![GBIF | Global Biodiversity Information Facility]
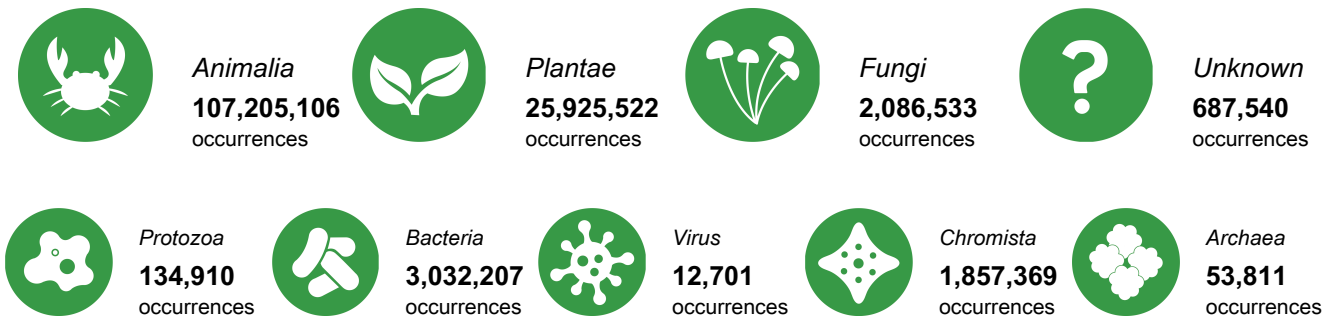
Activity report

Australia

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 Australia. 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.
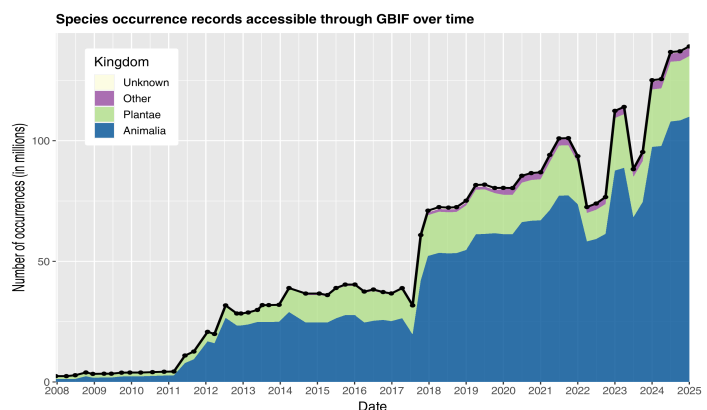
▶ Access and usage

Researchers from

Australia

contributed to

99

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

768

articles since 2008

▶ Data availability in Australia

Animalia
107,205,106
occurrences

Plantae
25,925,522
occurrences

Fungi
2,086,533
occurrences

Unknown
687,540
occurrences

Protozoa
134,910
occurrences

Bacteria
3,032,207
occurrences

Virus
12,701
occurrences

Chromista
1,857,369
occurrences

Archaea
53,811
occurrences

▶ Data mobilization

Institutions from

Australia

published

14,003,238

new occurrence records during 2024 out of a total of

428,451,251

occurrence records added globally to GBIF.org

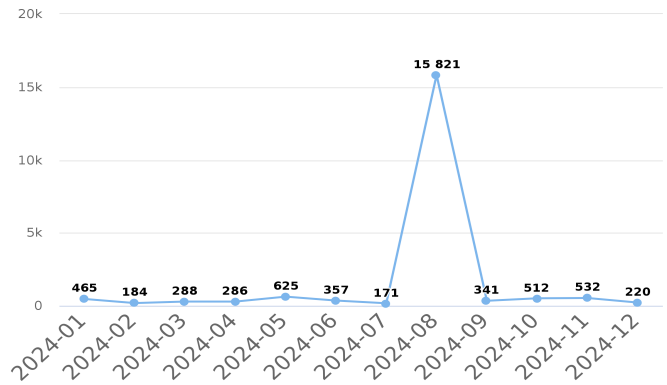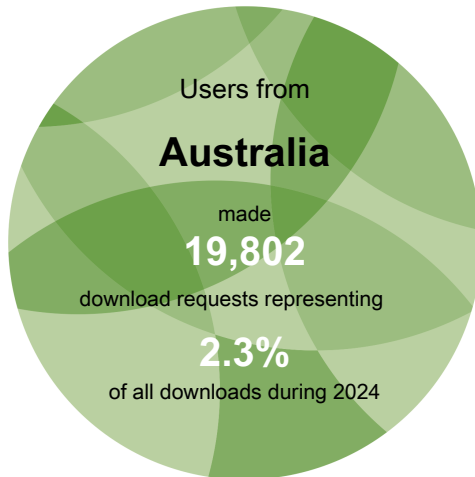Species occurrence records accessible through GBIF over time

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

Access and usage

Data downloads on GBIF.org from users in Australia

Users from

Australia

made

19,802

download requests representing

2.3%

of all downloads during 2024

Monthly downloads requested by users in Australia

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

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 Australia.

