



Strasbourg, 20 July 1994
[s:\TPVS94\TPVS8E.94]

T-PVS (94) 8
Or. Eng.

**CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS**

Group of Experts on Conservation of Invertebrates

3rd meeting
Strasbourg, 25 - 27 May 1994

Secretariat Memorandum
prepared by the
Directorate of Environment
and Local Authorities

The Group of Experts on Conservation of Invertebrates held its 3rd meeting in Strasbourg from 25 to 27 May 1994, in accordance with the terms of reference set up by the Standing Committee.

The Standing Committee is invited to:

1. Take note of the report of the meeting.
2. Take note, in particular of a series of suggestions made by the Group of experts concerning issues of importance for invertebrate conservation in Europe. These suggestions or recommendations from the Group are found in Appendix 3 to this document, and concern the following topics:
 - 2.1 implementation of previous recommendations
 - 2.2 coordination of national invertebrate conservation activities
 - 2.3 coordination with the implementation of the Habitats Directive
 - 2.4 legal protection of invertebrate species
 - 2.5 research on species in the Appendices
 - 2.6 international survey of *Margaritifera auricularia*
 - 2.7 control of use of insecticides in forests
 - 2.8 survey of *Margaritifera margaritifera* in the United Kingdom
 - 2.9 recovery plan for *Margaritifera auricularia* in Spain
 - 2.10 threats to *Maculinea nausithous* in Spain
 - 2.11 use of insecticides in Steigerwald (Germany)
 - 2.12 research on *Margaritifera durrovensis*
 - 2.13 protection of *Margaritifera* in the Kola Peninsula (Russia)
3. Examine the terms for a future recommendation on conservation, management and restoration of habitats to enhance conservation of invertebrate diversity and survival of threatened invertebrate species.

4. Take note and, when adopting the programme and budget, decide on the activities planned by the Group of experts for the following two years:

Activities without financial implications

- 4.1 Sub-group on landscape and habitat features of special significance to invertebrates. This sub-group, which is to work autonomously, will request information from Contracting Parties and will prepare a draft report on the topic.
- 4.2 Sub-group on high mountain invertebrates. The work of this sub-group will be carried out autonomously within the structure of the "High Altitude Ecology" Specialist Group of the European Ecological Federation. The sub-group will produce a draft report for the next meeting of the Group.
- 4.3 Report on legislation on capture and collection of invertebrates. Dr Stuart Ball volunteered to prepare such a report (and possible draft recommendations) for the next meeting of the Group.

Activities with financial implications (presented in order of priority)

- 4.4 Seminar (to be organised at the same time as the next meeting of the Group in 1996) on the topic: "Conservation, management and restoration of habitats for invertebrates: enhancing biological diversity".
- 4.5 Study of threatened species from major invertebrate groups in Central and Eastern Europe (aimed at producing information which would permit amendment of Appendix II of the Convention for that region).
- 4.6 Elaboration of more complete data sheets of invertebrate species in the appendices.
- 4.7 Report on marine invertebrates, aimed at identifying their main conservation problems and providing data sheets of candidate species to Appendices II and III.
- 4.8 Report on Trichoptera as a major group permitting assessment of conservation value of aquatic ecosystems. The study should explore the detection of indicating species for wetland and river quality.

1. Opening of the meeting by the Chairman

The Chairman, Mr Peter van Helsdingen (The Netherlands), welcomed participants (see Appendix 1) and noted that the new international legislation in nature conservation (the Habitats Directive and the Convention on Biological Diversity) had set a new framework into which invertebrate activities had to be integrated. As the Group was the only scientific group on this topic linked to an international convention, he suggested that action be coordinated with other conventions (including Ramsar), so that this Group may give advice to other Bodies. He suggested, in particular, that the Group be associated with initiatives like MedWet (on conservation and management of Mediterranean wetlands). The Secretariat, which participates in MedWet, agreed to inform the Chairman on main coming events and technical meetings within MedWet so that the experience of the Group on invertebrate conservation may be readily available to MedWet. Participation of experts was not excluded but had to be agreed with MedWet partners.

2. Adoption of the agenda

The agenda was adopted as it appears in Appendix 2.

