



generated January 2025

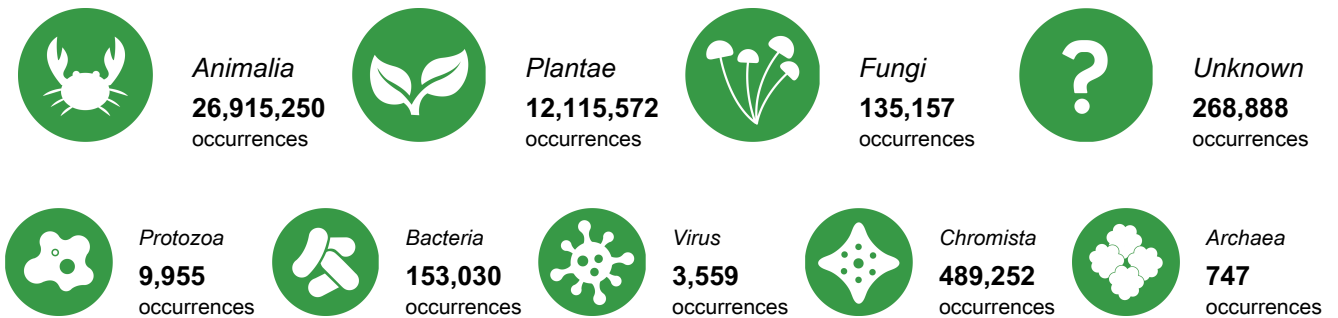
Belgium

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.

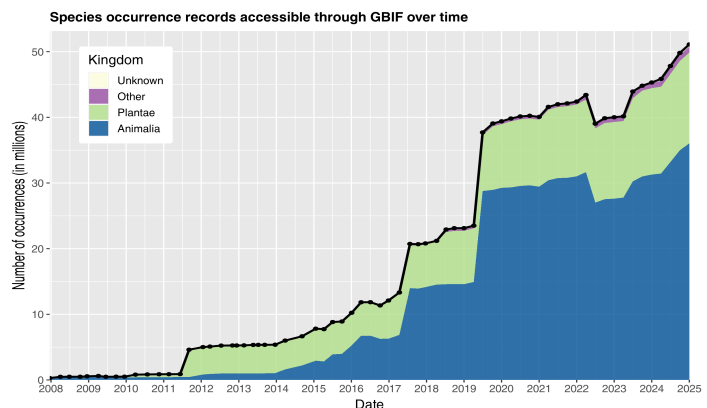
► Access and usage



► Data availability in Belgium



► Data mobilization

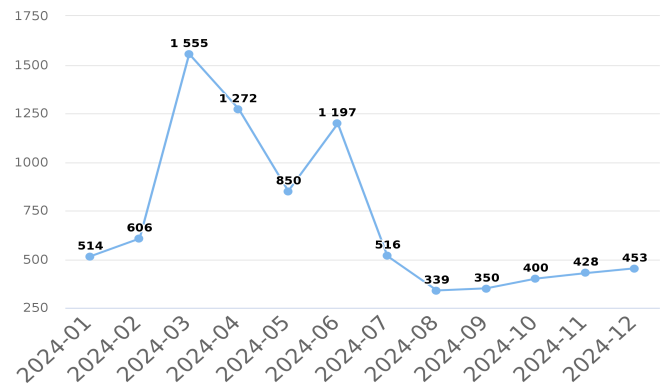
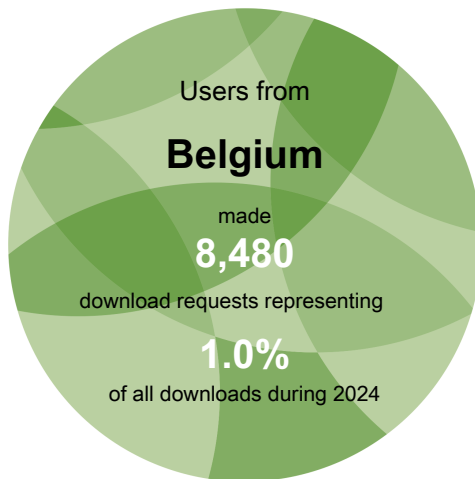


Number of records published by institutions in Belgium, categorized by kingdom



Access and usage

Data downloads on GBIF.org from users in Belgium



Monthly downloads requested by users in Belgium

Recent peer-reviewed articles using GBIF-mediated data by co-authors based in Belgium

The GBIF Secretariat maintains and reports on an ongoing literature tracking programme, giving priority to substantive uses of GBIF-mediated data in peer-reviewed literature while identifying the countries or areas of the authors' institutional affiliations. The citations below represent the five most recent journal articles with at least one co-author from Belgium.

