

Activity report



generated January 2025

Madagascar

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 Madagascar. 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 Madagascar



Animalia 1,216,843 occurrences



Plantae 1,065,894 occurrences



Fungi
46,177
occurrences



Unknown 15,422 occurrences



Protozoa 1,099 occurrences



8,930 occurrences



Virus
1,665
occurrences



8,677 occurrences



Archaea
20
occurrences

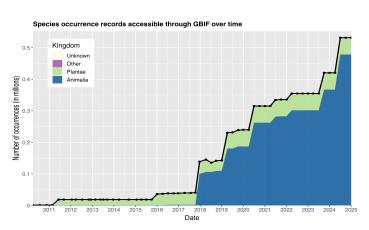
► Data mobilization

Institutions from

Madagascar

published
111,290

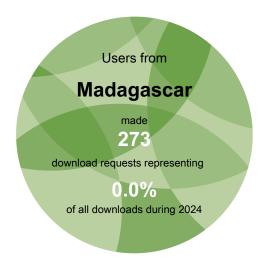
new occurrence records during 2024
out of a total of
428,451,251
occurrence records added
globally to GBIF.org

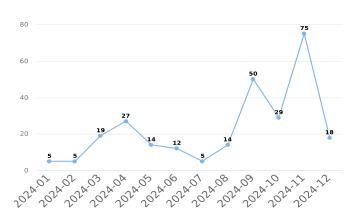


Number of records published by institutions in Madagascar, categorized by kingdom

Access and usage

Data downloads on GBIF.org from users in Madagascar





Monthly downloads requested by users in Madagascar

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

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 Madagascar.

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

Womersley, Sousa, Humphries *et al.* (2024) Climate-driven global redistribution of an ocean giant predicts increased threat from shipping. *Nature Climate Change*.

https://doi.org/10.1038/s41558-024-02129-5

Ovaskainen, Abrego, Furneaux *et al.* (2024) Global Spore Sampling Project: A global, standardized dataset of airborne fungal DNA. *Scientific Data.*

https://doi.org/10.1038/s41597-024-03410-0

Méndez, Barratt, Durka *et al.* (2024) Genomic signatures of past megafrugivore-mediated dispersal in Malagasy palms. *Journal of Ecology.*

https://doi.org/10.1111/1365-2745.14340

Wan, Wang, Leitch *et al.* (2024) The rise of baobab trees in Madagascar. *Nature*. https://doi.org/10.1038/s41586-024-07447-4

ANDREONE, RASELIMANANA, CROTTINI. (2023) Vouchering, integrative taxonomy and natural history collections: a case study with the amphibians of Madagascar. *Bollettino del Museo Regionale di Scienze Naturali, Torino.*

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

Data availability

Total data available for selected taxonomic groups in Madagascar



Mammals 46,724 occurrences



Birds 543,521 occurrences



Bony fish **25,716** occurrences



Amphibians 49,156 occurrences



Insects
324,157
occurrences



Reptiles 57,260 occurrences



Molluscs 91,602 occurrences



Arachnids
21,098
occurrences



Flowering plants 975,257 occurrences



Ferns
37,021
occurrences



Gymnosperms 917 occurrences



Mosses
24,138
occurrences



Sac fungi 18,662 occurrences



Basidiomycota
23,156
occurrences

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

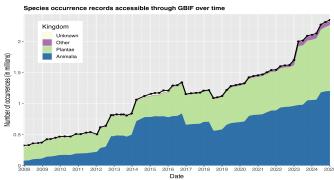
Insects = Class Insecta Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia

Molluscs = Phylum Mollusca

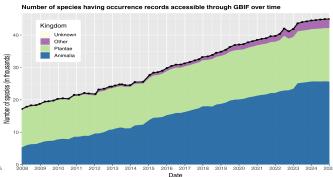
Arachnids = Class *Arachnida*Flowering plants = Phylum *Magnoliophyta*Gymnosperms = Superclass *Gymnospermae*

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

Change over time in records about biodiversity in Madagascar



Occurrence records available about species occurring in Madagascar



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

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



Malagasy Scoliidae recorded by PREP as flower visitors. *Published by Centre National de Recherches sur l'Environnement* https://doi.org/10.15468/6pr73g

Diversity and spatial distribution of Phyto and Zooplankton in the West Coast of Madagascar... Published by Madagascar Biodiversity Information Facility (MadBIF) https://doi.org/10.15468/gej9ta

Specimen references on the Verbenaceae family held by the TAN Herbarium. *Published by Parc Botanique et Zoologique de Tsimbazaza (P.B.Z.T.)* https://doi.org/10.15468/tqr4ip

Specimen references on the Sapotaceae family held by the TAN Herbarium. *Published by Parc Botanique et Zoologique de Tsimbazaza (P.B.Z.T.)* https://doi.org/10.15468/7paqmu

