

Brazil joins GBIF

Brazil has become the latest country to join GBIF, opening up a new phase of scientific collaboration with one of the world's most biodiverse countries.

The decision has been warmly welcomed by scientists, officials and politicians within Brazil, and across the global biodiversity informatics community.

Some reactions to Brazil's decision to join GBIF:

"This really is a fantastic thing, it is an enormous advance, (helping Brazil) to know how to use all its biodiversity in an intelligent way to promote a new type of development." Senator Rodrigo Rollemberg, Chair, Senate Environment Commission, speech on the floor of the Brazilian Senate, 9 November.

"All Participants in GBIF will share the excitement. Many countries see Brazil's participation in GBIF as vital to global efforts in biodiversity conservation and management." Joanne Daly, Chair, GBIF Governing Board.

"The official association of the country with GBIF is a sign of the importance of knowledge for the management of our immense natural resources." Carlos Nobre, national secretary for policies and programmes, Brazilian ministry of science, technology and innovation (MCTI).



Mercedes Bustamante, from Brazil's ministry of science, technology and innovation, acting Head of Delegation, joins staff at GBIF's Secretariat in Copenhagen to toast the country's official entry into the network.

GBIF AT CBD COP 11 2

GBIF promotes shared data culture at CBD conference

GBIF PUBLICATIONS 2

New guide for compiling national species checklists

Peer review option proposed for biodiversity data

INFORMATICS 3

IPT v2.0.4 released

GBIF data portal now in Japanese and Polish

SCIENCE AND POLICY 3

Record number of new papers highlighted in GBits Science Supplement

Symposium showcases use of GBIF-mediated data

NEW DATA 4

Argentina

Ireland

Colombia

Germany

United States

The Netherlands/Croatia

Belgium

France/Guadeloupe

Japan

AROUND THE NETWORK 5

Norway hailed as prolific data publisher

GBIF Belgium develops new regional biodiversity data portal

TRAINING 6

Taking biological collections to the next level

UPCOMING EVENTS 6

The formal step of becoming a GBIF Associate Participant was the signature of the GBIF Memorandum of Understanding by the Brazilian Minister for Science, Technology and Innovation, Marco Antônio Raupp, on 24 October.

Brazil is currently setting up an Information System for Brazilian Biodiversity and Ecosystems (SIB-Br), in partnership with the Global Environment Facility (GEF), involving an investment of US\$28 million. The new GBIF national node for Brazil will establish an interface enabling data mobilized through this system to be accessed globally via the GBIF network.

[Read more...](#)

GBIF AT CBD COP 11

GBIF promotes shared data culture at CBD conference

GBIF used the [11th Conference of Parties to the Convention on Biological Diversity \(COP 11\)](#), organized in Hyderabad, India, in October, to support a number of initiatives to enhance the quantity and quality of data available to monitor the state of biodiversity and ecosystems.

With a number of other partners, the GBIF Secretariat signed a Memorandum of Collaboration with the CBD to set up a Global Invasive Alien Species Information Partnership (GIASIP), aimed at improving the information available to governments to help tackle this major driver of biodiversity loss.



Bráulio Dias, Executive Secretary, CBD and Donald Hobern, Executive Secretary, GBIF, signing the memorandum on invasive species information.

A decision of the COP relating to invasive alien species “welcomes the work of the Global Biodiversity Information Facility (GBIF) to improve the interoperability of online databases and networks and facilitate the use of information necessary to conduct risk and/or impact assessments and encourages Parties, Governments and relevant institutions and organizations to participate in developing interoperable information systems that can be used in developing early-detection and rapid-response systems.”

Also during COP 11:

- The GBIF Secretariat hosted a side event to report progress on the Global Biodiversity Informatics Outlook, a framework for harnessing data capture, data access and modelling to build better understanding of biodiversity, helping countries to meet targets to halt its loss.
- Another side event presented initiatives involving GBIF partners to encourage online publication of biodiversity data from new sources, including data from camera traps set by wildlife managers in India, data collected by local governments and from environmental impact assessments.
- GBIF Executive Secretary Donald Hobern presented on the mobilization of botanical data in support of the Global Strategy for Plant Conservation (GSPC) and its national implementation.

