LYNX - a Special Interest Network on Ecological Networks

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The EMERALD Network - a network of Areas of Special Conservation Interest for Europe

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Bern Convention logo

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

Standing Committee

16th meeting Strasbourg, 2-6 December 1996

Secretariat Memorandum
established by the
Directorate of Environment
and Local Authorities

This short document explains how the EMERALD network was born, its reach and development, its relation with NATURA 2000 and other projects.

1. Introduction

In June 1989 the Standing Committee of the Bern Convention held an extraordinary meeting exclusively devoted to habitat conservation within the Convention. At the meeting the Committee adopted an interpretative resolution (Resolution No. 1 (1989) on the provisions relating to the conservation of habitats) and three operative recommendations (Recommendations Nos. 14, 15 and 16 (1989)) aimed at the development of a network of areas under the Convention. A further recommendation (Recommendation No. 25 (1991) on the conservation of natural areas outside protected areas proper) was adopted at a later meeting of the Committee.

In Recommendation No. 16 (1989) "on Areas of Special Conservation Interest" (ASCIs), the Standing Committee recommended Parties to "take steps to designate Areas of Special Conservation Interest to ensure that the necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility where that area fits one or several of the following conditions..." (a list of conditions followed).

The Committee had wished that all these recommendations on habitat conservation be rapidly implemented by Contracting Parties but two major events delayed their implementation. The first was the fundamental change in the political map of Europe that followed the fall of the Berlin wall in October 1989. The Bern Convention had to change its priorities from the building of a network or areas to the extension of the Convention to the new democracies of Central and Eastern Europe. The second was the preparation, at the European Community, of a legal instrument aimed at implementing the Bern Convention within the Community. (As any other Contracting Party to the Convention, the European Community had the obligation to take "the appropriate and necessary legislative and administrative measures" to implement the Convention.) The legal instrument was finalised in May 1992 and was called the "Directive on the conservation of natural habitats and of wild fauna and flora". Happily, that text did not simply take the text of the Bern Convention, but went much further in developing the obligations on habitat protection (so much that it is now best known as the "Habitats Directive"). The Habitats Directive created "a coherent European ecological network of special areas of conservation ... to be set up under the title of NATURA 2000".

In order to assure coherence between the network of Areas of Special Conservation Interest (ASCIs) to be designated under the Bern Convention and the network of Special Areas of Conservation (SACs) designated under the Habitats Directive, the Standing Committee to the Convention thought preferable to wait for the establishment of the proper mechanism by the Directive. In January 1996, a sufficient number of States of Central and Eastern Europe had become Parties to the Convention and were requesting the development of the network of ASCIs. The Standing Committee, realising this wish and noting that the Habitats Directive was already sufficiently advanced in its work to build NATURA 2000, decided to adopt its Resolution No. 3 (1996), in which it resolved to "set up a network (EMERALD Network) which would include the Areas of Special Conservation Interest designated following its Recommendation No. 16"; it furthermore "encouraged Contracting Parties and observer states to designate Areas of Special Conservation Interest and to notify them to the Secretariat". Resolution No. 3 (1996) was, in a sense, a second act of birth of the network, after its first creation in 1989. More precisely it was an act of baptism as the network had not been given a name in 1989 and it had proved rather awkward to promote a network under the name of "network to develop Recommendation No. 16 (1989) of the Standing Committee of the Convention on areas of special conservation interest". Short names have advantages.

2. Legal support of the EMERALD Network

The Bern Convention does not deal exclusively with the protection of species. Articles 1, 2, 3, 4, 6 and 9 of the Convention deal with the protection of natural habitats, in particular

- habitats of the wild flora and fauna species (specially those in Appendices I and II)
- endangered natural habitats.

Relevant texts of the Convention and the Standing Committee concerning protection of natural habitats are appended to this document.

The EMERALD Network was created by virtue of Recommendation No. 16 (1989) and Resolution No. 3 (1996) and thus benefits from the "soft law" approach characteristic of recommendations. Nevertheless, the obligations to protect natural habitats are not "soft law" but rather strict obligations clearly marked in the Convention, and forming part of international law. The Standing Committee recommended Contracting Parties to implement their obligations regarding natural habitats through the taking of a number of measures, among which the designation of the Areas of Special Conservation Interest (ASCIs) that form the EMERALD Network. Obviously obligations under the Bern Convention can only be requested of Contracting Parties. Other European states were "invited" to participate in the exercise.

The Standing Committee examined the possibility of amending the Convention (or establishing a protocol) to integrate the EMERALD Network into the text of the Convention - thus reinforcing its legal reach - but no decision in that sense had been taken by January 1997.

3. Areas of Special Conservation Interest (ASCIs)

What are Areas of Special Conservation Interest?

Recommendation No. 16 defines Areas of Special Conservation Interest as those designated by states where that area fits one or several of the following conditions:

- 1. it contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention;
- 2. it supports significant numbers of species in an area of high species diversity or supports important populations of one or more species;
- 3. it contains an important and/or representative sample of endangered habitat types;

- 4. it contains an outstanding example of a particular habitat type or a mosaic of different habitat types;
- 5. it represents an important area for one or more migratory species;
- 6. it otherwise contributes substantially to the achievement of the objectives of the convention.

The conditions above point clearly towards areas of a great ecological value for both the threatened and endemic species listed in the Appendices of the Bern Convention and for the endangered habitat types which are to be identified by the Standing Committee as "requiring specific conservation measures".

The EMERALD Network would thus not be simply a box into which any type of protected area can be put, or a mere collection of areas designated under other schemes. Its coherence - much like that of NATURA 2000 - comes from the limited criteria for choice: they have to be important and contribute substantially (the adjective is important!) to the objectives of the Convention.

Which States may designate ASCIs?

Resolution No. 3 (1996) encourages "Contracting Parties and observer states to designate ASCIs" and to notify them to the Secretariat.

The following 31 European states are Contracting Parties to the Convention (in November 1996):

Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom;

and the following 14 European states have the status of observer at the meetings of the Standing Committee:

Albania(*), Azerbaijan, Andorra, Belarus, Bosnia-Herzegovina, Croatia, Czech Republic, Holy See, Latvia, Russia, San Marino, Slovenia, "the former Yugoslav Republic of Macedonia", Ukraine.

(*) signatory

This raises to 45 the number of states which may participate in the EMERALD Network.

The participation of states which are not yet Contracting Parties is not only possible, but highly

desirable. Resolution No. 3 (1996) invites "European states which are observer states in the Standing Committee of the Bern Convention to participate in the network and designate ASCIs".

The participation of non-European (Parties or observers) in the EMERALD Network is unclear at present. While Recommendation No. 14 (1989) does not exclude such participation, Resolution No. 3 (1996) is clearly addressed to European states.