3. Report from the Secretariat

The Secretariat informed the Group on progress of the Convention in the last two years. There were at the moment 31 Contracting Parties, covering practically all Western Europe, most of Central Europe and an important part of Eastern Europe. There were efforts to link more tightly the Convention both to the Convention on Biological Diversity (CBD) and to the Flora, Fauna and Habitats Directive (FFH). The Secretariat believed that the Convention could help implement a number of the obligations of the CBD at the European level, as well as extend, with the adequate support, some of the programmes of the FFH to States of Central and Eastern Europe not members of the European Union. An important meeting had been called (to be held in Monaco) to discuss those issues. The Secretariat also believed that the Bern Convention should work more on biotopes and habitats conservation and on other issues that so far had not been developed much (policy making, soil and landscape conservation, conservation of threatened varieties of cultivated crops, etc.). Decision on that new role for the Convention was pending.

The Secretariat informed the Group that the new role of the Convention was not necessarily good for the Group as priorities might be shifted from work on threatened species to other work, even if it strongly believed that technical groups on threatened species should be maintained, perhaps with different terms of reference.

4. Progress in invertebrate conservation since the last meeting (March 1992)

4.1 General comments

Reports were presented in written form for all the States present, except Austria, which presented an oral report but promised to send a written report in the next few weeks, to be circulated to all participants. Portugal was not present at the meeting but had also sent a report.

Most of the reports contained data sheets on Bern Convention Invertebrates (BCIs), compiled by different authors, some from the government and others from scientific institutions. From these reports the following became clear:

- a) in most States there had been an increase in invertebrate conservation since - and often as a consequence of - inclusion of some species in the appendices to the Convention. This had resulted in some States launching some research and conservation projects, but other States lagged behind.
- b) invertebrate conservation was in most States poorly integrated with other conservation efforts, notably habitat protection or general conservation policy-making. Many governments of Parties to the Convention did not have regular contacts with their entomological institutes (or similar scientific institutions competent in invertebrate conservation). This proved a difficulty in implementing both the Convention and the recommendations from the Standing Committee. The Group recommended to its members to have closer links with members of the Standing Committee, so that information might circulate more freely. The positive role of NGOs was also stressed. It was recommended that both governments and scientific institutions maintain contacts with NGOs to make progress in the field of awareness of the role and importance of invertebrates in ecosystems.
- c) coordination between the different nature protection conventions is poor in the field of invertebrate conservation, the Bern Convention being the only one to count with an adequate group of experts. The maintenance and enlargement of this Group (to take more States from Central and Eastern Europe) was essential. Coordination with initiatives at the European Union level, in particular with the implementation of the Habitats Directive, should be considered a priority for EU member states. The Contracting Parties to the Convention on Biological Diversity should be aware that most of the world's biodiversity is indeed made by invertebrate species, many of them never studied.
- d) some States parties to the Bern Convention have still unprotected in their national legislations some of the species listed in Appendix II. (This is the case of Germany (three species are not protected: *Graphoderus bilineatus*, *Cucujus cinnaberinus* and *Margaritifera auricularia*, although this last species is presumed extinct); Greece, Hungary (which does not protect *Graphoderus bilineatus* and *Cucujus cinnaberinus*); Portugal, Spain (in which the law provides for a general protection of all living invertebrates but without a particular system of protection for Appendix II species); Turkey, and other States.)
- e) deletion of extinct species from the list of protected species may cause a number of problems if the species reappears or is introduced. The Group recommended that native species which are presumed extinct be kept in nature protection laws, as this facilitates their conservation when they are 'rediscovered' in the wild (which happens quite often), migrate from other States, or are subject to re-introduction programmes.
- f) the state of knowledge on many BCIs and their conservation status is indeed very unsatisfactory, lack of adequate research on invertebrates being the main cause. This lack of knowledge extends even further to other invertebrate species which may be as threatened, or even more threatened, than those in the appendices of the Bern Convention. All recommendations for action that are addressed to governments must thus be interpreted in this context.
- g) some forest management practices aimed at the control of invertebrate plagues (notably dispersal of insecticides from aeroplanes) are likely to further threaten some species listed in Appendix II. Governments were recommended to control those practices so as to reduce as far as possible their impact on populations of species

protected under the Convention, mapping also areas of high invertebrate value where these practices need to be avoided.