Those interested in assisting the Secretariat in identifying additional peer-reviewed uses of GBIF-mediated data may forward relevant citations to comms@gbif.org.

González-Moreno, Anđelković, Adriaens *et al.* (2024) Citizen science platforms can effectively support early detection of invasive alien species according to species traits. *People and Nature*.

<https://doi.org/10.1002/pan3.10767>

Carmona-Higuita, Mendieta-Leiva, Gómez-Díaz *et al.* (2024) Endemism Centres of the Five Richest Vascular Epiphyte Families in the Neotropics. *Journal of Biogeography*.

<https://doi.org/10.1111/jbi.15016>

Xu, Peng, Liu *et al.* (2024) Bridging climate refuges for climate change adaptation: A spatio-temporal connectivity network approach. *Geography and Sustainability*.

<https://doi.org/10.1016/j.geosus.2024.08.012>

Bagri Bouraïma, Bielders, Sikirou *et al.* (2024) Do agroecological practices control *Ralstonia solanacearum* wilt on solanaceous crops? A meta-analysis. *Plant Pathology*.

<https://doi.org/10.1111/ppa.14000>

Nash, Man, McTaggart *et al.* (2024) The genome sequence of the Violet Carpenter Bee, *Xylocopa violacea* (Linnaeus, 1785): a hymenopteran species undergoing range expansion. *Heredity*.

<https://doi.org/10.1038/s41437-024-00720-2>

See all research from this country or area
gbif.org/country/BE/publications/from



Data availability

Total data available for selected taxonomic groups in Belgium



Mammals
889,193
occurrences



Birds
19,220,435
occurrences



Bony fish
1,465,847
occurrences



Amphibians
54,943
occurrences



Insects
4,193,319
occurrences



Reptiles
14,708
occurrences



Molluscs
218,019
occurrences



Arachnids
330,961
occurrences



Flowering plants
11,098,599
occurrences



Ferns
249,689
occurrences



Gymnosperms
66,378
occurrences



Mosses
509,466
occurrences



Sac fungi
62,629
occurrences



Basidiomycota
70,595
occurrences

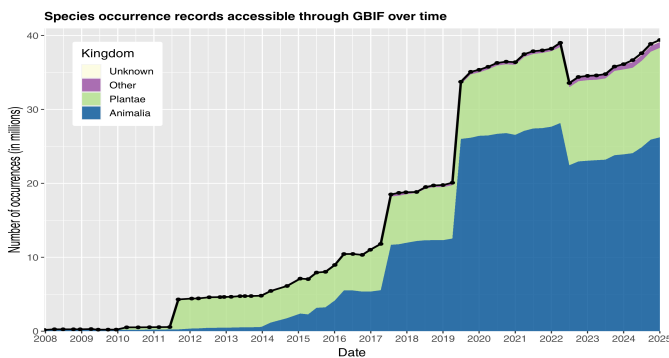
Mammals = Class *Mammalia*
Birds = Class *Aves*
Bony fish = Superclass
Osteichthyes p.p.
Amphibians = Class *Amphibia*

Insects = Class *Insecta*
Reptiles = Class *Testudines*,
Sphenodontia, *Squamata* &
Crocodylia
Molluscs = Phylum *Mollusca*

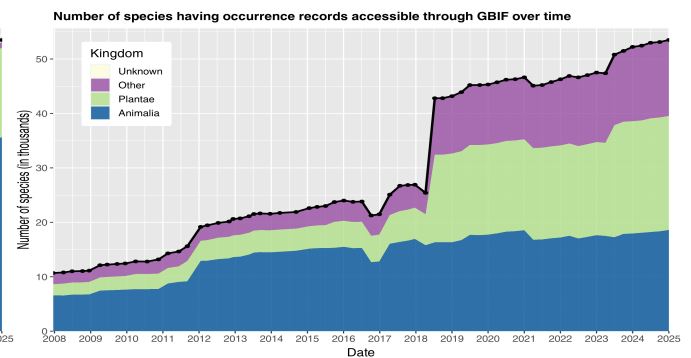
Arachnids = Class *Arachnida*
Flowering plants = Phylum
Magnoliophyta
Gymnosperms = Superclass
Gymnospermae

Ferns = Phylum *Pteridophyta*
Mosses = Phylum *Bryophyta*
Sac fungi = Phylum *Ascomycota*
Basidiomycota = Phylum
Basidiomycota

Change over time in records about biodiversity in Belgium



Occurrence records available about species occurring in Belgium



Species for which at least one occurrence record is available in Belgium

WHY MIGHT THE AMOUNT OF MOBILIZED DATA DECREASE?

