

BELGIË EN DE WERELD VAN OPEN BIODIVERSITEITSDATA

Tussen Bubbels en Silo

Sporen naar
adequate informatie

Donderdag 24 november 2022

Auditorium – Ellipsgebouw
Koning Albert-II laan 35
1030 Brussel



Global Biodiversity
Information Facility

Dimitri Brosens
Belgian Biodiversity Platform
& Research Institute for Nature and Forest (INBO)

dimitri.brosens@inbo.be

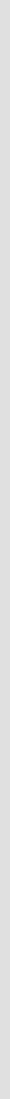
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Open science lab for biodiversity (INBO)

Clariss: LINNÆI. M. D.
METHODUS plantarum SEXUALIS
in SISTEMATE NATURÆ
descripta

The plate contains 20 botanical illustrations, each labeled with a letter from A to U. The illustrations are arranged in a grid-like fashion, with some rows having four items and others having three. The drawings are colored in a style typical of 18th-century scientific publications, using shades of brown, red, blue, and yellow. The illustrations depict various parts of plants, including stamens, pistils, and fruits. Some are shown in cross-section or in detail, while others are more general representations. The labels A through U are placed directly below each corresponding illustration.

Introduction



No. 15 ROOSEVELT MUSEUM.
Cuculus glandarius
1843 / 31
Hab. *Shetes Egypt* ♂

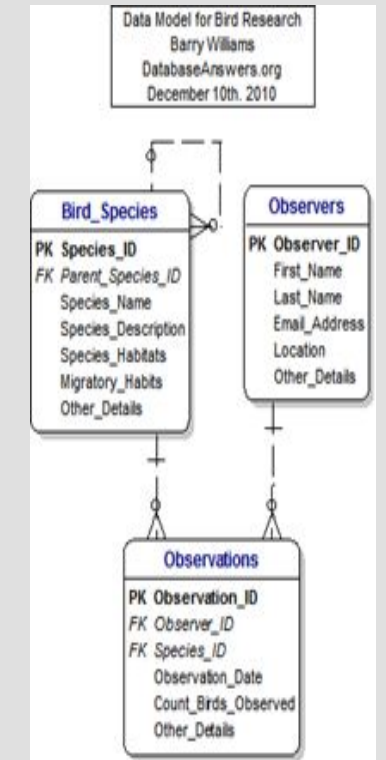
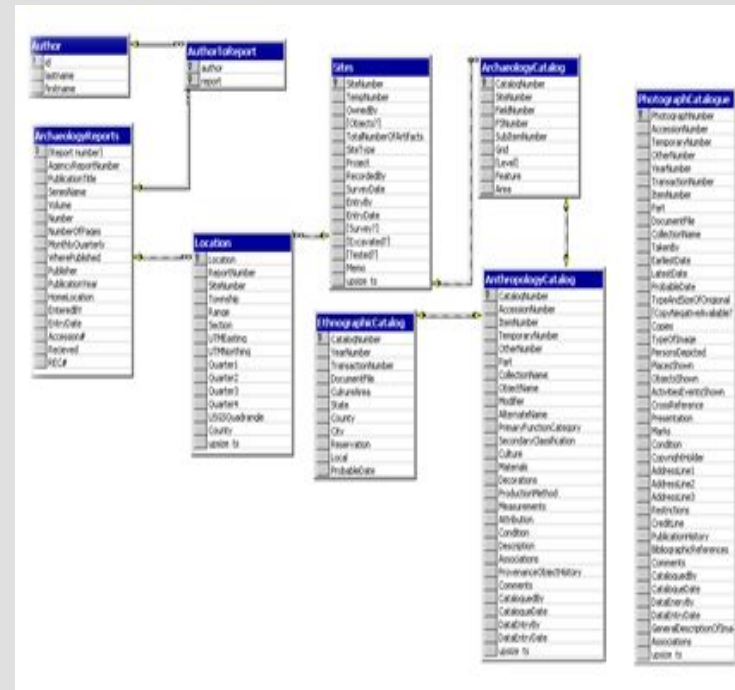
The collage features several geological specimens and their labels:

- Top Left:** Three dark, irregularly shaped rock specimens.
- Top Center:** A label from the U.S. NATIONAL MUSEUM, DIVISION OF MINERALOGY, dated 1910, for specimen B 2119, identified as AGONITE from Felling, Idaho, U.S.A.
- Top Right:** A label for DIALLOGITE (CASE) from the MUSEE D'ARNAULT & LAURENT.
- Middle Left:** A label for a specimen from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.
- Middle Center:** A label from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.
- Middle Right:** A label from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.
- Bottom Left:** A label from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.
- Bottom Center:** A label from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.
- Bottom Right:** A label from the U.S. NATIONAL MUSEUM, dated 1910, for specimen 1770 (1910), identified as AGONITE from Felling, Idaho, U.S.A.

[illegible]

1982

- Use of computers & databases
 - LOTUS 123
 - ViSICALC



Introduction

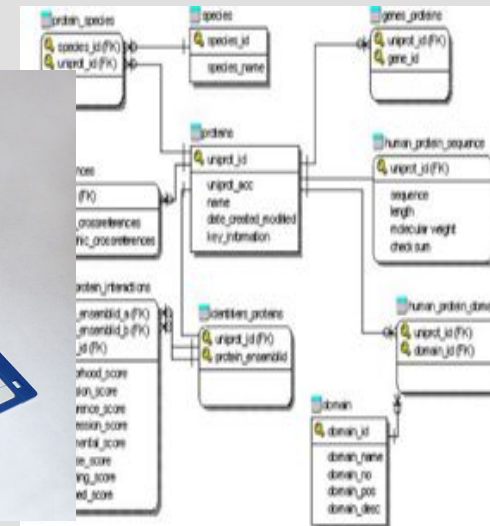


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1	EMP	EMP NAME	DEPTNO	JOB	YEARS	SALARY	BONUS			
2	1777	Asifali	4000	Sales	2	40000	10000			
3	81964	Brown	6000	Sales	3	45000	10000			
4	40178	Burns	6000	Mgr	4	75000	25000			
5	50786	Caeser	7000	Mgr	3	65000	25000			
6	40692	Curly	3000	Mgr	5	65000	20000			
7	34791	Dabavrett	7000	Sales	2	45000	10000			
8	84884	Daniels	1000	President	8	150000	100000			
9	59937	Deapsey	3000	Sales	3	40000	10000			
10	51515	Donovan	3000	Sales	2	30000	9000			
11	40138	Fields	4000	Mgr	5	70000	25000			
12	91574	Fiklare	1000	Admin	6	35000	---			
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DATA_MFG										

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:

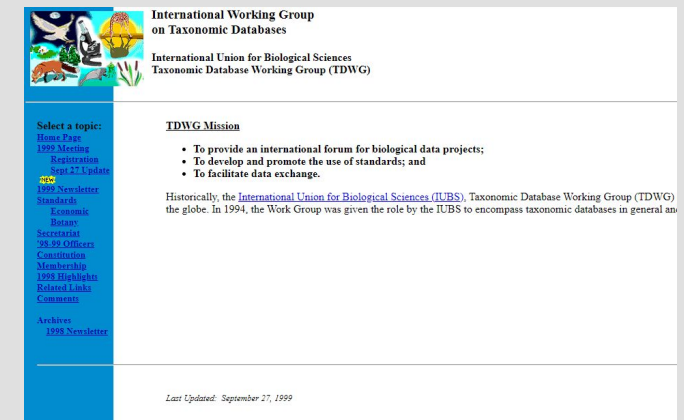
- **Develops, adopts, and promotes standards** and guidelines for the recording, discovery, exchange, and integration of data about organisms,
- **Promotes the use of these standards** and guidelines through the most appropriate and effective means, and
- **Acts as a forum for discussion** about biodiversity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

