



The mission of the European Platform for Biodiversity Research Strategy (EPBRs) is to ensure that research contributes to halting the loss of biodiversity by 2010.

## **Recommendations of the meeting of the European Platform for Biodiversity Research Strategy**

held under the Danish presidency of the EU  
Silkeborg, Denmark 4th – 6th October 2002

### **concerning “AUDITING THE ARK – SCIENCE BASED MONITORING OF BIODIVERSITY”**

*“Each problem that I solved became a rule which served to solve other problems.”*  
RENE DESCARTES

***To gain knowledge necessary to halt biodiversity loss by 2010, the participants of this meeting agreed that the following key issues and action points have high priority and that EPBRs will take a promoting role to:***

1. develop a core programme of biodiversity monitoring across Europe in co-operation with relevant EU and national institutions and IWG-Bio-MIN. This includes developing and applying methods to integrate already existing national and regional monitoring schemes into a European monitoring programme, with specific reference to biodiversity relevant environmental legislation,
2. develop and assess appropriate scientifically sound and rigorous monitoring methodologies of biodiversity based on standardised protocols and sampling strategies to maximise synergy, integration and interoperability,
3. analyse research and information gaps in monitoring programmes and set specific targets to close these gaps,

***To develop high quality and policy relevant research on these priority areas, particular attention should be paid to:***

- bring to bear knowledge derived from ENBI, GBIF and national nodes to help to monitor biodiversity, help populate relevant databases and use these systems to disseminate knowledge,
- promote as part of best practice co-operation between national and regional monitoring programmes and information networks,
- encourage as part of best practice the science based monitoring of effects of policies and actions on biodiversity,
- further enhance the involvement and effectiveness of volunteers.

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

- the maintenance of biodiversity is a key measure of sustainability,
- both the commitment by Heads of State “to reduce biodiversity loss by 2010” (WSSD Johannesburg, 2002) and the goal adopted by the Göteborg Council of “halting biodiversity decline by 2010” can only be validated with adequate monitoring,
- there is a strong need for research to support science-based and policy-relevant monitoring at different levels (genetic, species, habitat, ecosystem),
- long-term monitoring programmes should generate scientifically sound, comparable, policy relevant data sets that provide the basis to assess a) general status and trends in biodiversity, b) impact of land use, global change, invasive alien species, and other drivers on biodiversity and c) effectiveness and efficiency of conservation policy
- science-based monitoring implies that data are collected, processed, analysed, reported and archived according to scientifically sound methods and protocols that are repeatable within sites, comparable between sites, based on best practice, widely accepted by the competent scientific communities, supported by scientific evidence of their efficiency and effectiveness, and unambiguous,
- effective management of ecosystems depends on the monitoring of indicators for “Driving forces, Pressures, State, Impacts and Responses” (DPSIR), which are all important elements of science based monitoring,
- biodiversity indicators should be cost efficient, effective in their predictive power and calibrated to the relevant scale and context. The correspondence between changes in the indicator and changes in the monitored elements of biodiversity must be established, wherever possible, by best scientific knowledge,
- European agreements and policies require comparable biodiversity information and depend on the co-ordination, harmonisation and inter-operability of monitoring systems;
- the European Parliament called on the Commission to present structural indicators referring to biodiversity before the Spring Summit in 2003,
- the European Environmental Agency (EEA) has established an International Informal Working Group for Biodiversity Monitoring and Indicators (IWG-Bio-MIN),
- the European Network for Biodiversity Information and biomonitoring (ENBI), a EC supported thematic network as European contribution to the Global Biodiversity Information Facility (GBIF) will develop a common biodiversity information infrastructure and integrate standards and protocols for taxonomic specimen, collection and survey data,
- volunteers both provide support to sampling activities essential for biodiversity monitoring and they play an important role for the public awareness of biodiversity issues,
- local and indigenous people and their knowledge may have a significant role in biodiversity monitoring programmes,