In respect to European Union states, they are recommended (Recommendation No. 14 (1989), like other states, to designate ASCIs. The same might apply for the European Community as Contracting Party, as the Standing Committee recommended Parties to take steps to designate ASCIs "to ensure that necessary and appropriate measures of conservation are taken for each area situated within their territory or under their responsibility ...". In any circumstance, it is clear that Contracting Parties which are members of the European Union and the European Community itself may - if they so wish - coordinate their action in respect to the designation of ASCIs. The activities of designation of SPAs within the Habitats Directive would be more than enough to fulfil the implementation of Recommendation No. 16 and - if the States concerned so wish and decide - it may be their contribution to the EMERALD Network. Indeed no other action would be expected from them, the NATURA 2000 network having identical objectives (and a more solid legal basis) to those of the EMERALD Network. In this respect, the full and thorough implementation of the Habitats Directive is contemplated as a necessary and fundamental step into the achievement of the common goals it shares with the Bern Convention, both concerning the protection of natural habitats and the conservation of wild flora and fauna.

What are the duties of states concerning the status and management of ASCIs?

Once ASCIs have been designated by the states, that is not the end of the EMERALD Network, but rather the start, as states are recommended to take a number of steps (by legislation or otherwise, to ensure that ASCIs are properly managed. They are asked in Recommendation No. 16 (1989) to "ensure, wherever possible that":

- 1. ASCIs "are the subject of an appropriate regime, designed to achieve the conservation of the factors" responsible for the designation of the area;
- 2. "the agencies responsible for the designation and/or management and/or conservation of ASCIs have available to it sufficient manpower, training, equipment and resources (including financial resources) to enable them properly to manage, conserve and survey the areas;
- 3. appropriate ecological and other research is conducted, in a properly coordinated fashion, with a view to furthering the understanding of the critical elements in the management of ASCIs and to monitoring the status of the factors giving rise to their designation and conservation;
- 4. activities taking place adjacent to such areas or within their vicinity do not adversely affect

the factors giving rise to the designation and conservation of those sites."

Furthermore, states are recommended to take steps, as appropriate, in respect of ASCIs to:

- 1. draw up and implement management plans which will identify both short- and long-term objectives (such management plans can relate to individual areas or to a collection of areas such as heathlands);
- 2. regularly review the terms of the management plans in the light of changing conditions or of increased scientific knowledge;
- 3. clearly mark the boundaries of ASCIs on maps and, as far as possible, on the ground;
- 4. advise the competent authorities and landowners of the extent of ASCIs and their characteristics;
- 5. provide for the monitoring of ASCIs and especially of the factors for which their conservation is important."

It is obvious from the paragraphs above that states are invited to pay much conservation attention to ASCIs. There is, however, no precise recommendation to give legal protection to ASCIs, the Standing Committee having preferred to keep a supple wording and having recommended that the areas "be subject to the appropriate regime". As usual the Standing Committee was more interested by the achievement of conservation results than by a particular "area protection" procedure. Some systems may work very well without strong legal obligations attached. In any case the Standing Committee asked states to look into the matter of the protection of ASCIs and the last point of Recommendation No. 16 reads as follows:

The Standing Committee recommends that Contracting Parties:

5. "determine those areas which remain inadequately provided for under existing mechanisms and improve the conservation status of such areas, using whatever mechanisms are appropriate in order to meet the requirements of the convention."

Building the EMERALD Network is designed to be a dynamic process which will need regular updates of the information contained and the way the states comply with the recommendation. Point 2 of Recommendation No. 16 invites states to "review regularly or continually in a systematic fashion their performance in the implementation of [the designation of ASCIs]."

How are ASCIs designated?

Resolution No. 3 (1996) and Recommendation No. 16 (1989) are not very precise on that point. They

encourage Contracting Parties and observer states "to designate ASCIs and to notify them to the Secretariat". Thus the responsibility for designating ASCIs lies with the government of the states concerned. As for the technical details, it is worth noting that Resolution No. 3 created "a group of experts to carry out the necessary activities related to the building up of the network". This group met for the first time in November 1996 and did not discuss this issue in detail but it was stressed that the designation process would be done in such a way that it would be compatible with that of the NATURA 2000 network. A data sheet that needs to be filled in by the states is to be prepared early in 1997. The possibility of being able to fill in the forms electronically is being explored so that, for instance, data gathered for the CORINE-biotopes programme may be used.

Designation of ASCIs will start in 1997, after the preparation of data sheets. The states are expected to notify the Secretariat the ASCIs they designate which will be validated by the Secretariat and incorporated in the EMERALD Network.

Although some decisions in this respect need yet to be taken, it is likely that for Contracting Parties of the Convention which are also member states of the European Community the procedure will be different. In order to assure harmonisation and compatibility with the NATURA 2000 network, they need only to notify which areas have been effectively included in the NATURA 2000 network, after all the necessary verification process agreed in the Habitats Directive, and whether they wish these areas to become part of the EMERALD Network. This procedure is designed to assure full compatibility and coherence of both networks.

4. The work ahead

The Standing Committee thought that, for the designation of ASCIs and for the protection of natural habitat, it was necessary to reinforce the work that Contracting Parties were carrying out in habitat protection. Thus, it decided to ask Parties (in Recommendation No. 14 (1989)) to:

- 1. identify in the areas within their jurisdiction:
 - 1. species requiring specific habitat conservation measures;
 - 2. endangered natural habitats requiring specific conservation measures;
 - 3. migratory species requiring specific habitat conservation measures;
 - 4. species of which the breeding and/or resting sites require protection and their breeding and/or resting site types requiring protection;

and for each of these categories to indicate, as far as possible, their sites".

Although the above tasks were addressed to Contracting Parties, the Standing Committee decided, after 1989, to prepare, for the whole of Europe lists for points a, b, c and d above.

In December 1996 the Standing Committee adopted Resolution No. 4 identifying endangered natural habitats requiring specific conservation measures.

As for the other points, work was well advanced to identify species requiring specific habitat conservation measures (including the migratory species mentioned in *c*. above.

As for *d*. above (species of which the breeding and/or resting sites require protection), while all of them can be considered as included in *a*. above (*ie* they require specific habitat conservation measures), the identification of breeding and/or resting sites requiring protection will be clearly associated with the designation of ASCIs but has not started.

The identification of species requiring specific habitat conservation measures can be a useful step towards the designation of ASCIs because it may guide choices of sites of particular relevance for threatened species. Yet the temporary absence of a list of species requiring special habitat conservation measures should not hinder the designation of ASCIs as these may be chosen when they "contribute substantially to the survival of threatened species, endemic species or <u>any</u> species in Appendices I and II of the Convention".

The tasks ahead for the building of the network will be those aimed at facilitating the designation of ASCIs by states, mainly the following:

- the identification of endangered natural habitats requiring habitat conservation measures,
- the elaboration of a model data sheet form that may be completed by states,
- the elaboration of other technical instruments necessary to ensure coherence with the NATURA 2000 network (Map of Biogeographical Regions, adaptation of software for filling in data sheets, etc),
- the elaboration of lists of species requiring specific habitat conservation measures,
- the identification of sites of importance for migratory species.

