

# The Belgian node and the world of Biodiversity data



**GBIF**

Global Biodiversity  
Information Facility

Dimitri Brosens  
Croment Workshop  
February 2024







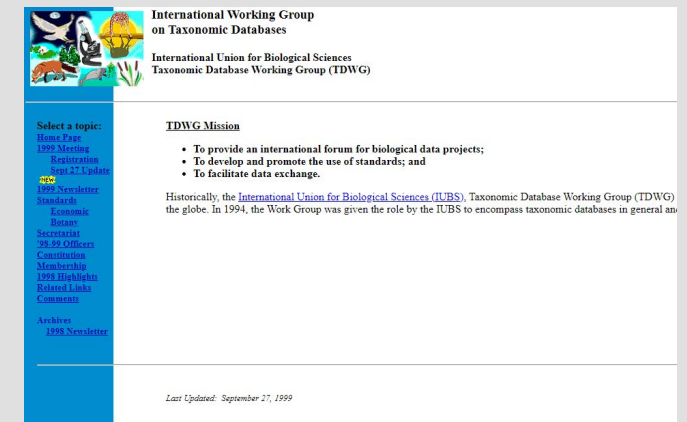
1985

- **TDWG** was founded in 1985 as the Taxonomic Databases Working Group
- Formed as an international collaboration to promote the wider and more effective **dissemination of information** about biological organisms.
  - Initially focusing on plant taxonomic databases
- 1994 it expanded its scope to cover all taxonomic databases and changed its name to **Taxonomic Databases Working Group (TDWG)**.
- In 2006 the group decided to change their name to emphasise their focus was on standards for **sharing biodiversity data**, rather than on taxonomy or the databases themselves.
- The name became **Biodiversity Informations Standards (TDWG)**.

The association currently:

- **Develops, adopts, and promotes standards** and guidelines for the recording, discovery, exchange, and integration of data about organisms,
- **Promotes the use of these standards** and guidelines through the most appropriate and effective means, and
- **Acts as a forum for discussion** about biodiversity informatics standards

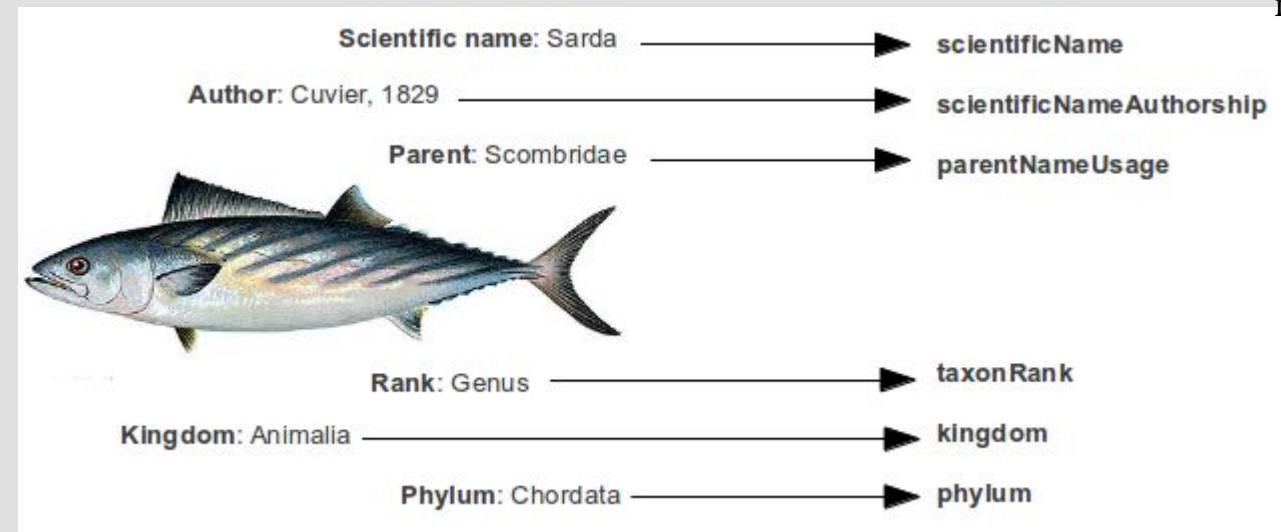
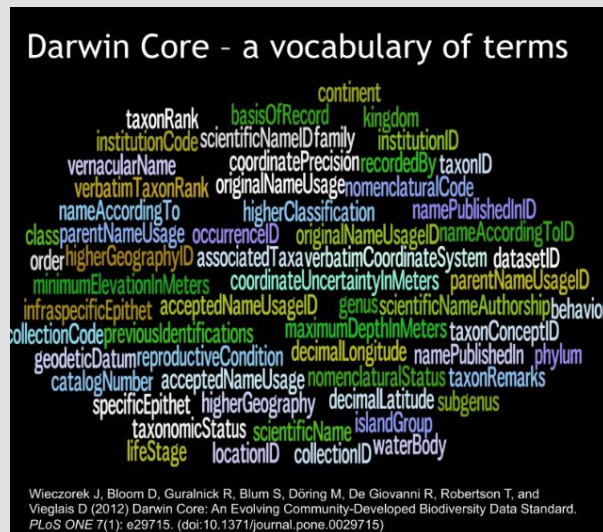
1994



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# 1998

- **Darwin Core (DwC)** was originally created as a Z39.50 profile by the Z39.50 Biology Implementers Group (ZBIG)
- The name "Darwin Core" was first coined by Allen Allison at the first meeting of the ZBIG held at the University of Kansas in 1998 while commenting on the profile's conceptual similarity with **Dublin Core**.
- The Darwin Core is a **body of standards** intended to facilitate the **sharing of information** about **biological diversity**.
- The DwC includes a **glossary of terms**
- Each DwC term includes a **definition** and discussions meant to promote the **consistent use** of the terms across applications and disciplines.



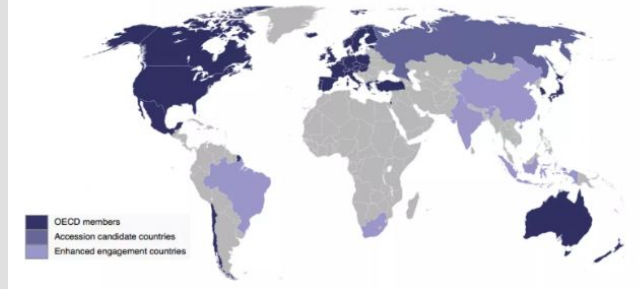
# 1999

- **GBIF** (The Global Biodiversity Information Facility) arose from a 1999 recommendation by the Biodiversity Informatics Subgroup of the Organization for Economic Cooperation and Development's (OECD - OECD) Megascience Forum.
- This report concluded that "An international mechanism is needed to make biodiversity data and information accessible worldwide"
- **Belgium** was one of the founding members of GBIF
- The **Belgian GBIF node** was established in 2001 and became part of the Belgian Biodiversity Platform in 2005
- Start of **VLIZ & marine datacenter & OBIS (Ocean Biodiversity Information System)**

## THE OECD ORIGIN...



OECD Global Science Forum recommendation (1999):  
"[E]stablish and support a distributed system of interlinked and interoperable modules (databases, software and networking tools, search engines, analytical algorithms, etc.) that together will form a *Global Biodiversity Information Facility (GBIF)*".



## GBIF status (1)

- Came into existence in March 2001
- Currently has 74 members (46 countries, 28 international organisations)
- 26 countries support GBIF financially (Voting Participants)
- 20 countries and 28 organisations as Associate Participants (e.g., IABIN, BioNet, IUCN, UNEP)

Global Biodiversity Information Facility

2001


- The **Belgian Biodiversity Platform** was established in 2001
- The Belgian Node of GBIF (**BeBIF**) was established in 2002
- In 2003 the BeBIF node was merged with the Belgian Biodiversity Platform

2002


**BIODIVERSITY.BE**

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Welcome to "Biodiversity.be", the Belgian portal site for information exchange in the field of biological diversity. This page give you access to all the information found on the websites developed by the main [OSTC](#)-funded partners concerned by biodiversity conservation in Belgium.

 The [Belgian Biodiversity Platform](#) (BBPF), the OSTC advisory organ on biodiversity research (analysis, development and promotion of biodiversity-related research in the scientific community).  
<http://www.biodiversity.be/bbpf>


The [Belgian Clearing-House Mechanism](#) (CHM), the national portal site for information exchange on all matters related to the Convention on Biological Diversity (Royal Belgian Institute of Natural Sciences)  
<http://www.naturalsciences.be/bch-cbd/homepage.htm>

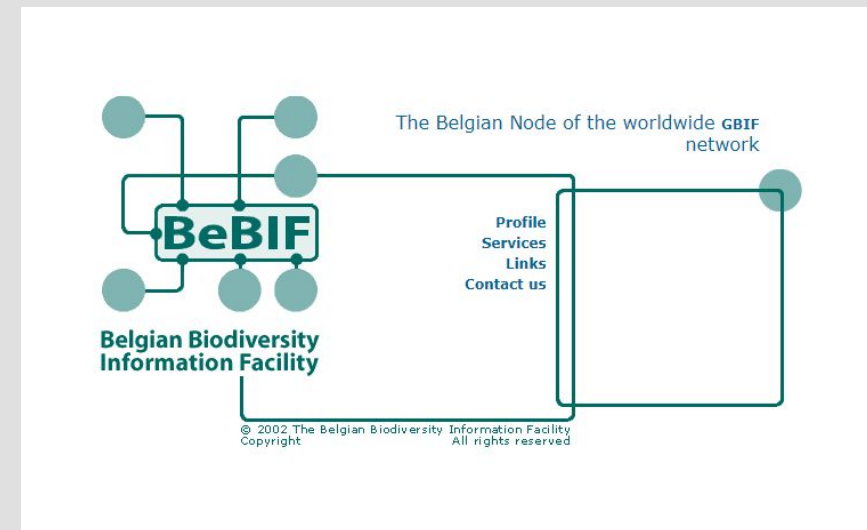
 [Belnet-BIODIV](#), the electronic catalogue of Belgian resources in Belgium: research projects, experts, institutions, collections and databases, events, etc (National Botanic Garden of Belgium)  
<http://www.br.fgov.be/biodiv>

[Be-BIE](#), the Belgian Node of the Global Biodiversity Information Facility. An endeavour to build the prototype of a Belgian bioinformatics infrastructure to integrate Belgian Biodiversity resources within a unified environment  
<http://www.be.gbif.net/>



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 **This site is under development. In the near future new pages will be added and others will be updated.**





2002

- GBIF is an **international network** of participant data holders dedicated to:

Making the world's biodiversity data **freely and universally available** via the Internet

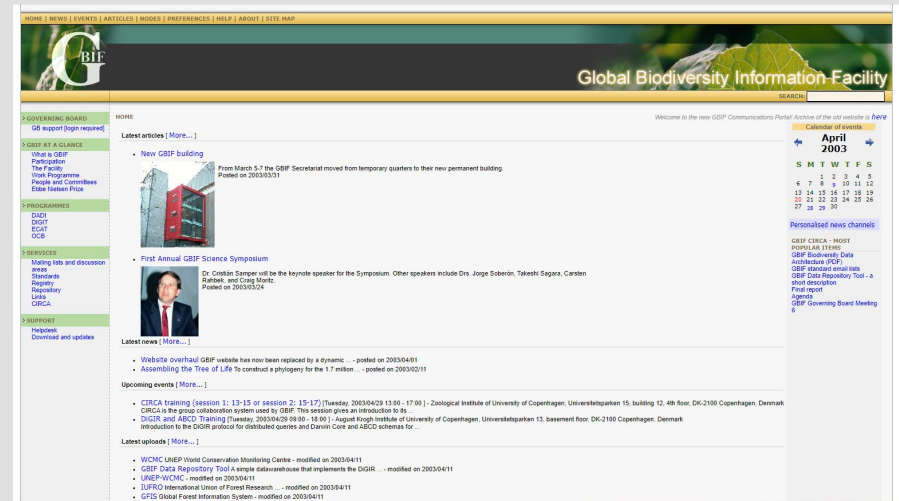
Sharing primary scientific biodiversity data to benefit society, science and a sustainable future

- GBIF is an **intergovernmental initiative** whose formal members—known as '**Participants**'—consist of **countries, economies and international organizations**, each of which signs the GBIF **Memorandum of Understanding (MOU)** and agrees to collaborate in advancing **free and open access** to biodiversity data.

- Under the terms of the MOU, each participant designates a "**node**" responsible for coordinating GBIF-related activities within a given country or organization, often including management of their own network of data-sharing institutions or "publishers".