4.2 Progress in implementation of Recommendation No. 35 (1992) on the conservation of some species of invertebrates listed in Appendix II of the Convention and of Recommendation No. 22 (1991) on conservation of the pearl mussel and other fresh water mussels

Recommendation 35 reads as follows:

[Recommends that **Austria, France, Germany and Switzerland:**

1. Locate the remaining populations of *Hypodryas maturna*; carry out research on the biology of the species, including methodology for locating its populations;]

Austria (information from only three regions):

Vienna: - the species is not found

Carinthia: - a new population has been found (although regional authorities had never heard of the recommendation and asked what would be the most appropriate way to conserve the species).

Salzburg:- two populations exist, one large and the other small. The species is protected under the new red list. The regional authorities had never heard of the recommendation.

France

The species was abundant in the 1950s, but disappeared in the 1960s from the department of Indre, from the Armainvillier forest, in the Paris region, and from most other localities in France. It has a very cyclic abundance, disappearing for many years and then coming back again, without any particular reason. It was still abundant at the end of the 1980s in humid forest in the Saône valley. Very rare in the region of Dijon. Since the recommendation was issued the species has not been subject to any particular survey or research in France.

Germany

Two populations of the species are known in Germany, one in Baden-Württemberg, which has a relatively good conservation status, and another in the southern part of Steigerwald, in Bavaria, which was mapped in 1989-90. This population is severely endangered by a planned application of Diflubenzuron (Dimilin) to control pest species *Lymatria dispar*. Other BCI's in the area (*Coenonypha hero* and *Eriogaster catax*) would also be affected by control measures.

Switzerland

New information seems to indicate that although the species has been extensively searched for 30 years, its presence on Swiss territory has not been confirmed. Museum specimens which had been captured in Switzerland and misidentified as *Hypodryas maturna* have all turned out to belong to a different species of *Hypodryas*.

[Recommends that **Austria** and **Switzerland**:

2. Take appropriate measures to protect the populations of *Coenonympha oedippus* in the Upper Rhine valley;]

Austria

No progress.

Switzerland

Only one last small population remains in Switzerland, at a protected site satisfactorily managed by the Swiss League for Nature Conservation (LSPN).

[Recommends that **France**:

3. Carry out a national survey of *Margaritifera auricularia*;]

No survey has been done.

[Recommends that **France**:

4. Give adequate legal protection to any invertebrate species in Appendix II to the Convention which remain legally unprotected;]

All species except *Lucanus cervus* are now protected by a new decree of 1993.

[Recommends that **France** and **Germany**:

5. Carry out surveys of *Maculinea nausithous* and *Maculinea teleius*, assessing their conservation problems, in particular those related to management practices in their habitats;]

France

No particular survey or research has been carried out in the last two years. Both species are endangered. *M. teleius* is not rare but regressing in Alsace. Elsewhere the situation is critical, as populations are small and keep disappearing as a result of change in agricultural practices and water works.

M. nausithous disappeared from all its localities in the Rhone valley in 1985, after the building of a dam. Elsewhere it regresses as a result of human modification of its habitat by pollution of the water table by agricultural fertiliser, and change of uses of soils.

Germany

Regional surveys have been carried out. Populations of both species are now stabilised as a result of appropriate management measures. In North Rhine-Westphalia (Bergisches Land) a wetland area (Feuchtgebiet Dreisel) has been established to preserve both *Maculinea* species.

[Recommends that **Portugal**:

6. Survey the species *Geomalacus maculosus*;

A survey based on bibliographical information and museum collections has been carried out, to find out that knowledge on the species is extremely poor. Specimens in museums are and come from the mountain regions of the North-West (Peneda-Gerês) and the Centre of Portugal (Estrela). In 1995 the Institute for Nature Conservation (ICN) will carry out a field survey to find out the range and status of the species.

[Recommends that **Spain**:

7. Survey and take the appropriate means to protect the remaining populations of *Margaritifera auricularia* in the Ebro Natural Park and surrounding areas;]

Not only has there been no progress but the last populations of the species in Spain have probably been wiped out by recent channel work in the Ebro Delta. The species has presumably become extinct, although it is difficult to know as no complete survey of the area has been carried out.

