GLOBAL BIODIVERSITY INFORMATION FACILITY

free and open access to biodiversity data

GBits

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New features introduced in GBIF Portal

Occurrence records accessible through GBIF now present richer information following the release of a new version of the GBIF portal.

Users of the portal can access many more fields of information in the detailed occurrence record pages. This has been made possible thanks to the new distributed technologies recently adopted by GBIF, allowing use of multiple servers.

Previous versions of the portal displayed only about 30 of the 150 terms from the Darwin Core standard, whereas visitors to the portal can now access other details made available by the publisher. These include information such as sampling methodology, collectors' names and field notes.

As an example, an occurrence record of a Plum fruited yew published by the Royal Botanic Garden in Edinburgh, provides in-depth notes of the habitat in which the plant was collected in Chile. Another page related to a record of a lichen specimen from a Kansas herbarium includes the recorders' names and information about the soil conditions and other information on the location where the specimen was collected.

Downloads of these newly 'widened' occurrences contain all published information on each of the records.

A much-requested feature over the past year has been the ability to search occurrences by type status. Types refer to physical specimens kept in a museum or herbarium to which the name of that organism is formally attached. This information is therefore of critical importance to taxonomic researchers. The filter is now available on the occurrence search page, and allows queries such as the records designated as a Holotype.

The release is the first of a two-stage process to improve information available via the GBIF portal. The next release of the portal in the coming weeks will enable users to view images, and access audio and video files associated with occurrence records.

DATA PUBLISHING

Real-time data publication from taxonomic research

Researchers and the public can now have immediate access to data underlying discovery of new species of life on Earth, under a new streamlined system linking taxonomic research with open data publication through GBIF and other networks.

The partnership involving Pensoft Publishers paves the way for unlocking and preserving a wealth of 'small data' backing up research conclusions, which often become lost within a few years of an article's publication in an academic journal.

In the first example of the new collaboration in action, the Biodiversity Data Journal carried a peer-reviewed description of a new species of spider - *Crassignatha danaugirangensis* - discovered during a field course in Borneo just one month earlier and described via satellite from the field. As soon as the journal published the paper, data showing the location of the spider's occurrence in nature were automatically harvested by GBIF, and richer data such as images and the species description were exported to the Encyclopedia of Life (EOL).

Read full story...

First data paper from Portugal published

Researchers from Portugal have published the country's first data paper based on a biological collection shared via GBIF. The article in Zookeys by Miguel Monteiro and colleagues describes a collection of birds of Angola at the Instituto de Investigação Científica Tropical in Lisbon, host of the national GBIF node. The institute houses 1560 bird specimens of 161 species and 361 subspecies, including threatened species such as the wattled crane (*Grus carunculata*) and the Gabela bush-shrike (*Laniarius amboimensis*).

A data paper is a searchable metadata document, describing a particular dataset or a group of datasets, published in the form of a peer-reviewed article in a scholarly journal.

NEW DATA

Benin

GBIF Benin has published over 10,000 records from a census of the country's plants. The dataset includes species that are of cultural and economic importance, such as the Wild syringa (*Burkea Africana*), *Anogeissus leiocarpa*, one of the plants used to make traditional Malian mudcloth, and *Pterocarpus erinaceus*, used for medicinal purposes.

GBIF Benin also published 1000 records from tree inventories in the Bonou and Itchèdè and Pobè forests in the south east of the country. Both inventories were carried out to gather information for the sustainable management of the forests.

Chinese Taipei

Over 100,000 records of plant specimens from the island of Taiwan have been published via the GBIF portal. The dataset, with records dating back to 1895, includes endemic species such as *Gentiana scabrida* Hayata, *Cycas taitungensis*, *Begonia chitoensis* and *Gastrochilus fuscopunctatus*. Data are from the collections of the herbarium at the National Taiwan University, which holds representative specimens of about 95 per cent of species of vascular plants in Taiwan. Most of the collection of 260,000 specimens has been digitized.

Gentiana scabrida Hayata. By Chun-Kuei Liao. CC-BY-NC.

Czech Republic

The National Museum in Prague has become the first institution in the Czech Republic to publish datasets through GBIF. The 56,300 records relate to the museum's botanical, entomological, mycological, zoological and paleontological collections. The Czech Republic is not yet a national Participant in GBIF, and the museum was endorsed as a data publisher by the Consortium for European Taxonomic Facilities. The collections have been mobilized through the Biological Collection Access Service for Europe.