2003



building the infrastructure

2004

- First datasets published by the Belgian BEBIF/ Belgian Biodiversity Platform
- 1 Belgian Publisher

## GBIF status (2)

- As of 15 March 2005, its data portal ([www.gbif.net](http://www.gbif.net)) served >65 million specimen and observation records from >70 data providers
  - Hope to serve 100 million records by 12/05
- Portal also has more than 600,000 species names provided by more than 25 names providers

Global Biodiversity Information Facility

INSTALLATION  
BeBIF Provider

Belgian National Node of GBIF  
Installation type: DIGIR installation  
Hosted by: Belgian Biodiversity Platform  
Registered: September 5, 2012  
Endpoints: <http://digir.bebif.be/main/DIGIR.php>

CONTACTS

Julien Cigar Technical point of contact System Administrator jcigar@ub.ac.be +32 (0)2 650 57 52	André Heughebaert Administrative point of contact Node Manager Belgium a.heughebaert@biodiversity.be +32 (0)2 650 57 51
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DATASET

ENBI WP 13 Martius C. F. R. von Collection subset (Muenchen) Occurrence dataset

Martius C. F. R. von Collection subset from the InfoComp collection of the Botanische Staatssammlung of Muenchen. Used for testing mappings against DarwinCore in the frame work of the ENBI WP12 fea...

1,350 occurrences | 88 citations

HOME | GBIF | BROWSE TAXONOMY | SEARCH | DATA PROVIDERS | COUNTRIES | DATA USE | LANGUAGE

# GBIF Data Portal

## Global Biodiversity Information Facility

ABOUT GBIF ... you can take the GBIF survey

The Global Biodiversity Information Facility (GBIF) is an international non-profit organisation to provide free and universal access to data regarding the world's biodiversity. To learn more about GBIF itself, visit the GBIF Communications Portal [www.gbif.org](http://www.gbif.org)

A wide range of countries and organisations participate in GBIF and have made their data available here. These bodies maintain ownership for all of the data they share. Any feedback provided through this web site will be passed back to the data provider concerned.

USE OF DATA

GBIF Participants have made their data available for use according to the terms of the GBIF Data Use Agreement. Please understand these terms before using GBIF data: [GBIF Data Use Agreement](#)

SEARCH

Search for name (minimum 3 characters):   Country:

Selecting a country limits results to those taxa which specimen/observation records show have been identified for the country concerned.

Search by scientific name  Find names starting with search string  
 Search by common name in any language  Find names containing search string  
 Search by English name  Find exact matches

Contact info | Webmaster

# 2005

- The Belgian Biodiversity Platform is the **GBIF node** for Belgium, based in the ULB
- First GBIF Governing board in Brussels, Belgium
- The GBIF secretariat has set up a consultation process on his **prototype data portal**.
- Data publication from Belgium is active
  - Mainly **digitization calls** (2006-2012)
- GBIF data is mostly **specimen/collection data**

GLOBAL BIODIVERSITY INFORMATION FACILITY

SPECIES COUNTRIES DATASETS OCCURRENCES SETTINGS

ABOUT

... free and open access to biodiversity data

Try out the new GBIF portal!

Why not try out the new GBIF portal at [www.gbif.org](http://www.gbif.org), which has many more features and includes lots of information about the GBIF community, including great examples of data uses in research and interesting applications? The old GBIF data portal which you are viewing now will continue to be supported until we are satisfied it can be taken down without causing major inconvenience. Be aware that the content here is static and has not been updated since the launch of the new portal on 9 October 2013. If and when a date is confirmed for discontinuing the old data portal, we will post it here with plenty of prior notice.

Welcome to the (former) GBIF Data Portal

Access 416,242,316 data records (363,215,360 with coordinates) shared via the GBIF network.

To learn how to use this site, please see [About](#).

To tune this site for smaller displays, see [Settings](#).

[Version 1.2.6](#) - click here to see what is new!

**Explore Species**

Find data for a species or other group of organisms.

**Species**

Information on species and other groups of plants, animals, fungi and micro-organisms, including species occurrence records, as well as classifications and scientific and common names.

**Example species:**

*Puma concolor* (Linnaeus, 1771)

**Explore Countries**

Find data on the species recorded in a particular country, territory or island.

**Countries**

Information on the species recorded in each country, including records shared by publishers from throughout the GBIF network.

**See data for:**

Germany

**Explore Datasets**

Find data from a data publisher, dataset or data network.

**Datasets**

Information on the data publishers, datasets and data networks that share data through GBIF, including summary information on 10140 datasets from 562 data publishers.

**Latest dataset added:**

Zoologische Staatssammlung Muenchen - Barcode of Life Project Specimen Data

2009

- The data team at the Belgian Biodiversity Platform is growing and more decentralized
  - 3 FTE in ULB
  - 1 FTE in INBO
- More and more **observation data** (INBO)
- INBO becomes data publisher for GBIF
- Many scientists are **reluctant** towards data publication <-> some are enthusiast or **curious**

2010

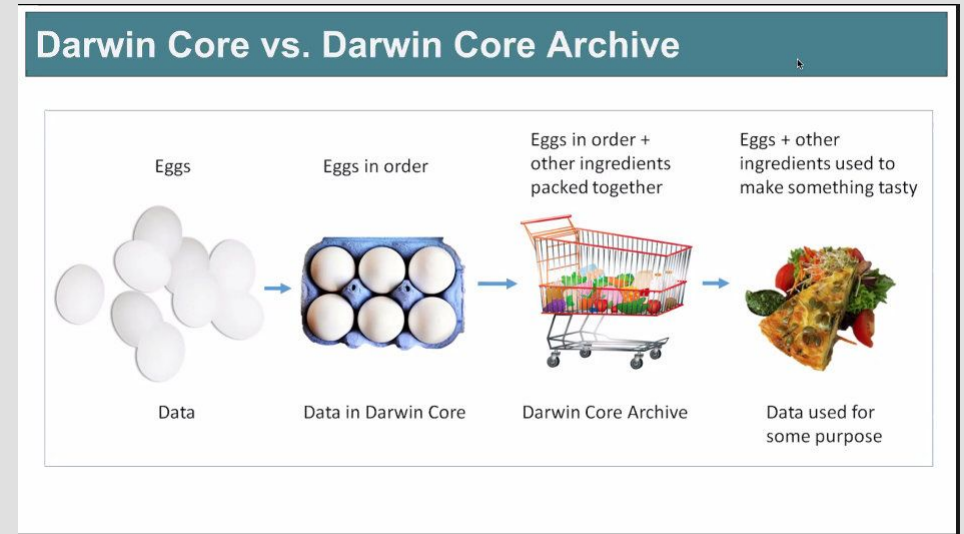
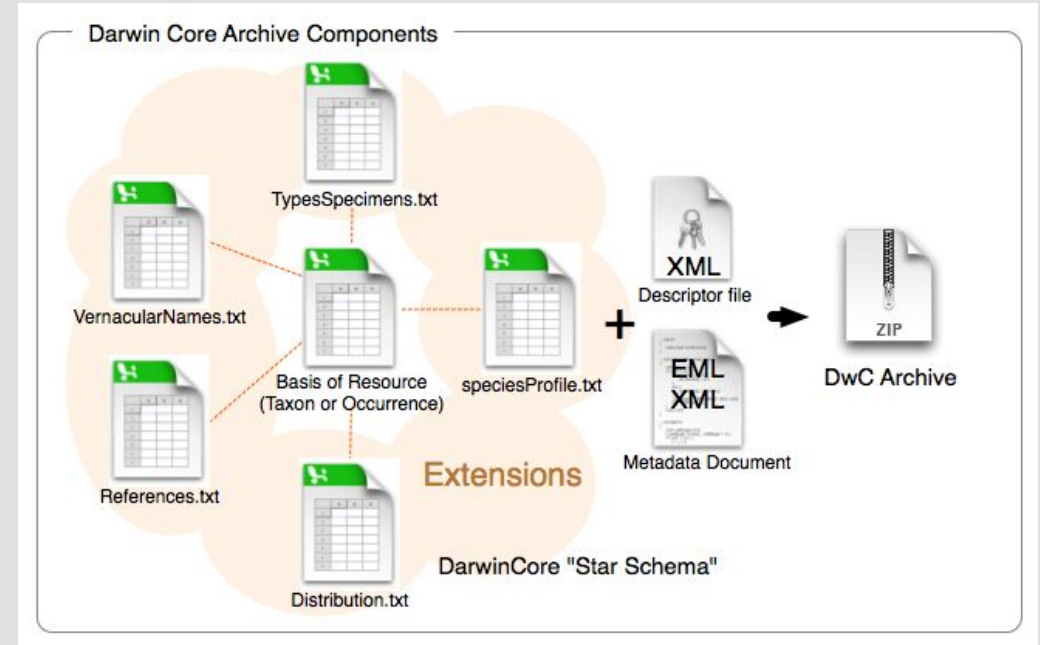
- First dataset on GBIF was published for Flanders

The screenshot shows the GBIF dataset page for 'TestWat - Macroinvertebrates and macrophytes of freshwater bodies in Flanders, Belgium'. The page includes a green navigation bar with links for 'Get data', 'How-to', 'Tools', 'Community', and 'About'. Below the navigation bar, the dataset title is displayed, along with the publisher 'Research Institute for Nature and Forest (INBO)' and the author 'Denys L. • Packet J'. The page also shows the dataset registration date 'REGISTERED MAY 7, 2012'. A summary section provides a brief description of the dataset, mentioning its importance for biodiversity conservation and ecological quality. Key statistics are displayed: 6,277 Occurrences, 100% With taxon match, 100% With coordinates, and 100% With year. A map at the bottom shows the geographical distribution of the 6,277 georeferenced records in Flanders, Belgium.

2009

- Data published in DwC-A (Darwin Core Archive)
  - Star scheme
  - Core file → occurrences
  - Extension
    - vernacular names
    - Measurements or Fact
    - ...
  - XML descriptor file
  - XML EML (Ecological Metadata Language)

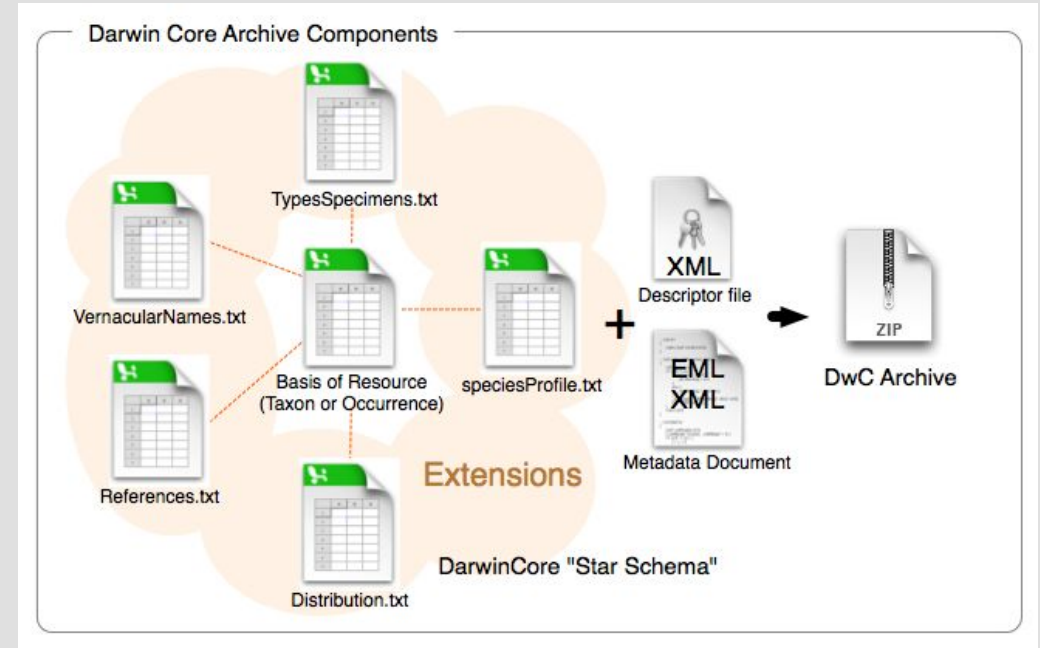
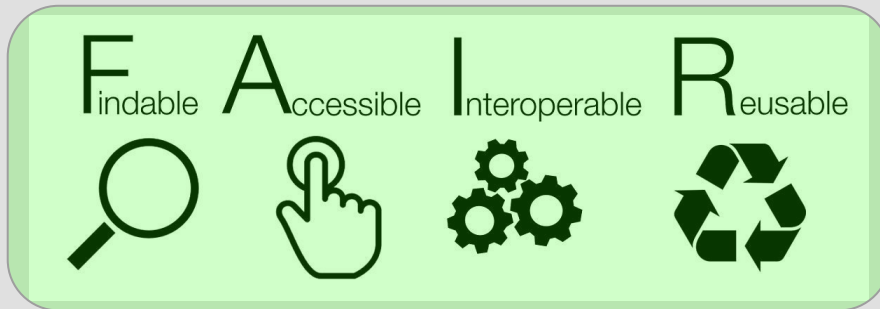
- Data in GBIF portal is
  - Interoperable
  - Findable
  - Accessible
  - Reusable



