Nigeria

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 Nigeria. 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 Nigeria contributed to 9 peer-reviewed articles citing GBIF use during 2023 and a total of 43 articles since 2008.

▶ Data availability in Nigeria

- **Animalia**: 835,730 occurrences
- **Plantae**: 156,793 occurrences
- **Fungi**: 14,740 occurrences
- **Unknown**: 2,164 occurrences
- **Protozoa**: 591 occurrences
- **Bacteria**: 31,149 occurrences
- **Virus**: 5,877 occurrences
- **Chromista**: 7,846 occurrences
- **Archaea**: 290 occurrences

▶ Data mobilization

Institutions from Nigeria published 323,687 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 Nigeria, categorized by kingdom*
Access and usage

Data downloads on GBIF.org from users in Nigeria

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

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 Nigeria.

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

Hounsou-Dindin, Idohou, Agre et al. (2023) Habitat range shift and prediction of the potential future distribution of Ricinodendron heudelotii (Baill.) Heckel in Benin (West Africa). *Heliyon.*
https://doi.org/10.1016/j.heliyon.2023.e02199

https://doi.org/10.1016/j.jnc.2023.126478

Nneji, Azevedo, Oyebanji et al. (2023) Patterns of species richness and turnover in endemic amphibians of the Guineo-Congolian rain forest. *Diversity and Distributions.*
https://doi.org/10.1111/ddi.13717

Chukwuma, Oyebanji, Chukwuma et al. (2023) Predicting the potential impact of environmental factors on the distribution of Triplochiton scleroxylon (Malvaceae): An economically important tree species in Nigeria. *Acta Ecologica Sinica.*
https://doi.org/10.1016/j.chnaes.2023.04.001

Obiakara, Olubode, Chukwuka. (2023) Climate change and the potential distribution of the invasive shrub, Leucaena leucocephala (Lam.) De Wit in Africa. *Tropical Ecology.*
https://doi.org/10.1007/s42965-023-00294-w

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

Total data available for selected taxonomic groups in Nigeria

- **Mammals**: 13,267 occurrences
- **Birds**: 685,617 occurrences
- **Bony fish**: 49,094 occurrences
- **Amphibians**: 3,997 occurrences
- **Insects**: 45,651 occurrences
- **Reptiles**: 4,749 occurrences
- **Molluscs**: 3,783 occurrences
- **Arachnids**: 1,101 occurrences
- **Flowering plants**: 150,157 occurrences
- **Ferns**: 1,262 occurrences
- **Gymnosperms**: 222 occurrences
- **Mosses**: 1,263 occurrences
- **Sac fungi**: 9,882 occurrences
- **Basidiomycota**: 2,778 occurrences

Mammals = Class Mammalia
Birds = Class Aves
Amphibians = Class Amphibia
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 Nigeria

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 Nigeria

Checklist of flora and fauna of Bayelsa State, Nigeria. Published by University of Lagos
https://doi.org/10.15468/2dz5u4

Checklist of flora in Ogba Zoo, Edo State, Nigeria. Published by University of Lagos
https://doi.org/10.15468/pdxuz5

Macrobenthos of Atlantic Ocean by Ikike, Akwa-Ibom State, Nigeria. Published by University of Lagos
https://doi.org/10.15468/u2crjj

Checklist of Macrobenthos around Ikike, Akwa-Ibom State, Nigeria. Published by University of Lagos
https://doi.org/10.15468/8qbea9

Checklist of Plants in Niger Delta Region of Nigeria. Published by University of Lagos
https://doi.org/10.15468/44tbp5

Plants of Onura Sacred Groove, Alesa, Nigeria. Published by University of Lagos
https://doi.org/10.15468/zsq95g

Plants of Omakuru and Obite Sacred Groove, Etche Local Government, Rivers, Nigeria. Published by University of Lagos
https://doi.org/10.15468/yh8xrw

Newest publishers from Nigeria

University of Calabar
A.P. Leventis Ornithological Research Institute (APLORI)
National Park Services
Nigerian Conservation Foundation (NCF)
Lagos State University

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

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

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

Number of occurrence records downloaded via GBIF.org published by institutions in Nigeria
Data mobilization

