

# GLOBAL BIODIVERSITY

## INFORMATION FACILITY



Annual Report  
2006

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# Global Biodiversity Information Facility

## Fifth Annual Report

### Letter from the Executive Secretary / Director

I am pleased to present the Annual Report for 2006.

In 2006, GBIF's first five-year Memorandum of Understanding came to an end. GBIF's Participants ensured our future by developing and adopting of a strategic plan and Memorandum of Understanding for the second phase of GBIF, covering the years 2007 - 2011, thus allowing GBIF to continue and grow into the future.

Another concentrated effort in 2006 focused on responding to user demands and expectations to transform the GBIF Data Portal from the prototype stage into a more fully mature, responsive portal that can support a much wider range of queries against an ever-growing distributed body of data.

The portal development process involved strengthening the GBIF network while at the same time producing robust information architecture services (machine-to-machine interfaces, web services) that will allow many kinds of users to tap in to the treasure of data that GBIF mediates.

An early version of the Data Portal architecture was demonstrated at GB13 in Iquitos in October of 2006. Following that meeting, the developer team at the Secretariat, in concert with partners based around the world, used the feedback obtained to construct a robust information architecture and portal interface to be released in 2007.

2006 was thus a watershed year, in which GBIF made significant progress toward its goal of making the world's scientific biodiversity data openly and freely available on the Internet in service to science, society and a sustainable future.

Sincerely,



James L. Edwards

Washington DC, October 2007

# Introduction

The work of GBIF for 2006 followed the Work Programme for 2005 - 2006, which centered around four themes:

- Nodes and Network Implementation
- Digital Biodiversity Science
- Furthering Participation, Impact and Benefits of GBIF
- Training and Capacity Building in Biodiversity Informatics

During 2006, a new Work Programme for 2007 - 2008 was developed, closely tied to the Strategic and Operational Plans 2007 - 2011, which in turn was developed during late 2005 and early 2006 in concert with the Memorandum of Understanding (MOU) for 2007 - 2011.

The Governing Board's activities in 2006 were crucial to the continuance of GBIF: The adoption of the new MOU and strategic plan, agreement on a schedule of contributions for Voting Participants, and on new rules for procedures (organisational, financial and staff) all took place during the year.

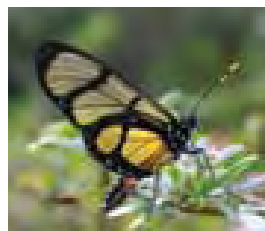
At GB13 in Iquitos, Peru, it was decided that there were a sufficient number of signatories to the new MOU to consider GBIF continued for its second phase of operation.

GBIF is able confidently to set off on its second phase of existence because of the groundwork laid during 2006.

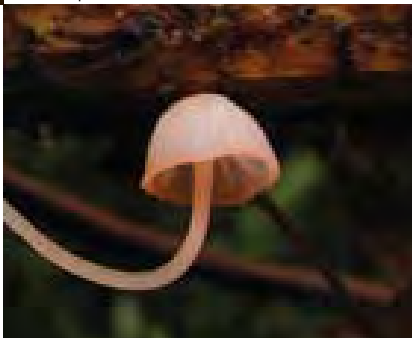


*Mycena pterigena* (Fr.) P. Kumm

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*Thyridia psidii* L.



# Summary Timeline for 2006

Jan 16	GBIF Governing Board adopts “Recommendation on Open Access to Scientific Data”
Jan 25 - 27	GBIF Data Provider training workshop, National Botanical Research Institute, Lucknow, India
Feb 1 - 3	First International Workshop on Globally Unique Identifiers for Biodiversity Informatics (GUID-1), hosted at the US National Evolutionary Synthesis Centre (Durham, North Carolina, USA), organized by TDWG, GBIF and IUBS
Feb 8	GBIF makes RSS feeds available from the Data Portal and Registry
Mar 6	Online survey on <i>Custodianship of Sensitive Data</i> launched
Mar 17	Online survey of <i>Feedback and Requirements for the GBIF Data Portal</i> launched
Mar 28	NODES mentee - mentor pairs announced: Pakistan by Australia, Peru by Costa Rica, Portugal by Spain
Apr 2 - 7	Twelfth GBIF Governing Board meeting (GB12), Cape Town, South Africa <ul style="list-style-type: none"> <li>• Fifth Ebbe Nielsen Prize awarded to John Wieczorek</li> <li>• Fourth Annual GBIF Science Symposium (GBIF’s Role in Conservation and Monitoring of Biodiversity)</li> <li>• Adoption of main text of Memorandum of Understanding to continue GBIF for another five years</li> <li>• <i>GBIF Strategic and Operational Plans 2007 - 2011</i> adopted</li> </ul>
Apr 19	Korean GBIF mirror site launched
Apr 24	Article about GBIF titled “Earth’s Biodiversity Now on Your Desktop” launched on the “Discoveries” section of the website of the US National Science Foundation
Jun 15 - 16	Extraordinary GBIF Governing Board meeting (GB12.5), Madrid, Spain adopted Annex 1 (financial contributions) to the Memorandum of Understanding
Jun 10 - 12	Second International Workshop on Globally Unique Identifiers for Biodiversity Informatics (GUID-2), hosted at the e-Science Institute (Edinburgh, Scotland), organized by organized by TDWG, GBIF and IUBS
Jul 5	GBIF Memorandum of Understanding for 2007 - 2011 opened for signature
Jul 14	GBIF Science Committee meeting, Copenhagen
Aug 1	New ECAT Programme Officer joins GBIF Secretariat
Aug 13 - 20	ISOBIS Summer School on Biodiversity Informatics (instructors included 3 GBIF staff)
Aug 22	<i>BioGeomancer Guide to Best Practices for Georeferencing</i> available for download
Oct 1 - 4	Thirteenth GBIF Governing Board meeting (GB13), Iquitos, Peru <ul style="list-style-type: none"> <li>• Approval of MOU for 2007 - 2011 to enter into force as of 1 January 2007</li> <li>• Adoption of revised Rules of Procedure, Staff Rules, and Financial Regulations</li> </ul>
Oct 23-25	Joint GEOSS Biodiversity workshop, organised in collaboration with DIVERSITAS, GTOS and the GEO Secretariat
Nov 16	Third GBIF Ecological Niche Modelling workshop
Dec 5 - 7	Georeferencing workshop (Belgium)
Dec 8	New NODES Programme Officer joins GBIF Secretariat
Dec 12	New GBIF Institutional Host Agreement signed between GBIF Secretariat and the University of Copenhagen

# GBIF Nodes and Network Implementation

## GROWTH AND ENCHANCEMENT OF THE PROTOTYPE DATA PORTAL

As of the end of 2006, the GBIF prototype data portal was serving more than 114 million records of species occurrences (of these 101 million were indexed by the portal) from 1214 collections and observational databases (for a complete listing, see Annex 4). These data were being served to the GBIF network by 215 data providers (located in 35 countries) representing 42 of the 82 GBIF Participants. This growth in data content and the GBIF network is shown graphically in Figures 1 and 2.

Figure 1.



Figure 2.

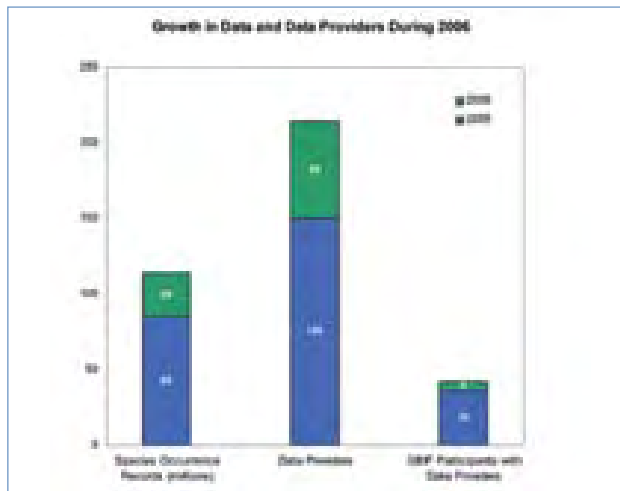


Figure 3.

The number of names data records also increased during 2006, from 527,000 species (and 41,000 infraspecies) names in 2005 to 884,552 species (and 68,872 infraspecies).



A number of enhancements to the Prototype Data Portal were begun in 2005, with the hiring of several Java developers (see Annex 2). In 2006, their work turned seriously toward the development of the new GBIF Data Portal, which entailed developing an entirely new infrastructure for indexing data and facilitating searching.

Included in the new Data Portal development were re-implementations or enhancements of the GBIF public metadata, data validation, and distributed services, as well as packages for accessing metadata and names data, and a schema repository.

As part of the Portal development team, a Data Portal Administrator was added to work with data providers on improving data quality, ensuring the accurate indexing of shared data, and facilitating the functioning and use of the Data Portal.

## STANDARDS AND TOOLS DEVELOPMENT

Work toward more, and better, standards was also ongoing in partnership with TDWG (Biodiversity Information Standards). GBIF and TDWG, funded through the grant received from the Gordon and Betty Moore Foundation in 2005, worked toward improving existing TDWG standards and held joint workshops on Globally Unique Identifiers (GUIDs). The use of GUIDs will be of great help with data management within the biodiversity information domain (pointing out duplication of records, making sure data providers are accredited, etc.), but a particular type of GUID was not chosen prior to these workshops. The attendees for the most part agreed that the most beneficial GUID standard to use would be Life Science Identifiers (LSIDs). Work to implement LSIDs within the GBIF network is ongoing.

GBIF and TDWG worked together in 2006 on two new data schemas. The first of these is for Structured Descriptive Data (SDD). The SDD, now formally established as a current TDWG standard, enables the transfer of descriptive data (including identification, data-mining and analysis tools) among existing and future software platforms and federated databases without loss of information content (see <http://wiki.tdwg.org/twiki/static/index.htm>).

The second, for Natural Collections Descriptions (NCD), remains a work in progress. However, NCD primarily holds information about collections of objects, but can also be used to describe organisations (collections of collections) and networks (collections of organisations). There are many existing sources of information about biodiversity organisations, but they are all in different formats. NCD could be used to form a directory for organisations using GUIDs, when these are implemented across the GBIF network. More information can be found at <http://wiki.tdwg.org/twiki/bin/view/NCD/WebHome>.

Because GBIF recognised the needs of current and potential data providers, contracts were established with ETI Bioinformatics to develop software packages to facilitate the process of sharing both specimen/observation data and names data. These contracts were in conjunction with prior work done on a toolkit for Nodes, which would facilitate the creation and aggregation of collections descriptions in a standardised format, employing the NCD data standard mentioned above.

## IMPROVEMENT OF GBIF SECRETARIAT ICT INFRASTRUCTURE

In early 2006, GBIF received a dedicated new server room in the basement of the Zoological Museum of the University of Copenhagen. Prior to that time, GBIF servers had been housed in the server room of the Museum, but as the server park grew, another solution became necessary. There is a dual cooling system and dual connections to the Internet at 1 gigabit speed via the Danish Research Network and NORDUnet. At the end of 2006, GBIF had 22 servers, all running the Linux operating system, and 3.6 terabytes of disk space.

## NODES

During 2006 several activities were carried out to assist Nodes in their role as coordinators and managers of the networks of biodiversity data providers and users at the Participant Level. These activities included training, mentoring, compilation of best practices, technical support and, very importantly, the meetings and discussions held by the GBIF Participant Nodes Committee.

A major area of work for Nodes was the further development of the GBIF Nodes Guide, a compilation of best practices, lessons learned, and resources to support nodes in their day-to-day activities.

This guide was set up as a wiki (<http://wiki.gbif.org/gbif/wikka.php?wakka=NODES>) to make it easier for Nodes to contribute and participate actively in its development. It has also served as a discussion forum for GBIF Nodes from around the GBIF Network, helping them to share ideas and find solutions to common problems.

During 2006 the Nodes Mentoring Programme, which is based on fostering Node-to-Node collaborations and partnerships, was shown to be a very successful strategy for building capacity and undertaking tailored training activities. Three mentoring projects, selected from among submissions in answer to the 2005 call for proposals, were carried out during 2006.

The **Pakistan-Australia mentoring** was focused on the configuration of a server for the Pakistan Node, including the installation of a DiGIR provider application. This mentoring also included support in the implementation and use of BioLink as the software for digitising the biological collections held at the Pakistan Museum of Natural History and other collections in the country.

The main objective of the mentoring between **Peru and Costa Rica** was to strengthen the capacity of national and subregional institutions in Peru with regard to the use and implementation of biodiversity informatics tools. This mentoring is expected to contribute towards the development of a national network of biodiversity data providers, while ensuring the seamless integration of this network with others at regional and global level.

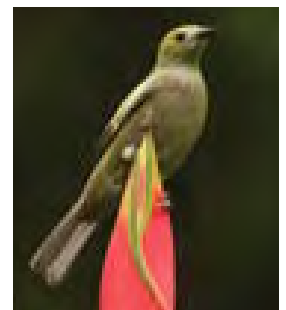
Finally, the **Portugal-Spain** mentoring activity was developed to assist Portugal in four main areas: 1) to set up a practical implementation project and action plan for the Portuguese GBIF node, 2) to produce a state-of-the-art report of biodiversity-related collections, institutions, projects and actors within the country, 3) to start the establishment of a robust Biodiversity Information Network at the national level in Portugal, and 4) to undertake several training activities on biodiversity informatics tools and practices.

The call for mentoring proposals in 2006 resulted in the **Netherlands - Bulgaria** mentoring project. This will allow the latter to increase the functionality, visibility and applied use of the Bulgarian GBIF Node, to raise awareness amongst officials,

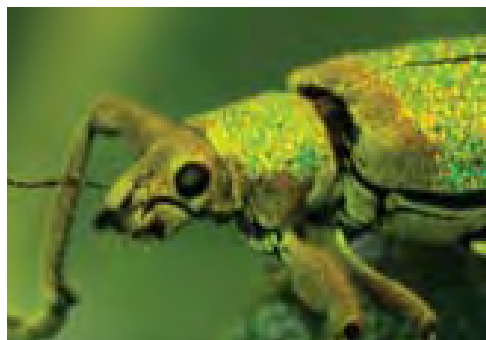


and to stimulate and train data providers to connect Bulgarian databases to the GBIF network. The work focuses on ‘jump-starting’ the Bulgarian national GBIF Node by addressing several issues: transfer of technical knowledge and know-how, administrative sociological approaches, and outreach. The capacity building effort will be implemented through two reciprocal visits, joint development of some specific ICT tools (wrappers, web applications), and establishing a permanently available video-conferencing link for ad hoc advice and online consultation. The output of the program is to be the generation of technological capacity and the actual linking of some Bulgarian databases to the GBIF network. The socio-political aspects of establishing a Node were addressed by a one day symposium that dealt with issues such as IPR, institutional embedding, sharing of resources, partnering, and how to motivate data providers, governmental officials and policy makers, and end users.

The Participant Nodes Committee meeting held in Capetown in April 2006, which was attended by about 45 people (including Node Managers, Heads of Delegation, GBIF Secretariat Staff and some invited observers), covered a wide range of issues including evaluation of progress in the Nodes activities, planning for 2006 and beyond, discussions on the development of custom portals and citation standards, and “learning-from-each-other” sessions, with presentations by Node Managers from Costa Rica, Spain, South Africa, Colombia, and Indonesia, plus a presentation made by an observer from Namibia.

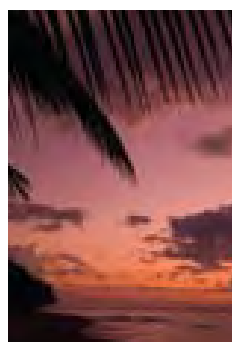


*Thraupis palmarum* (Wied-Neuwied)



*Airosimus erubescens* (Champion)

Photographs © Greg Basco, 2007  
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# Digital Biodiversity Science

## SEED MONEY AWARDS

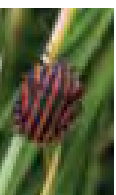
The 2005 - 2006 GBIF Seed Money awards were made in late 2005, and the work funded by them continued during 2006.

The ECAT Programme made awards to two projects. One, **A Global Working Checklist of the Compositae**, will integrate and make available substantial nomenclatural and taxon concept data for the estimated 25,000 species of Compositae which comprise 10% of the world's flora. Landcare Research in New Zealand is leading this initiative in collaboration with the International Compositae Alliance (TICA), South African National Biodiversity Institute (SANBI), Smithsonian Institution, Royal Botanic Gardens Kew, Missouri Botanical Garden, University of Tokyo, Berlin Botanic Garden, and the Australian National Herbarium. The mid-term report was received from this project in December 2006; the project participants had achieved the networking milestones laid out in the proposal for that timeframe.

The other funded project is to make a list of the ca. 13,278 names of **Melastomataceae (incl. Memecylaceae)** with information on recognised species, synonymous names, and literature, available via the LIAS platform. The midterm report indicates that a database of all the raw names data is accessible to members of the taxonomic working teams, who are beginning to add their own data records and categorise the names according to basionym, accepted name, or synonym. The taxonomic work was approximately 25% complete by 1 October 2006.

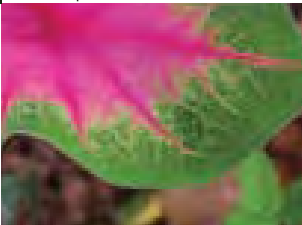
The DIGIT award for 2005 - 2006 was to enhance the capabilities and increase the membership of **HerpNET**, extending it to institutions in countries other than those in the Americas. Specifically, seven amphibian collections are being added to the network, and the project will include training in digitisation and geo-referencing, the installation of DiGIR servers and registration with the GBIF network for the partner institutions. The project will add at least 425,000 new amphibian records of which 374,445 specimens will be newly georeferenced. In addition, new HerpNET features available in 2007 and funded by this grant include: the ability to search under synonymous taxonomy, expert opinion maps from the Global Amphibian Assessment mapped along with point-locality data, and automatic links to maps from AmphibiaWeb species accounts, as well as to HerpNET data providers.

Although proposals having to do with pollinators (identified as a target group for GBIF content in the 2005 - 2006 Seed Money request for proposals) were received, they were not selected for funding. However, both the ECAT and DIGIT review committees recommended the use of uncommitted funds to explore how to engage the global pollinator community. Therefore, GBIF let a contract to organize this task, which included hosting international meetings, encouraging the mobilisation of nearly 1 million specimen records, and creating an 80% complete global checklist of bees.



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*Graphosoma italicum*  
Muller



*Catadium bicolor* (Aiton)

## PUBLICATIONS

During 2006, GBIF worked with the BioGeomancer Consortium and the University of California, Berkeley, to make the **BioGeomancer Guide to Georeferencing** available as a free publication. An electronic file (PDF) was put on the GBIF website for distribution in August, 2006, and arrangements were made for GBIF to provide a print version, as well.

In addition, a report on methods by which data providers can best handle data that are considered “sensitive” for any one of several reasons was commissioned. A survey on the topic of sensitive data was held to provide input for the report, including an e-conference discussion. Plans were laid for a workshop on sensitive data in early 2007. Two other papers were also commissioned: one on handling observational data, and one on how to get started digitising (for managers of natural history collections). These are scheduled to appear in 2007.

A database (in spreadsheet format) of publications that utilise GBIF data, or are about GBIF in one way or another (both scientific and public), has been established on the Internet by the Secretariat. This database can be accessed openly, at [http://www.editgrid.com/user/gbif\\_secretariat/Publications\\_that\\_cite\\_GBIF](http://www.editgrid.com/user/gbif_secretariat/Publications_that_cite_GBIF). See Box about GBIF in Publications, page 17, for more information.



Photographs © Christian Lange, 2006  
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*Hippophae rhamnoides* L.



*Apis mellifera* L. on *Citrus limon* (L.) Burm. f.  
Photograph © John Sullivan, 2004  
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*Bolbitius titubans* (Bull.) Fr.

## EBBE NIELSEN PRIZE

The 2006 Ebbe Nielsen Prize was awarded to John Wieczorek of the University of California, Berkeley.

Wieczorek played a seminal role in developing standards and protocols that allow biodiversity databases to be integrated with one another. For example, he was deeply involved in the development of a protocol in wide use today, called Distributed Generic Information Retrieval (DiGIR).

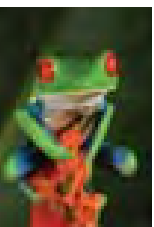
He was also instrumental in developing a computer program (BioGeomancer) that makes it possible to assign a latitude and longitude to a biodiversity data record that was originally collected without such information. Being able to convert verbal descriptions to numerical spatial data is “is bringing large portions of biodiversity information ‘to life’”, according to Ed Murdy, head of the US delegation to the GBIF Governing Board.

