![GBIF | Global Biodiversity Information Facility]
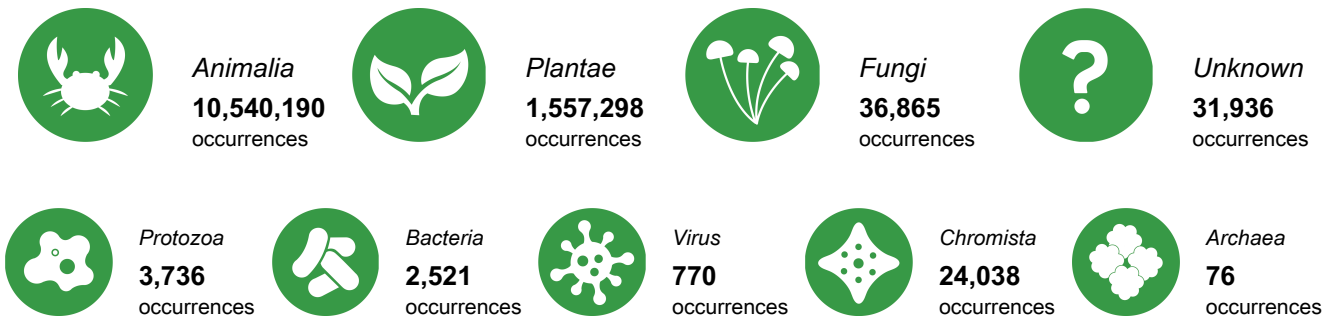
Activity report

Ecuador

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 Ecuador. 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.
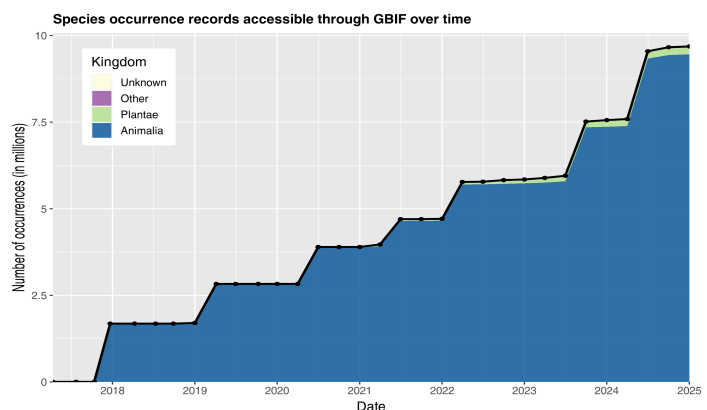
▶ Access and usage

Researchers from

Ecuador

contributed to

23

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

125

articles since 2008

▶ Data availability in Ecuador

Animalia
10,540,190
occurrences

Plantae
1,557,298
occurrences

Fungi
36,865
occurrences

Unknown
31,936
occurrences

Protozoa
3,736
occurrences

Bacteria
2,521
occurrences

Virus
770
occurrences

Chromista
24,038
occurrences

Archaea
76
occurrences

▶ Data mobilization

Institutions from

Ecuador

published

2,127,601

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
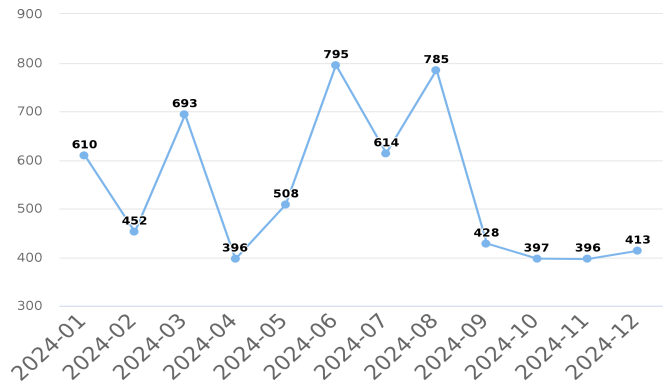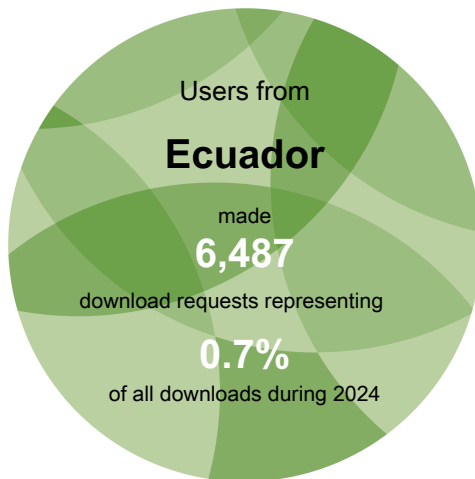
Kingdom
Unknown
Other
Plantae
Animalia

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

Access and usage

Data downloads on GBIF.org from users in Ecuador

Users from

Ecuador

made

6,487

download requests representing

0.7%

of all downloads during 2024

Monthly downloads requested by users in Ecuador

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

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 Ecuador.