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

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

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

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country or area</th>
<th>No. of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nigeria</td>
<td>739,457</td>
</tr>
<tr>
<td>2</td>
<td>United Kingdom</td>
<td>77,023</td>
</tr>
<tr>
<td>3</td>
<td>Sweden</td>
<td>47,391</td>
</tr>
<tr>
<td>4</td>
<td>United States of America</td>
<td>42,765</td>
</tr>
<tr>
<td>5</td>
<td>International organization or unknown country</td>
<td>29,398</td>
</tr>
<tr>
<td>6</td>
<td>Colombia</td>
<td>22,766</td>
</tr>
<tr>
<td>7</td>
<td>Netherlands</td>
<td>21,428</td>
</tr>
<tr>
<td>8</td>
<td>Estonia</td>
<td>16,787</td>
</tr>
<tr>
<td>9</td>
<td>Belgium</td>
<td>10,945</td>
</tr>
<tr>
<td>10</td>
<td>Germany</td>
<td>8,443</td>
</tr>
</tbody>
</table>

See all contributing countries and areas or datasets: gbif.org/country/NG/about
Nigeria participates in the following projects coordinated by GBIF

**Implementation of the biodiversity information and data system for coastal ecosystems in Nigeria**
*BID: Biodiversity Information for Development, 2021–2023*
[https://www.gbif.org/project/BID-AF2020-022-NAC](https://www.gbif.org/project/BID-AF2020-022-NAC)

**Enhancing capacity to mobilize and use biodiversity data to support sustainable development in West Africa**
*Capacity Enhancement Support Programme, 2020–2023*
The overall goal of this project is to enhance capacity for biodiversity data mobilization and development of information products in support of sustainable development in West Africa
[https://www.gbif.org/project/ImAtw3uVGyppjYHAxvD](https://www.gbif.org/project/ImAtw3uVGyppjYHAxvD)

**Expanding the visibility of the Lagos Herbarium through digitization and mobilization of plant specimen data**
*BID: Biodiversity Information for Development, 2021–2022*
[https://www.gbif.org/project/BID-AF2020-009-INS](https://www.gbif.org/project/BID-AF2020-009-INS)

**The African Bird Atlas Project**
*BID: Biodiversity Information for Development, 2021–2023*
[https://www.gbif.org/project/BID-AF2020-039-REG](https://www.gbif.org/project/BID-AF2020-039-REG)

**Capacity advancement for the Nigeria node of GBIF**
*BID: Biodiversity Information for Development, 2017–2019*
More than 700,000 data records related to plants and animals within protected areas and corresponding invasive, threatened and endemic species are housed in Institutions in Nigeria. The objective of the project is to initiate mobilization of biodiversity data from Nigerian biodiversity data holders, custodians, and institutions that are yet to begin data mobilization.
[https://www.gbif.org/project/6PYpxnirfMs2AQY1tOlO2](https://www.gbif.org/project/6PYpxnirfMs2AQY1tOlO2)

**Digitizing Odonata species of southern Nigeria**
*BID: Biodiversity Information for Development, 2017–2019*
A number of studies have been done on diversity, banking and DNA barcoding of odonates in southern Nigeria however, data collation on Odonata in Nigeria as a whole is unavailable. It is therefore important to compile this record for ease of access. The broader impact of the research would include capacity building for postgraduate students as well as conservationists, as well as availability of species records in relevant databases i.e. GBIF
[https://www.gbif.org/project/SM3TP8rR6YCmQUC05WkU](https://www.gbif.org/project/SM3TP8rR6YCmQUC05WkU)

**Mentoring of Nigerian Biodiversity Information Facility**
*Capacity Enhancement Support Programme, 2018–2019*
This project will enhance the capacity of the Nigerian GBIF node through mentoring by GBIF Benin/France with some Nigerian partners to strengthen biological collections.
[https://www.gbif.org/project/4knGeACyomSS4OekCi4E0](https://www.gbif.org/project/4knGeACyomSS4OekCi4E0)

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See all GBIF projects
[gbif.org/resource/search?content-type=project](https://gbif.org/resource/search?content-type=project)