[Full story and presentations...](#)

GBIF PUBLICATIONS

New guide for compiling national species checklists

GBIF has published a new guide on policies and procedures to capture information for national species checklists.

The *Best practice guide for compiling, maintaining and disseminating national species checklists* is a tool to help improve the capacity of a country to document, and thus better manage, its biodiversity. Freely available through GBIF's Online Resource Centre, it draws on the particular experiences of South Africa's checklist development to offer insights and detailed advice relevant to other countries.

[Download guide...](#)

Peer review option proposed for biodiversity data

Data publishers should have the option of submitting their biodiversity datasets for peer review, according to a discussion paper commissioned by GBIF.



The proposal is among a set of recommendations made by Mark Costello and co-authors in the paper *Quality assurance and Intellectual Property Rights in advancing biodiversity data publication*.

The paper argues that concerns over data quality impede the use of large biodiversity databases by researchers, and subsequent benefits to society. Peer review is proposed as the highest standard of a scale of quality assurance that could be attached to datasets published through online networks such as GBIF.

[Download discussion paper...](#)

INFORMATICS

IPT v2.0.4 released

In October, the GBIF Secretariat released version 2.0.4 of the Integrated Publishing Toolkit (IPT). It addresses more than 100 issues, bugs and enhancements in the software offering institutions a simple tool for publishing biodiversity data.

Special thanks are due to volunteer translators at GBIF nodes in Belgium, Chinese Taipei and Colombia, for their time and efforts to enable this update.

[Read about what has changed on the GBIF developer blog...](#)

GBIF data portal now in Japanese and Polish

The [GBIF data portal](#) now has interfaces in Japanese and Polish, thanks to the efforts of Sugawara Hideaki and Piotr Tykarski, from participant countries Japan and Poland.

To change your language settings, please visit <http://data.gbif.org/settings.htm>

SCIENCE AND POLICY

Record number of new papers highlighted in GBits Science Supplement

More than sixty new peer-reviewed research articles citing use of GBIF-mediated data are highlighted in the latest issue of the GBits Science Supplement, covering October and November 2012. The papers include a major assessment of threats to South America's plant species diversity and priority locations for protected areas; a prediction of shifts in areas suitable for date palm cultivation; and discussion of tools for modelling the spread of human diseases carried by insects.

[Access the science supplement ...](#)

Symposium showcases use of GBIF-mediated data

The 2012 GBIF Science Symposium, held in September, showcased the benefits of open-access data on the occurrence of species to scientific research and decision-making.

Eight researchers presented their work, beginning with the 2012 winner of the GBIF Ebbe Nielsen Prize, [Nathan Swenson of Michigan State University](#), who received his €30,000 prize shortly before the symposium.



Nathan Swenson, winner of the 2012 Ebbe Nielsen Prize.

A major focus of the presentations was the use of GBIF-mediated data to predict the impacts of climate change on species and ecosystems. Several speakers also highlighted research based on data about biodiversity from the Arctic, projected to be especially vulnerable to the changing climate.

The research outlined at the symposium included:

- Using large datasets to help map the functions evolved by plants and refine climate impact models
- Modelling the impacts of climate change on future range shifts of more than 50,000 species
- Developing a tool to help plan sensitive siting of industrial developments
- Using data on prey and competitor species to help predict future distribution of threatened Arctic Foxes in Scandinavia
- Assessing genetic diversity of northern plants under a changing climate
- Analysing the diversity of species dependent on dead wood
- Monitoring changes in the fruiting periods of fungi due to climate change
- Projecting the impact of climate and other pressures on Arctic seabird populations

Presentations and audio interviews with each of the presenters are available [online](#).

The science symposium was organized alongside the 19th meeting of the GBIF governing board (GB19) in Lillehammer, Norway. The 80 participants in GB19 represented 28 countries and five international organizations. Appointments to GBIF standing committees included the election of Stephen Wilkinson (United Kingdom node manager) as Chair of the Nodes Committee. Wilkinson heads the Access to Information programme at the [Joint Nature Conservation Committee](#), and has been heavily involved in the establishment of a National Biodiversity Network (NBN) to mobilize biodiversity data available across the United Kingdom. The new vice chairs of the Nodes Committee are Alex Asase, manager of the GBIF node in Ghana, and Manuel Vargas, node manager in Costa Rica.

