



GEO post-2025

Interfaces between Geodiversity, Ecosystems and Biodiversity

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2025+ Vision

Establish long-term transdisciplinary research programmes that encompass Geodiversity, Ecosystems and Biodiversity

- Contribute to evidence-based policy at EU and national level,
- Support the integrated management of natural diversity,
- Foster interconnectivity and functional natural systems,
- Prepare for a sustainable balance between humans and nature.

Von Humboldt A "Kosmos" Vol. 1-4. Stuttgart: Johann Georg Cotta. (1845 – 62)

Tansley, AG "The use and abuse of vegetational concepts and terms." *Ecology* 16 (1935) : 284-307

Steffen, W et al. "The emergence and evolution of Earth System Science." *Nature Reviews Earth & Environment* 1.1 (2020): 54-63.



2025+ Needs

1. Understand the relationship between biodiversity and geodiversity
=> move to a whole ecosystem concept,
2. Maintain top-down, bottom-up approaches,
3. Use existing data and establish new long-term observations,
4. Probe scales and systems underpinning natural heritage, include human drivers,
5. Provide research outputs to, for example, place-based organisations, such as the European UNESCO Global Geoparks.



2025+ Perspectives

- **Improved natural diversity management : effective habitat conservation and restoration, processes and natural cycles**
 - Nature protection and regeneration,
 - Greater potential for climate change adaptation,
 - Improved reliance to natural hazards.
- **Stronger sustainable development**
 - Informed land use and infrastructure choices,
 - Balanced use of natural resources,
 - Strengthen local agriculture.



UNESCO Global Geoparks: Who are we ?

- 98 UNESCO Global Geoparks in Europe, 2023
- Average size around 1000 km²
- Long term, place based organisations
- How do we work ?
 - Conserve and manage geodiversity and biodiversity
 - Support sustainable development
 - Foster climate change adaptation
 - Promote local agriculture and responsible natural resource use
 - Encourage natural hazard resilience
 - Provide environmental education