[Recommends that **Spain**:

8. Carry out adequate surveys of the populations of *Maculinea nausithous* in Picos de Europa and in the Soria province; monitor very closely the population in León, assessing the evolution of its size, and research its conservation problems.]

The species is at the southern limits of its range in Spain. Populations in Picos de Europa have been surveyed and are not threatened. A new population has been discovered in the Madrid region (Sierra de Guadarrama), a few hundred kilometres south of its previously known range in Spain. One of the populations in the Soria Province is threatened by a massive tourism development in the village of Valdeavellano de Tera, but the project is being contested.

* * *

Margaritifera sp

Mr Woodward presented a progress report on *Margaritifera margaritifera*, mostly on problems in the British Isles, and another report on the status of the species in the Varzuga area (Kola Peninsula, Russia).

According to the first report the populations of *Margaritifera* in Ennerdale Water (Lake District, United Kingdom) have been wiped out as a result of different developments by the water authorities. The populations on the River Lune, near Crook of Lune (Lancashire, United Kingdom), a typical locality for the species, have also gone, presumably extinct as a result of poisoning. The same fate has met the species at Mossdale, in the Scottish Borders, very abundant in 1985 and now gone. The extensive colony on the river Kilmartin, near Staffin (Isle of Skye, United Kingdom), has been severely hit by amateur pearl fishers in the last three years as a result of improved road access.

For the Irish Republic, the priority lay in *Margaritifera durrovensis* (again recognised as a valid species under its old name *Margaritifera durrovensis* Phillips 1928). The section of

the R. Nore Main channel still harbouring this taxon was proposed for special protection status. Planning legislation is being used to avoid development which may adversely affect water quality. Further research on its taxonomic status is needed, as it is presently uncertain whether *M. durrovensis* is a valid species, a subspecies of *M. margaritifera* or even a subspecies of *M. auricularia* (in that case it would be the last extant colony of the species in Europe).

* * *

Mr Woodward and Mrs Kochetova presented a report on the status of *Margaritifera* in the Varzuga River (Kola Peninsula, Russia). They described the area as one of the best preserved in Europe, containing extraordinary colonies of pearl mussels and many other river species, including salmon. The area was likely to be drastically transformed as a result of the new market-oriented trend of Russian policy. Areas of such a great biological interest can be subject to eco-development, taking into account the preservation of its great tourism and natural potential.

* * *

As a result of the examination of the reports provided by the parties the Group decided to address to the governments the recommendations for action found in Appendix 3 to this report. The Group expressed its satisfaction that many of the points having been included in Recommendation No. 35 (1992) had experienced considerable progress or had been solved altogether. Yet there had been no progress on many of the points, which was regrettable. The Group asked the Secretariat to contact as soon as possible the appropriate governments to try to get some progress on points 9. (*M. auricularia* in Spain), 10. (threats to *Maculinea nausithous* in Spain), 11. (use of pesticides in Steigerwald, Germany) and 13. (protection of the Kola Peninsula).

4.3 High altitude invertebrates (T-PVS-INV (94) 22)

At its last meeting the Group had decided to create a subgroup on conservation of alpine and high altitude invertebrates, which was to be coordinated by Mr John Haslett (Austria). Mr Haslett reported that the subgroup had indeed been created in close cooperation with the European Ecological Federation, and was enlarging its scope to consider other ecological problems of high altitude ecosystems. A workshop on "high altitude ecology" had already been held during the 6th European Ecology Congress in Marseilles. A report on conservation of high altitude invertebrates will be presented at the next meeting of the Group. The Group welcomed this news and encouraged its members to participate in the Specialist Group on High Altitude Ecology of the European Ecological Federation.

5. Habitat types of special significance to invertebrates. Presentation of the report by Mr van Helsdingen. Discussion (T-PVS (93) 43)

Mr van Helsdingen presented the report.

Several conclusions were of particular importance:

- a) red data books and lists of species protected under international legislation are often very biased so that they have only a limited use in the identification of the status of threat of large groups of invertebrates and on the priority habitats to be preserved. Even with those limitations it can be pointed out that old-growth (ancient) deciduous forest and wetlands should receive particular conservation attention.