1991



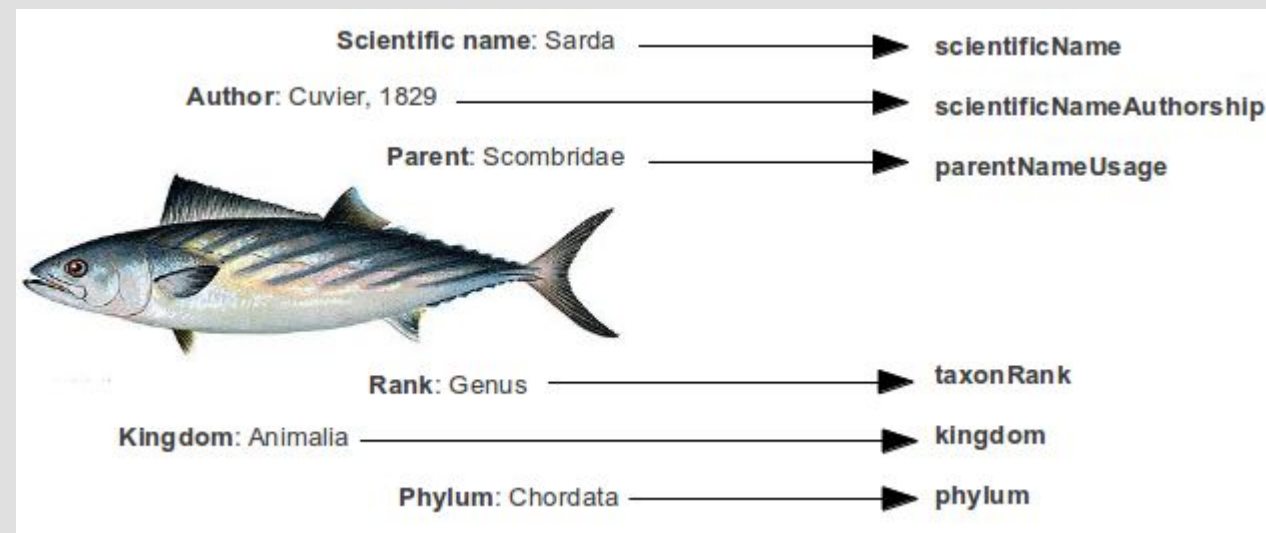
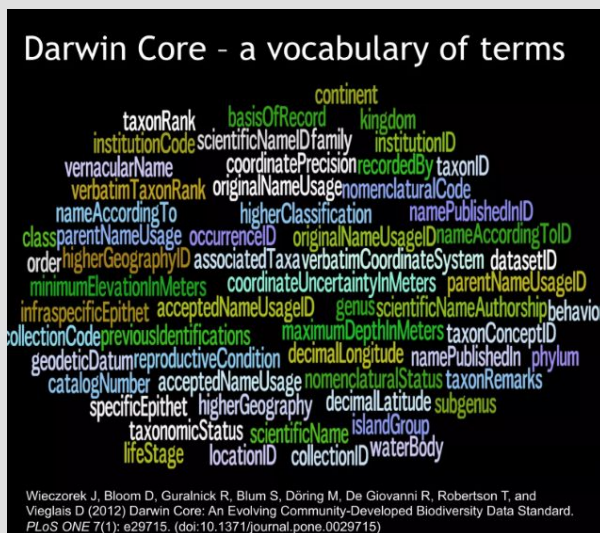
Introduction

1994



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.



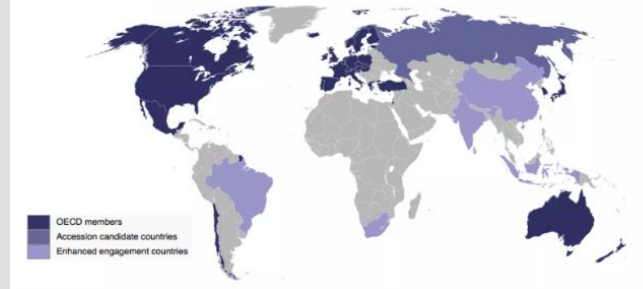
1999

- **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


Welcome on "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>

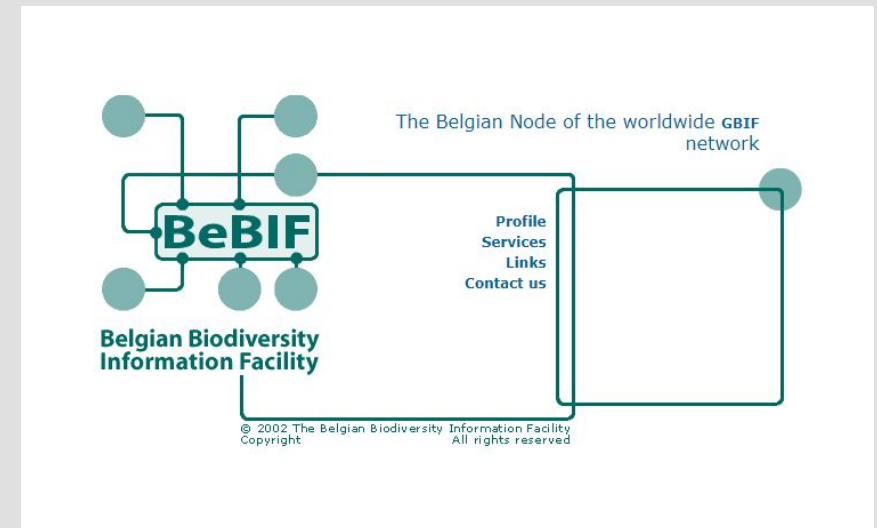
The Belgian Clearing-House Mechanism (CHM), the national portal site for information exchange on all matters related to the Convention on Biological Diversity (Royal Belgian Institute of Natural Sciences)
<http://www.naturalsciences.be/bch-cbd/homepage.htm>

 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-BIF, 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/>



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



2002

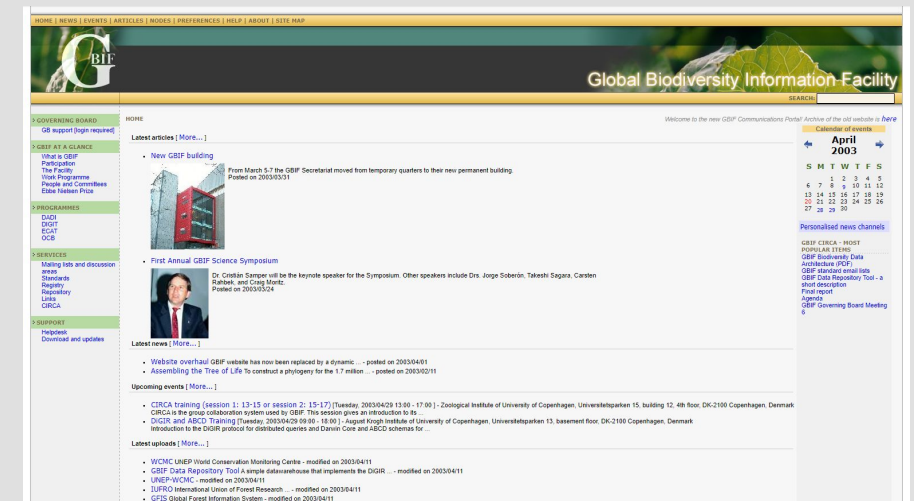
- GBIF is an **international network** of participant data holders dedicated to:

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

2003

- 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".



2004

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

2005

GBIF status (2)

- As of 15 March 2005, its data portal (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>

2 CONTACTS

Julien Cigar Technical point of contact System Administrator jcigar@ulb.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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1 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 feasa.

1,850 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

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 from 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

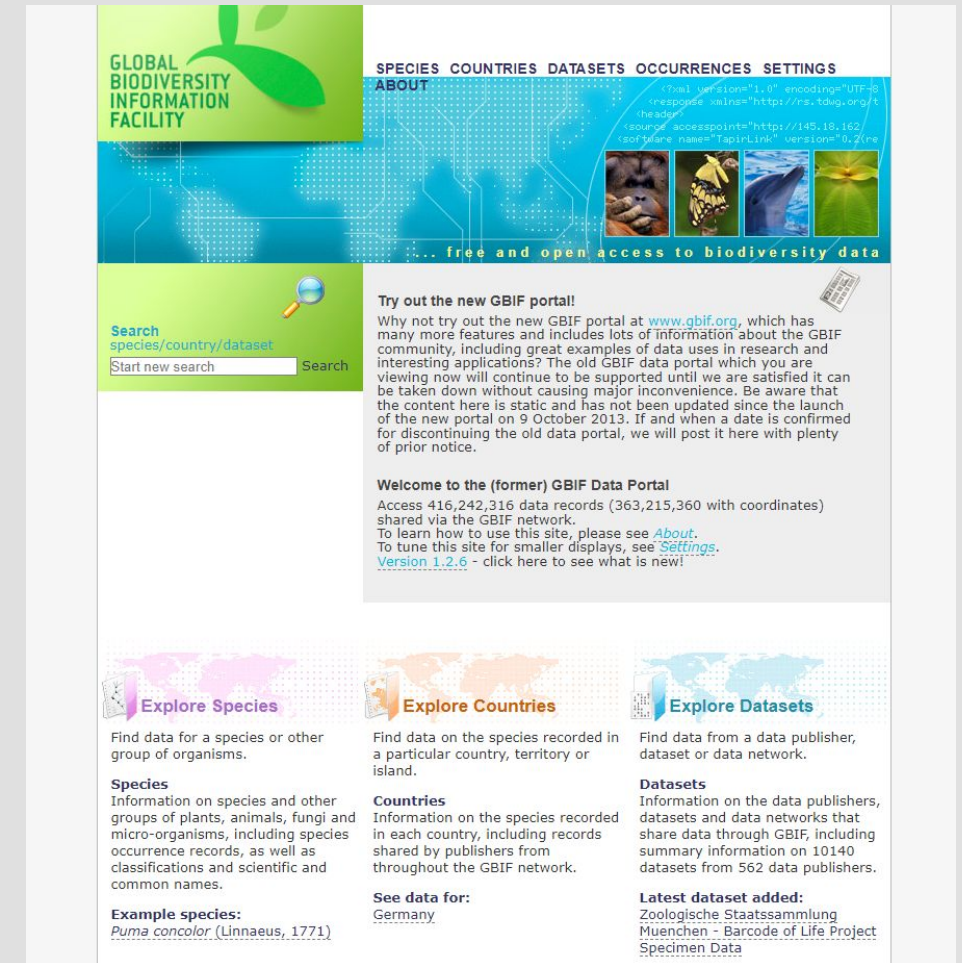
☐ Search by English name ☐ Find exact matches

