

generated January 2025

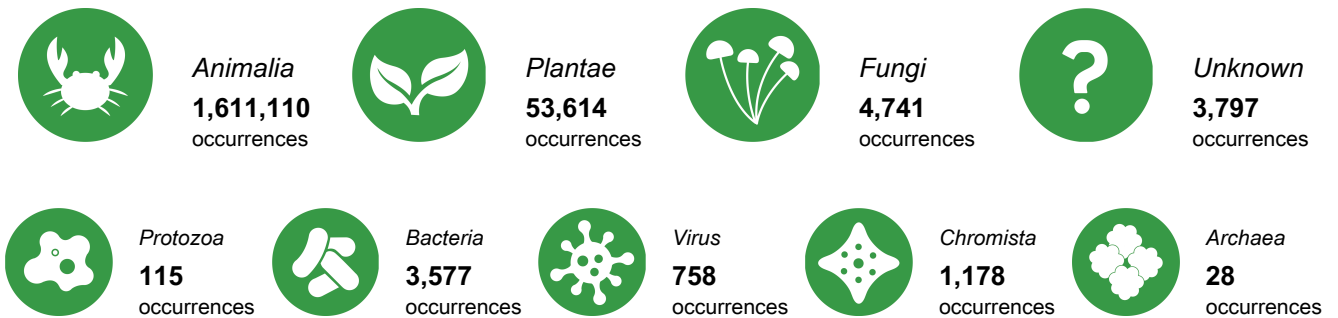
## Singapore

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 Singapore. 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.

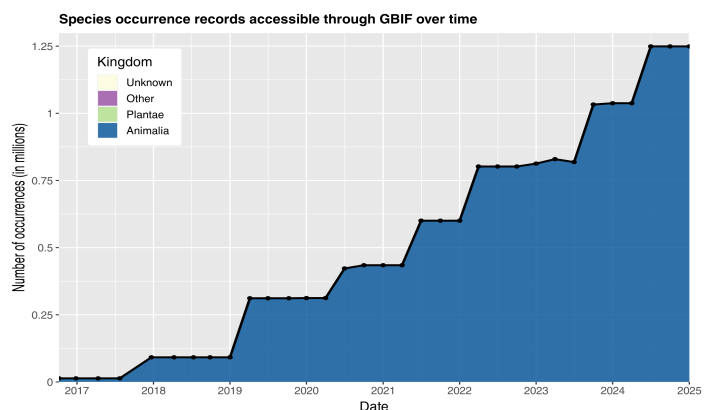
### ► Access and usage



### ► Data availability in Singapore



### ► Data mobilization

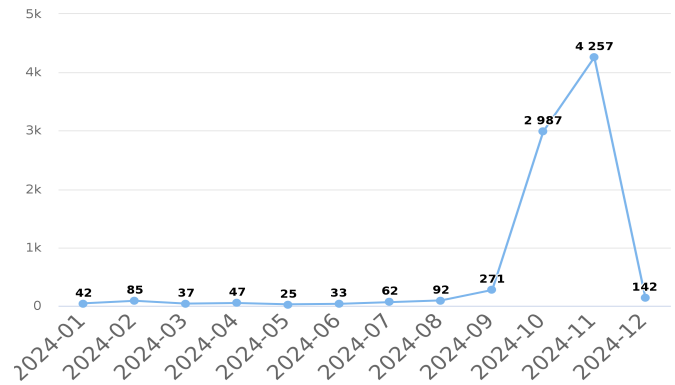
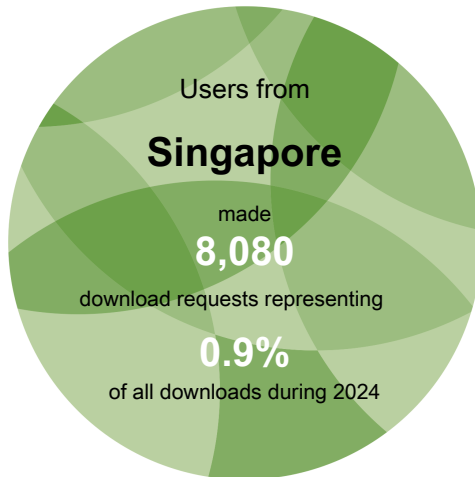


Number of records published by institutions in Singapore, categorized by kingdom



## Access and usage

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



Monthly downloads requested by users in Singapore

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

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 Singapore.

