance with the procedure laid down in Article 21.

2. On the basis of the criteria set out in Annex III (Stage 2) and in the framework both of each of the five biogeographical regions referred to in Article 1 (c) (iii) and of the whole of the territory referred to in Article 2 (1), the Commission shall establish, in agreement with each Member State, a draft list of sites of Community importance drawn from the Member States' lists identifying those which lost one or more priority natural habitat types or priority species.

Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory.

The list of sites selected as sites of Community importance, identifying those which host one or more priority natural habitat types or priority species, shall be adopted by the Commission in accordance with the procedure laid down in Article 21.

3. The list referred to in paragraph 2 shall be established within six years of the notification of this Directive

4. Once a site of Community importance has been adopted in accordance with the procedure laid down in paragraph 2, the Member State concerned shall designate that site as a special area of conservation as soon as possible and within six years at most, establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed

5. As soon as a site is placed on the list referred to in the third subparagraph of paragraph 2 it shall be subject to Article 6(2), (3) and (4).

# Article 5

1. In exceptional cases where the Commission finds that a national list as referred to in Article 4 (1) fails to mention a site hosting a priority natural habitat type or priority species which, on the basis of relevant and reliable scientific information, it considers to be essential for the maintenance of that priority natural habitat type or for the survival of that priority species, a bilateral consultation procedure shall be

initiated between that Member State and the Commission for the purpose of comparing the scientific data used by each.

2. If, on expiry of a consultation period not exceeding six months, the dispute remains unresolved, the Commission shall forward to the Council a proposal relating to the selection of the site as a site of Community importance.

3. The Council, acting unanimously, shall take a decision within three months of the date of referral.

4. During the consultation period and pending a Council decision, the site concerned shall be subject to Article 6 (2).

# Article 6

1. For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites.

2. Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.

3. Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

4. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

# Article 7

Obligations arising under Article 6 (2), (3) and (4) of this Directive shall replace any obligations arising under the first sentence of Article 4 (4) of Directive 79/409/EEC in respect of areas classified pursuant to Article 4 (1) or similarly recognised under Article 4 (2) thereof, as from the date of implementation of this Directive or the date of classification or recognition by a Member State under Directive 79/409/EEC, where the latter date is later.

# Article 8

1. In parallel with their proposals for sites eligible for designation as special areas of conservation, hosting priority natural habitat types and/or priority species, the Member States shall send, as appropriate, to the Commission their estimates relating to the Community co-financing which they consider necessary to allow them to meet their obligations pursuant to Article 6 (1).

2. In agreement with each of the Member States concerned, the Commission shall identify, for sites of Community importance for which co-financing is sought, those measures essential for the maintenance or re-establishment at a favourable conservation status of the priority natural habitat types and priority species on the sites concerned, as well as the total costs arising from those measures.

3. The Commission, in agreement with the Member States concerned, shall assess the financing, including co-financing, required for the operation of the measures referred to in paragraph 2, taking into account, amongst other things, the concentration on the Member State's territory of priority natural habitat types and/or priority species and the relative burdens which the required measures entail.

4. According to the assessment referred to in paragraphs 2 and 3, the Commission shall adopt, having regard to the available sources of funding under the relevant Community instruments and according to the procedure set out in Article 21, a prioritised action framework of measures involving co-financing to be taken when the site has been designated under Article 4 (4).

5. The measures which have not been retained in the action framework for lack of sufficient resources, as well as those included in the above mentioned action framework which have not received the necessary co-financing or have only been partially co-financed, shall be reconsidered in accordance with the procedure set out in Article 21, in the context of the two-yearly review of the action framework and may, in the maintime, be postponed by the Member States pending such review. This review shall take into account, as appropriate, the new situation of the site concerned.

6. In areas where the measures dependent on co-financing are postponed, Member States shall refrain from any new measures likely to result in deterioration of those areas.

# Article 9

The Commission, acting in accordance with the procedure laid down in Article 21, shall periodically review the contribution of Natura 2000 towards achievement of the objectives set out in Article 2 and 3. In this context, a special area of conservation may be considered for declassification where this is warranted by natural developments noted as a result of the surveillance provided for in Article 11.

# Article 10

Member States shall endeavour, where they consider it necessary, in their land-use planning and development policies and, in particular, with a view to improving the ecological coherence of the Natura 2000 network, to encourage the management of features of the landscape which are of major importance for wild fauna and flora.

Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.

# Article 11

Member States shall undertake surveillance of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species.

# **Protection of species**

# Article 12

1. Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV (a) in their natural range, prohibiting:

(a) all forms of deliberate capture or killing of specimens of these species in the wild;

(b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;

(c) deliberate destruction or taking of eggs from the wild;

(d) deterioration or destruction of breeding sites or resting places.

