

# Belgium compared to neighbouring countries

## Aims

In this document, we compare the GBIF country reports for **Belgium, Germany, France, the Netherlands and Luxembourg**. Country reports are available on [GBIF.org](https://gbif.org) since January 2022. The central question is *How does Belgium behaves in terms of GBIF data publication, availability and usage when compared to our neighbouring countries?*

*Edited by*

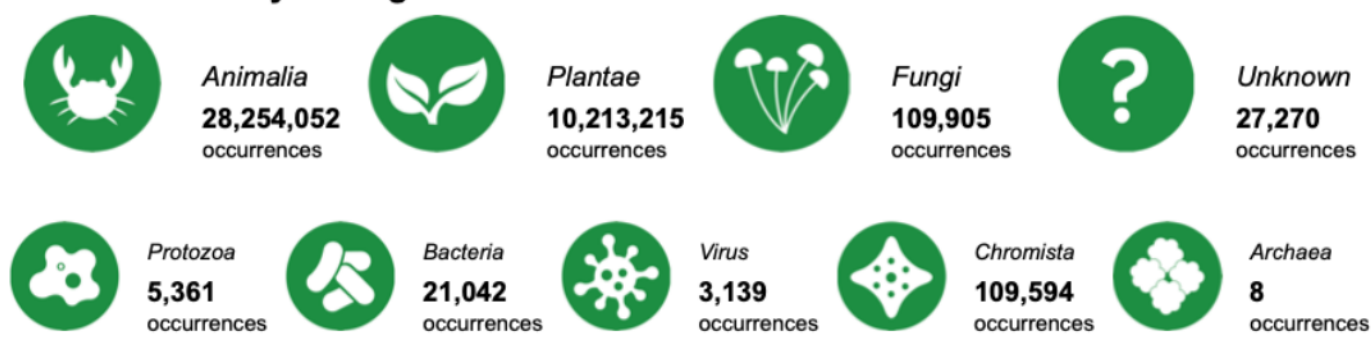
André Heughebaert on 7 February 2022

## Data availability

### Per phylum

Occurrences data available on the country are split down into phylums : Animalia, Plantae, Fungi, Unknown, Protozoa, Bacteria, Virus, Chromista, Archaea.

#### ► Data availability in Belgium



We compare percentages of data available for each phylum and rank these percentages for the five countries.

- Belgium is first (relatively more data available) for **Animalia** phylum.
- Belgium is last (relatively less data available) for **Plantae, Fungi and Virus**.

# Taxonomic groups

Occurrences data available on the country are split down into these taxonomical groups : Mammals, Birds, Bony fish, Amphibians, Insects, Reptiles, Molluscs, Arachnids, Flowering plants, Gymnosperms, Ferns, Mosses, Sac fungi and Basidiomycota.

## Data availability

### Total data available for selected taxonomic groups in Belgium



We compare percentages of data available for each groups and rank these percentages for the five countries.

- Belgium is first(relatively more data available) in **Birds and Arachnids** data. Belgium is second in **Bony fish and Mosses**
- Belgium is last(relatedly less data available) in **Mammals, Amphibians, Reptiles, Molluscs, Flowering plants, Gymnosperms, Ferns and Sac fungi**

## Top data contributors

Data available on Belgium is mostly coming from Belgian publishers(97,47%), the rest of data is coming from abroad.

## Top data contributors about biodiversity in Belgium

Rank	Country or area	No. of occurrences
1	Belgium	37,762,436
2	France	382,401
3	Germany	281,726
4	United States of America	164,562
5	Netherlands	89,527
6	United Kingdom	17,614
7	Luxembourg	10,082
8	Spain	4,894
9	Colombia	4,687
10	Canada	3,641

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

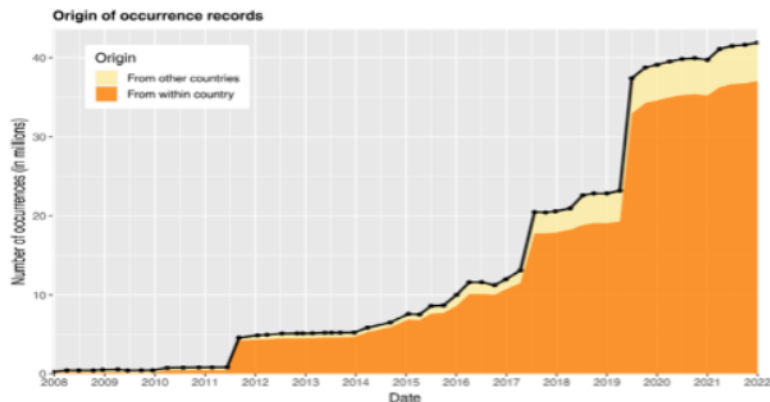
- This place Belgium on the second position. Only the Netherlands publishes a bigger proportion of data on its own country(97,55%).