Contact info | Webmaster

building the infrastructure

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**

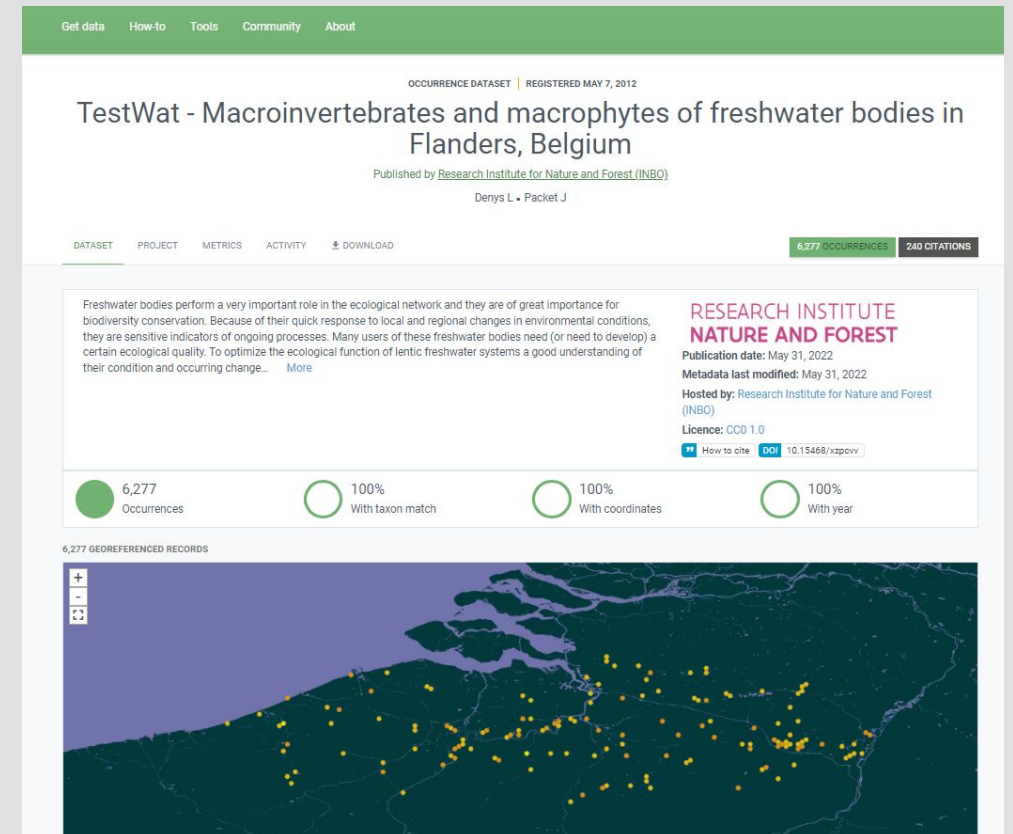


2009

- 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**

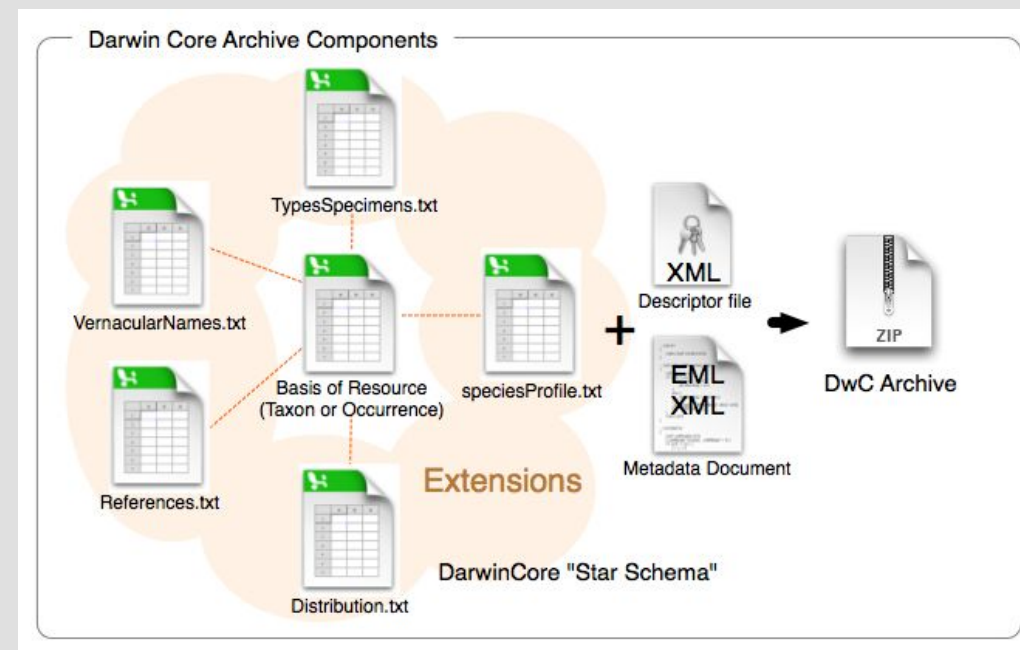
2010

- First dataset on GBIF was published for Flanders



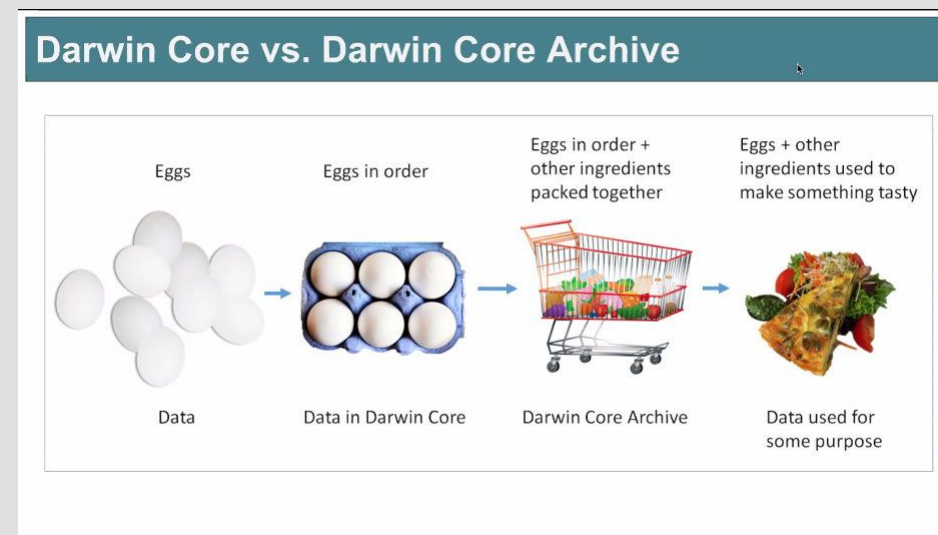
2009

- 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)



