

First GBIF Data Paper published

The first-ever peer-reviewed paper derived directly from a biodiversity metadata document has been published in the open-access ZooKeys journal.

The description of more than 2,400 bird records from northeast India, spanning almost a century, is the outcome of a new 'Data Paper' workflow pioneered by GBIF and [Pensoft publishers](#).

The aim is to provide incentives for those compiling data records about the occurrence of species to make their existence known to the scientific community, thus helping to increase knowledge about biodiversity and inform conservation measures.

Photo: J.M. Garg (Wikimedia Commons)



Oriental White Eye (*Zosterops palpebrosus*), one of the species documented in the new Data Paper.

A Data Paper is produced when metadata (data about data) are compiled using the [GBIF Integrated Publishing Toolkit \(IPT\)](#) generating a manuscript that then goes through the usual critical review process before being accepted for publication.

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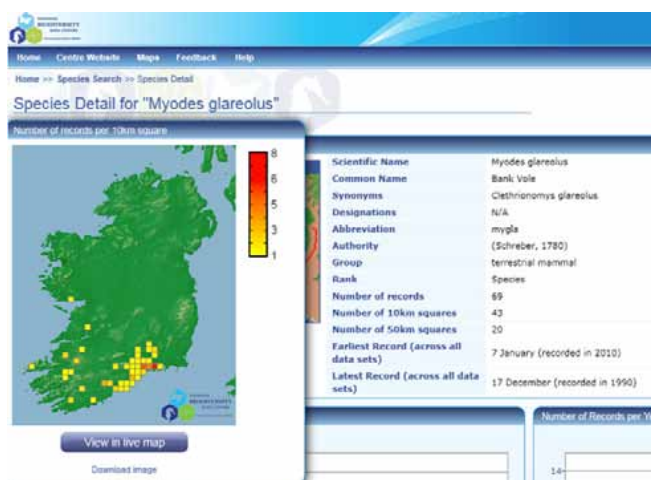
GBIF COMMUNITY

Second version of Ireland's Biodiversity Maps released

Ireland's GBIF Node, the National Biodiversity Data Centre, has released the second version of its online data portal [Biodiversity Maps](#).

The system, built on an ESRI geographic information system (GIS) platform and using Microsoft Silverlight software, now provides the biodiversity mapping needs for the terrestrial and marine environment of Ireland.

Eighty datasets, comprising two million observations of 12,000 species (one third of all known Irish species) are now mobilized, and feeding automatically into the GBIF data portal.



Screenshot of Ireland's new biodiversity map interface.

Three key features have been developed:

- A **terrestrial and marine mapping system**, integrating different geographic projections, so that all biodiversity data for the island of Ireland and its marine waters out to 1,000 kilometres can be mapped together.
- A system enabling registered users to **report on the biodiversity interest of a given area**, helping to inform decision-making. These user-defined reports can be generated for scales ranging from 50 square kilometres down to less than a hectare.
- **Habitat maps**, integrated to complement species observations. The National Parks and Wildlife Service, Ireland's statutory nature conservation body, has completed an extensive programme of national surveys of Ireland's protected habitats, and the first of these have been mobilized through the data portal.

For further details contact Liam Lysaght, Director, NBDC (llysaght@biodiversityireland.ie)

Project takes shape to digitize camera trap data

An Indo-Norwegian project to make available camera trap data from India could help conservation of tigers, leopards, elephants and snow leopards.

The species are being targeted in a partnership between India and Norway to demonstrate capacity building under the new [Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem services \(IPBES\)](#).

Priorities for the project, which GBIF is helping to facilitate, emerged at a meeting in New Delhi involving senior government representatives from the two countries.

The two-year pilot project will demonstrate how decision-makers can use data gathered from cameras equipped with motion sensors to photograph passing animals. It will focus on developing strategies for the conservation of tigers and elephants in the Rajaji National Park, leopards in Maharashtra and snow leopards in Sikkim. It will also help show the benefits of data sharing in India by developing user-friendly maps and GIS-data products adapted to various users including decision makers, researchers and civil society groups.

[Read more...](#)

DATA PUBLISHING NEWS

New biodiversity data publishing framework proposed

A comprehensive framework to encourage and facilitate the sharing of biodiversity data has been published in a peer-reviewed journal.

The [24 recommendations of the GBIF Data Publishing Framework Task Group](#) are included in a [special supplement of BMC Bioinformatics](#). These recommendations target social, cultural, technical, policy, legal, economic components to promote data sharing.

Separate papers in the BMC Biodiversity Informatics supplement cover: the '[data paper](#)' mechanism; indicators for a [Data Usage Index](#); an index for [biodiversity informatics potential of countries](#); and proposals for a [data hosting infrastructure](#).

[Read more...](#)



German research team targets 'at risk' data on biodiversity

A new German-based project is setting out to rescue biodiversity data at risk of being lost, because they are not integrated in institutional databases, are kept in outdated digital storage systems, or are not properly documented.

