# Why is an integrated Biodiversity System needed?

European frontiers are disappearing; economic activities cross borders easily and there is European policy on issues such as nature (habitats and species), water, agriculture, regional development and transport. National policies are being coordinated. This also means that reporting on impacts of policies should not only take place at the national, but also at the European level.

Measuring and reliable reporting of 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 agencies) have different and uncoordinated approaches. Worldwide the problem is even greater because in different continents species and ecosystems differ. Therefore there is a need to develop a coherent system for data collection that can be used for assessments at the European and global scales.

EBONE will deliver a European contribution to the development of a global biodiversity observation system that is spatially and topically prioritised. It will also build on existing information.

### The project is based on:









## The project contributes to:







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FP7-Collaborative Project Theme 6, Environment, Topic 4.1.1.2. Contribution to a global biodiversity observation system. Project 21322





# **EBONE**

**European Biodiversity Observation Network** 

Towards an integrated biodiversity observing system in space and time

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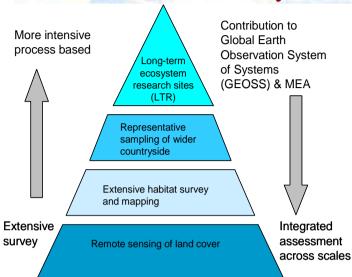
### The main outcome

A fully integrated system based on key biodiversity indicators and implementation within an institutional framework operating at the European level.

# 7 steps to reach the project objective

- Design a biodiversity observation hierarchy based predominantly on existing capability
- Develop techniques for up-scaling between site, networks of sites, habitats and remotely sensed data for detecting and interpreting changes in key indicators and ecosystems
- Validate the observation hierarchy
- Recommend refinements to the observation system
- Make recommendations for the implementation of the system in Europe
- Incorporate the measurements and data structures into existing data management systems
- Develop and test the world wide compatibility of the system in Mediterranean regions outside Europe

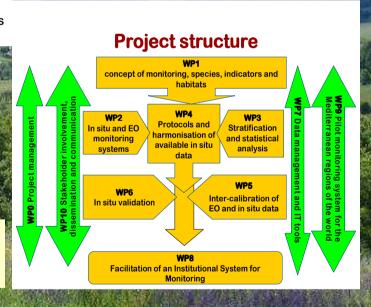
## Framework for a European Biodiversity Observation and Research Hierarchy



between databases which have currently remained isolated in order to increase their overall effectiveness. Quantitative comparisons will be made using matrices e.g. of remote sensed categories and their relationship with in situ habitat data.

EBONE is a partnership of eighteen universities and research institutes in Europe, Israel and South Africa.

A link will be made between the methods, data and observation sites available in different countries and regions. A link will also be made with various ongoing projects and available databases, as well as observation and monitoring systems. This will lead to a cost effective procedure for biodiversity monitoring by applying the most efficient indicators into a balanced sampling programme. One of the important steps is to carry out tests on the data from LTER sites in relation to analysis of nation-wide habitat monitoring programmes.















Ecology & Hydrology









