

generated January 2024

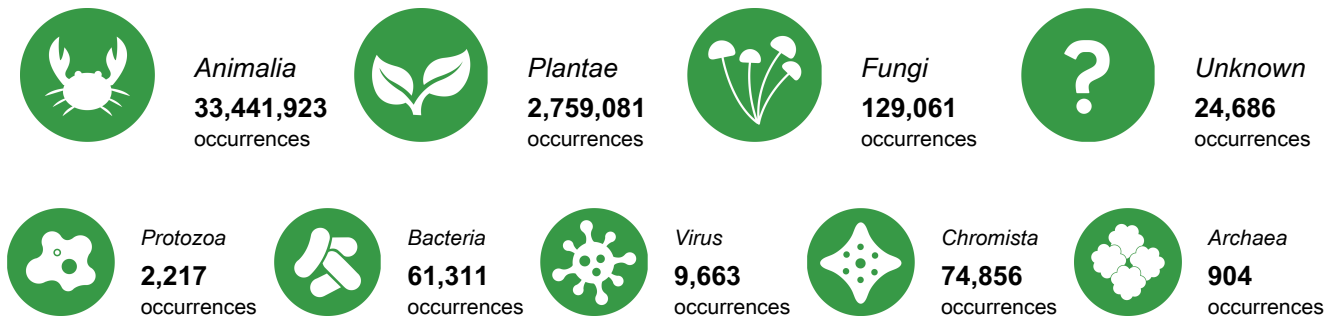
South Africa

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 South Africa. 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.

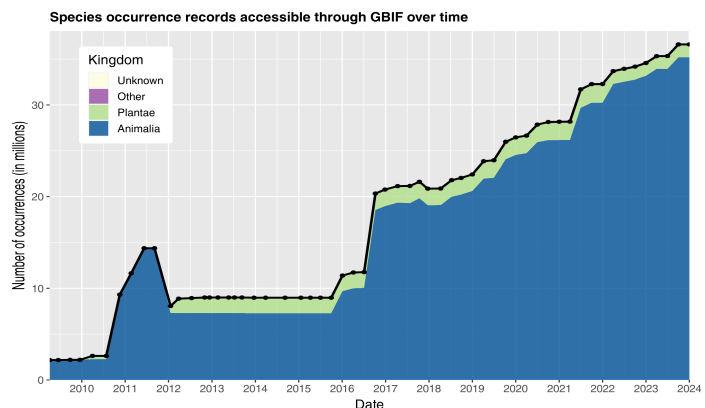
► Access and usage



► Data availability in South Africa



► Data mobilization

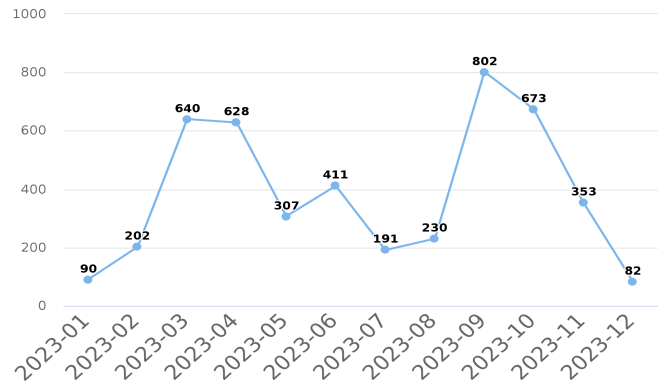
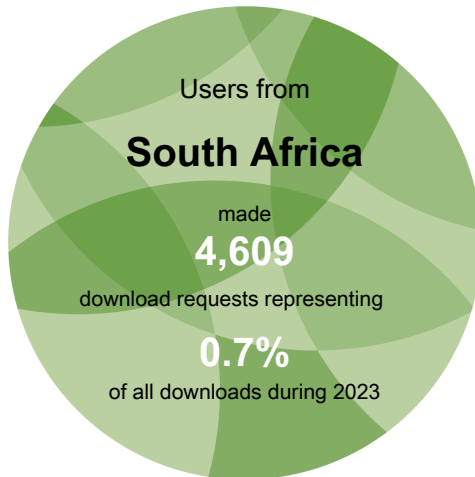


Number of records published by institutions in South Africa, categorized by kingdom



Access and usage

Data downloads on GBIF.org from users in South Africa



Monthly downloads requested by users in South Africa

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

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 South Africa.

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

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-Gradow *et al.* (2023) The Global Distribution of Acacia. *Wattles*.

<https://doi.org/10.1079/9781800622197.0009>

Deville, Mori, Kawai *et al.* (2023) Cryptic biodiversity in the commercial diamondback squid *Thysanoteuthis rhombus* Troschel 1857. *Reviews in Fish Biology and Fisheries*.

