

generated January 2024

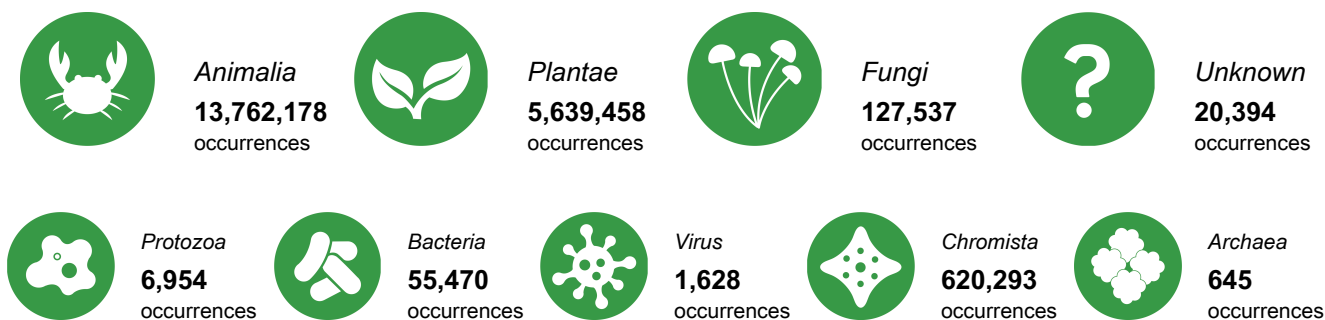
## Portugal

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 Portugal. 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.

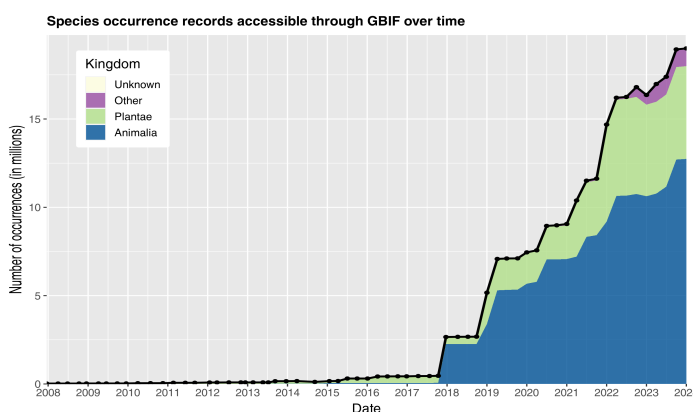
### ► Access and usage



### ► Data availability in Portugal



### ► Data mobilization

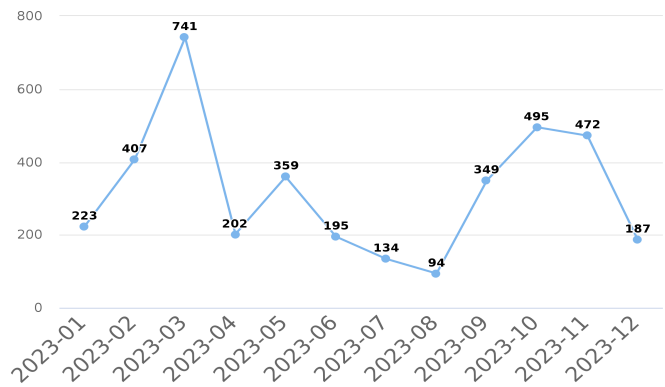
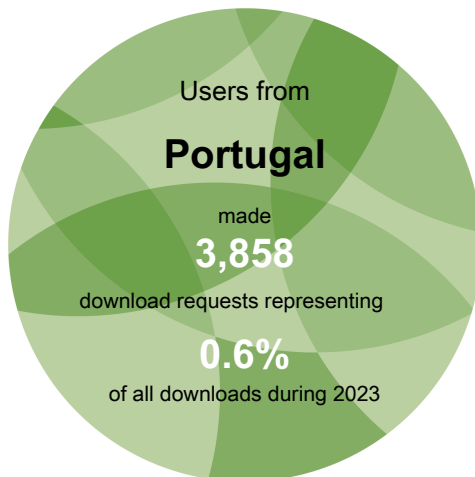


Number of records published by institutions in Portugal,  
categorized by kingdom



## Access and usage

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



Monthly downloads requested by users in Portugal

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

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 Portugal.

