



Natural history collections and (meta)data: an outline of the infrastructure landscape

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The European natural history scene is changing rapidly as a result of the Integrated Infrastructure Initiative grant SYNTHESYS (EU Framework Programme 6&7) and the FP6 Network of Excellence EDIT ("Towards a European Distributed Institute of Taxonomy") that operate largely under institutions already organised through the Consortium of European Taxonomic Facilities (CETAF). The two programmes are complementary, with SYNTHESYS focussed on improving access to and use of natural history collections and promoting standards and best practices, and EDIT working on collaboration, integration and building a research infrastructure. EDIT is taking all SYNTHESYS results on board, but advances further into policy and strategy levels.

Two initiatives at an even higher level are Scientific Collections International (SciColl), aimed at improving the management of worldwide scientific collections and magnifying their impact as a global research infrastructure, and LifeWatch that strives to integrate data on taxonomy, ecology (marine stations organised through MARS as well as terrestrial stations) and Earth observation in a GRID environment. SciColl is being launched as a new organisation and LifeWatch is about to kick off after its EU-funded preparatory phase. In addition to these initiatives, the infrastructure landscape has been or is being reshaped by initiatives like MarBEF (marine ecology), AlterNET (terrestrial ecology), STERNA (semantic annotation), CBOL & BOLD (global DNA-barcoding, with European hubs), PESI (species registers), Species2000 and related programmes like 4D4Life, and the Global Biodiversity Information Facility (GBIF) that will also serve as the portal for metadata on natural history collections.

Many of these initiatives are biology driven, but CETAF, SYNTHESYS, SciColl and GBIF are highly relevant for the earth sciences and are increasingly focussing on networking geological collections and related analytical data. Major digitisation efforts that have started worldwide will greatly improve the access and use of geological collections, with the potential to link them to, a.o., geophysical and Earth observation data.