5. Relations of the EMERALD Network with NATURA 2000

The Bern Convention (1979) and the Habitats Directive (1992) have a complete coincidence of objectives. Both are international legal instruments aimed at the conservation of wild flora, fauna and natural habitats. Their main differences come from the territory they apply to (European Union member states for the Directive and the whole of Europe and part of Africa for the Convention) and to the fact that the Directive is more explicit on the obligations concerning conservation of natural habitats.

In any case the Directive is a piece of legislation designed to implement the Bern Convention in the European Community and, as such, it is fundamentally coherent with the Convention. As Resolution No. 1 and Recommendations Nos. 14, 15 and 16 were adopted in 1989 and Recommendation No. 25 in 1991, at the time the Directive was being prepared, it is clear that they also influenced the content of the Directive. For instance, the "species requiring specific habitat conservation measures" mentioned in Recommendation No. 14 has its equivalent in Annex II of the Directive ("Animal and plant species of Community interest whose conservation requires the designation of Special Areas of Conservation").

Also the "endangered natural habitats requiring specific habitat conservation measures" of Recommendation No. 14 became Annex I of the Directive ("Natural habitat types of Community interest whose conservation requires the designation of Special Areas of Conservation). Even the term "Areas of Special Conservation Interest" (by the way, inspired by the United Kingdom's Sites of Special Scientific Interest) was taken in the Directive to become finally Special Areas of Conservation. The resemblance is even more striking in French (Zones d'intérêt spécial pour la conservation/Zones spéciales de conservation).

The great interest and merit of the Directive has been to convert into precise law the ideas and recommendations on habitat conservation contained in the Bern Convention, improving its reach and reenforcing its application in the 15 states of the Union.

It is obvious to any independent observer that most of the implementation of the Bern Convention will be carried out within the Union by the full implementation of the Directive.

Regarding the networks NATURA 2000 and EMERALD the only logical and feasible interpretation is that the member states of the European Union will satisfy the habitat requirements of the Bern Convention mostly through the designation of sites to the NATURA 2000 network. If the EU member states so decide, the Special Areas of Conservation of NATURA 2000 will also become Areas of Special Conservation Interest of the EMERALD Network. This will ensure the coherence of the Network for the whole of Europe. No other designation will be requested for EU member states.

There is an obvious advantage in this approach, which is that most of the work to be done in the building of the EMERALD Network will be concentrated in states which are not members of the European Union. In this way it will be possible to extend to the whole of Europe a homogeneous network of areas, helping to break down in this sector the barriers that history, politics and economic reality have imposed on the European continent. This is in line with the missions, the challenges and the ambitions of the Council of Europe.

Additionally, it may also help some states, candidates to join the European Union, to do part of the preparatory work necessary to comply in advance with the Habitats Directive. It seems evident that if a state designates a coherent network of ASCIs within the EMERALD Network, it will be in a more favourable position to designate its own ASC when it joins the Union. Such a possibility calls for a coordination of the Council of Europe, serving the Bern Convention, and the European Commission, responsible for the Directive, to discuss technical matters derived from the building of both networks.

In a sense the EMERALD Network will take farther than the borders of the European Union the philosophy of the NATURA 2000 network and will materialise in the whole continent the fundamentally coincident objectives of both the Bern Convention and the Habitats Directive regarding conservation of natural habitats. Its success will be that of nature conservation in Europe.

APPENDIX

CONVENTION TEXTS ON HABITAT PROTECTION

SUMMARY

- 1. Articles 1, 2, 3, 4, 6b and 9 of the Convention
- 2. Resolution No 1 (1989) of the Standing Committee on the provisions relating to the conservation of habitats
- 3. Recommendation No 14 (1989) of the Standing Committee on species habitat conservation and on the conservation of endangered natural habitats
- 4. Recommendation No 15 (1989) of the Standing Committee on the conservation of endangered natural habitat types
- 5. Recommendation No 16 (1989) of the Standing Committee on areas of special conservation interest
- 6. Recommendation No 25 (1991) of the Standing Committee on the conservation of natural areas outside protected areas proper
- 7. Resolution No. 3 (1996) of the Standing Committee concerning the setting up of a pan-European Ecological Network (EMERALD Network
- 8. Resolution No. 4 (1996) Listing endangered natural habitats requiring specific conservation measures

Articles 1, 2, 3, 4, 6b and 9 of the Convention

"(...)

Chapter I - General provisions

Article 1

1. The aims of this Convention are to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation.

2. Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species.

Article 2

The Contracting Parties shall take requisite measures to maintain the population of wild flora and fauna at, or adapt it to, a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements and the needs of subspecies, varieties or forms at risk locally.

Article 3

- 1. Each Contracting Party shall take steps to promote national policies for the conservation of wild flora, wild fauna and natural habitats, with particular attention to endangered and vulnerable species, especially endemic ones, and endangered habitats, in accordance with the provisions of this Convention.
- 2. Each Contracting Party undertakes, in its planning and development policies and in its measures against pollution, to have regard to the conservation of wild flora and fauna.
- 3. Each Contracting Party shall promote education and disseminate general information on the need to conserve species of wild flora and fauna and their habitats.

Chapter II - Protection of habitats

Article 4

- 1. Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in the Appendices I and II, and the conservation of endangered natural habitats.
- 2. The Contracting Parties in their planning and development policies shall have regard to the conservation requirements of the areas protected under the preceding paragraph, so as to avoid or minimise as far as possible any deterioration of such areas.
- 3. The Contracting Parties undertake to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III and which are appropriately situated in relation to migration routes, as wintering, staging, feeding, breeding or moulting areas.

4. The Contracting Parties undertake to co-ordinate as appropriate their efforts for the protection of the natural habitats referred to in this article when these are situated in frontier areas.

Chapter III - Protection of species

Article 6

Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II. The following will in particular be prohibited for these species:

b. the deliberate damage to or destruction of breeding or resting sites;

Article 9

- 1. Each Contracting Party may make exceptions from the provisions of Articles 4, 5, 6, 7 and from the prohibition of the use of the means mentioned in Article 8 provided that there is no other satisfactory solution and that the exception will not be detrimental to the survival of the population concerned:
 - o for the protection of flora and fauna;
 - to prevent serious damage to crops, livestock, forests, fisheries, water and other forms of property;
 - o in the interests of public health and safety, air safety or other overriding public interests;
 - o for the purposes of research and education, of repopulation, of reintroduction and for the necessary breeding;
 - o to permit, under strictly supervised conditions, on a selective basis and to a limited extent, the taking, keeping or other judicious exploitation of certain wild animals and plants in small numbers.
- 2. The Contracting Parties shall report every two years to the Standing Committee on the exceptions made under the preceding paragraph. These reports must specify:
 - the populations which are or have been subject to the exceptions and, when practical, the number of specimens involved;
 - o the means authorised for the killing or capture;

- the conditions of risk and the circumstances of time and place under which such exceptions were granted;
- o the authority empowered to declare that these conditions have been fulfilled, and to take decisions in respect of the means that may be used, their limits and the persons instructed to carry them out;
- the controls involved."