Lemur_occurrences_Madagasikara_Voakajy_MLP_20190917. Published by Madagascar Lemurs Portal

https://doi.org/10.15468/nmrdpa

Lemur_occurrences_CVB_MLP_20190917. *Published by Madagascar Lemurs Portal* https://doi.org/10.15468/9drm6d

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

Newest publishers from Madagascar

Madagascar Lemurs Portal

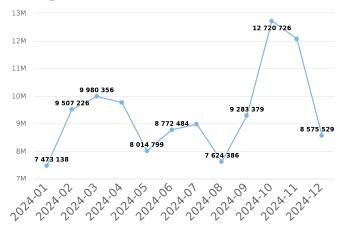
Kew Madagascar Conservation Centre - Royal Botanic Gardens Kew

Madagascar Biodiversity Center, Parc Botanique et Zoologique des Tsimbazaza

CNARP

Centre National de Recherches sur l'Environnement

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

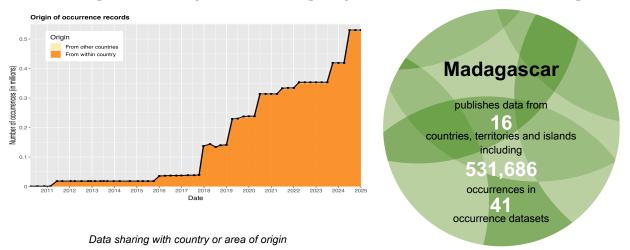


Number of occurrence records downloaded via GBIF.org published by institutions in Madagascar

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

Data mobilization





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

Top data contributors about biodiversity in Madagascar

Rank	Country or area	No. of occurrences
1	United States of America	1,038,313
2	Madagascar	526,841
3	France	248,272
4	United Kingdom	139,266
5	Netherlands	80,443
6	International organization or unknown country	69,234
7	Estonia	51,945
8	Belgium	46,422
9	Germany	32,550
10	Switzerland	21,297

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

Top datasets contributing data about Madagascar

EOD – eBird Observation Dataset. *455*,563 occurrences in Madagascar. (Last updated 27 Sep 2024)

Tropicos Specimens Non-MO. 422,100 occurrences in Madagascar. (Last updated 4 Jan 2025)

Tropicos MO Specimen Data. 170,553 occurrences in Madagascar. (Last updated 4 Jan 2025)

The vascular plants collection (P) at the Herbarium of the Muséum national d'Histoire Naturelle (MNHN -Paris). 145,223 occurrences in Madagascar. (Last updated 1 Jan 2025)

AntWeb. 136,088 occurrences in Madagascar. (Last updated 30 Dec 2024)

Madagascar participates in the following projects coordinated by GBIF

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

Mentoring Madagascar (MadBIF) - GBIF France

Capacity Enhancement Support Programme, 2015–2016

Guidance and technical support for Madagascar to implement a better data mobilization strategy and to mobilize and publish new data using the tools developed by GBIF.

https://www.gbif.org/project/82213

African Insect Atlas

BID: Biodiversity Information for Development, 2016-2018

This project is the first phase of the African Insect Atlas, which aims to unleash the potential of insects in conservation and sustainability research.

https://www.gbif.org/project/82632

The Forgotten African Islands - Addressing the gap in freshwater biodiversity knowledge for the Indian Ocean Islands

BID: Biodiversity Information for Development, 2017–2019

This project will address the need to manage the collation, digitisation, amendment and uploading of existing data for Ephemeroptera, Plecoptera and Trichoptera taxa and diatoms from the IOI to GBIF.

https://www.gbif.org/project/PTXkKWR6QoECgQy6leacM

Alien, native, and endemic grasses of Madagascar

BID: Biodiversity Information for Development, 2017–2019

This project will compile and mobilize all data on Madagascar grass species occurrence. Published research on which species are native will be used to compile the Grass Atlas of Madagascar. This Atlas will enable KMCC to develop a conservation strategy for valuable endemic grasses, and protected areas with grasslands.

https://www.gbif.org/project/617jpsl7c4OkumSugyQ0W6

BRYOTAN

BID: Biodiversity Information for Development, 2017-2019

The BRYOTAN project aims to answer to the lack of biodiversity data for bryophytes with focus on mosses in Madagascar. Bryophytes have crucial ecological functions in humid forest and in open, dry ecosystems. Since the end of the nineteen century more than 3000 dry mosses specimen are deposited in the herbarium of Parc Biologique Zoologique de Tsimbazaza, Antananarivo (TAN) and remain mostly unexploited. BRYOTAN project aims to build a database on Malagasy mosses (751 species reported) and to make taxonomic, geographical and temporal specimen data available. https://www.gbif.org/project/1AftOTKUtaumgCqCloi06G

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