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

PEDRO, CECCARELLI, SAGOT *et al.* (2024) Revealing the Baja California Peninsula's Hidden Treasures: An Annotated checklist of the native bees (Hymenoptera: Apoidea: Anthophila). *Zootaxa*.  
<https://doi.org/10.11646/zootaxa.5522.1.1>

Pang, Slik, Chisholm *et al.* (2024) Conserving Southeast Asian trees requires mitigating both climate and land-use change. *Nature Sustainability*.  
<https://doi.org/10.1038/s41893-024-01417-4>

Hou, Zhou, Luo *et al.* (2024) Mapping environmental suitability changes for arbovirus mosquitoes in Southeast Asia: 1960–2020. *iScience*.  
<https://doi.org/10.1016/j.isci.2024.110498>

Yahya, Chin, Syaddad *et al.* (2024) Land use and oriental pied-hornbill occurrence in Singapore. *Global Ecology and Conservation*.  
<https://doi.org/10.1016/j.gecco.2024.e03060>

Granville, Barclay, Boyle *et al.* (2023) Resilience of tropical invertebrate community assembly processes to a gradient of land use intensity. *Oikos*.  
<https://doi.org/10.1111/oik.10328>

See all research from this country or area  
[gbif.org/country/SG/publications/from](https://gbif.org/country/SG/publications/from)



### Data availability

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



**Mammals**  
8,924  
occurrences



**Birds**  
1,309,297  
occurrences



**Bony fish**  
13,527  
occurrences



**Amphibians**  
3,440  
occurrences



**Insects**  
185,758  
occurrences



**Reptiles**  
23,423  
occurrences



**Molluscs**  
16,508  
occurrences



**Arachnids**  
12,220  
occurrences



**Flowering plants**  
46,791  
occurrences



**Ferns**  
3,294  
occurrences



**Gymnosperms**  
207  
occurrences



**Mosses**  
1,449  
occurrences



**Sac fungi**  
2,253  
occurrences



**Basidiomycota**  
2,391  
occurrences

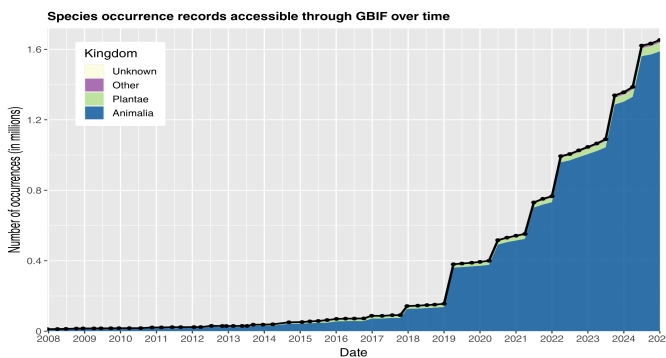
Mammals = Class *Mammalia*  
Birds = Class *Aves*  
Bony fish = Superclass  
*Osteichthyes* p.p.  
Amphibians = Class *Amphibia*

Insects = Class *Insecta*  
Reptiles = Class *Testudines*,  
*Sphenodontia*, *Squamata* &  
*Crocodylia*  
Molluscs = Phylum *Mollusca*

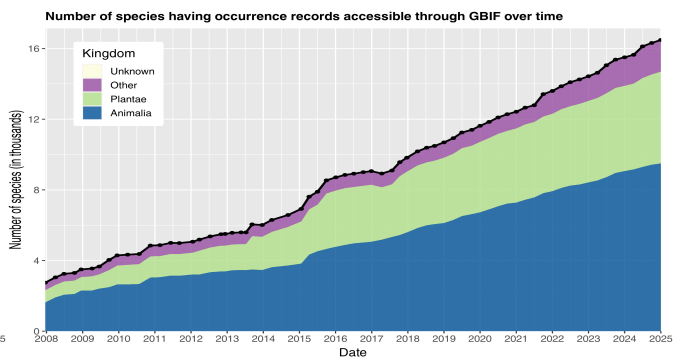
Arachnids = Class *Arachnida*  
Flowering plants = Phylum  
*Magnoliophyta*  
Gymnosperms = Superclass  
*Gymnospermae*

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

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



Occurrence records available about species occurring in Singapore



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

#### 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 Singapore

Records of Dung Beetles (Coleoptera: Scarabaeidae: Scarabaeinae) of Singapore. *Published by Asian School of the Environment*  
<https://doi.org/10.15468/6rq74u>

Sampling Event and Occurrence Records of Dung Beetles (Coleoptera: Scarabaeidae: Scarabaeinae) from Sabah, Malaysia Borneo. *Published by Asian School of the Environment*  
<https://doi.org/10.15468/kdt8vd>

Taxonomic Checklist of the Dung beetles (Coleoptera: Scarabaeidae: Scarabaeinae) of Sabah, Malaysia Borneo. *Published by Asian School of the Environment*  
<https://doi.org/10.15468/r8s697>

Butterflies of Singapore and Peninsular Malaysia (Riodinidae). *Published by Lee Kong Chian Natural History Museum, National University of Singapore*  
<https://doi.org/10.15468/rw7ppj>

Butterflies of Singapore and Peninsular Malaysia (Papilionidae). *Published by Lee Kong Chian Natural History Museum, National University of Singapore*  
<https://doi.org/10.15468/r3h2zy>

Butterflies of Singapore and Peninsular Malaysia (Pieridae). *Published by Lee Kong Chian Natural History Museum, National University of Singapore*  
<https://doi.org/10.15468/pmqfpa>

See all datasets from this country or area: [gbif.org/dataset/search?publishing\\_country=SG](https://gbif.org/dataset/search?publishing_country=SG)

