United Republic of Tanzania

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 United Republic of Tanzania. 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 United Republic of Tanzania contributed to 4 peer-reviewed articles citing GBIF use during 2023 and a total of 22 articles since 2008.

▶ Data availability in United Republic of Tanzania

- **Animalia**: 1,765,140 occurrences
- **Plantae**: 438,410 occurrences
- **Fungi**: 89,087 occurrences
- **Unknown**: 8,423 occurrences
- **Protozoa**: 1,641 occurrences
- **Bacteria**: 11,863 occurrences
- **Virus**: 2,508 occurrences
- **Chromista**: 15,887 occurrences
- **Archaea**: 506 occurrences

▶ Data mobilization

Institutions from United Republic of Tanzania published 245,591 new occurrence records during 2023 out of a total of 355,993,458 occurrence records added globally to GBIF.org.

Number of records published by institutions in United Republic of Tanzania, categorized by kingdom.
Access and usage

Data downloads on GBIF.org from users in United Republic of Tanzania

Users from United Republic of Tanzania made 107 download requests representing 0.0% of all downloads during 2023.

Monthly downloads requested by users in United Republic of Tanzania

Recent peer-reviewed articles using GBIF-mediated data by co-authors based in United Republic of Tanzania

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 United Republic of Tanzania.

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

Tumwebaze, Clewning, Chibwana et al. (2022) Evolution and Biogeography of Freshwater Snails of the Genus Bulinus (Gastropoda) in Afromontane Extreme Environments. *Frontiers in Environmental Science.*
https://doi.org/10.3389/fenvs.2022.902900

https://doi.org/10.7717/peerj.5457

https://doi.org/10.1016/j.margen.2023.101044

Howard, Nanyeni, Mollel et al. (2023) From southern Africa and beyond: Historical biogeography of a monocotyledonous bulbous geophyte. *Journal of Biogeography.*
https://doi.org/10.1111/jbi.14627

https://doi.org/10.1111/mec.16936

See all research from this country or area gbif.org/country/TZ/publications/from
Data availability

Total data available for selected taxonomic groups in United Republic of Tanzania

- **Mammals**: 91,477 occurrences
- **Birds**: 1,337,669 occurrences
- **Bony fish**: 64,484 occurrences
- **Amphibians**: 21,664 occurrences
- **Insects**: 162,381 occurrences
- **Reptiles**: 23,842 occurrences
- **Molluscs**: 28,773 occurrences
- **Arachnids**: 4,895 occurrences
- **Flowering plants**: 402,688 occurrences
- **Ferns**: 12,338 occurrences
- **Gymnosperms**: 1,217 occurrences
- **Mosses**: 10,684 occurrences
- **Sac fungi**: 48,787 occurrences
- **Basidiomycota**: 26,877 occurrences

**Classifications**:

- **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
- **Ferns** = Phylum Pteridophyta
- **Gymnosperms** = Superclass Gymnospermae
- **Mosses** = Phylum Bryophyta
- **Sac fungi** = Phylum Ascomycota
- **Basidiomycota** = Phylum Basidiomycota

Change over time in records about biodiversity in United Republic of Tanzania

Species occurrence records accessible through GBIF over time

Species for which at least one occurrence record is available in United Republic of Tanzania

**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 United Republic of Tanzania

Occurrence and diversity of aquatic macroinvertebrates in the Lake Manyara Basin, northern-Tanzania. *Published by TanBIF*
https://doi.org/10.15468/bua68p

Diversity and distribution of freshwater invertebrates in the Lake Victoria Basin. *Published by TanBIF*
https://doi.org/10.15468/pu3xma

A data set of non-flowering seed producing plants at TAFORI herbarium. *Published by TanBIF*
https://doi.org/10.15468/hfygvj

Occurrence and distribution of spores producing plants in Tanzania: Collection of Preserved Specimens at TAFORI herbarium. *Published by TanBIF*
https://doi.org/10.15468/urxwjq

Bryophyte collection -Tanzania Forestry Research Institute Herbarium. *Published by TanBIF*
https://doi.org/10.15468/gsp6vf

Macroinvertebrate composition and distribution in Zigi (Sigi) River Catchment: A Global Biodiversity Hotspot in Northeastern-Tanzania. *Published by TanBIF*
https://doi.org/10.15468/a8x4hu