- b) for the protection of endemic species, Mediterranean-type habitats are a priority, as they contain most of the regional endemic species. Other ecosystems or biogeographical regions that contain a high number of endemic species are those that have suffered ecological or biogeographical isolation. This includes underground ecosystems, island ecosystems (both in the Mediterranean and in the Atlantic), and high mountain ecosystems.
- c) conservation of stenoeconomic species (those living in a very narrow range of ecological conditions) requires a knowledge of the habitat preferences of the different species. Nevertheless it can be said that either very dry or very wet habitats are likely to contain a high proportion of threatened stenoeconomic species.

The Group unanimously congratulated Mr Koomen and Mr van Helsdingen for the excellent report, which formed a very good base for proposing action on habitats conservation for invertebrates.

Dr Varga and Dr Haslett insisted on the complexity of invertebrate biology. The survival of many species is dependent on the existence of a mosaic of habitats, which have to have certain interrelationships and be in a favourable state of conservation. This presented a difficulty when conservation priorities had to be fixed to a certain habitat type, such as those in the CORINE biotopes programme. A general landscape ecological approach was then necessary. Conservation had to aim at preservation of metapopulations, not just isolated, unconnected remnants of ancient ecosystems. Dr Speight agreed to these points and added that often what is important for invertebrate conservation is not so much the habitat type, but the presence of some landscape features, like irregular floodplains in rivers or certain types of dead wood in forests, which permitted the creation of some microhabitats vital for the survival of some species. Those microhabitats could indeed be present in very different habitats-types as defined in CORINE. Mr Goldberg, from Denmark, said that in his country the key factor for conservation of many invertebrate species was the way in which forests were being managed. Mr Gonseth, from Switzerland, explained the way in which his country is trying to develop a more environmentally friendly agriculture to raise the value of farmland for invertebrates and other groups. Mr de Bast, from Belgium, suggested that a way to work to conserve habitats for invertebrates could be to start by protecting those in which BCIs were present. Many more speakers intervened, and there was generally agreement that the different approaches were complementary and that Contracting Parties needed to do more work in habitat conservation for invertebrates.

6. Conservation priorities of Bern Convention invertebrates, including recommendations to the Standing Committee of the Convention

The Group proposed to Contracting Parties the creation of a sub-group (to work informally with Mr Speight as coordinator) which is to compile a list of habitat features significant to invertebrates. This list of features will be compiled from the information received from the different States or experts (as these features may vary much in the different regions) and from other suggestions made. The list could be used:

- a) in site surveys of invertebrate habitats
- b) in definition of habitat requirements of individual invertebrate species (including BCIs)
- c) in identifying management actions appropriate for invertebrates in protected areas and other areas where management for invertebrates may be carried out

Some of the ideas proposed were incorporated in a draft recommendation on habitat conservation for invertebrates, to be further developed (see Appendix 4 to this document).

The Group proposed the Standing Committee embark without delay on the launching of pilot projects of habitat conservation for invertebrates, as well as on the design and implementation of recovery plans for very threatened populations of BCIs. Research on BCIs was also considered a priority as the information available is not complete enough to permit a sound conservation. Governments were also asked to continue the identification of endemic species which may require conservation action at the national level.

7. Suggestions for invertebrate conservation activities within the framework of the Convention for 1994 and 1995

As for the activities of the Group, it was suggested that a seminar be held, in coordination with the next meeting of the Group on the following topic:

"Conservation, management and restoration of habitats for invertebrates: enhancing biological diversity",

where particular attention will be given to BCIs, their habitats and site management.

8. Election of Chairman and Vice-Chairman

Mr van Helsdingen (The Netherlands) was re-elected chairman of the Group. His mandate extends till the end of the next meeting of the Group in 1996. Having fulfilled two mandates he cannot be re-elected. Mr Meyer (Luxembourg) was elected vice-chairman.

9. Other business

Dr Stuart Ball (United Kingdom) proposed that the Group discuss at its next meeting the increasing problems that amateur entomologists find in collecting species due to restrictive legislation being passed by different States on invertebrate collection. As much of the information used by professional entomologists comes from data collected by amateurs, there is a risk that unnecessary control on collecting may result in poorer basic information for conservation purposes. This problem was recognised by the Group, which invited Dr Ball to prepare, for the next meeting, a short report and a draft recommendation to be addressed to Contracting Parties.