2. For these species, Member States shall prohibit the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the wild, except for those taken legally before this Directive is implemented.

3. The prohibition referred to in paragraph 1 (a) and (b) and paragraph 2 shall apply to all stages of life of the animals to which this Article applies.

4. Member States shall establish a system to monitor the incidental capture and killing of the animal species listed in Annex IV (a). In the light of the information gathered, Member States shall take further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned.

# Article 13

1. Member States shall take the requisite measures to establish a system of strict protection for the plant species listed in Annex IV (b), prohibiting:

(a) the deliberate picking, collecting, cutting, uprooting or destruction of such plants in their natural range in the wild;

(b) the keeping, transport and sale or exchange and offering for sale or exchange of specimens of such species taken in the wild, except for those taken legally before this Directive is implemented.

2. The prohibitions referred to in paragraph 1 (a) and (b) shall apply to all stages of the biological cycle of the plants to which this Article applies.

# Article 14

1. If, in the light of the surveillance provided for in Article 11, Member States deem it necessary, they shall take measures to ensure that the taking in the wild of specimens of species of wild fauna and flora listed in Annex V as well as their exploitation is compatible with their being maintained at a favourable conservation status.

2. Where such measures are deemed necessary, they shall include continuation of the surveillance provided for in Article 11. Such measures may also include in particular:

• regulations regarding access to certain property,

• temporary or local prohibition of the taking of specimens in the wild and exploitation of certain populations,

• regulation of the periods and/or methods of taking specimens,

• application, when specimens are taken, of hunting and fishing rules which take account of the conservation of such populations,

• establishment of a system of licences for taking specimens or of quotas,

• regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens,

• breeding in captivity of animal species as well as artificial propagation of plant species, under strictly controlled conditions, with a view to reducing the taking of specimens of the wild,

• assessment of the effect of the measures adopted.

# Article 15

In respect of the capture or killing of species of wild fauna listed in Annex V (a) and in cases where, in accordance with Article 16, derogation's are applied to the taking, capture or killing of species listed in Annex IV (a), Member States shall prohibit the use of all indiscriminate means capable of causing local disappearance of, or serious disturbance to, populations of such species, and in particular:

(a) use of the means of capture and killing listed in Annex VI (a);

(b) any form of capture and killing from the modes of transport referred to in Annex VI (b).

# Article 16

1. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):

(a) in the interest of protecting wild fauna and flora and conserving natural habitats;

(b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;

(c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;

(d) for the purpose of research and education, of repopulating and re-introducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants;

(e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

2. Member States shall forward to the Commission every two years a report in accordance with the format established by the Committee on the derogation's applied under paragraph 1. The Commission shall give its opinion on these derogation's within a maximum time limit of 12 months following receipt of the report and shall give an account to the Committee.

3. The reports shall specify:

(a) the species which are subject to the derogation's and the reason for the derogation, including the nature of the risk, with, if appropriate, a reference to alternatives rejected and scientific data used;

(b) the means, devices or methods authorised for the capture or killing of animal species and the reasons for their use;

(c) the circumstances of when and where such derogation's are granted;

(d) the authority empowered to declare and check that the required conditions obtain and to decide what means, devices or methods may be used, within what limits and by what agencies, and which persons are to carry but the task;

(e) the supervisory measures used and the results obtained.

# Information

# Article 17

1. Every six years from the date of expiry of the period laid down in Article 23, Member States shall draw up a report on the implementation of the measures taken under this Directive. This report shall include in particular information concerning the conservation measures referred to in Article 6 (1) as well as evaluation of the impact of those measures on the conservation status of the natural habitat types of Annex I and the species in Annex II and the main results of the surveillance referred to in Article 11. The report, in accordance with the format established by the committee, shall be forwarded to the Commission and made accessible to the public.

2. The Commission shall prepare a composite report based on the reports referred to in paragraph 1. This report shall include an appropriate evaluation of the progress achieved and, in particular, of the contribution of Natura 2000 to the achievement of the objectives set out in Article 3. A draft of the part of the report covering the information supplied by a Member State shall be forwarded to the Member State in question for verification. After submission to the committee, the final version of the report shall be published by the Commission, not later than two years after receipt of the reports referred to in paragraph 1, and shall be forwarded to the Member States, the European Parliament, the Council and the Economic and Social Committee.

3. Member States may mark areas designated under this Directive by means of Community notices designed for that purpose by the committee.

# Research

# Article 18

1. Member States and the Commission shall encourage the necessary research and scientific work having regard to the objectives set out in Article 2 and the obligation referred to in Article 11. They shall

exchange information for the purposes of proper co-ordination of research carried out at Member State and at Community level.

2. Particular attention shall be paid to scientific work necessary for the implementation of Articles 4 and 10, and transboundary co-operative research between Member States shall be encouraged.