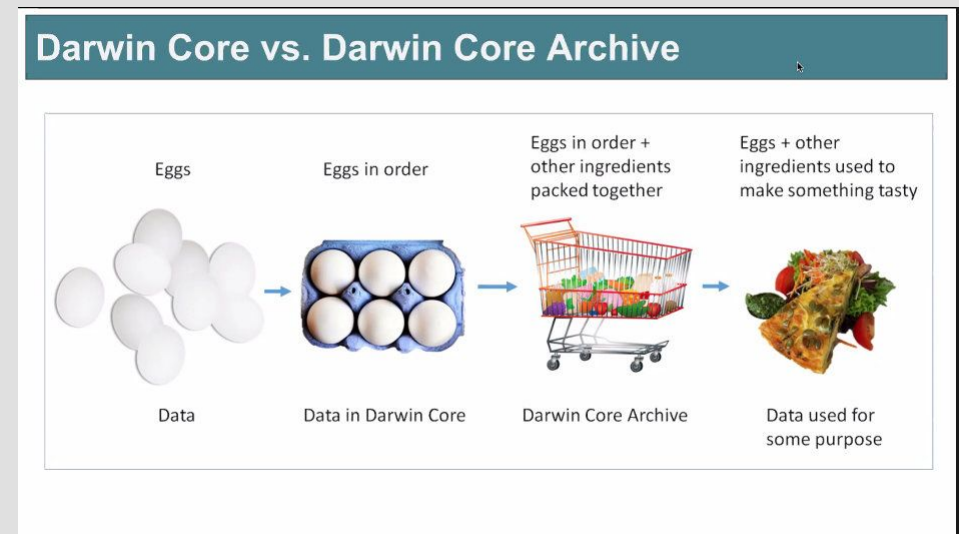
building the infrastructure

2009

- Data published in DwC-A (Darwin Core Archive)
  - Star scheme
  - Core file → occurrences
  - Extension
    - vernacular names
    - Measurement or Fact
    - ...



2010



building the infrastructure

# 2012

- Publication of more and more datasets through INBO
- First Datapaper published
  - Florabank1 (3 500 000 records)
- BBPF starts creating tailor made portals
- IFBL Portal online
  - some media coverage
  - servers burned

NEWS RELEASE 23-MAY-2012

## New tool for visualizing the distribution of vascular plants in Belgium

Business Announcement  
PENSOFT PUBLISHERS



The Belgian Biodiversity Platform has just released a new [website](#) "IFBL Data Portal, Explore Flora Checklists of Belgium". It aggregates about 23,000 checklists of vascular plants in Belgium, compiled since 1939. Users can search a database of over 2.5 million observations of over 2,800 different species. The website will be updated on a monthly basis, in cooperation with the Florabank database.

This website is a result of the cooperation between the Belgian Biodiversity Platform, [Flo.Wer](#), the [National Botanic Garden of Belgium](#) and the [Research Institute for Nature and Forest](#) (INBO). The data originates from two digitization projects funded by the [Belgian Biodiversity Platform](#) Australia.

### GBIF COMMUNITY

#### Globally-hosted data integrated into Australian national portal

The [Atlas of Living Australia](#) (ALA) has integrated more than a million records of Australian biodiversity, drawn from collections published through GBIF by institutions in other countries.

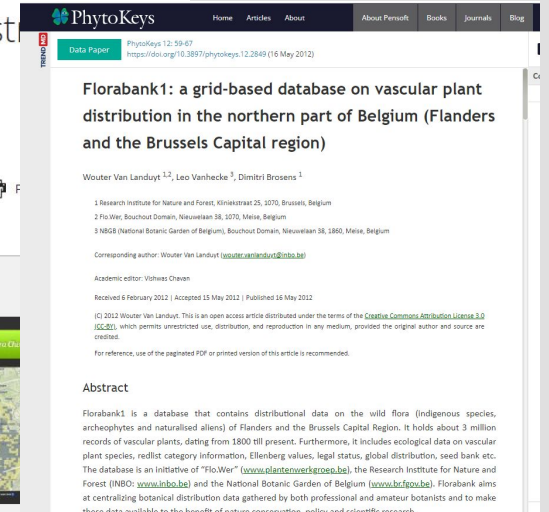
The records now exposed in the ALA national portal are from over 300 datasets hosted in 11 countries. They range from Australian plant records held in the United Kingdom's Royal Botanic Gardens, Kew and the Hong Kong University Herbarium; to zoological specimens in Poland and the United States.

The integration enables users of the ALA portal to combine the records held overseas with Australian-hosted data, for use in online tools to explore and analyse Australian biodiversity. The tools include distribution modelling with Australian environmental layers, data slicing to direct queries on regional data, data quality processing, and viewing the data against national species lists.



IMAGE: THIS IS A PEEK AT THE FLORABANK WEBSITE. [view more >](#)

CREDIT: FLORABANK



### Belgian flora

The Belgian Biodiversity Platform, which hosts the GBIF node for Belgium, has developed a new [website of the country's flora](#). The site gathers 23,000 checklists of vascular plants in Belgium, compiled since 1939. Over 2.5 million observation records of more than 2,800 species are available on the portal, making it a powerful tool to visualize the distribution of vascular plants in Belgium.

The IFBL website was developed by the [Belgian Biodiversity Platform](#), [Flo.Wer](#), the [National Botanic Garden of Belgium](#) and the [Research Institute for Nature and Forest](#) (INBO). Currently, the portal brings together data from the Atlas of Belgian and Luxembourg Flora, and from Florabank, a database of the wild flora of Flanders and the Brussels region, and it will be updated every month.

The Florabank1 database has been described in a new [data paper](#), based on a GBIF metadata document, and published in the open access journal PhytoKeys.

Institutions dealing with data on vascular plants in Belgium may contact Nicolas Noé ([n.noeb@biodiversity.be](mailto:n.noeb@biodiversity.be)) to publish their data through the IFBL data portal.

# 2012

- First Flemish open data day

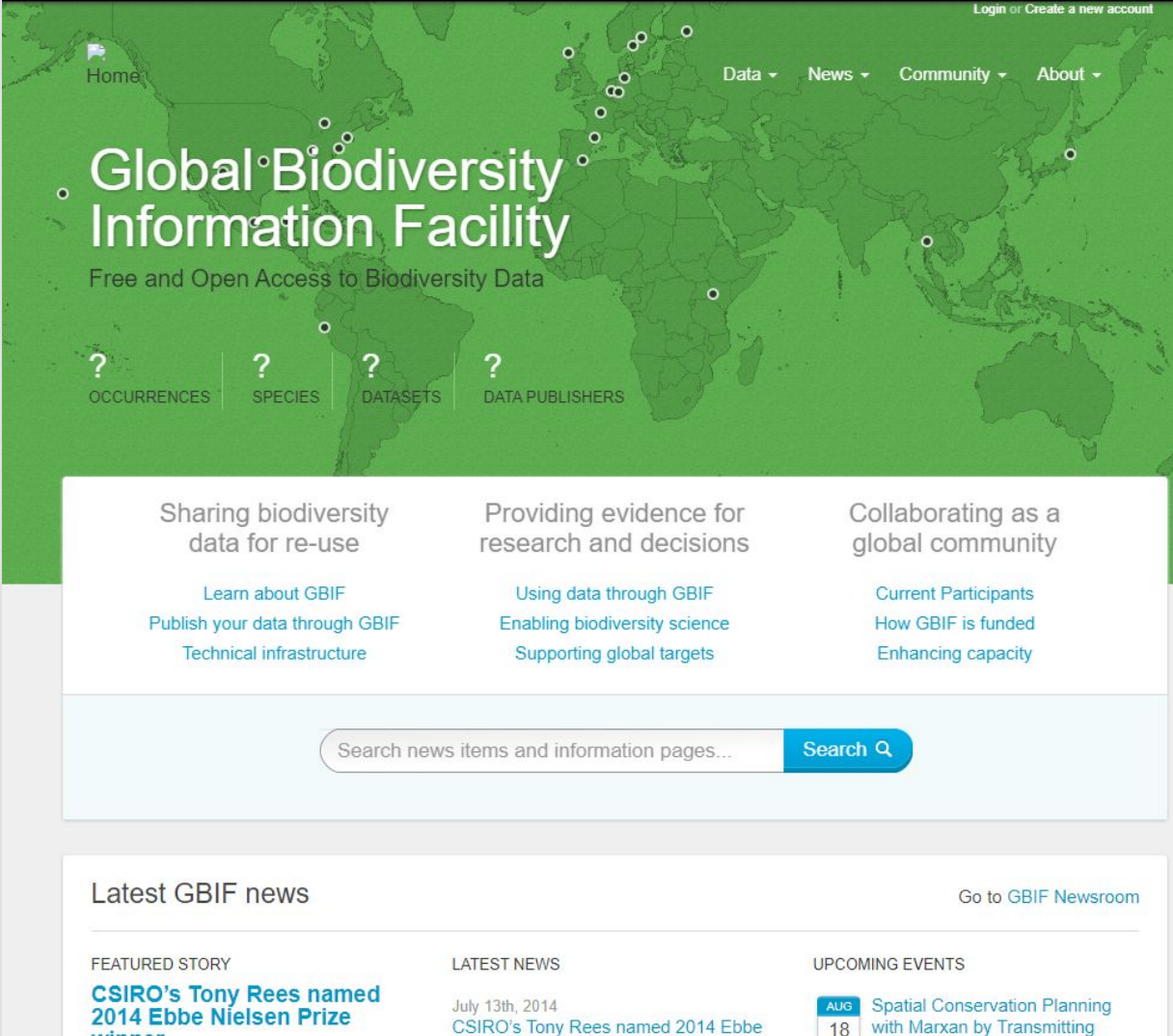
PROGRAMMA OPEN DATA DAG - 15 JUNI 2012			
06.00 - 09.00	OPEN DATA – VAN STRATEGIE TO PRAKTIJK	APPS FOR FLANDERS	
Inschrijvingen - Koffie			
Keynote: Andrew Stott (UK) - Open Data: best practices in Europe and key challenges facing the European Union			
Plenaire sessie - Citadel on the Move: Geert Mareels, Andrew Stott, Julia Glidden Enabling Smart City Services through Open Data, Mobile Applications and Common Data Formats			
10.00 - 10.45	<p><b>Workshop</b> Fon Zijlstra en Paul Suikerbuijk (Nederland) <b>Het gaat goed met open data in Nederland!</b> Het gaat slecht met open data in Nederland! Een groeiend data portaal (data.overheid.nl), actieve stadsbesturen, goed georganiseerde activiteiten, ministeries die belangrijke datasets vrij beschikbaar maken, het gaat heel goed met open data in Nederland. Werkzaamheden en budgetten onder druk, het risico dat het bij veelbelovende eerste stappen blijft; een nuchtere kijk op open data in Nederland, de kansen, bedreigingen, resultaten en beloften. Vergelijkbare situatie in Vlaanderen?</p>	<p><b>Workshop</b> Tangy De Lestre (Agoria) <b>Overheidsinformatie, een goudmijn voor ondernemers?</b> Open overheidsdata en hergebruik. - Welke combinatie van datasets is nuttig voor hergebruik door de privé-sector? - Welke diensten worden er gevraagd zoals unieke informatieketens voor overheidsinformatie? (-vlaanderen) - Hoe open data in mijn business model situeren?</p>	<p><b>Workshop</b> Katrien Janssen (KUL Leuven) <b>Het huidige wettelijke kader in Vlaanderen voor open data.</b> Deze workshop zal ingaan op het huidige wettelijke kader in Vlaanderen met betrekking tot open data, met focus op de wettelijke inzake toegang tot, en hergebruik van overheidsinformatie. De kansen, valkuilen en gevolgen van de nieuwe PSI richtlijn voorgesteld door de Europese Commissie worden besproken. Het licentiebeleid met betrekking tot het open beschikbaar stellen van overheidsinformatie krijgt ook bijzondere aandacht in deze workshop.</p>
HACKATON: Coördinator: Pieter Colpaert, (ONVA)			
10.45 - 11.15 Koffie en mogelijkheid tot netwerken			
11.15 - 12.00	<p><b>Workshop</b> Pieter Van Ooteyen (De Lijn) <b>De Lijn en open data.</b> De Lijn stelt meer en meer data ter beschikking aan derde partijen en streeft hoe langer hoe meer naar het hergebruik van deze data in 3rd party apps. Voorbeelden hiervan zijn Scotty.be en iRAIL.</p>	<p><b>Workshop</b> Twee Verbeke (HP) <b>Open data; systeem- en technische architecturale aspecten.</b> Veel organisaties willen wel met open data aan de slag, maar weten niet precies hoe dat moet. Vaak ook zijn er vragen over de technische aspecten van open data. In deze workshop bespreken wij een mogelijke aanpak en referentie architectuur voor consistente ontsluiting gegevens van bronstoeven tot een Open Data platform.</p>	<p><b>Workshop</b> Eddy Van der Stock (V-ICT-OR) <b>Filip Meuris (intercommunale Lelede)</b> <b>Open data; hoe start ik in mijn bestuur?</b> Lelede en V-ICT-OR tonen aan hoe lokale besturen maximaal kunnen participeren in de open-informatieomgeving. De projecten OSLO en Citadel on the Move tonen aan hoe open standaarden een sleutelrol spelen in de ontsluiting van data bij lokale besturen. Verder verwachten we dat Linked Open Data een extra economische impuls kan opleveren, een praktijktours vanuit het Europese project "Opening Up" (OUP).</p>
HACKATON			
12.00 - 13.00 Lunch			
Keynote: Chris Taggart (UK) - Open Data in the UK and the World, Status & Lessons Learned			
Plenaire sessie Chris Taggart (UK) - Andrew Stott (UK) - Bart Rousseau (Stad Gent) / Chair: Julia Glidden (UK)			
13.00 - 14.15	<p><b>Open Discussion: How to apply lessons learned from the UK and the world</b> Following on from Chris Taggart's keynotes about lessons learned from the UK and global open data communities, this plenary session and discussion will address how those lessons can be applied to the situation in Flanders and Belgium, to allow them to avoid some of the common pitfalls.</p>		
14.15 - 14.45 Koffie en mogelijkheid tot netwerken			
14.45 - 15.30	<p><b>Workshop</b> Fon Zijlstra en Paul Suikerbuijk (Nederland) <b>Het gaat goed met open data in Nederland!</b> Het gaat slecht met open data in Nederland! Een groeiend data portaal (data.overheid.nl), actieve stadsbesturen, goed georganiseerde activiteiten, ministeries die belangrijke datasets vrij beschikbaar maken, het gaat heel goed met open data in Nederland. Werkzaamheden en budgetten onder druk, het risico dat het bij veelbelovende eerste stappen blijft; een nuchtere kijk op open data in Nederland, de kansen, bedreigingen, resultaten en beloften. Vergelijkbare situatie in Vlaanderen?</p>	<p><b>Workshop</b> Bart Rousseau (Stad Gent) Raf Buyle (V-ICT-OR) <b>Open data; ja natuurlijk!</b> Maar wat zit er in voor mijn organisatie? Open data is hot. Internationale voorbeelden tonen aan dat Open Data-initiatieven werken en in een behoefte voorzien. Maar wat zit er in voor mijn organisatie? Wat moet je ervoor doen en wat krijg je ervoor terug? Deze interactieve workshop brengt het verhaal van 5 sprekers die actief zijn binnen lokale overheden en hun vaak en praktijkervaringen delen, waaronder Bart Rousseau die schetst hoe Open Data het verschil maakt voor de Stad Gent.</p>	<p><b>Workshop</b> Katrien Janssen (KUL Leuven) <b>Het huidige wettelijke kader in Vlaanderen voor open data.</b> Deze workshop zal ingaan op het huidige wettelijke kader in Vlaanderen met betrekking tot open data, met focus op de wettelijke inzake toegang tot, en hergebruik van overheidsinformatie. De kansen, valkuilen en gevolgen van de nieuwe PSI richtlijn voorgesteld door de Europese Commissie worden besproken. Het licentiebeleid met betrekking tot het open beschikbaar stellen van overheidsinformatie krijgt ook bijzondere aandacht in deze workshop.</p>
HACKATON			
15.30 - 16.45 Wrap-up, Conclusies uit de workshops, Resultaten hackaton			
16.45 - 17.00 Afsluitwoord - Minister Geert Bourgeois			
17.00 - ... Receptie en mogelijkheid tot netwerken			

