Sweden

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 Sweden. 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 Sweden contributed to 23 peer-reviewed articles citing GBIF use during 2018 and a total of 103 articles since 2008.

▶ Data availability in Sweden

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animalia</td>
<td>63,119,544</td>
</tr>
<tr>
<td>Plantae</td>
<td>13,395,723</td>
</tr>
<tr>
<td>Fungi</td>
<td>2,900,506</td>
</tr>
<tr>
<td>Unknown</td>
<td>476</td>
</tr>
<tr>
<td>Protozoa</td>
<td>15,294</td>
</tr>
<tr>
<td>Bacteria</td>
<td>6,753</td>
</tr>
<tr>
<td>Virus</td>
<td>6,753</td>
</tr>
<tr>
<td>Chromista</td>
<td>50,985</td>
</tr>
<tr>
<td>Archaea</td>
<td>97</td>
</tr>
</tbody>
</table>

▶ Data mobilization

Institutions from Sweden published 8,724,780 new occurrence records during 2018 out of a total of 104,166,615 occurrence records added globally to GBIF.org.
Access and usage

Data downloads on GBIF.org from users in Sweden

![Users from Sweden](chart.jpg)

Users from Sweden made 396 download requests representing 0.2% of all downloads during 2018.

Monthly downloads requested by users in Sweden

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

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 Sweden.

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

https://doi.org/10.1038/s41559-018-0743-8

https://doi.org/10.1098/rstb.2017.0415

van Gerven, Kuiper, Mooij et al. (2018) Nitrogen fixation does not axiomatically lead to phosphorus limitation in aquatic ecosystems. *Oikos.*
https://doi.org/10.1111/oik.05246

https://doi.org/10.1371/journal.pone.0202421

https://doi.org/10.1038/s41586-018-0301-1

See all research from this country or area [gbif.org/country/SE/publications](http://gbif.org/country/SE/publications)
Data availability

Total data available for selected taxonomic groups in Sweden

- **Mammals**: 173,545 occurrences
- **Birds**: 53,884,288 occurrences
- **Bony fish**: 3,311,945 occurrences
- **Amphibians**: 51,560 occurrences
- **Insects**: 5,010,440 occurrences
- **Reptiles**: 20,418 occurrences
- **Molluscs**: 208,133 occurrences
- **Arachnids**: 119,197 occurrences
- **Flowering plants**: 11,574,806 occurrences
- **Gymnosperms**: 182,824 occurrences
- **Ferns**: 415,660 occurrences
- **Mosses**: 901,447 occurrences
- **Sac fungi**: 1,092,249 occurrences
- **Basidiomycota**: 1,806,529 occurrences

Mammals = Class Animalia  
Birds = Class Aves  
Bony fish = Superclass Osteichthyes  
Amphibians = Class Amphibia  
Insects = Class Insecta  
Reptiles = Class Reptilia  
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 Sweden

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 Sweden

Living Collection of the Gothenburg Botanical Garden. Published by GBIF-Sweden
https://doi.org/10.15468/cchsv3

Bird Collection of Helsingborg Museums. Published by GBIF-Sweden
https://doi.org/10.15468/n7xfgz

The Bergius Herbarium. Published by GBIF-Sweden
https://doi.org/10.15468/mqwnmj

Axel W. Erikssons African Bird Collection at Vänersborg Museum. Published by GBIF-Sweden
https://doi.org/10.15468/z5i3wx

Swedish Malaise Trap Project (SMTP) Collection Inventory. Published by Swedish Museum of Natural History
https://doi.org/10.15468/5becml

Palaeozoological Collections (PZ), Swedish Museum of Natural History (NRM). Published by Swedish Museum of Natural History
https://doi.org/10.15468/zffolj

Entomological Collections (NHRS), Swedish Museum of Natural History (NRM). Published by Swedish Museum of Natural History
https://doi.org/10.15468/fpzyjx

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

Newest publishers from Sweden

Ájtte Museum
Lund Botanical Museum (LD)
Gothenburg Natural History Museum (GNM)
Lund Museum of Zoology
Swedish Museum of Natural History

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

Since 23 July 2018, users downloading all GBIF data have been directed to a common download created at the start of each month.

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

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

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

Top data contributors about biodiversity in Sweden

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country or area</th>
<th>No. of occurrences</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sweden</td>
<td>79,071,144</td>
</tr>
<tr>
<td>2</td>
<td>Netherlands</td>
<td>138,629</td>
</tr>
<tr>
<td>3</td>
<td>Norway</td>
<td>108,361</td>
</tr>
<tr>
<td>4</td>
<td>United States of America</td>
<td>68,618</td>
</tr>
<tr>
<td>5</td>
<td>Germany</td>
<td>65,312</td>
</tr>
<tr>
<td>6</td>
<td>Finland</td>
<td>55,898</td>
</tr>
<tr>
<td>7</td>
<td>United Kingdom</td>
<td>41,233</td>
</tr>
<tr>
<td>8</td>
<td>Denmark</td>
<td>27,666</td>
</tr>
<tr>
<td>9</td>
<td>Colombia</td>
<td>20,559</td>
</tr>
<tr>
<td>10</td>
<td>Estonia</td>
<td>17,091</td>
</tr>
</tbody>
</table>

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

Top datasets contributing data about Sweden

- Artportalen (Swedish Species Observation System). 64,483,068 occurrences in Sweden. (Last updated 11 Jan 2019)
- Bird Ringing Centre in Sweden (NRM). 6,706,047 occurrences in Sweden. (Last updated 12 Dec 2017)
- Phanerogamic Botanical Collections (S). 645,103 occurrences in Sweden. (Last updated 11 Dec 2017)

See all contributing countries and areas or datasets: gbif.org/country/SE/about
Sweden participates in the following projects coordinated by GBIF

European training hackathon on species checklists using GBIF data
*Capacity Enhancement Support Programme, 2014–2015*
This regional collaboration supports a hackathon for European nodes, aiming to enhance their capacity to produce national checklists.
https://www.gbif.org/project/82221

International Living Atlases workshop
*Capacity Enhancement Support Programme, 2017–2018*
This project will support and strengthen the growing international community of practice around open-source software developed by the Atlas of Living Australia.
https://www.gbif.org/project/83337

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