2010

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




building the infrastructure

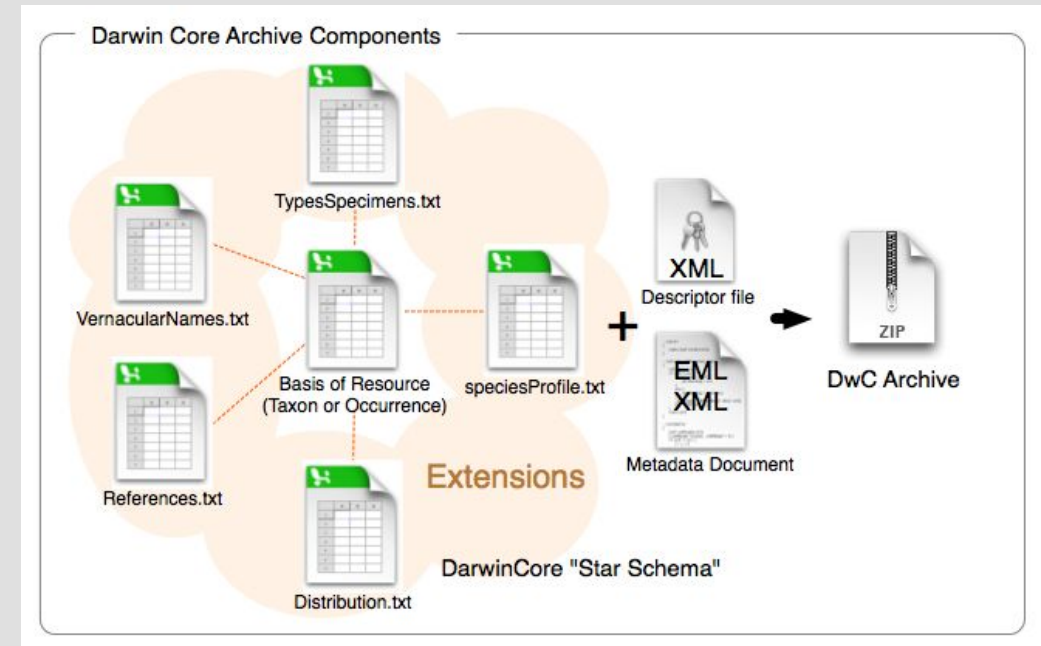
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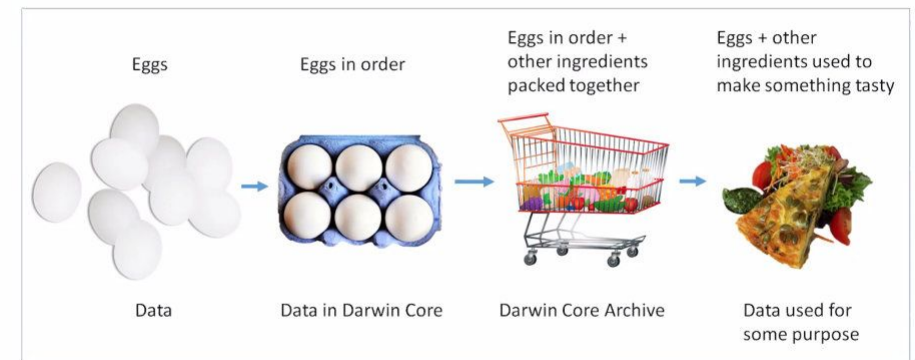
F_{indable} A_{ccessible} I_{nteroperable} R_{eusable}



2010



Darwin Core vs. Darwin Core Archive



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) to publish their data through the IFBL data portal.

2012

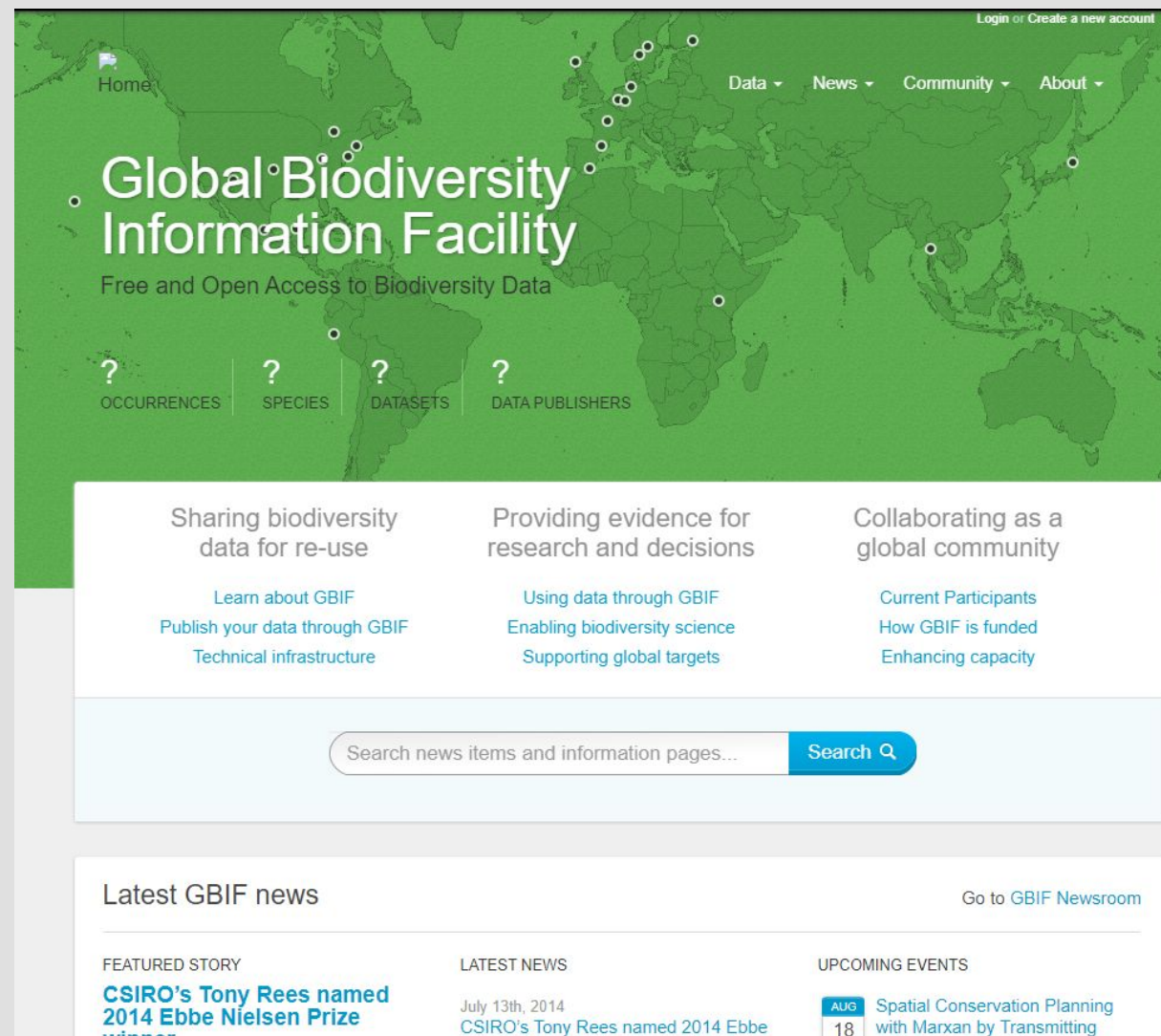
- First Flemish open data day

PROGRAMMA OPEN DATA DAG - 15 JUNI 2012			
OPEN DATA – VAN STRATEGIE TO PRAKTIJK			APPS FOR FLANDERS
08.00 - 09.00 Inschrijvingen - Koffie			
09.00 - 10.00 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	Workshop Ton Zijlstra en Paul Suikerbuijk (Nederland) Het gaat goed met open data in Nederland! 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?	Workshop Tangy De Lestre (Agoria) Overheidsinformatie, een goudmijn voor ondernemers? 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? (i-vlaanderen) - Hoe open data in mijn business model situeren?	Workshop Katrien Janssen (KUL Leuven) Het huidige wettelijke kader in Vlaanderen voor open data. Deze workshop zal ingaan op het huidige wettelijke kader in Vlaanderen met betrekking tot open data, met focus op de wetgeving inzake toegang tot, en hergebruik van overheidsinformatie. De kansen, valkuilen en gevolgen van de nieuwe PSI richtlijnen voorgesteld door de Europese Commissie worden besproken. Het licentiebeleid met betrekking tot het extern beschikbaar stellen van overheidsinformatie krijgt ook bijzondere aandacht in deze workshop. HACKATON: Coördinator: Pieter Colpaert, (ONVA)
10.45 - 11.15 Koffie en mogelijkheid tot netwerken			
11.15 - 12.00	Workshop Pieter Van Ooteyen (De Lijn) 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.	Workshop Twee Verbeke (HP) Open data; systeem- en technische architecturale aspecten. 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 bronstelsel tot een Open Data platform.	Workshop Eddy Van der Stock (V-ICT-OR) Filip Meuris (Intercommunale Leiedal) Open data; hoe start ik in mijn bestuur? Leiedal en V-ICT-OR tonen aan hoe lokale besturen maximaal kunnen participeren in de open-informatiesamenleving. 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 praktijktoets vanuit het Europese project "Opening Up" (OUIP). 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) Open Discussion: How to apply lessons learned from the UK and the world 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.			
13.00 - 14.15			
14.15 - 14.45 Koffie en mogelijkheid tot netwerken			
14.45 - 15.30	Workshop Ton Zijlstra en Paul Suikerbuijk (Nederland) Het gaat goed met open data in Nederland! 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?	Workshop Bart Rousseau (Stad Gent) Reij Royle (V-ICT-OR) Open data; ja natuurlijk! 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 visie en praktijkervaringen delen, waaronder Bart Rousseau die schetst hoe Open data het verschil maakt voor de Stad Gent.	Workshop Katrien Janssen (KUL Leuven) Het huidige wettelijke kader in Vlaanderen voor open data. Deze workshop zal ingaan op het huidige wettelijke kader in Vlaanderen met betrekking tot open data, met focus op de wetgeving inzake toegang tot, en hergebruik van overheidsinformatie. De kansen, valkuilen en gevolgen van de nieuwe PSI richtlijnen voorgesteld door de Europese Commissie worden besproken. Het licentiebeleid met betrekking tot het extern beschikbaar stellen van overheidsinformatie krijgt ook bijzondere aandacht in deze workshop. 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