### **Procedure for amending the Annexes**

### Article 19

Such amendments as are necessary for adapting Annexes I, II, III, V and VI to technical and scientific progress shall be adopted by the Council acting by qualified majority on a proposal from the Commission.

Such amendments as are necessary for adapting Annex IV to technical and scientific progress shall be adopted by the Council acting unanimously on a proposal from the Commission.

### Committee

# Article 20

The Commission shall be assisted by a committee consisting of representatives of the Member States and chaired by a representative of the Commission.

### Article 21

1. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the Chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The Chairman shall not vote.

2. The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission.

# Supplementary provisions

### Article 22

In implementing the provisions of this Directive, Member States shall:

(a) study the desirability of re-introducing species in Annex IV that are native to their territory where this might contribute to their conservation, provided that an investigation, also taking into account experience in other Member States or elsewhere, has established that such re-introduction contributes effectively to re-establishing these species at a favourable conservation status and that it takes place only after proper consultation of the public concerned;

(b) ensure that the deliberate introduction into the wild of any species which is not native to their territory is regulated so as not to prejudice natural habitats within their natural range or the wild native fauna and flora and, if they consider it necessary, prohibit such introduction. The results of the assessment undertaken shall be forwarded to the committee for information;

(c) promote education and general information on the need to protect species of wild fauna and flora and to conserve their habitats and natural habitats.

# **Final provisions**

Article 23

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within two years of its notification. They shall forthwith inform the Commission thereof.

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

3. Member States shall communicate to the Commission the main provisions of national law which they adopt in the field covered by this Directive.

# Article 24

This Directive is addressed to the Member States.

Done at Brussels, 21 May 1992.

For the Council

The President

Arlindo MARQUES CUNHA

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

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

<u>ANNEX III:</u> CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION

ANNEX IV: ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST IN NEED OF STRICT PROTECTION

<u>ANNEX V</u>: ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST WHOSE TAKING IN THE WILD AND EXPLOITATION MAY BE SUBJECT TO MANAGEMENT MEASURES

ANNEX VI: PROHIBITED METHODS AND MEANS OF CAPTURE AND KILLING AND MODES OF TRANSPORT

# 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 Union 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

# 11. Open sea and tidal areas

1110 Sandbanks which are slightly covered by sea water all the time

1120 \* Posidonia beds (Posidonion oceanicae)

1130 Estuaries

1140 Mudflats and sandflats not covered by seawater at low tide

1150 \*Coastal lagoons

1160 Large shallow inlets and bays

1170 Reefs

1180 Submarine structures made by leaking gases

# 12. Sea cliffs and shingle or stony beaches

1210 Annual vegetation of drift lines

1220 Perennial vegetation of stony banks

1230 Vegetated sea cliffs of the Atlantic and Baltic Coasts

1240 Vegetated sea cliffs of the Mediterranean coasts with endemic Limonium spp.

1250 Vegetated sea cliffs with endemic flora of the Macaronesian coasts

# 13. Atlantic and continental salt marshes and salt meadows

1310 Salicornia and other annuals colonizing mud and sand

1320 Spartina swards (Spartinion maritimae)

1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

1340 \* Inland salt meadows

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

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

# **15. Salt and gypsum inland steppes**

1510 \* Mediterranean salt steppes (Limonietalia)

1520 \* Iberian gypsum vegetation (Gypsophiletalia)

1530 \* Pannonic salt steppes and salt marshes

# 16. Boreal Baltic archipelago, coastal and landupheaval areas

1610 Baltic esker islands with sandy, rocky and shingle beach vegetation and sublittoral vegetation

1620 Boreal Baltic islets and small islands

1630 \* Boreal Baltic coastal meadows

1640 Boreal Baltic sandy beaches with perennial vegetation

1650 Boreal Baltic narrow inlets

# 2. COASTAL SAND DUNES AND INLAND DUNES

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

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

21A0 Machairs (\* in Ireland)

### 22. Sea dunes of the Mediterranean coast

2210 Crucianellion maritimae fixed beach dunes 2220 Dunes with Euphorbia terracina 2230 Malcolmietalia dune grasslands 2240 Brachypodietalia dune grasslands with annuals 2250 \* Coastal dunes with Juniperus spp. 2260 Cisto-Lavenduletalia dune sclerophyllous scrubs

