

Biodiversity Information

What was expected from the ETC/BD?

According to the EEA terms of reference, the ETC on biological diversity should:

- Use scientific knowledge and the data gathered to maintain a number of reference databases (containing information on European species, habitats and natural sites) and information systems for populating EEA's indicators and assessments, with particular attention to spatial aspects
- Establish dataflow routines with countries, EU institutions and international organisations to maximise the use of available data in EEA indicators and assessments, and to assess data quality, monitoring and reporting procedures
- Process the information in support to environmental assessments (figures, reports, indicators) to communicate to various users. This includes designing figures derived from biodiversity related datasets, participating in the elaboration of 'storylines' accompanying the indicators and datasets, including performing reviews of literature and current research to assess causal links and possible scenarios for future developments
- Provide relevant biodiversity information to specific EEA projects including sectoral studies (e.g. on agriculture, forestry or transport) and integrated spatial assessments (e.g. on land use, biodiversity and water interactions in cooperation with the other ETCs).

What is the wider context of the work?

- Gathering and building information on biodiversity faces several specific challenges:
 - biodiversity is a cross-cutting issue covering a wide range of aspects (genes, species, habitats, ecosystems, landscapes, wild/ domestic biodiversity) within various biogeographic contexts
 - there are a considerable variety of potential data sources (international non-governmental and scientific initiatives to national agencies and ministries), and thus a wide diversity of non-harmonised data sets
 - there is no comprehensive biodiversity monitoring in place
- The international and European policy context related to biodiversity conservation has considerably changed over the last years, including with the political commitment to "Halt the loss of biodiversity on its own territory by 2010". This provides a framework for a more targeted reporting on biodiversity state and trends
- Following an agreement between DG Environment, Joint Research Centre, Eurostat and EEA, EEA has recently been entrusted the mandate to develop the European Biodiversity Data centre, as part of the Shared Environmental Information System (SEIS).

What has been achieved?

Maintenance of reference databases and information systems

- Development of the European Nature Information System ([EUNIS](#)) as a reference system to manage and deliver European-wide, quality checked and harmonised information on species, habitats and sites:



- New datasets incorporated from various data sources e.g. Fauna Europa, Fishbase, Plant Genetic Resources Forum, most threatened European Plant species, Butterfly Conservation...
- Further completion of the marine component of the EUNIS habitat classification with Baltic, Black Sea and Mediterranean marine habitats
- Dissemination of EUNIS information through a dedicated web site, including with interactive maps and comprehensive queering tools

- EUNIS has been a major contributor to the Global Biodiversity Information Facility (GBIF)
- Increasing number of quality checked biodiversity datasets available on the EEA [data service](#) and the European Community Biodiversity Clearing House Mechanism ([EC-CHM](#))

Development of reporting tools and quality assurance / quality control procedures

- in support of EEA member countries in reporting on nationally designated areas
- in support of EU Member States in reporting on sites designation under the Birds and the Habitats Directives and on the conservation status of species and habitats in compliance with Article 17 of the Habitats Directive.

Identification of biodiversity relevant sources of information

- Updated overview of international biodiversity monitoring programmes in Europe (2005)
- Updated overview of national biodiversity monitoring programmes (2005)
- Overview of Geo-Referenced Datasets on Terrestrial and Freshwater Species (2005)
- Overview of main international datasets of relevance for a biodiversity data centre (2006)
- Review literature on ecosystem functions, ecosystem goods and services, ecosystem valuation (2007)

Most of these working papers are available at the ETC/BD web site (<http://biodiversity.eionet.europa.eu/reports>).

Production and documentation of indicators

- Information compiled to document biodiversity indicators for the EEA core set, IRENA agri-environmental indicators, specific indicators for EEA thematic reports and selected SEBI 2010 indicators

Contributions to various reports

Under preparation	<ul style="list-style-type: none">• Belgrade Report, 2007• Pan-European Ecological Network: taking stock, 2007• Climate Change Report, 2008• SEBI assessment report, 2008• European Forest Assessment, 2008
2007	<ul style="list-style-type: none">• Halting the loss of biodiversity by 2010: proposal for a first set of indicators to monitor progress in Europe
2006	<ul style="list-style-type: none">• How much bioenergy can Europe produce without harming the environment?• The changing faces of Europe's coastal areas• EU Birds Directive 25 years Anniversary• Progress towards halting the loss of biodiversity by 2010• Agriculture and environment - the IRENA indicator report
2005	<ul style="list-style-type: none">• The European environment - State and outlook 2005• EEA core set of indicators – Guide

What are the main challenges ahead?

- With biodiversity high on the political agenda, EEA and its ETC/BD are faced with a pressing need to address various perspectives, from genes to ecosystems, from impacts of climate change to impacts of bio-fuels (and other renewable energies), from ecosystem health to ecology and economics, which calls for a continuous update with the most recent scientific findings in many different biodiversity areas. At the same time there is still a crucial need to facilitate the organisation of data flows from countries. This suggests huge efforts are needed in data compilation, development of common methods, standards and tools for reporting, and in developing quality assurance-quality control procedures. A major challenge will therefore be to balance the resource available with the work required
- The building-up of the Shared Environmental Information System (and the Biodiversity Data Centre) will require setting up long term partnerships with relevant organisations (non-governmental, scientific organisations, national agencies).

What have we learned from our experience?

The ETC/BD consortium is uniquely positioned in Europe with its combined knowledge on biodiversity data – sources, relevance and limitations – to contribute to the implementation of the European Biodiversity Data Centre. However, due to the extreme fragmentation of biodiversity data, the building of information at a European scale – taking into account limitation of data – requires time and needs continuity in the expertise gathered. Planning such work is difficult and has been affected by changes in direction of the EEA annual work programme. As a result, the full capacities of the ETC/BD consortium have not been optimally focused. As an “umbrella” project, the Biodiversity Data Centre may help clarifying EEA's specific role in collating data about Europe's biodiversity and provide focus on the main priorities for data collection.