<https://doi.org/10.1007/s11160-023-09813-3>

Padidar, Monadjem, Litschka-Koen *et al.* (2023) Snakebite epidemiology, outcomes and multi-cluster risk modelling in Eswatini. *PLOS Neglected Tropical Diseases*.

<https://doi.org/10.1371/journal.pntd.0011732>

James, Coverdale, Shivambu *et al.* (2023) Potential Climatic Suitability Distribution Model for Wild Boar (*Sus scrofa*) in South Africa. *African Journal of Wildlife Research*.

<https://doi.org/10.3957/056.053.0185>

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



Data availability

Total data available for selected taxonomic groups in South Africa



Mammals
236,913
occurrences



Birds
30,944,440
occurrences



Bony fish
176,477
occurrences



Amphibians
60,615
occurrences



Insects
1,482,044
occurrences



Reptiles
142,403
occurrences



Molluscs
120,441
occurrences



Arachnids
108,761
occurrences



Flowering plants
2,597,945
occurrences



Ferns
44,767
occurrences



Gymnosperms
12,322
occurrences



Mosses
48,971
occurrences



Sac fungi
87,780
occurrences



Basidiomycota
29,292
occurrences

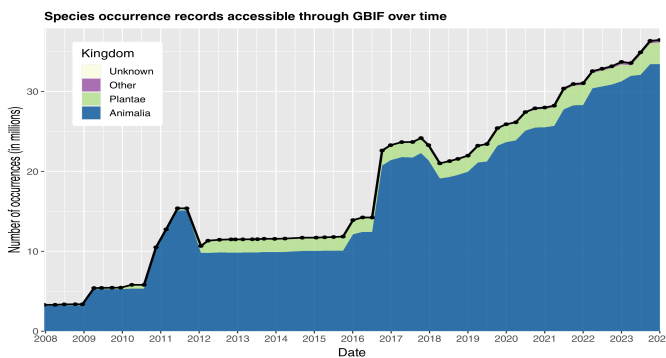
Mammals = Class *Mammalia*
Birds = Class *Aves*
Bony fish = Superclass
Osteichthyes p.p.
Amphibians = Class *Amphibia*

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

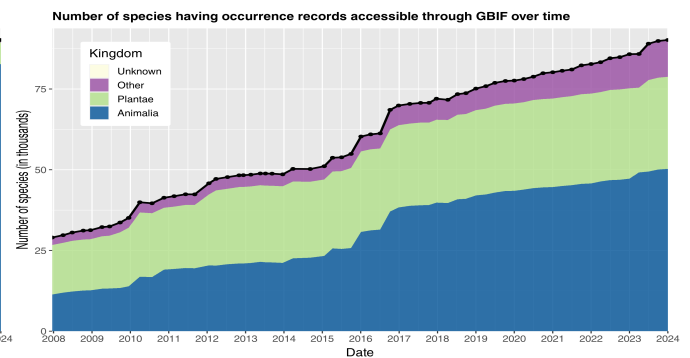
Arachnids = Class *Arachnida*
Flowering plants = Phylum
Magnoliophyta
Gymnosperms = Superclass
Gymnospermae

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

Change over time in records about biodiversity in South Africa



Occurrence records available about species occurring in South Africa



Species for which at least one occurrence record is available in South Africa

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 South Africa

KwaZulu-Natal Museum-Arachnida-Collection. *Published by KwaZulu-Natal Museum*
<https://doi.org/10.15468/kf9hfr>

African Bird Atlas Project. *Published by FitzPatrick Institute of African Ornithology*
<https://doi.org/10.15468/s27tr6>

The Freshwater Biodiversity Information System (FBIS) Fish Data. *Published by Freshwater Research Centre*
<https://doi.org/10.15468/gmk6hg>

KwaZulu-Natal Museum-Crustacea-collection. *Published by KwaZulu-Natal Museum*
<https://doi.org/10.15468/sbg2kg>

Filling the gap: Noteworthy herpetological discoveries in North West Province, South Africa. *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/v9y9p5>

KwaZulu-Natal Museum-Entomology-collection. *Published by KwaZulu-Natal Museum*
<https://doi.org/10.15468/vf6as7>

kznm-herpetology-collection. *Published by KwaZulu-Natal Museum*
<https://doi.org/10.15468/3fzhxq>

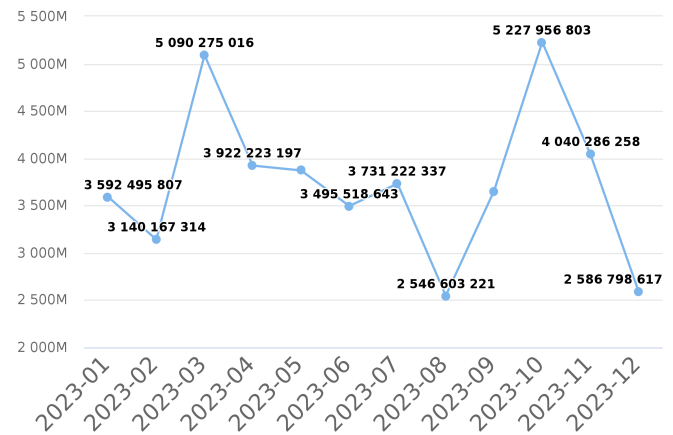
See all datasets from this country or area: gbif.org/dataset/search?publishing_country=ZA

