![GBIF — Global Biodiversity Information Facility]
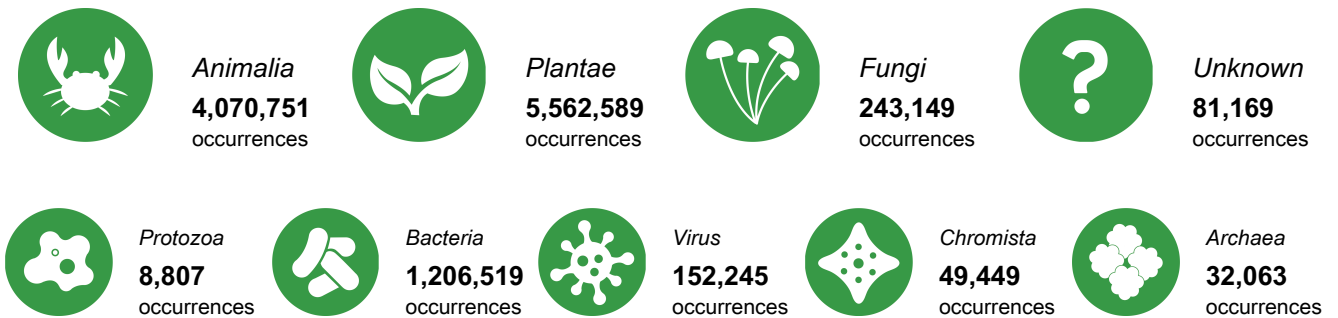
Activity report

China

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 China. 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.
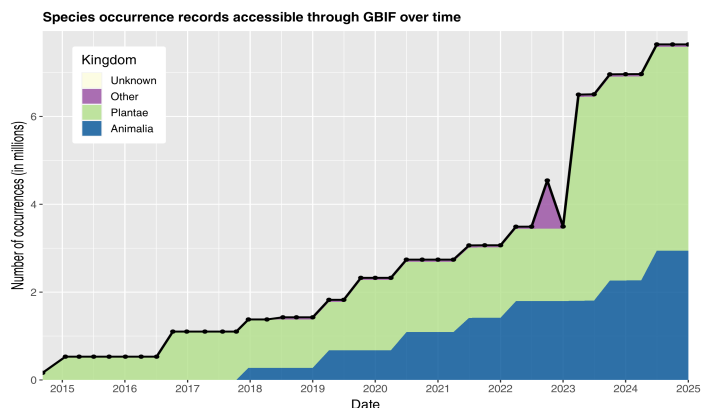
▸ Access and usage