(...)

RESOLUTION No. 1 (1989)

OF THE STANDING COMMITTEE

ON THE PROVISIONS RELATING TO THE CONSERVATION OF HABITATS

(Adopted by the Standing Committee of 9 June 1989 at its 8th Meeting)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to the obligations laid down by the convention, particularly in Articles 1, 2, 3, 4, 6.*b* and 9;

Conscious of the fact that most of these obligations bind Contracting Parties as to the results to be attained, while leaving them the choice of the means to be used for that purpose;

Recognising, however, that the absence of a common interpretation of certain provisions of the convention, and certain terms contained therein, may lead to considerable differences in the legal interpretation of the convention by individual Contracting Parties and may undermine the effectiveness of the convention:

Desirous to promote agreement, as much as possible, among Contracting Parties as to what is required to be done in order to implement the convention;

Convinced that a common interpretation of certain of the provisions and terms of the convention, particularly in Articles 4, 6.b and 9, will facilitate the achievement of the aims of the convention in a

harmonised way by all Contracting Parties,

Resolves that, for the purpose of improving the effectiveness of the convention, the terms listed hereunder are to be interpreted as follows:

1. For the purpose of the convention:

- 1. "habitat" of a species (or population of a species) means the abiotic and biotic factors of the environment, whether natural or modified, which are essential to the life and reproduction of members of that species (or population of that species) and which occur within the natural geographical range of the species (or population of that species);
- 2. "natural habitat" means a biotope, that is a distinctive type of terrestrial or aquatic area distinguished by geographic, abiotic or biotic features, whether entirely natural or modified as a result of human activities:

2. For the purpose of Article 4:

- 1. "necessary measures" means in particular those measures which are required:
 - 1. to ensure the conservation of the habitats of those species which have been identified by the Standing Committee, on the basis of scientific evidence, as requiring specific habitat conservation measures and, most particularly, of those part of their geographical range which are essential for the conservation of those species (hereinafter referred to as "critical sites");
 - 2. to ensure the conservation of those natural habitats which have been identified by the Standing Committee, on the basis of scientific evidence, as being endangered natural habitats and requiring specific conservation measures;
- 2. "appropriate measures" means in particular those measures, pursuant to paragraph *a* above, which are able to ensure the conservation of the habitat of particular species or of particular natural habitats;
- 3. "conservation" means the maintenance and, where appropriate, the restoration or improvement of the abiotic and biotic features which form the habitat of a species or a natural habitat, as defined in paragraph I above, and includes, where appropriate, the control of activities which may indirectly result in the deterioration of such habitats, including areas of importance for the migratory species specified in Appendices II and III, even where such areas are outside the jurisdiction of the Party in question;
- 4. "areas of importance for the migratory species specified in Appendices II and III" means the critical sites, wherever situated, of those migratory species which have been identified by the

Standing Committee, on the basis of scientific evidence, as requiring specific habitat conservation measures:

- 5. the conditions attached by Article 9 to the making of exceptions from the provisions of Article 4, as well as the obligation laid down in that article to report such exceptions to the Standing Committee, shall apply to:
 - 1. the critical sites of those species which have been identified by the Standing Committee, pursuant to paragraph *a*.i above;
 - 2. natural habitats which have been identified by the Standing Committee, pursuant to paragraph *a*.ii above;
 - 3. areas of importance for migratory species which have been identified by the Standing Committee, pursuant to paragraph *d* above;
- 3. For the purpose of Article 6.*b*:
 - 1. "breeding and resting sites" means, in respect of each species for which the Standing Committee has identified that breeding and/or resting sites require protection, those breeding and/or resting site types in respect of which the Standing Committee has considered that such measures are required;
 - 2. "deliberate damage to or destruction of breeding or resting sites" means, subject to relevant provisions of the law of each Contracting Party, any act committed with the intention of destroying or causing harm to breeding or resting sites as defined in paragraph *a* above, and any act committed without the intention to cause damage or destruction but in the knowledge that such would probably by the consequences of the act;
 - 3. the conditions attached by Article 9 to the making of exceptions from the provisions of Article 6.*b*, as well as the obligation, laid down in that article, to report these exceptions to the Standing Committee, only apply to those breeding and resting site types in respect of which the Standing Committee has considered that they require protection pursuant to paragraph *a* above.

RECOMMENDATION No. 14 (1989)

OF THE STANDING COMMITTEE

ON SPECIES HABITAT CONSERVATION

AND ON THE CONSERVATION OF ENDANGERED NATURAL HABITATS

(Adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Considering Articles 3 and 4 of the convention;

Having regard to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats, and to the decision it has taken to act by virtue of paragraph 2, sub-paragraphs a and d, and paragraph 3, sub-paragraph a of that resolution,

Recommends that Contracting Parties:

- 1. identify in the areas within their jurisdiction:
 - 1. species requiring specific habitat conservation measures;
 - 2. endangered natural habitats requiring specific conservation measures;
 - 3. migratory species requiring specific habitat conservation measures;
 - 4. species of which the breeding and/or resting sites require protection and their breeding and/or resting site types requiring protection;

and for each of these categories to indicate, as far as possible, their sites;

- 2. identify, furthermore, endangered species on their territory requiring recovery plans, and develop and implement such plans;
- 3. communicate to the Standing Committee the results of their work in the implementation of the recommendations above:
- 4. ensure that appropriate and necessary measures of conservation are taken for the species, habitats and sites identified according to paragraphs 1 and 2 above.

RECOMMENDATION No. 15 (1989)

OF THE STANDING COMMITTEE

ON THE CONSERVATION OF ENDANGERED NATURAL HABITAT TYPES

(Adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to the provisions of Articles 4 and 9, paragraph 1, of the convention and to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;

Conscious of the need not to endanger the survival of habitat types,

Recommends that Contracting Parties make exceptions to Article 4, by virtue of Article 9, paragraph 1, with respect to endangered natural habitat types as identified by the Standing Committee in Resolution No. 1 (1989) only in exceptional circumstances and provided that the exceptions will not be detrimental to the survival of the habitat type concerned.