2270 \* Wooded dunes with Pinus pinea and/or Pinus pinaster

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

2310 Dry sand heaths with Calluna and Genista

2320 Dry sand heaths with Calluna and Empetrum nigrum

2330 Inland dunes with open Corynephorus and Agrostis grasslands

2340 \* Pannonic inland dunes

### **3. FRESHWATER HABITATS**

#### **31. Standing water**

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

3140 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation

3160 Natural dystrophic lakes and ponds

3170 \* Mediterranean temporary ponds

3180 \* Turloughs

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

3210 Fennoscandian natural rivers 3220 Alpine rivers and the herbaceous vegetation along their banks 3230 Alpine rivers and their ligneous vegetation with Myricaria germanica 3240 Alpine rivers and their ligneous vegetation with Salix elaeagnos 3250 Constantly flowing Mediterranean rivers with Glaucium flavum 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 3270 Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation 3280 Constantly flowing Mediterranean rivers with Paspalo-Agrostidion species and hanging curtains of Salix and Populus alba 3290 Intermittently flowing Mediterranean rivers of the Paspalo-Agrostidion

# 4. TEMPERATE HEATH AND SCRUB

4010 Northern Atlantic wet heaths with *Erica tetralix*4020 \* Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*4030 European dry heaths
4040 \* Dry Atlantic coastal heaths with *Erica vagans*4050 \* Endemic macaronesian heaths
4060 Alpine and Boreal heaths
4070 \* Bushes with *Pinus mugo* and *Rhododendron hirsutum Rhododendretum hirsuti*)
4080 Sub-Arctic *Salix* spp. scrub
4090 Endemic oro-Mediterranean heaths with gorse

# 5. SCLEROPHYLLOUS SCRUB (MATORRAL)

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

5110 Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.)

5120 Mountain Cytisus purgans formations

5130 Juniperus communis formations on heaths or calcareous grasslands

5140 \* Cistus palhinhae formations on maritime wet heaths

#### 52. Mediterranean arborescent matorral

5210 Arborescent matorral with Juniperus spp.

5220 \* Arborescent matorral with Zyziphus

5230 \* Arborescent matorral with Laurus nobilis

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

5310 Laurus nobilis thickets

5320 Low formations of Euphorbia close to cliffs

5330 Thermo-Mediterranean and pre-desert scrub

#### 54. Phrygana

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

### 6. NATURAL AND SEMI-NATURAL GRASSLAND FORMATIONS

#### **61.** Natural grasslands

6110 \* Rupicolous calcareous or basophilic grasslands of the Alysso-Sedion albi

6120 \* Xeric sand calcareous grasslands

6130 Calaminarian grasslands of the Violetalia calaminariae

6140 Siliceous Pyrenean Festuca eskia grasslands

6150 Siliceous alpine and boreal grasslands

6160 Oro-Iberian Festuca indigesta grasslands

6170 Alpine and subalpine calcareous grasslands

6180 Macaronesian mesophile grasslands

# 62. Semi-natural dry grasslands and scrubland facies

6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates *Brometalia*) (\* important orchid sites)

6220 \* Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea

6230 \* Species-rich *Nardus* grasslands, on silicious substrates in mountain areas (and areas in Continental Europe)

6240 \* Sub-Pannonic steppic grasslands

6250 \* Pannonic loess steppic grasslands

(Festuco-

submountain

HABITAT DIRECTIVE

14

(Mugo-

6260 \* Pannonic sand steppes 6270 \* Fennoscandian lowland species-rich dry to mesic grasslands 6280 \* Nordic alvar and precambrian calcareous flatrocks

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

6310 Dehesas with evergreen Quercus spp.

# 64. Semi-natural tall-herb humid meadows

6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinioncaeruleae)6420 Mediterranean tall humid grasslands of the Molinio-Holoschoenion6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpinelevels6440 Alluvial meadows of river valleys of the Cnidion dubii6450 Northern boreal alluvial meadowslevels

# 65. Mesophile grasslands

6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)6520 Mountain hay meadows6530 \* Fennoscandian wooded meadows

# 7. RAISED BOGS AND MIRES AND FENS

# 71. Sphagnum acid bogs

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

# 72. Calcareous fens

7210 \* Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* 

7220 \* Petrifying springs with tufa formation (*Cratoneurion*)

7230 Alkaline fens

7240 \* Alpine pioneer formations of the Caricion bicoloris-atrofuscae

# 73. Boreal mires

7310 \* Aapa mires 7320 \* Palsa mires

# 8. ROCKY HABITATS AND CAVES

# 81. Scree

| 8110 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and      | Galeopsietalia  |
|---|-----------------|
| ladani)   |                 |
| 8120 Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea   | rotundifolii)   |
| 8130 Western Mediterranean and thermophilous scree                                  |                 |
| 8140 Eastern Mediterranean screes   |                 |
| 8150 Medio-European upland siliceous screes   |                 |
| 8160 * Medio-European calcareous scree of hill and montane levels                   |                 |
| 82. Rocky slopes with chasmophytic vegetation                                       |                 |
| 8210 Calcareous rocky slopes with chasmophytic vegetation                           |                 |
| 8220 Siliceous rocky slopes with chasmophytic vegetation                            |                 |
| 8230 Siliceous rock with pioneer vegetation of the Sedo-Scleranthion or of the Sedo | albi-Veronicion |
| dillenii  |                 |
| 8240 * Limestone pavements  |                 |
| 83. Other rocky habitats  |                 |