2014

- Open Belgium 2014
- Open Data dag



Open knowledge
Belgium

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 Makgill](#) - [Nicolas Kint](#) - [Bart Dumolin](#) - [Pol Deltour](#) - [Ton Zijlstra](#) - [Paul Suikerbuijk](#) - [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 Staff members below are proud to show you our attendees, speakers and presenters



Open Knowledge Belgium


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

Knowledge
ation

building
the
network


2015

- Open Belgium 2015
- Both worlds meet


OPEN
BELGIUM
2015

HomeProgrammeSpeakersPhotos and videosPresentationsPartnersAbout


Speakers

**Emmanuel Pieters**
Federal Government
Belgium


Director of the Federal Policy Unit
Digital Agenda, Post and Telecom
Unit

**Michiel Mentens**
Federal Government
Belgium


Advisor of the Federal Policy Unit
Simplification

**Minister Jean-Claude Marcourt**
Walloon Government


Vice-President of the Walloon
Government, Minister of Economy,
Industry, Innovation and Digital

**Noël Van Herreweghe**
Flemish Government


Program manager for Open Data

**François Du Mortier**
CIRB/CIBG


E-government manager CIRB / CIBG

**Jörgen Gren**
European Commission

Member of the cabinet of Andrus
Ansip, Vice-president of the
European Commission and
responsible for the Digital Single
Market

**Dimitri Brosens**
Research Institute for
Nature and Forest

Biodiversity Data Liaison Manager

**Thomas Hermine**
NextRide

Co-founder of 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



Empowering Biodiversity Research conference



Home Programme Workshops Biodiversity Fair Posters Venue Registration Contact About Resources Conference Pictures

Tweets sur #biodiversity OR #biodiversityinformatics OR #gbif OR #blodiv OR #lifewatch OR #eubon

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.

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. After this conference a series of related **workshops** will be organized.

RESEARCH INSTITUTE
NATURE AND FOREST



2016

Belgium

12-month report
ending 31 December 2016

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

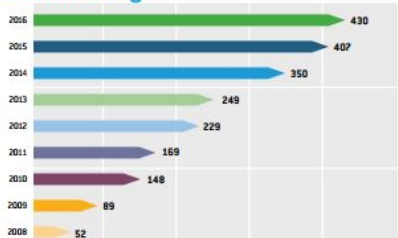


Figure 1. Number of peer-reviewed publications citing use of global GBIF-mediated data



2022

generated January 2022

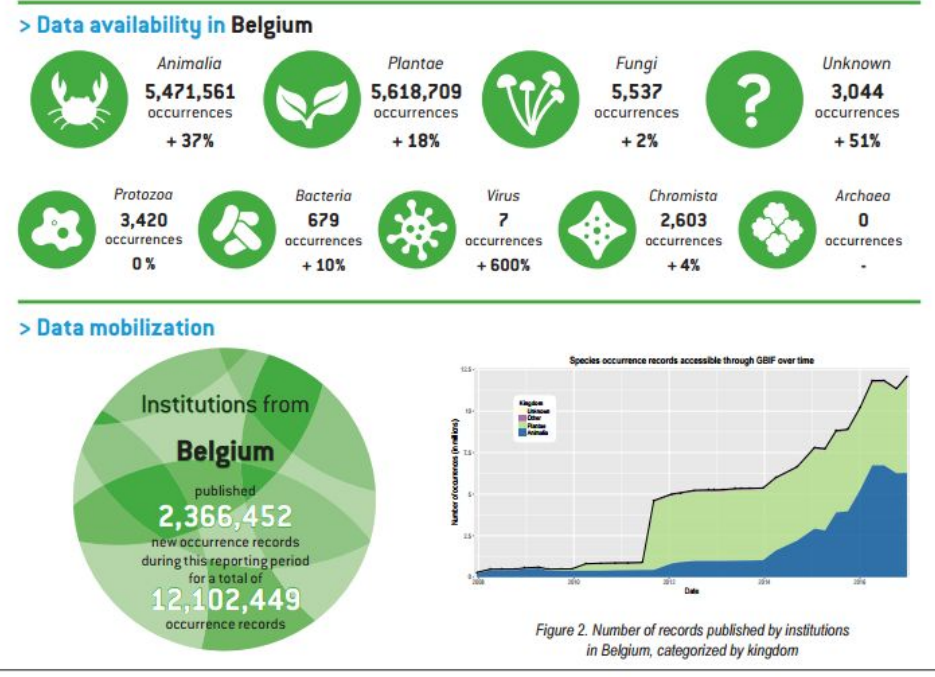
Belgium

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.

