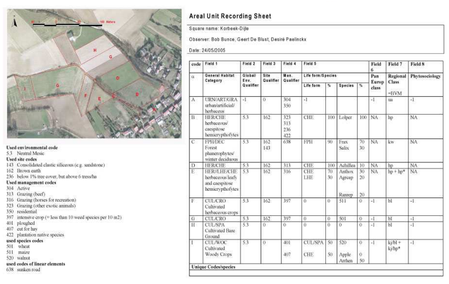
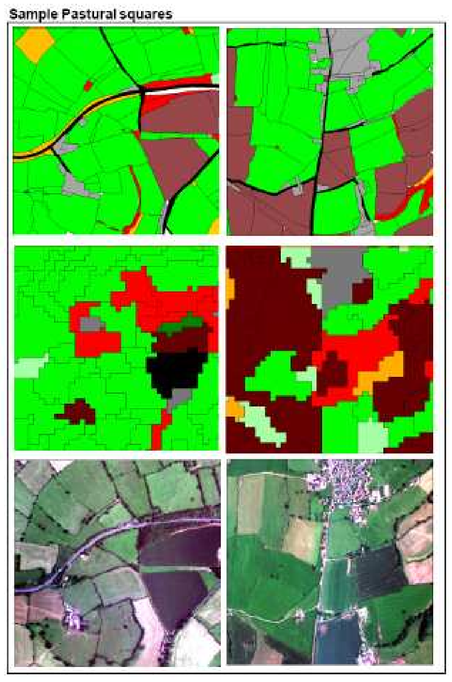
EBONE

European Biodiversity Observation Network:
a project to design and test a biodiversity observing system, integrated in time and space

Intercalibration
Species – Habitat - EO

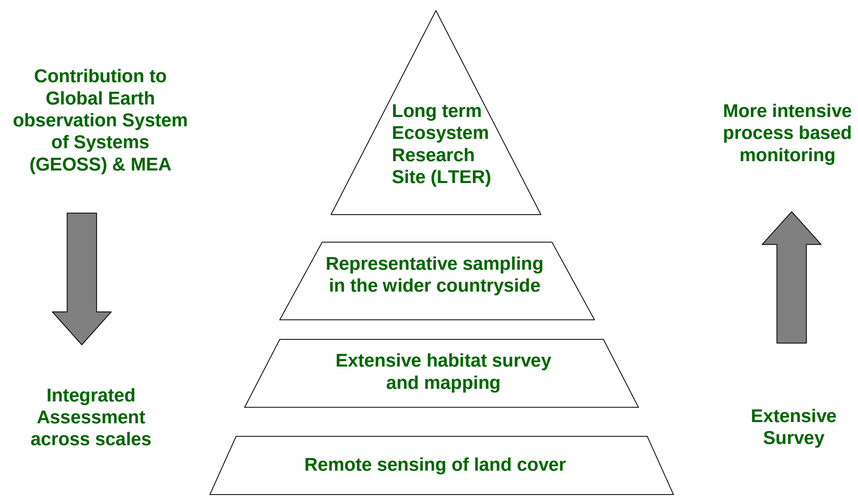




The objective of the EU FP7 project EBONE project is to develop and implement a terrestrial biodiversity observation network that is spatially and topically prioritized and a structure for an institutional framework allowing European and world wide terrestrial monitoring and projections on trends based on reliable data and indicators.

This objective has been elaborated in seven steps:

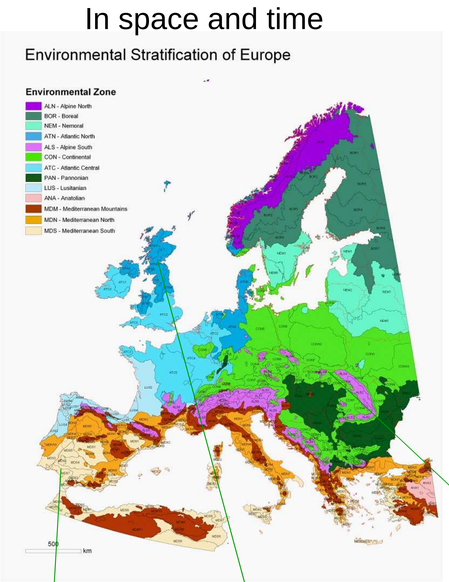
1. Design a biodiversity observation hierarchy based predominantly on existing capability.
2. Develop techniques for upscaling between site, networks of sites, habitats and remotely sensed data for detecting and interpreting changes in key indicators and ecosystems.
3. Validate the observation hierarchy by testing the system with field and earth observation (EO) data.
4. Recommend refinements to the observation system.
5. Make recommendations for the implementation of the system in Europe .
6. Propose how data can be integrated in existing structures and data management systems.
7. Develop and test the world wide compatibility of the system in Mediterranean regions outside Europe.



