

generated January 2025

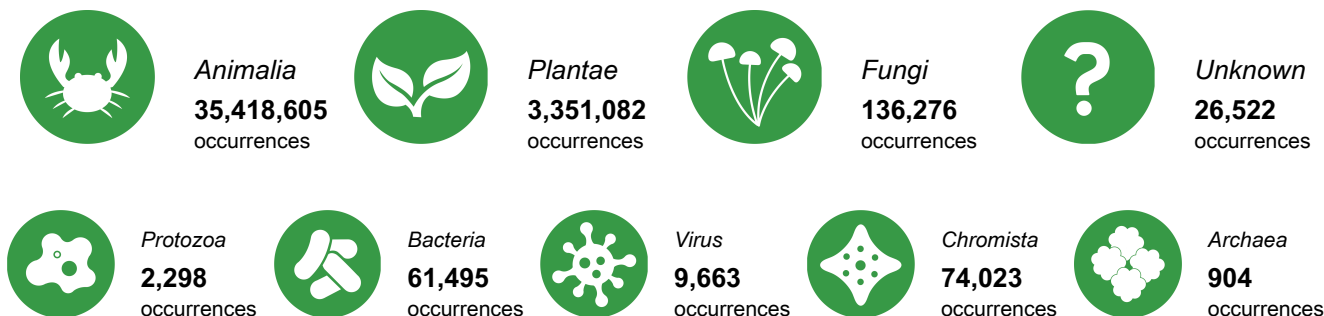
South Africa

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.

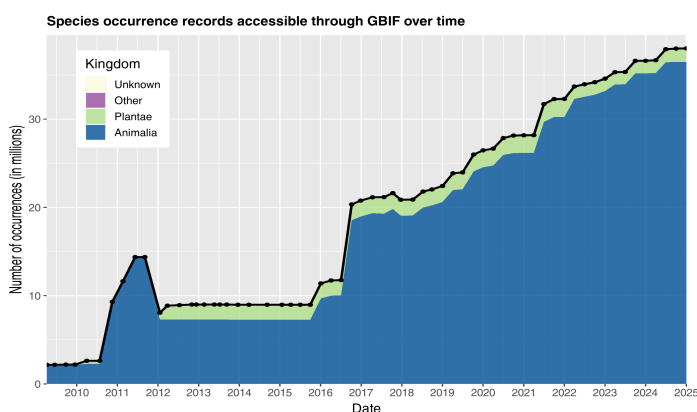
► Access and usage



► Data availability in South Africa



► Data mobilization

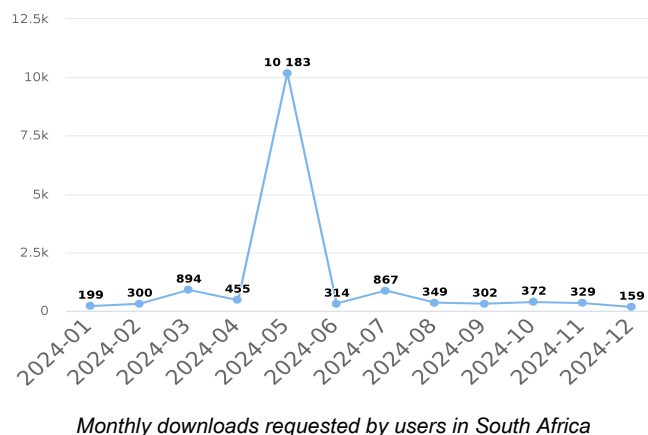
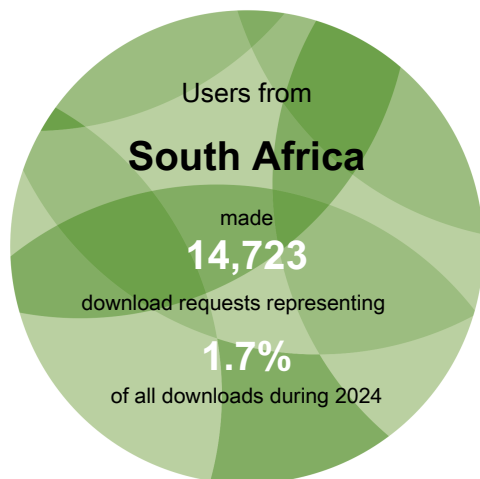


Number of records published by institutions in South Africa, categorized by kingdom



Access and usage

Data downloads on GBIF.org from users in South Africa



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.

