

# **Activity report**

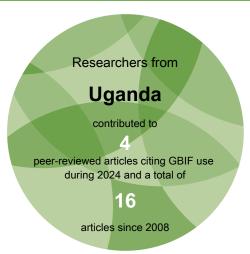


generated January 2025

# Uganda

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 Uganda. 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 Uganda



Animalia 2,217,906 occurrences



Plantae 120,107 occurrences



Fungi
24,854
occurrences



Unknown 4,925 occurrences



Protozoa
136
occurrences



A,463



Virus
3,040
occurrences



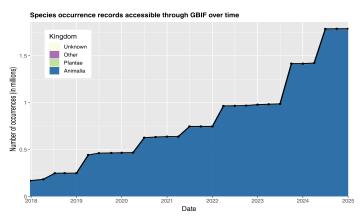
Chromista
2,795
occurrences



Archaea
54
occurrences

#### ► Data mobilization



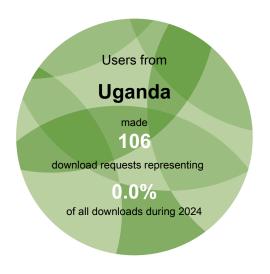


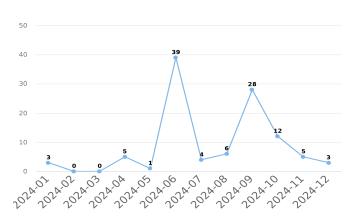
Number of records published by institutions in Uganda, categorized by kingdom



#### Access and usage

#### Data downloads on GBIF.org from users in Uganda





Monthly downloads requested by users in Uganda

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

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 Uganda.

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

KAWUMA, NAMAGANDA, KATUURA *et al.* (2024) Morphological variation within Solanum campylacanthum (Solanaceae) in Uganda and its relationship with S. cerasiferum. *Phytotaxa*. https://doi.org/10.11646/phytotaxa.661.1.4

Hordijk, Bialic-Murphy, Lauber *et al.* (2024) Dominance and rarity in tree communities across the globe: Patterns, predictors and threats. *Global Ecology and Biogeography.* https://doi.org/10.1111/geb.13889

Cuni-Sanchez, Martin, Uzabaho *et al.* (2024) Evidence of thermophilization in Afromontane forests. *Nature Communications.* 

https://doi.org/10.1038/s41467-024-48520-w

Omuse, Tonnang, Yusuf *et al.* (2024) The global atlas of edible insects: Analysis of diversity and commonality contributing to food systems and sustainability. *Scientific Reports.* https://doi.org/10.1038/s41598-024-55603-7

Tumwebaze, Clewing, Chibwana *et al.* (2022) Evolution and Biogeography of Freshwater Snails of the Genus Bulinus (Gastropoda) in Afromontane Extreme Environments. *Frontiers in Environmental Science* 

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

https://doi.org/10.3389/fenvs.2022.902900



#### **Data availability**

#### Total data available for selected taxonomic groups in Uganda



Mammals 49,607 occurrences



Birds 1,793,405 occurrences



Bony fish **30,034** occurrences



Amphibians 6,374 occurrences



Insects
255,805
occurrences



Reptiles 7,433 occurrences



Molluscs 12,638 occurrences



Arachnids
4,776
occurrences



Flowering plants
111,014
occurrences



Ferns
4,378
occurrences



Gymnosperms
225
occurrences



Mosses 2,920 occurrences



Sac fungi 17,677 occurrences



Basidiomycota 5,126 occurrences

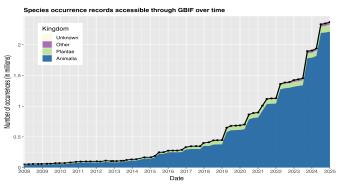
Mammals = Class Mammalia Birds = Class Aves Bony fish = Superclass Osteichthyes p.p. Amphibians = Class Amphibia Insects = Class Insecta Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia

Molluscs = Phylum Mollusca

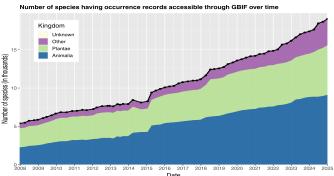
Arachnids = Class *Arachnida*Flowering plants = Phylum *Magnoliophyta*Gymnosperms = Superclass *Gymnospermae* 

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

#### Change over time in records about biodiversity in Uganda



Occurrence records available about species occurring in Uganda



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

### 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 Uganda

Abundance and distribution of endemic bird species in Rushebeya Kanyabaha wetland, Rukiga district, SouthWestern Uganda. *Published by Kabale University* https://doi.org/10.15468/6xys6x