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

Newest publishers from United Republic of Tanzania

University of Dar es Salaam, Department of Zoology
University of Dar es Salaam, Department of Botany
Sokoine University of Agriculture, Department of Ecosystems and Conservation
TanBIF

Occurrence records downloaded from GBIF.org, published by institutions in United Republic of Tanzania

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

Number of occurrence records downloaded via GBIF.org published by institutions in United Republic of Tanzania
Data mobilization
Data sharing with country or area of origin by national institutions in United Republic of Tanzania

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

Top data contributors about biodiversity in United Republic of Tanzania

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country or area</th>
<th>No. of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>United Republic of Tanzania</td>
<td>1,283,320</td>
</tr>
<tr>
<td>2</td>
<td>United States of America</td>
<td>315,683</td>
</tr>
<tr>
<td>3</td>
<td>United Kingdom</td>
<td>123,421</td>
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<tr>
<td>4</td>
<td>Estonia</td>
<td>115,412</td>
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<td>5</td>
<td>Belgium</td>
<td>103,711</td>
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<td>6</td>
<td>Netherlands</td>
<td>93,597</td>
</tr>
<tr>
<td>7</td>
<td>Germany</td>
<td>65,791</td>
</tr>
<tr>
<td>8</td>
<td>Denmark</td>
<td>36,608</td>
</tr>
<tr>
<td>9</td>
<td>Sweden</td>
<td>28,826</td>
</tr>
<tr>
<td>10</td>
<td>South Africa</td>
<td>22,932</td>
</tr>
</tbody>
</table>

Table 1. Ranking of countries or areas contributing data about United Republic of Tanzania

Top datasets contributing data about United Republic of Tanzania

- **EOD – eBird Observation Dataset. 1,189,064 occurrences in United Republic of Tanzania.** (Last updated 20 Aug 2023)
- **Global soil organisms. 95,281 occurrences in United Republic of Tanzania.** (Last updated 27 Feb 2023)
- **Natural History Museum (London) Collection Specimens. 75,236 occurrences in United Republic of Tanzania.** (Last updated 19 Dec 2023)
- **iNaturalist Research-grade Observations. 72,931 occurrences in United Republic of Tanzania.** (Last updated 2 Jan 2024)
- **Tropicos Specimens Non-MO. 68,717 occurrences in United Republic of Tanzania.** (Last updated 3 Jan 2024)

See all contributing countries and areas or datasets: gbif.org/country/TZ/about
United Republic of Tanzania participates in the following projects coordinated by GBIF

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

Mainstreaming freshwater invertebrate biodiversity data into government decision-making
*BID: Biodiversity Information for Development, 2021–2023*
https://www.gbif.org/project/BID-AF2020-169-USE

Enhancing accessibility of forest flora data in Tanzania
*BID: Biodiversity Information for Development, 2021–2023*
https://www.gbif.org/project/BID-AF2020-038-INS

Establishing Metadata of Biodiversity Data Generated from Ramsar Sites in Tanzania
*BID: Biodiversity Information for Development, 2017–2019*
The project will undertake an inventory of (a) who has what type of data, (b) in what form and format, (c) in what state of digitization, (d) if digitized, whether accessible or not (e) if accessible, from which source. Further the data will be mobilized and published on GBIF and TanBIF portals. In addition holders of biodiversity data from the Ramsar sites will be trained on how to publish and access data from GBIF Portal, as the strategic option for sustainability of data management in the Ramsar sites. Data that will be mobilized in the project will be analysed and help develop a checklist of species of the Tanzanian Ramsar Sites.
https://www.gbif.org/project/7ITBUVAicYKkg2ke68AMW

Publishing metadata for biodiversity data generated from REDD+ projects in Tanzania
*BID: Biodiversity Information for Development, 2016–2017*
This project inventories data generated from REDD+ pilot projects in Tanzania, to establish data holdings, formats that data are held in, and the state of data digitization and access.
https://www.gbif.org/project/82753

Digitizing national vegetable databases to improve food and nutritional security in Eastern Africa
*BID: Biodiversity Information for Development, 2017–2018*
Capacity building towards digitization of national vegetable databases to address regional and national priorities in food and nutritional security in Eastern Africa
https://www.gbif.org/project/5YRUpRxjGgiq0Qo4GVMeYG

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