No other business was raised.

APPENDIX 1**LIST OF PARTICIPANTS / LISTE DES PARTICIPANTS**

AUSTRIA/AUTRICHE Dr John R. HASLETT, Universität Salzburg, Zoologisches Institut, Hellbrunnerstrasse 34, A 5020 SALZBURG (E)

Tel. +43 662 / 8044 5600

Telex

Fax +43 662 / 8044 5698

BELGIUM/BELGIQUE M. Benoit DE BAST, Faculté des Sciences Agronomiques de Gembloux, Unité de Zoologie générale et appliquée, Passage des Déportés 2, B 5030 GEMBLoux (F) Tél. 32-81.62.23.48 Télex FSAGX 59482 Fax 32-81.61.45.44

M. Jean-Pierre MAELFAIT, Ministerie van de Vlaamse Gemeenschap, Instituut voor Natuurbehoud, Kiewitdreef 5, B 3500 HASSELT (E)

Tél. 32-11 210 110

Télex

Fax 32-11 242 262

DENMARK/DANEMARK Mr Claus GOLDBERG, Biologist, National Forest and Nature Agency, Ecological Division, Haraldsgade 53, DK 2100 KØBENHAVN Ø (E)

Tel. +45 39 27 20 00

Telex 21 485 NATURE DK Fax +45 39 27 98 99

EUROPEAN ECONOMIC COMMUNITY/COMMUNAUTE ECONOMIQUE EUROPEENNE Apologised for absence/Excusé

FINLAND/FINLANDE Mr Ilmari VALOVIRTA, Curator of Invertebrates, Finnish Museum of Natural History, University of Helsinki, PO Box 17, FIN-00014 HELSINKI (E)

Tel.+358-0-1917451 Fax +358-0-1917443

FRANCE M. Robert GUILBOT, Secrétaire Général, Office pour l'Information Entomologique, BP n° 9, F-78041 GUYANCOURT (F) Tel. (1) 30 44 13 43

M. J. Cl. MALAUSA, OPIE/INRA, Laboratoire de Biologie des Invertébrés, 1382 Route de Biot, F-06560 VALBONNE (F) Tel. (33) 93 12 06 55 Fax (33) 93 12 25 28

M. Jacques LHONORE, Professeur des Universités (Biologie Animale), Laboratoire de Biosystématique des Insectes, Faculté des Sciences, Université du Maine, BP 535, Av Olivier Messiaen, 72017 LE MANS Cédex (F/E)

Tel. (16) 43-83-32-51 (secret. 43-83-32-50)

Fax 43-83-33-66

GERMANY/ALLEMAGNE Dr Horst GRUTTKE, Bundesamt für Naturschutz, Konstantinstr. 110, D 53179 BONN (E) Tel. 0228 / 8491-105 Fax 0228/8491-200

GREECE/GRECE Dr Nikolaos AVTZIS, Professor of Forest Protection, T.E.I Drama, Dep. of Forestry, GR 66100 DRAMA (E) Tel. 0521 37707 Fax 0521 34743

HUNGARY/HONGRIE Dr Zoltán S. VARGA, Head of Dept of Zoology and Evolution, University Lajos Kossuth, Egyetem-tér 1, H-4010 DEBRECEN

Tel. 36 52 316 666 / 2331, 2333

Fax 36 52 310 936

(E)

IRELAND/IRLANDE Dr Martin C.D. SPEIGHT, Research Branch, National Parks & Wildlife Service, 51 St Stephen's Green, IRL DUBLIN 2 (E)
Tel. 1-6613111 Fax 1-6620283; Laboratory: Tel. 1/28 19 719 Fax 1/28 10 465

LIECHTENSTEIN Apologised for absence/excusé

LITHUANIA/LITUANIE Apologised for absence/excusé

LUXEMBOURG M. Marc MEYER, Conservateur, Musée national d'Histoire naturelle, Section Zoologie, 24 rue Münster, L 2160 LUXEMBOURG (F)
Tel.+352-46 22 33 200 Telex Fax +352-46 38 48

MONACO Apologised for absence/excusé

NETHERLANDS/PAYS-BAS Dr Peter J. van HELSDINGEN (Chairman/Président), Deputy Director, Rijksmuseum van Natuurlijke Historie, Raamsteeg 2, NL 2311 PL LEIDEN (E)
Tel. (31) 71 14 38 44 Telex Fax (31) 71 12 48 23