González-Moreno, Anđelković, Adriaens *et al.* (2024) Citizen science platforms can effectively support early detection of invasive alien species according to species traits. *People and Nature*.
<https://doi.org/10.1002/pan3.10767>

Rocha, Chicomo, Lutondo *et al.* (2024) Wildlife mammal communities in post-war Angola are depleted and simplified: Implications for biodiversity conservation. *Animal Conservation*.
<https://doi.org/10.1111/acv.13004>

Hackel, Razafimanantsoa, Porcher *et al.* (2024) Heathers (Erica, Ericaceae) of Madagascar: taxonomy, evolution, ecology and uses. *ARPHA Preprints*.
<https://doi.org/10.3897/arphapreprints.e141580>

Navia, Alfaro-Shigueto, Ágreda-Arango *et al.* (2024) Unveiling Macroecological Patterns of Elasmobranchs in the Eastern Pacific Ocean. *Journal of Biogeography*.
<https://doi.org/10.1111/jbi.15037>

Mokotjomela, Vukeya, Mbele *et al.* (2024) The alien and invasive plant species that may be a future conservation threat to the Lesotho Afro-alpine Drakensberg area. *Regional Environmental Change*.
<https://doi.org/10.1007/s10113-024-02326-0>

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
262,804
occurrences



Birds
32,359,887
occurrences



Bony fish
178,944
occurrences



Amphibians
67,082
occurrences



Insects
1,909,373
occurrences



Reptiles
157,412
occurrences



Molluscs
144,560
occurrences



Arachnids
130,581
occurrences



Flowering plants
3,170,387
occurrences



Ferns
50,715
occurrences



Gymnosperms
17,368
occurrences



Mosses
53,583
occurrences



Sac fungi
90,861
occurrences



Basidiomycota
33,028
occurrences

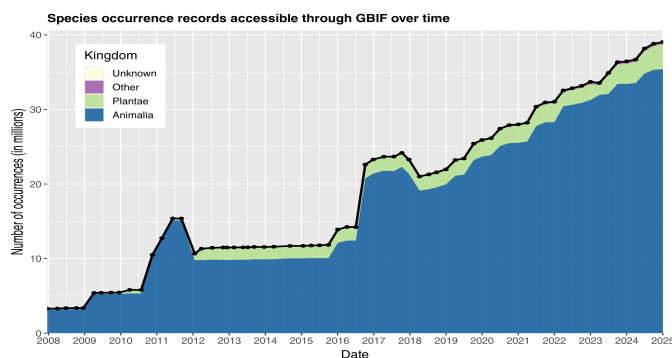
Mammals = Class *Mammalia*
Birds = Class *Aves*
Bony fish = Superclass
Osteichthyes p.p.
Amphibians = Class *Amphibia*

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

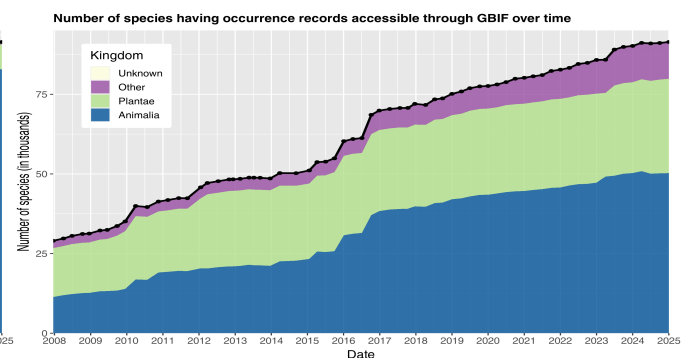
Arachnids = Class *Arachnida*
Flowering plants = Phylum
Magnoliophyta
Gymnosperms = Superclass
Gymnospermae

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

Monitoring Forest Vegetation and Carbon Change in the Upper Guinea Forest (UGF) - Soyah – Sabouya Forest, and the Ziama massif. *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/sdv44a>

Monitoring Forest Vegetation and Carbon Change in the Upper Guinea Forest (UGF) - Tai National Park, and the Cavally Nature Reserve. *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/3kn8nr>

Monitoring Forest Vegetation and Carbon Change in the Upper Guinea Forest (UGF) - Gola Forest National Park, Wonegizi-Wologizi Forest, Sapo National Park, Grebro-Krahn National Park. *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/nj4bge>