RECOMMENDATION No. 16 (1989)

OF THE STANDING COMMITTEE

ON AREAS OF SPECIAL CONSERVATION INTEREST

(Adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under Article 14 of the convention,

- Having regard to Article 4 of the convention and to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;
- Desirous of establishing common criteria for the identification of areas to be conserved;
- Desirous also of ensuring that the conservation and management of such areas have regard to certain minimum requirements,

Recommends that Contracting Parties:

1. take steps to designate areas of special conservation interest to ensure that necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility where that area fits one or several of the following conditions:

- 1. it contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention;
- 2. it supports significant numbers of species in an area of high species diversity or supports important populations of one or more species;
- 3. it contains an important and/or representative sample of endangered habitat types;
- 4. it contains an outstanding example of a particular habitat type or a mosaic of different habitat types;
- 5. it represents an important area for one or more migratory species;
- 6. it otherwise contributes substantially to the achievement of the objectives of the convention;
- 2. review regularly or continually in a systematic fashion their performance in the implementation of paragraph 1 above;
- 3. take such steps, either by legislation or otherwise, to ensure wherever possible that:
 - 1. areas referred to in paragraph 1 above are the subject of an appropriate regime, designed to achieve the conservation of the factors set out in that paragraph;
 - 2. the agencies responsible for the designation and/or management and/or conservation of such areas or any one of them have available to it sufficient manpower, training, equipment and resources (including financial resources) to enable them properly to manage, conserve and survey the areas;
 - 3. appropriate ecological and other research is conducted, in a properly co-ordinated fashion, with a view to furthering the understanding of the critical elements in the management of such areas and to monitoring the status of the factors giving rise to their designation and conservation;
 - 4. activities taking place adjacent to such areas or within their vicinity do not adversely affect the factors giving rise to the designation and conservation of those sites;
- 4. take steps, as appropriate, in respect of areas referred to in paragraph 1 above, to:
 - 1. draw up and implement management plants which will identify both short- and long-

term objectives (such management plans can relate to individual areas or to a collection of areas such as heathlands);

- 2. regularly review the terms of the management plans in the light of changing conditions or of increased scientific knowledge;
- 3. clearly mark the boundaries of such areas on maps and, as far as possible, on the ground;
- 4. advise the competent authorities and landowners of the extent of the areas and their characteristics;
- 5. provide for the monitoring of such areas and especially of the factors for which their conservation is important;
- 5. determine those areas which remain inadequately provided for under existing mechanisms and improve the conservation status of such areas, using whatever mechanisms are appropriate in order to meet the requirements of the convention.

RECOMMENDATION No. 25 (1991)

OF THE STANDING COMMITTEE

ON THE CONSERVATION OF NATURAL AREAS OUTSIDE PROTECTED AREAS PROPER

(Adopted by the Standing Committee on 6 December 1991)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under Article 14 of the convention,

Having regard to Articles 1, 2, 3 and 4 of the convention and to its Resolution No. 1 (1989);

Conscious that most of the obligations under Articles 1, 2, 3 and 4 of the convention are binding upon the Contracting Parties as to the results to be attained while allowing them a choice of the means to be used for that purpose;

Conscious that the establishment of protected areas of the A and B categories defined in Resolution 73 (30) of the Committee of Ministers of the Council of Europe of 26 October 1973 may prove to be insufficient to comply with the obligations of the convention;

Recognising that measures to conserve natural habitats outside protected areas thus defined are necessary for the protection of some species;

Recognising, however, that certain forms of action have proved particularly effective in the countries where they have been adopted and that the experience thus acquired should be brought to the attention of all Contracting Parties;

Recognising that flora and fauna conservation is possible only in the context of a regional planning policy conserving their environments and habitats,

Recommends that Contracting Parties:

- 1. Examine the possibility, for the purpose of the convention, of taking conservation measures such as those mentioned as examples in the appendix to this recommendation to improve conservation outside the protected areas of categories A and B of the above-mentioned Resolution (73) 30 of the Committee of Ministers;
- 2. Communicate to the Secretariat, for the information of the other Contracting Parties, any other relevant measures they have already taken or intend to take as well as any available information on the effects of measures they have taken.

Appendix

Examples of conservation measures $\frac{1}{2}$

- I. General measures for promoting ecological management of the environment as a whole
- 1. Submit all projects, plans, programmes and measures with an impact on the natural and seminatural environment to an examination of environmental compatibility with a view to protecting nature and landscapes and conserving them intact in cases where there is an overriding general interest in doing so.
- 2. Take care to use agricultural land and forests in a sustainable way by making maximum possible use of natural protection capacities and by reducing inputs.
- 3. Encourage the use of environment friendly technologies when carrying out technical operations in natural or semi-natural environment, and replace large-scale single operations by regular maintenance measures which are more evenly distributed in time and space. If it is impossible to avoid affecting natural or semi-natural environments which are worth protecting, ensure that mitigation measures are taken to minimise as much as possible the negative effects of the operations, to restore, or failing this, to replace them by adequate compensation.

II. Areas of special conservation interest

- 1. Draw up a detailed inventory of areas of special conservation interest as defined in paragraph 1 of the Standing Committee's Recommendation No. 16 (1989) and ensuring the conservation and management of those areas, when it is not possible or appropriate to include them in protected areas of categories A and B, by taking, in particular, the following measures:
 - 1. including those areas in land-use planning zones which enjoy a high level of protection;
 - 2. requiring that any development or activity liable to have an adverse ecological impact on those areas be subject to the authorisation, consultation, or agreement of the nature conservation authorities:
 - 3. requiring that any request for permission submitted in accordance with paragraph b above be accompanied by an environmental impact assessment or equivalent assessment making it possible to determine the precise effects of the proposed development or activity on the ecological characteristics which warranted the inclusion of those areas in the inventory;
 - 4. advising government agencies against carrying out, authorising or subsidising developments or activities which are shown by the environmental impact assessment or equivalent assessment adversely to affect significantly those ecological characteristics;
 - 5. granting exceptions to these provisions only under the conditions specified in Article 9 of the convention and in Recommendation No. 15 (1989) of the Standing Committee;
 - 6. taking the necessary measures to ensure that laws and regulations laying down obligations with regard to drainage, use of phytosanitary products, dredging of watercourses, consolidation of land-holdings or other activities liable to harm the natural environment are not compulsorily applicable to areas appearing in the inventory.
- 2. Facilitate the acquisition and management of areas of special conservation interest by the state or other public bodies in particular by taking the following measures:

1. Acquisition:

- 1. establishing a right of pre-emption for the state or other public bodies in respect of land included in the said areas;
- 2. authorising land forming part of those areas to be transferred to the state in lieu of inheritance tax;
- 3. introducing incentives to encourage gifts and bequests of land included in those areas

to the state or to other public bodies, such as tax concessions, the payment of an annuity to donors until their deaths or authorising donors to stay on until their death, as usufructuaries;

2. Management:

- 1. when a government agency is not in a position to manage land it owns or is responsible for within an area of special interest, arranging for the land to be managed by another government agency or a private person;
- 2. authorising the conclusion of long-term management contracts between the government agency that owns or is responsible for the land and a public body or private person;
- 3. authorising the nature conservation agency to conclude co-operative agreements with the public body owning or responsible for the land, for the purpose of managing the land concerned.
- 3. Facilitate the acquisition, conservation and management of areas of special conservation interest by private persons, in particular by taking the following measures:

1. Acquisition:

granting subsidies, loans and tax concessions to private nature conservation organisations for the acquisition of land included in such areas;

2. Conservation:

- 1. setting up voluntary reserves approved by a government agency and enjoying as such the same level of protection as reserves set up by government agencies themselves;
- 2. authorising the imposition by contract of land use restrictions which may be binding upon successors in title;
- 3. granting tax concessions to owners or occupiers who comply with these restrictions. It should be possible to apply the concessions to property tax and inheritance tax. In the latter case, it should be possible to grant concessions to heirs who undertake to conserve and manage the areas concerned according to a management plan drawn up by the conservation authorities. In the event of failure to observe the conditions in this plan, inheritance tax would immediately become due;
- 4. providing the state with the necessary legal powers to introduce immediate controls prohibiting all potentially harmful activities in the event of a threat to the integrity of an area of special interest and, where necessary, to expropriate the land in question;

3. Management:

1. setting up a system of management agreements, where such a system does not already

exist, between the state or another public body on the one hand, and the owners of land included in areas of special interest on the other, whereby the latter undertake to perform or refrain from certain actions in return for fair remuneration and other possible benefits such as tax concessions;

2. eliminating legal obstacles liable to hamper the conservation of land within areas of special interest, particularly rules prohibiting the owner from including in a farm lease clauses that limit the tenant farmer's freedom, for example with regard to the removal of banks and hedges or the ploughing up of meadowland.

