



GBIF-Sweden: Annual Report 2012

2013-01-10

Introduction

After the incorporation of GBIF-Sweden into the newly established Department of Biodiversity Informatics on January 1, 2011, integration within the group has proceeded during 2012. The staff consisted of one project coordinator (25%; Prof. Fredrik Ronquist), one node manager (100%; Ass. Prof. Anders Telenius, and one systems developer (100%; MSc. Mickaël Graf). The GBIF node is also supported by the Natural History Museum by one secretary (25%; Ms. Jane Sagindykova), and by a reduction of the overhead cost of the externally funded project.

Milestones

GBIF-Sweden expect

1. that all Swedish biodiversity databases (collections and observations) become available through GBIF,
2. that all Swedish natural history collections are rapidly and efficiently digitized,
3. that the national web portal becomes the most significant Swedish centre for extracting data and information concerning global biodiversity,
4. that Swedish researchers make use of biodiversity data provided by GBIF-Sweden,
5. that global biodiversity informatics is established as a research program in its´ own right,
6. that biodiversity informatics is made available for use in developing countries.

Results 2012

Focus areas

1. Data publication

This is a long-term commitment, and rather an ambition than a set, measurable goal. A small amount of digitized collection biodiversity data still remain to be published – mainly because the introduction of web-services for automatic updating of Sweden's large collections of natural history specimens is still under way. IT-support must be given to providers already included in the GBIF-system. To accomplish the inclusion into the GBIF repository of the estimated remaining 80% (at the national level) of collection data that are not yet available, a major digitization effort must be undertaken by the host institutions.

Activities during 2012:

- Continuing installation of transport protocol (IPT) to major Swedish data providers.
- Continuous IT-support to database providers.
- Economic subsidies to Svenska Botaniska Föreningen to add province flora project databases to GBIF.
- Further development of national standard for natural history collection data (ENSE).
- Cooperation with DINA, Baltic Diversity, EU BON, FishBase.
- Preparations for repatriation of foreign-owned Swedish collection data.

Milestone:

All Swedish biodiversity databases (collections and observations) should become available through GBIF.

2. Digitization effort

In total, it is estimated that the major Swedish natural history collection institutions hold some 40 million specimens, only 6 million of which have been digitized at least to some extent. Traditional digitization of museum specimens is labour-intensive and unsatisfactorily slow. Normally new acquisitions and as yet un-digitized specimens subject to loan are digitized, but the back-log of material kept in store is sometimes immense. To address this situation GBIF-Sweden will support the development and implementation of methods for rapid and efficient digitization of natural history collections. Where appropriate, we will also support data providers with minor but crucial digitization efforts.

Activities during 2012:

- Participation in other biodiversity informatics projects and programs in Europe and elsewhere (e.g. NCB Naturalis [Leiden], MNHN [Paris], MfN

- [Berlin], Digitalium [Joensuu], NHM [Oslo], Digisam [Stockholm], MKC [Fränsta]) to stay up-dated on the development of digitization efforts internationally.
- Preparations for a combined Nordic/Baltic application in 2013 for economic support to the development of large-scale, mass-digitization methods.
 - Preparations to include tools for digitization and handling of small datasets in the proposed new web portal of GBIF-Sweden (see below).

Milestone:

All Swedish natural history collections should be rapidly and efficiently digitized.

3. Web portal

The overriding aim of offering search facilities for Swedish biodiversity data, and information about GBIF via gbif.se is to serve a wide audience with specific information on Swedish conditions but also to provide a link to the international scene. To reach this goal the functionality and usability of the current gbif.se-web portal (launched in 2007) needs to be improved.

Activities during 2012:

- Software development for a customizable web portal has commenced in collaboration with GBIF-France. The software is intended to be modular in structure and possible to adapt to the needs of different thematic or regional interests.
- An application for handling metadata is ready for testing.
- Map functions in the new portal will be developed and used in collaboration with Baltic Diversity and Swedish LifeWatch.
- To better understand the content needs of the user community a survey will be dispatched early in 2013.
- The existing advisory panel organized to collect in-depth user requirements will also be re-invoked in 2013.

Milestone:

The web portal of GBIF-Sweden should become the most significant gateway to Swedish and International biodiversity data.

4. Education and outreach

GBIF-Sweden staff should take part in seminars, courses, workshops and meetings with researchers, encouraging education in this field of science. User statistics should be employed to highlight areas of deficit in relation to user demands. Information efforts should increase by continued participation from the GBIF-Sweden staff at various information events.

Activities during 2012:

- GBIF-Sweden staff has taken part in the research training programme at the Swedish Species Information Centre
- GBIF-Sweden staff is responsible for organizing a course on “Collection Management and Biodiversity Informatics” as part of the Master Programme “Nordic Academy of Biodiversity and Systematics Studies”.
- To serve as statistics over the use of Swedish biodiversity data have been made available.
- Cooperation with the Swedish Species Information Centre, the Species Gateway and Swedish Lifewatch continues.
- The node manager has taken part in several conferences, workshops and meetings presenting GBIF and what it can offer to scientists and other user groups. Among others this includes presentations at
 - the annual conference of the Swedish Society Oikos in Karlstad,
 - the Stockholm Polar Week in Stockholm,
 - “Flora- och faunavårdskonferensen 2012” at Ultuna,
 - “The Tipping Point” arranged by Stockholm municipality,
 - the 1st international Ecomuseums Conference in Seixal, Portugal,
 - the UNESCO Man and the Biosphere (MaB) -conference “Pearls of the Coniferous Forest” in Joensuu, Finland,
 - the UNESCO and Swedish Science Research Council World Science Day for Peace and Development in Stockholm,
 - the NRM/SLU conference “Människan i landskapet” in Stockholm,
 - during several MaB national and European workshops,
 - Naturhistoriska muséers samarbetsorganisation (NAMSA) – meetings.
- GBIF-Sweden has hosted one scholarship awardee from Utställningen Unga Forskare and one high school PRAO student.
- Plans have been put forward to organize a Stockholm Biodiversity Informatics Symposium during 2013.

Milestones:

A. Global biodiversity informatics should develop into a research topic in its own right.

B. Swedish researchers should significantly increase using GBIF-mediated data.

5. Support to biodiversity informatics in developing countries

GBIF-Sweden should increase its contacts with potential cooperating agencies (Swedbio and others) for dissemination of biodiversity information in developing countries.

Activities during 2012:

- An application was submitted during the 2012 GBIF Mentoring Call for lending support to the set up a GBIF node in India (INBIF). The application was subsequently declined.
- Later GBIF-Sweden was approached by a Nicaraguan contact for the possible participation in a developing project during 2013.

Milestone:

The development and use of global biodiversity informatics in developing countries should be encouraged.

Financial report 2012

Anders T. 2013-01-10

	<i>Budget 2012</i>	<i>Output 2012*</i>
Opening balance	93 969	93 969
Project grant VR 2012-01-01 - 2012-06-30	816 000	816 000
Project grant VR 2012-07-01 - 2012-12-31	1 291 000	1 291 000
OH 2012-01-01 – 2012-06-30	136 000	136 000
OH 2012-07-01 – 2012-12-31	258 200	258 200
Sum opening balance + project grant	2 595 169	2 595 169
Salaries	1 385 750	1 240 541
Travelling expenses + operation grant	220 000	36 427
Data migration: Svenska botaniska föreningen	25 000	0
OH 2012-01-01 - 2012-12-31	136 000	136 000
OH 2012-07-01 - 2012-12-31	258 200	258 200
	2 024 950	1 671 168
Balance	570 219	924 001

GBIF staff time (Focus Areas) spent on various activities during 2012