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

Loos, Bafort, Bosch *et al.* (2023) Non-indigenous seaweeds in the Northeast Atlantic Ocean, the Mediterranean Sea and Macaronesia: a critical synthesis of diversity, spatial and temporal patterns. *European Journal of Phycology*.  
<https://doi.org/10.1080/09670262.2023.2256828>

Batalha-Filho, Barreto, Silveira *et al.* (2023) Disentangling the contemporary and historical effects of landscape on the population genomic variation of two bird species restricted to the highland forest enclaves of northeastern Brazil. *Heredity*.  
<https://doi.org/10.1038/s41437-023-00662-1>

Campoy, Rivadeneira, Hernández *et al.* (2023) Deep-sea origin and depth colonization associated with phenotypic innovations in scleractinian corals. *Nature Communications*.  
<https://doi.org/10.1038/s41467-023-43287-y>

Vicente, Trindade, Máguas *et al.* (2023) Intraspecific Genetic and Ecological Differentiation in Australian Acacia Species: Insights from *Acacia longifolia*. *Wattles*.  
<https://doi.org/10.1079/9781800622197.0007>

Botella, Marchante, Celesti-Grampow *et al.* (2023) The Global Distribution of *Acacia*. *Wattles*.  
<https://doi.org/10.1079/9781800622197.0009>

See all research from this country or area  
[gbif.org/country/PT/publications/from](https://gbif.org/country/PT/publications/from)



## Data availability

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



**Mammals**  
**999,384**  
occurrences



**Birds**  
**10,880,475**  
occurrences



**Bony fish**  
**185,789**  
occurrences



**Amphibians**  
**77,625**  
occurrences



**Insects**  
**688,972**  
occurrences



**Reptiles**  
**101,296**  
occurrences



**Molluscs**  
**125,484**  
occurrences



**Arachnids**  
**85,726**  
occurrences



**Flowering plants**  
**4,115,530**  
occurrences



**Ferns**  
**115,512**  
occurrences



**Gymnosperms**  
**368,979**  
occurrences



**Mosses**  
**268,623**  
occurrences



**Sac fungi**  
**78,779**  
occurrences



**Basidiomycota**  
**43,854**  
occurrences

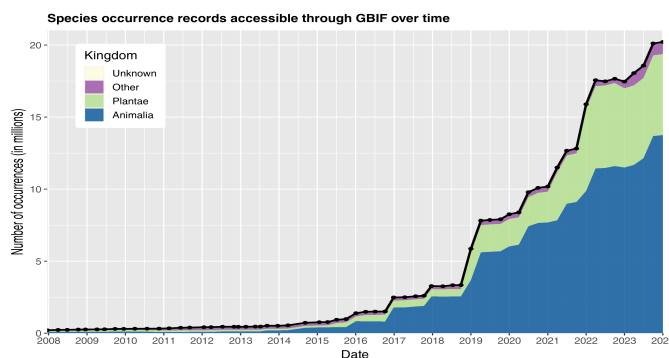
Mammals = Class *Mammalia*  
Birds = Class *Aves*  
Bony fish = Superclass  
*Osteichthyes* p.p.  
Amphibians = Class *Amphibia*

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

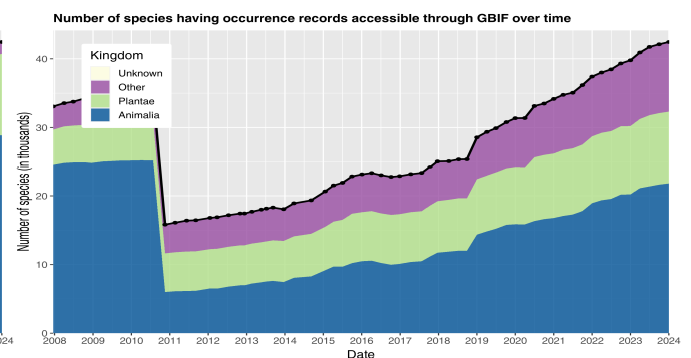
Arachnids = Class *Arachnida*  
Flowering plants = Phylum  
*Magnoliophyta*  
Gymnosperms = Superclass  
*Gymnospermae*