The selection of the Prize winner was conducted by the GBIF Science Committee, which in making its announcement noted, “John Wieczorek has a long and very good track record as an amazingly creative force for biodiversity informatics.” Letters in support of Wieczorek’s nomination for the Ebbe Nielsen Prize cited his combination of technical expertise and quiet humanity that has helped unite communities of data providers.

His leadership has been instrumental in developing community-based, distributed database networks about all terrestrial vertebrates in North America – MaNIS for mammals, HerpNET for amphibians and reptiles, and ORNIS for birds.

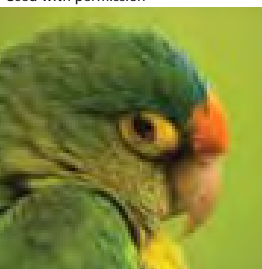
Wieczorek will use the Prize to help expand these projects to Brazil, Argentina, Madagascar and Russia.

The Prize was awarded on 5 April 2006 in Cape Town, South Africa, by Dr. Philemon Mjarwa, Director General of the Ministry of Science and Technology together with David Penman, GBIF Governing Board Chair. Wieczorek then gave a presentation about his work.



Photograph © Greg Basco 2007  
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*Agalychnis callidryas*  
(Cope)



*Amazona autumnalis* L.



Governing Board Chair David Penman presenting  
the Ebbe Nielsen Prize for 2006 to John Wieczorek.

Photograph by Larry Speers.



## FOURTH ANNUAL GBIF SCIENCE SYMPOSIUM

### The role of GBIF and other new technologies in conservation and monitoring biodiversity change

The Symposium was held in conjunction with the twelfth Governing Board meeting, in Cape Town, South Africa, on 5 and 6 April. Attended by Governing Board delegates, students and faculty from nearby universities, and members of the general public, the Symposium was well-received, and generated much discussion.

The speakers and their topics were:

<b>Simon Mduma</b> Tanzania Wildlife Research Institute	Ecological baselines and monitoring ecological change
<b>Guy Midgley</b> South African National Biodiversity Institute	Projecting and monitoring climate change impacts on terrestrial biodiversity: Roles for GBIF
<b>David Obura</b> Coral Reef Degradation in the Indian Ocean (CORDIO)	Applying new technologies to the monitoring of coral reefs
<b>Emma Archer</b> University of Witwatersrand	Biodiversity conservation and sustainable rural livelihoods in a marginal environment: A case study from dryland South Africa
<b>Stella Simiyu</b> Secretariat, Convention on Biological Diversity	Implementing the Global Strategy for Plant Conservation in Africa: The role of GBIF
<b>Martin Sharman</b> European Commission Directorate General for Research	Biodiversity data acquisition and assessment after the MEA: How GBIF and GEOSS will benefit Africa
<b>Gavin Maneveldt and Richard Knight</b> University of the Western Cape	Biodiversity conservation: Its current status in South Africa and the way forward
<b>Ed February</b> University of Cape Town	The potential role for GBIF in developing management policies in African national parks

# Participation

## INTELLECTUAL PROPERTY RIGHTS

In March 2006, GBIF convened a meeting of international legal and other experts to solicit advice on the IPRs associated with biodiversity data and databases. The meeting participants were able to consider, prior to the meeting, a white paper on the topic that GBIF had commissioned the previous year. Results of the meeting included improvements in the GBIF Data Use Agreement and Data Sharing Agreement. The full report of the meeting is available at <http://www.gbif.org/prog/ocb/iprmtg/>. One of the outcomes was a recommendation that GBIF form a pro bono legal advisory group, which the Secretariat followed. The legal advisory group that was constituted was dubbed “ProLEG” (short for PRO bono LEGal).

The first meeting of the ProLEG group took place in September, 2006. Based on the discussions at that meeting, a number of recommendations were made to GBIF. These included suggestions for wording of certain clauses of the Data Sharing and Data Use agreements, and a recommendation that GBIF should seek to use, as much as possible, public science norms and policies to guide the activities of GBIF and avoid using highly legalistic solutions and enforcement mechanisms. Also, GBIF should impose the least possible restrictions and obligations on users, but continue to include attribution as a condition of data use.

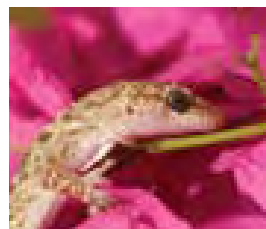


*Meconema thalassinum* (De Geer)  
Photographer: Jakob Damborg



*Hyles gallii* Rottemburg  
Photographer: Lars S. Madsen

Photographs © NatureEyes  
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*Hemidactylus turcius* L.  
Photographer: Mads Fjeldsø Christensen



*Ceriantus* sp.  
Photographer: Mads Fjeldsø Christensen

## FURTHERING THE IMPACT AND BENEFITS OF GBIF

During 2006, GBIF commissioned a white paper on the use of GBIF data to address the need for indicators of progress toward the 2010 target of reducing the rate of loss of biodiversity (see [http://www.gbif.org/GBIF\\_org/documents/2010indicators](http://www.gbif.org/GBIF_org/documents/2010indicators)). The authors presented the work at GB13 in Iquitos, Peru. The authors demonstrated that GBIF data can be combined with GIS layers and land-use history to document prior changes in the distribution of species, and predict future changes in the species' range given different climate change scenarios. The results of these analyses for a number of species can be used as an indicator of biodiversity loss and therefore of changes in the rate of such loss. Such an indicator is based on real scientific data (and therefore the analyses are repeatable), in contrast to the methods of indicating changes in the rate of biodiversity loss currently in use by other organisations, which are based on expert opinion and secondary sources.

GBIF provided funding for a Demonstration Project called the **PYXIS Digital Earth Reference Model** (renamed as **PYXIS WorldView™**). The goal of this project is to generate a platform that combines the most basic forms of geospatial data functions with next generation information flow, while at the same time integrating GBIF-mediated and GBIF-like data.

GBIF members will directly benefit from the release of the PYXIS WorldView™ with access to:

- Whole Earth information discovery, navigation and visualisation
- Authoritative single sources information publication service
- Multi-source information integration analysis and predictive modeling environment
- Multi lingual extensibility -APIs, PYXIS software development kit, SWIG FFI, plug-in architecture
- Interoperable with conventional coordinates
- Easy integration of GBIF data with other geo-data streams and imagery

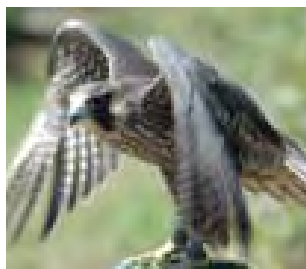
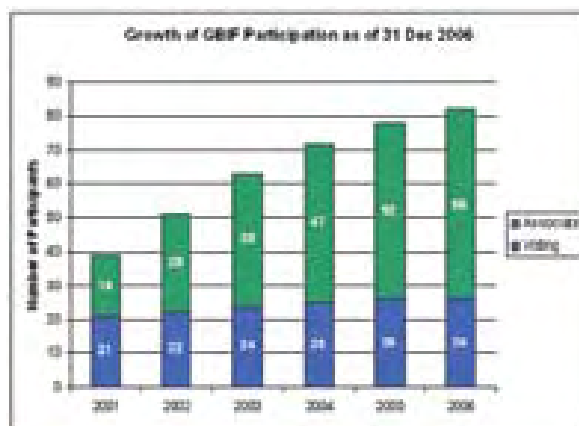
Due to the nature of this huge undertaking, the PYXIS WorldView™ beta release will be available in the fourth quarter of 2007.

GBIF was also active in the development of the Ten-Year Work Plan for the **Global Earth Observing System of Systems (GEOSS)**, being responsible for one of the 2006 Tasks: Development of a strategic plan for capturing historical biodiversity data from natural history collections and the research community. Work toward that goal was conducted at a workshop held at the World Meteorological Organisation headquarters in Geneva in October 2006, which was coorganised with the GEO Secretariat and DIVERSITAS. The output of that workshop was a commitment by all the participants to work toward establishing a Biodiversity Observing Network to be part of the GEOSS network of networks. GBIF became involved in a pilot project (output due in late 2007) to demonstrate the benefits of such a network.

## GROWTH IN PARTICIPATION

During 2006, four major international organisations joined GBIF as Associate Participants. These were Major Systematic Entomology Facilities, Ciencia y Tecnología para el Desarrollo (CYTED), the International Species Information System, and Bioversity International. These additions brought the total membership in GBIF to 82 Participants, as shown in Figure 4.

Figure 4.



*Falco peregrinus* Tunstall

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*Erigeron philadelphicus* L.



*Berberis* sp.



## GBIF IN PUBLICATIONS IN 2006

During 2006, a story about GBIF was featured on the website of the US National Science Foundation, and 4 other websites.

In addition to the BioGeomancer Guide to Best Practices for Georeferencing that GBIF published online, GBIF was also discussed in a governmental report called *To Stand the Test of Time: Long-term stewardship of digital data sets in science and engineering*.

GBIF data were used in 28 oral and printed scientific papers during 2006, and was itself the object of study in 29 other papers on topics such as intellectual property rights and biodiversity informatics as a discipline.

In addition, 42 news items about GBIF activities such as the Ecological Niche Modelling workshop or the Governing Board meeting appeared in newspapers and newsletters from around the world.

Citations of all these publications can be found in a database maintained by the GBIF Secretariat at [http://www.editgrid.com/user/gbif\\_secretariat/Publications\\_that\\_cite\\_GBIF](http://www.editgrid.com/user/gbif_secretariat/Publications_that_cite_GBIF).



Screenshot of the story at the US National Science Foundation website ([http://www.nsf.gov/discoveries/disc\\_summ.jsp?cntn\\_id=105863&org=NSF](http://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=105863&org=NSF))



Costa Rican delegate Erick Mata speaks with the press about GBIF during GB13 in Iquitos, Peru.

# Training and Capacity Building in Biodiversity Informatics

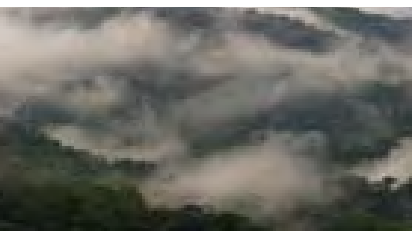
## ASSISTANCE TO DEVELOPING COUNTRIES

To raise supplementary funds for developing country members of the GBIF network, the Secretariat began in 2005 a discussion with the Royal Danish Ministry of Foreign Affairs (RDMFA) about a **Capacity Enhancement Programme for Developing Countries** ( CEPDEC). CEPDEC is a multi-stakeholder approach to support sustainable social and economic development in developing countries by making biodiversity information easily accessible and improving capacity to utilise this information.

As part of the development of the CEPDEC multi-donor proposal, feasibility studies were carried out in Tanzania (funded by the RDMFA) and Nicaragua (funded by GBIF). Based on the results of the Tanzania feasibility study, the RDMFA decided to fund a CEPDEC pilot project for Tanzania over a three year period (in total 400.000€).

The 3-year pilot project in Tanzania will help this country to gain access to, and make better use of data about its biological diversity held both within the country and in the world's natural history collections, project databases, and literature. The project will help mobilise biodiversity data and information to target the Millennium Development Goals (MGDs) while assisting the scientific community in Tanzania. Partners in the project are the Tanzania Commission for Science and Technology (COSTECH), the GBIF Secretariat and the Department for the Environment and Sustainable Development of the Royal Danish Ministry of Foreign Affairs.

Given the scope and magnitude of CEPDEC, the RDMFA invited the participation of other countries as potential donors in order to improve the possibilities of implementing this initiative (considering that it will be difficult for a single country to provide the level of funding required). France came forward and expressed its interest in collaborating with GBIF under the CEPDEC umbrella in the context of the “Sud Expert Plantes (SEP)”, an initiative supported by the French Ministry of Foreign and European Affairs to assist 15 francophone countries in Africa and Asia to better know, conserve, and sustainably use their plants. The CEPDEC component within this project will help these countries (particularly those that are already GBIF members) to implement their own networks of biodiversity data providers and users, particularly in support of activities such as policy and decision making, research, and education.



Photograph © Greg Basco  
Used with permission



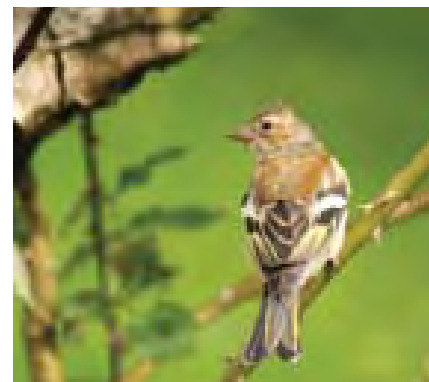
*Gallinula chloropus* L.  
Photograph © Derek Robertson  
Used with permission

## WORKSHOPS

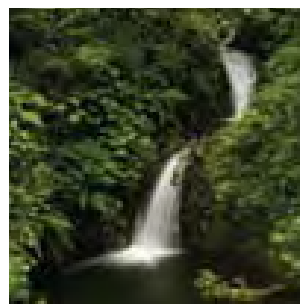
**DiGIR Provider training workshop for South and South-East Asia** - On 25 - 27 January 2006, GBIF and The National Botanical Research Institute of India organised a training workshop in Lucknow, India. Four GBIF staff, and a total of 22 people from 9 countries in the region attended the workshop. After the workshop, the first data provider installations were started in India and Pakistan.

The third GBIF **Ecological Niche Modeling workshop** on how to use GBIF-mediated biodiversity data for decision-making was held 13 - 17 November 2006 in Bangalore, India. Overall, 23 participants from 12 mostly Asian countries had an intense hands-on training in data modeling. Participants were required to bring their own data sets and build different scenarios using different data modeling approaches (BioCLIM, GARP and MAXENT ). This was complemented with a thorough discussion on the attributes and possibilities of modeling techniques. The highlight of the workshop was the final presentation by the attendees of their analyses of their own data. This workshop was locally organised by the Ashoka Trust for Research in Ecology and Environment (ATREE) (<http://www.atree.org/>) and benefited greatly from the on-going and generous contributions made by the faculty from the Biodiversity Research Center (The University of Kansas - <http://www.ku.edu/>), the Autonomous University of Mexico (UNAM - <http://www.unam.mx/english/>), the University of Guanajuato, and the American Museum of Natural History (<http://www.amnh.org/>). Full information about this training event including the documents and presentations is available at: [http://www.atree.org/gbif\\_enmw\\_2006.html](http://www.atree.org/gbif_enmw_2006.html).

As a part of the work of the HerpNet project discussed above, a **workshop on georeferencing** was offered to European collections personnel 5 - 7 December 2006, in Tervuren, Belgium. The workshop was attended by 28 persons from 15 countries, and was a co-sponsored activity between the HerpNet GBIF Seed Money project, the training program for GBIF Participant Nodes, and the Royal Museum for Central Africa. Topics covered at the workshop included: How to georeference using the Point-Radius method, online resources for georeferencing, using paper maps, using GIS to georeference, finding GIS resources online, and GM Library - BioGeomancer. More information on this workshop can be found at <http://www.herpNet.org/gbif/gbif.html>.



Photograph © Derek Robertson  
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*Fringilla coelebs* L.  
Photograph © Greg Basco  
Used with permission

# Governing Board Activities

## GB12

The meeting took place 3 - 4 April 2006 at the Table Bay Hotel in Cape Town, South Africa. Delegates were welcomed by Marjorie Pyoos, Head of the South African delegation, on behalf of the South African government.

Based upon a set of documents prepared by the Secretariat and the Review Response Team the Governing Board approved the new strategic plan, titled GBIF Plans for 2007 - 2011: From Prototype towards Full Operation, as well as the Memorandum of Understanding for 2007 - 2011, minus Annex 1 of that document. Because the Board was unable at GB12 to come to consensus on Annex 1, the finance section of the MOU, it was agreed to hold an extraordinary meeting in two months time, to consider that single issue.

Other actions taken by the Board at GB12 included election of Jim Croft (Australia) to the position of Vice Chair of the Nodes committee for a two-year period (2006 - 2008).



GB12 was attended by 44 delegations representing 29 countries and economies (Australia, Belgium, Cameroon, Canada, Colombia, Denmark, Equatorial Guinea, Finland, France, Germany, Guinea, Japan, Republic of Korea, Mexico, Morocco, Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Slovenia, South Africa, Spain, Sweden, Taiwan [Economy], Tanzania, United Kingdom, U.S.A.), the European Commission (EC), and 14 international organizations (BioNET-INTERNATIONAL, Consortium for the Barcode of Life (CBOL), ETI Bioinformatics, Inter-American Biodiversity Information Network (IABIN), International Commission on Zoological Nomenclature (ICZN), Integrated Taxonomic Information System (ITIS), IUCN, Major Systematic Entomological Facilities (MSEF), Ocean Biogeographic Information System (OBIS), Pacific Biodiversity Information Forum (PBIF), Species 2000, Taxonomic Database Working Group (TDWG), United Nations Environment Programme (UNEP), World Data Center for Biodiversity and Ecology (WD-CBE)). Representatives from Burkina Faso, Congo, Ethiopia, Namibia, Nigeria, Swaziland, Uganda and Zambia attended the meeting as observers. *Photograph: Dirk Visser, 2006*

## GB12.5

This extraordinary meeting took place from 15 - 16 June 2006 at the Royal Botanic Garden, Madrid, Spain. Governing Board delegates were welcomed by Violeta Demonte Barreto from the Spanish Ministry of Education of Science.

The main purpose of the meeting was to come to an agreement on the Annex 1 text to be included in the new MOU 2007 - 2011 that the board approved at GB12 in Cape Town, South Africa. The agreement on the Annex 1 text included the funding principles to be used and the funding levels during the five year lifetime of the new MOU.

After a careful review of the advantages and disadvantages of each of three funding models, the board agreed that the funding of GBIF under the new MOU would be based upon a GDP-based funding scale and a set of specific rules, as listed in Annex 1 to the new MOU.

The finalised Annex 1 includes a basic GBIF budget of €3.114 million for 2007, with an average yearly increase over the following four years of 9%.

The GB12.5 meeting in Madrid was attended by delegations from 22 Voting Participant countries (Australia, Belgium, Canada, Costa Rica, Denmark, Equatorial Guinea, Finland, France, Germany, Japan, Republic of Korea, Mexico, Netherlands, New Zealand, Norway, Portugal, Slovenia, South Africa, Spain, Sweden, United Kingdom, U.S.A.).



## GB13

The meeting took place 2 - 4 October 2006 at the Social and sporting Fishing Club in Iquitos, Peru. The Governing Board delegates were welcomed by Luis Campos Baca, President of the Instituto de Investigaciones de la Amazonia Peruana (IIAP) on behalf to the Peruvian Government.

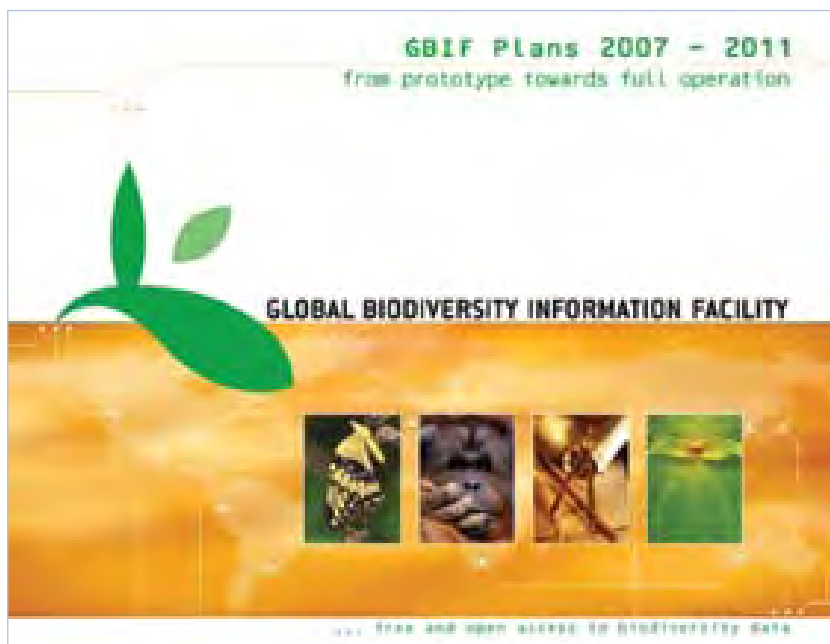
At this meeting, the Board unanimously approved that GBIF should continue into a second five-year phase, based on the number of Participants that had already signed the Memorandum of Understanding for 2007 - 2011, and approved that the MOU would go into force as of 1 January 2007.