8310 Caves not open to the public

8320 Fields of lava and natural excavations

8330 Submerged or partially submerged sea caves

8340 Permanent glaciers

# 9. FORESTS

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

### **90.** Forests of Boreal Europe

9010 \* Western Taïga

| <ul> <li>9020 * Fennoscandian hemiboreal natural old broad-leaved deciduous forests (<i>Quercus Fraxinus</i> or <i>Ulmus</i>) rich in epiphytes</li> <li>9030 * Natural forests of primary succession stages of landupheaval coast</li> <li>9040 Nordic subalpine/subarctic forests with <i>Betula pubescens</i> ssp. <i>czerepanovii</i></li> <li>9050 Fennoscandian herb-rich forests with <i>Picea abies</i></li> <li>9060 Coniferous forests on, or connected to, glaciofluvial eskers</li> <li>9070 Fennoscandian wooded pastures</li> <li>9080 * Fennoscandian deciduous swamp woods</li> </ul> | s, Tilia, Acer,    |
|---|--------------------|
| 91. Forests of Temperate Europe   |                    |
| <ul> <li>9110 Luzulo-Fagetum beech forests</li> <li>9120 Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the (Quercion robori-petraeae or Ilici-Fagenion)</li> <li>9130 Asperulo-Fagetum beech forests</li> <li>9140 Medio-European subalpine beech woods with Acer and Rumex arifolius</li> <li>9150 Medio-European limestone beech forests of the Cephalanthero-Fagion</li> </ul>   | shrublayer         |
| <ul> <li>9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion</i></li> <li>9170 <i>Galio-Carpinetum</i> oak-hornbeam forests</li> <li>9180 * <i>Tilio-Acerion</i> forests of slopes, screes and ravines</li> <li>9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains</li> <li>91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</li> <li>91B0 Thermophilous <i>Fraxinus angustifolia</i> woods</li> <li>91C0 * Caledonian forest</li> <li>91D0 * Bog woodland</li> </ul>                                     | betuli             |
| 91E0 * Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion,   | Alnion incanae,    |
| Salicion albae)91F0 Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor,<br>or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)91G0 * Pannonic woods with Quercus petraea and Carpinus betulus91H0 * Pannonian woods with Quercus pubescens91I0 * Euro-Siberian steppic woods with Quercus spp.91J0 * Taxus baccata woods of the British Isles  | Fraxinus excelsior |
| 92. Mediterranean deciduous forests   |                    |
| <ul> <li>9210 * Apeninne beech forests with <i>Taxus</i> and <i>Ilex</i></li> <li>9220 * Apennine beech forests with <i>Abies alba</i> and beech forests with <i>Abies</i></li> <li>9230 Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i></li> <li>9240 <i>Quercus faginea</i> and <i>Quercus canariensis</i> Iberian woods</li> <li>9250 <i>Quercus trojana</i> woods</li> <li>9260 <i>Castanea sativa</i> woods</li> <li>9270 Hallania baseh forests with <i>Abies horisii ragis</i></li> </ul>  | nebrodensis        |

9270 Hellenic beech forests with Abies borisii-regis

9280 Quercus frainetto woods

9290 Cupressus forests (Acero-Cupression)

92A0 Salix alba and Populus alba galleries

| 92B0 Riparian formations on intermittent Mediterranean water courses with         | Rhododendron |
|---|--------------|
| ponticum, Salix and others  |              |
| 92C0 Platanus orientalis and Liquidambar orientalis woods (Platanion orientalis)  |              |
| 92D0 Southern riparian galleries and thickets (Nerio-Tamaricetea and Securinegion | tinctoriae)  |

### 93. Mediterranean sclerophyllous forests

9310 Aegean *Quercus brachyphylla* woods
9320 *Olea* and *Ceratonia* forests
9330 *Quercus suber* forests
9340 *Quercus ilex* and *Quercus rotundifolia* forests
9350 *Quercus macrolepis* forests
9360 \* Macaronesian laurel forests (*Laurus, Ocotea*)
9370 \* Palm groves of *Phoenix*9380 Forests of *Ilex aquifolium*

### 94. Temperate mountainous coniferous forests

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

### 95. Mediterranean and Macaronesian mountainous coniferous forests

9510 \* Southern Apennine Abies alba forests
9520 Abies pinsapo forests
9530 \* (Sub-) Mediterranean pine forests with endemic black pines
9540 Mediterranean pine forests with endemic Mesogean pines
9550 Canarian endemic pine forests
9560 \* Endemic forests with Juniperus spp.
9570 \* Tetraclinis articulata forests
9580 \* Mediterranean Taxus baccata woods

