

Project Acronym: EBONE

• At a Glance

Title: European Biodiversity Observation Network: design of a plan for an integrated biodiversity observing system in space and time

Instrument: Collaborative Project FP7

Total Cost: 3.382.782 € **EC Contribution**: 2.701.987 €

Duration: 48 months **Start Date:** 01/04/2008

Consortium: 18 partners from 16 countries

Project Coordinator: Alterra, Wageningen UR (The Netherlands)

Project Web Site: http://www.ebone.wur.nl

Key Words: Biodiversity, ecosystems, upscaling-downscaling, site monitoring, habitat

monitoring, Earth Observation

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The Problem: Measuring and reporting reliably trends and changes in biodiversity requires that data and indicators are collected and analysed in a standard and comparable way. This is valid for a national park, but also for larger areas such as the European Union. However at present all responsible authorities (over 100 national and regional authorities) have different and uncoordinated approaches. Worldwide the problem is even bigger as in different continents species and ecosystems do differ. There is a need to develop a system for a coherent system for data collection that can be used for international comparable assessments.

The Project Objectives: The EBONE project is developing a system of biodiversity observation at regional, national and European levels as a contribution to European reporting on biodiversity as well as to the GEOSS¹ tasks on biodiversity and ecosystems. EBONE assesses existing approaches on validity and applicability starting in Europe, expanding to regions in Africa and seeking cooperation with projects in other continents. The objective of EBONE is to deliver:

- 1. A sound scientific basis for the production of statistical estimates of stock and change of key indicators that can then be interpreted by policy makers responding to EU Directives regarding threatened ecosystems and species;
- 2. The development of a system for estimating past changes and forecasting and testing policy options and management strategies for threatened ecosystems and species.
- 3. A proposal for a cost-effective system;

The results contribute to the GEOSS¹ 10 year implementation plan.

The Methodology: The system will make use of existing networks of site observations, wider countryside mapping and earth observation. Techniques will be developed for upscaling and downscaling. The system and its representativeness will be validated using existing and new data from Europe and Mediterranean regions outside Europe. Based on the validation we will propose refinements to the system (sites, protocols). A link will be made between the methods, data and observation sites available in different countries and regions as well as with various ongoing projects, available databases and observation and monitoring systems. One of the important steps is to carry out tests on the data from LTER (Long-term Ecosystem Research) sites in relation with data from nation-wide habitat monitoring programmes. Power analysis of the existing datasets at different levels (species, habitat, ecosystems) is carried out to test representativeness and usefulness of sampling schemes and data sets.

¹ Global Environmental Observation System of Systems



The (Expected) Results: The main outcome will be an integrated monitoring system based on key biodiversity indicators and implementation within an institutional framework operating at the European level. This framework will provide continued access to indicator data for CBD reporting against the 2010 target and form the basis for the continued development of a European Biodiversity Observation system.

The project focuses on GEO task BI 07-01 to *unify many of the disparate biodiversity observing systems and create a platform to integrate biodiversity data with other types of information* and will deliver a European contribution to the development of a global biodiversity observation system that is spatially and topically prioritised. It also delivers to GEO task EC 06-02.

The beneficiaries are the agencies within and outside the European Union that have the task of biodiversity monitoring, the GEO Community and Biodiversity monitoring NGOs worldwide.

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The Partners (listing: organisation, country, contact point and email)

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