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

Wenk, Mesaglio, Keith *et al.* (2024) Curating protected area-level species lists in an era of diverse and dynamic data sources. *Ecological Informatics.*
https://doi.org/10.1016/j.ecoinf.2024.102921

Chowdhury, Cardillo, Chapman *et al.* (2024) Protected area coverage of the full annual cycle of migratory butterflies. *Conservation Biology.*
https://doi.org/10.1111/cobi.14423

Echeverri, Batista, Wolny *et al.* (2024) Toward Sustainable Biocultural Ecotourism: An Integrated Spatial Analysis of Cultural and Biodiversity Richness in Colombia. *People and Nature.*
https://doi.org/10.1002/pan3.10755

Zhang, Dayananda, Liu *et al.* (2024) Spatial and Temporal Variation of Precipitation Drives the Genome Size Variation in Scolopendra in Chinese Mainland. *Ecology and Evolution.*
https://doi.org/10.1002/ece3.70580

Zhao, Xian, Yang *et al.* (2024) A Proposed Coupling Framework of Biological Invasions: Quantifying the Management Prioritization in Mealybugs Invasion. *Global Change Biology.*
https://doi.org/10.1111/gcb.17583

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

Data availability

Total data available for selected taxonomic groups in Australia

Mammals
4,603,796
occurrences

Birds
83,533,429
occurrences

Bony fish
4,278,915
occurrences

Amphibians
1,612,815
occurrences

Insects
5,740,573
occurrences

Reptiles
1,816,466
occurrences

Molluscs
1,420,859
occurrences

Arachnids
659,834
occurrences

Flowering plants
24,209,476
occurrences

Ferns
609,531
occurrences

Gymnosperms
135,525
occurrences

Mosses
260,895
occurrences

Sac fungi
1,038,457
occurrences

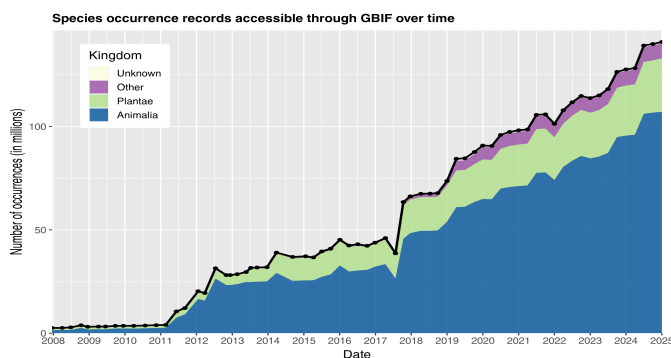*Basidiomycota*
850,302
occurrences

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

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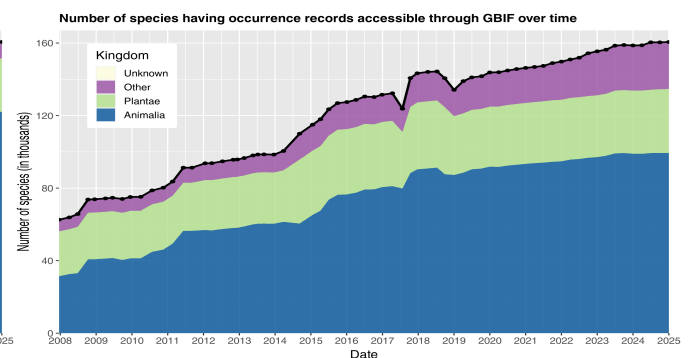Molluscs = Phylum *Mollusca*

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 Australia

Occurrence records available about species occurring in Australia

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

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 Australia

Alice Springs Desert Park (ASDP). *Published by Northern Territory Government*
  https://doi.org/10.15468/mzpret

NSW Biosecurity Information System - Weeds. *Published by Atlas of Living Australia*
  https://doi.org/10.15468/ctvmns

Phascogale pirata records from Melville Island 2015-2024. *Published by Atlas of Living Australia*
  https://doi.org/10.15468/4pw7qe

WEST CAPE YORK MARINE PARK (WCYMP). Benthic surveys of Carpentaria and Merkara
  Shoals,10?20 November 2022. *Published by Atlas of Living Australia*
  https://doi.org/10.15468/xqhpkk

WEST CAPE YORK MARINE PARK (WCYMP). Fish surveys of Carpentaria and Merkara Shoals,10 ?
  20 November 2022. *Published by Atlas of Living Australia*
  https://doi.org/10.15468/uw2n6x

National Seed Bank. *Published by Australian National Botanic Gardens*
  https://doi.org/10.15468/kyg9he