Researchers from

China

contributed to

494

peer-reviewed articles citing GBIF use during 2024 and a total of

2195

articles since 2008

▸ Data availability in China

Animalia
4,070,751
occurrences

Plantae
5,562,589
occurrences

Fungi
243,149
occurrences

Unknown
81,169
occurrences

Protozoa
8,807
occurrences

Bacteria
1,206,519
occurrences

Virus
152,245
occurrences

Chromista
49,449
occurrences

Archaea
32,063
occurrences

▸ Data mobilization

Institutions from

China

published

678,325

new occurrence records during 2024 out of a total of

428,451,251

occurrence records added globally to GBIF.org

Species occurrence records accessible through GBIF over time
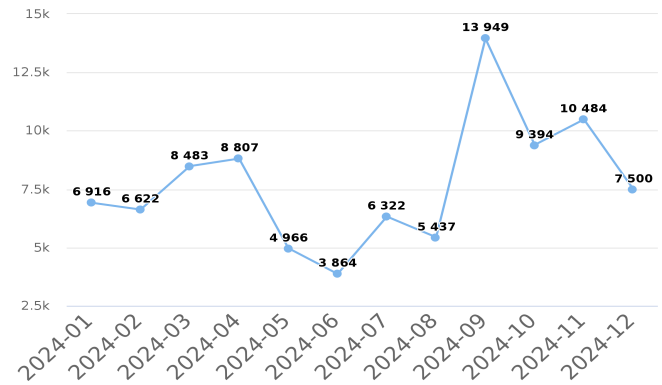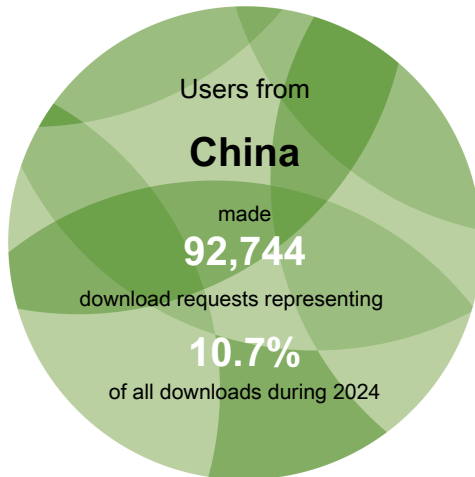
Kingdom
- Unknown
- Other
- Plantae
- Animalia

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

Access and usage

Data downloads on GBIF.org from users in China

Users from

China

made

92,744

download requests representing

10.7%

of all downloads during 2024

Monthly downloads requested by users in China

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

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 China.

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

Shao, Diao, Zhang *et al.* (2024) Optimizing conservation planning: An integrated approach to cost-effective biodiversity and carbon sequestration management in Yunnan Province, China. *Global Ecology and Conservation.*
https://doi.org/10.1016/j.gecco.2024.e03336

赵, 何, 赵 *et al.* (2024) 中国葡萄科特有种分布格局分析. 植物资源与环境学报.
https://doi.org/10.3969/j.issn.1674-7895.2024.05.01

Du, Njenga, Mbuni *et al.* (2024) Diversity and conservation of medicinal plants in tropical East Africa. *Biodiversity and Conservation.*
https://doi.org/10.1007/s10531-024-02983-x

Zhang, Yang, Xie *et al.* (2024) Assessment of the Potential Suitable Habitat of Apriona rugicollis Chevrolat, 1852 (Coleoptera: Cerambycidae) Under Climate Change and Human Activities Based on the Biomod2 Ensemble Model. *Insects.*
https://doi.org/10.3390/insects15120930

Song, Wambulwa, Milne *et al.* (2024) Deep plastid phylogeographic divergence of beaked hickory (Carya sinensis) calls for transboundary conservation in a biodiversity hotspot. *Tree Genetics & Genomes.*
https://doi.org/10.1007/s11295-024-01683-5

Data availability

Total data available for selected taxonomic groups in China

Mammals
60,916
occurrences

Birds
3,202,403
occurrences

Bony fish
64,207
occurrences

Amphibians
111,788
occurrences

Insects
403,059
occurrences

Reptiles
40,789
occurrences

Molluscs
64,343
occurrences

Arachnids
18,533
occurrences

Flowering plants
5,051,078
occurrences

Ferns
283,834
occurrences

Gymnosperms
84,749
occurrences

Mosses
80,302
occurrences

Sac fungi
135,264
occurrences

Basidiomycota
86,681
occurrences

Mammals = Class *Mammalia*	Insects = Class *Insecta*	Arachnids = Class *Arachnida*	Ferns = Phylum *Pteridophyta*
Birds = Class *Aves*	Reptiles = Class *Testudines,*	Flowering plants = Phylum	Mosses = Phylum *Bryophyta*
Bony fish = Superclass	*Sphenodontia, Squamata &*	*Magnoliophyta*	Sac fungi = Phylum *Ascomycota*
Osteichthyes p.p.	*Crocodylia*	Gymnosperms = Superclass	Basidiomycota = Phylum
Amphibians = Class *Amphibia*	Molluscs = Phylum *Mollusca*	*Gymnospermae*	*Basidiomycota*

