



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 Belgian Country presidency of the EU
Brussels, Belgium 2nd - 4th December 2001

concerning

SCIENTIFIC TOOLS FOR BIODIVERSITY CONSERVATION: MONITORING, MODELLING AND EXPERIMENTS

“Human history becomes more and more a race between education and catastrophe.”
H. G. WELLS

To gain knowledge necessary to halt biodiversity loss by 2010, the participants of this meeting agreed that the following research action points have high priority:

1. amend, improve or if necessary develop methods and techniques to integrate social, economic and ecological research;
2. actively involve the managers who might implement the results in the design and execution of research that has implications for conservation management;
3. derive specialised and generalised indicators, suites of indicators and other biodiversity assessment tools, that are soundly based on scientific knowledge, tested and accepted, and that will be simple to use, cost effective, and of direct practical use to managers and policy-makers;
4. improve monitoring, modelling and experimental methodology to detect progress towards ecological and social objectives and to detect early any significant deviation from the desired trajectory; and to predict and evaluate the ecological and socio-economic risks and impacts of management regimes and methods, and to recommend changes;
5. develop multi-disciplinary scientific support for appropriate policy on conservation management, and legislation, public awareness and information;
6. seek better understanding of the functions, goods, services, exchange of genes, and connections between components of biodiversity within ecosystems and the functional links between ecosystems;
7. communicate effectively and appropriately the aims and results of scientific projects to stakeholders, policy makers and the public.

The participants of this meeting agree that the management of ecosystems as a contribution to conservation policy must be based on sound scientific understanding of:

- the needs, values and goals of human society, whether local, national or European, and especially those of stakeholders in managed areas;
- how humans influence and are influenced by ecological processes in managed areas;

- how the agencies and individuals with responsibility for the managed areas interact, work and take decisions;
- how the structure and methods of organisations can be adapted to become more effective in ecosystem management.

The participants further agree that this social and institutional understanding must be complemented by understanding of:

- ecological units and boundaries;
- the interaction between genetic, species and ecosystem biodiversity, and the interaction of these across landscapes and within contiguous marine volumes.

The participants agree that the proper approach to ecosystem management depends on:

- agreement between stakeholders about the objectives of any ecosystem management;
- observations, experiments, modelling and long term monitoring;
- designing experiments at appropriate scales and in such a way that the results may be transferred and applied at relevant scales;
- applying scientific techniques to predict and monitor the effect of management actions;
- acting to protect the components of biodiversity and the processes and interactions between them;
- collecting, compiling, analysing, organising, archiving, and providing access to, appropriate scientific data, continuously and over the long term, in such a way as to make data and knowledge widely available;
- adapting management responses in the light of regular assessment of ecological and social goals and progress towards these goals.

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

- European legal commitments in the field of conservation of biological diversity, including the CBD, CCD, Ramsar, FCCC, other international multilateral agreements and appropriate EU and national legislation.