



GBIF-Sweden: Work plan 2012

2012-06-11

Introduction

The previous year, 2011, was the final year of the second phase of the international GBIF initiative ("From prototype towards full operation"). At the international level, the theme of the current five-year period is "Seizing the future". The aim is to build a more regionalized GBIF organization with greater efficiency in data handling procedures and better quality in the services offered.

GBIF-Sweden's Strategic plan for the period 2012-2016 outlines how the Swedish node will contribute to reaching these internationally defined goals during the current project period. It defines five focus areas. This Work plan details the activities and deliverables in each of these focus areas during 2012.

Plan for 2012

1. Data publication

The primary objective of GBIF-Sweden is to make all Swedish biodiversity information available on the Internet. By offering improved services and support to Swedish database providers, we expect to be able to reach full coverage of the digitized natural history collections in Sweden in 2012 or 2013.

- During 2011, the collections in Gothenburg, Lund and Uppsala were all fitted with TAPIRLink or IPT provider software for automatic updating of their content to GBIF servers, but we were not able to successfully use these mechanisms. In 2012, we will continue to provide technical support for these installations, with the goal of having the automatic data flows work as planned by the end of the year.
- We will use Lifewatch web services to set up automatic, daily harvesting of data from the Species Gateway (Artportalen), which currently supplies GBIF with more than 75% of its data.
- We will continue to support the incorporation of data from regional vegetation inventories made throughout Sweden during recent decades.
- We will continue to search for hitherto unrecognized collection or observational databases, which once found will be included in the offerings of GBIF-Sweden.

- In collaboration with cultural heritage institutions, we will explore the possibilities of presenting GBIF data combined presentation of natural and cultural history data through the “K-samsök” portal.

2. Digitization effort

Data from biological collections represent a fundamentally important resource to basic and applied research, but such information is still to a considerable extent hidden in the enormous backlog of undigitized specimens kept at various institutions. Only 10-20% of all 30-60 million estimated objects in Sweden have been digitized and their data made available through the GBIF network at present. It is of utmost significance to the utility of GBIF-Sweden’s services that the information represented by this backlog is made public through large-scale digitization projects.

- We will invite appropriate major data providers to form a planning team for a major Swedish digitization effort focused on natural history specimens.
- We will investigate existing technology for mass digitization of museum specimens, and will explore the opportunities to form Swedish teams focused on developing new technology, where needed.
- We will explore funding opportunities for the development of new digitization technology and for mass digitization of Swedish natural history collections using existing technology and crowd-sourcing.
- We will keep a close eye on the development of this field of biodiversity informatics at national and international levels. In particular, we will exchange information and explore possible future collaboration with Digitalium in Finland, the herbarium at MNHN in Paris, Atlas of Living Australia, and DigiSam at the National Archives in Sweden, all of which are engaged in large-scale digitization efforts.

3. Web Portal

Apart from offering a search facility for Swedish biodiversity data, the web site of GBIF-Sweden (www.gbif.se) contains general information on the project, simple tools for collection management and digitization aimed at small providers, and information from the biodiversity community and from the international GBIF organization. Intended to be the premier Swedish gateway to global biodiversity informatics the existing portal was set up in 2008. To meet increasing demands from several user categories, the web portal of GBIF-Sweden now needs to be radically refurbished. This work was initiated in 2011 by inviting a user panel to comment on the functionality of the web site. Development of the new node portal software has been initiated in collaboration with GBIF-France.

- We will invite other national GBIF nodes to participate in the development of the new node portal software. Tentatively, GBIF-Norway and GBIF-Belgium have signaled an interest in participating. We will also investigate the possibility of merging our project with the Nodes Portal Toolkit (NPT) project initiated earlier by the GBIF secretariat. The NPT was intended for use

primarily by GBIF nodes lacking capacity to construct and maintain web portals of their own, but progress in this project has been extremely slow.

- We will continue to gather input from user panels concerning the desired functionality of the new GBIF node portal. We will also collect and analyze usage statistics for the current GBIF node portal.
- By the end of the year, we will have all non-map modules in the software available for testing. Development of the final module, the mapping module, should be initiated, with the aim of releasing the first version of the new portal in the early spring of 2013.

4. Education and outreach

Biodiversity informatics is still comparably new to many potential user groups, and apart from among bioinformaticians, and environmental researchers the possibilities that lie in easy access to large data sets are not yet fully acknowledged in the research community. Systematists, biogeographers, evolutionary biologists and ecologists will all benefit strongly from the work of organizations like GBIF, but in general they need to be better informed of the resources offered by current biodiversity informatics initiatives.

GBIF-Sweden must also contribute to increase the interest and competence level among researchers. This can only be achieved by continued and increasing participation in scientific seminars, workshops, conferences and meetings, and by arranging and taking part in educational activities. Collaboration with other biodiversity informatics initiatives is also crucial.

- By using existing networks we will increase the amount of popular presentations (orally and in writing) in order to further increase the public visibility of GBIF-Sweden outside the scientific community.
- We will continue to present GBIF resources at conferences and meetings, and we will approach potential users in university institutions, research groups, and official authorities, offering information about GBIF and training opportunities in biodiversity informatics.
- We will continue to be a part of the Taxonomic Research School funded by the Swedish Taxonomy Initiative.
- We will participate in the new international Masters program (The Nordic Academy of Biodiversity and Systematics) by giving one of the course modules ("Curation and Biodiversity informatics") starting in the late fall of 2012.
- We will contribute to Synthesys Network Activity 2 by participating in a Training Module ("Access to Collections") held in Budapest in April 2012..
- We will strengthen the collaboration with the informatics group at the Swedish Species Information Centre in Uppsala by initiating regular meetings.

5. Support to biodiversity informatics in developing countries

A large fraction of the data handled by GBIF-Sweden consists of information on organisms observed or collected in foreign countries (particularly in the tropics). In

many countries access to data and information on indigenous biodiversity is restricted and repatriation of such information is among the most important tasks of GBIF internationally. GBIF-Sweden should also explore the possibilities of transferring biodiversity informatics knowledge and technology to developing countries in need of assistance.

- We will apply for extra funds from GBIF internationally for a mentoring program involving GBIF-Sweden and the Wildlife Institute of India/INBIF.
- We will continue to explore additional opportunities for knowledge and technology transfer to developing countries.