NEW DATA

Argentina

The [Argentinian Ministry of Science, Technology and Innovation](#), a new publisher, has published 4,200 records of grassland plovers from periodic counts between 2006 and 2010. (<http://data.gbif.org/datasets/provider/463>)

Also in Argentina, the [Centro Nacional Patagonico – CONICET](#) published 365 records of amphibians in the country (<http://data.gbif.org/datasets/resource/14429>) and the faculty of science at the [National University of La Plata](#) published 1700 records of grasshoppers, locusts and weevils. (<http://data.gbif.org/datasets/provider/47>)

Colombia

The [Alexander von Humboldt Institute](#), which hosts the GBIF node in Colombia, has published 144,000 records from its holdings of mammals, birds, fish, amphibians, beetles and bugs. Data from the collection of the Federico Medem herbarium in Bogotá are also included in the published records. (<http://data.gbif.org/datasets/provider/262>)

Germany

The [German Federal Agency for Nature Conservation \(Bundesamt für Naturschutz\)](#) has published 3.9 million records of vascular plants from [Floraweb](#), an online database of vegetation in Germany. (<http://data.gbif.org/datasets/resource/14519>)

Ireland

More than 5,000 records collected by volunteers in Ireland's 2012 Bioblitz are now accessible through the GBIF data portal. The [annual event](#) invites members of the public to gather in selected locations to identify the maximum number of living species over a 24 hour period.



Volunteers at the 2012 Bioblitz

The [National Biodiversity Data Centre](#), which hosts the GBIF node, announced that this year's Bioblitz winner was Crawfordspurn Country Park, where volunteers recorded no fewer than 980 species. Records from the whole event can be accessed at <http://data.gbif.org/datasets/resource/14458>.

The NBDC has also published around 16,000 records from the Atlas of Irish mammals survey, which was launched in April 2010 and will run until 2015. Various conservation bodies and mammal scientists in the country are working together to document the distribution of the 64 species of mammals that are known to occur in Ireland. This includes 37 species of land mammals, including 10 bat species, and 27 marine mammals. (<http://data.gbif.org/datasets/resource/14459>)

The Centre has been awarded a new five-year contract by the Heritage Council of Ireland, an independent statutory advisory council to the government. "This is a positive signal to the value placed on the work of the Centre and the importance attached to the mobilization of biodiversity data for the conservation of biological diversity in Ireland," said Liam Lysaght, GBIF node manager.

NBDC won the national 'Best Business Case and Return on Investment' award at the Irish Organization for Geographic Information (IRLOGI) annual conference in October 2012.

[Read more...](#)



United States

A laboratory run by the US Department of Agriculture (USDA) has published nearly 30,000 records used in a [study tracking patterns of widespread decline in North American bumblebees](#). The [USDA bee biology and systematics lab](#) is located at the Utah State University, and researches solutions to problems in managing pollination for agriculture through study of hundreds of species of bees. (<http://data.gbif.org/datasets/resource/14547>)

The [University of Wyoming Museum of Vertebrates](#) has published its collection of North American mammals, with 3700 records. (<http://data.gbif.org/datasets/resource/14435>).

The Netherlands/Croatia

The [Dutch Mammal Society](#), a new publisher, has shared 2,300 records of mouse observations from trapping studies carried out in recent years. (<http://data.gbif.org/datasets/resource/14478>)

The field study group of the Dutch Mammal Society has published 424 records of mammals surveyed in the Biokovo Nature Park, Croatia, in July-August 2011. Biokovo is the second-highest mountain range in Croatia and is located along the Dalmatian coast. (<http://data.gbif.org/datasets/resource/14501>)

Another new publisher, the [Natural History Museum – Rotterdam](#), has made available 31,200 records from its collection of the International Fossil Shell Museum. Molluscs in this collection are fossils from 2 to 58 million years ago. (<http://data.gbif.org/datasets/resource/14503>)