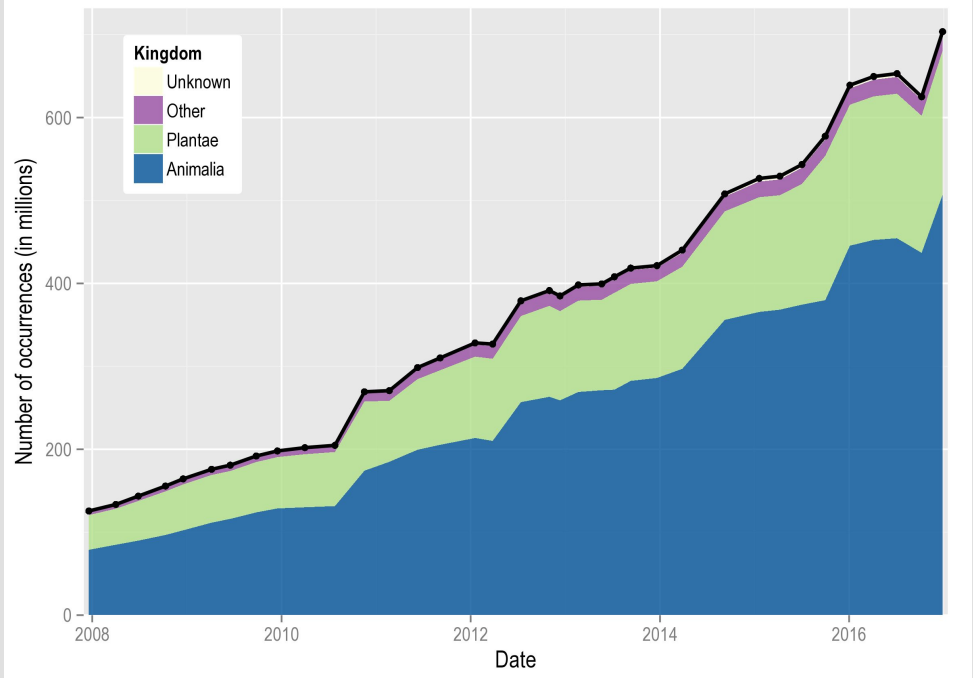
► Access and usage



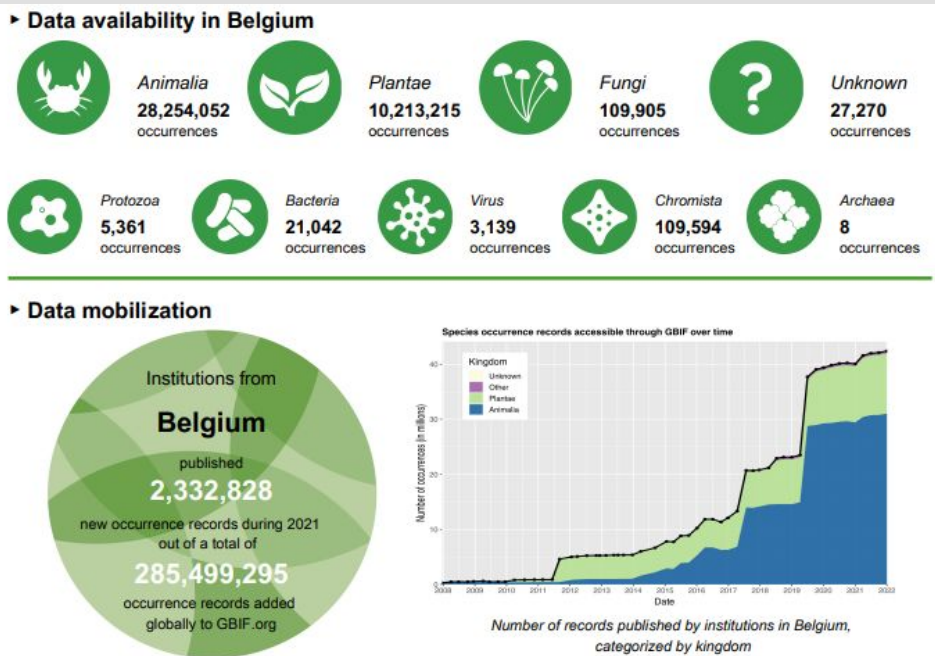
2016



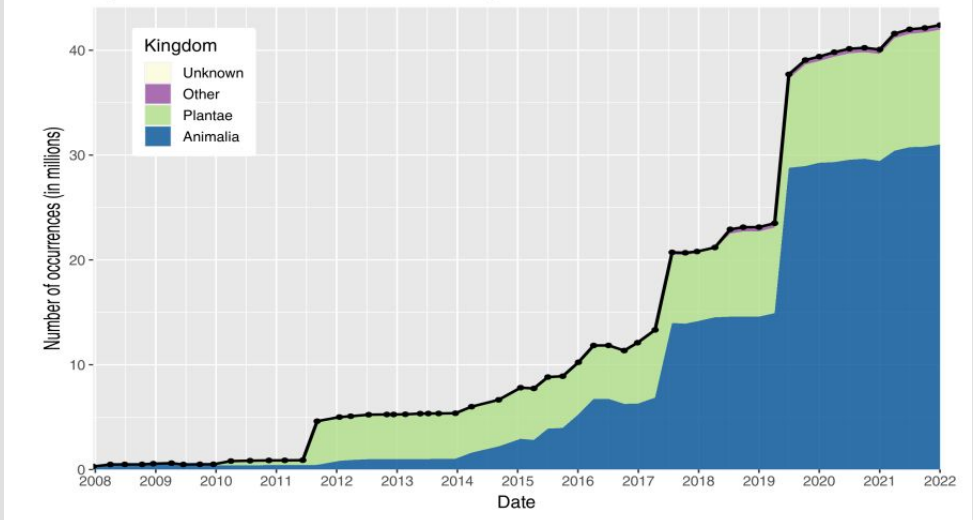
Species occurrence records accessible through GBIF over time



2022



Species occurrence records accessible through GBIF over time



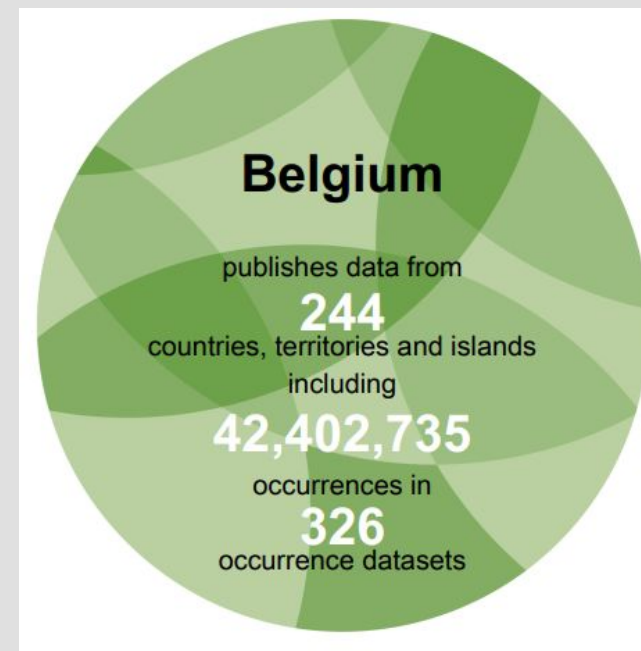
Number of records published by institutions in Belgium, categorized by kingdom

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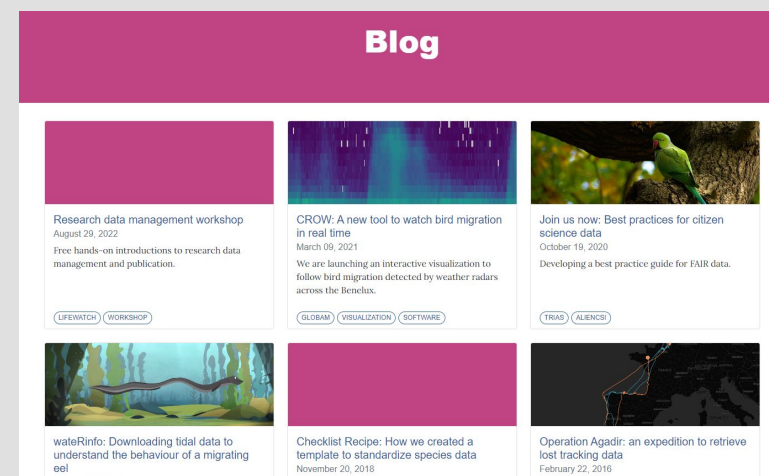
2009

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

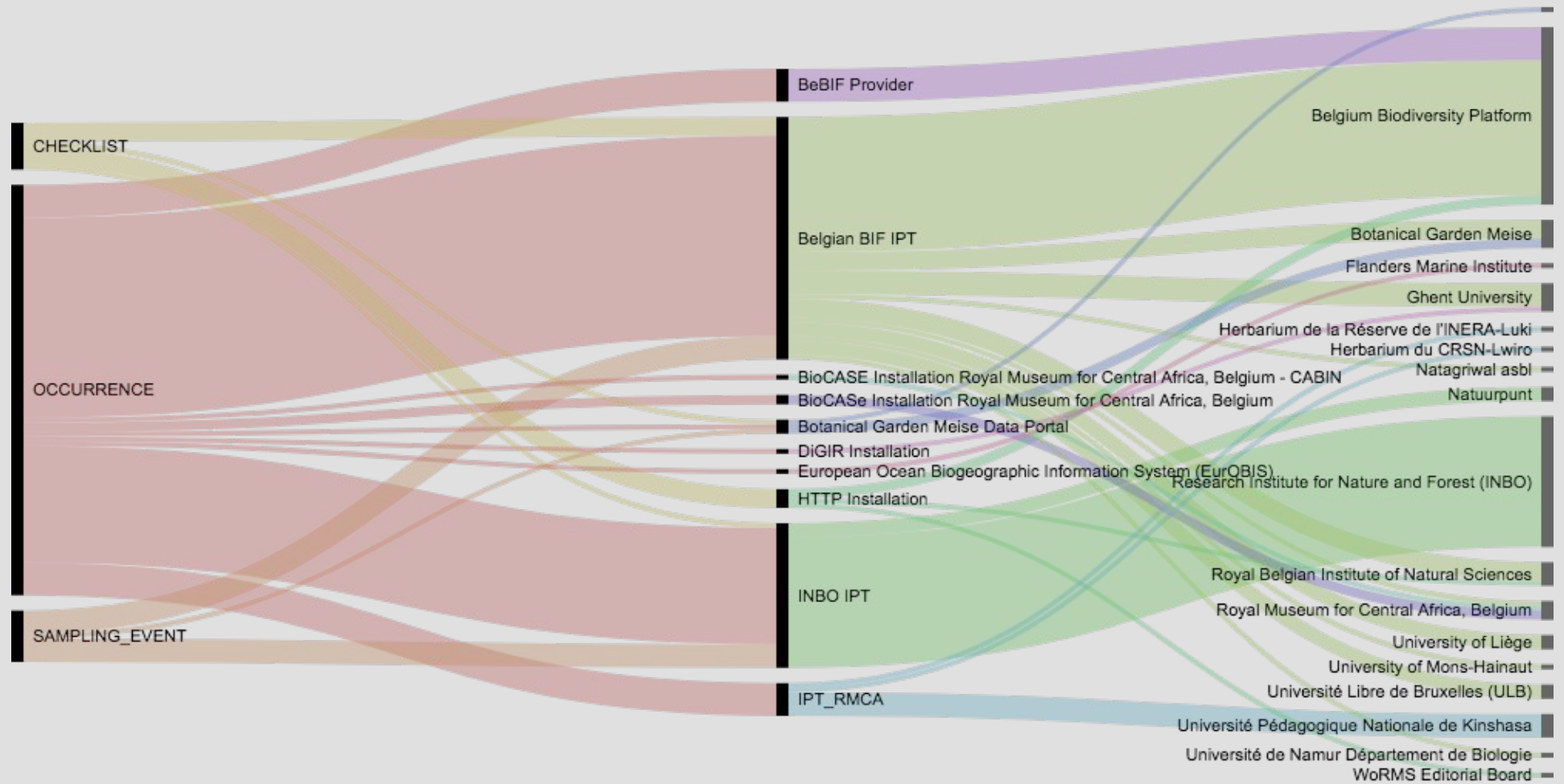


2022

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



2016



2022

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2004

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...

Leefmilieu Brussel New publisher

Joined 16 days ago
Founded in 1989, Brussels Environment is the public service for the environment and energy of the Brussels Capital Region. Our areas of activity cover the environment in the broad sense, including: ...

Belgium

Agency for Nature and Forests (Flemish Government) New publisher

Joined a month ago
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...

2 datasets | Belgium

Contrat de rivière Senne

Joined 7 months ago
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...

2 datasets | 2 citations | Belgium

RATO vzw

Joined a year ago
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.

2 datasets | 14 citations | Belgium

Province East Flanders

Joined a year ago
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...

2 datasets | Belgium

Natagora

Joined 4 years ago
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...

3 datasets | 336 citations | Belgium

Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)

Joined 5 years ago

13 datasets | 51 citations | Belgium

Institute of Tropical Medicine Antwerp

Joined 5 years ago
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...

