

## Activity report



generated January 2025

### Bhutan

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 Bhutan. 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 Bhutan



Animalia 527,779 occurrences



Plantae 43,430 occurrences



Fungi
20,462
occurrences



Unknown
1,021
occurrences



Protozoa4occurrences



Bacteria
1,904
occurrences



Virus
668
occurrences



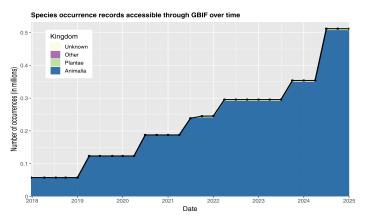
Chromista
288
occurrences



Archaea
43
occurrences

#### ► Data mobilization



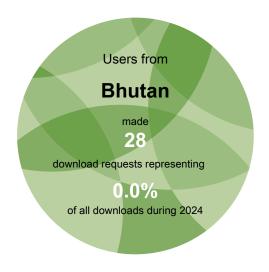


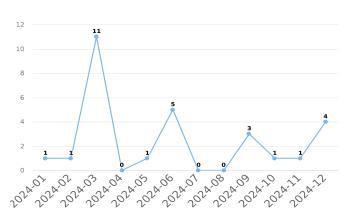
Number of records published by institutions in Bhutan, categorized by kingdom



#### Access and usage

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





Monthly downloads requested by users in Bhutan

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

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 Bhutan.

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

Dahal, Nepal, Rai *et al.* (2023) Understanding the impact of climate change on the habitat of the rufous-necked hornbill (Aceros nipalensis) (Hodgson, 1829) using MaxEnt modeling in Bhutan. *Ornithology Research*.

https://doi.org/10.1007/s43388-023-00130-8

van Klinken, Dorji, Om *et al.* (2018) Benefits and challenges of maintaining national plant pest lists: an analysis of agricultural pests in Bhutan. *Annals of Applied Biology.* 

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

https://doi.org/10.1111/aab.12436



#### **Data availability**

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



Mammals 798 occurrences



Birds 516,191 occurrences



Bony fish
103
occurrences



Amphibians
78
occurrences



Insects 9,264 occurrences



Reptiles
291
occurrences



Molluscs 135 occurrences



Arachnids
338
occurrences



Flowering plants
37,732
occurrences



Ferns
1,973
occurrences



Gymnosperms
660
occurrences



Mosses 1,838 occurrences



Sac fungi 6,208 occurrences



Basidiomycota
12,645
occurrences

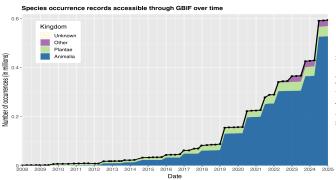
Mammals = Class *Mammalia*Birds = Class *Aves*Bony fish = Superclass *Osteichthyes* p.p.
Amphibians = Class *Amphibia* 

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

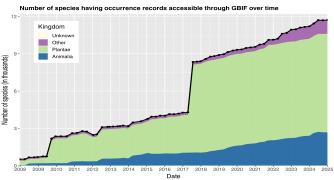
Molluscs = Phylum *Mollusca* 

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 Bhutan



Occurrence records available about species occurring in Bhutan



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

## 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 Bhutan

Bhutan: Invertebrate species. *Published by National Biodiversity Centre* https://doi.org/10.15468/rjuepc

Bhutan: Nonvascular plant species. *Published by National Biodiversity Centre* https://doi.org/10.15468/kv2xcp

Bhutan: Vascular plant species. *Published by National Biodiversity Centre* https://doi.org/10.15468/p82afy

Bhutan Biodiversity Portal data. *Published by National Biodiversity Centre* https://doi.org/10.15468/wqcp7j

Bhutan: Chromista & Eubacteria species. *Published by National Biodiversity Centre* https://doi.org/10.15468/rsvcsf

Bhutan: Fungi species. *Published by National Biodiversity Centre* https://doi.org/10.15468/x49n78

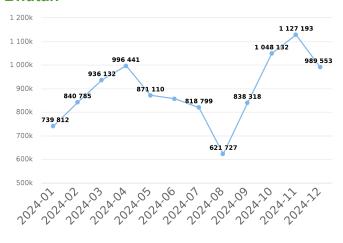
Bhutan: Vertebrate species. *Published by National Biodiversity Centre* https://doi.org/10.15468/n6jv4s

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

#### **Newest publishers from Bhutan**

National Biodiversity Centre

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



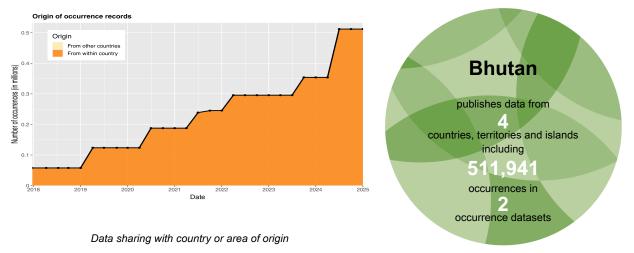
Number of occurrence records downloaded via GBIF.org published by institutions in Bhutan

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



#### **Data mobilization**

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



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

## Top data contributors about biodiversity in Bhutan

Rank	Country or area	No. of occurrences
1	Bhutan	511,879
2	Estonia	21,924
3	United Kingdom	20,534
4	United States of America	15,419
5	India	6,313
6	International organization or unknown country	4,042
7	Netherlands	3,384
8	Australia	2,390
9	Colombia	1,772
10	Germany	1,215

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

## Top datasets contributing data about Bhutan

EOD – eBird Observation Dataset. 505,219 occurrences in Bhutan. (Last updated 27 Sep 2024)

Global soil organisms. 18,942 occurrences in Bhutan. (Last updated 27 Feb 2023)

iNaturalist Research-grade Observations. 11,589 occurrences in Bhutan. (Last updated 30 Dec 2024)

Edinburgh (E) Herbarium Specimens. 10,146 occurrences in Bhutan. (Last updated 31 Dec 2024)

Bhutan Biodiversity Portal data. *6,660 occurrences in Bhutan.* (Last updated 17 Aug 2021)

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



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

Enriching the Bhutan Biodiversity Portal through digitization and mobilization of specimen collections *BIFA: Biodiversity Information Fund for Asia, 2020–2021*This project aims to digitize specimen collections of the highly diverse flora and fauna of Bhutan <a href="https://www.gbif.org/project/7gXiH4Eulp3oXAMmltDNPG">https://www.gbif.org/project/7gXiH4Eulp3oXAMmltDNPG</a>

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