

## **Activity report**

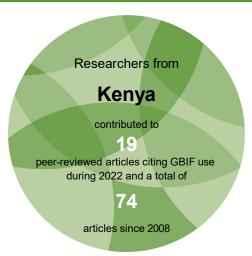


generated January 2023

Kenya

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 Kenya. 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



Animalia
3,159,888
occurrences



Plantae 189,865 occurrences



Fungi
14,644
occurrences



Unknown
12,915
occurrences



Protozoa
4,979
occurrences



Bacteria
10,771
occurrences



Chromista
4,468
occurrences



Archaea
403
occurrences

# Data mok

Institutions from

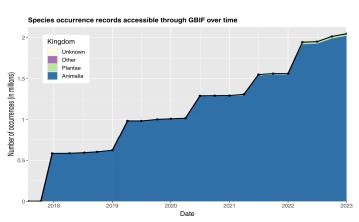
### Kenya

published **484,786** 

new occurrence records during 2022 out of a total of

369,598,378

occurrence records added globally to GBIF.org

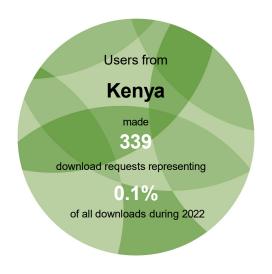


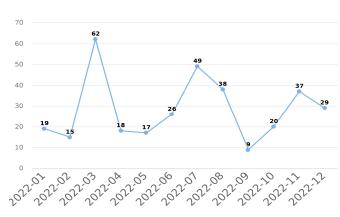
Number of records published by institutions in Kenya, categorized by kingdom



### Access and usage

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





Monthly downloads requested by users in Kenya

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

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 Kenya.

Those interested in assisting the Secretariat in identifying additional peer-reviewed uses of GBIF-mediated data may forward relevant citations to <a href="mailto:comms@gbif.org">comms@gbif.org</a>.

de Jong, d'Huart, Butynski. (2022) Biogeography and conservation of desert warthog Phacochoerus aethiopicus and common warthog Phacochoerus africanus (Artiodactyla: Suidae) in the Horn of Africa. *Mammalia*.

https://doi.org/10.1515/mammalia-2022-0048

Waititu, Mundia, Sichangi. (2022) Assessing distribution changes of selected native and alien invasive plant species under changing climatic conditions in Nyeri County, Kenya. *PLOS ONE*. <a href="https://doi.org/10.1371/journal.pone.0275360">https://doi.org/10.1371/journal.pone.0275360</a>

Ngarega, Gikonyo, Wanga *et al.* (2022) Threatened Fabaceae taxa in coastal East Africa: Current and future modelled distributions and conservation priorities. *South African Journal of Botany*. <a href="https://doi.org/10.1016/j.sajb.2022.08.033">https://doi.org/10.1016/j.sajb.2022.08.033</a>

Kamau, Karichu, Ngarega *et al.* (2022) The potential distributions of African Azolla species and their implications for African wetland ecosystems for the future. *Ecology and Evolution*. https://doi.org/10.1002/ece3.9210

Fallas Conejo, Fremout, Hien *et al.* (2022) Food tree species selection for nutrition-sensitive forest landscape restoration in Burkina Faso. *Plants*, *People, Planet*.

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

https://doi.org/10.1002/ppp3.10304



### **Data availability**

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



Mammals 112,889 occurrences



Birds 2,744,398 occurrences



Bony fish 19,916 occurrences



**Amphibians** 16,842 occurrences



Insects 196.075 occurrences



Reptiles 20.100 occurrences



Molluscs 11.800 occurrences



Arachnids 8,225 occurrences



Flowering plants 173,829 occurrences



Ferns 5,190 occurrences



**Gymnosperms** 639 occurrences



Mosses 2,549 occurrences



Sac fungi 11,592 occurrences

Gymnospermae



Basidiomycota 2,368 occurrences

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

Amphibians = Class Amphibia

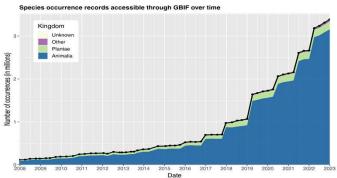
Insects = Class Insecta Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia

Molluscs = Phylum Mollusca

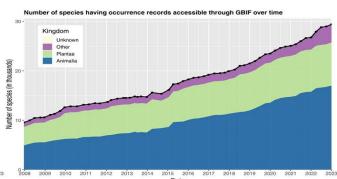
Arachnids = Class Arachnida Flowering plants = Phylum Magnoliophyta Gymnosperms = Superclass

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

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



Occurrence records available about species occurring in Kenya



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

### 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 Kenya

Bird Ringing Data of the Taita Hills Forests, 1996 to 2016. *Published by National Museums of Kenya* <a href="https://doi.org/10.15468/96cup5">https://doi.org/10.15468/96cup5</a>