Other actions taken by the Board at GB13 included approval of new Rules of Procedure, Staff Rules and Financial Regulations the Rules Committee as a Standing Committee Terms of Reference for the Executive, Science, Budget and Nodes committees the Work Programme for 2007 - 2008, including guidelines for Campaign activities. The Board elected Lawrence Way (United Kingdom) to a second term as Chair of the Nodes Committee, and Dag Terje Endresen (Nordic Gene Bank) to the position of Vice-Chair of Nodes from 2006 - 2008.



Thirty three delegations attended GB 13, representing 20 Voting Participants (Australia, Belgium, Canada, Costa Rica, Denmark, Finland, France, Germany, Japan, Republic of Korea, Mexico, Netherlands, New Zealand, Norway, Peru, South Africa, Spain, Sweden, United Kingdom, USA), 4 Associate Participant countries/economies (Colombia, Indonesia, Poland, Taiwan (Economy)), and 9 Associate Participant Organisations (European Commission, ETI Bioinformatics, Inter-American Biodiversity Information Network (IABIN), Integrated Taxonomic Information System (IT IS), IUCN, Ocean Biogeographic Information System (OBIS), Pacific Biodiversity Information Forum (PBIF), Species2000, World Data Center for Biodiversity and Ecology (WDCBE)). Representatives of the Amazon Cooperation Treaty Organisation (OTCA), BirdLife International, Brazil, Chile, Guyana, Panama, Paraguay and Uruguay were observers at the meeting.

# GBIF Gets a New Logo



In keeping with the theme of moving from prototype to full operation, as laid out in the *GBIF Plans 2007 - 2011* adopted at GB12, GBIF has had a new logo designed to replace the “big green G” of its prototype years.

The new logo has several forms, and is available for use by GBIF partners by contacting the Secretariat.



Old logo



New logo

# Financial Statement 2006

## SUMMARY FINANCIAL REPORT 2006 IN DKK AND USD GBIF BASIC FUNDS

	DKK	USD	Average exchange rate
<b>Income</b>	<b>20,411,581</b>	<b>3,432,479</b>	<b>594,66</b>
<b>Expenditure</b>			
Staff expenditure	-11,010,284	-1,851,526	
Running expenditure	-1,750,691	-294,402	
Secretarial facilities	-611,654	-102,858	
Work programme and Ebbe Nielsen Prize	-6,985,313	-1,174,674	
Expenses of the Governing Board	-545,817	-91,786	
Ebbe Nielsen Prize	-244,410	-41,101	
<b>Total expenditure</b>	<b>-21,148,169</b>	<b>-3,556,347</b>	<b>594,66</b>

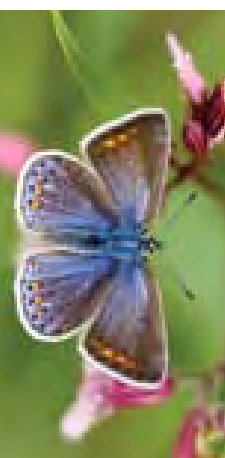
Changes in foreign exchanges rates	-959,265	-161,313	
Exchange rate differences rising from converting Financial report from	0	53,091	
	-959,265	-108,222	
<b>Retained funds</b>	<b>-1,695,853</b>	<b>-232,090</b>	

			Year end exchange rate
<b>Assets</b>			
Other receivables, VAT	565,001	99,799	
Cash at bank	10,838,473	1,914,451	
<b>Total assets</b>	<b>11,403,474</b>	<b>2,014,250</b>	<b>566,14</b>

<b>Retained funds and liabilities</b>			
Retained funds	1,948,605	344,191	
Provisions (Approved seed money)	967,996	170,982	
Liabilities other than provisions	8,486,873	1,499,077	
<b>Total equity and liabilities</b>	<b>11,403,474</b>	<b>2,014,250</b>	<b>566,14</b>

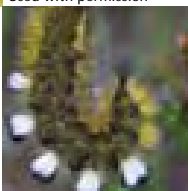
### GBIF SUPPLEMENTARY FUND

Balance at 1 January	4,714,694	745,512	632,41
Income	5,144,744	865,157	594,66
Interest income transferred to Supplementary Fund	598,500	100,645	
<b>Expenditure</b>	<b>-4,438,206</b>	<b>-746,343</b>	
Change in foreign exchange rates	-141,528	-23,800	
Exchange rate differences	0	97,124	
	<b>5,878,204</b>	<b>1,038,295</b>	<b>5,6614</b>



Photograph © NatureEyes  
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*Polyommatus icarus* Rottemburg  
Photographer:  
Mads Fjeldsø Christensen



*Dicaelotus fascellina* L.  
Photographer: Kim Aaen



# Financial Contributions 2006

## BASIC CONTRIBUTIONS

Voting Participants	Financial Contributors
Australia:	CSIRO Entomology
Belgium:	Belgian Federal Science Office
Canada:	Canadian Museum of Nature
Costa Rica:	InBio, National Biodiversity Institute
Denmark:	The Danish Natural Science Research Council
Equatorial Guinea:	CICTE - Council of Scientific and Technological Investigations
Estonia:	Ministry of Environment
Finland:	Academy of Finland
France:	Institut Francais de la Biodiversite
Germany:	German Aerospace Center
Iceland:	Ministry for the Environment
Japan:	Japan Science and Technology Agency
Korea, Republic of:	Ministry of Science and Technology
Mexico:	Commission for the Knowledge and Use of Biodiversity
Netherlands:	Ministry of Education, Culture and Science
New Zealand:	Ministry of Research Science
Norway:	The Research Council of Norway
Peru:	Institution of Investigation into the Amazon
Portugal:	GRICES - Ministry for International Scientific Relations
Slovenia:	Ministry of Science, Technology and Higher Education
South Africa:	Department of Science and Technology
Spain:	Ministry of Education and Science
Sweden:	Swedish Research Council
United Kingdom:	BBSRC Polaris House, Swindon Department for Environment, Food and Rural Affairs (DEFRA) NERC Polaris House, Swindon Royal Botanic Gardens, Kew
USA:	National Science Foundation

## GRANTS RECEIVED

Grants received by GBIF in 2006 included:

- **Royal Danish Ministry of Foreign Affairs**
  - 125,000 € (1,000,000 DKK) for the first year of a three year Pilot Project for Tanzania in support of the GBIF Capacity Enhancement Programme for Developing Countries (CEPDEC).
  - 66,667 € (500,000 DKK) for the first year of three years of general support to assist developing-country participation in GBIF activities (meetings, training workshops, etc.)
- **GEO Secretariat**
  - 12,000 USD in support of the organisation of a workshop on needs, methods and strategies for a Global Biodiversity Observing Network
- **Microsoft Research, UK**
  - 24,000 GBP to support a staff member to work on the Ark2010 Project, a cooperative endeavour (among Microsoft Research, UNEP-WCMC, Cardiff University, the US Geological Survey and GBIF) to develop analytical workflow solutions for biodiversity data

In addition to these direct grants, Ciencia y Tecnología para el Desarrollo (CYTED) enabled representatives from Colombia, Panama, Paraguay, Uruguay and the Amazon Treaty (OTCA) to attend GB13 in Quito.



*Membracis flaveola* Gmelin on *Coccoloba* sp.  
Photograph © David Remsen, 2006  
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Photograph © Greg Basco  
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# Annex 1: GBIF Participants as of 31st December 2006

## Voting Participants

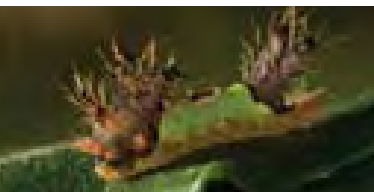
Australia	Feb 2001
Belgium	Feb 2001
Canada	Mar 2001
Costa Rica	May 2001
Denmark	Jan 2001
Equatorial Guinea	Mar 2005
Estonia	Sep 2003
Finland	Apr 2001
France	Mar 2001
Germany	Feb 2001
Iceland	Jun 2001
Japan	Feb 2001
Korea, Republic of	May 2001
Mexico	Mar 2001
Netherlands	Feb 2001
New Zealand	Feb 2001
Nicaragua	Jun 2001
Norway	Mar 2004
Peru	Sep 2002
Portugal	Jun 2001
Slovenia	Feb 2001
South Africa	May 2003
Spain	Feb 2001
Sweden	Feb 2001
United Kingdom	Aug 2001
United States of America	Jan 2001

## Associate Participants: Countries / Economies

Argentina	Mar 2002
Austria	Sep 2001
Benin	Dec 2004
Bulgaria	Aug 2001
Cameroon	Mar 2005
Colombia	Sep 2003
Czech Republic	Oct 2002
Ghana	Mar 2001
Guinea	Mar 2005
India	Aug 2003
Indonesia	Nov 2004
Madagascar	Jan 2003
Morocco	Jun 2003
Pakistan	Aug 2001
Papua New Guinea	Mar 2004
Philippines	Mar 2005
Poland	Mar 2001
Slovakia	Aug 2001
Switzerland	Feb 2001
Taiwan (Economy)	Mar 2001
Tanzania	Sep 2002

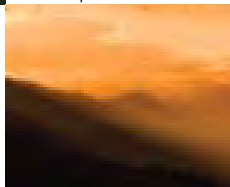


Map courtesy of World66.com



Limacodidae larva

Photographs © Greg Basco  
Used with permission

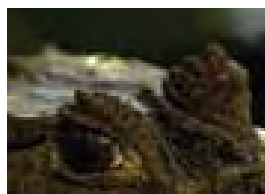


*Agalychnis callidryas* (Cope)



## Associate Participants: Organisations

ASEAN Regional Centre for Biodiversity Conservation	Dec 2003
ASEANET	Oct 2002
BIOSIS	Mar 2002
BioNET-INTERNATIONAL	May 2001
Botanic Gardens Conservation International	Aug 2004
CABI Bioscience	Sep 2001
Ciencia y Tecnología para el Desarrollo	May 2006
Consortium for the Barcode of Life	Mar 2005
EASIANET	Oct 2002
ETI Bioinformatics	Mar 2001
European Commission	Feb 2001
Finding Species	Dec 2003
Freshwater Biological Association - FreshwaterLife	Oct 2003
IUCN	Sep 2003
Integrated Taxonomic Information System	Mar 2001
Inter-American Biodiversity Information Network	May 2001
International Centre for Insect Physiology and Ecology	Mar 2004
International Commission on Zoological Nomenclature	Jun 2005
International Species Information System	Jun 2006
Major Systematic Entomology Facilities	Mar 2006
Natural Science Collections Alliance	Dec 2004
NatureServe	May 2001
Nordic Gene Bank	Mar 2004
Ocean Biogeographic Information System	Jun 2001
Pacific Biodiversity Information Forum	Sep 2004
SAFRINET	Aug 2003
Société de Bactériologie Systématique et Vétérinaire	Dec 2002
Species 2000	Mar 2001
Taxonomic Databases Working Group	Mar 2002
United Nations Educational Scientific and Cultural Organisation, Man and the Biosphere Programme	May 2001
United Nations Environment Programme	May 2001
Wildscreen Trust	Jan 2003
World Data Center for Biodiversity and Ecology	Apr 2005
World Federation for Culture Collections	Oct 2002



*Caiman crocodilus* L.

Photographs © Greg Basco  
Used with permission

*Diceroprocta* sp.



*Epidendrum radicans* Pav. ex Lindl.

# Annex 2: GBIF Secretariat Staff 2006

Director:	<b>James L. Edwards</b>
Deputy Director for Informatics:	<b>Hannu Saarenmaa</b> (Jan - Jun) <b>Donald Hobern</b> (Jun - Dec)
Data Portal Administrator:	<b>Andrea Hahn</b>
Java Developer:	<b>Ali Kalufya</b>
Java Developer:	<b>Tim Robertson</b>
Java Developer:	<b>Fini Alring</b> (Jan - Apr)
Java Developer:	<b>Dave Martin</b> (May - Dec)
Intern:	<b>Francisco (Paco) del Castillo</b> (Jul - Sep)
Deputy Director for Management & International Relations:	<b>Hugo von Linstow</b>
ICT Support Manager:	<b>Anne Mette Nielsen</b>
Office Manager & PA to the Director:	<b>Susanne Lønstrup Sheldon</b>
Financial Officer:	<b>Belinda Skeel</b>
Senior Programme Officer, Data Access & Database Interoperability:	<b>Donald Hobern</b> (Jan - Jun)
Senior Programme Officer, Digitisation of Natural History Collections:	<b>Larry Speers</b>
Intern:	<b>Lindsay McGinnis</b> (Jun - Aug)
Programme Officer, Electronic Catalogue of the Names of Known Organisms:	<b>Per de Place Bjørn</b> (Jan - Jul)
Senior Programme Officer, Electronic Catalogue of the Names of Known Organisms:	<b>David Remsen</b> (Aug - Dec)
Senior Programme Officer, Outreach and Capacity Building:	<b>Beatriz Torres</b>
Nodes Liaison Officer:	<b>Francisco (Paco) Pando</b>
Public & Scientific Liaison Officer:	<b>Meredith A. Lane</b>
Senior Advisor to the Director:	<b>Hannu Saarenmaa</b> (Jul - Dec)
Liaison Officer (employed by U of Copenhagen):	<b>Else Østergaard Andersen</b> (Jan - Oct)

# Annex 3: GBIF Governing Board Standing Committees 2006

## Budget Committee

Chair	Lars M. Nilsson
Vice Chairs	Helmut Kühn Peter Schalk
Members	Bonnie C. Carroll Akiko Inoue
Ex-officio	David Penman James Edwards

## Executive Committee

Chair	David Penman
Vice Chairs	Hideaki Sugawara Christoph Häuser
Committee	Wouter Los (Science)
Chairs	Lars Nilsson (Budget) Lawrence Way (Nodes)
Ex-officio	James Edwards

## Node Managers Committee (NODES)

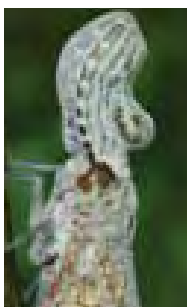
Chair	Lawrence Way
Vice Chair	Jim Croft Dag Terje Endresen
Members	Every Participant Node Manager

## Science Committee

Chair	Wouter Los
Vice Chairs	Daphne G. Fautin Jorge Soberón Mainero
Subcommittee	Stan Blum (DADI)
Chairs	Walter Berendsohn (DIGIT) Chris Lyal (ECAT) Vishwas Chavan (OCB)
Ex-officio	David Penman Hideaki Sugawara Lawrence Way James Edwards



*Ipomoea tricolor* Cav.  
Photograph © Martin Sharman.  
Used with permission



*Fulgora laternaria* L.  
Photograph © Greg Basco.  
Used with permission



*Vipera berus* L.  
Photographer: Mads Fjeldsø Christensen  
Photograph © NatureEyes.  
Used with permission

**Subcommittee for Data Access & Database Interoperability (DADI)**

Chair David A. Vieglais  
Vice Chair Greg Whitbread  
Members Peter Arzberger  
Walter G. Berendsohn  
Stan Blum  
Soren Brunak  
W. Alex Gray  
Robert A. Herzog  
Norbert Hirneisen  
Raúl Jiménez Rosenberg  
Hideaki Sugawara  
Eric Yen  
Nozomi Ytow  
Maria Zemankova

**Subcommittee for Outreach and Capacity Building (OCB)**

Chair Erick Mata  
Vice Chair Chris Lyal  
Members Peter Bridgewater  
Vanderlei Canhos  
Bonnie Carroll  
Vishwas Chavan  
Ian Cresswell  
Nicholas King  
Peter Schalk  
Marcos Silva  
Stella Simiyu

**Subcommittee for Digitisation of Natural History Collection Data (DIGIT)**

Chair Jorge Soberón Mainero  
Members Vishwas Chavan  
Keiichi Matsuura  
Francisco Pando  
Steven Shattuck  
Joost A. Stalpers  
Simon Tillier  
Peter Cornelis van Welzen  
Anna Weitzman

**Subcommittee for Electronic Catalogue of Names of Known Organisms (ECAT)**

Chair Michael Ruggiero  
Vice Chair Frank Bisby  
Members Miguel A. Alonso-Zarazaga  
Guy Baillargeon  
Peter Crane  
Jim Croft  
Henrik Enghoff  
Jean-Marc Gagnon  
Gregor Hagedorn  
Linda R. Sacks  
Junko Shimura

# Annex 4: GBIF Specimen/Observation Data Sharers and Providers 2006

As of 31 December 2006, 114 million (101 million indexed) data records from 1214 collection and observational databases were being made available by 215 providers located in 35 countries and representing 42 GBIF Participants. This is an increase over 2005 of 29 million records, 814 databases, 65 providers, 4 countries and 6 GBIF Participants.

Participant	Provider	Data Resource	Number of Records Indexed
Argentina	Centro de Ecología Aplicada	Colección Paleontológica	7149
Argentina	Centro Nacional Patagonico - CONICET	Colección Paleontológica Invertebrados e Icnología - CONICET- Argentina	190
Argentina	Centro Nacional Patagonico - CONICET	Endocast Collection -CONICET- Argentina	144
Argentina	Centro Nacional Patagonico - CONICET	Extra-andean Patagonian Herbarium -CONICET- Argentina	859
Argentina	Centro Nacional Patagonico - CONICET	Ichthyology Collection - CONICET- Argentina	1522
Argentina	Centro Nacional Patagonico - CONICET	Marine Mammals - CONICET - Argentina	662
Argentina	Colección Herpetológica de la UNNE	Facultad de Ciencias Exactas y Naturales y Agrimensura (UNNE)	8063
Argentina	Fundacion Miguel Lillo	Fundacion Miguel Lillo	48796
Argentina	Museo Argentino de Ciencias Naturales Bernardino Rivadavia	Colección Nacional de Aracnología	6428
Argentina	Museo Argentino de Ciencias Naturales Bernardino Rivadavia	Colección Nacional de Foraminíferos del Museo Argentino de Ciencias Naturales	13257
Argentina	Museo Argentino de Ciencias Naturales Bernardino Rivadavia	Colección Nacional de Invertebrados	20570
Australia	Australian Antarctic Data Centre	Antarctic Marine Protists species checklist	563
Australia	Australian Antarctic Data Centre	Antarctic Penguin Colony Counts	1110
Australia	Australian Antarctic Data Centre	APIS - Antarctic Pack Ice Seals 1994-1999, plus historical data from the 1980's	7958
Australia	Australian Antarctic Data Centre	ARGOS Satellite Tracking of animals	8060
Australia	Australian Antarctic Data Centre	Australian Antarctic Division Herbarium	14435
Australia	Australian Antarctic Data Centre	Cetacean Sightings Survey and Southern Ocean cetacean program	1208
Australia	Australian Antarctic Data Centre	Elephant Seal Sightings, Heard Island	1794
Australia	Australian Antarctic Data Centre	Elephant Seal Sightings, Macquarie Island	199399
Australia	Australian Antarctic Data Centre	Macquarie Island Fur Seal Database	3000
Australia	Australian Antarctic Data Centre	Orca observations from the shores of Macquarie Island	248
Australia	Australian Antarctic Data Centre	Pelagic Fishes of the Eastern Antarctic Ocean	2182
Australia	Australian Antarctic Data Centre	Seabirds of the Southern and South Indian Ocean	154392
Australia	Australian Antarctic Data Centre	Southern Ocean Continuous Zooplankton Recorder (SO-CPR) Survey	40623
Australia	Australian Antarctic Data Centre	Weddell Seal census, Vestfold Hills, Antarctica	4603
Australia	Australian Antarctic Data Centre	Weddell Seal Sightings, Vestfold Hills, Antarctica	21145
Australia	Australian Antarctic Data Centre	Whale catches in the Southern Ocean	7122
Australia	Australian Biological Resources Study	Australian Faunal Directory	74157
Australia	Australian Biological Resources Study	Dung Beetles	3690
Australia	Australian Biological Resources Study	Land Molluscs	100006
Australia	Australian National Herbarium (CANB)	Australian National Herbarium (CANB)	679720
Australia	Australian National Insect Collection, CSIRO Entomology	Australian National Insect Collection	153179
Australia	Australian National Insect Collection, CSIRO Entomology	Australian National Insect Collection Gerromorpha Dataset	3590
Australia	Australian National Insect Collection, CSIRO Entomology	Australian National Insect Collection Nepomorpha Dataset	3261
Australia	Australian National Insect Collection, CSIRO Entomology	Australian National Insect Collection Sternorrhyncha Dataset	589
Australia	Australian National Insect Collection, CSIRO Entomology	GBIF EntomID-PNG Insect Database	33993
Australia	National Herbarium of New South Wales	Plants of Papua New Guinea	143123