III. Ecological corridors

Encourage the conservation and, where necessary, the restoration of ecological corridors in particular by taking the following measures:

1. Rights of way of roads, railways and high-voltage lines

Authorising agreements between nature conservation authorities and government or other public bodies owning or responsible for such areas with a view to maintaining natural plant cover and preserving the sites of rare or endangered plant species, prohibiting or limiting the use of phytosanitary products and of fire in those areas, as well as restricting the use of machinery to the strict minimum necessary necessary for safety reasons.

Taking measures to restore or to compensate for the loss of ecological corridors caused by the building of new roads and other constructions that prevent animals from migrating or interchanging. In these cases, the responsible authority has to safeguard such crossing routes, for example, by building special tunnels for otters, badgers, by building so-called cerviducts for deer, by closing roads during the spring migrational period for amphibians, or by any other appropriate measures.

2. Watercourses

Maintaining certain watercourses or parts thereof in their natural state, and where necessary restoring them, by prohibiting the building of dams, any straightening or canalisation work and the extraction of materials from their beds, and by maintaining or restoring vegetation along their banks. Ensuring that dredging operations, when they prove essential, do not harm the integrity of the aquatic ecosystem or of the banks.

On other watercourses, limiting canalisation and straightening work to whatever is absolutely essential, providing fish passes across dams, maintaining a minimum flow in low-water periods as far as possible, limiting extraction of materials from the bed and maintaining vegetation along the banks.

IV. Habitat types

1. Ensure the conservation of endangered habitat types such as wetlands, heathlands and dry

grasslands by requiring that all projects liable to cause their deterioration or destruction be subject to the permission (or agreement) of the authority responsible for nature conservation.

- 2. Subject permission, once it has been granted, to an obligation, where appropriate, to take suitable compensation measures.
- 3. Set up a system of management agreements, together with financial incentives, to provide for the management of certain habitat types, whether or not they are protected.

V. Landscape features

Encourage the conservation of landscape features such as streams, ponds, small woods, individual trees, hedges and natural grassland, in particular, by taking the following measures:

- 1. drawing up in each municipality an inventory of landscape features which should be preserved;
- 2. taking these features into account in the preparation or revision of land-use plans by including them in zones enjoying a high level of protection;
- 3. setting up a system of management agreements for the preservation and, where appropriate, the management of the landscape features thus protected;
- 4. for each agricultural production unit, establishing, in agreement with the farmer, a conservation plan comprising:
 - 1. an ecological analysis of the unit;
 - 2. a map of landscape features and natural areas to be conserved and, where necessary, restored or reconstituted;
 - 3. practicable and advisable "extensification" methods;
 - 4. setting aside certain plots of land where appropriate, selected on the basis of an ecological study;
 - 5. a management agreement specifying the results to be achieved, the means needed to achieve them and the amounts to be paid to the farmer by way of compensation or remuneration for services rendered.

VI. Ecologically sensitive areas

Set up special legal regimes applicable to certain areas requiring specific measures on account of

their ecological vulnerability and the various kinds of pressure to which they are exposed, including, in particular, the following measures:

1. Coastlines and adjacent marine areas

- 1. setting up a legal regime for natural areas in the public maritime domain which takes account of the need to preserve the natural habitats comprising them and which regulates activities liable to affect them adversely;
- 2. instituting binding land-use plans for marine areas which are of special ecological interest or require special protective measures on account of their vulnerability;
- 3. adopting special planning regulations prohibiting or limiting new development, especially the building of roads, on the coastline;
- 4. protecting landscape features and habitats characteristic of coastal ecosystems, such as dunes, beaches, cliffs, wetlands, salt marshes and woodlands, by including them in land-use planning zones enjoying the highest level of protection;
- 5. as far as possible, eliminating the difficulties due to the division of powers between different government agencies on either side of the upper limit of the public maritime domain by setting up a co-ordinating mechanism allowing for the management of the coastline and the adjacent marine areas, particularly protected ones, as a single unit.

2. Mountains

- 1. providing for financial means of enocuragement along with management agreements to maintain the rural mountain population, while promoting farming methods respectful of natural habitats and the balance of nature; adjusting aid arrangements for stock-breeding in mountain areas to the carrying capacity of the pastureland;
- 2. designating areas where the building of roads, except access tracks to pastures and forests, and the construction of buildings and other structures are prohibited;
- 3. including in land-use planning zones enjoying the highest level of protection the landscape features and habitats typical of mountain ecosystems, such as glaciers, névés, moraines, rock faces, scree, high-altitude lakes, torrents, peat bogs and dry grasslands;
- 4. regulating off-piste skiing, the spreading of artificial snow, the use of cross-country vehicles and any other activities liable to harm mountain ecosystems.

3. Flood plains

- 1. maintaining and, where possible, restoring the natural cycle of flooding in flood-plains;
- 2. designating flood-risk areas and subjecting them to special restrictions, particularly with regard to building;
- 3. protecting landscape features and habitats that are typical of flood plains, such as alluvial forests, water meadows, oxbow lakes and islands, by including them in land-use planning zones enjoying the highest level of protection;
- 4. encouraging the continuation of traditional agricultural and stock breeding methods by means of subsidies and management agreements;
- 5. requiring prior authorisation for any drainage or conversion of wetlands in a flood plain;
- 6. creating river nature parks, in accordance with paragraph VII.3 below.

4. Forests

- 1. Maintaining at least 2% of the surface area of publicly-owned indigenous and natural forests in its natural state by letting biological cycles, including the recycling of dead wood, occur freely;
- 2. setting up a system of management agreements with the owners of private forests to encourage the conservation of certain forest ecosystems or the continuation of certain forestry practices;
- 3. adopting regulations to ensure the protection of forest clearings and edges;
- 4. requiring that, after an environmental impact assessment has been carried out, any afforestation of semi-natural or natural non-wooded land and any conversion of natural forest into artificial forest be subject to the permission (or agreement) of the authority responsible for nature conservation and/or forest management.

VII. Protected landscapes

1. Set up a network of nature parks of the C and D categories defined in Resolution (73) 30 of the Committee of Ministers with a view to conserving European landscapes by managing all their component elements in an integrated way.