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

Navia, Alfaro-Shigueto, Ágreda-Arango *et al.* (2024) Unveiling Macroecological Patterns of Elasmobranchs in the Eastern Pacific Ocean. *Journal of Biogeography.*
https://doi.org/10.1111/jbi.15037

Serrano-Rodríguez, Serrano Rodríguez, Ferrer-Sánchez *et al.* (2024) Prediction of environmental suitability for Haematoxylum campechianum: A proposal to promote reforestation in Mexico. *Global Ecology and Conservation.*
https://doi.org/10.1016/j.gecco.2024.e03293

Womersley, Sousa, Humphries *et al.* (2024) Climate-driven global redistribution of an ocean giant predicts increased threat from shipping. *Nature Climate Change.*
https://doi.org/10.1038/s41558-024-02129-5

van der Kamp, Ortega-Andrade. (2024) Phylogeny, historical biogeography and climate niche differentiation in extant species of Ceratophryidae (Anura, Hyloidea) frogs in South America. *Frontiers of Biogeography.*

Data availability

Total data available for selected taxonomic groups in Ecuador

Mammals
133,359
occurrences

Birds
9,448,989
occurrences

Bony fish
96,909
occurrences

Amphibians
191,205
occurrences

Insects
417,740
occurrences

Reptiles
103,974
occurrences

Molluscs
48,743
occurrences

Arachnids
24,362
occurrences

Flowering plants
1,355,467
occurrences

Ferns
102,148
occurrences

Gymnosperms
1,747
occurrences

Mosses
38,785
occurrences

Sac fungi
24,606
occurrences

Basidiomycota
10,821
occurrences

Mammals = Class *Mammalia*	Insects = Class *Insecta*	Arachnids = Class *Arachnida*	Ferns = Phylum *Pteridophyta*
Birds = Class *Aves*	Reptiles = Class *Testudines, Sphenodontia, Squamata & Crocodylia*	Flowering plants = Phylum *Magnoliophyta*	Mosses = Phylum *Bryophyta*
Bony fish = Superclass *Osteichthyes* p.p.		Gymnosperms = Superclass *Gymnospermae*	Sac fungi = Phylum *Ascomycota*
Amphibians = Class *Amphibia*	Molluscs = Phylum *Mollusca*		Basidiomycota = Phylum *Basidiomycota*

Change over time in records about biodiversity in Ecuador

Species occurrence records accessible through GBIF over time

Number of species having occurrence records accessible through GBIF over time
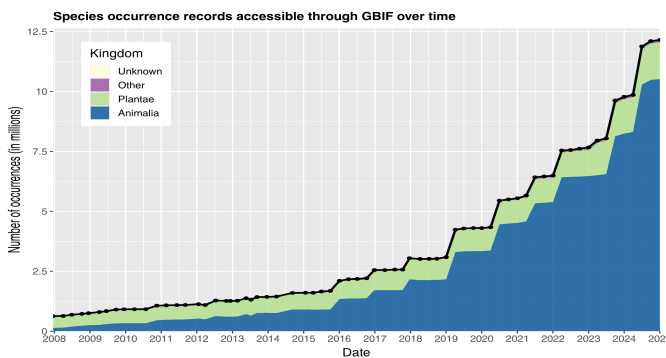
Occurrence records available about species occurring in Ecuador
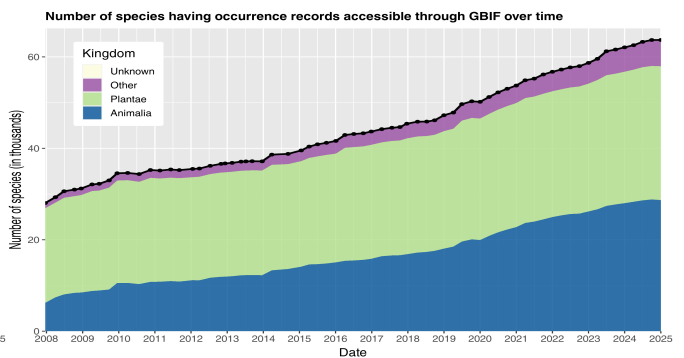
Species for which at least one occurrence record is available in Ecuador