5 datasets | 29 citations | Belgium

Natagriwal asbl

Joined 6 years ago
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 biog...

1 dataset | 287 citations | Belgium

BCCM - Belgian Coordinated Collections of Micro-organisms

Joined 6 years ago
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 ...

7 datasets | 58 citations | Belgium

Université de Namur Département de Biologie

Joined 6 years ago
Collections botaniques

1 dataset | 519 citations | Belgium

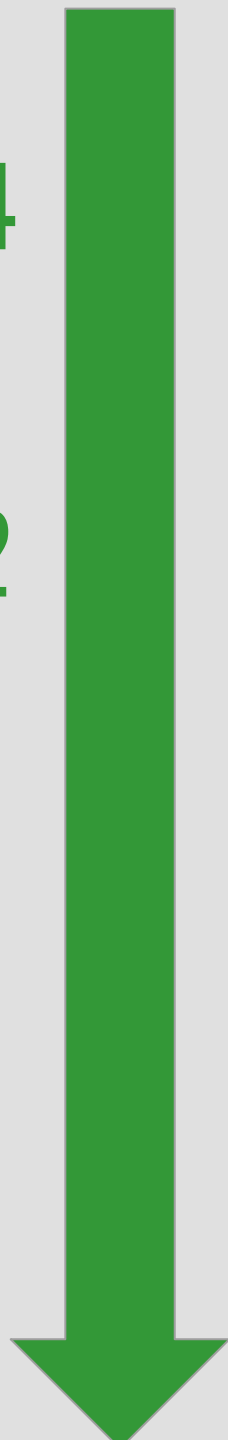
Flanders Environment Agency (VMM)






Joined 6 years ago
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...



4 datasets | 57 citations | Belgium

2004

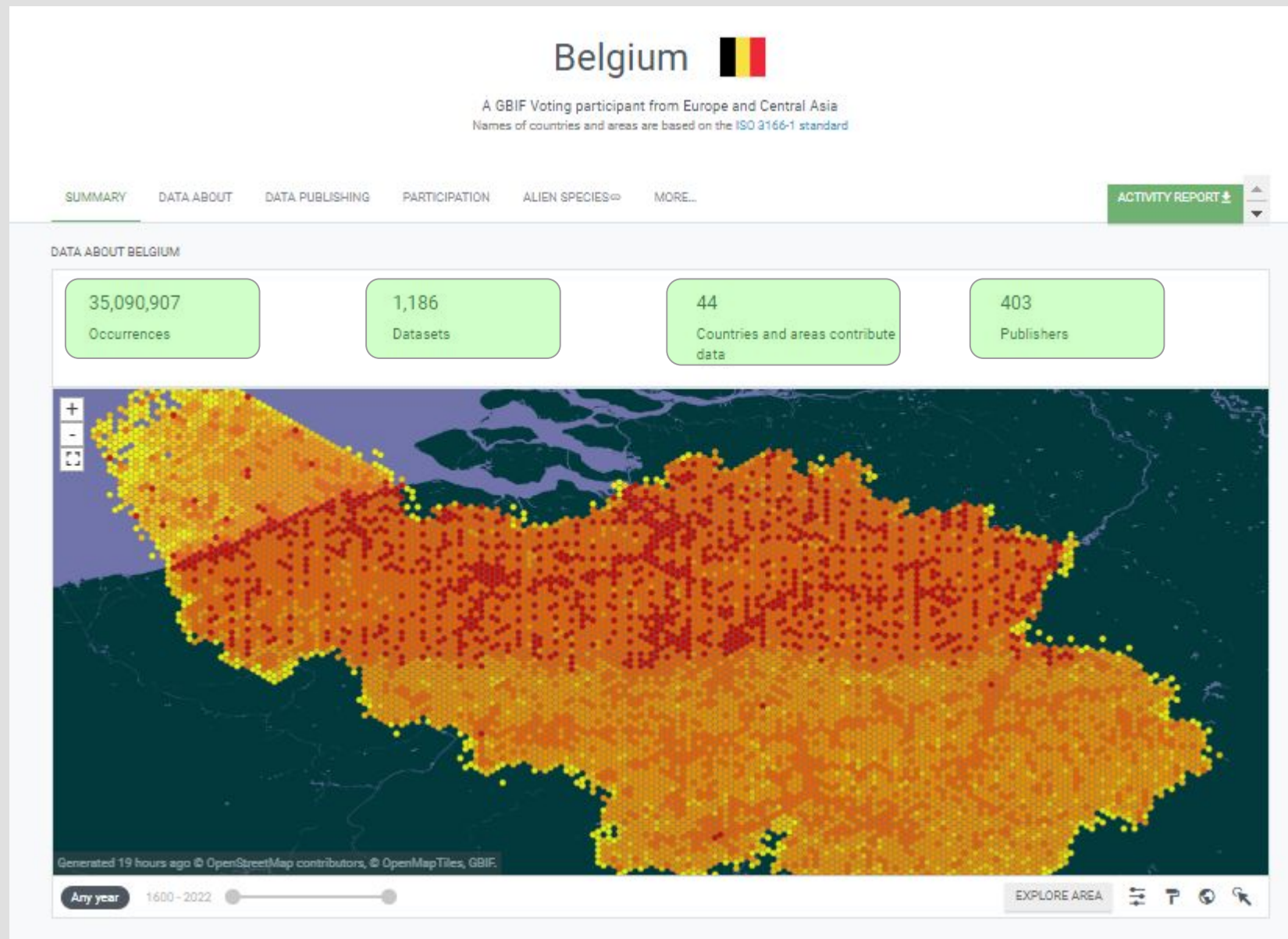
2022



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 scien... 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	