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

### Change over time in records about biodiversity in Portugal



Occurrence records available about species occurring in Portugal



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

#### 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 Portugal

EDP Baixo Sabor: Exploration Phase – Vascular Flora and Habitats: Compensatory Measures Program, Compensatory Measure MC1: improvement and restoration of the riparian gallery [2015-2020]. *Published by EDP - Energias de Portugal*  
<https://doi.org/10.15468/u7bsxt>

EDP Foz-Tua: Bonelli's Eagle Prey Species: Columba spp., Alectoris rufa and Oryctolagus cuniculus (line transects) – Compensatory Measures Program, Compensatory Measure MC46B (Management of Raptors' Feeding Habitats) [2018-2020]. *Published by EDP - Energias de Portugal*  
<https://doi.org/10.15468/4qh279>

EDP Foz-Tua: Terrestrial Birds (count points) – Compensatory Measures Program, MC46B (Management of Raptors' Feeding Habitats) [2018-19]. *Published by EDP - Energias de Portugal*  
<https://doi.org/10.15468/z2xb3k>

EDP Foz-Tua: Otter (Lutra lutra) (transects) - Ecological Monitoring Program (2018-2020). *Published by EDP - Energias de Portugal*  
<https://doi.org/10.15468/7jvsnd>

EDP Foz-Tua: American Mink (Neovison vison) (transects) - Ecological Monitoring Program (2018-20). *Published by EDP - Energias de Portugal*  
<https://doi.org/10.15468/du6nyg>

See all datasets from this country or area: [gbif.org/dataset/search?publishing\\_country=PT](https://gbif.org/dataset/search?publishing_country=PT)

## Newest publishers from Portugal

Centre of Marine Sciences

Departamento de Biologia Animal, Faculdade de Ciências, Universidade de Lisboa

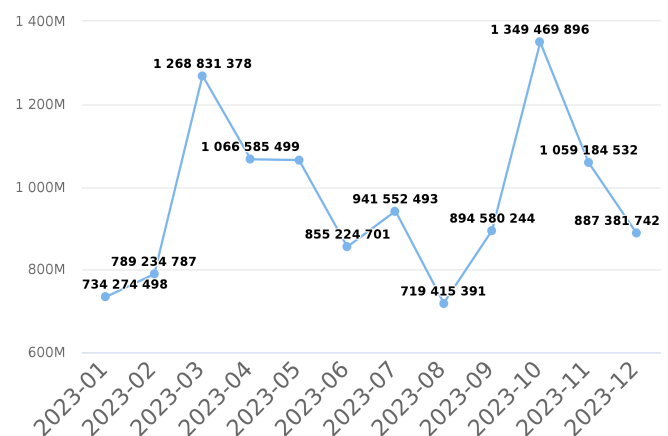
Natural History Museum of the Iberian Peninsula - NatMIP ("Museu de História Natural da Península Ibérica")

ICNF - Instituto da Conservação da Natureza e das Florestas

Herbarium of University of Coimbra (COI)

See all publishers from this country or area  
[gbif.org/publisher/search?country=PT](https://gbif.org/publisher/search?country=PT)

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

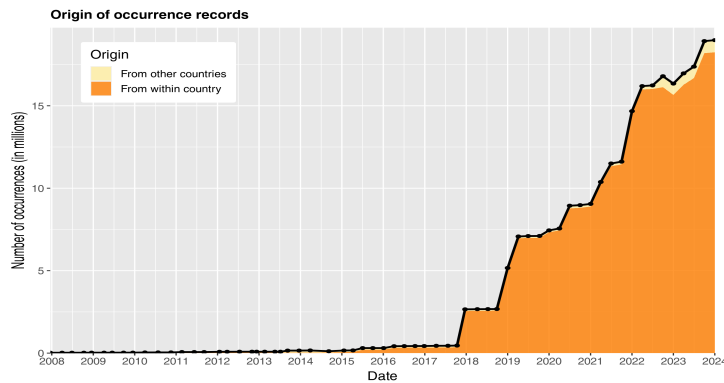


Number of occurrence records downloaded via GBIF.org published by institutions in Portugal