- 2. Provide each nature park thus defined with the following means of action:
 - 1. a specific land-use planning instrument with which the land-use plans of municipalities situated in the park must comply, and which includes the zoning and regulation of human activities according to the conservation needs of each zone;
 - 2. incentives to encourage the maintenance of traditional activities compatible with the conservation needs of each zone, or necessary to achieve them;
 - 3. administration specific to each park and empowered to grant the permits required to carry out those activities which are regulated in each zone;
 - 4. adequate funds and staff for providing information, encouragement and financial or technical assistance to all public bodies and private individuals that own land or carry out activities in the park.
- 3. Pay particular attention to establishing river nature parks covering the whole width of the flood plain, on either side of certain watercourses or parts thereof, where hydraulic schemes, drainage and any activities liable to harm river and alluvial ecosystems are regulated.

RESOLUTION No. 3 (1996)

OF THE STANDING COMMITTEE

CONCERNING THE SETTING UP OF A PAN-EUROPEAN ECOLOGICAL NETWORK

(Adopted by the Standing Committee on 26 January 1996)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Desirous to pursue the implementation of its Recommendation No. 16 (1989) on areas of special conservation interest:

Desirous also to contribute as a first step to the implementation of the Pan-European Biological and Landscape Diversity Strategy, in particular to Theme 1 of the strategy "Establishing the Pan-European ecological network", as endorsed at the Ministerial Conference "Environment for Europe" (Sofia, Bulgaria, October 1995),

Resolves to:

- 1. set up a network (EMERALD Network) which would include the areas of special conservation interest designated following its Recommendation No. 16;
- 2. create a group of experts to carry out the necessary activities related to the building up of the network;
- 3. encourage contracting parties and observer states to designate areas of special conservation interest and to notify them to the Secretariat;
- 4. invite European states which are observer states in the Standing Committee of the Bern Convention to participate in the network and designate areas of special conservation interest.

RESOLUTION No. 4 (1996)

OF THE STANDING COMMITTEE

LISTING ENDANGERED NATURAL HABITATS REQUIRING SPECIFIC CONSERVATION MEASURES

(Adopted by the Standing Committee on 6 December 1996)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to its Resolution No. 1 (1989) on the provisions relating to the conservation of habitats,

Having regard to its Recommendation No. 14 (1989) on species habitat conservation and on the conservation of endangered natural habitats,

Acknowledging that for Contracting Parties which are Member States of the European Union the list of natural habitats requiring specific conservation measures corresponds to Annex I of the Council Directive 92/43/EEC,

Resolves to identify the natural habitats listed in Annex I to this resolution as endangered natural habitat types requiring specific conservation measures. (Selected habitats are marked with the sign!)

Resolves to update periodically Annex I to this resolution.

ANNEX I

ENDANGERED NATURAL HABITAT TYPES

1. COASTAL AND HALOPHYTIC COMMUNITIES

11. OCEAN AND SEAS, MARINE COMMUNITIES

11.2 Benthic communities

- ! 11.22 Sublittoral soft seabeds
- ! 11.24 Sublittoral rocky seabeds and kelp forests
- ! 11.25 Sublittoral organogenic concretions
- ! 11.26 Sublittoral cave communities
- ! 11.27 Soft sediment littoral communities
- ! 11.3 Sea-grass meadows
- 11.4 Brackish sea vascular vegetation
- ! 11.42 Marine spike-rush beds

12. SEA INLETS AND COASTAL FEATURES

! 12.7 Sea-caves

13. ESTUARIES AND TIDAL RIVERS

! 13.2 Estuaries

! 14. MUD FLATS AND SAND FLATS

15. SALTMARSHES, SALT STEPPES, SALT SCRUBS, SALT FORESTS

15.1 Annual salt pioneer swards

17. SHINGLE BEACHES

! 16.3 Humid dune-slacks

! 16.2 Dunes

! 15.8 Mediterranean salt steppes

! 15.9 Mediterranean gypsum scrubs

! 15.A Continental salt steppes and saltmarshes

16. COASTAL SAND DUNES AND SAND BEACHES

! 17.3 Sea kale communities

1 4		COTAT	ACDOCYCTEMIC	۹
IA.	CUA	SIAL	AGROSYSTEMS)

! 1A.1 Machair

2. NON-MARINE WATERS

! 21. COASTAL LAGOONS

22. STANDING FRESH WATER

22.1 Permanent ponds and lakes

! 22.11 Lime-deficient oligotrophic waterbodies

22.3 Amphibious communities

- ! 22.31 Euro-Siberian perennial amphibious communities
- 22.32 Euro-Siberian dwarf annual amphibious swards
- ! 22.321 Dwarf spike-rush communities
- ! 22.322 Dune-slack centaury swards
- 22.323 Dwarf toad-rush communities
- ! 22.3232 Small galingale swards
- ! 22.3233 Wet ground dwarf herb communities
- 22.34 Mediterraneo-Atlantic amphibious communities
- ! 22.341 Short Mediterranean amphibious swards
- ! 22.342 Tall Mediterranean amphibious swards
- ! 22.344 Serapias grasslands
- 22.35 Central Eurasian amphibious communities

! 22.351	Pannonic	riverbank	dwarf s	sedge	communities
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22.4 Euhydrophyte communities

22.41 Free-floating vegetation

! 22.412 Frogbit rafts

! 22.413 Water-soldier rafts

! 22.414 Bladderwort colonies

! 22.415 Salvinia covers

! 22.416 Aldrovanda communities

22.43 Rooted floating vegetation

22.431 Floating broad-leaved carpets

! 22.4316 Sacred lotus beds

22.432 Shallow-water floating communities

! 22.4321 Water crowfoot communities

! 22.4323 Water violet beds

! 22.44 Chandalier algae submerged carpets

! 22.5 Turlough and lake-bottom meadows

23. STANDING BRACKISH AND SALT WATER

! 23.1 Athalassal saline lakes

! 23.3 Salt lake islands

24. RUNNING WATER

! 24.2 River gravel banks

3. SCRUB AND GRASSLAND

31. TEMPERATE HEATH AND SCRUB

!	31.1	Euro	pean	wet	heaths
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! 31.2 European dry heaths

! 31.3 Macaronesian heaths

31.4 Alpine and boreal heaths

31.42 Alpenrose heaths

! 31.424 Carpathian Kotschy's alpenrose heaths

! 31.425 Balkan Kotschy's alpenrose heaths

! 31.46 Bruckenthalia heaths

! 31.7 Hedgehog-heaths

31.8 Western Eurasian thickets

31.8B South-eastern deciduous thickets

! 31.8B1 Pannonic and sub-Pannonic thickets

32. SCLEROPHYLLOUS SCRUB

32.2 Thermo-Mediterranean shrub formations

! 32.22 Tree-spurge formations

! 32.24 Palmetto brush

! 32.25 Mediterranean pre-desert scrub

! 32.26 Thermo-Mediterranean broom fields (retamares)