building the network



2014

- Launch of the new GBIF web portal
- Launch of the GBIF API



The screenshot shows the GBIF web portal homepage. At the top, there is a navigation bar with links for Home, Data, News, Community, and About, along with a login/registration option. The main header features the title "Global Biodiversity Information Facility" and the tagline "Free and Open Access to Biodiversity Data". Below this, there are four categories: OCCURRENCES, SPECIES, DATASETS, and DATA PUBLISHERS, each with a question mark icon. The main content area is divided into three columns: "Sharing biodiversity data for re-use" (with links for learning about GBIF, publishing data, and technical infrastructure), "Providing evidence for research and decisions" (with links for using data, enabling science, and supporting targets), and "Collaborating as a global community" (with links for current participants, funding, and capacity). A search bar is located below these columns. At the bottom, there is a "Latest GBIF news" section with a link to the GBIF Newsroom. This section is divided into three sub-sections: "FEATURED STORY" (highlighting CSIRO's Tony Rees as the 2014 Ebbe Nielsen Prize winner), "LATEST NEWS" (listing a news item from July 13th, 2014), and "UPCOMING EVENTS" (listing an event for August 18th).

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# 2014

- Open Belgium 2014
- Open Data dag



## A look back to the Open Belgium Conference 2014

February 25, 2014  
Pieter-Jan Pauwels

- [Home](#)
- [Programma](#)
- [Sprekers](#)
- [Nieuws](#)
  - [Entrepreneur](#)
  - [Start Up](#)
  - [Data Dive](#)
  - [Videoclips](#)
- [Informatie](#)
- [ORGANISATIES](#)
- [FOTO's](#)

### Sprekers

De derde editie van de Open Data Dag in Vlaanderen staat volledig in het teken van het gebruik van Open Data, m.a.w. de vraagzijde. In 2012 en 2013 hebben wij vooral de aanbodzijde aan het woord gelaten. Deze keer zijn het de ontwikkelaars, individuen, bedrijven, organisaties, andere overheden...die open data gebruiken om meerwaarde op allerlei gebied te creëren. Zoals vorige jaren kunnen wij weer meer dan twintig uitstekende sprekers uit binnen- en buitenland begroeten.

**Organisator:** [Noël Van Herreweghe](#). **Keynote sprekers:** [Saskia Van Uffelen](#) en [Bart Van Leeuwen](#). **Sprekers:** [Christian Lister](#) - [Bart Rosseau](#) - [Toon Vanagt](#) - [Chris Van Aart](#) - [Jan Maekjill](#) - [Nicolas Kint](#) - [Bart Dumolin](#) - [Pol Deltour](#) - [Ton Zijlstra](#) - [Paul Suijkerbuijk](#) - [Nicolas Futter](#) - [Baudouin Corluy](#) - [Vital Schreurs](#) - [Peter Bonne](#) - [Ides Bauwens](#) - [Rombout Verwimp](#) - [Stefan De Konink](#) - [Steven Logghe](#) - [Christiaan De Backer](#) - [Frank Huynen](#) - [Bart Lowyck](#) - [Peter Van De Perre](#) - [Luc Chauvin](#) - [Erik Mannens](#) - [John van Echtelt](#) - [Geert Mareels](#)

 [Noël Van Herreweghe - Vlaamse overheid](#)

[Noël Van Herreweghe Vlaamse overheid](#)

**Noël Van Herreweghe** - is programmamanager Open Data en de organisator van de Open Data Dag in Vlaanderen

Titel presentatie  
Open Data Dag in Vlaanderen 2014  
Website  
[Opendataforum](#)  
Twitter  
[@opendataforum](#)

 [Keynote: Saskia Van Uffelen](#)

**Keynote: Saskia Van Uffelen**

**Saskia Van Uffelen** is CEO België en Luxemburg voor Ericsson

- [Day 1: Open Belgium](#)
- [Day 2: Open Europe](#)
- [Day 3: Open World](#)
- [Speakers](#)
- [Presentations](#)
- [Photos](#)

Join **Open Data** Pioneers, practitioners, thinkers and researchers from **across the world** to unlock and advance the power of collaboration and **Open Innovation** in this joint conference by the Open Knowledge Foundation (OKFN), **Citadel on the Move** and Linked Organization of Local Authority ICT Societies (LOLA).  
17/18/19 February 2014  
Bijloke, Gent

Opnieuw laden

[datadays2014](#) [featured](#) [conference](#) [datadays](#)

Last monday, on the 17th of February 2014, the first edition of the Open Belgium Conference was held in the STAM Museum in the City of Ghent as part of the three day conference called DataDays. DataDays is an initiative organised by [OKFN Belgium](#), [Citadel on the move](#) and [LOLA](#) to discuss the role and future of Open Data on a national, European and global level.

The Open Knowledge Foundation is proud to show support at the DataDays conference and present at...



## Open Knowledge Belgium

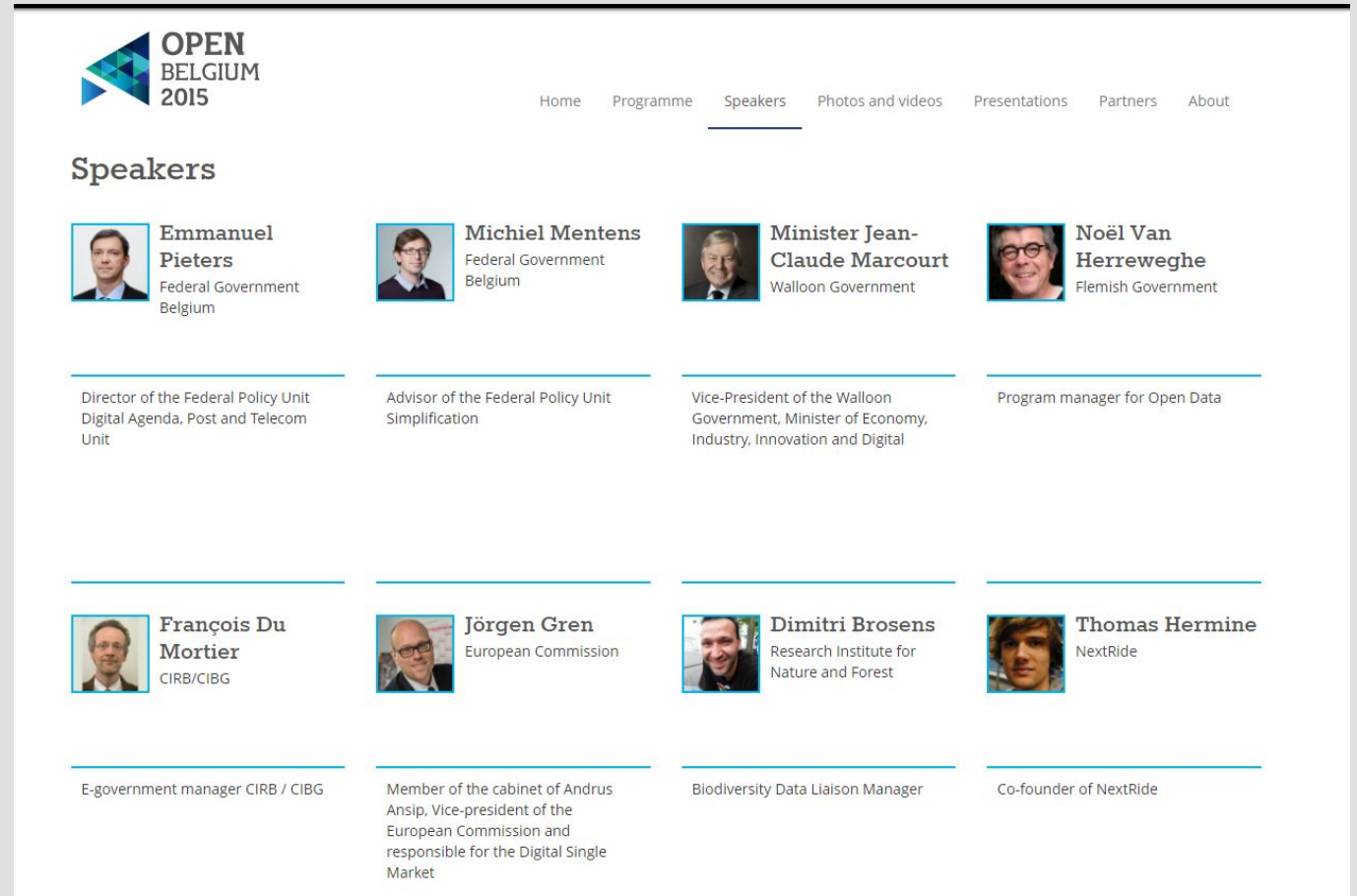
Pieter Colpaert  
[pieter.colpaert@okfn.org](mailto:pieter.colpaert@okfn.org)  
[@pietercolpaert](#)

Knowledge  
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building  
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# 2015

- Open Belgium 2015
- Both worlds meet



The screenshot shows the 'Speakers' page of the Open Belgium 2015 website. The page features a navigation menu with links for Home, Programme, Speakers (which is highlighted), Photos and videos, Presentations, Partners, and About. Below the navigation, the 'Speakers' section is displayed in a grid format, listing eight speakers with their names, titles, and affiliations. Each speaker's name is in bold, and their title and affiliation are in a smaller font. A thin blue horizontal line separates each speaker's name and title from their biographical text.