Australia	OZCAM (Online Zoological Collections of Australian Museums)	Online Zoological Collections of Australian Museums	787739
Austria	Haus der Natur Salzburg	Haus der Natur Salzburg	7774
Austria	inatura - Erlebnis Naturschau Dornbirn	inatura - Erlebnis Naturschau Dornbirn	9349
Austria	Karl Franzens University of Graz, Institute for Botany - Herbarium GZU	Herbarium GZU	1862
Austria	Natural History Museum, Vienna - Herbarium W	Herbarium W	11198
Austria	Steiermärkisches Landesmuseum Joanneum - Herbarium GJO	Herbarium GJO	15045
Austria	Tiroler Landesmuseum Ferdinandeum	Tiroler Landesmuseum Ferdinandeum	66884
Austria	University of Vienna, Institute for Botany - Herbarium WU	Herbarium WU	41058
Austria	University of Vienna, Institute for Botany, Research Group for Plant Biogeography	Floristische Kartierung à-sterreichs - Mapping the Flora of Austria	22817
Austria	Österreichische Mykologische Gesellschaft	Österreichische Mykologische Gesellschaft	1773
Belgium	BeBIF	BCCM/IHEM - Biomedical Fungi and Yeasts Collection	4553
Belgium	BeBIF	BCCM/LMG - Laboratory of Microbiology Gent Bacteria Collection	12155
Belgium	BeBIF	BCCM/MUCL - (Agro)Industrial Fungi and Yeasts Collection	11759
Belgium	BeBIF	ENBI WP 13 Martius C. F. P. von Collection subset (Muenchen)	1350
Belgium	BeBIF	Herbarium of the Ghent University (Herbarium Gandavensis), partim Mycology, collection: Lactarius sect. Deliciosi	255
Belgium	BeBIF	IHEM	128
Belgium	BeBIF	LMBP	741
Belgium	BeBIF	LMG	1343
Belgium	BeBIF	MUCL	294
Belgium	BeBIF	National Botanic Garden Belgium - Albertian Rift Rubiaceae (ENBI wp13)	2643
Belgium	BeBIF	National Botanic Garden Belgium - Martius	303
Belgium	BeBIF	National Botanic Garden Belgium - Myxomycetes	22836
Belgium	BeBIF	Royal Museum of Central Africa - Albertian Rift Birds (ENBI wp13)	43443
Belgium	BeBIF	Royal Museum of Central Africa - Albertian Rift Butterflies (ENBI wp13)	25128
Belgium	BeBIF	Royal Museum of Central Africa - Albertian Rift Cichlids (ENBI wp13)	37788
Belgium	BeBIF	Royal Museum of Central Africa - Metafro-Infosys - Prelude	1506
Belgium	BeBIF	Royal Museum of Central Africa - Metafro-Infosys - Xylarium	10189
Belgium	BeBIF	Royal Museum of Central Africa - True Fruit Flies (Diptera, Tephritidae) of the Afrotropical Region (ENBI wp13)	5733
Belgium	BeBIF	University of Ghent - Zoology Museum - Invertebratacollectie	1999
Belgium	BeBIF	University of Ghent - Zoology Museum - Nematodencollectie	407
Belgium	BeBIF	University of Ghent - Zoology Museum - Vertebratacollectie	3997
Belgium	Marine Biology Section Ugent	Generic Taxonomic Database System on Mysida and Nematoda	8437
Belgium	Royal Museum for Central Africa	RMCA-HERP	13352
Biodiversity International	International Plant Genetic Resources Institute (IPGRI)	EURISCO	903979
Biodiversity International	International Plant Genetic Resources Institute (IPGRI)	The System-wide Information Network for Genetic Resources (SINGER)	466706
CABI Bioscience	CABI Bioscience UK Centre	CABI Bioscience Fungus Collection	358344
CABI Bioscience	CABI Bioscience UK Centre	CABI Bioscience Genetic Resource Collection	24958
CABI Bioscience	CABI Bioscience UK Centre	CABI Bioscience Nematode Collection	819
Canada	Bird Studies Canada	BC Coastal Waterbird Survey	23128
Canada	Bird Studies Canada	Canadian Lakes Loon Survey	15883
Canada	Bird Studies Canada	Marsh Monitoring Program - Amphibians	25526
Canada	Bird Studies Canada	Marsh Monitoring Program - Birds	73522
Canada	Bird Studies Canada	Ontario Breeding Bird Atlas 1981-1985	14885
Canada	Bird Studies Canada	Ontario Breeding Bird Atlas 2001-2005	190257
Canada	Canadian Arachnologist Nearctic Spider Database	Canadian Arachnologist Nearctic Spider Database	20380
Canada	Canadian Biodiversity Information Facility	Agriculture and Agri-Food Canada, Fredericton Collection	73
Canada	Canadian Biodiversity Information Facility	Agriculture and Agri-Food Canada, Saskatoon	372
Canada	Canadian Biodiversity Information Facility	Agriculture and Agri-Food Canada, St. Johns, Newfoundland	1678



Canada	Canadian Biodiversity Information Facility	Alan Wormington Collection	591
Canada	Canadian Biodiversity Information Facility	Atlantic Forestry Centre Insect Reference Collection	292
Canada	Canadian Biodiversity Information Facility	Bombus of Canada	16091
Canada	Canadian Biodiversity Information Facility	Brassicaceae of Canada	17061
Canada	Canadian Biodiversity Information Facility	Butterflies and Skippers of Alberta Project	2044
Canada	Canadian Biodiversity Information Facility	Canadian National Collection (CNC) of Insects, Arachnids and Nematodes	44842
Canada	Canadian Biodiversity Information Facility	Canadian National Collection of Insects	6323
Canada	Canadian Biodiversity Information Facility	Crispin S. Guppy Collection	11940
Canada	Canadian Biodiversity Information Facility	Crispin S. Guppy Observational Records	37
Canada	Canadian Biodiversity Information Facility	DAO Herbarium Type Specimens	5231
Canada	Canadian Biodiversity Information Facility	Donald F. Hooper Butterfly collection, Canada	210
Canada	Canadian Biodiversity Information Facility	E. C. Manning Park Collection	84
Canada	Canadian Biodiversity Information Facility	Gerald Hilchie Collection	599
Canada	Canadian Biodiversity Information Facility	Great Lakes Forestry Centre Insect Collection	368
Canada	Canadian Biodiversity Information Facility	Jeff Ogden Collection	54
Canada	Canadian Biodiversity Information Facility	Lepidopterists Society Season Summaries 1973-1997	4641
Canada	Canadian Biodiversity Information Facility	Lyman Entomological Museum	6987
Canada	Canadian Biodiversity Information Facility	M. Gollop Collection	1513
Canada	Canadian Biodiversity Information Facility	Manitoba Museum of Man and Nature	29477
Canada	Canadian Biodiversity Information Facility	McMaster University Collection	546
Canada	Canadian Biodiversity Information Facility	Memorial University Botanical Garden Collection	5
Canada	Canadian Biodiversity Information Facility	Memorial University Department of Biology Collection	243
Canada	Canadian Biodiversity Information Facility	New Brunswick Museum Collection	1614
Canada	Canadian Biodiversity Information Facility	Norbert Kondla Collection	10760
Canada	Canadian Biodiversity Information Facility	North West Territories and Nunavut Bird Checklist, Canada	48564
Canada	Canadian Biodiversity Information Facility	Northern Forestry Centre Arthropod Collection, Edmonton	362
Canada	Canadian Biodiversity Information Facility	Nova Scotia Department of Natural Resources, Subenacadie, NS, Canada	321
Canada	Canadian Biodiversity Information Facility	Nova Scotia Museum of Natural History, Halifax, NS, Canada	3420
Canada	Canadian Biodiversity Information Facility	Ontario Nest Records	26631
Canada	Canadian Biodiversity Information Facility	Peter Hall Observations	4732
Canada	Canadian Biodiversity Information Facility	Phragmites of Canada	1679
Canada	Canadian Biodiversity Information Facility	Point Pelee National Park Collection, Canada	243
Canada	Canadian Biodiversity Information Facility	Provincial Museum of Alberta	1224
Canada	Canadian Biodiversity Information Facility	Provincial Museum of Alberta, Edmonton, AB, Canada. Birds (Aves)	30669
Canada	Canadian Biodiversity Information Facility	R. Curry Collection	14
Canada	Canadian Biodiversity Information Facility	Ross A. Layberry Observations	24665
Canada	Canadian Biodiversity Information Facility	Ross A. Layberry, Collection	2653

Canada	Canadian Biodiversity Information Facility	Royal Botanical Gardens Herbarium	13570
Canada	Canadian Biodiversity Information Facility	Royal British Columbia Museum	22700
Canada	Canadian Biodiversity Information Facility	Royal British Columbia Museum Entomology Collection	9810
Canada	Canadian Biodiversity Information Facility	Royal Ontario Museum: Entomology	25959
Canada	Canadian Biodiversity Information Facility	Royal Saskatchewan Museum Collection	3956
Canada	Canadian Biodiversity Information Facility	Spencer Entomological Museum	1023
Canada	Canadian Biodiversity Information Facility	Strickland Museum of Entomology	2300
Canada	Canadian Biodiversity Information Facility	The Provincial Museum of Newfoundland and Labrador Natural History Collection	28
Canada	Canadian Biodiversity Information Facility	University of Guelph, Department of Environmental Biology	3079
Canada	Canadian Biodiversity Information Facility	University of New Brunswick Collection	321
Canada	Canadian Biodiversity Information Facility	University of Saskatchewan	510
Canada	Canadian Biodiversity Information Facility	University of Western Ontario Collection	963
Canada	Canadian Museum of Nature	Canadian Museum of Nature Amphibian and Reptile Collection - Anura	17374
Canada	Canadian Museum of Nature	Canadian Museum of Nature Bird Collection	88335
Canada	Canadian Museum of Nature	Canadian Museum of Nature Fish Collection	43356
Canada	Canadian Museum of Nature	Canadian Museum of Nature Herbarium	119775
Canada	Canadian Museum of Nature	Canadian Museum of Nature Mollusc Collection - Unionoida	6299
Canada	EMAN	FrogWatch Canada	6639
Canada	New Brunswick Museum	NBM birds	7926
Canada	New Brunswick Museum	NBM Insects	1046
Canada	New Brunswick Museum	NBM Unionoids	1225
Canada	Royal Ontario Museum	Fish specimens	112562
Canada	Royal Ontario Museum	Herp specimens	82269
Canada	University of Alberta Museums	Freshwater Invertebrate Collection	4526
Canada	University of Alberta Museums	Museum of Zoology, Amphibian and Reptile Collection	2546
Canada	University of Alberta Museums	University of Alberta Ichthyology Collection	9502
Canada	University of Alberta Museums	University of Alberta Lepidoptera Collection	14144
Colombia	Herbario Nacional Colombiano	Herbario Nacional Colombiano	8714
Costa Rica	Instituto Nacional de Biodiversidad (Costa Rica)	Biodiversidad de Costa Rica	2411010
Costa Rica	Museo Nacional de Costa Rica	Herbario Nacional de Costa Rica (CR)	191866
DanBIF	The Danish Biodiversity Information Facility	Botanical Museum, Copenhagen, Mycology Herbarium	42069
DanBIF	The Danish Biodiversity Information Facility	Botanical Museum, Copenhagen, the Lichen Herbarium	6957
DanBIF	The Danish Biodiversity Information Facility	Botanical Museum, Copenhagen, the Phycology Herbarium	47342
DanBIF	The Danish Biodiversity Information Facility	Botanical Museum, Copenhagen. Database of type specimens	21619
DanBIF	The Danish Biodiversity Information Facility	Botanical Museum, Denmark. Database of registrations of red listed plants	3299
DanBIF	The Danish Biodiversity Information Facility	Botany registration database by Danish botanists	7939
DanBIF	The Danish Biodiversity Information Facility	Bryotropha (Lepidoptera: Gelechiidae) in Western Palearctic.	9899
DanBIF	The Danish Biodiversity Information Facility	ConDidact public insect surveys (danske-dyr.dk)	4085
DanBIF	The Danish Biodiversity Information Facility	Crustacea species in ZMUC	7968
DanBIF	The Danish Biodiversity Information Facility	Danish Mycological Society, fungal records database	57358
DanBIF	The Danish Biodiversity Information Facility	Danish waterbugs (Insecta: Hemiptera-Heteroptera: Gerromorpha + Nepomorpha)	19760
DanBIF	The Danish Biodiversity Information Facility	Entomology Department Collections, ZMUC	2769
DanBIF	The Danish Biodiversity Information Facility	Fungal Specimens collected by HabitatVision (Jacob Heilmann-Clausen)	17788
DanBIF	The Danish Biodiversity Information Facility	Fungi on beech (Fagus sylvatica) wood, Halland, Sweden	5202

DanBIF	The Danish Biodiversity Information Facility	Galathea II, Danish Deep Sea Expedition 1950-52.	1825
DanBIF	The Danish Biodiversity Information Facility	Herbarium Faeroense	12844
DanBIF	The Danish Biodiversity Information Facility	Marine Benthic Fauna List, Læsø, Denmark	577
DanBIF	The Danish Biodiversity Information Facility	Nivå Bay species list, Sjælland, Denmark	770
DanBIF	The Danish Biodiversity Information Facility	P. V. Lund collection in ZMUC, Copenhagen	88
DanBIF	The Danish Biodiversity Information Facility	Pilularia Globulifera distribution map in Denmark	230
DanBIF	The Danish Biodiversity Information Facility	Priest Pot species list, Cumbria, Britain	1321
DanBIF	The Danish Biodiversity Information Facility	The Danish Newt Collection	557
DanBIF	The Danish Biodiversity Information Facility	The Danish Royal Veterinary and Agricultural University's Arboretum	24798
DanBIF	The Danish Biodiversity Information Facility	The Fish Collection	70229
DanBIF	The Danish Biodiversity Information Facility	Western Palearctic migrants in continental Africa	25333
Denmark	Herbarium of the University of Aarhus	The AAU Herbarium Database	116706
EASIANET	The Hong Kong University Herbarium	The University of Hong Kong Herbarium	891
EASIANET	The Museum of Biology, Sun Yatsen Univ	Plant specimen collection	31418
Estonia	Institute of Geology at TUT	TUT Palaeontology	22510
Estonia	Institute of Zoology and Botany of EAU	Herbarium of Vascular Plants	439
EU - BioCASE	Dipartimento di Biologia, Università di Trieste	TSB Lichen Herbarium	34251
EU - BioCASE	Israel Nature and Parks Authority	Israel Nature and Parks Authority	448854
European Commission	European Environment Agency	EUNIS	1646269
Finland	Finnish Museum of Natural History	Finnish Entomological Database	238357
Finland	Finnish Museum of Natural History	Hatikka	281462
Finland	Jyväskylä University Museum - The Section of Natural Sciences	Fungus collection of the Jyväskylä University Museum	5761
Finland	Jyväskylä University Museum - The Section of Natural Sciences	Invertebrate collection of Jyväskylä University Museum	1896
Finland	Jyväskylä University Museum - The Section of Natural Sciences	Vascular plant collection of Jyväskylä University Museum	34734
Finland	University of Helsinki, Department of Applied Biology	Animal observations	40
Finland	University of Helsinki, Department of Applied Biology	European Lepidoptera Observations by Donald Hobern	2410
Finland	University of Helsinki, Department of Applied Biology	Lepidoptera collection of Hannu Saarenmaa	56714
Finland	University of Helsinki, Department of Applied Biology	Lepidoptera Observations from New Zealand by Donald Hobern	886
Finland	University of Helsinki, Department of Applied Biology	Lepidopterological Society of Finland	11506
Finland	University of Helsinki, Department of Applied Biology	Observations by David Remsen	3
Finland	University of Helsinki, Department of Applied Biology	Rancho Grande	1393
Finland	University of Turku	Auchenorhyncha collections of SW Finland	1659
Finland	University of Turku	Fauna of Bahuaja-Sonene Tambopata by WWF Peru	5169
Finland	University of Turku	Flora and Fauna of Pacaya Samiria by WWF Peru	11009
Finland	University of Turku	Flora of PN Bahuaja-Sonene WWF Peru	2199
Finland	University of Turku	Heteroptera collections of SW Finland	11249
Finland	University of Turku	Observations of flora y fauna of Peruvian Amazon by BIODAMAZ project	444
Finland	University of Turku	Rosaceae and Fabaceae of Kevo region, Northern Finland	6218
Finland	University of Turku	Schulman's Neotropical Adelobotrys database	1
Finland	University of Turku	Species information on Amazonian one hectare tree study sites	612
France	Cameroon National Herbarium	Cameroon National Herbarium	10815
France	Conservatoire botanique national du Bassin parisien	Observations du Conservatoire botanique national du Bassin parisien.	3072374
France	Herbier de la Guyane	Herbier de la Guyane	114180

France	Herbier de l'Université Louis Pasteur	Herbier de Strasbourg	30790
France	Laboratoire de Paléobotanique et Paléoécologie	Collection de paleobotanique	835
France	Museum national d'histoire naturelle	Ichtyologie	119583
France	Museum national d'histoire naturelle	Phanerogamie	542101
Germany	Biologiezentrum der Oberoesterreichischen Landesmuseen	Biologiezentrum Linz	2019053
Germany	Biologische Anstalt Helgoland in the Foundation Alfred-Wegener Institute for Polar and Marine Research	Alfred-Wegener Institute for Polar and Marine Research Herbarium (Marine macroalgae of Helgoland, North Sea)	8311
Germany	Bodensee-Naturmuseum Konstanz	Leiner-Herbar Konstanz	15663
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Algaterra Types	5591
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	AlgaTerraMovies	23
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	BoBO - Botanic Garden Berlin BDI Observations	4
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	BoGART	1252
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Bridel Herbar	916
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Desmidiaceae Engels	9547
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Desmidiaceae Mollenhauer	603
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Desmidiaceae Rostock	6
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	ENBI-Dataset of GART/GloBIS	190
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Flora exsiccata Bavarica	2178
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Fruit and seed collection database	10666
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	GEO Biodiversity Day	1359
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	HerbarImages	38771
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Herbarium des Staatlichen Museums für Naturkunde Gärnitz (GLM)	44960
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Herbarium Willing	11234
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	IPK Gatersleben Genebank accessions	109709
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Lichen Herbarium Berlin	70454
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Pollichia Pilzherbar	2867
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	PonTaurus DB 1999	2944
Germany	Botanic Garden and Botanical Museum Berlin-Dahlem	Staatliches Museum für Naturkunde Stuttgart, Herbarium	29204
Germany	Bundesamt für Naturschutz / Zentralstelle für Phytodiversität Deutschland	Bundesamt fuer Naturschutz / Zentralstelle fuer Phytodiversitaet Deutschland	3500053
Germany	Bundesamt für Naturschutz / Zentralstelle für Phytodiversität Deutschland	VegetWeb: zentrale Datenbank der Arbeitsgemeinschaft Vegetationsdatenbanken; Teil der Zentralstelle für Phytodiversität, Deutschland (ZePhyD)	256514
Germany	DSMZ - German National Resource Centre for Biological Material	GSPB Prokarya Catalogue	3012
Germany	DSMZ - German National Resource Centre for Biological Material	Plant Cell Cultures	669
Germany	DSMZ - German National Resource Centre for Biological Material	Plantviruses	545
Germany	DSMZ - German National Resource Centre for Biological Material	Prokarya	13137
Germany	Herbarium Hamburgense	HGBGBryophyta - Herbarium Hamburgense	2008
Germany	Herbarium Hamburgense	HGBSpermatophyta - Herbarium Hamburgense	14331
Germany	Herbarium Hamburgense	Impetus - Herbarium Hamburgense	16112
Germany	Humboldt-Universität Berlin	Archive of Animal Sounds (Berlin)	14972

