![GBIF | Global Biodiversity Information Facility]
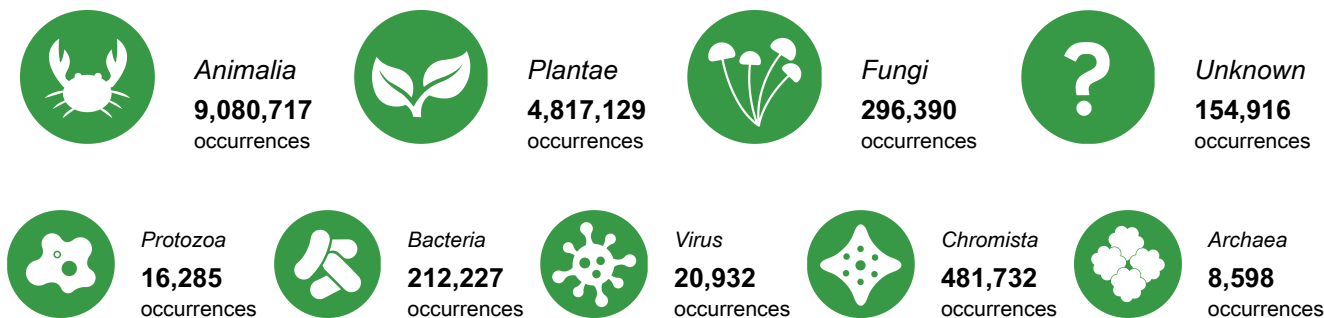
Activity report

Japan

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 Japan. 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.
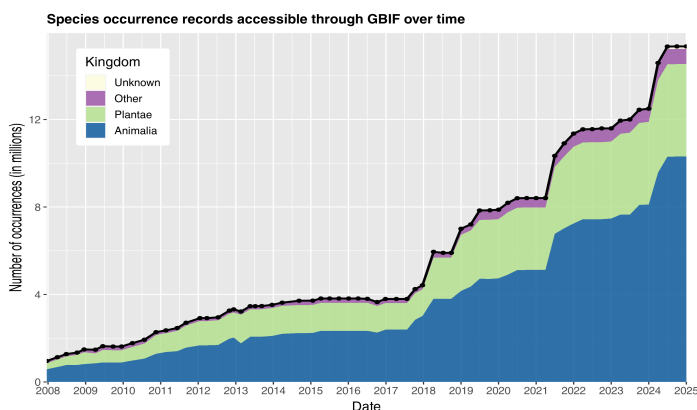
▸ Access and usage

Researchers from

Japan

contributed to

42

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

198

articles since 2008

▸ Data availability in Japan

Animalia
9,080,717
occurrences

Plantae
4,817,129
occurrences

Fungi
296,390
occurrences

Unknown
154,916
occurrences

Protozoa
16,285
occurrences

Bacteria
212,227
occurrences

Virus
20,932
occurrences

Chromista
481,732
occurrences

Archaea
8,598
occurrences

▸ Data mobilization

Institutions from

Japan

published

2,848,298

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
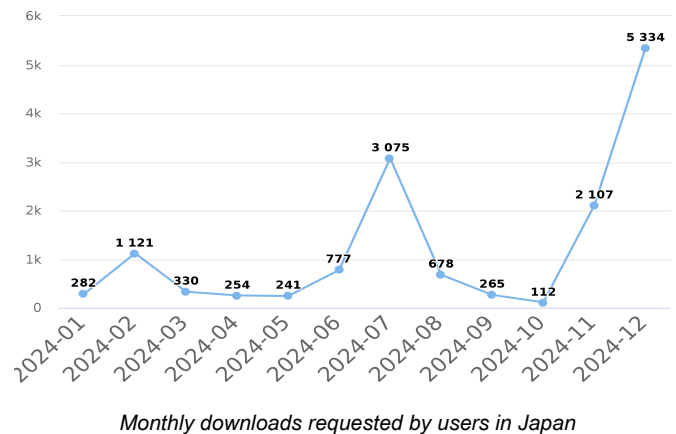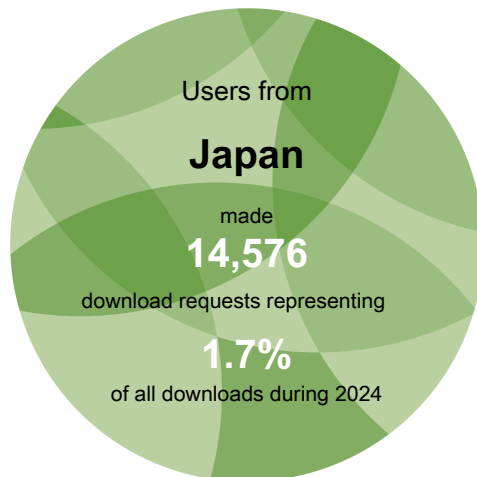
Kingdom: Unknown, Other, Plantae, Animalia

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

Access and usage

Data downloads on GBIF.org from users in Japan

Users from

Japan

made

14,576

download requests representing

1.7%

of all downloads during 2024

Monthly downloads requested by users in Japan

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

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 Japan.