### 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 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 russicus) Spermophilus citellus (Citellus citellus) Castoridae Castor fiber (except the Finnish and Swedish populations) Microtidae Microtus cabrerae \* 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 bottnica (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 **Tursiops truncatus** Phocoena phocoena REPTILES CHELONIA (TESTUDINES) Testudinidae Testudo hermanni Testudo graeca Testudo marginata Cheloniidae \* Caretta caretta Emydidae **Emys** orbicularis Mauremys caspica Mauremys leprosa **SAURIA** Lacertidae Lacerta bonnali (Lacerta monticola) Lacerta monticola Lacerta schreiberi Gallotia galloti insulanagae \* Gallotia simonyi Podarcis lilfordi Podarcis pityusensis Scincidae Chalcides simonyi (Chalcides occidentalis) Gekkonidae Phyllodactylus europaeus **OPHIDIA (SERPENTES)** Colubridae Elaphe quatuorlineata

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) 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 Bombina bombina Bombina variegata Discoglossus galganoi (including Discoglossus "jeanneae") Discoglossus montalentii Discoglossus sardus \* Alytes muletensis Ranidae Rana latastei Pelobatidae \* Pelobates fuscus insubricus **FISHES** PETROMYZONIFORMES Petromyzonidae Eudontomyzon spp. (o) Lampetra fluviatilis (V) (except the Finnish and Swedish populations) Lampetra planeri (o) (except the Finnish and Swedish populations) Lethenteron zanandreai (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 salar (only in fresh water) (V) (except the Finnish populations) Salmo marmoratus (o)

Elaphe situla

Salmo macrostigma (o) Coregonidae \* Coregonus oxyrhynchus (anadromous populations in certain sectors of the North Sea) **CYPRINIFORMES** *Cyprinidae* Alburnus albidus (o) (Alburnus vulturius) Anaecypris hispanica Aspius aspius (o) (except the Finnish populations) Barbus plebejus (V) Barbus meridionalis (V) Barbus comiza (V) Chalcalburnus chalcoides (o) Chondrostoma soetta (o) Chondrostoma polylepis (o) (including C. willkommi) Chondrostoma genei (o) Chondrostoma lusitanicum (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) Rutilus pigus (o) Rutilus rubilio (o) Rutilus arcasii (o) Rutilus macrolepidotus (o) Rutilus lemmingii (o) Rutilus frisii meidingeri (o) Rutilus alburnoides (o) Rhodeus sericeus amarus (o) Scardinius graecus (o) Cobitidae Cobitis trichonica (o) Cobitis taenia (o) (except the Finnish populations) 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 Pomatoschistus canestrini (o) Knipowitschia (Padogobius) panizzae (o) Padogobius nigricans (o)

SCORPAENIFORMES *Cottidae* Cottus petiti (o) Cottus gobio (o) (except the Finnish populations)

#### **INVERTEBRATES**

# ARTHROPODS

**CRUSTACEA** Decapoda Austropotamobius pallipes (V) INSECTA *Coleoptera* Agathidium pulchellum (o) Boros schneideri (o) Buprestis splendens \*Carabus menetriesi pacholei (o) \*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 **O**donata Coenagrion hylas (o) Coenagrion mercuriale (o) Cordulegaster trinacriae Gomphus graslinii Leucorrhinia 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 moulinsiana (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

HABITAT DIRECTIVE

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. Ern) R. Fernandes Myosotis lusitanica Schuster Myosotis rehsteineri Wartm. Myosotis retusifolia R. Afonso Omphalodes kuzinskyanae Willk. \* Omphalodes littoralis Lehm. Solenanthus 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 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. Blanca \*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. Blanca) G. Blanca Centaurea rothmalerana (Arènes) Dostál 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 \*Convolvulus 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 (Pau) 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 Eurphorbia 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 summilusitana 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 dirphya (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 Ouer 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 (Hoffmans. & 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

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Papaver laestadianum (Nordh.) Nordh. Papaver radicatum Rottb. subsp. hyperboreum Nordh. PLANTAGINACEAE Plantago algarbiensis Sampaio (Plantago bracteosa (Willk.) G. Sampaio) 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 Welw. ex Boiss. & Reuter Limonium dodartii (Girard) O. Kuntze subsp. lusitanicum (Daveau) Franco \*Limonium insulare (Beg. & Landi) Arrig. & Diana Limonium lanceolatum (Hoffmans. & 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 Ranunculus lapponicus L. Pulsatilla vulgaris Hill. subsp. gotlandica (Johanss.) Zaemelis & Paegle \*Ranunculus weyleri Mares RESEDACEAE \*Reseda decursiva Forssk. ROSACEAE Agrimonia pilosa Ledebour Potentilla delphinensis Gren. & Godron Sorbus teodorii 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 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 (Poiret) 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.) Aust. (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 breidleri 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 Mvosotis 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 thalassophylum (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 gossypinumWebb Helichrysum monogynum Burtt & Sund. Hypochoeris oligocephala (Svent. & Bramw.) Lack \*Lactuca watsoniana Trel. \*Onopordum nogalesii Svent. \* Onorpordum 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 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

