



Convention on the Conservation
of European Wildlife and Natural Habitats

Standing Committee

**Recommendation No. 146 (2010) of the Standing Committee, adopted on 9 December 2010,
on guidance for Parties on biodiversity and climate change in European islands**

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 aims of the Convention to conserve wild flora and fauna and its natural habitats;

Recognising that climate change affects biological diversity in the territory covered by the Convention, including species, habitats and the Areas of Special Conservation Interest of the Emerald Network;

Recognising the need to adapt conservation work to the challenges of climate change so as to minimise its impacts on the species and natural habitats protected under the Convention;

Bearing in mind that uncertainties surrounding the precise nature of future climate change and its impacts on biodiversity should not delay practical conservation action;

Recalling CBD COP 10 Decision X/33 on Biodiversity and climate change;

Recalling the “*Message from Reunion Island*” issued at the conference “The European Union and its Overseas Entities: Strategies to Counter Climate Change and Biodiversity Loss” (July 2008) and the exceptional importance of the biodiversity of the EU’s Overseas Countries and Territories and Outermost Regions and their vulnerability to climate change;

Recalling Recommendation No. 99 (2003) of the Standing Committee on the European Strategy on Invasive Alien Species;

Recalling Recommendation No. 91 (2002) of the Standing Committee on Invasive Alien Species that threaten biological diversity in Islands and geographically and evolutionary isolated ecosystems;

Recalling Recommendations No. 135 (2008) and No. 143 (2009) of the Standing Committee, on addressing the impacts of climate change on biodiversity;

Noting that European islands are home to many species and habitats of conservation concern, that they contain a large number of endemic species (particularly in the Mediterranean and Macaronesian Regions), many of which are listed in Appendices I and II of the Convention as strictly protected species;

Noting that often, due to their geographical characteristics, many islands biodiversity is already vulnerable because of their limited space in islands and the high concentration of human activities affecting natural ecosystems, particularly in their costs;

Noting also that island biodiversity, because of its endemism, the reduced possibilities in increasing habitat connectivity and the reduced distribution area of many species, is particularly vulnerable to climate change and the risk of spread of invasive alien species;

Noting that, following the report of the Group of Experts on European Islands Biological Diversity [*document T-PVS (2009) 13*], the geographic scope of this recommendation is restricted to islands in the

Mediterranean and Black Seas, the Baltic Sea, the Arctic and East Atlantic (from Iceland to Ascension Island);

Welcoming and bearing in mind the report “*Climate change and the biodiversity of European islands*” by Ms Cordula Epple [document T-PVS/Inf (2010) 9];

Recommends relevant Contracting Parties to the Convention and invites relevant Observer States to:

1. Address and communicate the impacts of climate change on island biological diversity and its conservation including coastal and marine biodiversity in the waters surrounding islands;
2. Carry out inventories and specific national and European research on island biodiversity that will be most affected by climate change, monitoring their change, identifying in particular species that may go extinct in the next decades, and propose solutions for the conservation of their genetic diversity;
3. Carry out a special effort to create more reserves in and around islands, in particular coastal and marine reserves, ensuring their functionality and better integrating biodiversity concerns in development, water and tourism policies;
4. Develop specific climate change adaptation policies and action for island biodiversity, taking due account of the proposed guidance set out in the Appendix to the present recommendation.
5. Where appropriate, implement the proposed actions of the guidance in appendix to this recommendation.

APPENDIX

Guidance

This guidance draws on the expert report commissioned by the Council of Europe and discussed by the Group of Experts on Biodiversity and Climate Change at its meeting in 2010.

Measures that may be considered as appropriate for addressing the impacts of climate change on biodiversity, for the purposes of the application of the Convention, are listed for consideration by Contracting Parties. These measures are offered as examples of action that may be taken by authorities at all levels of governance to address this issue. Other complementary measures may be identified by governments as equally appropriate to their particular circumstances and concerns. Notwithstanding these adaptation measures, there is an urgent need for climate change mitigation actions at local, regional, country and global levels. Effective mitigation is crucial to contain climate change to levels within which we may have a reasonable chance of achieving effective adaptation. Although these recommendation focus on the adaptation to climate change, it is important to bear in mind that, on the one hand, climate change mitigation activities may be harmful to biodiversity and, on the other hand, the conservation and restoration of certain ecosystem types in particular forests and wetlands have to play an important role in the overall mitigation effort.

The effects of climate change on island biodiversity are complex. The impacts of a changing climate on the species and habitats protected by the Bern Convention may differ widely, depending on the species and the interactions with other species and/or their habitats, as well as according to location and, especially latitude. The effects that climate change mitigation and adaptation measures, taken in other sectors, can have on species and habitats should also be considered in order to avoid negative impacts.