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

Xiang, Yang, Gernandt *et al.* (2024) Ecological and Evolutionary Factors Contribute to the Uneven Diversification of Firs in the Northern Hemisphere. *Journal of Biogeography.*
https://doi.org/10.1111/jbi.15055

Taufiq, Fujiwara, Murakami. (2024) Comparative Phylogeographic Analysis and Environmental Suitability of Four Native Tree Species in Sundaland. *Acta Phytotaxonomica et Geobotanica.*
https://doi.org/10.18942/apg.202410

Uehira, Shimono. (2024) Evaluation of climate conditions and ecological traits that limit the distribution expansion of alien Lolium rigidum in Japan. *NeoBiota.*
https://doi.org/10.3897/neobiota.96.122752

Hinckley, Maldonado, Tamura *et al.* (2024) Lost in synonymy: Integrative species delimitation reveals two unrecognized species of Southern Asian tree squirrels (Rodentia: Sciuridae: Callosciurinae). *Vertebrate Zoology.*
https://doi.org/10.3897/vz.74.e133467

ANDREYENKOVA, HONG, LIN *et al.* (2024) Genetic relationships of populations of the Black Kite Milvus migrans (Accipitriformes: Accipitridae) in the east of its range in Asia and Australia. *Zootaxa.*
https://doi.org/10.11646/zootaxa.5523.1.5

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

Data availability

Total data available for selected taxonomic groups in Japan

Mammals
157,814
occurrences

Birds
2,899,397
occurrences

Bony fish
869,430
occurrences

Amphibians
54,302
occurrences

Insects
2,247,881
occurrences

Reptiles
36,497
occurrences

Molluscs
604,852
occurrences

Arachnids
51,706
occurrences

Flowering plants
3,557,670
occurrences

Ferns
765,508
occurrences

Gymnosperms
69,971
occurrences

Mosses
209,928
occurrences

Sac fungi
133,242
occurrences

Basidiomycota
142,910
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 Japan
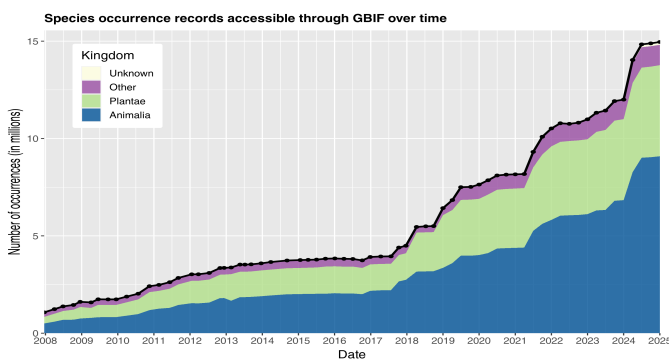
Occurrence records available about species occurring in Japan
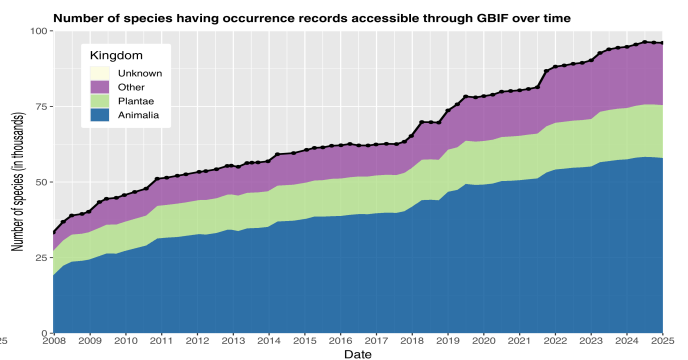
Species for which at least one occurrence record is available in Japan

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 Japan

FernGreenList ver. 2.0. *Published by National Museum of Nature and Science, Japan*
https://doi.org/10.57400/data.bnmnsbot.22696618.v1

Biodiversity monitoring in Nakaikemi-shicchi. *Published by National Institute of Genetics, ROIS*
https://doi.org/10.15468/rbwrey

Specimen-based records and geographic locations of brittle stars (Echinodermata) collected from Sagami Bay. *Published by National Institute of Genetics, ROIS*
https://doi.org/10.15468/nfxpnp