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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 Svent. & 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)

# ANNEX III

# CRITERIA FOR SELECTING SITES ELIGIBLE FOR IDENTIFICATION AS SITES OF COMMUNITY IMPORTANCE AND DESIGNATION AS SPECIAL AREAS OF CONSERVATION

STAGE 1: Assessment at national level of the relative importance of sites for each natural habitat type in Annex I and each species in Annex II (including priority naturalhabitat types and priority species)

A. Site assessment criteria for a given natural habitat type in Annex I

(a) Degree of representativity of the natural habitat type on the site.

(b) Area of the site covered by the natural habitat type in relation to the total area covered by that natural habitat type within national territory.

(c) Degree of conservation of the structure and functions of the natural habitat type concerned and restoration possibilities.

(d) Global assessment of the value of the site for conservation of the natural habitat type concerned.

B. Site assessment criteria for a given species in Annex II

(a) Size and density of the population of the species present on the site in relation to the populations present within national territory.

(b) Degree of conservation of the features of the habitat which are important for the species concerned and restoration possibilities.

(c) Degree of isolation of the population present on the site in relation to the natural range of the species.

(d) Global assessment of the value of the site for conservation of the species concerned.

*C*. On the basis of these criteria, Member States will classify the sites which they propose on the national list as sites eligible for identification as sites of Community importanceaccording to their relative value for the conservation of each natural habitat type in Annex I or each species in Annex II.

*D*. That list will show the sites containing the priority natural habitat types and priority species selected by the Member States on the basis of the criteria in A and B above.

STAGE 2: Assessment of the Community importance of the sites included on the national lists

1. All the sites identified by the Member States in Stage 1 which contain priority natural habitat types and/or species will be considered as sites of Community importance.

2. The assessment of the Community importance of other sites on Member States' lists, i.e. their contribution to maintaining or re-establishing, at a favourable conservation status, a natural habitat in Annex I or a species in Annex II and/or to the coherence of Natura 2000 will take account of the following criteria:

(a) relative value of the site at national level;

(b) geographical situation of the site in relation to migration routes of species in Annex II and whether it belongs to a continuous ecosystem situated on both sides of one or more internal Community frontiers;

(c) total area of the site;

(d) number of natural habitat types in Annex I and species in Annex II present on the site;

(e) global ecological value of the site for the biogeographical regions concerned and/or for the whole of the territory referred to in Article 2, as regards both the characteristic of unique aspect of its features and the way they are combined.

### 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 cabrerae

-Microtus oeconomus arenicola

Zapodidae

-Sicista betulina

Hystricidae

-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 kotschyi

-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 cultripes

-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

-Anaecypris 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) (<sup>1</sup>) plus those mentioned below

PTERIDOPHYTA

ASPLENIACEAE

-Asplenium hemionitis L.

ANGIOSPERMAE

AGAVACEAE

-Dracaena draco (L.) L.

AMARYLLIDACEAE

-Narcissus longispathus Pugsley

-Narcissus triandrus L.

<sup>(1)</sup> Except bryophytes in Annex II (b).

BERBERIDACEAE

-Berberis maderensis Lowe

CAMPANULACEAE

-Campanula morettiana Reichenb.

-Physoplexis comosa (L.) Schur.

CARYOPHYLLACEAE

-Moehringia fontqueri Pau

COMPOSITAE

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-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 Simsmerh. -Spiranthes aestivalis (Poiret) 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.

## ANNEX V

# ANIMAL AND PLANT SPECIES OF COMMUNITY INTEREST WHOSE TAKING IN THE WILD AND EXPLOITATION

## MAY BE SUBJECT TO MANAGEMENT MEASURES

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.

(a) ANIMALS VERTEBRATES MAMMALS CARNIVORA

Canidae

-Canis aureus

-Canis lupus (Spanish populations north of the Duera and Greek populations north of the 39th parallel)

Mustelidae

-Martes martes

-Mustela putorius

Phocidae

-All species not mentioned in Annex IV

Viverridae

-Genetta genetta

-Herpestes ichneumon

DUPLICIDENTATA

Leporidae

-Lepus timidus

ARTIODACTYLA

Bovidae

-Capra ibex

-Capra pyrenaica (except Capra pyrenaica pyrenaica)

-Rupicapra rupicapra (except Rupicapra rupicapra balcanica and rupicapra ornata)

AMPHIBIANS

ANURA

Ranidae

-Rana esculenta

-Rana perezi

-Rana ridibunda

-Rana temporaria

FISH

PETROMYZONIFORMES

Petromyzonidae

-Lampetra fluviatilis

-Lethenteron zanandrai

## ACIPENSERIFORMES

Acipenseridae

-All species not mentioned in Annex IV

#### SALMONIFORMES

Salmonidae

-Thymallus thymallus

-Coregonus spp. (except Coregonus oxyrhynchus - anadromous populations in certain sectors of the North

Sea)

-Hucho hucho

-Salmo salar (only in fresh water)

Cyprinidae

-Barbus spp.