## Data Repatriation

GBIF defines data repatriation as publishing data on other countries.

## Data mobilization

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



Data sharing with country or area of origin



Belgian publishers publish mostly(89,06%) on their own country and rarely(10.94%) on other countries.

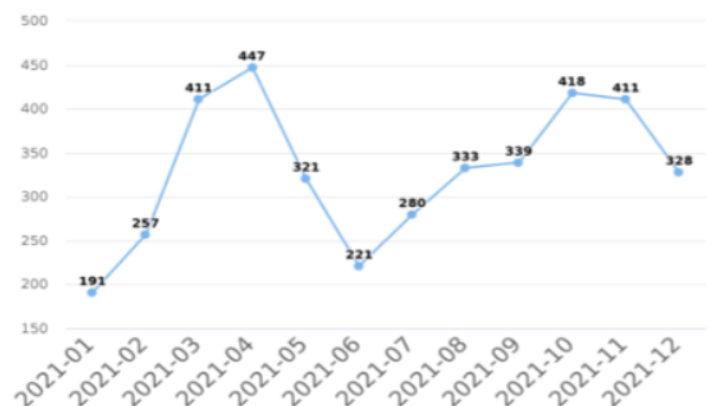
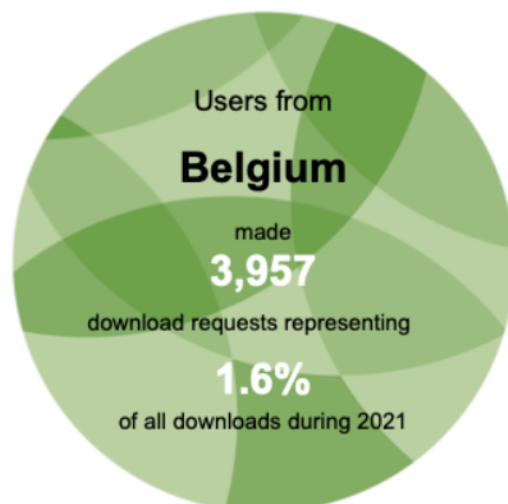
- This gives us the last position for data repatriation.

## Data Usage

Here we look at data downloads, peer-reviewed articles in 2021. In absolute numbers, Belgium comes to third and fourth position, but this is strongly biased by the country size.

### Access and usage

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



So we measure relative numbers (per GDP and Population) and the results are very good:

- Belgium is first in downloads and peer-reviewed per GDP and per population.

## Data Mobilization effort

Here we look at overall data mobilization efforts in the countries, and again, we compare relative numbers (per GDP and Population).

- Belgium is leader in term of data per GDP.
- Belgium is third in term of data per population, Luxembourg and the Netherlands are doing better, France and Germany are doing less.

## Data Publishing types

Here we look at the basis-of-record of all occurrences published by the countries.

- Belgium is leader in **machine observation and material sample**.
- Belgium is last in **human observation and fossil specimen**.

## Data with Medias

Here we look at occurrences with media(Image, Video, Audio).

- Belgium has middle position (third or fourth).

## Data Licences

Here we look at data Licences(CC0, CC-BY, CC-BY-NC) of published occurrences.

- Belgium publish relatively more CC-0 data (second position) and less CC-BY or CC-BY-NC.

## Historical data

Here we look at the years of occurrences.

- Belgium is leader in **recent data** (since 2000).
- Belgium is last in **historical data** (before 2000).

## References

- Country reports: [Belgium](#), [Germany](#), [France](#), [the Netherlands](#) and [Luxembourg](#) - GBIF.org
- [Gross domestic product 2020 - World Bank](#)
- [Population 2020 - World Bank](#)