GBIF | Global Biodiversity Information Facility
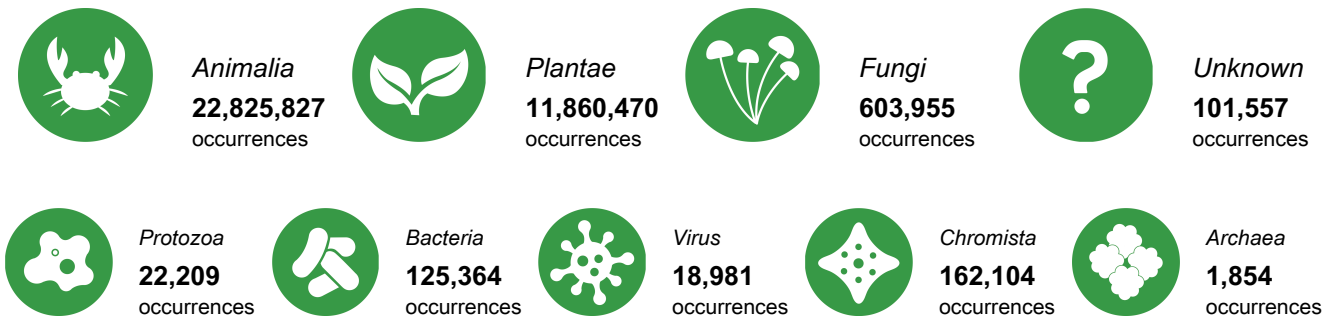
Activity report

Brazil

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 Brazil. 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.
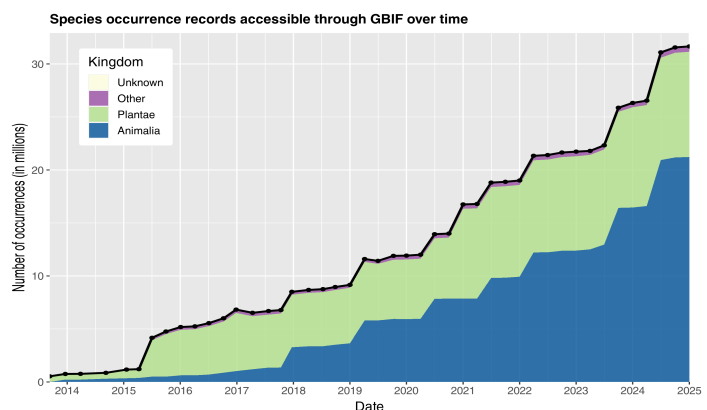
‣ Access and usage

Researchers from

Brazil

contributed to

211

peer-reviewed articles citing GBIF use during 2024 and a total of

1237

articles since 2008

‣ Data availability in Brazil

Animalia
22,825,827
occurrences

Plantae
11,860,470
occurrences

Fungi
603,955
occurrences

Unknown
101,557
occurrences

Protozoa
22,209
occurrences

Bacteria
125,364
occurrences

Virus
18,981
occurrences

Chromista
162,104
occurrences

Archaea
1,854
occurrences

‣ Data mobilization

Institutions from

Brazil

published

5,333,817

new occurrence records during 2024 out of a total of

428,451,251

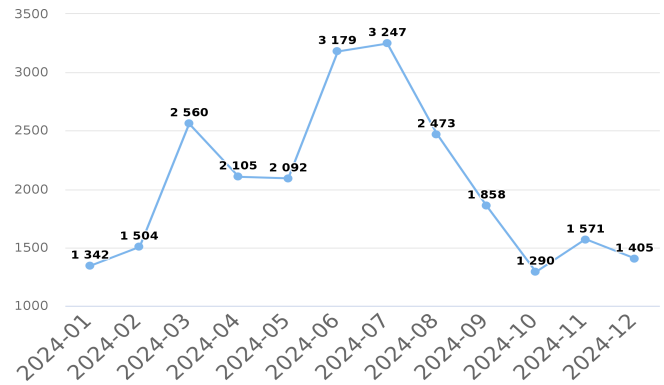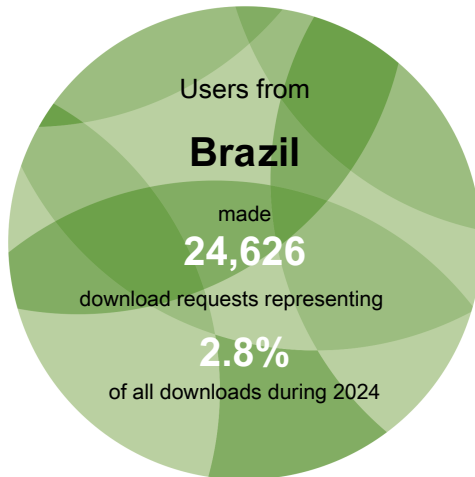occurrence records added globally to GBIF.org

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

Access and usage

Data downloads on GBIF.org from users in Brazil

Users from

Brazil

made

24,626

download requests representing

2.8%

of all downloads during 2024

Monthly downloads requested by users in Brazil

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

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 Brazil.

