

# **Activity report**



generated January 2024

# **United States of America**

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 United States of America. 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
United States of
America
contributed to
365
peer-reviewed articles citing GBIF use
during 2023 and a total of
2522
articles since 2008

#### ► Data availability in United States of America



Animalia
904,440,616
occurrences



Plantae 37,316,842 occurrences



Fungi 4,707,006 occurrences



Unknown 1,126,639 occurrences



Protozoa
341,197
occurrences



Bacteria
6,150,574
occurrences



Virus
230,368
occurrences



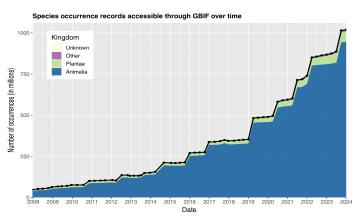
Chromista
1,951,225
occurrences



Archaea
93,178
occurrences

#### ► Data mobilization

Institutions from
United States of
America
published
151,004,708
new occurrence records during 2023
out of a total of
355,993,458
occurrence records added
globally to GBIF.org



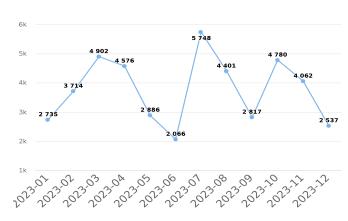
Number of records published by institutions in United States of America, categorized by kingdom



#### Access and usage

#### Data downloads on GBIF.org from users in United States of America





Monthly downloads requested by users in United States of America

# Recent peer-reviewed articles using GBIF-mediated data by co-authors based in United States of America

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 United States of America.

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

Rivera, Zegarra, Figuerola-Hernández *et al.* (2023) Contemporary record and photographs of the rarely seen and poorly known Mona Blindsnake, Antillotyphlops monensis (Schmidt, 1926), with comments on its .... *Herpetology Notes*.

Gao, Fang, Deitch *et al.* (2023) Prioritizating Birds' Habitats for Conservation to Mitigate Urbanization Impacts Using Field Survey-Based Integrated Models in the Yangtze River Estuary. *Land.* https://doi.org/10.3390/land12122115

Feuerborn, Quinlan, Shippee *et al.* (2023) Variance in heat tolerance in bumble bees correlates with species geographic range and is associated with several environmental and biological factors. *Ecology and Evolution.* 

https://doi.org/10.1002/ece3.10730

Monroe, Gill, Turner *et al.* (2023) Convergent discoveries support convergent evolution of life-history strategies: the importance of summer drought. *New Phytologist.* https://doi.org/10.1111/nph.19351

Okely, Engel, Shebl. (2023) Climate Change Influence on the Potential Distribution of Some Cavity-Nesting Bees (Hymenoptera: Megachilidae).

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



#### **Data availability**

#### Total data available for selected taxonomic groups in United States of America



Mammals 5,069,364 occurrences



Birds 841,940,067 occurrences



Bony fish 18,140,406 occurrences



Amphibians 2,236,546 occurrences



Insects
22,043,998
occurrences



Reptiles 2,667,117 occurrences



Molluscs 3,888,257 occurrences



Arachnids 1,338,683 occurrences



Flowering plants
32,960,590
occurrences



Ferns **1,090,060** occurrences



Gymnosperms 778,705 occurrences



Mosses 1,228,420 occurrences



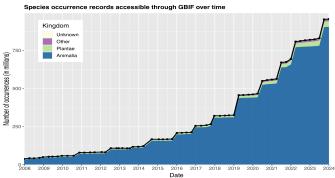
Sac fungi 2,087,816 occurrences



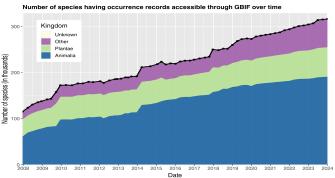
Basidiomycota 2,502,565 occurrences

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 United States of America



Occurrence records available about species occurring in United States of America



Species for which at least one occurrence record is available in United States of America

### 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 United States of America

Ohio State University Spider Collection. *Published by Ohio State University Insect Collection* https://doi.org/10.15468/yx59vm

AMAPPS Northeast Aerial Cruise Summer 2021. *Published by OBIS-SEAMAP* https://doi.org/10.15468/864c59

AMAPPS Northeast Shipboard Cruise Summer 2021. *Published by OBIS-SEAMAP* https://doi.org/10.15468/5fjuke

Happywhale - Burmeister's porpoise in South Atlantic Ocean. *Published by OBIS-SEAMAP* https://doi.org/10.15468/8eg7gx

Hoyt Arboretum Vascular Plant Herbarium. *Published by Consortium of Pacific Northwest Herbaria* https://doi.org/10.15468/7hs2bc

Adam Haberski Research Collection. *Published by Clemson University Arthropod Collection* https://doi.org/10.15468/nwvwzk