Germany	Institute of Botany, University of Hohenheim	Digital images of herbarium specimen from EA, Kenya	2885
Germany	Institute of Botany, University of Hohenheim	Herbarium specimen from BIEL	306
Germany	Institute of Botany, University of Hohenheim	Herbarium specimen from USJ	722
Germany	Institute of Botany, University of Hohenheim	Herbarium specimen from the Estacion Cientifica San Francisco, Southern Ecuador	5420
Germany	Institute of Botany, University of Hohenheim	Herbarium specimens from LOJA; Ulf Soltau	21
Germany	Institute of Botany, University of Hohenheim	Plants from Costa Rica, illustrations by Teresa Barantes Lobo	82
Germany	Institute of Botany, University of Hohenheim	Plants from Costa Rica; Juergen Homeier	693
Germany	Institute of Botany, University of Hohenheim	Plants from RBAMB, Costa Rica; Helmut Dalitz	642
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Ben Hell	139
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Daniel Plechowski	33
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Florian Werner	91
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Frank Haubrich	4
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Helmut Dalitz	127
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Juergen Homeier	978
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Steffen Matezki	127
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Ulf Soltau	279
Germany	Institute of Botany, University of Hohenheim	Plants from Southern Ecuador; Ute Knoerr	9
Germany	Institute of Botany, University of Hohenheim	Plants from the Kakamega Forest, Kenya; Baerbel Bleher	80
Germany	Institute of Botany, University of Hohenheim	Plants from the Kakamega Forest, Kenya; Dana Uster	244
Germany	Institute of Botany, University of Hohenheim	Plants from the Kakamega Forest, Kenya; Frederike Proewe	4
Germany	Institute of Botany, University of Hohenheim	Plants from the Kakamega Forest, Kenya; Helmut Dalitz	104
Germany	Institute of Botany, University of Hohenheim	Plants from the Kakamega Forest, Kenya; Robert Gliniars	1
Germany	Institute of Botany, University of Hohenheim	Plants from the RBAMB, Costa Rica; Annette Wolter	13
Germany	Institute of Botany, University of Hohenheim	Private collection of Asta Napp-Zinn	219
Germany	Institute of Botany, University of Hohenheim	Private collection of Barbara Kueppers	9
Germany	Institute of Botany, University of Hohenheim	Private collection of Florian Werner	30
Germany	Institute of Botany, University of Hohenheim	Private collection of Helmut Dalitz	64
Germany	Institute of Botany, University of Hohenheim	Private collection of Juergen Homeier	232
Germany	Institute of Botany, University of Hohenheim	Private collection of Manfred Kueppers	83
Germany	Institute of Botany, University of Hohenheim	Private collection of Rainer Bussmann	1094
Germany	Institute of Botany, University of Hohenheim	Private collection of Thorsten Kroemer	114
Germany	Institute of Botany, University of Hohenheim	Private collection of Vindas Jorge, Costa Rica	48
Germany	Institute of Botany, University of Hohenheim	Private collection of Walter Wucherer	1
Germany	Museum für Naturkunde, Humboldt-Universität zu Berlin	MFN Fish Collection, Zoology	1669
Germany	PANGAEA - Publishing Network for Geoscientific and Environmental Data	Pangaea	99485
Germany	Senckenberg	Collection Arachnology	9704
Germany	Senckenberg	Collection Aves (bird skeletons)	7
Germany	Senckenberg	Collection Aves (bird skins)	715

Germany	Senckenberg	Collection Aves (spirit preserved)	2751
Germany	Senckenberg	Collection Bryozoa	206
Germany	Senckenberg	Collection Bryozoa - Naturhistorisches Museum Berlin	139
Germany	Senckenberg	Collection Bryozoa - Zoologische Staatssammlung München	529
Germany	Senckenberg	Collection Bryozoa - Zoologisches Institut und Museum Hamburg	45
Germany	Senckenberg	Collection Cnidaria	2989
Germany	Senckenberg	Collection Cnidaria - Deutsches Meeresmuseum Stralsund	49
Germany	Senckenberg	Collection Crustacea	16121
Germany	Senckenberg	Collection Crustacea - Naturhistorisches Museum Berlin	24653
Germany	Senckenberg	Collection Crustacea - Zoologisches Institut und Museum Hamburg	804
Germany	Senckenberg	Collection Crustacea NHCY	68
Germany	Senckenberg	Collection Crustacea ZMG	893
Germany	Senckenberg	Collection Ctenophora	90
Germany	Senckenberg	Collection Echinodermata - Naturhistorisches Museum Berlin	2
Germany	Senckenberg	Collection Mollusca	11247
Germany	Senckenberg	Collection Oligochaeta - Zoologisches Institut und Museum Hamburg	698
Germany	Senckenberg	Collection Pantopoda	13
Germany	Senckenberg	Collection Pentastomida	17
Germany	Senckenberg	Collection Pisces	1656
Germany	Senckenberg	Collection Porifera	3112
Germany	Senckenberg	Collection Porifera - Naturhistorisches Museum Berlin	1
Germany	Senckenberg	Collection Tunicata	700
Germany	Senckenberg	Collection Vermes - Naturhistorisches Museum Berlin	10961
Germany	Senckenberg	Herbarium Senckenbergianum	11154
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	Epiphytic Lichens of G. Lettau at the Botanical Museum Berlin-Dahlem	3595
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	Phytopathogenic Fungi Observed by Hans and Hanna Doppelbaur	21311
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Collection of Lichenicolous Fungi at the Botanische Staatssammlung München	3699
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Erysiphales Collection at the Botanische Staatssammlung München	5793
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Erysiphales Collection at the University Halle-Wittenberg	1470
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Fungal Collection at the Staatliches Museum für Naturkunde Göttingen	59090
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Myxomycetes Collections at the Botanische Staatssammlung München - Collection of Hermann Neubert	7388
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Myxomycetes Collections at the Botanische Staatssammlung München - Collection of Martin Schnittler	4221
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	The Myxomycetes Collections at the Botanische Staatssammlung München - Main Collection	2933
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	Water Colours of Fungi by Fritz Wohlfarth at the Botanische Staatssammlung München	1903
Germany	Staatliche Naturwissenschaftliche Sammlungen Bayerns	Water Colours of Fungi by Konrad Schieferdecker at the Botanische Staatssammlung München	1233
Germany	SysTax	A. Fjellberg private collection	37
Germany	SysTax	Abteilung Systematische Botanik und Ökologie, Universität Ulm	1
Germany	SysTax	Academy of Natural Sciences, Philadelphia	42
Germany	SysTax	American Museum of Natural History, Division of Vertebrate Zoology (Herpetology), New York	1
Germany	SysTax	Ann Arbor, Herb. Univ. of Michigan	165
Germany	SysTax	Austin, Herb. Pl. Res. Cent.	16
Germany	SysTax	Australian National Herbarium, Atherton, Queensland, Australia	7
Germany	SysTax	Australian National Herbarium Canberra	1
Germany	SysTax	Bangkok (DAB)	1
Germany	SysTax	Belem, Herb., Lab. de Botanica do CPATU, EMBRAPA	3
Germany	SysTax	Belem, Museu Paraense Emilio Goeldi	40
Germany	SysTax	Belo Horizonte, Herbario	19
Germany	SysTax	Belo Horizonte, Herbario, Fundação CETEC	18
Germany	SysTax	Beltsville, USDA	8
Germany	SysTax	Berkeley, Univ. Herb.	2
Germany	SysTax	Berlin, Herbarium	5
Germany	SysTax	Biologische Reichsanstalt für Land- und Forstwirtschaft, Naumburg a.d. Saale, Germany	1
Germany	SysTax	Bishop Museum, Honolulu	2

Germany	SysTax	Bogor	1
Germany	SysTax	Bogota (COL)	18
Germany	SysTax	BOKU Vienna, Institute of Zoology	1
Germany	SysTax	Botanical Garden Yoshkar-Ola	330
Germany	SysTax	Botanischer Garten Bochum	13776
Germany	SysTax	Botanischer Garten Bonn	13529
Germany	SysTax	Botanischer Garten der Christian-Albrechts-Universität zu Kiel	6007
Germany	SysTax	Botanischer Garten Frankfurt	10103
Germany	SysTax	Botanischer Garten Freiburg	1418
Germany	SysTax	Botanischer Garten Gießen	5249
Germany	SysTax	Botanischer Garten Graz	1753
Germany	SysTax	Botanischer Garten Jena	10326
Germany	SysTax	Botanischer Garten Karlsruhe	5602
Germany	SysTax	Botanischer Garten Marburg	13916
Germany	SysTax	Botanischer Garten Münster	2202
Germany	SysTax	Botanischer Garten Osnabrück	16265
Germany	SysTax	Botanischer Garten Regensburg	2128
Germany	SysTax	Botanischer Garten Rostock	5088
Germany	SysTax	Botanischer Garten Saarbrücken	5362
Germany	SysTax	Botanischer Garten TU Dresden	11461
Germany	SysTax	Botanischer Garten Ulm	10547
Germany	SysTax	Botanischer Garten Witzenhausen	101
Germany	SysTax	Botucatu (BOTU), Brazil	2
Germany	SysTax	Brasilia (CEN), Herbario, CENARGEN, EMPRAPA	55
Germany	SysTax	Brasilia (UB)	294
Germany	SysTax	Campinas (UEC), Brazil	50
Germany	SysTax	Caracas, Herb. Nac. de Venezuela	1
Germany	SysTax	Cayenne, French Guyana (CAY)	123
Germany	SysTax	Chicago, Herb. Bot. Dept. Field Mus. Nat. Hist.	53
Germany	SysTax	CI (coll. S.Ingrisch)	13
Germany	SysTax	Civico Orto Botanico Trieste	806
Germany	SysTax	Coll. A. Garai	3
Germany	SysTax	Coll. C. Willemse	1
Germany	SysTax	Coll. F. Willemse	13
Germany	SysTax	Coll. G.H. Schmidt	41
Germany	SysTax	Coll. Greenfield	4
Germany	SysTax	Coll. H. Braun	741
Germany	SysTax	Coll. Hasan Sevgili	2
Germany	SysTax	Coll. Heller	3833
Germany	SysTax	Coll. Helversen	4
Germany	SysTax	Coll. Landeck	1
Germany	SysTax	Coll. Mark Cyril Orcl	1
Germany	SysTax	Coll. P. Naskrecki	1
Germany	SysTax	Coll. S. Ingrisch	493
Germany	SysTax	Coll. Schmidt	361
Germany	SysTax	Collectio Heller	7
Germany	SysTax	Collection Joachim Moog	10
Germany	SysTax	Collection Pfeiffer	35
Germany	SysTax	Commonwealth Scientific & Industrial Research Organisation	10
Germany	SysTax	Concepcion, Chile	1
Germany	SysTax	Corrientes, Herb. Instituto del Nordeste	118
Germany	SysTax	Corumba, Herbario, CPAP, EMBRAPA	95
Germany	SysTax	CPAP2	1
Germany	SysTax	Cuiaba, Herb. Central, Univ. Fed. de Mato Grosso	472
Germany	SysTax	Curitiba (MBM), Museu Botanico Municipal	2179
Germany	SysTax	Curitiba (UPCB), Herb. Dept. Botanica, Univ. Fed.	63
Germany	SysTax	Department of Biology, University of Antwerp (RUCA)	1
Germany	SysTax	Department of Botany and Microbiology, Ohio Wesleyan University, Delaware, Ohio	4
Germany	SysTax	Department of General and Theoretical Ecology, Centre for Environmental Research & Technology (UFT), A. Zuk, private collection	1

Germany	SysTax	Department of General and Theoretical Ecology, Centre for Environmental Research & Technology (UFT),University of Bremen, J. Filser, private collection	4
Germany	SysTax	Department of General and Theoretical Ecology, Centre for Environmental Research & Technology (UFT),University of Bremen, U. Burkhardt private collection	5
Germany	SysTax	Deutsches Entomologisches Institut, Eberswalde	19
Germany	SysTax	Deutsches Entomologisches Institut, ZALF e.V. Muncheberg	683
Germany	SysTax	Dudley Herbarium, California Academy of Sciences, San Francisco	3
Germany	SysTax	Edinburgh, Herb. Royal Bot. Gard.	82
Germany	SysTax	Entomological Museum, Department of Agriculture, Bangkok, Thailand	79
Germany	SysTax	Florianopolis (FLOR), Herbario	3
Germany	SysTax	Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt/Main (SMF)	562
Germany	SysTax	Forstamt Freiburg-Gunterstal	1426
Germany	SysTax	Forstbotanischer Garten Eberswalde	1136
Germany	SysTax	Forstbotanischer Garten Gottingen	2346
Germany	SysTax	Forstbotanischer Garten Tharandt	3912
Germany	SysTax	Frankfurt, Herbarium Forsch.-Inst. Senckenberg	40
Germany	SysTax	Geneve, Herb. Cons. et Jard. bot.	3
Germany	SysTax	Georg Reimer	1
Germany	SysTax	Giessen, Herbarium Botan. Instit. Univ. Giessen	1311
Germany	SysTax	Goteborg, Herbarium, Botanical Museum	12
Germany	SysTax	Gruga-Park Essen	864
Germany	SysTax	Hamilton, Ontario (HAM)	1
Germany	SysTax	Herbario Centro de Estudios y Colecciones Biologicas para la Conservacion Asuncion	1
Germany	SysTax	Herbario ICN, Departamento de Botanica Universidade Federal do Rio Grande do Sul	27
Germany	SysTax	Herbario Jardin Botanico Asuncion	1
Germany	SysTax	Herbario Loja, Ecuador	78
Germany	SysTax	Herbario Museo de La Plata	2
Germany	SysTax	Herbario Rafael M. Moscoso, Santiago de los Caballeros	1
Germany	SysTax	Herbario Universitario BioCentro-UNELLEZ Portuguesa	13
Germany	SysTax	Herbarium Barroso	11
Germany	SysTax	Herbarium Descoigns	3
Germany	SysTax	Herbarium Fromm-Trinta	4
Germany	SysTax	Herbarium Gent University	42
Germany	SysTax	Herbarium Gesneriad Research Foundation	2
Germany	SysTax	Herbarium Haussknecht, Jena	2258
Germany	SysTax	Herbarium hermogenes	2
Germany	SysTax	Herbarium Johannes Gutenberg-Universitat Mainz	8
Germany	SysTax	Herbarium National Museum in Prague	1
Germany	SysTax	Herbarium New York Botanic Garden	368
Germany	SysTax	Herbarium Pederson	32
Germany	SysTax	Herbarium S.C.H. Barrett	1
Germany	SysTax	Herbarium Sigr�d Liede	13
Germany	SysTax	Herbarium Stace	1
Germany	SysTax	Herbarium Taylor	1
Germany	SysTax	Herbarium Univ. of Michigan, Ann Arbor	3
Germany	SysTax	Herbarium Universitaet Ulm	24714
Germany	SysTax	Herbarium Universitat Bochum	13
Germany	SysTax	Herbarium Universitat Munster	81
Germany	SysTax	Herbarium University of Alabama	9
Germany	SysTax	Herbarium University of Calicut	1
Germany	SysTax	Herbarium University of Lagos	2
Germany	SysTax	Herbarium Webster	1
Germany	SysTax	Herbarium, Biological Sciences Department, Florida Atlantic University	3
Germany	SysTax	Herbarium, Department of Biological Sciences Old Dominion University Norfolk	1
Germany	SysTax	Hungarian National Museum, Budapest	1
Germany	SysTax	Ilha Solteira, Herbario	185
Germany	SysTax	Institut fur Allgemeine Botanik der Universitat Hamburg, Herbarium	10
Germany	SysTax	Institut fur Botanik der Universitat Wien, Herbarium	3
Germany	SysTax	Institut fur Forstzoologie und Waldschutz, Universitat Gottingen	25
Germany	SysTax	Institut fur Systematische Botanik der Universitat Munchen, Herbarium	4
Germany	SysTax	Institut fur Systematische Botanik der Universitat Zurich, Herbarium	6



Germany	SysTax	Jardin Botanique de la Ville Lyon	993
Germany	SysTax	Jardin Botanique Villa Thuret, Antibes	69
Germany	SysTax	Juiz de Fora, Herbario Dept. Botanica, Univ. Fed.	5
Germany	SysTax	Kew, Royal Botanic Gardens	329
Germany	SysTax	KSJ	1
Germany	SysTax	Kurpark Bad Bellingen	283
Germany	SysTax	La Paz (LPB), Herbario Nacional de Bolivia	9
Germany	SysTax	London, The Natural History Museum - Herbarium	33
Germany	SysTax	London, The Natural History Museum - zoologische Sammlung	1
Germany	SysTax	LPT	1
Germany	SysTax	Macapa, Herbario Amapaense	330
Germany	SysTax	Manaus, Herb., Dept. de Botanica	44
Germany	SysTax	Manaus, Herbario da Universidade do Amazonas	730
Germany	SysTax	Mexico City, Herb. Nacional	2
Germany	SysTax	Munchen, Botanische Staatssammlung	72
Germany	SysTax	Museo Nac. de Cienc. Nat., Quito	31
Germany	SysTax	Museum d'histoire naturelle de la Ville de Geneve	20
Germany	SysTax	Museum fur Naturkunde der Humboldt-Universitat, Berlin	32
Germany	SysTax	Museum fur Naturkunde, Berlin	5361
Germany	SysTax	Museum fur Naturkunde, Berlin - Arachnida	3250
Germany	SysTax	Museum fur Naturkunde, Berlin - Malakologie	8529
Germany	SysTax	Museum fur Naturkunde, Humboldt-Universitat, Berlin	6978
Germany	SysTax	Museum National d'Histoire Naturelle, Paris	10
Germany	SysTax	Museum Stuttgart Kopie Coll. Heller	5
Germany	SysTax	National Herbarium of New South Wales, Royal Botanic Gardens Sydney	3
Germany	SysTax	National Museum of Natural History Naturalis, Leiden	16
Germany	SysTax	Naturkundemuseum Berlin, Malakologie	11
Germany	SysTax	Naturkundemuseum Berlin, Mollusken	1
Germany	SysTax	Neuer Botanischer Garten Gottingen	12057
Germany	SysTax	Okologisch Botanischer Garten Bayreuth	18804
Germany	SysTax	Orto Botanico di Genova	505
Germany	SysTax	Orto Botanico di Pisa	5419
Germany	SysTax	Oshkosh, Univ. Wisconsin	24
Germany	SysTax	Palmengarten Frankfurt	227
Germany	SysTax	Panama (PMA), Herb. Univ. de Panama	62
Germany	SysTax	Paramaribo (BBS), Surinam	1
Germany	SysTax	Paris (P), Herb., Lab. de Phanerog.	19
Germany	SysTax	private collection	10
Germany	SysTax	Privatsammlung S. Ingrisch	132
Germany	SysTax	Quito, Herb. Dept. Biol. Pontif. Univ.	54
Germany	SysTax	Rijksherbarium Leiden	24
Germany	SysTax	Rio de Janeiro (RB), Secao de Botanica Sistemica	28
Germany	SysTax	Rio de Janeiro, Herbario, Museu Nacional	1
Germany	SysTax	Saint Louis (MO), Herb. of Miss. Bot. Gardens	262
Germany	SysTax	San Isidro, Instituto Darwinion	9
Germany	SysTax	San Jose (CR), Herb. Nacional, Costa Rica	13
Germany	SysTax	San Jose (USJ), Herbario Univ.	637
Germany	SysTax	Santiago (SGO) Chile	1
Germany	SysTax	Santo Domingo de Heradia (INB)	1
Germany	SysTax	São Luis, Herbario Univ. Federal do Maranhão	3
Germany	SysTax	São Paulo (SP), Herb. Inst. de Bot.	99
Germany	SysTax	Sao Paulo (SPF), Herb. Depart. de Bot.	8
Germany	SysTax	Sektion Forstwirtschaft Tharandt der TU Dresden, Germany	1
Germany	SysTax	Sektion fur Biosystematische Dokumentation	1
Germany	SysTax	Senckenberg Museum, Forschungsinstitut Senckenberg (FIS)	19
Germany	SysTax	Senckenberg-Museum Frankfurt	652
Germany	SysTax	SMTD	18
Germany	SysTax	SNMBR	90
Germany	SysTax	Staatliche Naturhistorische Sammlung Dresden, Museum fur Tierkunde	872
Germany	SysTax	Staatliches Museum fur Naturkunde Gorlitz	140