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

Jain, Cunha, Bunsen *et al.* (2024) Insect Identification in the Wild: The AMI Dataset. *Lecture Notes in Computer Science,Computer Vision – ECCV 2024.*
https://doi.org/10.1007/978-3-031-72913-3_4

Barros, Paixão, Sacramento *et al.* (2024) Predicting the climate change and suitable areas of Digitaria insularis based on CMIP6 projections by MaxEnt. *New Zealand Journal of Agricultural Research.*
https://doi.org/10.1080/00288233.2024.2433211

ANTÚNEZ-FONSECA, RAMOS-GALDAMEZ, SOLÍS *et al.* (2024) A new species of the genus Liotyphlops Peters, 1881 (Serpentes: Anomalepididae) from the Caribbean coast of Honduras. *Zootaxa.*
https://doi.org/10.11646/zootaxa.5543.1.5

Xavier, Bovcon, Basílio *et al.* (2024) Distributional limits of the Shortnose Guitarfish, Zapteryx brevirostris (Rhinopristiformes: Trygonorrhinidae) - An update. *Ocean and Coastal Research.*
https://doi.org/10.1590/2675-2824072.23119

Desidério, Sganga, Libonatti *et al.* (2024) After six decades, a new species of the Andean caddisfly genus Eosericostoma Schmid, 1955 (Trichoptera: Helicophidae) is discovered. *Austral Entomology.*
https://doi.org/10.1111/aen.12713

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

Data availability

Total data available for selected taxonomic groups in Brazil

Mammals
181,666
occurrences

Birds
18,181,922
occurrences

Bony fish
939,028
occurrences

Amphibians
244,295
occurrences

Insects
2,246,214
occurrences

Reptiles
200,218
occurrences

Molluscs
160,249
occurrences

Arachnids
250,080
occurrences

Flowering plants
10,878,728
occurrences

Ferns
492,341
occurrences

Gymnosperms
25,619
occurrences

Mosses
155,945
occurrences

Sac fungi
372,049
occurrences
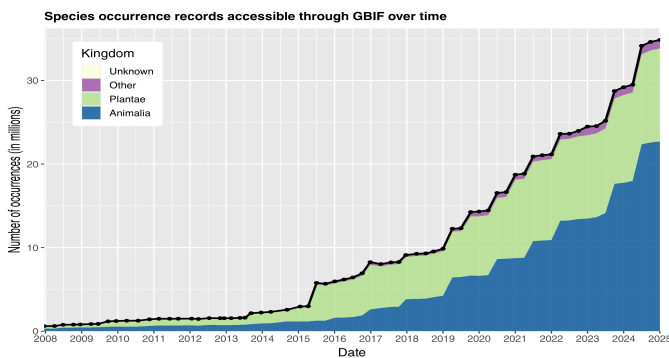
Basidiomycota
193,663
occurrences

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

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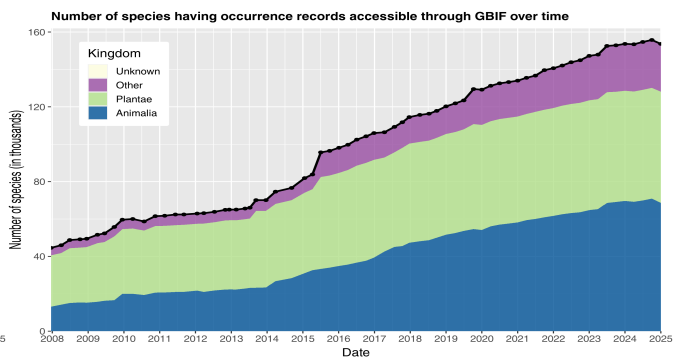Molluscs = Phylum *Mollusca*

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 Brazil

Occurrence records available about species occurring in Brazil

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

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 Brazil

Inventory of Fish Taxa Based on Bulk Fish Diet Samples from the Capim River Basin (Pará, Brazil). *Published by Universidade Federal do Pará*
https://doi.org/10.15468/t2fv67

UFMT | Composição aves do Cerrado. *Published by Universidade Federal de Mato Grosso*
https://doi.org/10.15468/a9bznp

Inventory of Fish Taxa from Water eDNA Samples in the Capim River Basin (Pará, Brazil). *Published by Universidade Federal do Pará*
https://doi.org/10.15468/yphvf5

PPBioMA - PPBio | Monitoramento de morcegos na Ilha Grande, RJ - Mata Atlântica. *Published by Universidade do Estado do Rio de Janeiro*
https://doi.org/10.15468/w4wmuh

PPBio - ComCerrado | Levantamento da vegetação arbórea-arbustiva do cerrado sul maranhense no Parque Estadual do Mirador (PEM). *Published by Universidade Estadual do Maranhão*
https://doi.org/10.15468/24n3bw