Forest monitoring data of 45 plots over the Japanese archipelago during the period of 1980-2021. *Published by National Institute of Genetics, ROIS*
https://doi.org/10.15468/ag72vk

Database of Aquatic Macrophytes in Japanese lakes. *Published by National Institute of Genetics, ROIS*
https://doi.org/10.15468/bb98dn

The Yasunobu Naritomi Butterffly Collection, The University Museum, The University of Tokyo.. *Published by National Museum of Nature and Science, Japan*
https://doi.org/10.15468/pmg55h

See all datasets from this country or area: gbif.org/dataset/search?publishing_country=JP
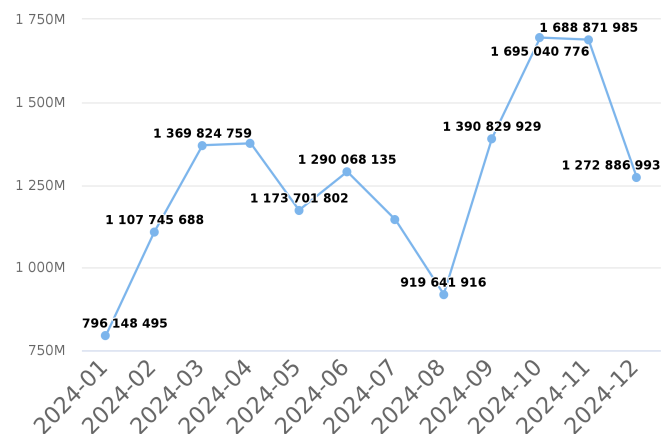
Newest publishers from Japan

National Museum of Nature and Science, Japan

National Institute of Genetics, ROIS

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

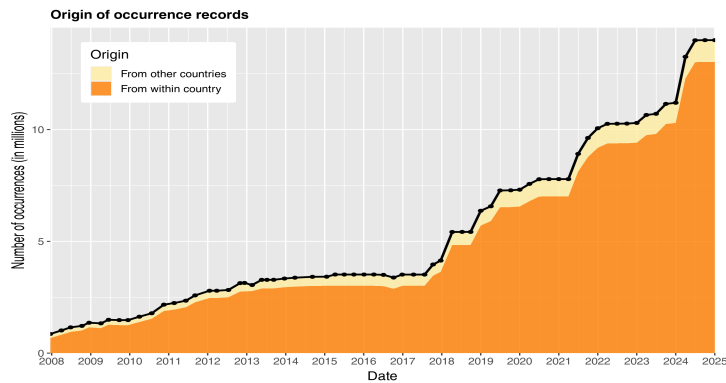## Occurrence records downloaded from GBIF.org, published by institutions in Japan

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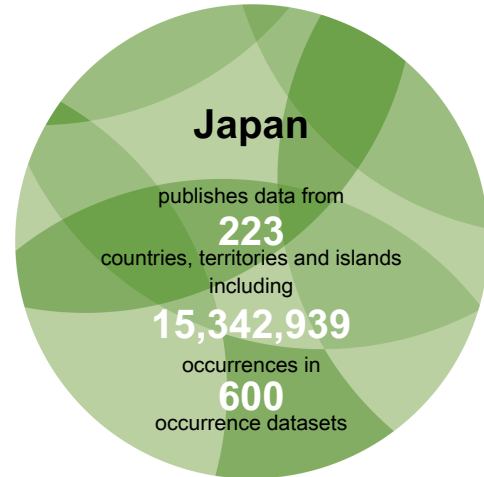
Data mobilization

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

Origin of occurrence records

Data sharing with country or area of origin

Japan

publishes data from
223
countries, territories and islands
including
15,342,939
occurrences in
600
occurrence datasets

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

Top data contributors about biodiversity in Japan

Rank	Country or area	No. of occurrences
1	Japan	13,030,370
2	United States of America	787,123
3	United Kingdom	536,247
4	China	144,607
5	Germany	91,129
6	Netherlands	83,399
7	International organization or unknown country	77,950
8	Sweden	59,932
9	France	39,889
10	Australia	37,417

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

Top datasets contributing data about Japan

EOD – eBird Observation Dataset. *2,021,039 occurrences in Japan.* (Last updated 27 Sep 2024)

Environmental baseline data in abyssal plain off Minami Torishima based on megafauna occurrence. *977,008 occurrences in Japan.* (Last updated 1 Feb 2024)

FRA-PLANKTON DATASET. *697,283 occurrences in Japan.* (Last updated 28 Apr 2021)

Vascular plant specimens of National Museum of Nature and Science (TNS). *500,060 occurrences in Japan.* (Last updated 16 Feb 2024)

iNaturalist Research-grade Observations. *362,347 occurrences in Japan.* (Last updated 30 Dec 2024)

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