Germany	SysTax	Staatliches Museum fur Naturkunde, Karlsruhe	14473
Germany	SysTax	Staatliches Museum fur Naturkunde, Stuttgart	841
Germany	SysTax	SysTax: cited material from literature	2311
Germany	SysTax	Tempe, Herb. Arizona State Univ	46
Germany	SysTax	Uberseemuseum, Bremen	280
Germany	SysTax	UC Davis Herbarium (DAV), Davis, USA	94
Germany	SysTax	ULNM	5
Germany	SysTax	Universidad de Buenos Aires	9
Germany	SysTax	USDA	2
Germany	SysTax	Utrecht (U), Herb. Inst. of Syst. Bot.	209
Germany	SysTax	Vanderbilt University	11
Germany	SysTax	Vascular Plant Herbarium Royal Ontario Museum	1
Germany	SysTax	Victoria, University, Biology Dept.	35
Germany	SysTax	Wageningen, Herbarium Vadense	59
Germany	SysTax	Washington, Herbarium Smithsonian Institution	17
Germany	SysTax	Washington, U.S. Nat. Herb.	31
Germany	SysTax	Wien (W), Herb. Naturhist. Mus. Wien	47
Germany	SysTax	Yunnan University, Kunming, P. R. China	5
Germany	SysTax	ZMUH	271
Germany	SysTax	Zoological Museum, University of Copenhagen	67
Germany	SysTax	Zoological Survey of India Western Regional Station, Pune	2
Germany	SysTax	Zoological Survey of India, Calcutta	60
Germany	SysTax	Zoologische Staatssammlung Munchen	8231
Germany	SysTax	Zoologische Staatssammlung Munchen - Projekt MOLART	6888
Germany	SysTax	Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn	1573
Germany	SysTax	Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn - Ornithologie	17660
Germany	SysTax	Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn - Projekt DORSA	40
Germany	SysTax	Zoologisches Institut der Universitaet Halle/Saale	151
Germany	SysTax	Zoologisches Institut der Universitaet Koln, Germany	18
Germany	SysTax	Zoologisches Institut und Museum Hamburg	760
Germany	SysTax	Zoologisches Institut und Zoologisches Museum, Universitaet Hamburg	283
Germany	SysTax	Aarhus, Herb. Jutlandicum	14
Germany	Universitaetsherbarium Gottingen; Gesellschaft fur wissenschaftliche Datenverarbeitung mbH Gottingen GWDG.	Bryophyte herbarium, Gottingen (GOET)	29063
Germany	Universitaetsherbarium Gottingen; Gesellschaft fur wissenschaftliche Datenverarbeitung mbH Gottingen GWDG.	Forster herbarium, Gottingen (GOET)	306
Germany	Universitaetsherbarium Gottingen; Gesellschaft fur wissenschaftliche Datenverarbeitung mbH Gottingen GWDG.	Type herbarium, Gottingen (GOET)	8203
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Diptera collection	783
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Heteroptera collection	4
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Homoptera collection	3964
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Hymenoptera collection	4613
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Orthopteroidea collection	10393
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Phthiraptera collection	375
Germany	Zoologisches Forschungsinstitut und Museum Alexander Koenig	ZFMK Siphonaptera collection	31
Iceland	Icelandic Institute of Natural History	Herbarium (AMNH)	50424
Iceland	Icelandic Institute of Natural History	Herbarium (ICEL)	83296
Iceland	Icelandic Institute of Natural History	Observational database of Icelandic plants	371265
India	National Botanical Research Institute	Indian Virtual Herbarium Network (IVH-NET)	389

Japan	GTI Japan	EASIANET	478
Japan	GTI Japan	Freshwater fish collection	25955
Japan	GTI Japan	GTI Microfungi Observations	217
Japan	GTI Japan	JType	1840
Japan	GTI Japan	National Survey on Odonata	5551
Japan	National Institute of Genetics, ROIS	Database of Fungal Specimens Maintained at the Selected Japanese Herbaria	16164
Japan	National Institute of Genetics, ROIS	Entomological Specimens of Museum of Nature and Human Activities, Hyogo Pref., Japan	269454
Japan	National Institute of Genetics, ROIS	Flora of Japan Specimen Database	4498
Japan	National Institute of Genetics, ROIS	Herbarium Specimens of Museum of Nature and Human Activities, Hyogo Pref., Japan	110847
Japan	National Institute of Genetics, ROIS	Lichen specimen database of Faurie collection	7849
Japan	National Institute of Genetics, ROIS	NODAI Culture Collection Center, Tokyo University of Agriculture, Japan	429
Japan	National Science Museum, Japan	Algae Collection of National Science Museum	18155
Japan	National Science Museum, Japan	Bird Collection of National Science Museum	4605
Japan	National Science Museum, Japan	Bryophyte specimens database of Mr. Tsutomu Kodama collection	14061
Japan	National Science Museum, Japan	Bryophytes Collection of National Science Museum	19628
Japan	National Science Museum, Japan	Fern specimens collected by Mr. Hisaya Manago, Aquatic plant specimen database of Dr. Shigeru Miki collection	13655
Japan	National Science Museum, Japan	Fish Collection of National Science Museum	56547
Japan	National Science Museum, Japan	Fish Collection of Yokosuka City Museum	3424
Japan	National Science Museum, Japan	Fish specimen database of Osaka Museum of Natural History	17363
Japan	National Science Museum, Japan	Fish specimens of Fisheries Research Laboratory Mie University	31494
Japan	National Science Museum, Japan	Fish Specimens of Museum of Tokushima Prefectural Museum, Japan	16079
Japan	National Science Museum, Japan	Fukui City Museum of Natural History	11986
Japan	National Science Museum, Japan	Herbarium of Kitakyushu Museum of Natural History and Human History	5049
Japan	National Science Museum, Japan	Herbarium Specimens of Tokushima Prefectural Museum, Japan	10070
Japan	National Science Museum, Japan	Hymenopteran specimen database of Osaka Museum of Natural History	11027
Japan	National Science Museum, Japan	Kashihara City Museum of Insect	10006
Japan	National Science Museum, Japan	Kurashiki Museum of Natural History	14850
Japan	National Science Museum, Japan	Lake Biwa Museum	7586
Japan	National Science Museum, Japan	Lichen Collection of National Science Museum	4999
Japan	National Science Museum, Japan	Mammal Collection of National Science Museum	9674
Japan	National Science Museum, Japan	Myxomycetes Collection of National Science Museum	20648
Japan	National Science Museum, Japan	Omogo Mountain Museum	3983
Japan	National Science Museum, Japan	Osaka Prefectural Minoh Park Insects Museum	10151
Japan	National Science Museum, Japan	Taga Town Museum, Shiga Pref., Japan	3025
Japan	National Science Museum, Japan	Vascular Plants Collection of National Science Museum	683
Korea	CCBB (Center for Computational Biology and Bioinformatics), KISTI	Database of Annelida (Order Oligochaeta)	40
Korea	CCBB (Center for Computational Biology and Bioinformatics), KISTI	Korean Agricultural cari (Chelicerata)	98
Korea	CCBB (Center for Computational Biology and Bioinformatics), KISTI	Korean Insect Database (Hymenoptera: Ichneumonidae)	300
Korea	CCBB (Center for Computational Biology and Bioinformatics), KISTI	Reference DB of Korean land Arthropods	4121
Korea	CCBB (Center for Computational Biology and Bioinformatics), KISTI	The Korean Freshwater Fish	209
Korea	Folklore and Natural History Museum	Folklore and Natural History Museum DB	50611
Korea	Folklore and Natural History Museum	Folklore and Natural History Museum PLANT	10474
Korea	Gyeryonsan Natural History Museum	Gyeryongsan Natural History Museum DB	3000
Korea	Jeollanamdo Maritime & Fisheries Science Museum	Jeollanamdo Maritime & Fisheries Science Museum	2000
Korea	KBRC (Korean Biological Resource Center) - KBIF Node	Korean Collection for Type Cultures	5396
Korea	KDR (KBIF Data Repository)	Baekdu Mountain Animal	447
Korea	KDR (KBIF Data Repository)	Baekdu Mountain Plant	517
Korea	KDR (KBIF Data Repository)	geoworm	40
Korea	KDR (KBIF Data Repository)	Korean Wild Birds	1395
Korea	KDR (KBIF Data Repository)	North Korean Mushroom	549
Korea	Korea National Arboretum (Korea Forest Service)	Insect	367491

Korea	Korea National Arboretum (Korea Forest Service)	Plant	498599
Korea	Korean Bioinformation Center (KOBIC)	육조류	661
Korea	Korean Bioinformation Center (KOBIC)	해조류	51
Korea	Kyung Hee University Natural History Museum	Kyung Hee University Natural History Museum Bird	2020
Korea	Mokpo Museum of Natural History	Mokpo Museum of Natural History Bird	2630
Korea	Mokpo Museum of Natural History	Mokpo Museum of Natural History Insect	6052
Korea	Mokpo Museum of Natural History	Mokpo Museum of Natural History Plant	2506
Korea	Mokpo Museum of Natural History	Mokpo Museum of Natural History Shellfish	788
Korea	National Science Museum of Korea	National Science Museum of Korea DB	38182
Korea	Seodaemun Museum of Natural History	Seodaemun Museum of Natural History Bird	70
Korea	Seodaemun Museum of Natural History	Seodaemun Museum of Natural History Fossil	4
Korea	Seodaemun Museum of Natural History	Seodaemun Museum of Natural History Insect	1386
Korea	Seodaemun Museum of Natural History	Seodaemun Museum of Natural History Mammal	3
Korea	Seodaemun Museum of Natural History	Seodaemun Museum of Natural History Plant	299
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Banco Nacional de Germoplasma Vegetal, México (BANGEV, UACH)	8337
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Colección de Diatomeas del Sur del Golfo de México (ICMyL-DF, UNAM)	484
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Colección de Mamíferos de la Sierra Volcánica Transversal de México (UAM-I)	14590
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Colección de Mamíferos de Nuevo León, México (UANL)	5273
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Herbario de la Escuela Nacional de Ciencias Biológicas, México (ENCB, IPN)	2
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Herbario del Instituto de Ecología, A.C., México (IE-BAJÁO)	158518
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Herbario del Instituto de Ecología, A.C., México (IE-XAL)	237448
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Herbarium de Geo. B. Hinton, México	10585
Mexico	Comisión nacional para el conocimiento y uso de la biodiversidad	Himenópteros Parasíticos en México (UANL)	10898
Mexico	Museo de Zoología de la Facultad de Ciencias, UNAM	Coleccion de Herpetología, MZFC-UNAM	21333
Mexico	UNIBIO, IBUNAM	Asteraceae	17087
Mexico	UNIBIO, IBUNAM	CNAC/Coleccion Nacional de Acaros	3434
Mexico	UNIBIO, IBUNAM	CNAN/Tipos Arachnida	186
Mexico	UNIBIO, IBUNAM	CNAR/Coleccion Nacional de Anfibios y Reptiles	11996
Mexico	UNIBIO, IBUNAM	CNAV/Coleccion Nacional de Aves	26676
Mexico	UNIBIO, IBUNAM	CNCR/Coleccion Nacional de Crustaceos	8034
Mexico	UNIBIO, IBUNAM	CNHE/Coleccion Nacional de Helmintos	5159
Mexico	UNIBIO, IBUNAM	CNIN/Mantodea	265
Mexico	UNIBIO, IBUNAM	CNIN/Tipos Diptera	58
Mexico	UNIBIO, IBUNAM	CNIN/Tipos Homoptera	83
Mexico	UNIBIO, IBUNAM	CNIN/Tipos Hymenoptera	97
Mexico	UNIBIO, IBUNAM	CNIN/Tipos Odonata	241
Mexico	UNIBIO, IBUNAM	CNIN/Tipos Orthoptera	49
Mexico	UNIBIO, IBUNAM	CNIN/Triatominos (Hemiptera-Heteroptera-Reduviidae)	596
Mexico	UNIBIO, IBUNAM	CNMA/Coleccion Nacional de Mamíferos	38407
Mexico	UNIBIO, IBUNAM	CNPE/Coleccion Nacional de Peces	12095
Mexico	UNIBIO, IBUNAM	Herbario Los Tuxtlas	5716
Mexico	UNIBIO, IBUNAM	MEXU/Colección de Briofitas	39563
Mexico	UNIBIO, IBUNAM	MEXU/Frutos y Semillas	109

Mexico	UNIBIO, IBUNAM	MEXU/Plantas Vasculares	26132
Mexico	UNIBIO, IBUNAM	Tipos de plantas vasculares	531
Netherlands	CBS (NLBIF)	CBS fungi	36168
Netherlands	Centre for Genetic Resources, The Netherlands	CGN-PGR	23711
Netherlands	NLBIF	(Zoological Museum Amsterdam) Amphibia and Reptilia	14195
Netherlands	NLBIF	(Zoological Museum Amsterdam) Aves	24794
Netherlands	NLBIF	(Zoological Museum Amsterdam) Bombidae	11668
Netherlands	NLBIF	(Zoological Museum Amsterdam) Bryozoa	211
Netherlands	NLBIF	(Zoological Museum Amsterdam) Coelenterata	1209
Netherlands	NLBIF	(Zoological Museum Amsterdam) Coleoptera	1214
Netherlands	NLBIF	(Zoological Museum Amsterdam) Diptera	3816
Netherlands	NLBIF	(Zoological Museum Amsterdam) Noordzee	35886
Netherlands	NLBIF	(Zoological Museum Amsterdam) Porifera	18370
Netherlands	NLBIF	Nationaal Herbarium Nederland	638265
Netherlands	NLBIF	Natural History Museum Rotterdam (NMR)	29501
Netherlands	NLBIF	Naturalis Acari Types	1744
Netherlands	NLBIF	Naturalis Cichlidae of Lake Victoria collection	6165
Netherlands	NLBIF	Naturalis Coelenterata	3117
Netherlands	NLBIF	Orthoptera	85970
New Zealand	GBIF New Zealand	International Collection of Microorganisms from Plants - New Zealand National Microbial Collection	9792
New Zealand	GBIF New Zealand	New Zealand National Plant Herbarium (CHR)	100312
New Zealand	GBIF New Zealand	New Zealand National Vegetation Survey Databank	1259718
New Zealand	GBIF New Zealand	NZFUNGI - Collections of the New Zealand National Fungal Herbarium (PDD)	60375
New Zealand	GBIF New Zealand	Planetary Biodiversity Inventory Eumycota Databank	12084
Nicaragua	Herbario de la Universidad de Leon	Plantas de Nicaragua	950
Nordic Gene Bank	The Nordic Gene Bank	Alntorps Å, Nora	18
Nordic Gene Bank	The Nordic Gene Bank	Danmarks Jordbrugsforskning	140
Nordic Gene Bank	The Nordic Gene Bank	Ekebyhovsparken	22
Nordic Gene Bank	The Nordic Gene Bank	Fredriksdal museer och trädgårdar	52
Nordic Gene Bank	The Nordic Gene Bank	Julita - Sveriges Lantbruksmuseum	85
Nordic Gene Bank	The Nordic Gene Bank	Munkagårdsgymnasiet	12
Nordic Gene Bank	The Nordic Gene Bank	N.I. Vavilov Research Institute of Plant Industry	21
Nordic Gene Bank	The Nordic Gene Bank	Nordic Gene Bank	30292
Nordic Gene Bank	The Nordic Gene Bank	Planteforsk	43
Nordic Gene Bank	The Nordic Gene Bank	Pomerium Vadstenense	11
Nordic Gene Bank	The Nordic Gene Bank	Stiftelsen Capellagården	12
Nordic Gene Bank	The Nordic Gene Bank	von Echstedtska gården, Söföle	16
Norway	Natural History Museum, University of Oslo	Bryophyte herbarium, Bergen (BG)	14073
Norway	Natural History Museum, University of Oslo	Bryophyte herbarium, Oslo (O)	10879
Norway	Natural History Museum, University of Oslo	Fungi field notes, Oslo (O)	29668
Norway	Natural History Museum, University of Oslo	Lichen field notes, Oslo (O)	75014
Norway	Natural History Museum, University of Oslo	Lichen herbarium, Bergen (BG)	63991
Norway	Natural History Museum, University of Oslo	Lichen herbarium, Oslo (O)	127482
Norway	Natural History Museum, University of Oslo	Mycology collection, Norwegian Forest Research Institute	629
Norway	Natural History Museum, University of Oslo	Mycology herbarium, Bergen (BG)	14623
Norway	Natural History Museum, University of Oslo	Mycology herbarium, Oslo (O)	121930
Norway	Natural History Museum, University of Oslo	Norwegian Lepidoptera collection, Oslo	55062
Norway	Natural History Museum, University of Oslo	Notes from the Mycology Herbarium, Oslo (O)	31610
Norway	Natural History Museum, University of Oslo	Vascular Plant Herbarium, Oslo (O)	461235
Norway	Natural History Museum, University of Oslo	Vascular Plants, Field notes, Oslo (O)	1087544
Ocean Biogeographic Information System	FishBase	FishBase DIGIR - Philippine Server	2105708

Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	AIMS Bioresources Library	1093
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Atlantic Canada Conservation Data Centre	1318
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Atlantic Reference Centre	111900
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Bay of Fundy Species List	2380
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Bishop Museum Data (OBIS distribution)	7881
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Bureau of Rural Sciences National commercial fisheries half-degree data set 2000-2002	60445
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Canada Maritimes Regional Cetacean Sightings	22742
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Canadian Museum of Nature - Fish Collection	39897
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Centro Nacional Patagonico Ichthyological Collection	1531
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	ChEssBase	2593
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Continuous Plankton Recorder database	2357028
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	CSIRO Marine Data Warehouse (via OBIS Australia)	105835
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Davis Strait and Baffin Bay Zooplankton	9491
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Demersal and pelagic species from the Patagonian shelf	1734
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	DFO Scotian Summer Research Trawl Survey	60108
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Eastern Canada Benthic Macro Fauna	5650
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	ECNASAP - East Coast North America Strategic Assessment	313916
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Electronic Atlas of Ichthyoplankton on the Scotian Shelf of North America	3437
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	EPA'S EMAP Database	19911
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Fishes in the Argentine Sea from 1967 to the present time	5449
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	GBR Nearshore Coral Diversity	16489
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Grand Manan Basin Benthos	243
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Gulf of Maine Bottom Trawl Survey Data (NEFSC, NMFS, NOAA)	5311
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Gwaii Haanas Invertebrates	24311
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Gwaii Haanas Marine Plants	6351
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Historical hyperbenthos data (1987-2001) from the North Sea and some adjacent areas	20967
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	HMAP-History of Marine Animal Populations	242213
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Ifremer BIOCEAN database (Deep Sea Benthic Fauna)	24408
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	iziko South African Museum - Fish Collection	15016
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	iziko South African Museum - Marine Mammal Collection	1184
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Locations of Seals in Patagonian Large Marine Ecosystem	3901
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Macrobenthic species of the Eastern South Pacific (OBIS South America, CHILE)	573
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Marine and Coastal Management - Copepod Surveys	91705
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Marine and Coastal Management - demersal Surveys	98083
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Marine and Coastal Management - Seal Surveys	2440
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Marine Invertebrate Diversity Initiative	26
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Natal Museum - Mollusc Collection	16209

Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	North American Sessile Marine Invertebrate Survey	4808
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	North Pacific Groundfish Observer	422150
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Nova Scotia Museum of Natural History - Marine Birds, Mammals, and Fishes	517
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Pacific Ocean Shelf Tracking	10286
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Paranaguá Bay - Plankton and Benthos Database	4500
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Resolute Passage Copepod Distribution	3132
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	REVIZEE Score Sul / Benthos	2810
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	REVIZEE South Score / Pelagic and Demersal Fish Database	1888
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	REVIZEE South Score / Pelagic and Demersal Fish Database II	4129
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	SEAMAP - marine mammals, birds and turtles	718446
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	SINBIOTA - marine data	14319
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	South African Institute for Aquatic Biodiversity - Fish Collection	56390
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	South Western Pacific Regional OBIS Data for the NIWA Marine Biodata Information System	307589
Ocean Biogeographic Information System	Institute of Marine and Coastal Sciences, Rutgers University	Zooplankton of the Eastern South Pacific	1664
Ocean Biogeographic Information System	International Census of Marine Microbes	MICROBIS database	2584
Ocean Biogeographic Information System	National Chemical Laboratory	Biological Collection, National Institute of Oceanography, Goa, India	803
Ocean Biogeographic Information System	National Chemical Laboratory	IndOBIS, Indian Ocean Node of OBIS	37624
Ocean Biogeographic Information System	School of Fisheries and Ocean Sciences	Arctic Ocean Diversity	1
Pakistan	Pakistan Museum of Natural History	Pakistan Museum of Natural History, Islamabad	134
Peru	Herbarium Amazonense - AMAZ	Herbario UNAP	26569
Peru	Instituto de Investigaciones de la Amazonía Peruana	Herbario Herrerense	3208
Peru	Siamazonia	Biodamaz1	477
Peru	Siamazonia	IIAPPoa	11009
Poland	Bia?owie?a Geobotanical Station, Warsaw University	Herbarium of the Bia?owie?a Geobotanical Station	9719
Poland	Botanic Garden of Warsaw University	Botanical Garden Collection	1199
Poland	Botanic Garden of Warsaw University	WA	832
Poland	Forest Research Institute, Department of Natural Forests	Coleoptera of Bia?owie?a Forest	5831
Poland	Forest Research Institute, Department of Natural Forests	Coleoptera of Biebrza National Park.	1236
Poland	Forest Research Institute, Department of Natural Forests	Coleoptera of Kozienice Forest.	733
Poland	Forest Research Institute, Department of Natural Forests	Coleoptera of Swierkianiec Forest	511
Poland	Forest Research Institute, Department of Natural Forests	Coleoptera of Tuchola Forest and Tuchola Forest National Park.	970
Poland	Forest Research Institute, Department of Natural Forests	Fungi Collection	1946
Poland	Forest Research Institute, Department of Natural Forests	Herbarium	7729
Poland	IHAR	Herbarium species (seeds, herbarium, ears)	2437
Poland	IHAR	National Centre for Plant Genetic Resources, Poland	43048
Poland	Institute of Agricultural and Food Biotechnology, Department of Microbiology	Collection of Industrial Microorganisms	600
Poland	Institute of Biochemistry and Biophysics PAS	IBB bacterial database	2493
Poland	Institute of Dendrology PAS	Institute of Dendrology PAS, Flora of Sudety Mountains	67194
Poland	Institute of Environmental Sciences UJ	Breeding birds in Malopolska	8300
Poland	Institute of Environmental Sciences UJ	Lepidoptera of Cracow City	1422