The Netherlands

The City of Amsterdam has published 8,900 records from an urban fish monitoring project in the city's harbor area. The survey of fish biodiversity was carried out by commercial eel fisherman Piet Ruijter, who has been fishing in the city's waters since he was 15. For the survey, Ruijter used fyke nets – bag-shaped nets held open by hoops, typically used to catch eels.

Spain

The [Botanical Garden of Barcelona](#), has published nearly [3,000 records from its seedbank](#), built to act as a reference centre for the conservation of Mediterranean flora. Most of the data come from Southern Europe, North Africa and the Middle East, with some additional records from Australia, Chile, the United States and South Africa.

Also from Barcelona is a dataset published by the [Natural History museum](#) with [observation records of terrestrial molluscs](#) from the Natural Park of the Serralada Litoral, a range of mountains running parallel to the Mediterranean Sea in Catalonia. Data were gathered during an assessment in the area to develop a conservation plan.

The [herbarium at the University of León](#) in northwestern Spain has published [9,000 records of lichens](#), collected by researchers in the northern part of the Iberian peninsula.

France

The [Institut National de la Recherche Agronomique](#) (INRA), has published two datasets related to agricultural research.

INRA holds a major collection of the *Medicago* genus, a legume native to the Mediterranean region. One of the datasets consists primarily of [specimen records for Medicago truncatula or barrel clover](#) , a species used in genomic research, as well as for two other species - *Medicago littoralis* and *Medicago tornata*.

The second dataset relates to [young potato plants](#) (*Solanum tuberosum*) that are maintained in test tubes by INRA or as field-produced tubers, and are available as genetic resource material. These living specimens come from old cultivars of potato that were grown in France in the past, and were collected by scientists at INRA and breeders from French seed companies.

Among other data published from France are a number of historically-important records, including two datasets from the [Henri-Lecoq museum](#) in Clermont Ferrand, central France. One includes [specimens of the rose family](#) (Rosaceae) collected between 1790 and 1913. The other dataset consists of [records of freshwater molluscs](#), collected in the mid-19th century. The [Zoological Museum of Strasbourg](#) has also published [data records of sponges](#) collected in the 19th century.

Germany

The [Leibniz Institute DSMZ](#) has published [6,900 records of myxobacteria](#), a group of organisms which live in the soil and feed on insoluble organic substances. The institute's collection comprises about 7,000 strains of the bacteria.

Colombia

The [International Center for Tropical Agriculture](#) has published [1,500 records of herbivorous mites](#), documented by the organization between 1975 and 2012.

Some species of the *Mononychellus* genus are pests which affect cassava, a staple food crop in many parts of the tropics. The dataset comprises observational and specimen-based occurrence data and most of the records are from the genus' native range in South America, with other records from six countries in Central America, four in Africa and two in Asia.

The Alexander von Humboldt Institute has published [2,700 records of the flora and fauna of the páramo](#), a type of alpine tundra ecosystem unique to the South and Central America. The data were gathered in the municipality of Sotará in southwestern Colombia, as part of a project to map biodiverse areas that are not protected.

United States

The [Museum of Biological Diversity at the Ohio State University](#) has published [42,700 observation records from sound recordings](#) of birds, animals and insects gathered by the [Borror Laboratory of Bioacoustics](#). The lab holds one of the largest animal sound archives in the world.

Canada

The University of Alberta Vascular Plant Herbarium has published [69,000 records](#), relating to over half the specimens held in the herbarium. The published data are from around the world with an emphasis on Alberta and the western Arctic.

Pensoft Publishers

[Data records from an analysis of 17 species](#) of the *Megophthalmidia* genus of flies in North America, including eight new species, are now available via GBIF. The species are described in a [paper published](#) in the peer-reviewed open access journal ZooKeys.

The *Megophthalmidia* genus belongs to the Mycetophilidae family, made up of mainly fungus gnats, so named because their larvae feed on plant roots and fungi and aid in their decomposition.

