

ADVANCE: Advanced metadata standards for biodiversity survey and monitoring data for supporting research and conservation

In an ever-changing world, field surveys, inventories and monitoring data are essential for prediction of biodiversity responses to global drivers such as land use and climate change. This knowledge provides the basis for appropriate management. However, field biodiversity data collected across terrestrial, freshwater and marine realms are highly complex and heterogeneous. The successful integration and re-use of such data depends on how FAIR (Findable, Accessible, Interoperable, Reusable) they are. ADVANCE aims at underpinning rich metadata generation with interoperable metadata standards using semantic artefacts. These are tools allowing humans and machines to locate, access and understand (meta) data, and thus facilitating integration and reuse of biodiversity monitoring data across terrestrial, freshwater and marine realms. To this end, we revised, adapted and expanded existing metadata standards, thesauri and vocabularies. We focused on the most comprehensive database of biodiversity monitoring schemes in Europe (DaEuMon) as the base for building a metadata schema that implements quality control and complies with the FAIR principles. In a further step, we will use biodiversity data to test, refine and illustrate the strength of the concept in cases of real use. ADVANCE thus complements semantic artefacts of the Hub Earth & Environment and other initiatives for FAIR biodiversity research, enabling assessments of the relationships between biodiversity across realms and associated environmental conditions. Moreover, it will facilitate future collaborations, joint projects and data-driven studies among biodiversity scientists of the Helmholtz Association and beyond.

Please assign your poster to one of the following keywords.

Standards

In addition please add keywords.

biodiversity monitoring, metadata standards, FAIR

Please assign yourself (presenting author) to one of the stakeholders.

Scientist/ Data Re-User

Please specify "other" (stakeholder)

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