GBIF is – a tool for science and society

Data discovered and accessed through GBIF are being used in many areas of scientific research and decision making. The GBIF network thus supports international policies and responses to key targets that seek to stop the loss of biodiversity.

Experts and scientists have used the data mobilized and mediated by the GBIF network in a growing volume of peer-reviewed studies and official reports, for example applying them to:

- Model the potential spread of known invasive alien species, under current and future environmental conditions

- Predict the consequences of climate change for biodiversity, from single species to global impacts

- Research agriculture and food security, including crop wild relatives and pest control

- Suggest priorities for conservation of threatened species and protected areas

- Explore links between biodiversity and human health, including modelling of disease vectors

Supporting national and global information needs

Enabling applied, policy-relevant research

Complementing existing investments and initiatives
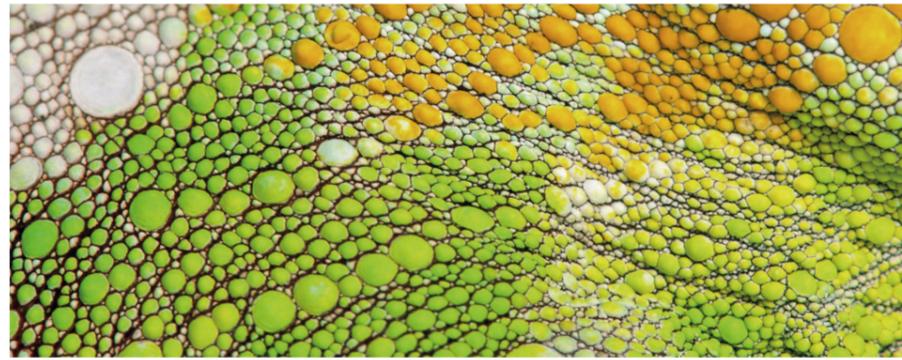
How you can get involved in GBIF

- **Explore and use millions of occurrence records** for more than 1.5 million species worldwide
  www.gbif.org

- **Publish open-access data** with guidance and information available on GBIF.org
  www.gbif.org/publishing-data

- **Find your GBIF national node** and learn how to work with our network of member states and organizations
  www.gbif.org/participation/list

- **Learn how to engage the GBIF community** as a researcher, practitioner, policymaker or individual
  www.gbif.org/whatisgbif

- **Join GBIF as a formal Participant** to link national goals and priorities with international commitments
  www.gbif.org/participation/how-to-join

- **Stay informed** about GBIF activities and uses of biodiversity data with the *GBits* newsletter and GBIF *Science Review*
  www.gbif.org/resources/key-information

GBIF

GBIF | Global Biodiversity Information Facility

Enables free, universal access to all available evidence on where species have lived, including changes over time

Builds the collaborations and technical infrastructure to provide cost-effective sharing, discovery and re-use of digital data

Supports research not possible before, and promotes evidence-based decisions affecting life on Earth and sustainable human development

GBIF.org
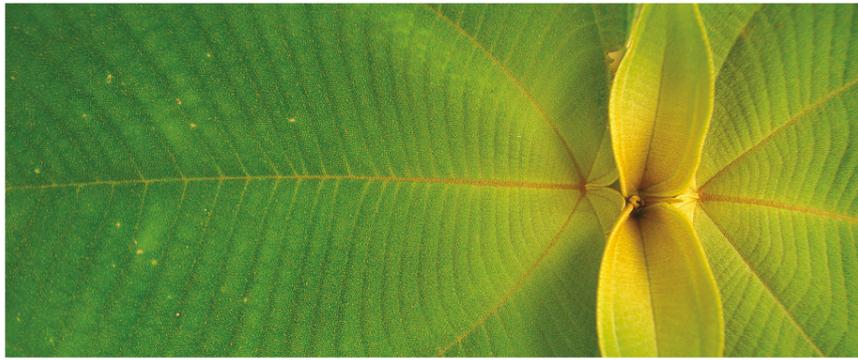
GBIF is – a connected community

GBIF's Participants collaborate by sharing skills, experience and technology to mobilize and use data about biodiversity for the public good.

GBIF is a network of governments and organizations, helping one another to set up national and thematic biodiversity information facilities.

Participants work with the Secretariat based in Copenhagen to facilitate the flow of biodiversity data, ensure data quality and enable data use in science and policy. Expertise and technology are shared through:

- Regional groups, strategies and plans

- Training workshops and online resources

- A capacity enhancement programme that includes mentoring, training and engagement activities

- Informal interactions among the community to share good practice and solve problems

GBIF also collaborates with a wide range of other global and regional initiatives promoting access to data, information and knowledge about biodiversity.

Building collaborative solutions and resources

Enabling national and institutional data mobilization

**Promoting cost-effective open access to data**

GBIF is – an informatics infrastructure

GBIF encourages adoption and use of agreed, community-built data standards and informatics tools. This enables anyone to discover and use thousands of datasets of many different types and coming from all over the world.

The informatics solutions facilitated by GBIF include:

- Open-source software that provides a simple, efficient means of publishing and sharing web-enabled biodiversity data

- A single website — GBIF.org — that enables discovery and access of any and all data shared by GBIF publishers

- A robust, well-designed and maintained API that allows other websites, web applications and software to discover, access and display GBIF-mediated data and other information services

- National and thematic portals that meet specific needs and requirements of GBIF Participants

- Tools to simplify the process of organizing data by scientific names and classifications

Guiding biodiversity data management and publication

Helping ensure data persistence

Increasing recognition and visibility for sharing data

GBIF is – a window on biodiversity

Data published through the GBIF network describe where and when hundreds of millions of individual organisms have been observed or collected, helping countries to unlock knowledge about their own biodiversity from around the world.

GBIF enables universal access to data from hundreds of institutions publishing thousands of datasets, including:

- Specimens of plants, fungi and animals from herbaria, fungaria and zoological museums, dating back to the earliest days of natural history collections and digitized from millions of specimen labels

- Data from continuous monitoring projects and surveys, including some covering decades of sampling in oceans, land and freshwater

- Observations of animals and plants gathered through citizen science networks that employ community-based identification and verification

- Information about species occurrences extracted from historic literature and online journals

Offering one-stop shop for 'big data' on biodiversity

Creating a virtual natural history museum to support taxonomy

Enabling access to images, sounds and video of specimens and observations