AROUND THE NETWORK
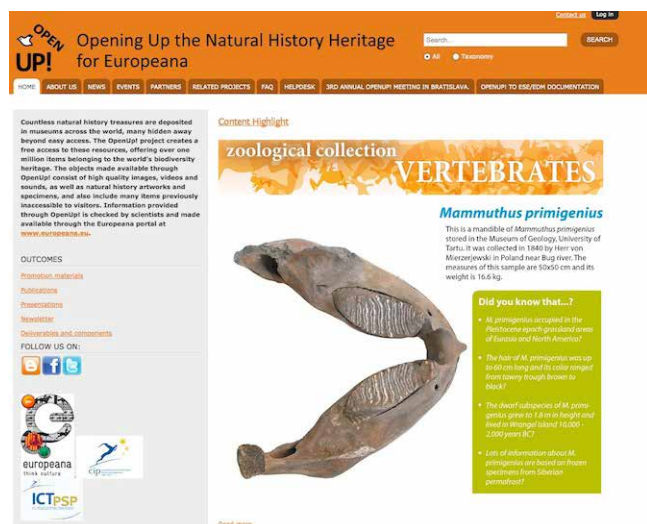
TraitBank launched

The Encyclopedia of Life (EOL) has launched a new service called TraitBank, a searchable repository for traits, measurements, interactions and other attributes associated with the species included within

EOL's database. The site features over three million records relating to more than 250 attributes recorded for 272,000 taxa.

Read more...

OpenUp! mobilizes 1.6 million multimedia objects

The EU-project OpenUp! has mobilized and made available over 1.6 million multimedia objects relating to natural history in the three years since its inception. The objects are accessible through the European digital library Europeana, based on BioCASe and GBIF tools. The data mobilized puts the project among the top ten content providers to Europeana.

A special feature is the common names service, which adds vernacular names in more than 27 languages to the scientific objects. This metadata enrichment service greatly improves the semantic linking of natural history content with other domains and facilitates easy access to the collections.

OpenUp! held its third and final annual meeting in Bratislava on 20-21 February this year, with a symposium entitled Collections in the virtual world, and a workshop on intellectual property right issues based on the OpenUp! document IPR problems and solutions for the domain of natural history objects.

OpenUp! is a three-year project running from 2011 to 2014, and is an initiative of members of the Consortium of European Taxonomic Facilities (CETAF) and several European GBIF nodes. The consortium believes it will continue to provide multimedia content to Europeana.

White paper on genome data portal published

A white paper on the Global Genome Biodiversity Network (GGBN) has been published.

GBIF is a partner of the GGBN, which was formed in 2011 with the principal aim of making high-quality well-documented and vouchered collections that store DNA or tissue samples of biodiversity, discoverable for research through a networked community of biodiversity repositories. This is achieved through the GGBN Data Portal, which links globally distributed databases and bridges the gap between biodiversity repositories (natural history collections, tissue banks, DNA banks and culture collections), sequence databases and research results. All underlying specimen data are also published via GBIF.

Workshop on the new GBIF portal held in Spain

GBIF Spain presented the functionalities of the new GBIF portal in a workshop organized on 5 March 2014. The features highlighted included greater visibility for countries and institutions sharing data, improved search and mapping, showing information about database activity and statistics, unlimited downloads, real time indexing and building searches using web services. Special emphasis was placed on the possibilities provided by the APIs.

Sixteen people attended the event and about a hundred more followed it via live streaming. Remote participants could submit questions in real time via Twitter.
Videos from the event are available through GBIF Spain's website.

OPPORTUNITIES

New appointments to enhance GBIF data content and use

The GBIF Secretariat invites applications for two staff positions focussed on enhancing the biodiversity data available through the network, and supporting the use of data in research and policy. The vacancies are for a Programme Office for Content Mobilisation, and for a Programme Officer for Content Analysis and Use.

The deadline for applications is 22 April.

More details...

Nominations invited for 2014 GBIF science awards

GBIF invites nominations for the 2014 Ebbe Nielsen Prize and Young Researchers Awards.

The Ebbe Nielsen Prize has been 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 3-6 months.

The Young Researchers Awards intend 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.

Nominations for the 2014 Ebbe Nielsen Prize and the 2014 Young Researchers Awards are due on 31 May 2014.

More details…

EVENTS

Meetings and conferences

Open Repositories Conference
9-13 June 2014, Helsinki, Finland
More information…

Atlas of Living Australia Science Symposium
11-12 June 2014, Canberra, Australia
More information…

Training courses

Introduction to individual based models in ecology using NetLogo by Transmitting Science
26-30 May 2014, Els Hostalets de Pierola, Spain
More information…

I3B Workshop: Foundations, evaluation and future of the species distribution models
2-6 June 2014, Tepoztlán, Mexico
More information…