GBIF Germany and its international context

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GBIF-International

The mission of GBIF is to make the world's primary data on biodiversity freely and universally available via the Internet. GBIF works on the development of worldwide capacity to access the vast amount of already existing biodiversity data by means of an interoperable network of biodiversity databases and information technology tools. The globally co-ordinated approach provides the framework for a rapid expansion of the network and is opening new possibilities for the utilisation of research data.

GBIF was founded in 2001. In October 2004, participation has grown to 41 countries and 26 organisations committed to contribute data to the GBIF information structure and to work towards an interoperable network. An important aspect is the sharing of biodiversity data with the countries of origin, e.g. the country where a specimen in a biological collections has been collected.

Fig. 1: Countries involved in GBIF, October 2004

The total number of objects in natural history collections worldwide has been estimated at 1.5 to 3 billion, with an unknown number of additional observation data records. The international GBIF-Portal (www.gbif.org) is already providing access to more than 44 million unit-level data records from 82 data providers in November 2004, and the amount of data is constantly increasing. Germany participated actively in the formulation and implementation of the GBIF Work Programme through its memberships in and contribution to Committees of GBIF-International and other important biodiversity initiatives. For simultaneous data access, GBIF makes use also of software developed in Germany in the course of the EU-funded BioCASE project (Biological Collection Access Service for Europe). Other European projects such as ENBI (European Network of Biodiversity Information (www.biocase.org) also join forces with European institutions and GBIF Nodes to mobilize biodiversity information resources.

GBIF as a Megascience facility will mainly serve scientific needs, but by creating the common infrastructure for disseminating and integrating the world's vast resources of biodiversity information it will make possible the creation of a wide variety of special interest networks.

GBIF-Germany (GBIF-D)

GBIF´s subjects are activities in biodiversity informatics that can not be achieved by individual nations. The German federal government makes a substantial annual contribution to support the running of the international GBIF Secretariat and the GBIF work programme. To foment the national contribution, GBIF Germany (GBIF-D, www.gbif.de) has been set up as a system of seven nodes. Up to now 48 institutes join the German network and look after 66 funded sub-projects (Fig. 2).

GBIF-Germany rank among the four largest collection holder worldwide and is primarily focussing on access to specimen collections and networking of institutional databases. It already contributed more than 3,800,000 specimens and observation records to the GBIF network – making Germany currently the fourth-largest GBIF Data Provider.
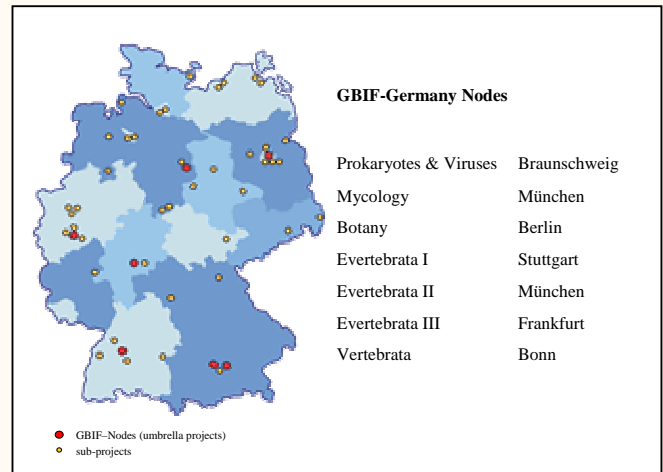

GBIF-Germany Nodes

Prokaryotes & Viruses	Braunschweig
Mycology	München
Botany	Berlin
Evertebrata I	Stuttgart
Evertebrata II	München
Evertebrata III	Frankfurt
Vertebrata	Bonn

● GBIF–Nodes (umbrella projects)
○ sub-projects

Fig. 2: GBIF-D – the German GBIF system

GBIF-D objectives are:

• Fostering the digitisation of such data and their on-line presentation

• Integrating German primary biodiversity data into the global interoperable GBIF network

• Registration and networking of biological collections and taxonomic data resources in Germany, including important private ones

Open and effective access to global primary biodiversity data can help to address and prioritise research aimed at filling the huge gaps in knowledge that still exist. Continuing broad international co-operation is needed to accomplish this "megascience" task. GBIF-D will continue to initiate and support activities to mobilise data, engaging further institutional and private data holders. Linking GBIF data with other information domains will open new perspectives for a wide array of fields, affecting conservation, global change research, human and animal health, agricultural resources and productivity, among others. It will greatly enhance efficiency and productivity of taxonomic research and thus contribute to the removal of the "taxonomic impediment".