The project, run by the Botanic Garden and Botanical Museum Berlin-Dahlem, provides a good example for a GBIF recommendation to establish hosting centres for biodiversity data. This is one of a [set of data management recommendations](#) just published by GBIF.



Valuable biodiversity data are held on outdated 3.5" floppy disks.

The team behind the German project called [reBiND](#), or Biodiversity Needs Data, has started identifying threatened databases for archiving, and will make them accessible via the GBIF network.

[Read more...](#)

New publishers

Estonia - The Natural History Museum of the University of Tartu has published a large number of records from its databases on animal, plant and fungal specimens from Estonian collections. It is the first time non-fossil biodiversity data hosted in Estonia have been published since the country became a GBIF Participant. Until now, only paleontological collections have been available through the Data Portal. Some 90,000 records can now be accessed. They include more than 4,000 kinds of fungus, 1,200 plant and 1,100 animal taxa. The records come from specimen collections of the [museum](#) itself, [Estonian University of Life Sciences](#) and the [Tallinn Botanical Garden](#).
<http://data.gbif.org/datasets/resource/13670>
<http://data.gbif.org/datasets/resource/13671>
<http://data.gbif.org/datasets/resource/13672>

Sweden - Records from one of the world's oldest and most important insect collections, based at Lund University, are now accessible through the GBIF Data Portal. The Lund Museum of Zoology has published a dataset of around 140,000 specimens including over 72,000 insect taxa. The [collection](#) dates back to 1735, with its first donation coming from Kilian Stobaeus,

teacher of the father of modern taxonomy, Carl Linnaeus.

<http://data.gbif.org/datasets/resource/13718>

Belgium - Another major historic collection, from the [Royal Belgian Institute of Natural Sciences](#), has made its debut on the GBIF portal. More than 320,000 records covering 73,000 animal taxa with a wide geographic and taxonomic range are included in the [DaRWiN](#) (Data Research Warehouse Information Network) database. Constantly expanding, DaRWiN is just a glimpse of a vast collection with its origins in the 18th century, currently estimated to include some 37 million specimens of zoological, anthropological, paleontological, mineralogical and geological materials.

<http://data.gbif.org/datasets/resource/13690>

France - The [Muséum d'Histoire Naturelle de Bourges](#), has published 430 mammal records of 163 taxa.

<http://data.gbif.org/datasets/resource/13710>

Switzerland - The [Musée Cantonal de Zoologie](#) in Lausanne has published 103 records from its insect and mollusc collections dating back to the mid-19th century. <http://data.gbif.org/datasets/resource/13712>

Australia - The [Western Australian Herbarium](#) has published nearly three quarters of a million plant records, in a dataset presenting an inventory of the flora of Western Australia. It contains taxonomic, geographical and ecological information based on the herbarium's specimen collections.

<http://data.gbif.org/datasets/resource/13675>

Canada - The Université de Montréal Biodiversity Centre has published more than 135,000 records of plant specimens held in the [Marie-Victorin Herbarium](#). The dataset covers the digitized portion of the fourth largest Canadian herbarium, which includes more than 620,000 vascular plants and 50,000 bryophytes (mosses and worts), around half originating from Canada.

<http://data.gbif.org/datasets/resource/13734>

A Canadian-based citizen science service, [Wildlife Sightings](#) has begun publishing data to the GBIF network. It was inspired by the [Thousand Eyes Project](#), recalling the pioneering work of a school superintendent in Nova Scotia who encouraged schoolchildren to compile nature observations, recorded by nib pens and entered in ledgers. Wildlife Sightings updates the process using GPS devices and digital photos to help validate the observations.

<http://data.gbif.org/datasets/resource/13709>

United States - The [New York State Museum](#) in Albany, NY, has published more than 14,000 records of the museum's mammal specimens. These include skins, skeletons, fluid preservations and frozen tissue from 250 mammal species, mostly from the state of New York.

<http://data.gbif.org/datasets/resource/13666>

The [Cincinnati Museum Center](#) has published nearly 10,000 records of reptiles, amphibians and birds from its herpetological and ornithological collections. The herpetological data are from vouchered specimens held in the museum, while the bird records include frozen tissues, blood samples and isolated DNA.
<http://data.gbif.org/datasets/resource/13711>
<http://data.gbif.org/datasets/resource/13990>

The [Fish division of Ohio State University's Museum of Biological Diversity](#) has published nearly 90,000 records of almost 900 fish taxa, concentrated on species found in Ohio's lakes, rivers and streams but extending across the eastern United States.
<http://data.gbif.org/datasets/resource/13717>

INFORMATICS

New BioCAsE version speeds large dataset harvesting

A new version of the BioCAsE Provider Software will enable very large datasets to be harvested more quickly by networks such as GBIF. Version 3 of the software, released in December, allows all information published by a BioCAsE provider to be stored in a single XML file. If required, these files can be transformed in a subsequent step into Darwin Core Archive, the preferred format for serving data to GBIF.

This feature will be especially useful for datasets containing millions of records, as it will enable more efficient harvesting and reduce the time needed for GBIF and other networks to index new or updated data from publishers using BioCAsE.