Change over time in records about biodiversity in China

Species occurrence records accessible through GBIF over time
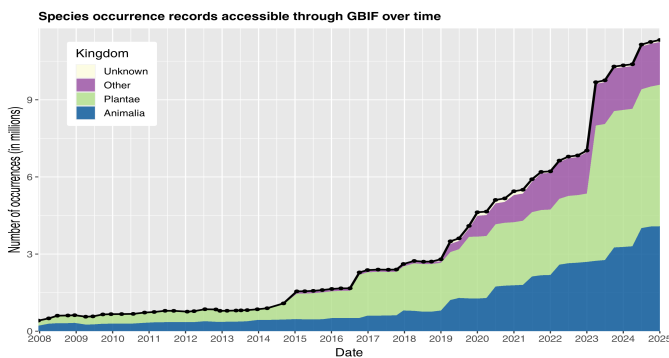
Occurrence records available about species occurring in China

Number of species having occurrence records accessible through GBIF over time
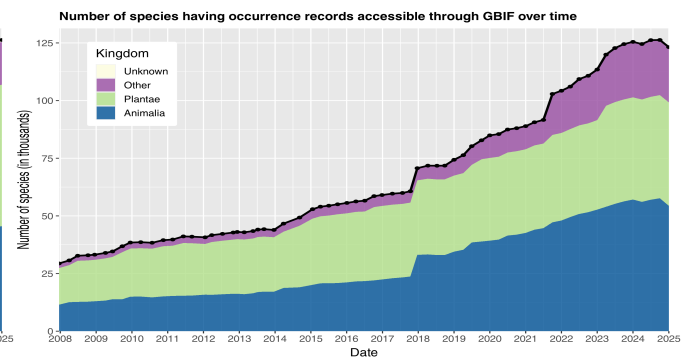
Species for which at least one occurrence record is available in China

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 China

A checklist of wild vascular plants in Xinjiang, China. *Published by Chinese Academy of Sciences (CAS)*
https://doi.org/10.15468/pwnth2

biodiversity-in-the-arctic-circle. *Published by China Biodiversity Conservation and Green Development Foundation*
https://doi.org/10.15468/azdwgw

Catalogue of Life China 2023 Annual Checklist. *Published by Chinese Academy of Sciences (CAS)*
https://doi.org/10.15468/ae6ush

Occurrence dataset of birds in 12 Universities in Nanjing, China. *Published by Chinese Academy of Sciences (CAS)*
https://doi.org/10.15468/xk82yf

birds-red-river-delta-seawater-reservoir. *Published by China Biodiversity Conservation and Green Development Foundation*
https://doi.org/10.15468/gnwx5w

A checklist of mosses in three provinces (Heilongjiang Jilin and Liaoning) in northeast China. *Published by Northeast Forestry University*
https://doi.org/10.15468/n9amcx

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

Newest publishers from China

Northeast Forestry University

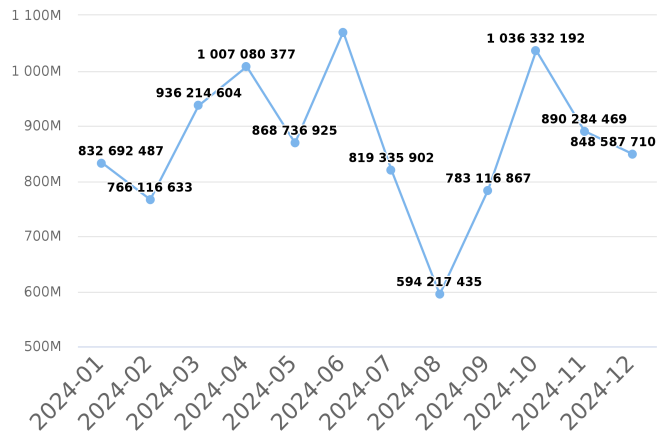China National GeneBank (CNGB)

China Biodiversity Conservation and Green Development Foundation

Chinese Academy of Sciences (CAS)

WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)