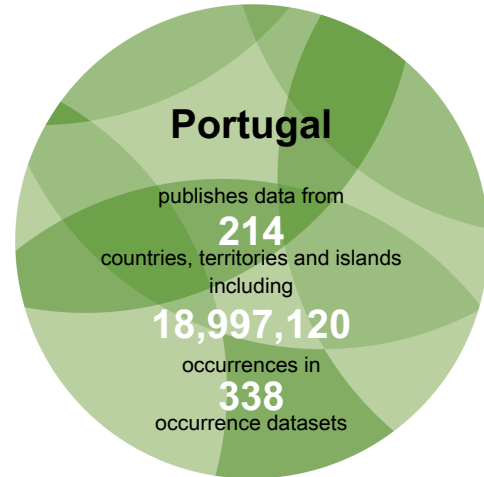


## Data mobilization

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



Data sharing with country or area of origin



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

### Top data contributors about biodiversity in Portugal

Rank	Country or area	No. of occurrences
1	Portugal	18,248,816
2	Netherlands	480,143
3	United States of America	400,688
4	Belgium	309,871
5	United Kingdom	167,317
6	Spain	166,904
7	Germany	158,338
8	France	107,369
9	International organization or unknown country	37,224
10	Estonia	31,712

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

### Top datasets contributing data about Portugal

- EOD – eBird Observation Dataset. 8,804,964 occurrences in Portugal. (Last updated 20 Aug 2023)
- Azorean Biodiversity Portal. 1,652,342 occurrences in Portugal. (Last updated 22 Mar 2023)
- iNaturalist Research-grade Observations. 622,716 occurrences in Portugal. (Last updated 2 Jan 2024)
- Forestry Inventory 2015. 579,422 occurrences in Portugal. (Last updated 12 Nov 2021)
- Forestry Inventory 2010. 575,481 occurrences in Portugal. (Last updated 12 Nov 2021)

See all contributing countries and areas or datasets: [gbif.org/country/PT/about](https://gbif.org/country/PT/about)



## Portugal participates in the following projects coordinated by GBIF

### Promote GBIF in the African Portuguese speaking countries through documentation and seminars

*Capacity Enhancement Support Programme, 2015–2016*

An initiative by GBIF Portugal to ensure that the fundamental documentation on node establishment and data mobilization is available in Portuguese and to promote GBIF in Angola, Mozambique and Guinea Bissau through seminars and conferences.

<https://www.gbif.org/project/82205>

### Agrotraining: Proofing GBIF use on agrobiodiversity through needs assessment and training

*Capacity Enhancement Support Programme, 2016–2017*

This Iberian project will design and develop a training course on the use of agro-biodiversity information available through GBIF and other relevant data sources.

<https://www.gbif.org/project/82833>

### GBIF.pt

*, 2016–2016*

The Biodiversity Data Portal of Portugal is the site for access to national information published through the GBIF.

<https://www.gbif.org/project/82967>

### Filling taxonomic and geographic gaps in open data by strengthening skills of the Brazilian zoological collections network

*Capacity Enhancement Support Programme, 2021–2023*

<https://www.gbif.org/project/CESP2021-008>

### 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>

### International Living Atlases workshop

*Capacity Enhancement Support Programme, 2017–2018*

This project will support and strengthen the growing international community of practice around open-source software developed by the Atlas of Living Australia.

<https://www.gbif.org/project/83337>

### European training hackathon on species checklists using GBIF data

*Capacity Enhancement Support Programme, 2014–2015*

This regional collaboration supports a hackathon for European nodes, aiming to enhance their capacity to produce national checklists.

<https://www.gbif.org/project/82221>

### 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>

### CRBio: Atlas of Living Costa Rica

*, 2016–2016*

CRBio integrates occurrence records, species pages, multimedia and scientific literature about the biodiversity of Costa Rica in a single site through the use of several biodiversity informatics APIs, including the ones developed by ALA, GBIF and BHL.

<https://www.gbif.org/project/82989>

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