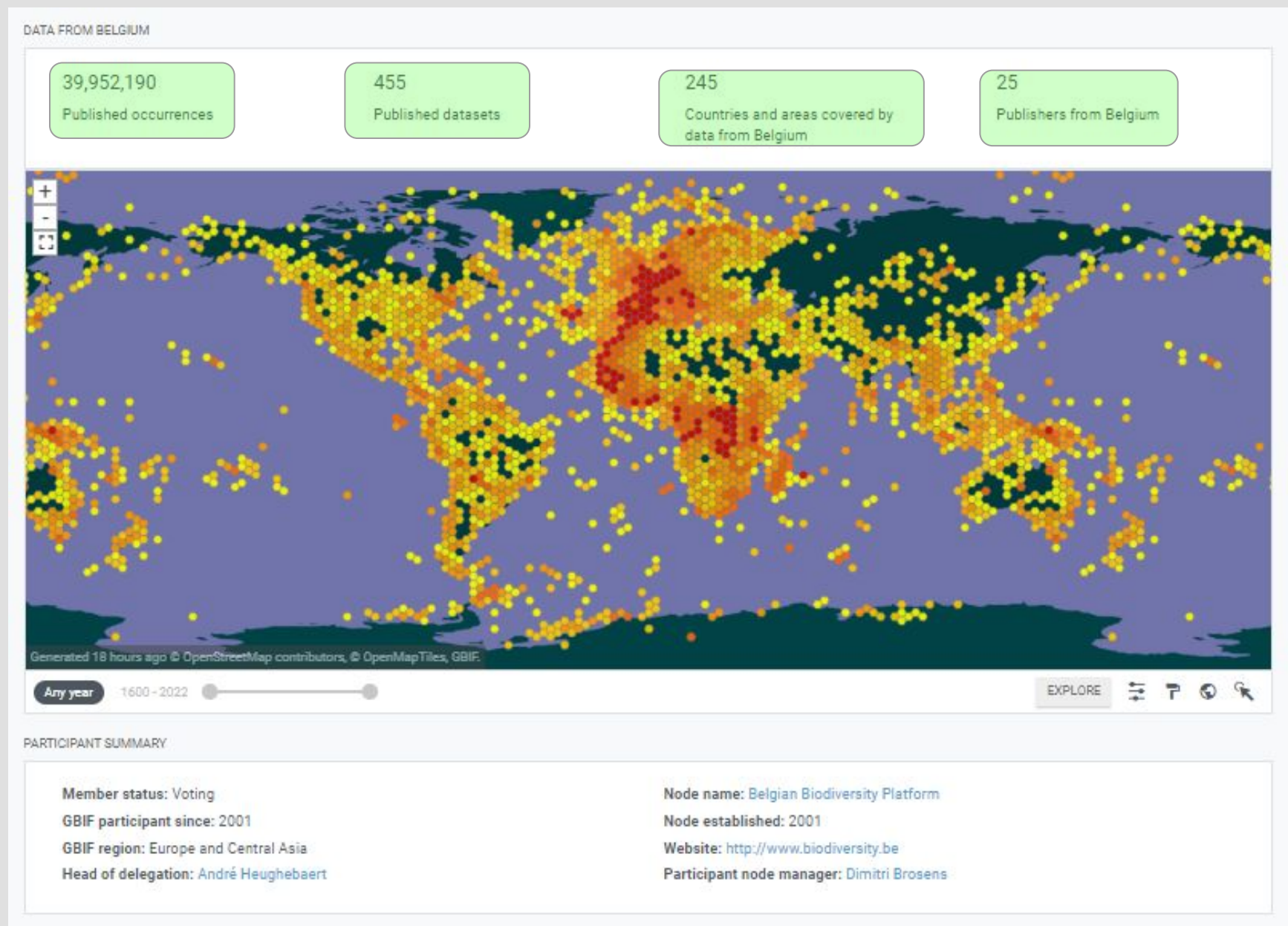
2022



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2022

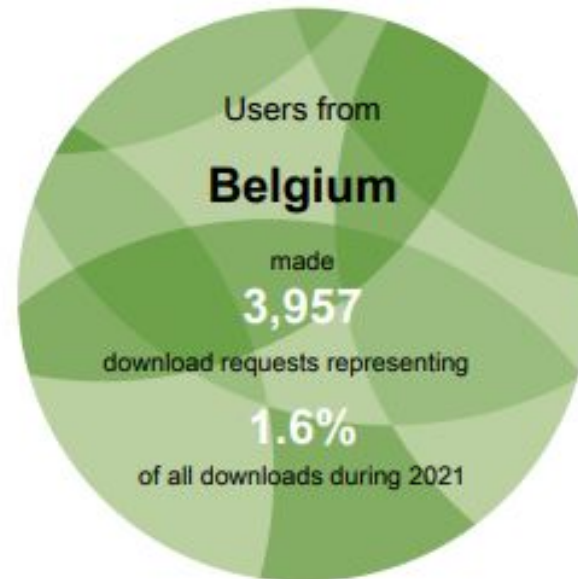


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Access and usage

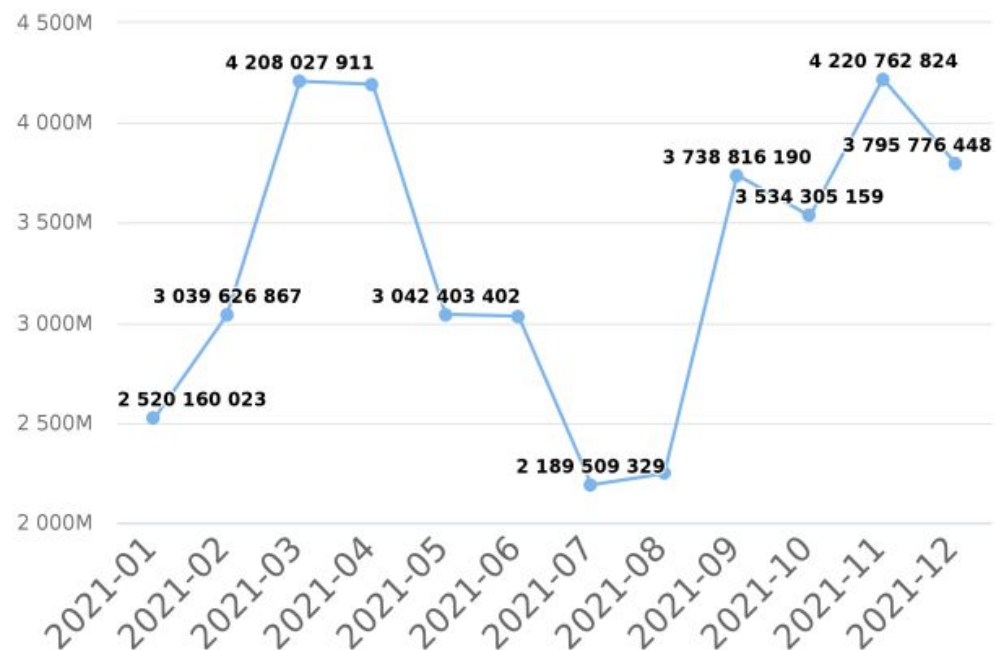
Data downloads on GBIF.org from users in Belgium



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

- 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. Marzia, B. Margherita, T. ... - (2022) 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/giarct DOI 10.15468/90dpt DOI 10.15468/ab2s5x DOI 10.15468/b9ndf 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. Díazgranados, 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. Bnuhl, 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.yw34a8

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

2022

- Empowering Biodiversity Research conference II 2022

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

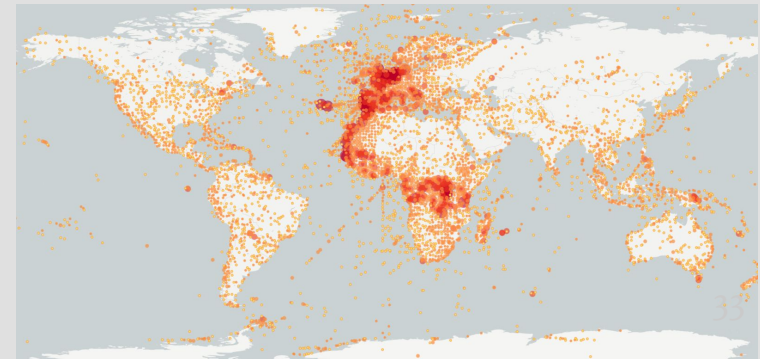


building the network

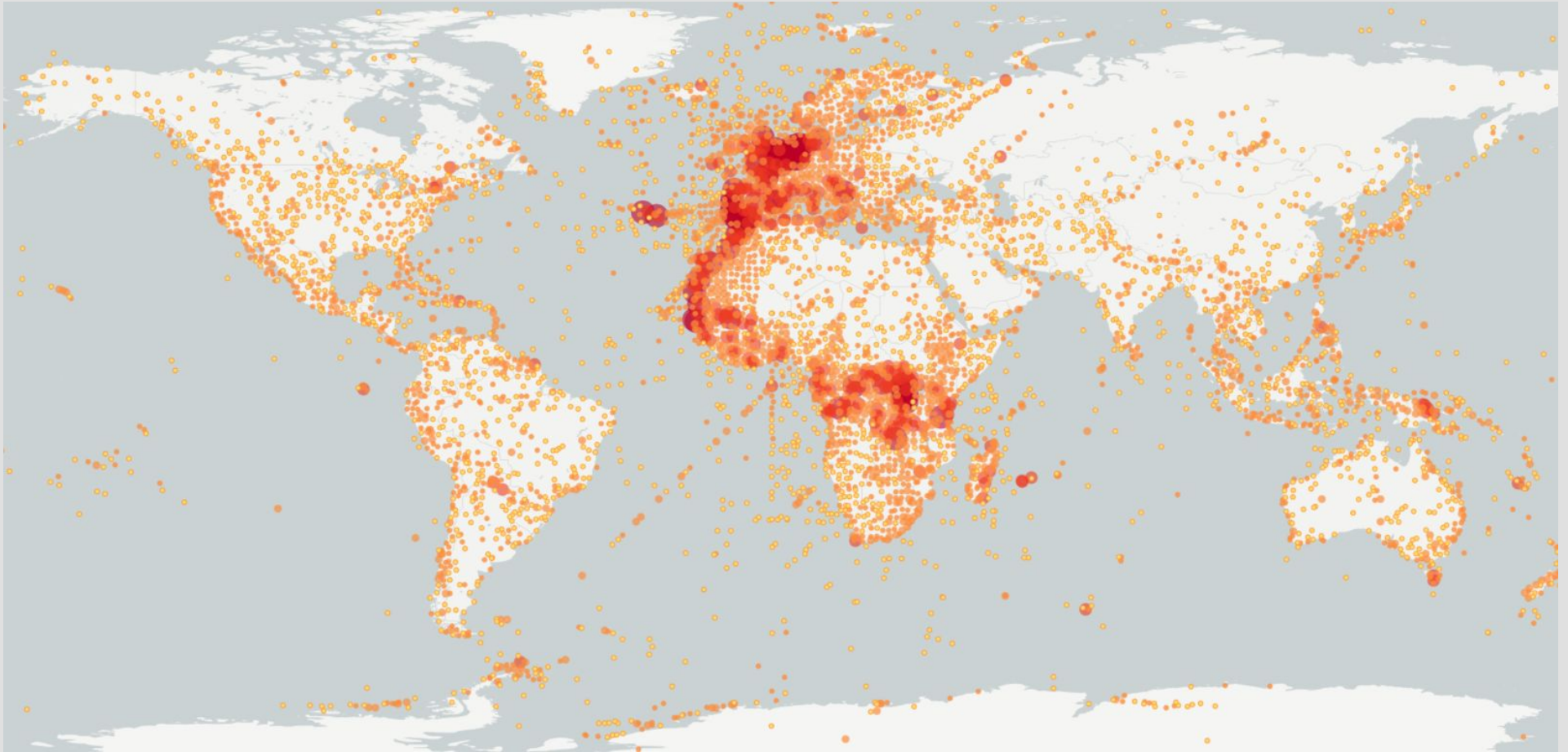
2022

- 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
- ...

...



2022



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