NORWAY/NORVEGE Mr Kaare AAGAARD, Norwegian Institute for Nature Research (NINA), Tungasletta 2, N 7005 TRONDHEIM (E)
Tel.+47 73 580 500 or 73 580 623 Telex Fax +47 73 91 54 33

SPAIN/ESPAGNE Dr María Angeles RAMOS SANCHEZ, Museo nacional de Ciencias naturales (CSIC), c/ José Gutierrez Abascal 2, E 28006 MADRID (E/F)
Tel. 341 (91) 411 1328 Fax (91) 564 5078

SWITZERLAND/SUISSE M. Yves GONSETH, Directeur du CSCF, Musée d'Histoire naturelle, Centre suisse de Cartographie de la Faune, Rue des Terreaux 14, CH 2000 NEUCHATEL (F) Tel. 38 257 257 Telex Fax 38 20 7869

UNITED KINGDOM/ROYAUME-UNI Dr Stuart G. BALL, The Vertebrate, Ecology & Conservation Branch, Joint Nature Conservation Committee, Monkstone House, City Road, GB PETERBOROUGH PE1 1JY Tel. +44-733 62626 Fax +44-733 555 948 (E)

OBSERVERS/ OBSERVATEURS

HOLY SEE/ SAINT SIEGE Apologised for absence/excusé

ROMANIA/ROUMANIE

La Représentation permanente, 6 rue Gustave Klotz, 67000 STRASBOURG (F)

RUSSIAN FEDERATION/FEDERATION DE RUSSIE Mrs Nadejda I. KOCHETOVA, Head of Laboratory of Invertebrates' Protection, Institute of Nature Conservation, Znamenskoye-Sadki, P/O Vilar, 113628 MOSCOW M-628 (E)
Tel. 4232-21-44 Telex 411584 MFAC SU Fax 7 095 423 23 22

UKRAINE Apologised for absence/Excusé

CONVENTION ON BIOLOGICAL DIVERSITY Apologised for absence/excusé

UNESCO Apologised for absence/excusé

IRSN de Belgique Mr Richard D. KIME, Institut Royal des Sciences Naturelles de Belgique, Dept Entomologie, Rue Vautier 29, B 1040 BRUXELLES, Belgique (E/F)
Tel. (19 32) 2 627 4299 (Bureau); 2 627 4211 (Institut) Telex INSNAT Bruxelles
Fax 32 2/646 44 33

INSTITUTE OF TERRESTRIAL ECOLOGY (UK) Mr Paul T. HARDING, Head, Biological Records Centre, NERC Institute of Terrestrial Ecology, Monks Wood, Abbots Ripton GB HUNTINGDON Cambs PE17 2LS (E)
Tel. +44 (0) 4873-381/8 Telex 32416 MONITE G Fax +44 (0)4873 467

UNIVERSITÄT DES SAARLANDES Dr H. SCHREIBER (Apologised for absence/excusé), Institut für Biogeographie, Universität des Saarlandes, Zentrum für Umweltforschung, Postfach 1150, D 66041 SAARBRUECKEN, Allemagne (E)
Tel. 0 68 97/ 7 98 - 1 00 Fax 0 68 97 / 7 98 - 1 55

DE VLINDERSTICHTING Mr Jan van der MADE, (Apologised for absence/excusé) De Vlinderstichting, Postbus 506, NL 6700 AM WAGENINGEN, Pays-Bas (E)
Tel. 08370 - 24224 Fax 08370 - 20296

WORLD CONSERVATION MONITORING CENTRE Dr N.M. COLLINS (Apologised for absence/Excusé) 219 Huntingdon Road, GB CAMBRIDGE CB3 0DL
Tel. +44 (0) 223 277314 Fax +44 (0) 223 277136

Mr Frederick R. WOODWARD, c/o UNIO Trust, 68 Main Street, GB NEWMILNS Ayrshire KA16 9DE, Scotland, Grande Bretagne (E) Tel. +44 (0)560-320851

SECRETARIAT

Mr Eladio FERNANDEZ-GALIANO, Administrator, Environment Conservation and Management Division/Division de la Protection et de la Gestion de l'Environnement