! 32.2B Cabo de Sao Vicente brushes

! 33. PHRYGANA

34. STEPPES AND DRY CALCAREOUS GRASSLANDS

34.1 Middle European pioneer sw	vards
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- 34.11 Middle European rock debris swards
- ! 34.112 Houseleek communities
- ! 34.2 Lowland heavy metal grasslands
- ! 34.3 Dense perennial grasslands and middle European steppes
- ! 34.5 Mediterranean xeric grasslands
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- ! 34.A Sand steppes
- 35. DRY SILICEOUS GRASSLANDS
- 35.1 Atlantic mat-grass swards and related communities
- ! 35.11 Mat-grass swards
- ! 35.7 Mediterraneo-montane mat-grass swards
- 37. HUMID GRASSLAND AND TALL HERB COMMUNITIES
- 37.1 Lowland tall herb communities
- ! 37.13 Continental tall herb communities
- ! 37.14 Eastern nemoral tall herb communities
- ! 37.2 Eutrophic humid grasslands
- ! 37.3 Oligotrophic humid grasslands
- ! 37.4 Mediterranean tall humid grasslands
- 37.7 Humid tall herb fringes
- 37.71 Watercourse veils

! 37.711 Angelica archangelica fluvial communities
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! 37.712 Angelica heterocarpa fluvial communities

! 37.713 Marsh mallow screens

38. MESOPHILE GRASSLANDS

38.2 Lowland high meadows

! 38.25 Continental meadows

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41. BROAD-LEAVED DECIDUOUS FORESTS

! 41.1 Beech forests

! 41.2 Oak-hornbeam forests

! 41.4 Mixed ravine and slope forests

! 41.5 Acidophilous oak forests

! 41.6 Quercus pyrenaica forests

! 41.7 Thermophilous and supra-Mediterranean oak woods

! 41.8 Mixed thermophilous forests

! 41.H Euxino-Hyrcanian mixed deciduous forests

42. TEMPERATE CONIFEROUS FORESTS

42.1 Western Palaearctic fir forests

! 42.15 Southern Apennine silver fir forests

! 42.16 Southern Balkan silver fir forests

! 42.17 Balkano-Pontic fir forests

! 42.19 Afro-Asian fir forests

42.2 Western Palaearctic orogenous spruce forests

- ! 42.21 Alpine and Carpathian sub-alpine spruce forests
- ! 42.22 Inner range montane spruce forests
- ! 42.23 Hercynian subalpine spruce forests
- 42.24 Sub-Mediterranean Norway spruce forests
- ! 42.241 Rhodope spruce forest
- ! 42.243 Montenegrine spruce forest
- ! 42.244 Paeonian spruce forest
- ! 42.245 Balkan Range spruce forest
- ! 42.27 Omorika spruce forests
- ! 42.28 Oriental spruce forests

42.3 Alpine larch-arolla forests

- ! 42.31 Eastern Alpine siliceous larch and arolla forests
- ! 42.32 Eastern Alpine calcicolous larch and arolla forests
- ! 42.35 Carpathian larch and arolla forests
- ! 42.36 Larix polonica forests

42.4 Mountain pine forests

- ! 42.41 Rusty alpenrose mountain pine forests
- ! 42.42 Xerocline mountain pine forests

42.5 Western Palaearctic Scots pine forests

! 42.51 Caledonian forest

LYNX - The EMERALD network
42.52 Middle European Scots pine forests
42.523 Western Eurasian steppe pine forest
! 42.5232 Sarmatic steppe pine forest
! 42.5233 Carpatian steppe pine frests
! 42.5234 Pannonic Scots pine steppe woods
42.54 Spring heath Scots pine forests
! 42.542 Carpatian relict calcicolous Scots pine forest
! 42.5C South-eastern European Scots pine forests
! 42.5F Ponto-Caucasian Scots pine forests
42.6 Black pine forests
! 42.61 Alpino-Apennine <i>Pinus nigra</i> forests
! 42.62 Western Balkan <i>Pinus nigra</i> forests
! 42.63 Salzmann's pine forests
! 42.64 Corsican laricio pine forests
! 42.65 Calabrian laricio pine forests
! 42.66 Banat and Pallas' pine forests
! 42.7 High oro-mediterranean pine forests
42.8 Mediterranean pine woods
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! 42.811 Charente pine-holm oak forests
1 42 812 Aquitanian nine-cork oak forests

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LYNX - The EMERALD network
! 42.82 Mesogean pine forests
! 42.83 Stone pine forests
42.84 Aleppo pine forests
! 42.841 Iberian Aleppo pine forests
! 42.842 Balearic Aleppo pine forests
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! 42.844 Corsican Aleppo pine woods
! 42.845 Sardinian Aleppo pine woods
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! 42.8471 Gargano Aleppo pine forests
! 42.8472 Metapontine Aleppo pine forests
! 42.8473 Umbrian Aleppo pine forests
! 42.848 Hellenic Aleppo pine forests
! 42.849 Illyrian Aleppo pine forests
! 42.84A East Mediterranean Aleppo pine forests
! 42.85 Aegean pine forests
! 42.9 Canary Island pine forests
! 42.A Western Palaearctic cypress, juniper and yew forests
! 42.B Western Palaearctic cedar forests
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! 44.1 Riparian willow formations

: 44.2 Boreo-arpme riparian ganeries
! 44.3 Middle European stream ash-alder woods
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! 44.43 South-east European ash-oak-alder forests
! 44.44 Po oak-ash-alder forests
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! 44.66 Ponto-Sarmatic mixed poplar riverine forest
! 44.69 Irano-Anatolian mixed riverine forests
! 44.7 Oriental plane and sweet gum woods
! 44.8 Southern riparian galleries and thickets
44.9 Alder, willow, oak, aspen swamp woods
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44.911 Meso-eutrophic swamp alder woods
! 44.9115 Eastern Carpathian alder swamp woods
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! 44.A Birch and conifer mire woods
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! 51.1 Near-natural raised bogs
! 52. BLANKET BOGS
53. WATER-FRINGE VEGETATION
! 53.3 Fen-sedge beds
54. FENS, TRANSITION MIRES AND SPRINGS
54.1 Springs
! 54.12 Hard water springs
! 54.2 Rich fens
! 54.3 Arcto-alpine riverine swards
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! 54.6 White beak-sedge and mud bottom communities
! 54.8 Aapa mires
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61. SCREES

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9. WOODED GRASSLANDS AND SCRUBS

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! 91.2 Dehesa

! 93. WOODED STEPPE

Footnote:

1. These examples have been taken from Document T-PVS (90) 52 on "The conservation of natural habitats outside protected areas proper -- A juridical analysis", Cyrille de Klemm, 1990.

Source: Council of Europe (1997) The EMERALD Network - a network of Areas of Special Conservation Interest for Europe. Standing Committee for the Convention on the Conservation of European Wildlife and Natural Habitats. Strasbourg, 7 January 1997, T-PVS (96) 75 revised.

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