



## What is it?

In the discovery stage you search for available data that might be valuable and usable for your own study or research project. To discover data and their **discovery metadata**, they have to be visible and accessible. Thus, data should have been submitted (see [Fact-Sheet 'Submit'](#)) to a data infrastructure (archive, data center) and been provided with a **persistent identifier (PID)**. GFBio offers a [single entry point](#) for a faceted search and filtering of data sets stored in a selection of **interoperable, long-term data centers and archives**. You can search for acronyms and synonyms, soon provided by our terminology service, and discover datasets using our workbenches and tools ([BExIS 2](#) and [Diversity Workbench \(DWB\)](#)).

## How to do it?

1. You can discover data through the search function at the [GFBio-Portal](#) which comprises archives and data centers that are specialised on biodiversity related data (or by reading academic publications linked to the used data set).
2. Be aware that the terms/key words you use for your search will influence the data discovery.
3. **Discover available and suitable data sets** for developing new research questions, testing or comparing with your own collected data by using e.g. geographic overlays, soon provided by GFBio visualization tools.
4. To gain access to the data you are interested in, gather information about the rights and access management that might allow access to only authorized users.
5. To fulfil **authentication requirements** and get access to the data (if possible), follow the instructions on the GFBio Portal. That might imply to (a) get into contact with the data owner or (b) to register in the GFBio Portal.
6. Some infrastructures require the submission of data or to provide a persistent identifier of your data in order to allow you access to others data sets.
7. When data are **linked to journal publications** the paper itself can serve discovery.

## Who does it?

Data reusers in general, that can be modellers, researchers in integrative or comparative studies.

## Key elements

- Faceted data search and filtering via the GFBio-Search-Function.
- Use appropriate key terms.
- Discover the suitability of a data set through GFBio-Visualization- or -Analysis-Tools (soon implemented) and read the discovery metadata.
- Check the access requirements and authentication procedures.

## Useful links

<http://www.lifewatch.eu/web/guest/home> (European infrastructure for biodiversity data)

<http://www.gbif.org/> (International open data infrastructure for biodiversity data)

<http://www.pangaea.de> (Data publisher for earth and environmental science)

<http://www.unidata.ucar.edu/software/thredds/current/tds/> (Thredds Data Server)

<http://mercury.ornl.gov> (Metadata-Search and associated data)