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

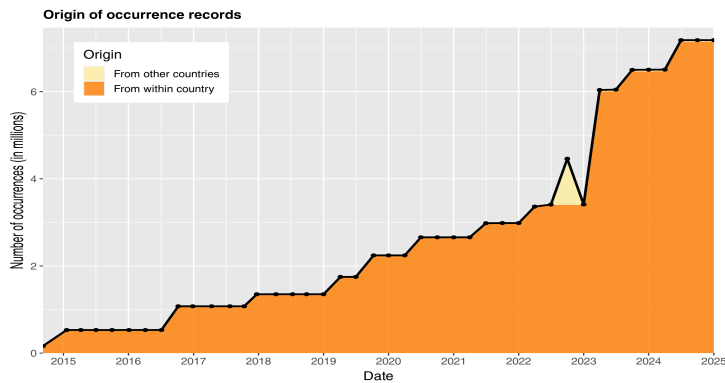## Occurrence records downloaded from GBIF.org, published by institutions in China

Data points:
- 2024-01: 832 692 487
- 2024-02: 766 116 633
- 2024-03: 936 214 604
- 2024-04: 1 007 080 377
- 2024-05: 868 736 925
- 2024-06: (peak ~1 070M)
- 2024-07: 819 335 902
- 2024-08: 594 217 435
- 2024-09: 783 116 867
- 2024-10: 1 036 332 192
- 2024-11: 890 284 469
- 2024-12: 848 587 710

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

Data mobilization

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

Origin of occurrence records

Origin
- From other countries
- From within country

Data sharing with country or area of origin

China

publishes data from
174
countries, territories and islands
including
7,639,851
occurrences in
59
occurrence datasets

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

Top data contributors about biodiversity in China

Rank	Country or area	No. of occurrences
1	China	7,180,330
2	United Kingdom	1,977,116
3	United States of America	1,119,029
4	Taiwan	213,416
5	International organization or unknown country	182,162
6	Estonia	132,752
7	Sweden	77,037
8	Colombia	74,125
9	Netherlands	61,820
10	France	60,468

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

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

Top datasets contributing data about China

EOD – eBird Observation Dataset. *2,918,011 occurrences in China.* (Last updated 27 Sep 2024)

2023 Contributions of Plant Specimen Data inside China. *2,593,837 occurrences in China.* (Last updated 5 Mar 2023)

500,000 plant Specimens from PE Herbarium in China from 1950 to 1999. *500,000 occurrences in China.* (Last updated 29 Jun 2021)

iNaturalist Research-grade Observations. *382,203 occurrences in China.* (Last updated 30 Dec 2024)

Some Plant Specimens from KUN, IBSC, NAS Herbarium in China from 1900 to 1950. *346,574 occurrences in China.* (Last updated 29 Jun 2021)

China participates in the following projects coordinated by GBIF

Cleaning and digitizing plant specimen records from Heilongjiang Province
BIFA: Biodiversity Information Fund for Asia, 2020–2022
This project aims to pilot activities to clean digitize herbarium specimen data from China's northernmost province
https://www.gbif.org/project/CDF2eNPzbhDXjc2DiMYH0

Compiling a multi-language gazetteer for occurrence distribution in Asia
BIFA: Biodiversity Information Fund for Asia, 2017–2018
This project focuses on compiling a multilingual gazetteer for locations in Asia from different data sources, initially tapping locality information from the non-georeferenced specimen records currently available through GBIF.
https://www.gbif.org/project/83225

Data mining of historical herbarium specimens from the Korean peninsula
BIFA: Biodiversity Information Fund for Asia, 2018–2019
This project will mobilize existing biodiversity information and knowledge within the Korean Peninsula using the BRAHMS database. Much of the historical biodiversity information about the Korean peninsula is held in institutions outside of the region
https://www.gbif.org/project/1WAshWi9buQEQeYQQM0QUA

Tending to the neglected diversity of beetles and Darwin wasps in Southwest China's "Lost World"
BIFA: Biodiversity Information Fund for Asia, 2021–2023
https://www.gbif.org/project/BIFA6_006

Mobilizing invertebrate monitoring data in South-East Asia
BIFA: Biodiversity Information Fund for Asia, 2020–2022
This project aims to explore the diversity of forest organisms and functions across latitude and elevation in Southeast Asia
https://www.gbif.org/project/1EzuZWkQMvYhBHh0GRirLL

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