Name	Title	Affiliation
<b>Emmanuel Pieters</b>	Director of the Federal Policy Unit Digital Agenda, Post and Telecom Unit	Federal Government Belgium
<b>Michiel Mentens</b>	Advisor of the Federal Policy Unit Simplification	Federal Government Belgium
<b>Minister Jean-Claude Marcourt</b>	Vice-President of the Walloon Government, Minister of Economy, Industry, Innovation and Digital	Walloon Government
<b>Noël Van Herreweghe</b>	Program manager for Open Data	Flemish Government
<b>François Du Mortier</b>	E-government manager CIRB / CIBG	CIRB/CIBG
<b>Jörgen Gren</b>	Member of the cabinet of Andrus Ansip, Vice-president of the European Commission and responsible for the Digital Single Market	European Commission
<b>Dimitri Brosens</b>	Biodiversity Data Liaison Manager	Research Institute for Nature and Forest
<b>Thomas Hermine</b>	Co-founder of NextRide	NextRide

# 2015

- **Empowering Biodiversity Research conference 2015**
  - For an **scientific** audience
  - What **tools** are available
  - What **projects** are starting
- There is a world of **tools, standards** and **data** out there, ready for you to use. Biodiversity Informatics deals with the application of informatics techniques to biodiversity information for improved **management, presentation, discovery, exploration** and **analysis** of scientific data. Combined with open data sources on the Internet, this is a powerful new approach in doing research. During this conference, organised by the Belgian Biodiversity Platform and **several key institutes**, we would like to take you on a trip to the world of **biodiversity informatics & open data**.

The Belgian Biodiversity Platform and several key Biodiversity Informatics related partner institutes are pleased to invite you to the Conference "Empowering Biodiversity Research", which will take place on May 21th 2015 in Brussels at the Palace of Academies.

## EMPOWERING BIODIVERSITY RESEARCH



The conference will bring together representatives of national and international scientific institutes to explore and discuss the opportunities and strengths related to **Biodiversity Informatics and Open Data**. Three keynote speakers will start the day:

- Vince Smith, research leader in informatics at the Natural History Museum, London
- Dr Hilde Eggermont, Scientific Coordinator at the Belgian Biodiversity Platform
- Pieter Colpaert, Researcher at Open Knowledge Belgium

Screenshot of the Empowering Biodiversity Research conference website. The page features a navigation menu with links for Home, Programme, Workshops, Biodiversity Fair, Posters, Venue, Registration, Contact, About, Resources, and Conference Pictures. Below the menu, there is a section for tweets with a search bar and a welcome message: "Welcome on the webpage of the Empowering Biodiversity Research conference that will take place in the Palace of the Academies on May 21th 2015 in Brussels, Belgium." The footer contains a paragraph about the conference's focus on biodiversity informatics and open data, mentioning that a series of workshops will be organized after the conference.

RESEARCH INSTITUTE  
NATURE AND FOREST



Meise  
Botanic Garden



AFRICA  
museum

MUSEUM



LifeWatch  
BELGIUM



building the network

2016

12-month report  
ending 31 December 2016

## Belgium

This report provides a series of summary charts, statistics and other details about the mobilization and use of open-access species data through the GBIF network at global and national scales. These metrics represent change over the past 12 months, unless otherwise noted. Taken together, the elements of this report can help guide and measure progress toward the information needs for national and international commitments on biodiversity and sustainable development.

### > Access and usage

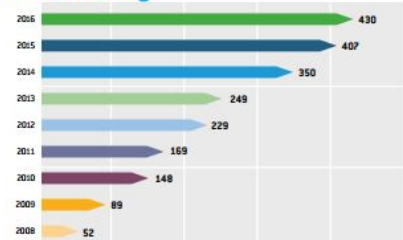


Figure 1. Number of peer-reviewed publications citing use of global GBIF-mediated data



generated January 2022

## Belgium

This report provides a series of summary charts, statistics and other details about the mobilization and use of open-access species data through the GBIF network, relating to users and participating institutions in Belgium. These metrics show status at the time of report generation, unless otherwise noted. Taken together, the elements of this report can help guide and measure progress toward the information needs for biodiversity research, as well as for national commitments on biodiversity and sustainable development.

### ► Access and usage

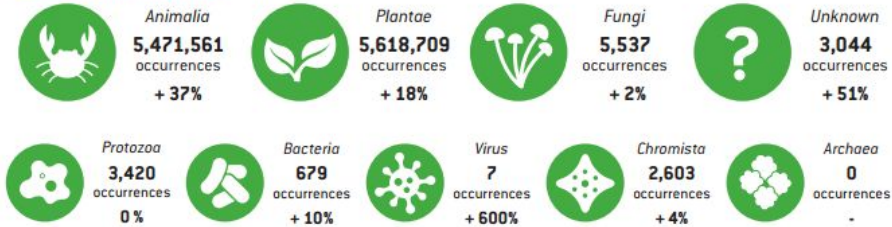


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2016

> Data availability in Belgium



> Data mobilization

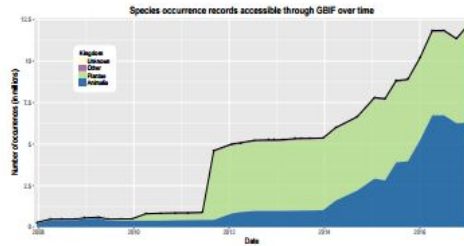
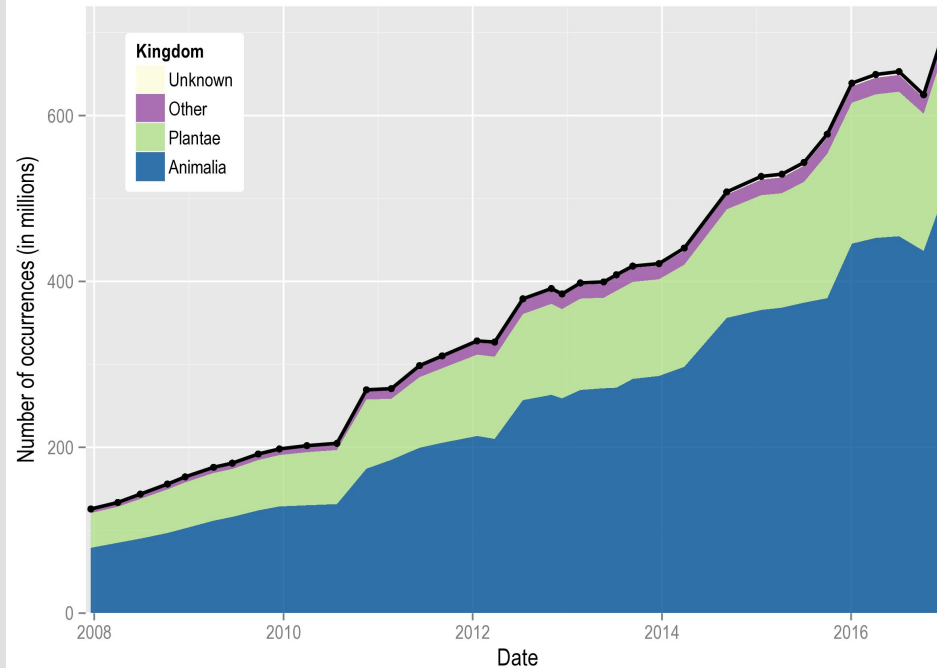


Figure 2. Number of records published by institutions in Belgium, categorized by kingdom

Species occurrence records accessible through GBIF over time

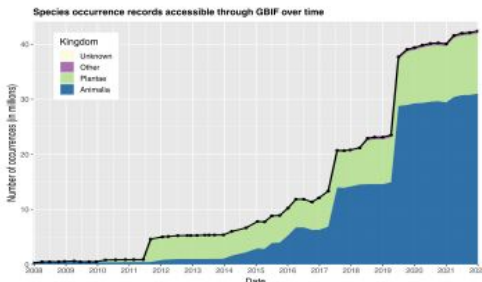


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> Data availability in Belgium

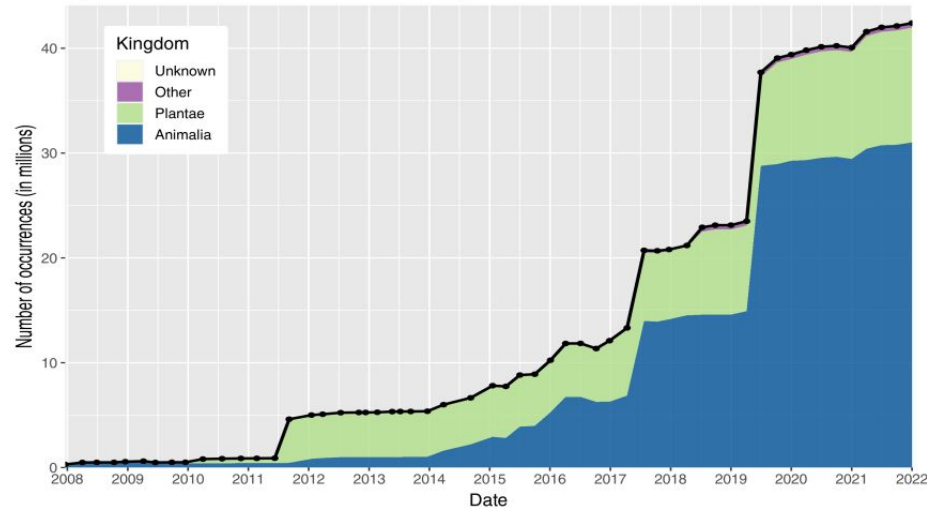


> Data mobilization



Number of records published by institutions in Belgium, categorized by kingdom

Species occurrence records accessible through GBIF over time

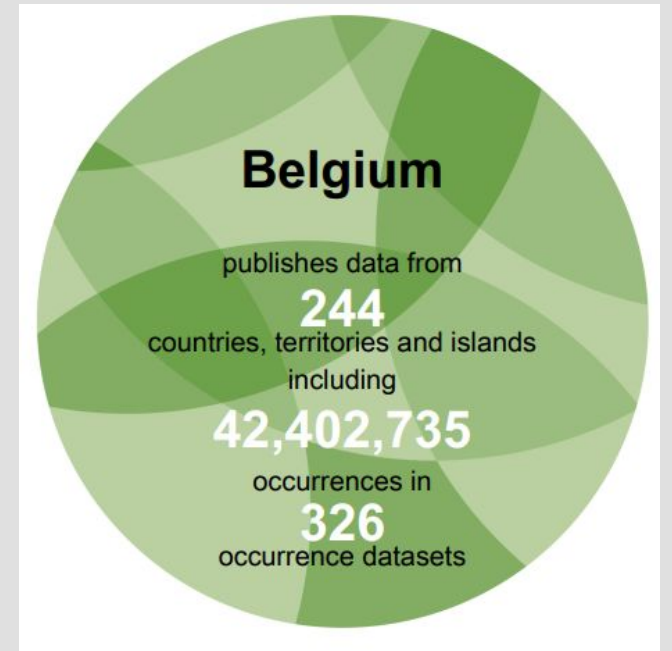


Number of records published by institutions in Belgium, categorized by kingdom

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2009

- 1 FTE in INBO on data publication
- 2 FTE in BBPF on data publication and biodiversity informatics
- Vliz Marine Data center...



