

SAFRED

Saving Freshwater Biodiversity Research Data

DURATION
15/12/2015 - 15/03/2018

BUDGET
618.984 €

PROJECT DESCRIPTION

The aim of the SAFRED project is to jointly develop an approach for systematically compiling and publishing the data generated during freshwater research. The project partners have been involved in numerous research projects in freshwater environments (e.g. B-BLOOMS, BIOMAN, Pondscape, Manscape and the Boyekole Ebale Congo 2010 expedition). Although certain research results from these projects have already been the subject of numerous scientific articles, the data themselves have not previously been made available to the general public in a systematic way. By joining forces and sharing expertise, the project partners will be able to combine datasets, document information (metadata) on the collection and storage of these data, standardise the data and publish them online. At the same time, a descriptive (meta)data publication and/or summary article will be released.

Our focus within this project is species distribution data and the supporting environmental data. In order to standardise the sample data, we shall use the Darwin Core standard that has been adapted for working with this type of data (its development was coordinated by GBIF in the context of the FP7 EU BON project). The biodiversity data will be integrated into the database with information on the distribution of species. This database was developed by the Royal Belgian Institute of Natural Sciences (RBINS) within the framework of the FP7 BioFresh project (Biodiversity of Freshwater Ecosystems: Status, Trends, Pressures, and Conservation Priorities) and is hosted by the Belgian Biodiversity Platform. These datasets as a whole make up a substantial volume of homogenous data, which can support summarising research on various scales. In order to demonstrate that a clear added value has been created by synthesising these data, we intend to develop an illustrative example with selected datasets from pools.

In addition to the data on species distribution, various project partners also have datasets on microbial biodiversity. Datasets of this type are often made up of a complex mix of molecular data obtained through a wide range of analysis techniques (e.g. DGGE, clone libraries, ARDRA and various sequencing techniques) in combination with data from microscopic research and/or analysis of environmental variables. Within the framework of this project, the publication of this type of data in a standardised way will be thoroughly studied and tested. The experience gained will be shared during a workshop on the management of data in microbial ecology.

The development of freshwater specific, multi-lingual thesauri designed to better standardise the description of datasets and to facilitate searches within them will take place in collaboration with international partners involved in the Freshwater Information Platform initiative, which stemmed from the – now completed – EU FP7 BioFresh project. This platform unites numerous – chiefly European – initiatives related to freshwater data and information.

An important point for attention in this project is developing guidelines for the sustainable management and publication of freshwater data. As soon as the project starts, we will be approaching and involving external partners in order to convince them to make their data public and to support them in this process. Each of the partners will take steps towards drawing up a data policy and implementing data management plans. This means that the data storage and potential publication will be taken into account from the very beginning of a research project.



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The lessons that can be drawn from this project will form the subject of a white paper. In addition, the project partners will draw up an inventory of relevant activities for the use, digitisation and "resuscitation" of data on freshwater biodiversity in the future. The experiences and recommendations and the potential of the data compiled in summary analyses will be presented and discussed at a closing conference that will be open to the public.

CONTACT INFORMATION

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LINKS

<http://odnature.naturalsciences.be/safred/>

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