Timed species count birds' data of the Kenyan Coastal Forests, 1992 - 1994. *Published by National Museums of Kenya* 

https://doi.org/10.15468/yg9qje

Occurrence records of different mammal species from several localities in Kenya. *Published by National Museums of Kenya* 

https://doi.org/10.15468/vyf55f

Occurrence of Butterflies at Eastern and Central Uganda, 1932-2021. *Published by A Rocha Kenya* <a href="https://doi.org/10.15468/kw6dms">https://doi.org/10.15468/kw6dms</a>

Avifauna recorded using point count method during 2003 Spotted Ground-thrush surveys in Kenyan Coastal Forests Fragments. *Published by National Museums of Kenya* https://doi.org/10.15468/ca82mz

Avifauna recorded using Mist netting method during 2003 Spotted Ground-thrush surveys in Kenyan Coastal Forests. *Published by National Museums of Kenya* <a href="https://doi.org/10.15468/ntbenc">https://doi.org/10.15468/ntbenc</a>

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

### **Newest publishers from Kenya**

Kenya Marine and Fisheries research Institute

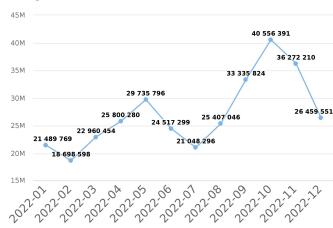
Strathmore University

A Rocha Kenya

Kenya Wildlife Service

National Museums of Kenya

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



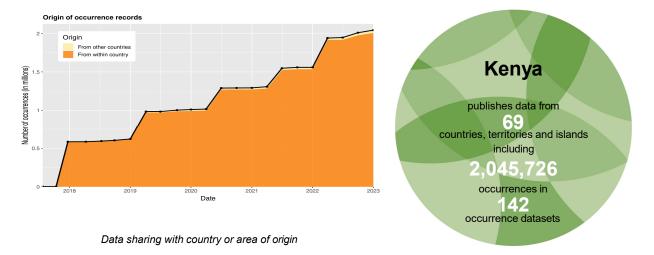
Number of occurrence records downloaded via GBIF.org published by institutions in Kenya

<u>See all publishers from this country or area</u> <u>gbif.org/publisher/search?country=KE</u>



### **Data mobilization**

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



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

## Top data contributors about biodiversity in Kenya

Rank	Country or area	No. of occurrences
1	Kenya	2,008,007
2	South Africa	720,042
3	United States of America	280,180
4	United Kingdom	74,553
5	Netherlands	64,022
6	Belgium	33,597
7	Germany	29,698
8	Norway	14,223
9	Estonia	13,851
10	France	13,490

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

# Top datasets contributing data about Kenya

EOD – eBird Observation Dataset. 1,651,265 occurrences in Kenya. (Last updated 2 Mar 2022)

Kenya Bird Map (Full protocol and Adhoc records). 691,941 occurrences in Kenya. (Last updated 20 Oct 2022)

Kenya Bird Map Occurrence Data. 89,632 occurrences in Kenya. (Last updated 13 Mar 2019)

iNaturalist Research-grade Observations. 60,011 occurrences in Kenya. (Last updated 1 Jan 2023)

International Barcode of Life project (iBOL). 48,936 occurrences in Kenya. (Last updated 5 Feb 2022)

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



### Kenya participates in the following projects coordinated by GBIF

### Enhancing capacity of GBIF South Sudan

Capacity Enhancement Support Programme, 2021–2022

https://www.gbif.org/project/CESP2021-009

## 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

### Raising the profile of data for the conservation of four forested African landscapes

BID: Biodiversity Information for Development, 2021–2023

https://www.gbif.org/project/BID-AF2020-140-REG

## Capacity development for mobilization and use of biodiversity data on endangered bird species in Kenya

BID: Biodiversity Information for Development, 2021–2023

https://www.gbif.org/project/BID-AF2020-014-NAC

#### Prioritizing conservation management in an East African forest landscape

BID: Biodiversity Information for Development, 2017–2019

A Rocha Kenya, the National Museum of Kenya (NMK), Kenya Wildlife Service (KWS), Animal Demography Unit of University of Cape Town (ADU), and the Arabuko- Sokoke Forest Guides Association (ASFGA) will access, assess, digitize, engage and improve the data for birds, mammals, invertebrates, reptiles and higher plants in order to inform the management of important, unique and threatened forest ecosystem.

https://www.gbif.org/project/7EOzw96rgAoSKKUgYaoaCe

### Mobilizing data on freshwater snails in Kenya

BID: Biodiversity Information for Development, 2016-2017

This project is mining and will publish records of freshwater snails from existing voucher collections of the National Museums of Kenya and other research institutions.

https://www.gbif.org/project/82725

### Mobilizing biodiversity information from the Kenya Wildlife Service

BID: Biodiversity Information for Development, 2016–2018

This project organizes biodiversity data collected in Kenya's protected areas since the 1950's.

https://www.gbif.org/project/82706

### Kenya's other carnivores: harnessing biodiversity data for conservation

BID: Biodiversity Information for Development, 2016–2017

This project mobilizes existing biodiversity data for 31 species of Kenya's small carnivores to develop a national strategy for their conservation.

https://www.gbif.org/project/82779

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