Poland	Institute of Nature Conservation PAS	Atlas of the Amphibians and Reptiles of Poland	3883
Poland	Institute of Nature Conservation PAS	Bumblebees, cuckoo bees and butterflies	10194
Poland	Institute of Nature Conservation PAS	IAS	232
Poland	Institute of Nature Conservation PAS	National System of Protected Areas	16455
Poland	Institute of Systematics and Evolution of Animals Polish Academy of Sciences	ISEZ Collection	14520
Poland	Institute of Zoology, Jagiellonian University	Apionidae of Tatra Mts.	858
Poland	Institute of Zoology, Jagiellonian University	Carabidae Collection	22906
Poland	Institute of Zoology, Jagiellonian University	Carabidae of the Slonne Mts.	1275
Poland	Institute of Zoology, Jagiellonian University	Carabidae of the Tatra Mts.	313
Poland	Institute of Zoology, Jagiellonian University	Chrysomelidae of Beskid Maly Mts.	356
Poland	Institute of Zoology, Jagiellonian University	Chrysomelidae of Beskid Zywiecki Mts.	10995
Poland	Institute of Zoology, Jagiellonian University	Chrysomelidae of Pomeranian Lakeland	2168
Poland	Institute of Zoology, Jagiellonian University	Curculionoidea of the Magura Spiska Mts.	1352
Poland	Institute of Zoology, Jagiellonian University	Curculionoidea of the Pieniny Spiskie Mts.	1387
Poland	Museum and Institute of Zoology, Polish Academy of Science	Amphibia Collection of Museum and Institute of Zoology PAS	356
Poland	Museum and Institute of Zoology, Polish Academy of Science	Bird Collection of Museum and Institute of Zoology PAS	77300
Poland	Museum and Institute of Zoology, Polish Academy of Science	Collembola Collection	3918
Poland	Museum and Institute of Zoology, Polish Academy of Science	Diptera Collection of Museum and Institute of Zoology PAS	4177
Poland	Museum and Institute of Zoology, Polish Academy of Science	Mollusca Collection	7830
Poland	Museum and Institute of Zoology, Polish Academy of Science	Platinotina Collection	7509
Poland	Museum and Institute of Zoology, Polish Academy of Science	Reptilia Collection of Museum and Institute of Zoology PAS	420
Poland	Museum and Institute of Zoology, Polish Academy of Science	Type Specimen Database of Museum and Institute of Zoology PAS	2340
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Collection of Coleoptera	2689
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Collection of Heteroptera	1284
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Collection of Hymenoptera	2651
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Curculionoidea of Poland	4333
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Flora of the Stożowe Mts.	48769
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Herbarium WSRL	1487
Poland	Museum of Natural History, Wroclaw University	Museum of Natural History, Wroclaw University, Insect Collection from New Caledonia	444
Poland	National Institute of Public Health, Poland	Bacteria collection of National Institute of Public Health, Poland	2119
Poland	Nicolaus Copernicus University of Torun	The Distribution Atlas of Butterflies in Poland	57952
Poland	University of Gdansk, Bird Migration Research Station	Ringling Data from the Bird Migration Research Station, University of Gdańsk	338094
Poland	University of Gdansk, Department of Plant Taxonomy and Nature Conservation	Orchid Herbarium Collection	3667
Poland	University of Silesia	Herbarium KTU	3773
Poland	Upper Silesian Museum, Bytom	Upper Silesian Museum, Bird Collection	610
Poland	Upper Silesian Museum, Bytom	Upper Silesian Museum, Bird Observations	2029
Poland	Upper Silesian Museum, Bytom	Upper Silesian Museum, Insect Collection	268



Poland	Warsaw Agricultural University, Faculty of Horticulture and Landscape Architecture, Department of Applied Entomology	Eriophyoid Mites of Poland	2112
Poland	Warsaw University, Faculty of Biology	Warsaw Univ., Fac. of Biology, Hosted Invertebrate Collection 01	2576
Poland	Warsaw University, Faculty of Biology	Warsaw Univ., Fac. of Biology, Invertebrate Collection of Dept. of Ecology	558
Poland	Warsaw University, Faculty of Biology	Warsaw Univ., Fac. of Biology, Saproxyllic Beetles of the Tatra Mts.	1728
Poland	Warsaw University, Faculty of Biology	Warsaw Univ., Fac. of Biology, Small Mammal Research Database	5733
Portugal	Botanic Garden, National Museum of Natural History, University of Lisbon	Bryophyte collection	21380
Portugal	Botanic Garden, National Museum of Natural History, University of Lisbon	Lichen collection	2175
Slovakia	Institute of Botany, SAS - Bratislava	František Náb?lek Herbarium 1909-1910	293
Slovenia	Prirodoslovni muzej Slovenije	Siphonaptera collection Slovenia	2857
Slovenia	Prirodoslovni muzej Slovenije	Siphonaptera collection world	6917
South Africa	National Research Foundation	ADU Beta Resource	2111770
South Africa	National Research Foundation	Albany Beta Resource	956
South Africa	National Research Foundation	IZIKO Beta Resource	4559
South Africa	National Research Foundation	Palaentology Beta Resource	40
South Africa	National Research Foundation	SAIAB Beta Resource	956
South Africa	National Research Foundation	Zoology Beta Resource	2108
Spain	Banc de dades de biodiversitat de Catalunya	Banc de dades de biodiversitat de Catalunya-FungaCat	56512
Spain	Banc de dades de biodiversitat de Catalunya	Banc de dades de biodiversitat de Catalunya-LiqueCat	26334
Spain	Banc de dades de biodiversitat de Catalunya	Banc de dades de biodiversitat de Catalunya-MolusCat	12861
Spain	Banc de dades de biodiversitat de Catalunya	Banc de dades de biodiversitat de Catalunya-VerteCat	179353
Spain	GBIF-Spain	Aranzadi Zientzi Elkartea	12314
Spain	GBIF-Spain	BANDASCA	15918
Spain	GBIF-Spain	Botánica, Universidad de León: LEB-Cormo	14360
Spain	GBIF-Spain	CeDoc de Biodiversitat Vegetal: BCN-Cormophyta	4957
Spain	GBIF-Spain	CIBIO, Alicante:ABH-GBIF	11254
Spain	GBIF-Spain	CUBA: Herbario de la Academia de Ciencias, La Habana, Cuba: HAC-Pteridophyta	6048
Spain	GBIF-Spain	CUBA: Herbario del Jardín Botánico Nacional, La Habana, Cuba: HAJB-Pteridophyta	6560
Spain	GBIF-Spain	CUBA: Herbario del Jardín de los Helechos, Centro Oriental de Ecosistemas y Biodiversidad, Santiago de Cuba: BSC-Pteridophyta	1114
Spain	GBIF-Spain	Departamento de Biolog. Veg. II, Facultad de Farmacia, Universidad Complutense, Madrid: MAF	4969
Spain	GBIF-Spain	Departamento de Biolog. Veg. II, Facultad de Farmacia, Universidad Complutense, Madrid: MAF-Lich	13865
Spain	GBIF-Spain	Dirección General de Investigación, Desarrollo Tecnológico e Innovación de la Junta de Extremadura(DGIDTI): HSS	17269
Spain	GBIF-Spain	Dpto de Botánica, Ecología y Fisiología Vegetal (herbario_cofc).Facultad de Ciencias.Universidad de Córdoba	3247
Spain	GBIF-Spain	Dpto de Botánica, Ecología y Fisiología Vegetal (Historico_cofc). Facultad de Ciencias. Universidad de Córdoba	1597
Spain	GBIF-Spain	Dpto. de Botánica, Ecología y Fisiología Vegetal. Facultad de Ciencias. Universidad de Córdoba. Fungi-COFC	4015
Spain	GBIF-Spain	Escuela Técnica Superior de Ingenieros de Montes, UPM: EMMA	3101
Spain	GBIF-Spain	Estacion Biologica Donana - CSIC, Aves (Trochilidae)	280
Spain	GBIF-Spain	Estacion Biologica Donana - CSIC, Guinean Bats	1043
Spain	GBIF-Spain	Flora Mycologica Iberica	54068
Spain	GBIF-Spain	Fonoteca Zoológica, Museo Nacional de Ciencias Naturales, Madrid: FZ_AMPHIBIA	3618
Spain	GBIF-Spain	Fonoteca Zoológica, Museo Nacional de Ciencias Naturales, Madrid: FZ_AVES	1403
Spain	GBIF-Spain	Fonoteca Zoológica, Museo Nacional de Ciencias Naturales, Madrid: FZ_INSECTA	62
Spain	GBIF-Spain	Fonoteca Zoológica, Museo Nacional de Ciencias Naturales, Madrid: FZ_REPTILIA	53
Spain	GBIF-Spain	Fonoteca Zoológica, Museo Nacional de Ciencias Naturales, Madrid: MAMMALIA_FZ	208
Spain	GBIF-Spain	GBIF-PORTUGAL-Herbário João de Carvalho e Vasconcelos, I.S.A./U.T.L.	11141
Spain	GBIF-Spain	Herbario de la Universidad de Sevilla, SEV	37128
Spain	GBIF-Spain	Herbario de la Universidad de Sevilla, SEV-Historico	11455

Spain	GBIF-Spain	Herbario Universidad de Málaga: MGC-Cormófitos	36722
Spain	GBIF-Spain	Hortus Botanicus Sollerensis Herbarium (FBonafè)	4051
Spain	GBIF-Spain	Institut Botanic de Barcelona, BC	11038
Spain	GBIF-Spain	Institut Botanic de Barcelona, BC-Històric	827
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Algae	1769
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Arthro	2445
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Mollusca	180
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_OtherInv	185
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Phyto	3218
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Pisces	46
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Plantae	585
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Polichae	308
Spain	GBIF-Spain	Institut d'Ecologia Litoral: IEL_Seed	98
Spain	GBIF-Spain	Instituto de Investigación CIBIO, Universidad de Alicante: CEUA	15852
Spain	GBIF-Spain	Instituto Pirenaico de Ecología-CSIC: Herbarium JACA	50939
Spain	GBIF-Spain	Jardi Botanic de València: VAL	39536
Spain	GBIF-Spain	Jardín Botánico de Córdoba: Herbarium COA	24518
Spain	GBIF-Spain	Laboratorio de Entomología y Control de Plagas del Instituto Cavanilles de Biodiversidad y Biología Evolutiva de la Universidad de Valencia: ENV	3302
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Colección de Aves: MNCN-Ornit	2980
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Colección de Ictiología	44853
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Colección de Malacología	936
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Colección de Mamíferos: MNCN-Mam	1599
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Entomología: Iberian Orthopteroidea	1048
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Madrid. Colección de Tejidos y ADN	4231
Spain	GBIF-Spain	Museo Nacional de Ciencias Naturales, Madrid: Invertebrados Poliquetos	10270
Spain	GBIF-Spain	Museu de Ciències Naturals, Zoologia, Barcelona: MCNC-Art	2153
Spain	GBIF-Spain	Museu de Ciències Naturals, Zoologia, Barcelona: MCNC-Cord	15144
Spain	GBIF-Spain	Museu de Ciències Naturals, Zoologia, Barcelona: MCNC-Malac	6312
Spain	GBIF-Spain	Museu Valencià d'Història Natural - Fundació Entomològica Torres Sala: FETS	720
Spain	GBIF-Spain	Real Jardín Botánico (Madrid), Vascular Plant Herbarium (MA)	187690
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Algae	8096
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Fungi	62226
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Funhist	19981
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Hepat	4071
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Lichen	13840
Spain	GBIF-Spain	Real Jardín Botánico, Madrid: MA-Musci	25454
Spain	GBIF-Spain	Univ. Herbarium Salamanca: SALA	26741
Spain	GBIF-Spain	Universidad de Almería, HUAL	9722
Spain	GBIF-Spain	Universidad de Extremadura, UNEX	4985
Spain	GBIF-Spain	Universidad de Murcia, Dpto. Biología Vegetal (Botánica), Murcia: MUB-HEPATICAIE	2304
Spain	GBIF-Spain	Universidad de Oviedo. Departamento de Biología de Organismos y Sistemas: FCO	7250
Spain	GBIF-Spain	Universidad del País Vasco/EHU, Bilbao: Herbario BIO	9096
Spain	GBIF-Spain	Universidad Politécnica de Madrid, Dpto. Biología Vegetal, Banco de Germoplasma	9754
Spain	GBIF-Spain	Universitat de Girona: HGI-Cormophyta	4306
Spain	GBIF-Spain Herbario de la Universidad de Granada	GDA, GDAC	44657
Spain	Herbario SANT, Universidade de Santiago de Compostela	SANT herbarium vascular plant collection	11390
Spain	University of Navarra, Museum of Zoology	Museum of Zoology, University of Navarra	15988
Sweden	The Swedish Museum of Natural History (NRM)	Algae (S)	2892
Sweden	The Swedish Museum of Natural History (NRM)	Birds (GBIF-SE:Artdatabanken)	6393049
Sweden	The Swedish Museum of Natural History (NRM)	Birds of the Gothenburg Natural History Museum	18170
Sweden	The Swedish Museum of Natural History (NRM)	Botany (UPS)	38078
Sweden	The Swedish Museum of Natural History (NRM)	Bugs (GBIF-SE:Artdatabanken)	231191
Sweden	The Swedish Museum of Natural History (NRM)	Diptera (NRM)	3179
Sweden	The Swedish Museum of Natural History (NRM)	Fishes (NRM)	41154

Sweden	The Swedish Museum of Natural History (NRM)	Fishes of the Gothenburg Natural History Museum	8644
Sweden	The Swedish Museum of Natural History (NRM)	Fungi (GBIF-SE:Artdatabanken)	33968
Sweden	The Swedish Museum of Natural History (NRM)	Fungi (S)	124673
Sweden	The Swedish Museum of Natural History (NRM)	Herbarium of Oskarshamn (OHN)	124351
Sweden	The Swedish Museum of Natural History (NRM)	Herpetology (NRM)	4297
Sweden	The Swedish Museum of Natural History (NRM)	Invertebrates (GBIF-SE:SMNH)	82578
Sweden	The Swedish Museum of Natural History (NRM)	Lichens (S)	68165
Sweden	The Swedish Museum of Natural History (NRM)	Lund Botanical Museum (LD)	258335
Sweden	The Swedish Museum of Natural History (NRM)	Lund Museum of Zoology (MZLU)	145518
Sweden	The Swedish Museum of Natural History (NRM)	Mammals (NRM)	6773
Sweden	The Swedish Museum of Natural History (NRM)	Mammals of the Gothenburg Natural History Museum	10197
Sweden	The Swedish Museum of Natural History (NRM)	Molluscs of the Natural History Museum in Gothenburg	5704
Sweden	The Swedish Museum of Natural History (NRM)	Mosses (S)	106530
Sweden	The Swedish Museum of Natural History (NRM)	National Board of Fisheries (Fiskeriverket) - Institute of Coastal Research	146382
Sweden	The Swedish Museum of Natural History (NRM)	National Board of Fisheries (Fiskeriverket) - National Register of Survey testfishing	17447
Sweden	The Swedish Museum of Natural History (NRM)	National Board of Fisheries (Fiskeriverket) - Swedish Electrofishing Registry	67371
Sweden	The Swedish Museum of Natural History (NRM)	Nordic Herbarium (S)	96750
Sweden	The Swedish Museum of Natural History (NRM)	Plants (GBIF-SE:Artdatabanken)	360319
Sweden	The Swedish Museum of Natural History (NRM)	Porpoises (NRM)	376
Sweden	The Swedish Museum of Natural History (NRM)	Pteridophytes (S)	16137
Sweden	The Swedish Museum of Natural History (NRM)	Reptiles and Amphibians of the Gothenburg Natural History Museum	3782
Sweden	The Swedish Museum of Natural History (NRM)	Zoology (Museum of Evolution - Uppsala)	59534
Switzerland	GBIF Swiss Participant Node	Conservatoire et Jardin botaniques de la Ville de Genève	2332
Switzerland	GBIF Swiss Participant Node	Naturhistorisches Museum Bern	355
Switzerland	Herbaria of the University and ETH Zürich (Z+ZT)	Sukkulentensammlung Zürich	21217
Taiwan	Taiwan Biodiversity Information Facility	Magnoliophyta	35853
Taiwan	Taiwan Biodiversity Information Facility	TaiBIF	55209
Taiwan	Taiwan Biodiversity Information Facility	Taiwan Biodiversity Data for GBIF	90490
United Kingdom	British Antarctic Survey	Antarctic Plant Database	44927
United Kingdom	British Antarctic Survey	SOMBASE	7709
United Kingdom	Department of Plant Sciences, University of Oxford	Leucaena BRAHMS Database	746
United Kingdom	Herbarium RNG, School of Plant Sciences, The University of Reading	Herbarium RNG	47474
United Kingdom	Natural History Museum	Natural History Museum Science Database Collection	233959
United Kingdom	Royal Botanic Gardens, Kew	Royal Botanic Gardens, Kew	144304
United Kingdom	UK National Biodiversity Network	Aquatic Heteroptera Recording Scheme - Aquatic Heteroptera Dataset	6481
United Kingdom	UK National Biodiversity Network	Balfour-Browne Club - Water Beetle Surveys from Britain and Ireland	276785
United Kingdom	UK National Biodiversity Network	BATS & The Millennium Link - Bat species distribution in Central Belt of Scotland (Period 2000 to 2005)	250
United Kingdom	UK National Biodiversity Network	Bees, Wasp and Ants Recording Society - Bees, Wasps and Ants Recording Society - Trial Dataset	9521
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Aquatic Heteroptera Dataset	45306
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Atomariinae Dataset	10200
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Cantharoidea and Buprestoidea Dataset	39792

