

**Safeguarding Biodiversity Data for the Future**  
Conference & workshop of the “Saving Freshwater Biodiversity Research Data”  
project

**Tuesday 27<sup>th</sup> & Wednesday 28<sup>th</sup> February 2018**  
**Royal Belgian Institute of Natural Sciences, Brussels, Belgium**



**Venue:**

Royal Belgian Institute of Natural Sciences, Vautierstraat 29, 1000 Brussels. Approx. 10 min. walking distance from Underground station Trône and 5 min. from Brussel-Luxemburg train station. See <https://www.naturalsciences.be/en/museum/practical-information> for a route description.

**Registration:**

Get inspired and learn what you can do for “Safeguarding Biodiversity Data for the Future” during our conference on February 27th and workshop on February 28th! Register at: <https://goo.gl/forms/NX8Ao1B5ACoV7Hef1>.



Project partners:

Funded by:



### About the Safeguarding Biodiversity Data for the Future conference:

Biodiversity research typically involves the collection of large datasets on the distribution of organism and information on other relevant biotic and abiotic variables. While the results and key findings from numerous studies are subject of peer-review scientific papers, public release of biodiversity data is generally not yet done in a systematic way. Publishing data in a standardised format ensures that the data are easily retrievable and understandable, safeguarded for future re-use and integration in large scale analysis and contributes to reproducible science.

SAFRED represents a concerted effort towards systematic recovery and publication of data generated in freshwater research. Project partners aimed to futureproof their data by standardising it and making it publicly available, while improving their data management practices.

During the “Safeguarding Biodiversity Data for the Future” conference we specifically aim to share the lessons learned from the project and put our work in a broader perspective. Three keynote speakers will provide their perspectives on working with large datasets, the need for Open Data and Open Science.

- **Jonathan Chase** from the German Centre for Integrative Biodiversity Research (iDiv) will share insights from his work on biodiversity synthesis.
- **Jörg Freyhof** based at the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB) will offer a global perspective on biodiversity observation data based on his experience in working on the EU BioFresh project and the Group on Earth Observation Biodiversity Observation Network (GEO BON).
- **Julia Steward Lowndes** from the National Center for Ecological Analysis and Synthesis (NCEAS) will present a strong case for Open Science sharing the story of building the Ocean Health Index.

### About the Biodiversity Data Management workshop:

Not sure what to do if a project partner asks to deliver data in a standardized format? Not sure if the latest data is data\_1.xls, data\_1\_final.xls or data\_1\_final\_2.xls? Not sure you even have it on your computer and where it might be?

If this sound familiar, look no further and join our workshop on Biodiversity Data Management. You'll learn how to create a data management plan and adapt good enough practices for data management (because we know you don't have time for the best practices). Not only because the funding agency demands it, but because future-you will thank you. You'll practice to transform a dataset to a tidy format, so it can be used more easily for analyses. And you'll get an introduction to Darwin Core: the standard to publish biodiversity data. In the afternoon, you can choose between transforming data to Darwin Core in R or how to publish microbiological data.

This is a hands-on workshop, so bring your laptop (and have RStudio installed if you will attend the R option in the afternoon).

Register at: <https://goo.gl/forms/NX8Ao1B5ACoV7Hef1> indicating your choice for the afternoon session.

## Draft program [November 2017 version]

### Day 1 – Tuesday 27th of February – Safeguarding Biodiversity Data for the Future conference

**09:30** Registration

**09:45** Start of the meeting

- Why "Saving Freshwater Biodiversity Research Data"? (Koen Martens)

Keynote session:

- **10:00** Jonathan Chase – Synthesis, the need for large scale data [title to be confirmed]
- *10:35-11:00 Coffee break*
- **11:00** Jörg Freyhof – A global perspective on biodiversity observation data
- **11:35** Julia Steward Lowndes – The power of Open Science: experience from building the Ocean Health Index
- **12:15** Panel discussion on data mobilisation

*12:45-14:00: Lunch*

The SAFRED experience – Session chair: Dimitri Brosens

- **14:00** Data mobilisation in the SAFRED project (Aaike De Wever)
- **14:20** Details on mobilised pond data, Meuse data and microbial ecology data (Pieter Lemmens, Adrien Latli, Maxime Sweetlove)
- **15:00** Analysis of compiled data (Pieter Lemmens)
- **15:20** Lessons learned during data processing (Stijn Vanhoey)
- **15:40** Sustaining biodiversity data publication after SAFRED: Data Management Plans and improving data management practices (Tanja Milotic)

*16:00-16:30 Coffee break*

- poster session
- possibility for follow-up committee to reflect on project outcomes

The SAFRED experience [continued]– Session chair: Dimitri Brosens

- **16:30** Lessons learned from working with external partners
- **16:45** Final discussion – Moderator: Dimitri Brosens
  - “What can you do? How can you contribute?”
  - Continuation of the SAFRED-work & legacy
  - Feedback by the follow-up committee

*17:15 Closing reception*

## Day 2 – Wednesday 28th of February – Biodiversity Data Management workshop

**09:15** Registration

**09:30** Start of the meeting

- Introduction to the Biodiversity Data Management workshop

**09:45** Good enough practices in data management

*10:15-10:30 Coffee break*

**10:30** Tidy data exercise

*12:00-13:00 Lunch*

**13:00** Introduction to Darwin Core

**13:30** Parallel sessions

**Transforming data to Darwin Core with R** (VIP room)

- Introduction
- *dplyr* exercise

**Publishing microbiological data** (Van Straelen room)

- Introduction to microbial data standards & databases, nature of data (old fashion sequencing, NGS), mimarks. Link between molecular and other biodiversity data
- Challenges and lessons learned when processing molecular datasets for online publication
- The Microbial Antarctic Resource System (mARS) workflow
- Practical exercise / examples

*16:30 End of workshop*