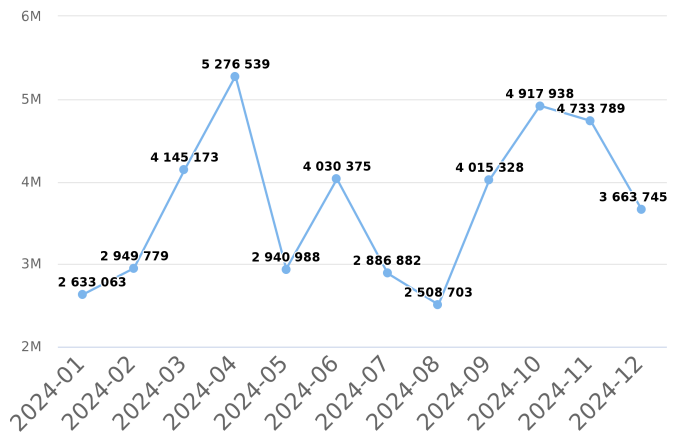
### Newest publishers from Singapore

Asian School of the Environment

Lee Kong Chian Natural History Museum, National University of Singapore

See all publishers from this country or area [gbif.org/publisher/search?country=SG](https://gbif.org/publisher/search?country=SG)

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

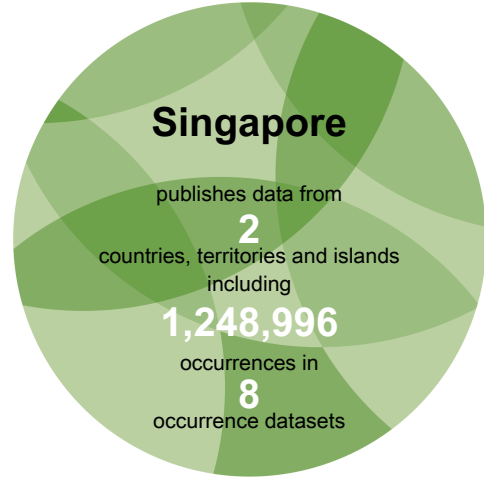
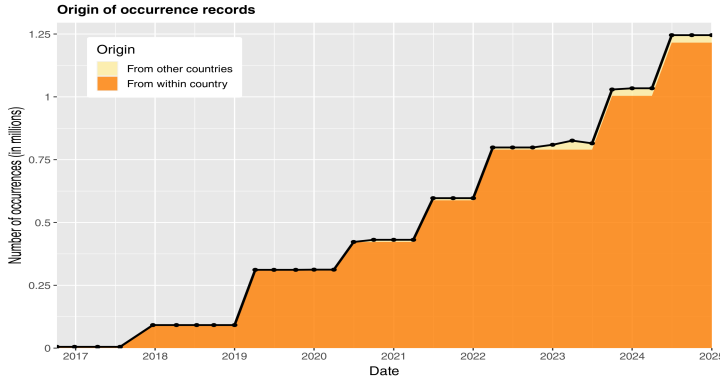


Number of occurrence records downloaded via GBIF.org published by institutions in Singapore



## Data mobilization

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



Data sharing with country or area of origin

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

### Top data contributors about biodiversity in Singapore

Rank	Country or area	No. of occurrences
1	Singapore	1,215,416
2	United States of America	342,935
3	United Kingdom	32,047
4	Australia	23,412
5	Brazil	19,732
6	Netherlands	18,468
7	France	4,274
8	Germany	3,268
9	Japan	2,290
10	International organization or unknown country	2,269

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

### Top datasets contributing data about Singapore

- EOD – eBird Observation Dataset. 1,214,946 occurrences in Singapore. (Last updated 27 Sep 2024)
- iNaturalist Research-grade Observations. 339,571 occurrences in Singapore. (Last updated 30 Dec 2024)
- FNJV - Fonoteca Neotropical Jacques Vielliard. 18,489 occurrences in Singapore. (Last updated 5 Jan 2025)
- INSDC Sequences. 9,557 occurrences in Singapore. (Last updated 4 Jan 2025)
- Earth Guardians Weekly Feed. 8,710 occurrences in Singapore. (Last updated 19 Dec 2024)

See all contributing countries and areas or datasets: [gbif.org/country/SG/about](https://gbif.org/country/SG/about)



## Singapore participates in the following projects coordinated by GBIF

### Mobilizing data on ecologically important insects in Malaysia and Singapore

*BIFA: Biodiversity Information Fund for Asia, 2021–2023*

[https://www.gbif.org/project/BIFA6\\_032](https://www.gbif.org/project/BIFA6_032)

### Digitizing butterfly specimens of Singapore & Peninsular Malaysia

*BIFA: Biodiversity Information Fund for Asia, 2019–2020*

<https://www.gbif.org/project/7msmpErXC8uaGYzhJpyHoX>

*See all GBIF projects*

[gbif.org/resource/search?contentType=project](https://www.gbif.org/resource/search?contentType=project)