Belgium

The [Research Institute for Nature and Forest \(INBO\)](#) has published 3,700 records from efforts to evaluate fish reintroduction programmes for chub, dace, burbot and brown trout in nine water courses. (<http://data.gbif.org/datasets/resource/14486>). The institute has also made available 16,500 records relating to fish passages in Flanders. These passages were created to enable migration in streams and rivers where structures such as mills and locks make fish movement difficult. (<http://data.gbif.org/datasets/resource/14492>)

The [Royal Museum of Central Africa](#) in Tervuren, Belgium, has published over 10,000 wood records from its xylarium. The collection includes 56,000 specimens of 13,600 species from around the world, and is the largest collection of its kind in Europe. (<http://data.gbif.org/datasets/resource/14521>)

France/Guadeloupe

The research institute [INRA Antilles-Guyane](#), located in Guadeloupe, has published 430 records of three of the most cultivated species of yam, as well as wild varieties that grow in the rainforests of the West Indies. The dataset represents more than 500 genotypes and is the result of surveys and collection efforts conducted since the 1970s. (<http://data.gbif.org/datasets/resource/14488>)

Japan

Five datasets from five municipal and prefectural museums, covering 15,900 records were published in October 2012. (<http://data.gbif.org/datasets/resource/14525>) 30,000 records from the bird collections of the Yamashina Institute for Ornithology have also been published. (<http://data.gbif.org/datasets/resource/14533>)

AROUND THE NETWORK

Norway hailed as prolific data publisher

An article published in the Science Nordic portal has highlighted Norway's impressive achievement in publishing biodiversity records through GBIF. The number of published records more than doubled in the past year, taking the total to 17 million. This puts Norway in third place in Europe, and fifth place globally, in the data publishing ranking, despite its small population. The only countries publishing more data records than Norwegian institutions are the United States (108 million), Sweden (37.4 million), the United Kingdom (37.1 million) and Australia (27.7 million).

[Read the full article...](#)

GBIF Belgium develops new regional biodiversity data portal

The Belgian Biodiversity Platform, which acts as the GBIF node in the country, has developed a new portal on the biodiversity of the Greater Region, which includes parts of Germany, France, Belgium and Luxembourg.

The Greater Region is located between the Rhine, Mosel, Sarre and Meuse rivers and covers a total area of over 65,000 square kilometres.

The portal can be accessed at <http://www.bio-gr.eu>.

TRAINING

Taking biological collections to the next level

A workshop entitled *Biological Collections 3.0* gathered 39 participants from 12 countries at the Alexander von Humboldt institute in Villa de Leyva, Colombia from 8-11 October.

The idea behind the training course was to take advanced collection managers and curators from the region to the next level in collection management - 3.0 - in which collections are part of a global information system on biodiversity science. The workshop discussed current technologies and approaches such as interoperability, images, semantic web, identifiers, connection to environmental and molecular databases and the role of GBIF.

The workshop is the first of four training events planned under the [Iberoamerican Infrastructure for Biodiversity Information](#), I3B, a collaborative platform that brings together several GBIF nodes from Latin America and Spain. The training was organized by [Sistema de Información sobre Biodiversidad de Colombia](#) (SiB Colombia, coordinated by the Alexander von Humboldt institute) and the [Spanish GBIF node](#).

Participants at the workshop were from Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, United States, Mexico, Nicaragua, Uruguay and Spain. The event was [partially supported by the GBIF Secretariat](#).

Material from the training sessions is available at <http://www.recibio.net/biological-collections-3-0/>

UPCOMING EVENTS

8th International Conference on Ecological Informatics

3-7 December 2012, Brasília, Brazil

[More information...](#)

First meeting of the IPBES Plenary

21-26 January 2013, Bonn, Germany

[More information...](#)

Biodiversity Information Architecture workshop

4-8 February 2013, Kirstenbosch, Cape Town, South Africa

[More information...](#)

BioSyst.EU 2013 Global systematics

18-22 February 2013, Vienna, Austria

[More information...](#)

GBIF-Africa regional meeting

14-19 April 2013, Pretoria, South Africa

[More information...](#)

A workshop on the JRS-funded project to develop a biodiversity data mobilization strategy for southern Africa and participating African GBIF countries will take place alongside the meeting.

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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MISSION OF GBIF: To be the foremost global resource for biodiversity information, and engender smart solutions for environmental and human well-being.

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