









eLTER'S CONTRIBUTIONS TO BIODIVERSITY MONITORING

eLTER Standard Observations

- Largely automated biodiversity Standard Observations at ~250 longterm research Sites and socio-ecological Platforms
- Standardised methods & FAIR data
- Harmonisation with reference standards (EuropaBON, Essential Biodiversity Variables (EBV),...; ongoing consultation process

Mobilisation and curation of legacy data

- Covering decades (partly > 100yrs) of distributed biodiversity monitoring
 - terrestrial, freshwater, transitional waters



Methods and feasibility

In-situ

- Methods testing and development with related communities working on applicable EBVs
- Methods roll-out; operational feasibility at larger scales
- Potential role in revision of existing monitoring schemes

Calibration/Validation and ground truthing

- Standard Observations consider variables of high relevance for Cal/Val
- Connections to ESA and EEA expert groups established



















eLTER WHOLE SYSTEM RESEARCH AS ADDED VALUE

Novel, integrated data sets to anchor biodiversity data and trends

- Environmental Standard Observations as explanatory variables for biodiversity change
 - Attribution of trends, support for management options
- High potential for a nested design linking research with spatially representative, area-wide monitoring

Nodes for collaboration and integration across stakeholders (communities, domains...)

- Data integration and creation of Information Clusters
 - → Hotspots of seamlessly accessible data on long-term sites (global earth observation systems, e.g. GEOSS)
 - → Own in-situ data plus data drawn from a wide range of other sources
- **Example:** e-shape Showcase on Ecosystems

Collation of high quality datasets beyond eLTER and statistical analyses

Example: Haase, P., Bowler, D.E., Baker, N.J. et al. The recovery of European freshwater biodiversity has come to a halt. Nature 620, 582-588 (2023). https://doi.org/10.1038/s41586-023-06400-1

Shared infrastructure

IT, portals, analytical tools and virtual research environments