PPBio | Efeito da perturbação sobre a diversidade de espécies de Asteraceae e insetos endófagos associados em fragmentos de Cerrado na Chapada dos Guimarães – MT. *Published by Universidade Federal de Mato Grosso*
https://doi.org/10.15468/xkyyzn

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

Newest publishers from Brazil

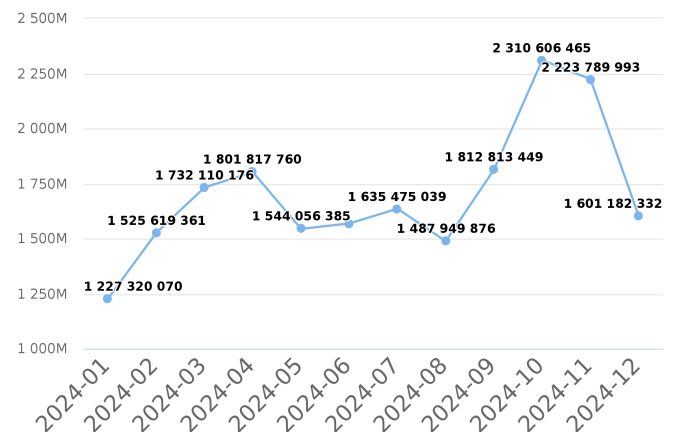Universidade do Estado do Rio de Janeiro

Universidade Federal do Amapá

Universidade Federal do Pará

Instituto Vital Brazil

Universidade Federal do Rio Grande

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

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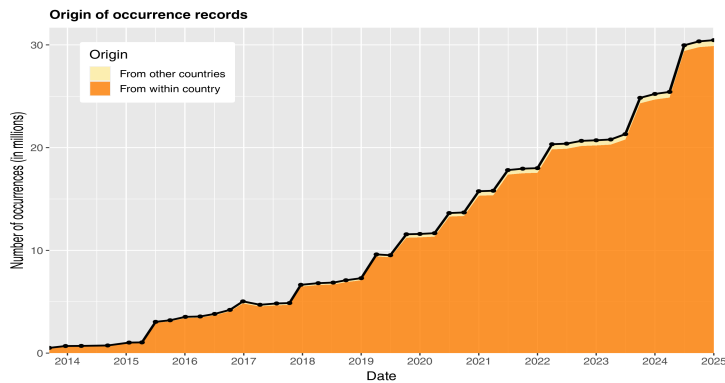

Number of occurrence records downloaded via GBIF.org published by institutions in Brazil

Data mobilization

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

Origin of occurrence records

Data sharing with country or area of origin

Brazil

publishes data from
224
countries, territories and islands
including
31,898,444
occurrences in
685
occurrence datasets

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

Top data contributors about biodiversity in Brazil

Rank	Country or area	No. of occurrences
1	Brazil	30,723,943
2	United States of America	2,677,653
3	United Kingdom	611,253
4	France	313,802
5	Estonia	308,658
6	Netherlands	234,141
7	Germany	111,186
8	Sweden	104,046
9	International organization or unknown country	99,547
10	Colombia	90,880

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

Top datasets contributing data about Brazil

EOD – eBird Observation Dataset. *17,359,307 occurrences in Brazil.* (Last updated 27 Sep 2024)

iNaturalist Research-grade Observations. *850,808 occurrences in Brazil.* (Last updated 30 Dec 2024)

RB - Rio de Janeiro Botanical Garden Herbarium Collection. *753,495 occurrences in Brazil.* (Last updated 1 Jan 2025)

The New York Botanical Garden Herbarium (NY). *423,728 occurrences in Brazil.* (Last updated 25 Dec 2024)

NMNH Extant Specimen Records (USNM, US). *376,037 occurrences in Brazil.* (Last updated 2 Jan 2025)

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

Brazil participates in the following projects coordinated by GBIF

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

Developing a data extension for documenting socio-biodiversity information
Capacity Enhancement Support Programme, 2024–2026
https://www.gbif.org/project/CESP2024-015

From shared experiences to shared knowledge and common solutions: collaborating to improve web-based tools in Latin America and the Caribbean
Capacity Enhancement Support Programme, 2020–2022
Participating nodes aim to incorporate shared best practices, protocols, tools and future road maps for representing the region's biodiversity richness and abundance
https://www.gbif.org/project/4YJIFEvYJi5kfuUVzNcfYH

Regional capacity enhancement by setting up Uruguay's data portal
Capacity Enhancement Support Programme, 2015–2016
Project to provide mentorship to Uruguay in establishing a national biodiversity website and data-portal, as well as an efficient data publication workflow.
https://www.gbif.org/project/82209

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

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

Data quality: Improving primary biodiversity data in the GBIF network
Capacity Enhancement Support Programme, 2014–2015
This regional initiative aims to address data quality by transferring knowledge about best publishing practices and putting them into effect.
https://www.gbif.org/project/82230

See all GBIF projects
gbif.org/resource/search?contentType=project