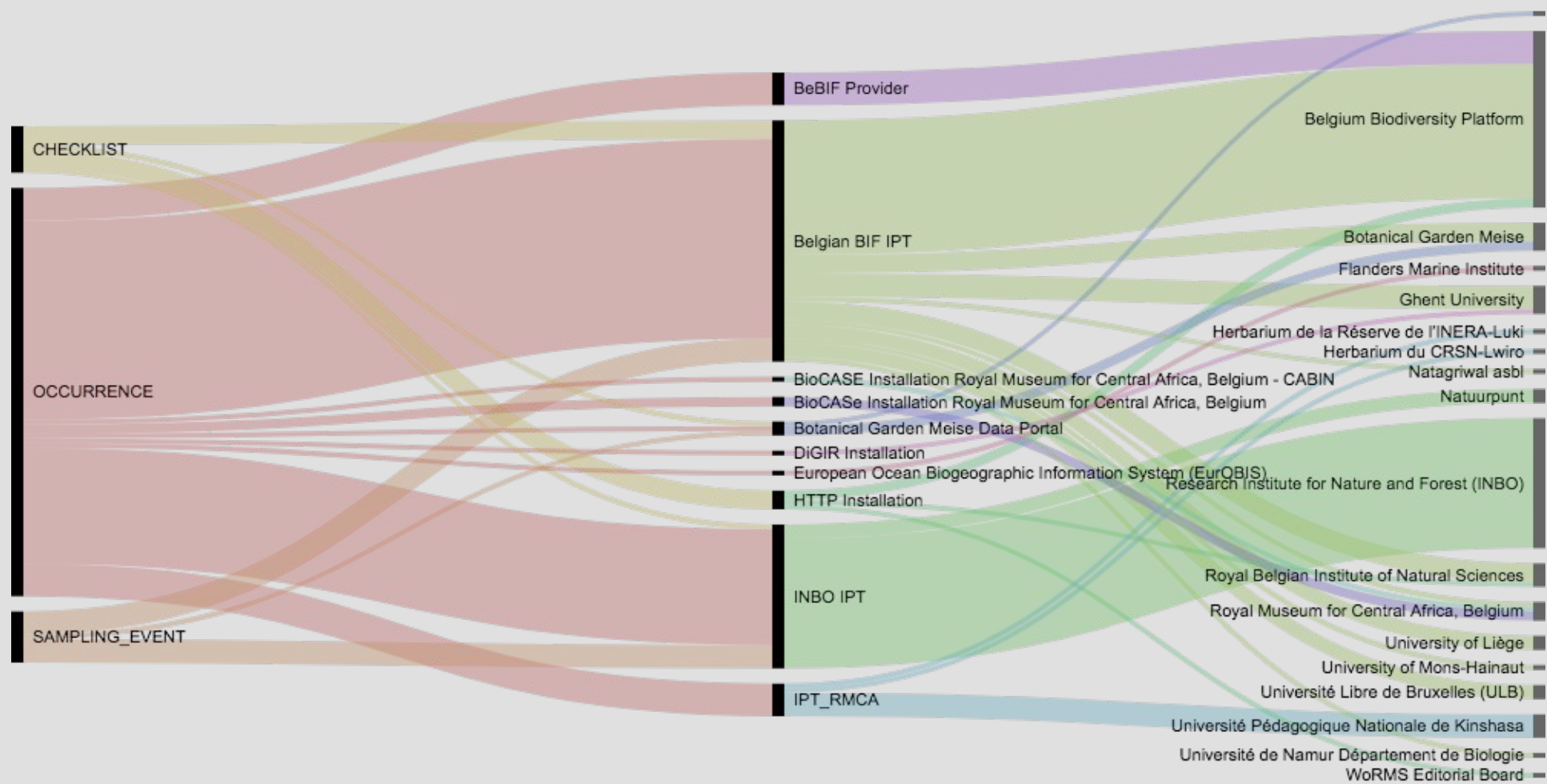
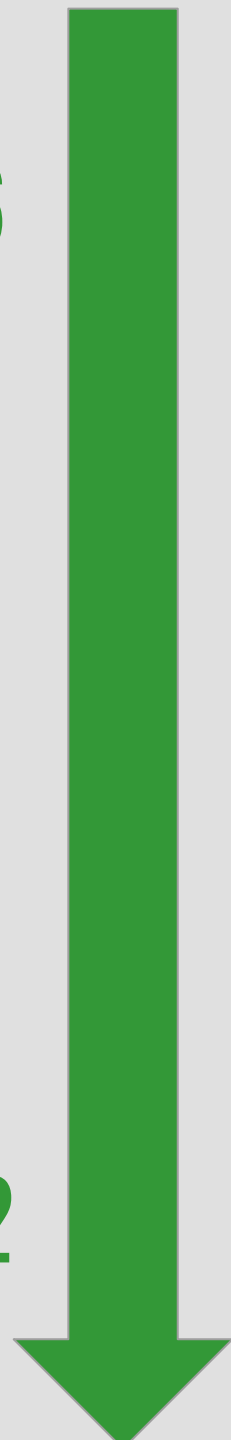
2022

- several teams in INBO/ VLIZ/ RBINS/ AfricaMuseum/ Botanic Garden Meise... do have data publication and biodiversity informatics in their portfolio

### Blog

<p>Research data management workshop August 29, 2022 Free hands-on introductions to research data management and publication.</p> <p>LIFEWATCH   WORKSHOP</p>	<p>CROW: A new tool to watch bird migration in real time March 09, 2021 We are launching an interactive visualization to follow bird migration detected by weather radars across the Benelux.</p> <p>GLOBAM   VISUALIZATION   SOFTWARE</p>	<p>Join us now: Best practices for citizen science data October 19, 2020 Developing a best practice guide for FAIR data.</p> <p>TRIAD   ALIENCSI</p>
<p>wateRinfo: Downloading tidal data to understand the behaviour of a migrating oel January 23, 2016</p>	<p>Checklist Recipe: How we created a template to standardize species data November 20, 2018</p>	<p>Operation Agadir: an expedition to retrieve lost tracking data February 22, 2016</p>

2016



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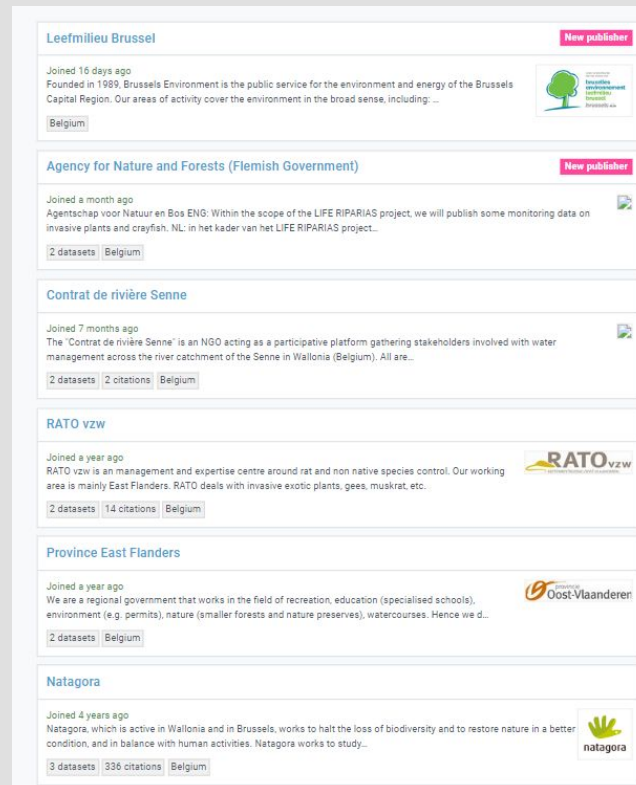
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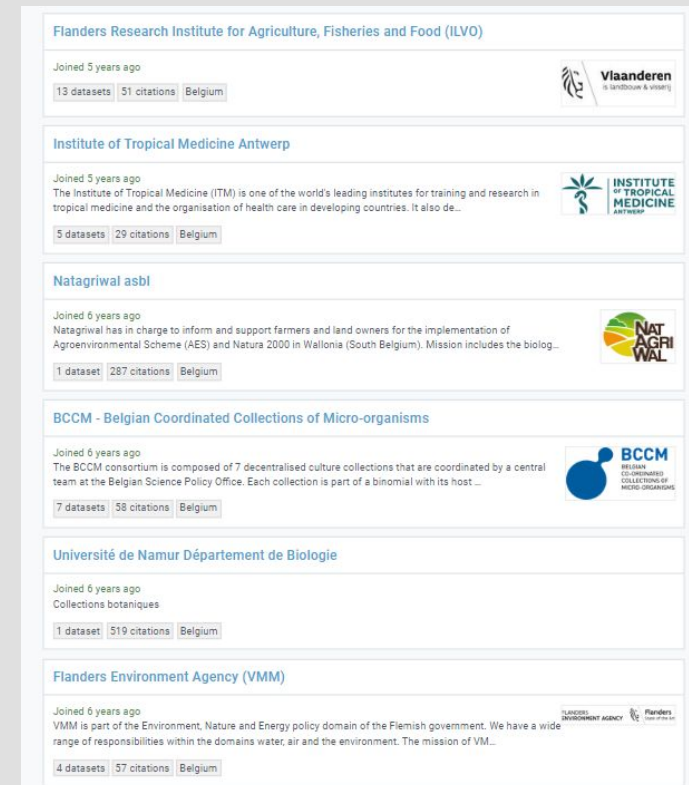
2022

- The Belgian Biodiversity Platform is the only GBIF publisher in Belgium
- 25 Organisations are GBIF publisher in Belgium
  - institutions & universities
  - NGO's / private companies
  - Museums
  - Governmental agencies...






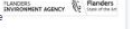


This screenshot shows a list of GBIF publishers from 2004. Each entry includes the publisher's name, a 'New publisher' badge, the date they joined GBIF, a brief description, and their logo. The publishers listed are:

- Leefmilieu Brussel**: Joined 16 days ago. Description: Founded in 1989, Brussels Environment is the public service for the environment and energy of the Brussels Capital Region. Logo: 
- Agency for Nature and Forests (Flemish Government)**: Joined a month ago. Description: Agentschap voor Natuur en Bos ENG: Within the scope of the LIFE RIPARIAS project, we will publish some monitoring data on invasive plants and crayfish. NL: in het kader van het LIFE RIPARIAS project... Logo: 
- Contrat de rivière Senne**: Joined 7 months ago. Description: The "Contrat de rivière Senne" is an NGO acting as a participative platform gathering stakeholders involved with water management across the river catchment of the Senne in Wallonia (Belgium). All are... Logo: 
- RATO vzw**: Joined a year ago. Description: RATO vzw is an management and expertise centre around rat and non native species control. Our working area is mainly East Flanders. RATO deals with invasive exotic plants, gees, muskrat, etc. Logo: 
- Province East Flanders**: Joined a year ago. Description: We are a regional government that works in the field of recreation, education (specialised schools), environment (e.g. permits), nature (smaller forests and nature preserves), watercourses. Hence we d... Logo: 
- Natagora**: Joined 4 years ago. Description: Natagora, which is active in Wallonia and in Brussels, works to halt the loss of biodiversity and to restore nature in a better condition, and in balance with human activities. Natagora works to study... Logo: 

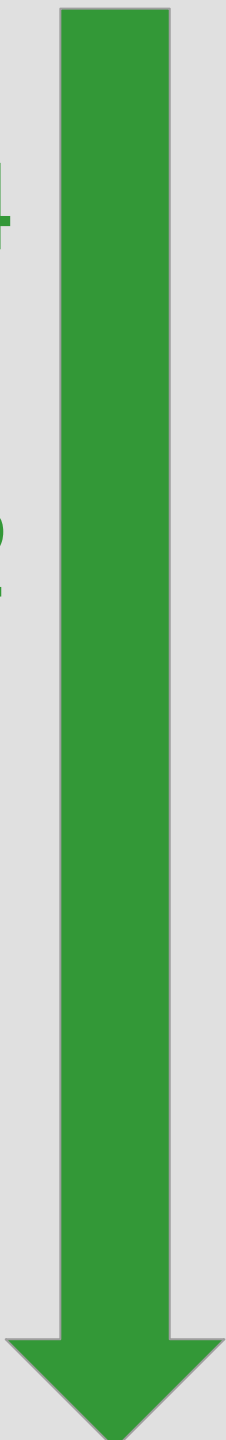


This screenshot shows a list of GBIF publishers from 2022. Each entry includes the publisher's name, the date they joined GBIF, a brief description, and their logo. The publishers listed are:

- Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)**: Joined 5 years ago. Description: 
- Institute of Tropical Medicine Antwerp**: Joined 5 years ago. Description: The Institute of Tropical Medicine (ITM) is one of the world's leading institutes for training and research in tropical medicine and the organisation of health care in developing countries. It also de... Logo: 
- Natagriwal asbl**: Joined 6 years ago. Description: Natagriwal has in charge to inform and support farmers and land owners for the implementation of Agroenvironmental Scheme (AES) and Natura 2000 in Wallonia (South Belgium). Mission includes the biolog... Logo: 
- BCCM - Belgian Coordinated Collections of Micro-organisms**: Joined 6 years ago. Description: The BCCM consortium is composed of 7 decentralised culture collections that are coordinated by a central team at the Belgian Science Policy Office. Each collection is part of a binomial with its host... Logo: 
- Université de Namur Département de Biologie**: Joined 6 years ago. Description: Collections botaniques. Logo: 
- Flanders Environment Agency (VMM)**: Joined 6 years ago. Description: VMM is part of the Environment, Nature and Energy policy domain of the Flemish government. We have a wide range of responsibilities within the domains water, air and the environment. The mission of VM... Logo: 

2004

2022



**WoRMS Editorial Board**

Joined 7 years ago  
The aim of a World Register of Marine Species (WoRMS) is to provide an authoritative and comprehensive list of names of marine organisms, including information on synonymy. While highest priority goes...

