

Contribution of EU BON to the GEO framework

Linkage of EU BON & GEO BON



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MAIN OBJECTIVE of EU BON:

build a substantial part of the Group on Earth Observation's Biodiversity Observation Network (GEO BON), also in light of the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES)



EU BON approach

EU BON (European Biodiversity Observation Network) presents an innovative approach towards integration, harmonization and standardization of biodiversity information from on-ground to remote sensing data, for addressing policy and information needs. EU BON is going to contribute to GEOSS via integrated access to multiple online data sources, following the data requirements formulated by GEO BON. It builds on existing biodiversity information systems and infrastructures such as GBIF, LifeWatch, DataOne and national biodiversity data centers as well as other environmental datasets in Europe and across the globe. It will provide integration between social networks of science and policy and technological networks of interoperating IT infrastructures, resulting in a new open access platform for sharing biodiversity data and tools, and greatly advance biodiversity knowledge in Europe. EU BON specifically aims to promote the free access to biodiversity data and data-related products (Hoffmann et al. 2014).

In addition to the collection and integration efforts, analytical tools are developed and refined for evaluation and analysis of biodiversity data from terrestrial, freshwater and marine ecosystems. Methods and models are tested and applied to analyse patterns, processes and trends of biodiversity, particularly at selected European test sites.

The integrative EU BON approach will greatly improve the open access to scientific data. It will also facilitate decisions in different sectors concerned with biodiversity on different levels, ranging from park management, national governments to inter-governmental bodies such as IPBES.

➤ Establishment of EU BON task groups relating to GEO BON activities:

- Informatics Task Force
- Task Force on Remote Sensing
- Task Force on Essential Biodiversity Variables
- EU BON outcomes [GEO XII Plenary]

➤ Key partners in EU BON directly linked to several GEO BON working groups

- **EU BON delivers:** access to biodiversity data, data integration, and analysis that links to international environmental policies (e.g. CBD, IPBES, EU legislation)

The challenge of integrating biodiversity information from different realms:

- field („in situ“) data
- remote sensing data



Images: Mihai Tamisla, Wanetta Ayers, Johannes Penner

EU BON Task Forces specifically addressing GEO BON needs:

1) Informatics Task Force

has the purpose to advise the EU BON project on connecting with GEOSS Common Infrastructure (GCI), other global biodiversity and ecosystem cyber-infrastructures, and relevant ICT standards and trends.

2) Essential Biodiversity Variable (EBV) Task Force

focuses on how EU BON could contribute to the development of the EBVs

- As a first step: use case on one EBV
- Joint workshop of GEO BON and EU BON on EBV data standards, work flows, and pilot implementation (held)
- A publication was published to describe how EBVs could bridge the gap between biodiversity data and policy reporting (Geijzendorffer et al. 2015)

3) Remote Sensing Task Force

will act as a service provider/central point for all EU BON questions related to remote sensing and will also act as an integration point between the local level (test sites) and the global/European wide level, especially concerning analysis and modeling results.

References:

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