Datasets are sometimes removed by publishers, but more often decreases in the number of records are due to the removal of duplicate records and datasets.

SPECIES COUNTS represent the number of binomial scientific names for which GBIF has received data records, organized as far as possible using synonyms recorded in key databases like the Catalogue of Life



Most recent datasets from publishers in Belgium

FORMICA_LEPIDOPTERA - Lepidoptera along edge-to-core transects in open and dense forests in the framework of the Forest Microclimate Assessment (FORMICA) project. *Published by Ghent University*
<https://doi.org/10.15468/3sckuk>

FORMICA_VEG - Vegetation surveys along edge-to-core transects in open and dense forests in the framework of the Forest Microclimate Assessment (FORMICA) project. *Published by Ghent University*
<https://doi.org/10.15468/be9pwc>

BulkDNA macrobenthos from sandextraction sites in the Belgian part of the North Sea. *Published by Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)*
<https://doi.org/10.15468/djwzhu>

12S eDNA from seawater samples collected within the coastal zone of the Belgian part of the North Sea. *Published by Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)*
<https://doi.org/10.15468/kg56dz>

Northwestern European arthropod life histories and ecological traits. *Published by Ghent University*
<https://doi.org/10.15468/75g5z9>

Endure – standardised invertebrate sampling in coastal blond dunes from the 2-seas region. *Published by Ghent University*
<https://doi.org/10.15468/xx2gcp>

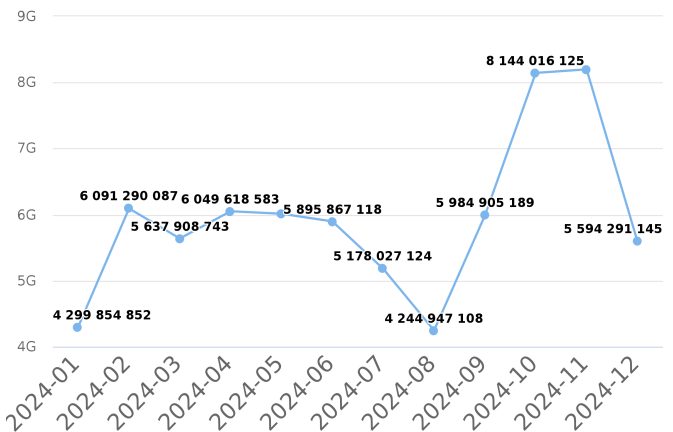
See all datasets from this country or area: gbif.org/dataset/search?publishing_country=BE

Newest publishers from Belgium

- Province West Flanders
- OBIS Secretariat
- Agency for Nature and Forests (Flemish Government)
- Contrat de rivière Senne
- RATO vzw

See all publishers from this country or area gbif.org/publisher/search?country=BE

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

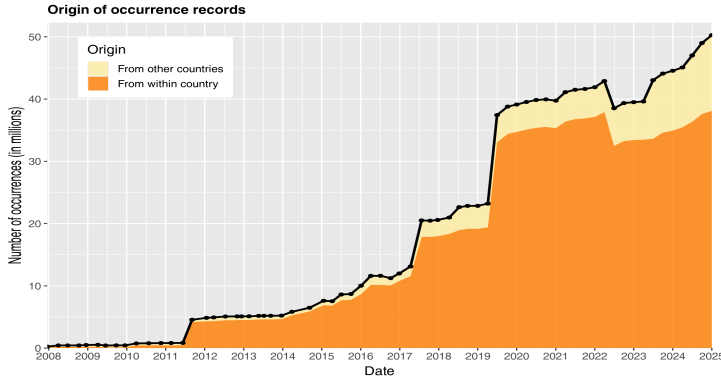


Number of occurrence records downloaded via GBIF.org published by institutions in Belgium

