RECOMMENDATIONS OF THE WORKING GROUP ON BIODIVERSITY AND ISLANDS

EUROPEAN PLATFORM FOR BIODIVERSITY RESEARCH STRATEGY

Meeting under the Dutch Presidency of the EU Amsterdam, The Netherlands, 9th–13th December 2004

"The larger the island of knowledge, the longer the shoreline of wonder" RALPH W. SOCKMAN (1889 - 1970)

The participants of this meeting place high priority on research to:

- 1. compile detailed inventories of island species, assess their conservation status including the main threat criteria, and develop the taxonomic expertise necessary to facilitate this;
- 2. assess genetic diversity and differentiation within and between island populations;
- 3. understand the dynamics of key island populations and ecological communities, and what constitutes an adequate area of key habitat to ensure viable populations;
- 4. improve understanding of ecological processes on islands, and how the lessons learned can be adapted to isolated and fragmented habitats elsewhere;
- 5. understand how underwater islands including seamounts, hydrothermal vents, and cold seeps help to preserve biodiversity;
- 6. classify island ecosystems at a level of detail that is useful for practical conservation, for example by development of a thorough and widely-accepted typology;
- 7. develop appropriate techniques for monitoring island biodiversity in order to assess the long-term effects of global change;
- 8. understand the impact of the delayed response of species to degradation, loss and fragmentation of insular habitats;
- 9. understand how biodiversity is affected by pressures resulting from economic activities including tourism, agriculture, forestry and fisheries, which are intensified in small, insular, island environments:
- 10. understand how sea level rise and other aspects of climate change threaten island biodiversity;
- 11. develop methods to protect endangered species in their island environments and to restore unique habitats which have sustained extensive damage.
- 12. develop methods to prevent invasion, and to control or where appropriate, eradicate, non-native species on islands;
- 13. assess the current and potential contribution of biodiversity to island peoples in terms of sustaining livelihoods, economic activity and cultural value;

- 14. investigate perceptions of biodiversity by island inhabitants, tourists, developers and other stakeholders to improve the legitimacy and effectiveness of island-specific, science-based policy making;
- 15. assess the effectiveness of policies designed to render economic activities sustainable on islands, and provide scientific knowledge to develop them further;
- 16. understand how such island-specific policies can be incorporated in the over-arching trade, tourism and environmental governance schemes and whether they comply with the principle of fair access and benefit sharing;

The above research priorities stemmed in particular from the following considerations:

- Many research questions apply but are not specific to islands, and we only include those
 which have particular urgency on islands, or where the lessons learned are likely to be
 different.
- Islands are natural laboratories for ecosystem research and have attracted considerable scientific expertise and attention, the results of which have contributed greatly to general ecological theory.
- Islands contain a large fraction of Europe's endemic and threatened species and should therefore be a primary target for research efforts to support conservation.
- The ecosystem approach, taking climate change into consideration, provides a framework for adaptive management of island habitats and ecosystems.
- The specificities of islands, in particular small, inhabited islands, amplify the impacts of issues affecting biodiversity.
- Biodiversity conservation on islands requires the development of effective interfaces between science and policy.
- Research programmes on biodiversity must include financial provision for follow-up actions to develop practical conservation plans.
- Many aspects considered here are applicable to mountain systems and other isolated habitats, that have so far not been explicitly covered in previous EPBRS recommendations