A P P E N D I X 2

AGENDA

1. Opening of the meeting by the Chairman
2. Adoption of the agenda
3. Report from the Secretariat
4. Progress in invertebrate conservation since the last meeting (March 1992)
 - 4.1 General comments
 - 4.2 Progress in implementation of Recommendation No. 35 (1992) and Recommendation No. 22 (1991)
 - 4.3 High altitude invertebrates
5. Habitat types of special significance to invertebrates. Presentation on the report by Mr van Helsdingen. Discussion (T-PVS (93) 43)
6. Conservation priorities of Bern Convention invertebrates, including recommendations to the Standing Committee of the Convention
7. Suggestions for invertebrate conservation activities within the framework of the Convention for 1994 and 1995
8. Election of Chairman and Vice-Chairman
9. Other business

APPENDIX 3

**Recommendation of the Group of experts
concerning matters of general interest
and conservation of some species of BCIs**

Contracting Parties are recommended to:

1. comply with previous recommendations of the Standing Committee ; implement, in particular, the points of Recommendation No. 35 (92) which have not yet been fulfilled.
2. distribute recommendations to the appropriate level (research institutes, managers of protected areas, regional governments) so that they be carried out; improve contacts between conservation agencies and entomological scientific institutions in matters related to the Bern Convention.
3. improve coordination between the implementation of the Habitats Directive (and other treaties) and the work of this Group.
4. implement article 6 of the convention which requires Parties to give legal protection to species listed in Appendix II; include in their list of protected species also those taxa which are presumably extinct.
5. carry out more research on status of invertebrate species listed in the appendices.
6. promote, in particular, the launching of an international research project on *Margaritifera auricularia* and other species linked to channel ecosystems. An international group could look for the species in all its European range, trying to evaluate the presence and status of its populations.
7. control of use of insecticides in areas known to be of importance for species listed in Appendix II.

It is further recommended that the **United Kingdom**:

8. survey *Margaritifera*, particularly in Yorkshire, Northumberland, the Midlands, Devon, Cornwall and Wales; avoid works that would lead to the disappearance of more populations of the species.

It is further recommended that **Spain**:

9. urgently investigate the status of *Margaritifera auricularia* in the Ebro delta, carrying out a recovery plan for the species.
10. carry out an environmental impact assessment (particularly on threats to *Maculinea nausithous*) of the proposed development in Valdeavellano de Tera (Soria); research the conservation status and possible threats to the newly discovered population of *M. nausithous* in the Madrid region.

It is further recommended that **Germany**:

11. make an enquiry into the use of insecticides in the forest of Steigerwald (Bavaria), to limit the effects of their use on the last population of *Hypodryas maturna* in the region.

It is further recommended that **Ireland**:

12. investigate the taxonomic status of *Margaritifera durrovensis*.

As an observer state, **Russia** is invited to

13. seek international conservation status for the entire Umba / Varzuga Basin, so that a controlled development plan is implemented to make tourism, agriculture, fisheries and timber extraction compatible with the maintenance of the high environmental quality of the region.

APPENDIX 4**Elements for a recommendation
on habitat conservation for invertebrates**

1. It is important to view conservation of invertebrate species taking account of the conservation of meta populations, and the preservation of a mosaic of interrelated habitats which are all needed to maintain species in a favourable conservation status.
2. The following ecosystems are of particular importance for invertebrate conservation on the European scale: old-growth deciduous forests, wetlands, Mediterranean-type ecosystems; ecosystems which are isolated geographically or ecologically are of a particular importance for endemic species (islands, caves, high mountain ecosystems, hyperhaline habitats, very dry ecosystems).
3. Particular attention should be given to the preservation of some landscape features (dead wood, small brooks, hedges, etc) which permit the creation of microhabitats fundamental to the survival of many species.
4. The compilation of new red lists on European invertebrates is essential, based on an extensive inventory of species, with special attention to endemic species and to the sampling of under-sampled biotopes, like swamps, summits, canopy and hyperhaline biotopes.
5. The level of knowledge in invertebrate conservation is not satisfactory. It is recommended to stimulate taxonomic work, building and maintenance of invertebrate collections, and faunistic and auto-ecological research.