New Zealand National Forestry Herbarium. *Published by Scion*
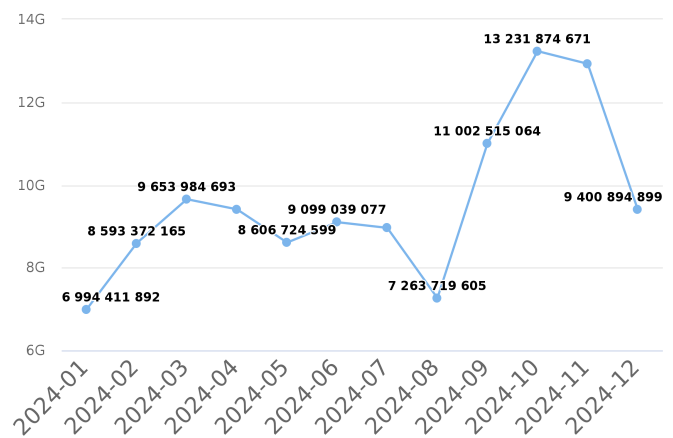 https://doi.org/10.15468/wwmzk6

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

Newest publishers from Australia

Plant Health Australia

Scion

Myrtleford & District Landcare & Sustainability Group

Central Coast Council

Sunshine Coast Council

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

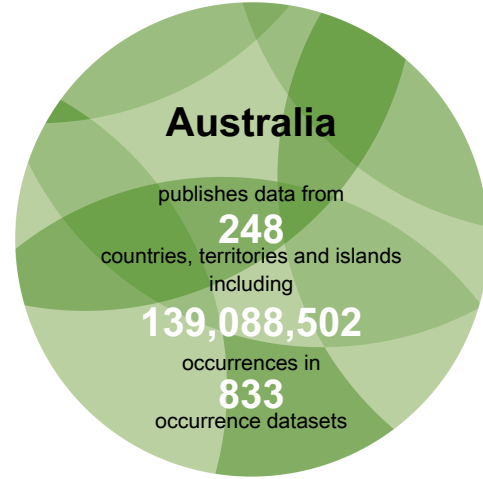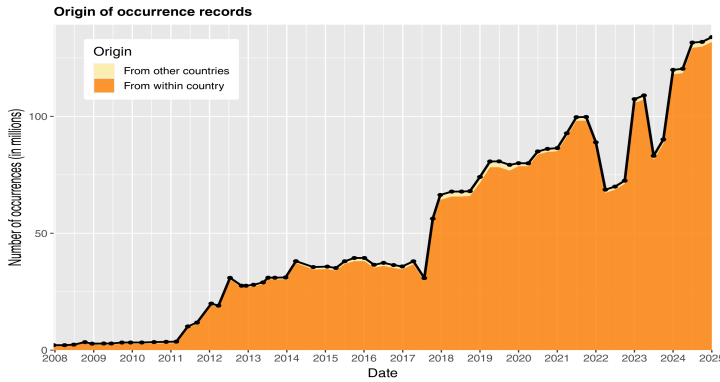## Occurrence records downloaded from GBIF.org, published by institutions in Australia

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

Data mobilization

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

Origin of occurrence records

Data sharing with country or area of origin

Australia

publishes data from
248
countries, territories and islands
including
139,088,502
occurrences in
833
occurrence datasets

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

Top data contributors about biodiversity in Australia

Rank	Country or area	No. of occurrences
1	Australia	131,864,621
2	United Kingdom	4,639,870
3	United States of America	2,787,846
4	International organization or unknown country	469,516
5	Netherlands	226,648
6	Estonia	220,021
7	Germany	158,370
8	New Zealand	119,608
9	Colombia	118,733
10	France	67,023

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

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

Top datasets contributing data about Australia

EOD – eBird Observation Dataset. *47,102,359 occurrences in Australia.* (Last updated 27 Sep 2024)

NSW BioNet Atlas. *14,601,716 occurrences in Australia.* (Last updated 19 Dec 2024)

BirdLife Australia, Birdata. *11,631,570 occurrences in Australia.* (Last updated 19 Dec 2024)

Victorian Biodiversity Atlas. *10,079,568 occurrences in Australia.* (Last updated 19 Dec 2024)

iNaturalist Research-grade Observations. *4,926,019 occurrences in Australia.* (Last updated 30 Dec 2024)

Australia participates in the following projects coordinated by GBIF

Atlas of Living Australia
, 2010–2010
The Atlas of Living Australia (ALA) provides free, online access to a vast repository of information about Australia's amazing biodiversity. It's a collaborative, open infrastructure that pulls together biodiversity data from multiple sources, and focuses on making biodiversity information accessible and usable.
https://www.gbif.org/project/82983

GBIF.es
, 2014–2014
GBIF Spain's biodiversity data portal was the first adaptation of the open-source system Atlas of Living Australia to another national platform.
https://www.gbif.org/project/82954

Atlas of Living Scotland
, 2016–2016
The Atlas of Living Scotland was created in 2015 to provide a platform for the collection, aggregation, analysis and use of biological data in Scotland.
https://www.gbif.org/project/82973

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

Argentina: Sistema Nacional de Datos Biológicos
, 2016–2016
https://www.gbif.org/project/82985

Atlas of Living France
, 2015–2015
The Atlas of Living France provides open access to primary biodiversity data from French institutions.
https://www.gbif.org/project/82969

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

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*