Islands and climate change

Islands are more vulnerable than other territories as in many of them there has been an intensive human occupation and because some of them are small so that developments that would be environmentally feasible in the continent have greater impact on natural ecosystems. Pollution is often a problem in islands, linked with relatively high human density, and often not much water. Management of waste can be a challenge due to scarcity of land. The absence of long rivers in small islands has often lead in Mediterranean and Macaronesian islands to water scarcity, intensive use of ground water and sometimes saline intrusions. Invasive alien species have a strongest impact on island endemics than in flora and fauna elsewhere. This marked environmental fragility of island ecosystems is likely to be worsened by climate change.

European islands are home to many species and habitats of conservation concern, including endemic as well as threatened biodiversity. Endemism is largely concentrated on islands in the Mediterranean and Macaronesian region. There are significant knowledge gaps concerning current and potential future impacts of climate change on European island biodiversity. However, there is enough evidence to demonstrate that impacts already take place and are likely to increase in future. Processes related to climate change which are particularly relevant in the island context include sea level rise and the possibility of increasing incidence of invasive alien species. Available measures to support adaptation for biodiversity are similar to those recommended for other areas. However, possibilities to enhance connectivity beyond the individual island are limited so that a greater attention has to be paid to island unique ecosystems and their conservation.

PROPOSED ACTIONS

1. Applying general policy on climate change adaptation to islands

Fully implement previous Bern Convention recommendations relevant to the conservation of island biodiversity under climate change which have already been approved by the Standing Committee and should be applied in the island context as a matter of urgency.

These include:

- Bern Convention Recommendation 135 (2008) on addressing the impacts of climate change on biodiversity, and in particular the points of guidance on taking an integrated approach to climate change response activities, addressing non-climatic threats to vulnerable species, taking early action on the protection of island-endemic amphibian and reptile species, maintaining and restoring large intact habitats as well as ecosystem structure and function, establishing networks of interconnected protected areas, increasing protected area coverage where necessary to ensure that vulnerable species groups and habitats are included, establishing buffer zones around conservation areas, avoiding development in coastal areas, considering the role of species translocation and ex situ conservation, ensuring policy integration, using adaptive management and addressing invasive species issues.
- Bern Convention Recommendation 143 (2009) on further guidance for Parties on biodiversity and climate change, and in particular the points of guidance on minimising threats to vulnerable invertebrates and plants, including in Atlantic and Mediterranean islands, implementing appropriate protected area management to increase resilience and considering mechanisms for implementation of off-protected areas management.
- Bern Convention Recommendation 91 (2002) on invasive species that threaten biological diversity on islands and evolutionary isolated ecosystem which ask for special mechanisms to prohibit intentional introduction of alien species and special precautionary measures to avoid their unintentional introduction.
- The European Strategy on Invasive Species endorsed in Recommendation No. 99 (2003) which requests Contracting Parties to draw up and implement national strategies on invasive alien species taking into account that guidance.

2. Islands of special concern

- When developing adaptation measures, special consideration should be given to islands of the Mediterranean and Macaronesian regions because of their high rates of endemism and expected serious changes in precipitation regimes, and within these regions particularly to those sites hosting vulnerable or threatened endemic taxa, or unique habitat types; mountain habitats in both regions are under a double threat of being small, be particularly isolated and often, contain unique ecosystems or species that can migrate nowhere (like the high Canarian mountain) .
- Identify islands in other regions may also contain highly sensitive biota which require attention, as exemplified by the observed drastic declines in seabird populations of the North East Atlantic region.

3. Ensuring preservation of species that may lose their climate space

Because many island species have no or little possibility to migrate or extend their geographical range to other territories, and taking into account the high level of endemism on certain islands, special consideration should be given to the question of ex situ conservation and translocation for those species which are threatened with extinction in their current habitat, and unlikely to be able to reach other suitable habitat by natural dispersal. Although both ex situ and translocation measures are very resource-intensive strategies and not always feasible in practice, and translocation also carries a significant amount of risk to biota in the target area, where such options exist they may be the only way to ensure the survival of certain taxa.

4. Developing special financial and regulatory mechanisms for island biodiversity

Because islands gather, together with mountains, a very high proportion of Europe's endemic flora and fauna (see for instance that Appendix I of the Bern Convention had to be split in two parts, the second exclusively with Macaronesian flora) a special and solidarity effort has to be carried out at the European level to provide support to research and conservation in high diversity islands. Islands should receive the appropriate means to be able to cope with the responsibility of conserving such a rich common European heritage.

5. Island biodiversity research needs

In addition to research needs already identified in previous reports (including improving the information base on the vulnerability of Bern Convention species and habitats, and strengthening monitoring schemes) and by other Expert Groups (including the identification of knowledge gaps in European island threatened biodiversity and on invasive alien species on European islands), the following specific research needs should be addressed:

- improving knowledge about island endemic species in less well researched groups,
- monitoring climate change impacts on island biota (including impacts on migratory species),
- further development of appropriate approaches to assess the vulnerability of rare and endemic species to climate change, including trait-based assessment frameworks,
- improving climate projections at a resolution which is appropriate for consideration of climate change effects on islands,
- improving knowledge on species that depend both on islands and the marine environment to see how their survival may be affected by climate change.