1 dataset | 1 citation | Belgium

**Natuurpunt**

Joined 7 years ago  
Natuurpunt is Flanders largest NGO in nature conservation. Our key missions are nature reserve management, nature policy, education, and research. We coordinate and support volunteers in collecting in...

11 datasets | 622 citations | Belgium

**Meise Botanic Garden**

Joined 8 years ago  
Meise Botanic Garden (MeiseBG) has a long history that goes back to 1796. Today, it is an internationally recognized botanic garden in a domain of 92 hectares, and a center of excellence for plant bio...

18 datasets | 1.031 citations | Belgium

**Université Libre de Bruxelles (ULB)**

Joined 9 years ago  
The Université libre de Bruxelles has 12 faculties that cover all the disciplines, closely combining academic input and research. It offers almost 40 undergraduate programmes and 247 graduate programm...

5 datasets | 456 citations | Belgium

**Flanders Marine Institute**

Joined 11 years ago  
The Flanders Marine Institute (VLIZ) is a centre for marine and coastal research. As a partner in various projects and networks it promotes and supports the international image of Flemish marine scienc...

198 datasets | 138 citations | Belgium

**Service Public de Wallonie – Département d'Etude du Milieu Naturel et Agricole (SPW – DEMNA)**

Joined 11 years ago

5 datasets | 314 citations | Belgium

**Royal Belgian Institute of Natural Sciences**

Joined 11 years ago  
Royal Belgian Institute of Natural Sciences

26 datasets | 910 citations | Belgium

**Ghent University**

Joined 13 years ago  
Ghent University is a top 100 university and one of the major universities in Belgium. 11 faculties offer a wide range of courses and conduct in-depth research in both exact and social sciences.

13 datasets | 485 citations | Belgium

**Research Institute for Nature and Forest (INBO)**

Joined 13 years ago  
The Research Institute for Nature and Forest (INBO) is a scientific institute of the Flemish Government in Belgium. INBO has resulted from the merger of the Institute for Forestry and Game Management ...

92 datasets | 713 citations | Belgium

**Belgian Biodiversity Platform**

Joined 13 years ago  
<http://www.biodiversity.be>

29 datasets | 639 citations | Belgium

**Royal Museum for Central Africa, Belgium**

Joined 13 years ago  
<http://www.africamuseum.be>

7 datasets | 204 citations | Belgium

**University of Mons-Hainaut**

Joined 13 years ago  
<http://zoologie.umh.ac.be>

1 dataset | 61 citations | Belgium

building the network

# Belgium

A GBIF Voting participant from Europe and Central Asia  
Names of countries and areas are based on the ISO 3166-1 standard

SUMMARY DATA ABOUT DATA PUBLISHING PARTICIPATION ALIEN SPECIES  $\infty$  MORE...

ACTIVITY REPORT  $\updownarrow$

## DATA ABOUT BELGIUM

35,090,907

Occurrences

1,186

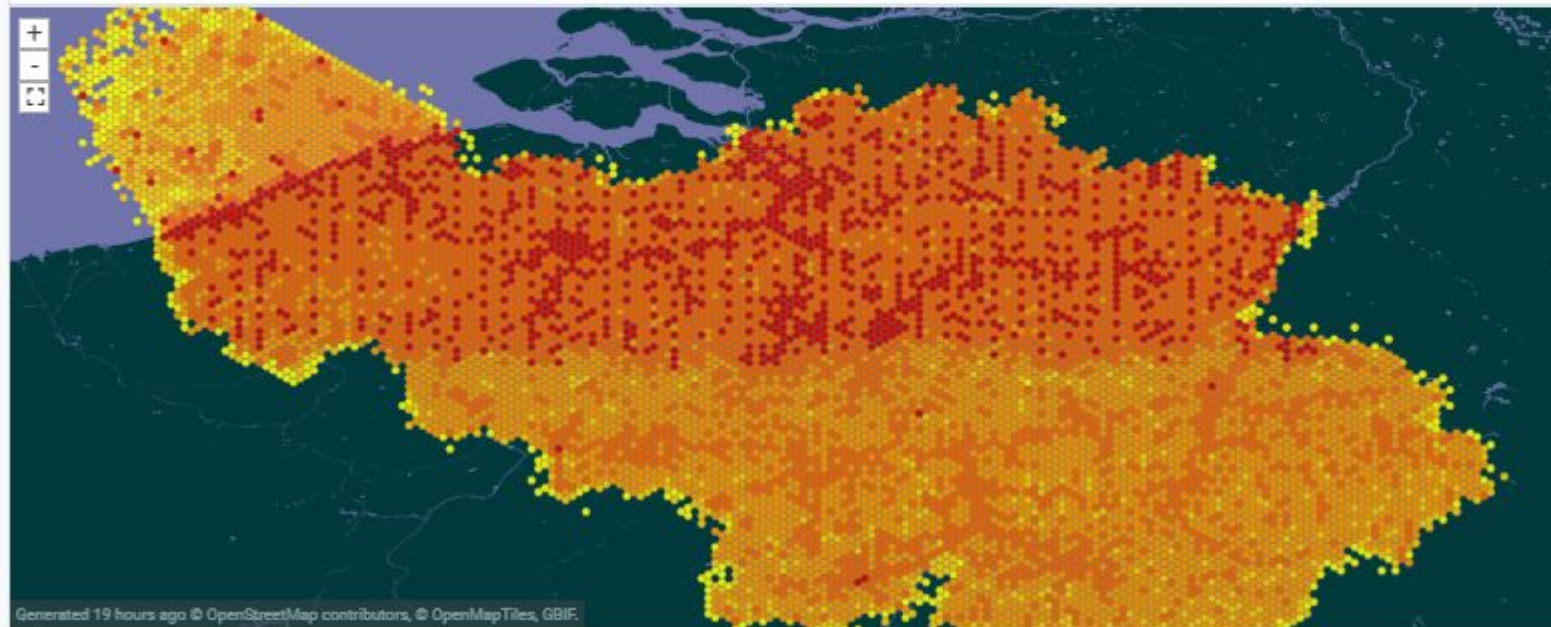
Datasets

44

Countries and areas contribute data

403

Publishers



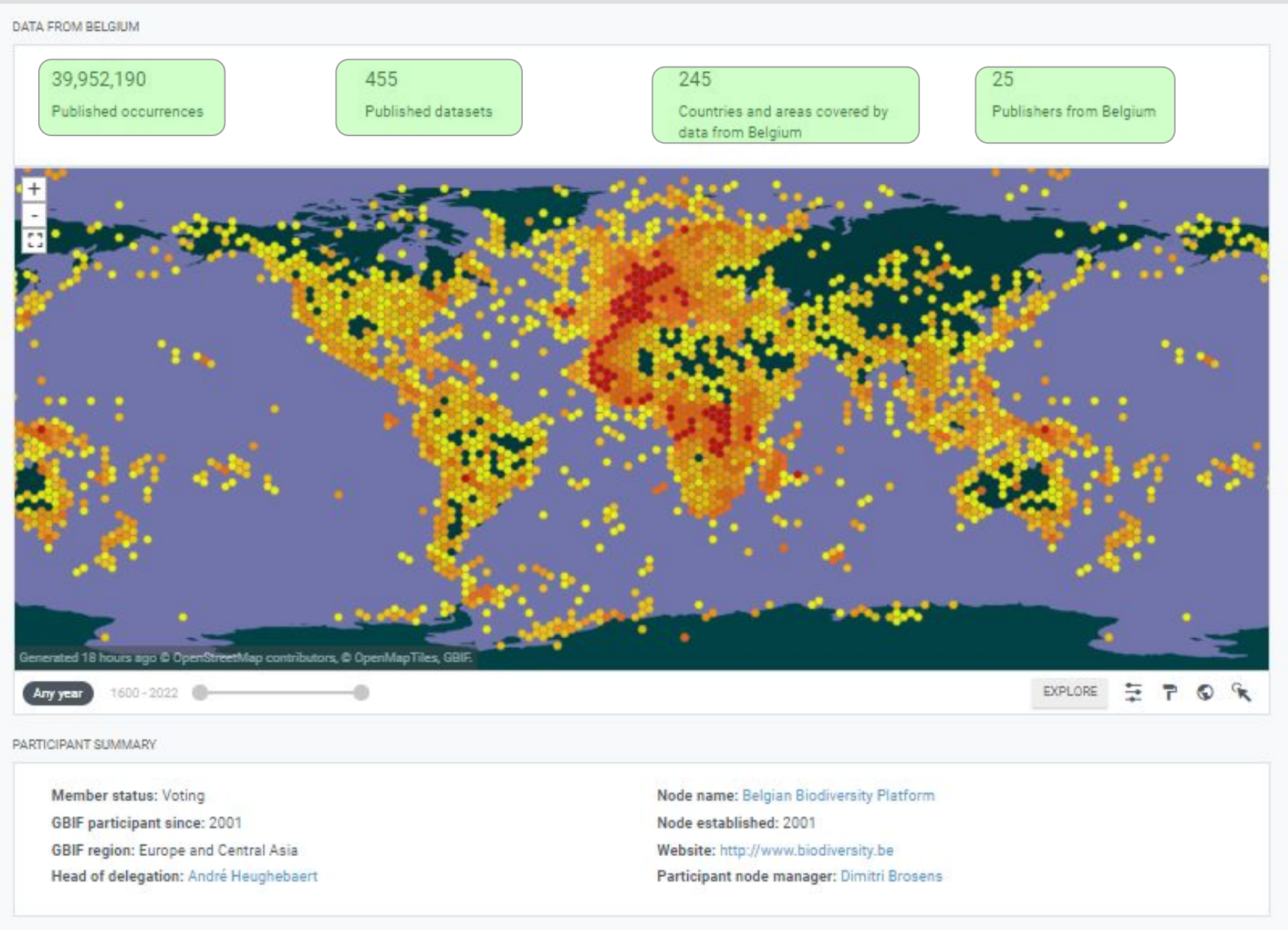
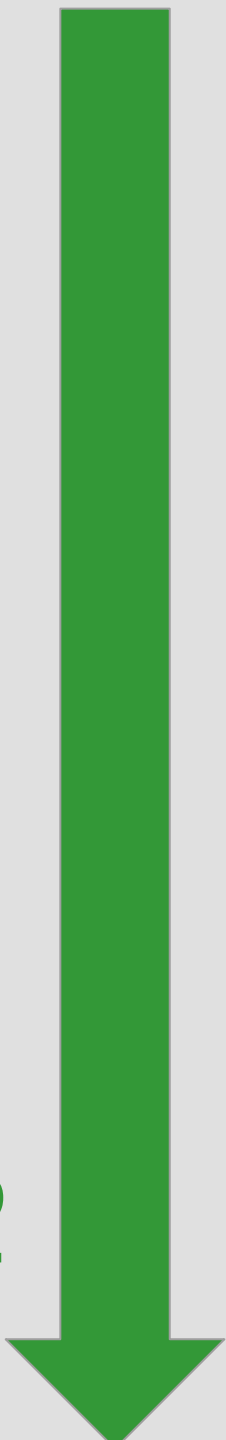
Any year 1600 - 2022

EXPLORE AREA



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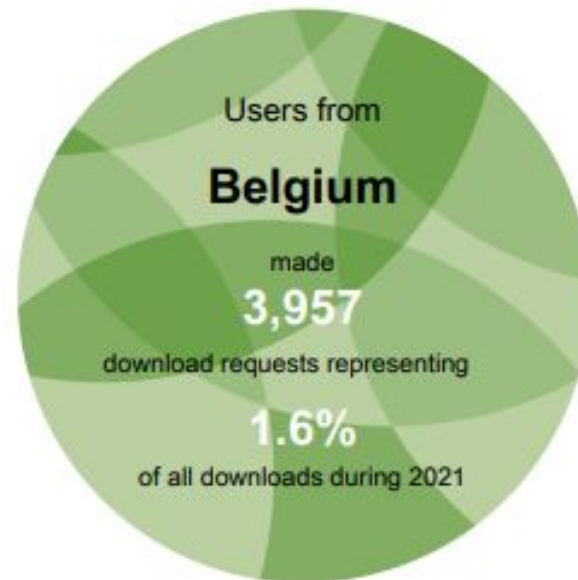
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## Access and usage