Fish taxa observed in the first national surveys of streams and rivers in Uganda. *Published by National Fisheries Resources Research Institute* https://doi.org/10.15468/sngcfm

Fish species occurrences in selected rivers in the Albert system. *Published by National Fisheries Resources Research Institute* https://doi.org/10.15468/8x7bjb

Occurrence dataset of wild bees (Hymenoptera, Apoidea) present in agricultural and non-farmed landscapes of Central Uganda. *Published by Department of Zoology, Entomology and Fisheries Sciences* 

https://doi.org/10.15468/ew2zkd

Checklist of small mammals of Mpigi Forest Reserve, Uganda. *Published by A Rocha Uganda* https://doi.org/10.15468/6wh2v6

Checklist of small mammals of Bukaleba Forest Reserve, Uganda. *Published by A Rocha Uganda* https://doi.org/10.15468/w6wsk7

See all datasets from this country or area: gbif.org/dataset/search?publishing\_country=UG

#### **Newest publishers from Uganda**

Kabale University

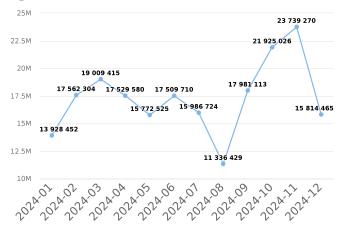
A Rocha Uganda

Makarere University, Department of Plant Science, Microbiology and Biotechnology

Department of Zoology, Entomology and Fisheries Sciences

National Biodiversity Data Bank

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



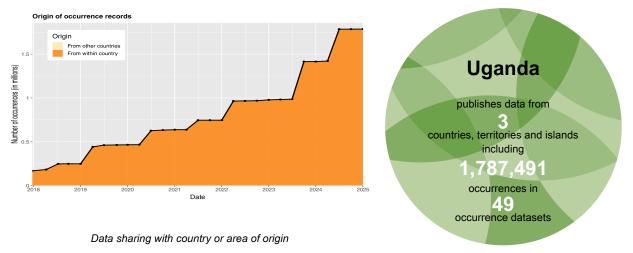
Number of occurrence records downloaded via GBIF.org published by institutions in Uganda

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



#### **Data mobilization**





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

# Top data contributors about biodiversity in Uganda

Rank	Country or area	No. of occurrences
1	Uganda	1,786,187
2	United States of America	266,161
3	United Kingdom	88,966
4	Netherlands	40,667
5	Finland	33,152
6	International organization or unknown country	22,226
7	Estonia	21,744
8	Kenya	21,464
9	Norway	18,898
10	Belgium	16,987

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

# Top datasets contributing data about Uganda

EOD – eBird Observation Dataset. *1,629,562* occurrences in Uganda. (Last updated 27 Sep 2024)

VectorBase (Bioinformatics Resource for Invertebrate Vectors of Human Pathogens). *132,515 occurrences in Uganda*. (Last updated 19 Mar 2024)

National Biodiversity Data Bank. Observation records, 1900-2014. 57,218 occurrences in Uganda. (Last updated 28 Sep 2021)

iNaturalist Research-grade Observations. 39,634 occurrences in Uganda. (Last updated 30 Dec 2024)

Natural History Museum (London) Collection Specimens. 34,650 occurrences in Uganda. (Last updated 3 Jan 2025)



#### Uganda 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

# Advancing freshwater biodiversity data access, utility and relevance for conservation decision-making in Uganda

BID: Biodiversity Information for Development, 2021–2023 https://www.gbif.org/project/BID-AF2020-145-USE

#### Biodiversity data mobilization in the Albertine Rift region

BID: Biodiversity Information for Development, 2016–2017
This project strengthens the ARBIMS portal and expands the data managers' network. https://www.gbif.org/project/82764

#### Mobilizing plant diversity data in Uganda through training

BID: Biodiversity Information for Development, 2016–2017

The project aims to identify data holders from Uganda engaged in active monitoring and management of plant biodiversity data https://www.gbif.org/project/82781

### Increasing capacity for conservation of threatened fish species through data mobilization and training

BID: Biodiversity Information for Development, 2017–2019

The goal of this project is to increase capacity for conservation of threatened fish species through data mobilization and training. The specific objectives are (1) to mobilize data on at least 10,000 fish records from Uganda's aquatic systems (including lakes, rivers and streams, and wetlands), (2) identify and train scientists active in monitoring and management of fish biodiversity data in the use of data publishing tools, and (3) create awareness among policy makers in use of biodiversity information for decision making.

https://www.gbif.org/project/5MKPHm718koog2OYmgqKKI

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