Monitoring Forest Vegetation and Carbon Change in the Upper Guinea Forest (UGF) - Gola Rainforest National Park, Outamba Kilimi National Park. *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/j7x2w6>

Bovid fossils sampled for the project Palaeogenomes of a lost world: Ancient bovids of the submerged Palaeo-Agulhas Plain of southern Africa (PalaeoBovids). *Published by South African National Biodiversity Institute*
<https://doi.org/10.15468/aafkx7>

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

Newest publishers from South Africa

South African National Parks

Freshwater Research Centre

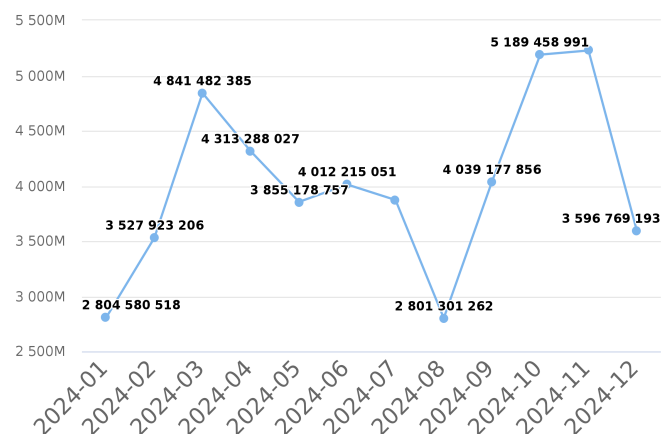
KwaZulu-Natal Museum

FitzPatrick Institute of African Ornithology

The South African Institute for Aquatic Biodiversity

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

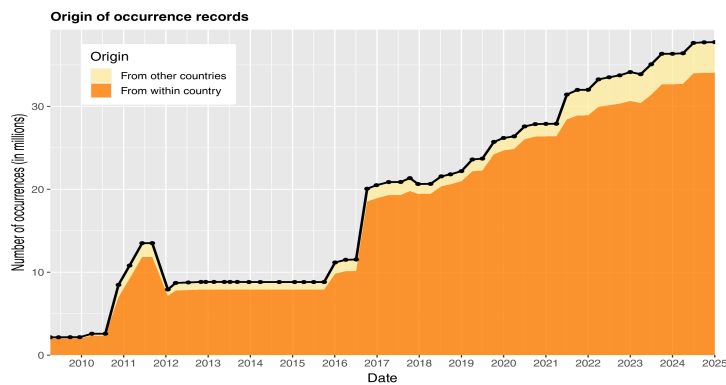


Number of occurrence records downloaded via
GBIF.org published by institutions in South Africa

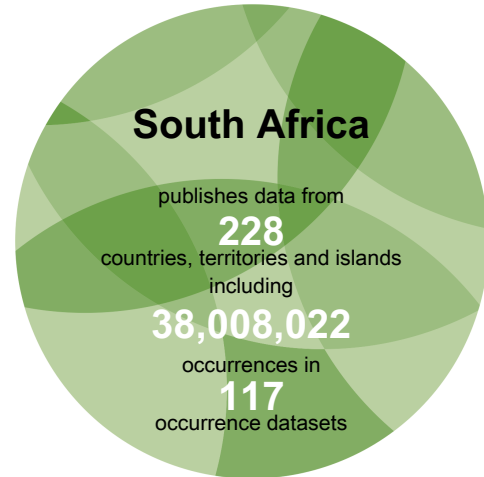


Data mobilization

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	34,066,563
2	United States of America	2,792,465
3	International organization or unknown country	826,168
4	United Kingdom	547,462
5	Netherlands	260,565
6	Germany	104,198
7	Sweden	103,603
8	Estonia	81,473
9	Belgium	57,630
10	France	57,286

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

Top datasets contributing data about South Africa

- Southern African Bird Atlas Project 2. 18,625,817 occurrences in South Africa. (Last updated 2 Jan 2025)
- EOD – eBird Observation Dataset. 5,958,244 occurrences in South Africa. (Last updated 27 Sep 2024)
- Southern African Bird Atlas Project. 4,845,186 occurrences in South Africa. (Last updated 6 Mar 2018)
- iNaturalist Research-grade Observations. 2,421,004 occurrences in South Africa. (Last updated 30 Dec 2024)
- SAFRING: Historical Bird Ringing Records (2005-2009). 1,755,753 occurrences in South Africa. (Last updated 22 Nov 2017)

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/2du1KSeBHxlcZF9krfPZvp>

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)