

# Activity report

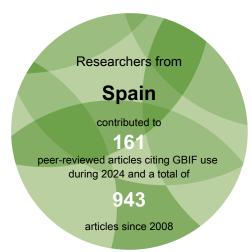


generated January 2025

# Spain

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 Spain. 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 Spain



Animalia 53,160,374 occurrences



Plantae
20,480,099
occurrences



Fungi 1,042,836 occurrences



Unknown 51,110 occurrences



Protozoa
45,982
occurrences



Bacteria
1,012,917
occurrences



Virus
10,717
occurrences

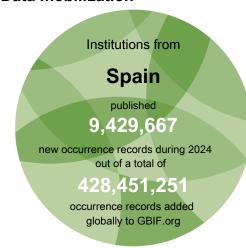


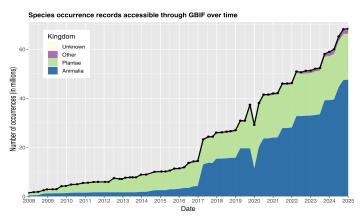
Chromista
238,656
occurrences



Archaea
4,087
occurrences

#### ► Data mobilization

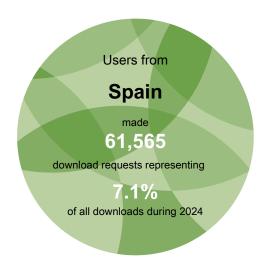


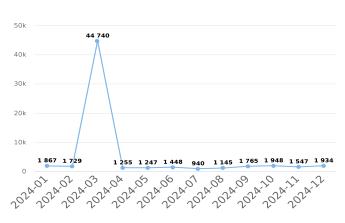


Number of records published by institutions in Spain, categorized by kingdom

## Access and usage

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





Monthly downloads requested by users in Spain

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

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 Spain.

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

Rosero-Erazo, Frey, Armijos-Arcos *et al.* (2024) Ecological Niche Modeling of Five Azorella Species in the High Andean Páramo Ecosystem of South America: Assessing Climate Change Impacts Until 2040. *Diversity.* 

https://doi.org/10.3390/d16120736

Bracho-Estévanez, Arenas-Castro, González-Varo *et al.* (2024) Spatially explicit metrics improve the evaluation of species distribution models facing sampling biases. *Ecological Informatics*. https://doi.org/10.1016/j.ecoinf.2024.102916

Balmori-de la Puente, Rodríguez-Escolar, Collado-Cuadrado *et al.* (2024) Transmission risk of vector-borne bacterial diseases (Anaplasma spp. and Ehrlichia canis) in Spain and Portugal. *BMC Veterinary Research*.

https://doi.org/10.1186/s12917-024-04383-3

González, Pertierra, Guerrero *et al.* (2024) High vulnerability of the endemic Southern Ocean snail Neobuccinum eatoni (Buccinidae) to critical projected oceanographic changes. *Scientific Reports*. https://doi.org/10.1038/s41598-024-80353-x

González-Moreno, Anđelković, Adriaens *et al.* (2024) Citizen science platforms can effectively support early detection of invasive alien species according to species traits. *People and Nature*.

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

# **Data availability**

# Total data available for selected taxonomic groups in Spain



Mammals 2,488,023 occurrences



Birds 44,452,634 occurrences



Bony fish 544,398 occurrences



Amphibians 191,022 occurrences



Insects
4,149,104
occurrences



Reptiles 290,596 occurrences



Molluscs 366,139 occurrences



Arachnids 178,896 occurrences



Flowering plants
18,561,176 occurrences



Ferns
291,333
occurrences



Gymnosperms 1,311,213 occurrences



Mosses 136,906 occurrences



Sac fungi 503,635 occurrences



Basidiomycota 476,052 occurrences

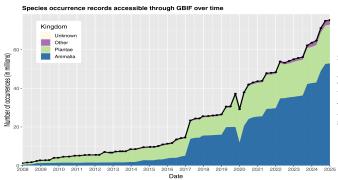
Mammals = Class Mammalia Birds = Class Aves Bony fish = Superclass Osteichthyes p.p. Amphibians = Class Amphibia Insects = Class Insecta Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia

Molluscs = Phylum *Mollusca* 

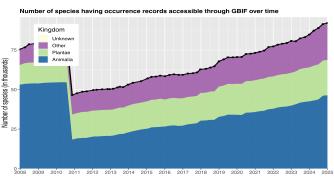
Arachnids = Class *Arachnida*Flowering plants = Phylum *Magnoliophyta*Gymnosperms = Superclass *Gymnospermae* 

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

## Change over time in records about biodiversity in Spain



Occurrence records available about species occurring in Spain



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

# 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 Spain

Colección Histórica Seca del Centro Oceanográfico de Málaga (IEO-CSIC): CFM-HISTÓRICA-SECA-IEOMA. *Published by Instituto Español de Oceanográfia. Centro Oceanográfico de Málaga (CSIC)* https://doi.org/10.15470/cxjarj