Newest publishers from South Africa

- Freshwater Research Centre
- KwaZulu-Natal Museum
- FitzPatrick Institute of African Ornithology
- The South African Institute for Aquatic Biodiversity
- Agricultural Research Council

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

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

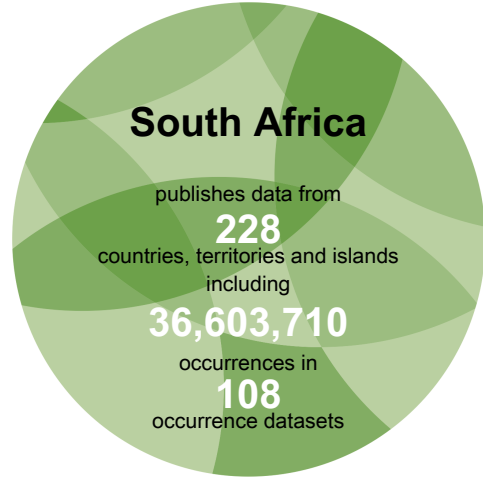
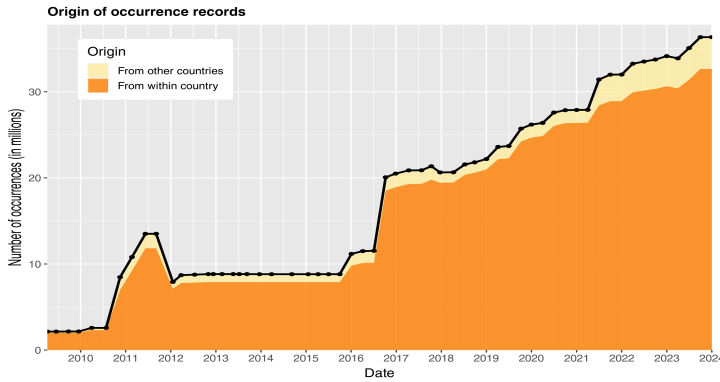


Number of occurrence records downloaded via GBIF.org published by institutions in South Africa



Data mobilization

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



Data sharing with country or area of origin

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

Top data contributors about biodiversity in South Africa

Rank	Country or area	No. of occurrences
1	South Africa	32,673,617
2	United States of America	2,201,432
3	International organization or unknown country	416,967
4	United Kingdom	405,924
5	Netherlands	235,443
6	Germany	105,630
7	Sweden	94,500
8	Estonia	81,441
9	Belgium	57,396
10	Switzerland	51,054

Top datasets contributing data about South Africa

- Southern African Bird Atlas Project 2. *18,625,817 occurrences in South Africa.* (Last updated 9 Dec 2023)
- Southern African Bird Atlas Project. *4,845,186 occurrences in South Africa.* (Last updated 6 Mar 2018)
- EOD – eBird Observation Dataset. *4,689,973 occurrences in South Africa.* (Last updated 20 Aug 2023)
- iNaturalist Research-grade Observations. *1,854,834 occurrences in South Africa.* (Last updated 2 Jan 2024)
- SAFRING: Historical Bird Ringing Records (2005-2009). *1,755,753 occurrences in South Africa.* (Last updated 22 Nov 2017)

Table 1. Ranking of countries or areas contributing data about South Africa

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



South Africa participates in the following projects coordinated by GBIF

GBIF Africa Nodes data mobilization, ecological niche modelling and data paper training and mentorship

Capacity Enhancement Support Programme, 2015–2016

This project is centred on providing practical training on ecological niche modelling and the preparation of data papers to participants from up to 10 nodes in Africa using real datasets for threatened or invasive species to be published to the GBIF network.

<https://www.gbif.org/project/82204>

Cross-continental partnership to investigate data mining approaches for impactful data use cases and stories

Capacity Enhancement Support Programme, 2022–2023

<https://www.gbif.org/project/CESP2022-005>

Mobilizing endemic and economically useful species data for policy and protection

Capacity Enhancement Support Programme, 2020–2021

Technical training for data managers at key institutions to ensure the availability of data for target species

<https://www.gbif.org/project/2du1KSeBHxIczF9krfPZvp>

Engaging academia to unlock access to biodiversity data in southern Africa

Capacity Enhancement Support Programme, 2018–2019

This project will trial a data management and data publication short-course tailored to university students and their lecturers within the Southern African Development Community (SADC) region.

<https://www.gbif.org/project/2MNIZMf30AEGOu0SOYEcGO>

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