United Kingdom	UK National Biodiversity Network	Biological Records Centre - Cerambycidae Dataset	12813
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Coccinellidae Data	9043
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Cranefly Dataset	73305
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Crayfish Dataset	9162
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Database for the Atlas of Freshwater Fishes	269221
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Dragonfly and Damselfly records	98412
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Freshwater crayfish data from survey of Great Britain held by the Biological Records Centre	3532
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Irish Otter Dataset	798
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Isopoda (Interim dataset)	59016
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Lacewings and allied insects	18501
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Mammals Database	40563
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Opillones (Harvestman) Dataset	8568
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Orthoptera Dataset	44012
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Reptiles and Amphibians Dataset	53552
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Ticks (Ixodoidea) distribution for the British Isles	4125
United Kingdom	UK National Biodiversity Network	Biological Records Centre - Trichoptera Dataset	17266
United Kingdom	UK National Biodiversity Network	Botanical Society of the British Isles - Demonstration set of data downloaded from the BSBI threatened plant database	2300
United Kingdom	UK National Biodiversity Network	Botanical Society of the British Isles - New Atlas of the British & Irish Flora 2002	8975589
United Kingdom	UK National Biodiversity Network	Bristol Regional Environmental Records Centre - SW Pilot Project BAP Species Inventory 2002	1464
United Kingdom	UK National Biodiversity Network	British Bryological Society - Bryophyte data for Great Britain from the British Bryological Society held by BRC	1779872
United Kingdom	UK National Biodiversity Network	British Bryological Society - Bryophyte data for Great Britain held by BRC for compilation	74014
United Kingdom	UK National Biodiversity Network	Conchological Society of Great Britain & Ireland - Mollusc (marine) data for Great Britain and Ireland	47599
United Kingdom	UK National Biodiversity Network	Conchological Society of Great Britain & Ireland - Mollusc (non-marine) data for Great Britain and Ireland	207034
United Kingdom	UK National Biodiversity Network	Countryside Council for Wales - Marine Nature Conservation Review (MNCR) and associated benthic marine data held and managed by CCW	13698
United Kingdom	UK National Biodiversity Network	Countryside Council for Wales - Pembrokeshire Marine Species Atlas	42674
United Kingdom	UK National Biodiversity Network	Countryside Council for Wales - Survey of North Wales and Pembrokeshire tide influenced communities.	6927
United Kingdom	UK National Biodiversity Network	Countryside Council for Wales - UK Biodiversity Action Plan: Invertebrate data for Ceredigion	882
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Bryophyte Survey of the Poole Basin Mires - NBN South West Pilot Project Case Studies	3313
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Dorset Hawkmoths - NBN South West Pilot Project Case Studies	4510
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Dorset Heath - NBN South West Pilot Project Case Studies	773
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Dorset Invasive Alien Plants - NBN South West Pilot Project Case Studies	942
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Dorset SW Pilot species dataset	5949
United Kingdom	UK National Biodiversity Network	Dorset Environmental Records Centre - Ross Coral Mapping Project - NBN South West Pilot Project Case Studies	32
United Kingdom	UK National Biodiversity Network	Dragonfly Recording Network - Dragonfly records from the British Dragonfly Society's Dragonfly Recording Network for the period up to 2005	352205
United Kingdom	UK National Biodiversity Network	English Nature - Batsites inventory for Britain	9966
United Kingdom	UK National Biodiversity Network	English Nature - Dormouse site inventory	887
United Kingdom	UK National Biodiversity Network	Environment and Heritage Service - EHS Species Datasets	255559
United Kingdom	UK National Biodiversity Network	Glasgow Museums BRC - The Changing Flora of Glasgow: Orchid Dataset	546
United Kingdom	UK National Biodiversity Network	Herts Bird Club - Hertfordshire Breeding Bird Atlas : 1967-1973	26152
United Kingdom	UK National Biodiversity Network	Herts Bird Club - Hertfordshire Breeding Bird Atlas : 1988-1992	28345
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Arachnid dataset	370
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Badger dataset	988
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Coleoptera dataset	4847
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Diptera dataset	1893
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Fish and Herptiles dataset	2475
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Fungi & Lichens dataset	772
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Hymenoptera dataset	9088
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Lepidoptera dataset	39018
United Kingdom	UK National Biodiversity Network	Highland Biological Recording Group - HBRG Mammals dataset.	25242
United Kingdom	UK National Biodiversity Network	Hoverfly Recording Scheme - Hoverfly Recording Scheme database for Great Britain	418053
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - England Otter Survey Database	2297

United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Marine benthic dataset (version 1) commissioned by UKOOA	181715
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Marine Nature Conservation Review (MNCR) and associated benthic marine data held and managed by JNCC	573334
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Otters: Northern Ireland Otter Survey Database	782
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Scarce Macro Moth Review Data (historical)	284321
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Scotland Otter Survey Database	8332
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Seabird 2000	21496
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Vegetation surveys of coastal shingle in Great Britain	30748
United Kingdom	UK National Biodiversity Network	Joint Nature Conservation Committee - Wales Otter Survey Database	1346
United Kingdom	UK National Biodiversity Network	Lothian Wildlife Information Centre - Lothian Wildlife Information Centre Secret Garden Survey	5399
United Kingdom	UK National Biodiversity Network	Marine Biological Association - Marine Life Information Network (MarLIN) marine survey data (Professional)	128522
United Kingdom	UK National Biodiversity Network	Marine Biological Association - Marine Life Survey Data (collected by volunteers) collated by MarLIN	20862
United Kingdom	UK National Biodiversity Network	Marine Conservation Society - Seasearch Marine Surveys	87811
United Kingdom	UK National Biodiversity Network	National Biodiversity Network Trust - Marine Turtles	849
United Kingdom	UK National Biodiversity Network	Natural England - Batsites inventory for Britain	12622
United Kingdom	UK National Biodiversity Network	Natural England - Dormouse site inventory	1038
United Kingdom	UK National Biodiversity Network	Natural England - Invertebrate Site Register - England.	213546
United Kingdom	UK National Biodiversity Network	Natural England - Marine Nature Conservation Review (MNCR) and associated benthic marine data held and managed by English Nature	13769
United Kingdom	UK National Biodiversity Network	Northumberland Wildlife Trust - Squirrel Records for 2002 - 2005	965
United Kingdom	UK National Biodiversity Network	Rosendale Ornithologists' Club - ROC RSPB Farmland Species Survey Dataset	993
United Kingdom	UK National Biodiversity Network	Royal Society for the Protection of Birds - The Dartford warbler in the United Kingdom in 1994	482
United Kingdom	UK National Biodiversity Network	Royal Society for the Protection of Birds - The status of the cirI bunting <i>Emberiza cirulus</i> in the UK and the Channel Islands in 1998	410
United Kingdom	UK National Biodiversity Network	RSPB - 1995 Broads ESA breeding wader survey	841
United Kingdom	UK National Biodiversity Network	RSPB - Nearshore winter seabird survey of South-west England 1994/95	1480
United Kingdom	UK National Biodiversity Network	RSPB - The status and distribution of nightjars <i>Caprimulgus europaeus</i> in Britain in 1992	1118
United Kingdom	UK National Biodiversity Network	RSPB - The status of breeding woodlarks <i>Lullula arborea</i> in Britain in 1997	1550
United Kingdom	UK National Biodiversity Network	RSPB - Yellowhammers in Northern Ireland	44
United Kingdom	UK National Biodiversity Network	Scottish Borders Biological Records Centre - SWT Scottish Borders Local Wildlife Site Survey data 1996-2000 - species information	13737
United Kingdom	UK National Biodiversity Network	Scottish Environment Protection Agency - River macroinvertebrate and diatom data (1990-2004) from sites classified in 2004	204885
United Kingdom	UK National Biodiversity Network	Scottish Natural Heritage - Marine Nature Conservation Review (MNCR) and associated benthic marine data held and managed by Scottish Natural Heritage	16531
United Kingdom	UK National Biodiversity Network	Scottish Natural Heritage - Reports of New Zealand Flatworms in Scotland, 1989 - 2005	1936
United Kingdom	UK National Biodiversity Network	Scottish Wildlife Trust - Ants: <i>Formica exsecta</i> Records from Abernethy RSPB	320
United Kingdom	UK National Biodiversity Network	Scottish Wildlife Trust - Small Cow-wheat distributions for Scotland 1999 to 2005	19
United Kingdom	UK National Biodiversity Network	Standing Waters Database	78433
United Kingdom	UK National Biodiversity Network	Suffolk Biological Records Centre - Suffolk Orthoptera Data	568
United Kingdom	UK National Biodiversity Network	Take a Pride in Fife Environmental Information Centre - Red and Grey Squirrel Records for Fife from TAPIF EIC	3387
United Kingdom	UK National Biodiversity Network	The Herpetological Conservation Trust - The HCT Rare Species Database	17787
United Kingdom	UK National Biodiversity Network	Wiltshire and Swindon Biological Records Centre - Amphibian Records for Wiltshire 1900 - 2003	2479
United Kingdom	UK National Biodiversity Network	Wiltshire and Swindon Biological Records Centre - Odonata Records for Wiltshire 1965 - 2002	3052
United Kingdom	UK National Biodiversity Network	Wiltshire and Swindon Biological Records Centre - Reptile Records for Wiltshire 1900 - 2003	1667
United Kingdom	UK National Biodiversity Network	Wiltshire and Swindon Biological Records Centre - Wiltshire BAP Priority Species Distribution Records	3600
United States of America	Academy of Natural Sciences	Academy of Natural Sciences Malacology Database	327094
United States of America	Academy of Natural Sciences	Academy of Natural Sciences OBIS Mollusc Database [Darwin Core]	179366
United States of America	Avian Knowledge Network	eBird	5511331
United States of America	Avian Knowledge Network	Great Backyard Bird Count	3081810
United States of America	Avian Knowledge Network	Macaulay Library - Audio Data	3372
United States of America	Avian Knowledge Network	Macaulay Library - Video Data	214
United States of America	Avian Knowledge Network	Project FeederWatch	10115977
United States of America	Avian Knowledge Network	Rocky Mountain Bird Observatory - Section Survey	196067
United States of America	Berkeley Natural History Museums	Essig Museum of Entomology DIGIR	18659
United States of America	Berkeley Natural History Museums	University and Jepson Herbaria DIGIR	338360
United States of America	Berkeley Natural History Museums	University of California Botanical Garden DIGIR	32762

United States of America	Berkeley Natural History Museums	University of California Museum of Paleontology DIGIR	250182
United States of America	Bernice Pauahi Bishop Museum	Bishop Museum Natural History Specimen Data	512449
United States of America	Botanical Research Institute of Texas	Andes to Amazon Biodiversity Program	11660
United States of America	Burke Museum	UW Fish specimens	116379
United States of America	Burke Museum	WTU Herbarium vascular plant collection	137182
United States of America	California Academy of Sciences	AntWeb Collection Catalog	64546
United States of America	California Academy of Sciences	CAS Bird Collection Catalog	92543
United States of America	California Academy of Sciences	CAS Herpetology Collection Catalog	281806
United States of America	California Academy of Sciences	Mammal Collection Catalog	26005
United States of America	Cornell University Museum of Vertebrates	Amphibians and Reptiles Collection	12208
United States of America	Fairchild Tropical Botanic Garden	Fairchild Tropical Botanic Garden Virtual Herbarium Darwin Core format	63268
United States of America	Florida Museum of Natural History	Herpetology specimens	147392
United States of America	Florida Museum of Natural History	Malacology specimens	411474
United States of America	Harvard University Herbaria	E. C. Smith Herbarium	15565
United States of America	Harvard University Herbaria	Harvard University Herbaria	169380
United States of America	Harvard University Herbaria	Vascular plants of south-central China	29001
United States of America	Illinois Natural History Survey	Herps specimens	115069
United States of America	Illinois Natural History Survey	Illinois Natural History Survey (Insect Collection)	268256
United States of America	Institute of Natural Resource Analysis and Management	New Mexico Biodiversity Collection	441
United States of America	James R. Slater Museum of Natural History	Terrestrial vertebrates	60046
United States of America	Louisiana State University Museum of Natural Science	Bird specimens	445954
United States of America	Marine Science Institute, UCSB	Paleobiology Database	621490
United States of America	Michigan State University Herbarium	MSU Lichen Collection	34194
United States of America	Michigan State University Museum	Vertebrate specimens	614570
United States of America	Missouri Botanical Garden	Missouri Botanical Garden	1933634
United States of America	Monty L. Bean Museum, Brigham Young University	Reptile and Amphibian Collection	34605
United States of America	Museum of Comparative Zoology, Harvard University	MCZ Fish Collection	158340
United States of America	Museum of Comparative Zoology, Harvard University	MCZ Herpetology Collection - Amphibian Database	136351
United States of America	Museum of Comparative Zoology, Harvard University	MCZ Herpetology Collection - Reptile Database	179553
United States of America	Museum of Comparative Zoology, Harvard University	MCZ Mammalogy Collection	58037
United States of America	Museum of Comparative Zoology, Harvard University	MCZ Ornithology Collection	193526
United States of America	Museum of Southwestern Biology, Division of Amphibians and Reptiles	Museum of Southwestern Biology, Division of Amphibians and Reptiles database	70637
United States of America	Museum of Texas Tech University (TTU)	Mammal specimens	644279
United States of America	Museum of Vertebrate Zoology	Terrestrial vertebrate specimens	658781
United States of America	NatureServe	NatureServe Network Species Occurrence Data	608439
United States of America	Ohio State University Insect Collection	Insects	89190
United States of America	Oregon State University	Vascular Plant Collection	144702
United States of America	San Diego Natural History Museum	Birds specimens	24802
United States of America	Santa Barbara Museum of Natural History	California Beetle Project	22765
United States of America	Santa Barbara Museum of Natural History	Santa Barbara Museum of Natural History	15507
United States of America	School of Life Sciences, Arizona State University	Arizona State University Vascular Plant Herbarium	103362
United States of America	School of Life Sciences, Arizona State University	The Deaver Herbarium, Northern Arizona University	54238
United States of America	School of Life Sciences, Arizona State University	University of Arizona Herbarium	87165
United States of America	Texas Natural Science Center	TNHC Ichthyology Collection	33017
United States of America	The New York Botanical Garden	American Bryophyte Catalog	88361
United States of America	The New York Botanical Garden	Macrofungi Type Specimens	2344
United States of America	The New York Botanical Garden	Ozark Lichens	15633
United States of America	The New York Botanical Garden	Species of Eastern Brazil Vascular Plant Specimens	10233

United States of America	The New York Botanical Garden	Vascular Plant Type Specimens	79742
United States of America	UCD	Bohart Museum of Entomology, UCD	15243
United States of America	UCD	California State University, Chico	64710
United States of America	UCD	Database Schema for UC Davis [Herbarium Labels]	24178
United States of America	UCD	Database Schema for UC Davis [Phaff]	6034
United States of America	UCD	Database Schema for UC Davis [TGRC]	4419
United States of America	UCD	Database Schema for UC Davis Wildlife museum	11436
United States of America	UCD	UC Davis Department of Anthropology Museum	299
United States of America	UCD	UCD Botanical Conservatory	5584
United States of America	Univ. of Kansas Biodiversity Research Center	Bird Collection	242854
United States of America	Univ. of Kansas Biodiversity Research Center	Fish Collection	169663
United States of America	Univ. of Kansas Biodiversity Research Center	Fish Tissue Collection	5995
United States of America	Univ. of Kansas Biodiversity Research Center	Herp Collection	337163
United States of America	Univ. of Kansas Biodiversity Research Center	Herp Collection (using MANIS DW2 Schema)	289489
United States of America	Univ. of Kansas Biodiversity Research Center	Insect Collection	470104
United States of America	Univ. of Kansas Biodiversity Research Center	Mammal Collection	245799
United States of America	Univ. of Kansas Biodiversity Research Center	Plant Collection	160822
United States of America	Univ. of Kansas Biodiversity Research Center	Univ of Kansas Biodiversity Research Center Invertebrate Zoology Collection	1063
United States of America	University of Alabama Biodiversity and Systematics	Herbarium (UNA)	30534
United States of America	University of Alaska Museum of the North	Kenelm W. Philip Lepidoptera Collection	13915
United States of America	University of Alaska Museum of the North	National Biolmonitoring Specimen Bank Bird Collection	321
United States of America	University of Alaska Museum of the North	University of Alaska Museum Mammal Collection	96760
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Amphibian and Reptile Collection	311
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Bryozoan Collection	523
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Crustacean Collection	346
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Entomology Collection	1454
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Fish Collection	3551
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Herbarium (ALA)	89009
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Mammal Observation Catalog	74
United States of America	University of Alaska Museum of the North	University of Alaska Museum of the North Mollusc Collection	7158
United States of America	University of Alaska Museum of the North	University of New Mexico Division of Genomic Resources Bird Collection	342
United States of America	University of Alaska Museum of the North	University of New Mexico Division of Genomic Resources Mammal Collection	395
United States of America	University of Alaska Museum of the North	University of New Mexico Museum of Southwestern Biology Bird Collection	24461
United States of America	University of Alaska Museum of the North	University of New Mexico Museum of Southwestern Biology Mammal Collection	102334
United States of America	University of Arkansas	Planetary Biodiversity Inventory Eumycetozoon Databank	98659
United States of America	University of Colorado Museum	Alexander Orthoptera Collection	19159
United States of America	University of Nebraska State Museum	UNSM Vertebrate Specimens	30651
United States of America	University of Tennessee - Chattanooga (UTC)	(UTC) University of Tennessee - Birds Collection	119
United States of America	University of Tennessee - Knoxville	Ferns	526
United States of America	University of Tennessee - Knoxville	Land Snails	244
United States of America	University of Tennessee - Knoxville	Plants	74465
United States of America	University of Tennessee - Knoxville	UTCP	4933
United States of America	University of Tennessee - Knoxville	Vascular Plants	61775
United States of America	University of Texas at El Paso	Herps Specimens	353876

United States of America	University of Texas at El Paso	Mammals Specimens	28045
United States of America	US National Plant Germplasm System	Barley Genetic Stocks Center	1385
United States of America	US National Plant Germplasm System	Clover collection	241
United States of America	US National Plant Germplasm System	Cotton Collection	2579
United States of America	US National Plant Germplasm System	Desert Legume Program	2535
United States of America	US National Plant Germplasm System	Maize Genetic Stock Center	1368
United States of America	US National Plant Germplasm System	National Arboretum	1906
United States of America	US National Plant Germplasm System	National Arctic Plant Genetic Resources Unit	391
United States of America	US National Plant Germplasm System	National Arid Land Plant Genetic Resources Unit	1235
United States of America	US National Plant Germplasm System	National Center for Genetic Resources Preservation	14869
United States of America	US National Plant Germplasm System	National Germplasm Resources Laboratory	40
United States of America	US National Plant Germplasm System	National Small Grains Collection	19666
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Brownwood	1056
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Corvallis	9423
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Davis	4352
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Geneva	3989
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Hilo	691
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Mayaguez	853
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Miami	3897
United States of America	US National Plant Germplasm System	Natl. Germplasm Repository - Riverside	1168
United States of America	US National Plant Germplasm System	North Central Regional PI Station	25937
United States of America	US National Plant Germplasm System	Northeast Regional PI Station	7722
United States of America	US National Plant Germplasm System	Ornamental Plant Germplasm Center	2297
United States of America	US National Plant Germplasm System	Pea Genetic Stock Collection	501
United States of America	US National Plant Germplasm System	Plant Germplasm Quarantine Office	3042
United States of America	US National Plant Germplasm System	Potato Germplasm Introduction Station	4845
United States of America	US National Plant Germplasm System	Rice Genetic Stock Center	30
United States of America	US National Plant Germplasm System	Southern Regional PI Station	35246
United States of America	US National Plant Germplasm System	Soybean Collection	1933
United States of America	US National Plant Germplasm System	Tobacco Collection	1731
United States of America	US National Plant Germplasm System	Tomato Genetic Stock Center	1971
United States of America	US National Plant Germplasm System	Western Regional PI Station	46712
United States of America	US National Plant Germplasm System	Wheat Genetic Stocks Center	334
United States of America	USDA PLANTS	USDA PLANTS Database	869311
United States of America	Utah State University	USU-UTC Specimen Database	78632
United States of America	Utah Valley State College (UVSC)	Utah Valley State College Herbarium	10613
United States of America	Western Foundation of Vertebrate Zoology	Avian specimens	97423
United States of America	Yale University Peabody Museum	Invertebrate Zoology DIGIR Service	68262
United States of America	Yale University Peabody Museum	Ornithology DIGIR Service	125018
United States of America	Yale University Peabody Museum	Peabody Mammal DIGIR Service	9753



United States of America	Yale University Peabody Museum	Yale Peabody Museum - Invertebrate Paleontology DiGIR service	295580
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	ATCC Bacteria Collection Catalog	3537
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	ATCC Fungi Collection Catalog	6627
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CBS Bacteria Database	479
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CBS Filamentous Fungi Database	8503
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CCUG Microorganisms databases(Bacteria)	1474
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CCUG Microorganisms databases(Fungi)	93
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CECT Spanish Type Culture Collection(Bacteria)	598
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	CECT Spanish Type Culture Collection(Fungi)	399
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	DSMZ - List of Bacteria	7352
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	DSMZ Bacteria	5337
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	DSMZ Fungi	1678
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	IFO Bacteria database	1645
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	IFO Filamentous Fungi	3110
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	Institute of Ecology and Genetics of Microorganisms	24
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	Japan Collection of Microorganisms(Bacteria)	2756
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	Japan Collection of Microorganisms(Basidio)	205
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	Japan Collection of Microorganisms(Fungi)	1516
World Federation for Culture Collections	WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)	National Collection of Yeast Cultures,Norwich,UK	576

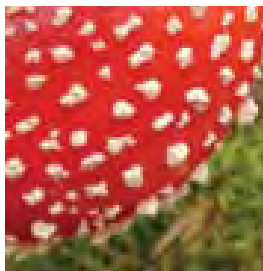


*Clavaria argillacea* Fr.



*Thyridia psidii* L.

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*Amanita muscaria* (L.) Lam.



*Tuber aestivum* Vittad.





GBIF Secretariat building (red) attached to the Zoological Museum building of the University of Copenhagen.  
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