PERCIFORMES

Percidae

-Gymnocephalus schraetzer

-Zingel zingel

CLUPEIFORMES

Clupeidae

-Alosa spp.

SILURIFORMES

Siluridae

-Silurus aristotelis

INVERTEBRATES COELENTERATA

CNIDARIA

Corallium rubrum

MOLLUSCA

GASTROPODA - STYLOMMATOPHORA

Helicidae

-Helix pomatia

BIVALVIA - UNIONOIDA

Margaritiferidae

-Margaritifera margaritifera

Unionidae -Microcondylaea compressa -Unio elongatulus ANNELIDA HIRUDINOIDEA - ARHYNCHOBDELLAE Hirudinidae -Hirudo medicinalis ARTHROPODA **CRUSTACEA - DECAPODA** Astacidae -Astacus astacus -Austropotamobius pallipes -Austropotamobius torrentium Scyllaridae -Scyllarides latus **INSECTA - LEPIDOPTERA** Saturniidae -Graellsia isabellae (b) PLANTS ALGAE RHODOPHYTA CORALLINACEAE -Lithothamnium coralloides Crouan frat. -Phymatholithon calcareum (Poll.) Adey & McKibbin **LICHENES** CLADONIACEAE -Cladonia L. subgenus Cladina (Nyl.) Vain. BRYOPHYTA MUSCI LEUCOBRYACEAE -Leucobryum glaucum (Hedw.) AAngstr. **SPHAGNACEAE** -Sphagnum L. spp. (exept Sphagnum pylasii Brid.) PTERIDOPHYTA -Lycopodium spp. ANGIOSPERMAE AMARYLLIDACEAE -Galanthus nivalis L.

-Narcissus bulbocodium L.

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-Narcissus juncifolius Lagasca

## COMPOSITAE

-Arnica montana L.

-Artemisia eriantha Ten

-Artemisia genipi Weber

-Doronicum plantagineum L.

- subsp. tournefortii (Rouy) P. Cout.

## CRUCIFERAE

-Alyssum pintadasilvae Dudley.

-Malcolmia lacera (L.) DC.

- subsp. graccilima (Samp.) Franco

-Murbeckiella pinnatifida (Lam.) Rothm.

- subsp. herminii (Rivas-Martinez) Greuter & Burdet

GENTIANACEAE

-Gentiana lutea L.

IRIDACEAE

-Iris lusitanica Ker-Gawler

## LABIATAE

-Teucrium salviastrum Schreber

- subsp. salviastrum Schreber

LEGUMINOSAE

-Anthyllis lusitanica Cullen & Pinto da Silva

-Dorycnium pentaphyllum Scop.

- subsp. transmontana Franco

-Ulex densus Welw. ex Webb.

LILIACEAE

-Lilium rubrum Lmk

-Ruscus aculeatus L.

PLUMBAGINACEAE

-Armeria sampaio (Bernis) Nieto Feliner

ROSACEAE

-Rubus genevieri Boreau

- subsp. herminii (Samp.) P. Cout.

SCROPHULARIACEAE

-Anarrhinum longipedicelatum R. Fernandes

-Euphrasia mendonçae Samp.

-Scrophularia grandiflora DC.

- subsp. grandiflora DC.

-Scrophularia berminii Hoffmanns & Link -Scrophularia sublyrata Brot.

COMPOSITAE

-Leuzea rhaponticoides Graells

## ANNEX VI

## PROHIBITED METHODS AND MEANS OF CAPTURE AND KILLING AND MODES OF TRANSPORT

(a) Non-selective means

## MAMMALS

- Blind or mutilated animals used as live decoys
- Tape recorders
- Electrical and electronic devices capable of killing or stunning
- Artificial light sources
- Mirrors and other dazzling devices
- Devices for illuminating targets
- Sighting devices for night shooting comprising an electronic image magnifier or image converter
- Explosives
- Nets which are non-selective according to their principle or their conditions of use
- Traps which are non-selective according to their principle or their conditions of use
- Crossbows
- Poisons and poisoned or anaesthetic bait
- Gassing or smoking out
- Semi-automatic or automatic weapons with a magazine capable of holding more than two rounds of ammunition
- FISH
- Poison
- Explosives
- (b) Modes of transport
- Aircraft
- Moving motor vehicles