Checklist of earthworm species (Oligochaeta) of the Andaman and Nicobar Islands, India. *Published by Museu de Ciències Naturals de Barcelona* https://doi.org/10.15470/dkefty

Herbario EEZA - Colección de Angiospermae. *Published by Estación Experimental de Zonas Áridas* (CSIC)

https://doi.org/10.15470/ttw9mc

Monitorización de la comunidad de anfibios mediante metabarcoding de ADN ambiental - Sistema de Información de la Naturaleza de Euskadi. *Published by Basque Government* https://doi.org/10.15468/atwtkx

Situación del sapillo pintojo meridional en los Parques Naturales de Izki y Valderejo - Sistema de Información de la Naturaleza de Euskadi. *Published by Basque Government* https://doi.org/10.15468/z35ttk

Seguimiento de anfibios en el Parque Natural de Izki - Sistema de Información de la Naturaleza de Euskadi. *Published by Basque Government* https://doi.org/10.15468/48uttw

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

#### **Newest publishers from Spain**

Universidade de Vigo

Instituto de Investigación en Recursos Cinegéticos (IREC /CSIC-UCLM-JCCM)

Laboratori d'Aplicacions Bioacustiques - Universitat Politècnica de Catalunya · Barcelona Tech (UPC)

Ministerio de Agricultura, Pesca y Alimentación

Instituto de Recursos Naturales y Agrobiología de Sevilla (CSIC)

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

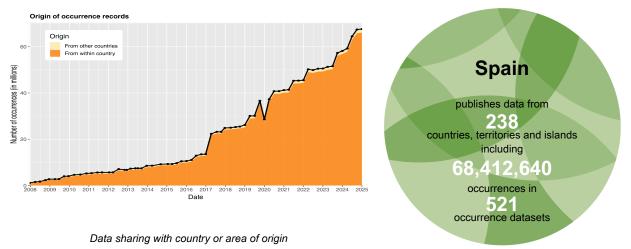
# Occurrence records downloaded from GBIF.org, published by institutions in Spain



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

#### **Data mobilization**

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



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

# Top data contributors about biodiversity in Spain

Rank	Country or area	No. of occurrences
1	Spain	66,676,863
2	Netherlands	4,625,040
3	United States of America	1,677,422
4	France	1,030,648
5	Belgium	626,478
6	Germany	403,903
7	United Kingdom	387,024
8	International organization or unknown country	99,049
9	Colombia	94,709
10	Estonia	83,173

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

# Top datasets contributing data about Spain

EOD – eBird Observation Dataset. 28,273,645 occurrences in Spain. (Last updated 27 Sep 2024)

Anillamiento SEO\_Bird ringing. 9,435,714 occurrences in Spain. (Last updated 17 Dec 2021)

Localización de táxones botánicos de interés para la identificación de hábitats de la REDIAM (Secretaría General de Medio Ambiente, Agua y Cambio Climático). 6,467,839 occurrences in Spain. (Last updated 13 Jul 2022)

Observation.org, Nature data from around the World. *4,253,222 occurrences in Spain.* (Last updated 3 Jan 2025)

Banco de Datos de la Biodiversidad de la Comunitat Valenciana. 2,654,662 occurrences in Spain. (Last updated 5 Dec 2024)

## Spain participates in the following projects coordinated by GBIF

#### 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

#### National portals addressing national challenges

Capacity Enhancement Support Programme, 2023–2024 https://www.gbif.org/project/CESP2023-010

#### GBIF.es

, 2014–2014

GBIF Spain's biodiversity data portal was the first adaptation of the open-source system Atlas of Living Australia to another national platform.

https://www.gbif.org/project/82954

#### OpenPSD: Promoting publication and use of private-sector data on biodiversity

Capacity Enhancement Support Programme, 2019–2021 https://www.gbif.org/project/2Zik1tfJoh3C92ZslvhDIr

#### Plinian Core for plant-pollinator interactions

Capacity Enhancement Support Programme, 2023–2024 https://www.gbif.org/project/CESP2023-011

# Cross-continental partnership to investigate data mining approaches for impactful data use cases and stories

Capacity Enhancement Support Programme, 2022–2023 https://www.gbif.org/project/CESP2022-005

#### 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

#### Establishing a national node for Chile to enhance Latin America regional capacity

Capacity Enhancement Support Programme, 2017–2018

This project will promote and encourage biodiversity data sharing in Chile while distributing specialized knowledge on managing biological data and improving its quality, access and use across Latin America. https://www.gbif.org/project/83351

#### Agrotraining: Proofing GBIF use on agrobiodiversity through needs assessment and training

Capacity Enhancement Support Programme, 2016–2017

This Iberian project will design and develop a training course on the use of agro-biodiversity information available through GBIF and other relevant data sources.

https://www.gbif.org/project/82833

# Training in participatory biodiversity monitoring: Building locally, connecting globally

Capacity Enhancement Support Programme, 2017–2018
Instruction in the theory and practice of community-based monitoring hopes to establish a self-sustaining, Spanish-speaking community of practice. https://www.gbif.org/project/83344

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