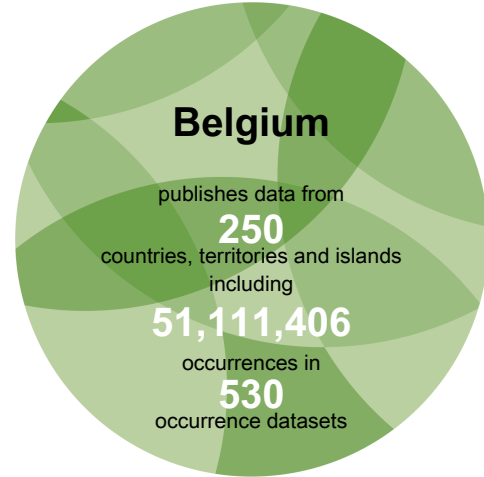


Data mobilization

Data sharing with country or area of origin by national institutions in Belgium



Data sharing with country or area of origin



The chart above shows the number of records shared over time by publishers within Belgium, with separate colours for records about species occurring within undefined and those occurring elsewhere.

Top data contributors about biodiversity in Belgium

| Rank | Country or area | No. of occurrences |
|------|--------------------------|--------------------|
| 1 | Belgium | 38,837,614 |
| 2 | France | 363,337 |
| 3 | United States of America | 319,399 |
| 4 | Germany | 282,679 |
| 5 | Netherlands | 114,099 |
| 6 | United Kingdom | 94,026 |
| 7 | Luxembourg | 18,518 |
| 8 | Sweden | 9,410 |
| 9 | Spain | 7,869 |
| 10 | Estonia | 7,552 |

Table 1. Ranking of countries or areas contributing data about Belgium

Top datasets contributing data about Belgium

Waarnemingen.be - Bird occurrences in Flanders and the Brussels Capital Region, Belgium. *12,811,851 occurrences in Belgium.* (Last updated 30 Apr 2021)

Florabank1 - A grid-based database on vascular plant distribution in the northern part of Belgium (Flanders and the Brussels Capital region). *5,286,677 occurrences in Belgium.* (Last updated 30 Jun 2024)

Waarnemingen.be - Plant occurrences in Flanders and the Brussels Capital Region, Belgium. *2,300,868 occurrences in Belgium.* (Last updated 30 Apr 2021)

Waarnemingen.be - Non-native animal occurrences in Flanders and the Brussels Capital Region, Belgium. *1,397,752 occurrences in Belgium.* (Last updated 1 Jan 2025)

Waarnemingen.be - Butterfly occurrences in Flanders and the Brussels Capital Region, Belgium. *1,298,346 occurrences in Belgium.* (Last updated 30 Apr 2021)

See all contributing countries and areas or datasets: gbif.org/country/BE/about



Belgium participates in the following projects coordinated by GBIF

Internationalization of the ALA node portal

Capacity Enhancement Support Programme, 2015–2016

Translation of ALA portal's user interface and technical documentation, such as installation and operation guides, into French, Portuguese and Spanish for use by the GBIF network.

<https://www.gbif.org/project/82202>

European Bireme: EU Nodes in biodiversity reporting mechanisms

Capacity Enhancement Support Programme, 2017–2018

By detailing national reporting processes and data flows in several European Union member states, this project explored how changes to GBIF tools and procedures could streamline and improve biodiversity reporting across the region.

<https://www.gbif.org/project/83336>

CroMent

Capacity Enhancement Support Programme, 2023–2024

<https://www.gbif.org/project/CESP2023-006>

Using the CBD Clearing-House Mechanism to strengthen biodiversity data acquisition and data sharing

Capacity Enhancement Support Programme, 2019–2020

A new content management system, Bioland Tool, could use the Convention on Biological Diversity's CHM network and infrastructure to improve biodiversity data sharing

<https://www.gbif.org/project/79ZRBGx5dNXYpR2ijHKebK>

Strengthening GBIF Philippines

BIFA: Biodiversity Information Fund for Asia, 2016–2017

This project aims at strengthening PhilBIF by enhancing the capacities of partners in the publishing of biodiversity information according to GBIF standards.

<https://www.gbif.org/project/82652>

International workshop on invasive species in the sub-Saharan area

Capacity Enhancement Support Programme, 2014–2015

This bilingual regional training event will promote knowledge exchange between biodiversity experts and establish a coordinated early warning and response network for invasive alien species across the entire sub-Saharan region (Maghreb and Sahel).

<https://www.gbif.org/project/82223>

See all GBIF projects
[gbif.org/resource/search?contentType=project](https://www.gbif.org/resource/search?contentType=project)