The Biological Collection Access Service (BioCAsE) is a suite of standards and software tools for sharing rich information from natural history collections and observation databases. They are grouped around the comprehensive Access to Biological Collections Data (ABCD) schema and the BioCAsE Provider Software for publishing biodiversity knowledge.

More information on BioCAsE and the new BioCAsE Provider Software is available at <http://www.biocase.org> and <http://wiki.bgbm.org/bps>.

GBIF SECRETARIAT NEWS

At the end of December, GBIF bade farewell to Nick King its Executive Secretary. As reported in the last GBits, he is [replaced by Donald Hobern](#), until now director of the Atlas of Living Australia.

In his farewell message to GBIF participant countries and organizations, Nick says, "The past four and a half years as Executive Secretary have been very exciting, as well as somewhat frustrating. GBIF is now in great shape, and delivering an excellent return



on investment for the very small core budget it operates on. The main challenge going forward is for the Participants, the founders and owners of GBIF, to take greater ownership, direct GBIF to meet their needs and derive the greatest benefit and optimal return from their establishment of, and participation in GBIF.

"I wish you and GBIF all success in the future and thank you for all the inputs and contributions over the past few years."

TRAINING AND COLLABORATION

Call for applications for regional training support

The GBIF Secretariat calls for applications from Participants seeking support to organize regional training activities in 2012.

[GBIF Participants](#) are invited to apply for financial support of up to 5000 EUR per event, to be used exclusively to enable regional participation in their events, by representatives of GBIF Participants from the region. These may be either trainers or trainees.

For further details, please download the full [call for applications](#).

GBIF Spain's training programmes in 2012

GBIF Spain is organizing 11 training events in 2012, which may be of interest to the wider GBIF community. Training programmes include those on persistent identifiers, data quality in biodiversity databases, GIS, sensitive data management, data recording for technicians working with natural history collections and sharing digital images from collections.

A full list of events is at http://www.gbif.es/Plan_formacion_in.php.

Call for 2012 GBIF Mentoring Programme

GBIF invites nodes to submit proposals for the 2012 Mentoring Programme. The deadline for submission is 30 March 2012, and nodes are encouraged to contact each other directly to explore possibilities of joint mentoring activities.

All information about the mentoring programme and the application guidelines are available at <http://www.gbif.org/participation/participant-nodes/mentoring/call-for-mentoring-proposals/>



AWARD NOMINATIONS

Call for nominations for the 2012 Ebbe Nielsen Prize

GBIF invites nominations for the 2012 Ebbe Nielsen Prize, awarded annually to a person or team who demonstrates excellence in combining biodiversity informatics and biosystematics research.

The **€30,000 award** is intended to allow the recipient(s) to engage in biosystematics/biodiversity informatics research outside his/her/their country of residence for a period of three to six months.

Nominations are due by 15 March 2012. Individuals or institutions who wish to be nominated should contact the Head of Delegation of the relevant GBIF Participant country.

For further details, please download the [full call for nominations](#) (pdf file, 38 KB)

Call for proposals for the 2012 Young Researchers Award

GBIF invites proposals from graduate students for the 2012 Young Researchers Award. This prize intends to foster innovative research and discovery in biodiversity informatics.

Two awards of €4,000 will be available to graduate students in a master's or doctoral programme at a university in a GBIF Voting Participant or Associate Participant country.

Submitted proposals will be reviewed by the Head of Delegation of a GBIF Voting or Associate Participant country.

The deadline to receive nominations from the Heads of Delegation is **15 March 2012**.

For further details, please download the [full call for proposals](#) (pdf file, 84 KB).

UPCOMING EVENTS

13th annual meeting of the Society of Biological Systematics, Germany

Bonn, Germany, 23-25 February 2012

Three GBIF-related projects will be presented at the meeting of the Gesellschaft für Biologische Systematik (GfBS). The three projects are the [Diversity Workbench](#), which is a database system to store different types of bio- and geodiversity data; the DNA Bank Network, a non-commercial scientific service based on the GBIF infrastructure and the [Biological Collection Access Service](#) to provide access to information associated with organisms' DNA samples; and the Senckenbergische SAMmlungsmanagement-System (SeSAM), a collection management system which documents the relationship between objects and theories.

Workshop on genomic data standards

Oxford e-Research Centre, UK, 27-29 February 2012

GBIF is organizing a workshop, in collaboration with the [Genomic Standards Consortium](#) (GSC), on species-level biodiversity and genomic data standards with the aim of ensuring alignment and harmonization of efforts. The workshop will contribute to the ongoing work of the [USA National Science Foundation-funded Research Coordination Network](#), which seeks to promote the integration of genomic standards with ecological and species level standards.

The GSC is an international community that promotes mechanisms for standardizing descriptions of genomes and especially the contextual information (e.g. environmental variables) associated with genomic samples.

For further information, contact Dr Éamonn Ó Tuama, GBIF Secretariat (eotuama@gbif.org).

VISION OF GBIF: A world in which biodiversity information is freely and universally available for science, society, and a sustainable future.

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