The Antarctic Biodiversity Portal, an online ecosystem for linking, Integrating and Disseminating Antarctic Biodiversity Information

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The Antarctic Biodiversity portal (www.biodiversity.aq) is a gateway to a wide variety of Antarctic biodiversity Information and tools. Launched in 2015 as SCAR-MarBIN and the register of Antarctic Marine Species (RAMS) the system has grown in scope from purely marine to also include terrestrial information.

Biodiversity.aq is a SCAR product, currently supported as one of the Belgian contribution to the European Lifewatch-ERIC (European Research Infrastructure Consortium). *The goal of lifewatch is to provide access to: Distributed observatories/sensor networks; Interoperable databases, existing (data-)networks, using accepted standards; High Performance Computing (HPC) and Grid power, including the use of the start-of-art of the so-called Cloud and Big Data paradigms technologies; Software and tools for visualization, analysis and modeling*."

Here we provide an overview of the most recent advances in the biodiversity. aq online ecosystem, a number of use cases as well as an overview of future directions. Some of the most notable components are:

The Register of Antarctic Species (www.marinespecies.org/RAS) provides an authoritative and comprehensive list of names of marine and terrestrial species in Antarctica and the Southern Ocean. It serves as a reference guide for users to interpret taxonomic literature, as valid names and other names in use are both provided.

IPT.biodiversity.aq allows disseminating Antarctic biodiversity data into global initiatives such as the Ocean Biogeographic Information System (OBIS) as Ant-OBIS (formerly also known as SCAR-MArBIN) and the Global Biodiversity Information Facility (GBIF) as AntaBIF. Data that can be made available includes metadata, Species checklists, species occurrence data and more recently event based data. Data from these international portals can be accessed through data.biodiversity.aq.

Biodiversity.aq, provides a strong and tested platform for sharing integrating, discovering and analysing Antarctic biodiversity information originating from a variety of sources into a distributed system.

No preference