California Desert Studies Center Mammal Specimens (Arctos). *Published by CSU Desert Studies Center* 

https://doi.org/10.15468/ywb2p2

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

#### Newest publishers from United States of America

Oakland University Herbarium

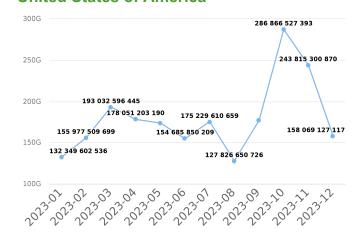
Volunteer State Community College

Oswego Herbarium, SUNY Oswego

Vermont Agricultural and Environmental Laboratory

Alaska Center for Conservation Science

# Occurrence records downloaded from GBIF.org, published by institutions in United States of America



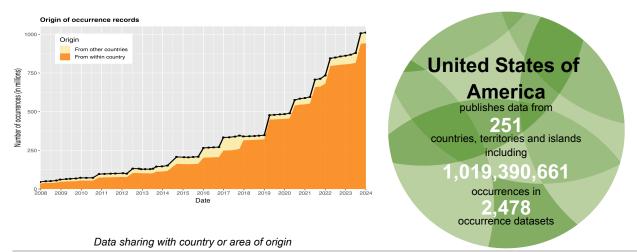
Number of occurrence records downloaded via GBIF.org published by institutions in United States of America

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



#### **Data mobilization**

# Data sharing with country or area of origin by national institutions in United States of America



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

# Top data contributors about biodiversity in United States of America

| Rank | Country or area                               | No. of occurrences |
|------|---|--------------------|
| 1    | United States of America                      | 942,614,021        |
| 2    | United Kingdom                                | 7,852,400          |
| 3    | Canada  | 1,187,659          |
| 4    | France  | 931,907            |
| 5    | International organization or unknown country | 668,992            |
| 6    | Colombia                                      | 441,650            |
| 7    | Portugal                                      | 427,056            |
| 8    | Estonia                                       | 417,713            |
| 9    | Netherlands                                   | 340,179            |
| 10   | Germany                                       | 218,395            |

Table 1. Ranking of countries or areas contributing data about United States of America

# Top datasets contributing data about United States of America

EOD – eBird Observation Dataset. 805,508,316 occurrences in United States of America. (Last updated 20 Aug 2023)

iNaturalist Research-grade Observations. 34,412,130 occurrences in United States of America. (Last updated 2 Jan 2024)

USGS PWRC - Bird Banding Lab - US State Centroid - 1960-2010. 14,079,367 occurrences in United States of America. (Last updated 2 Jun 2022)

Great Backyard Bird Count. 6,789,249 occurrences in United States of America. (Last updated 6 Mar 2018)

NMNH Extant Specimen Records (USNM, US). 3,290,717 occurrences in United States of America. (Last updated 2 Jan 2024)



#### United States of America participates in the following projects coordinated by GBIF

### Expanding the network: Bringing marine research stations and library collections into the data-sharing community

Capacity Enhancement Support Programme, 2022–2023

https://www.gbif.org/project/CESP2022-009

#### Using invasive species and biodiversity data for decision-making in the Pacific region

BID: Biodiversity Information for Development, 2021–2023

https://www.gbif.org/project/BID-PA2020-003-USE

#### Building capacity at SPREP for data mobilization and use

BID: Biodiversity Information for Development, 2021–2023

https://www.gbif.org/project/BID-PA2020-002-INS

#### Strengthening processes for invasive species and biodiversity data mobilization in the Pacific region

BID: Biodiversity Information for Development, 2021–2023

https://www.gbif.org/project/BID-PA2020-004-REG

#### From shared experiences to shared knowledge and common solutions: collaborating to improve webbased tools in Latin America and the Caribbean

Capacity Enhancement Support Programme, 2020–2022

Participating nodes aim to incorporate shared best practices, protocols, tools and future road maps for representing the region's biodiversity richness and abundance

https://www.gbif.org/project/4YJIFEvYJi5kfuUVzNcfYH

### Enhancing capacity to mobilize and use biodiversity data to support sustainable development in West Africa

Capacity Enhancement Support Programme, 2020–2023

The overall goal of this project is to enhance capacity for biodiversity data mobilization and development of information products in support of sustainable development in West Africa

https://www.gbif.org/project/ImAtw3uVGVpjrpiYHAxvD

#### Digitization of specimens at the University of the Philippines Los Baños Museum of Natural History

BIFA: Biodiversity Information Fund for Asia, 2020–2022

This project aims to digitize specimen data from four different museum research and teaching collections and share data skills through training

https://www.gbif.org/project/2as3Q2nNvRQhMc30JzAQ6e

#### Extending tools for improving biodiversity data quality to Spanish-speaking communities

Capacity Enhancement Support Programme, 2017–2018

By translating elements of a key tool for making pre-publications improvements to data quality, VertNet and SiB Colombia will fill an important technical gap for the numerous Spanish-speaking staff across the GBIF community. https://www.gbif.org/project/83348

### Workshop on digital documentation: Linking biodiversity data, publications and images

Capacity Enhancement Support Programme, 2014–2015

This project will increase the Latin American region's capacity to digitize and publish biodiversity data from scientific literature, images and other multimedia objects.

https://www.gbif.org/project/82236

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