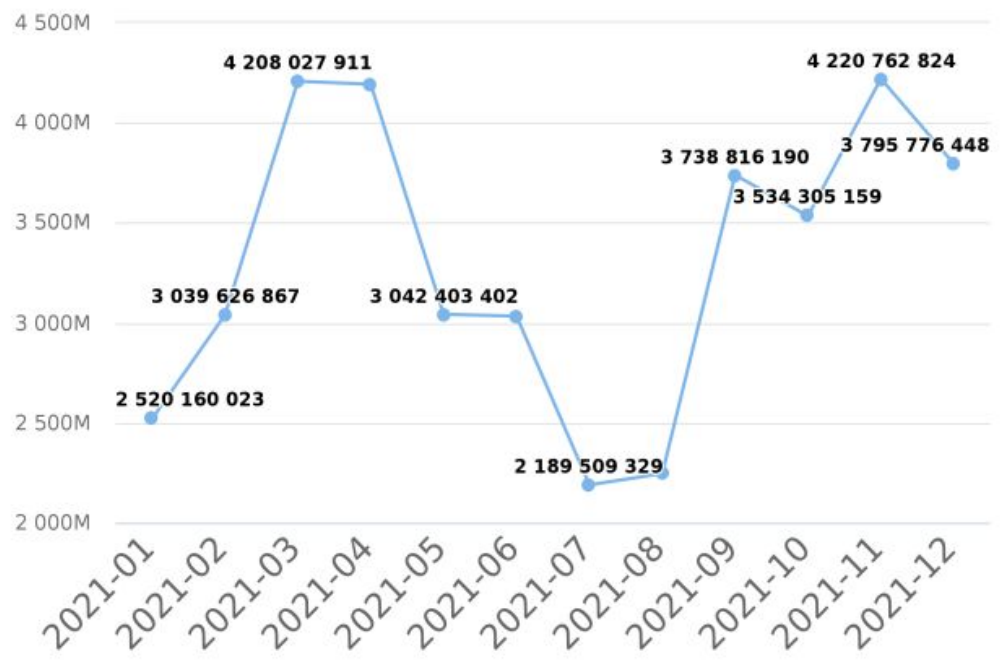
### Data downloads on GBIF.org from users in Belgium



Monthly downloads requested by users in Belgium

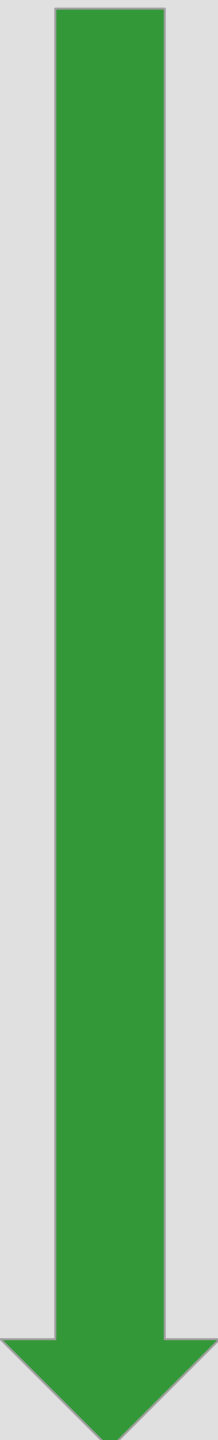
2022

## Occurrence records downloaded from GBIF.org, published by institutions in Belgium



Number of occurrence records downloaded via GBIF.org published by institutions in Belgium

2022



- 207 Peer reviewed publications on GBIF mediated data with researchers/authors from Belgium since 2000
- More than 8000 in total

SEARCH RESOURCES | 209 RESULTS

**Low vulnerability of the Mediterranean antipatharian *Antipathella subpinnata* (Ellis & Solander, 1786) to ocean warming** Literature

Methilde, G. Tom, Z. Lorenzo, B. Pascal, R. Marsia, B. Margherita, T. ... - (2023) Ecological Modelling  
Antipatharians (black corals) are major components of mesophotic ecosystems in the Mediterranean Sea. The arborescent species *Antipathella subpinnata* has received particular attention as it is the most abundant and forms dense forests harbouring high levels of biodiversity. This species is currently...

Antipatharia • Mediterranean Sea • Mesophotic • Niche modelling • Physiology • Thermotolerance  
Journal article | Peer-reviewed  
Data referenced in study [DOI 10.15468/gisrct](#) [DOI 10.15468/90drpi](#) [DOI 10.15468/ab2s5x](#) [DOI 10.15468/b9rdf](#) [DOI 10.15468/ldch7a](#)

**Low availability of functional seed trait data from the tropics could negatively affect global macroecological studies, predictive models and plant co...** Literature

Váscher, A. Vandeloek, F. Fernández-Pascual, E. Pérez-Martínez, L. Ullán, T. Diazgranados, M. ... - (2022) Annals of Botany  
Abstract Background Plant seeds have many traits that influence ecological functions, ex situ conservation, restoration success and their sustainable use. Several seed traits are already known to vary significantly between tropical and temperate regions. Here we present t...

Alpine germination • Desiccation sensitivity • Functional seed traits • Geographical bias • Global ecological studies • Post-dispersal embryo growth  
Journal article | Open access | Peer-reviewed  
Data referenced in study [DOI 10.15468/dl.mat4zv](#)

**Biogeography and conservation of desert warthog *Phacochoerus aethiopicus* and common warthog *Phacochoerus africanus* (Artiodactyla: Suidae) in the Horn ...** Literature

de Jong, Y. d'Huart, J. Butynski, T. (2022) Mammalia  
Abstract Two species of warthog are currently widely recognised, the poorly known desert warthog *Phacochoerus aethiopicus* and the widely distributed common warthog *Phacochoerus africanus*. Spatial data for both species were collected during field surveys and from the literature, museums, colleagues, ...

altitudinal limits • ecological separation • rainfall limits • suid • temperature limits  
Journal article | Peer-reviewed

**Chromosome size matters: genome evolution in the cyperid clade** Literature

Elliott, T. Zedek, F. Barrett, R. Bruhl, J. Escudero, M. Hroudová, Z. ... - (2022) Annals of Botany  
Abstract Background and Aims While variation in genome size and chromosome numbers and their consequences are often investigated in plants, the biological relevance of variation in chromosome size remains poorly known. Here, we examine genome and mean chromosome size in t...

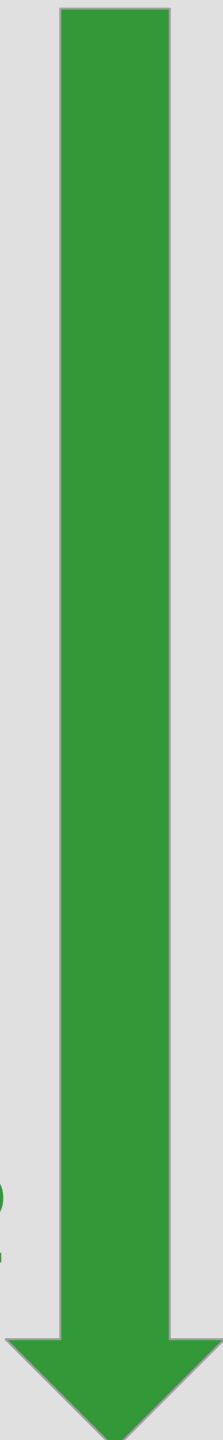
Chromosome number • Cyperaceae • Juncaceae • Thurniaceae • chromosome size • distribution range size  
Journal article | Peer-reviewed  
Data referenced in study [DOI 10.15468/dl.f9cc43](#) [DOI 10.15468/dl.w6gqpk](#) [DOI 10.15468/dl.yw94a8](#)

**Analysis of the impact of the use of and of climate on the vulnerability and availability of *Macaranga beillei* in Côte d'Ivoire** Literature

JEAN, K. FRANCIS, Y. FATOU, T. MOUSSA, K. BAKAYOKO, A. BOGAERT, J. (2022) Biodiversitas  
*Macaranga beillei* Prain is a vulnerable species of the Euphorbiaceae family, used in traditional medicine, and whose habitat is threatened by anthropogenic activities. This study is a contribution to the knowledge of the causes of the threat of this species in Côte

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2022

- Empowering Biodiversity Research conference II 2022

- For an **scientific** audience
- What **tools** are available
- What **projects** have done



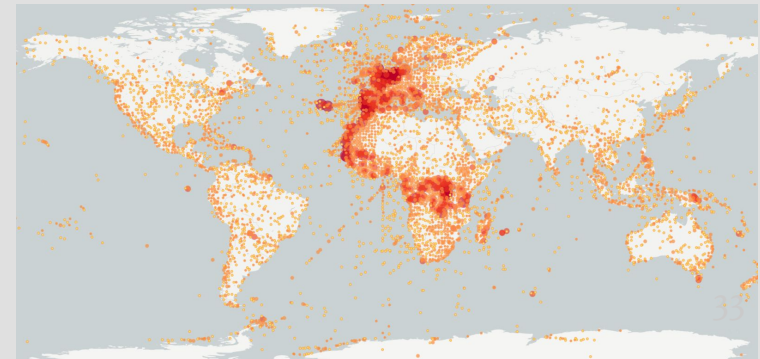
building the network



# 2022

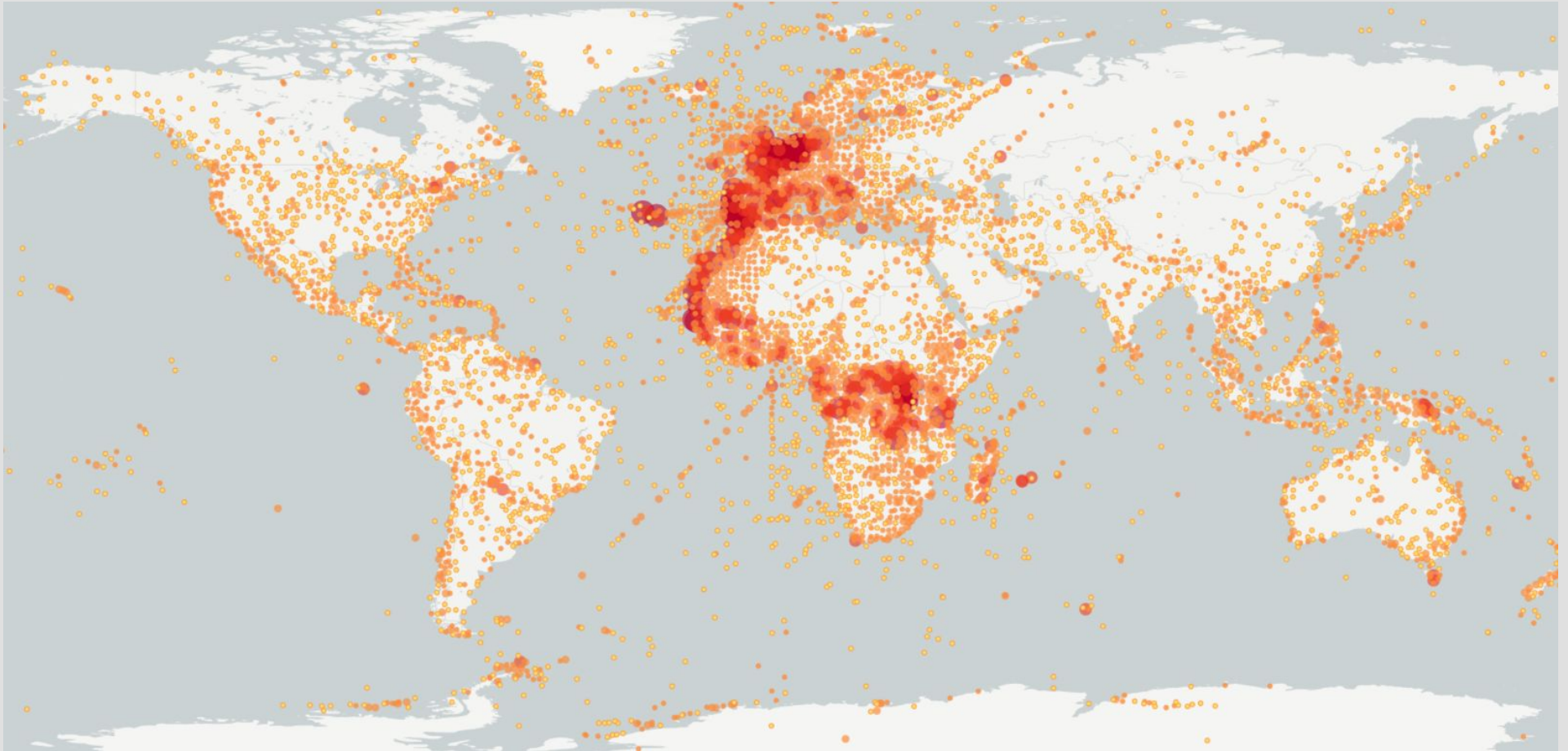
- 35 090907 occurrences in Belgium
- 39 952190 occurrences globally from Belgium
- 25 Data publishers
- 455 published datasets
- Amazing growth in number of GBIF related projects
- More than 200 Peer reviewed articles with Belgian authors
- Increasing number of scientists dealing with biodiversity informatics
- a Belgian community on biodiversity informatics

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2022



Thank you!  
Thank all who published data!  
Thank all who is using the data!  
And a special thanks to the web archive!