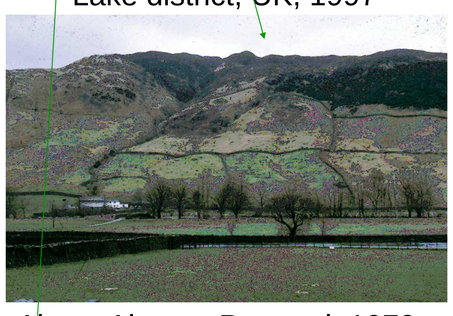
The EBONE project intends to be the basis of a cost effective data collection system for biodiversity including extant data, both past and present, at national, regional and European level. It will form the basis for the continued development of a European Biodiversity Observation System and in this way provide a common European basis or reporting on biodiversity, and access to indicator data for CBD reporting against the 2010 target. The system contributes to the GEOSS 10 year implementation plan, especially EBONE to the GEOSS tasks EC-07-02 and BI-07-01.

The project will deliver a European contribution to the development of a global biodiversity observation system that is spatially and topically prioritised. It will build on existing information and intercalibrate species, habitat and EO-data. Therefore a link will be made between the methods, data and observation sites available in different countries and regions including the Mediterranean regions and its gradient into the desert in Israel, Northern Africa and South Africa . A link will be made with various ongoing projects and available databases as well as observation and monitoring systems.

In space and time



Lake district, UK, 1997

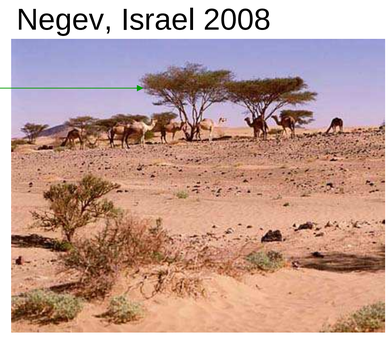


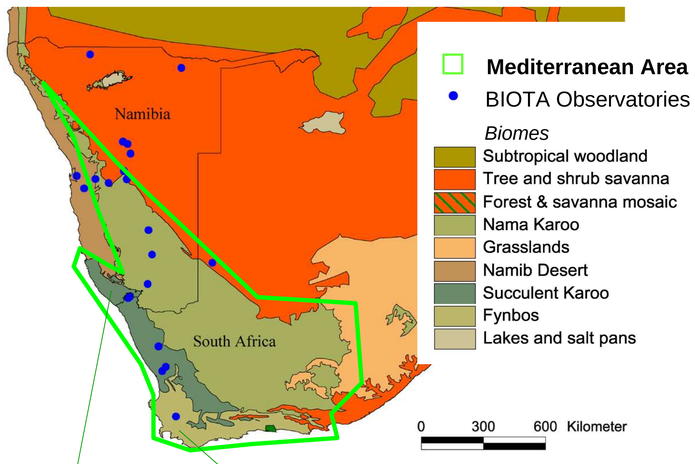
Alves, Algarve Portugal, 1979

High Tatra, Slovakia 2006

Mount Carmel, Israel 2008

Negev, Israel 2008





Namaqualand, South Africa

Cape Peninsula, South Africa

Data that will be included are from representative LTER (Long-term Ecosystem Research) sites, BIOTA-Southern Africa sites and Natura 2000 sites. These will be linked to data from nation-wide habitat monitoring and EO monitoring programmes. Power analysis at different levels (species, habitat, ecosystems) are carried out to test the representativeness and in this way the usefulness of sampling schemes and data sets.
The approach builds on recent European research projects and networks such as AlterNet, BioHab, BioPress and EuMon assessing representativeness of sites and integrating national monitoring systems. Its final product will be a proposal for a cost effective procedure for biodiversity monitoring.

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