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 Ecuador

Colección de aves naturalizadas del MUBIO. *Published by Universidad Central del Ecuador*
 https://doi.org/10.60545/gpwgcs

ECOSISTEMAS, BIODIVERSIDAD Y CONSERVACIÓN DE ESPECIES, INVERTEBRADOS Y SUS
 INTERACCIONES. *Published by Universidad Estatal Amazónica*
 https://doi.org/10.60545/zxjuuh

Colección de Mastozoología - Museo de Zoología de la USFQ. *Published by Universidad San
 Francisco de Quito USFQ*
 https://doi.org/10.60545/fxmibg

Análisis de cobertura vegetal post-fuego en el páramo del Atacazo. *Published by Universidad Central
 del Ecuador*
 https://doi.org/10.60545/fvtu8f

Colección de Reptiles del Museo de Zoología QCAZ. *Published by Pontificia Universidad Católica del
 Ecuador*
 https://doi.org/10.60545/a733ub

Colección de Anfibios del Museo de Zoología QCAZ. *Published by Pontificia Universidad Católica del
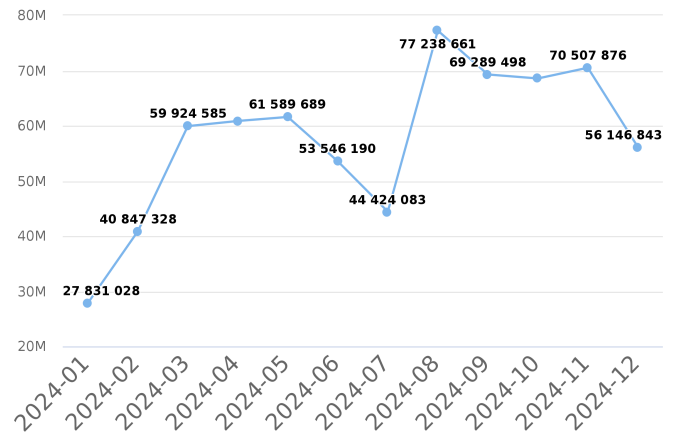 Ecuador*
 https://doi.org/10.60545/ejgu3c

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

Newest publishers from Ecuador

Un poco del Chocó

Corporación ECOPAR

Universidad Espíritu Santo - UEES

Universidad Nacional de Loja

Prefectura del Guayas

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

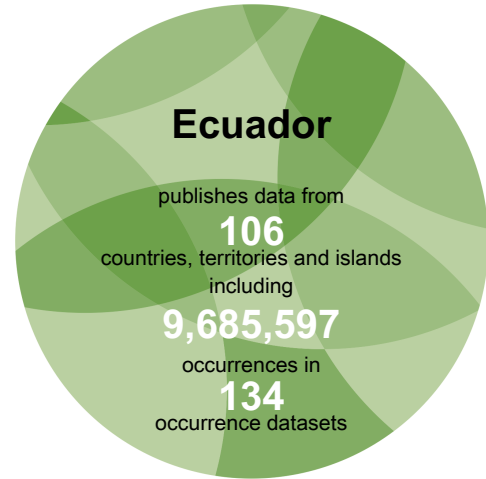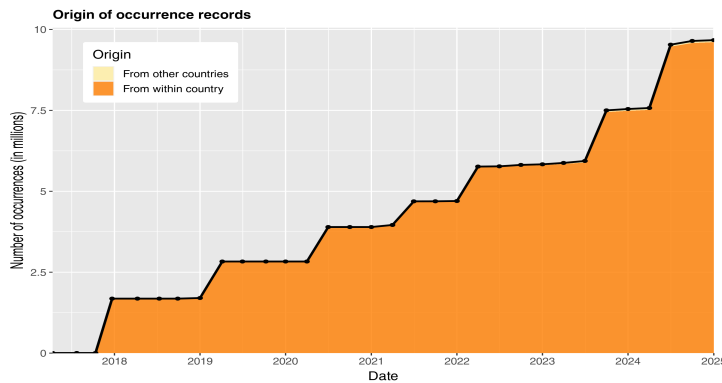## Occurrence records downloaded from GBIF.org, published by institutions in Ecuador

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

Data mobilization

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

Origin of occurrence records

Data sharing with country or area of origin

Ecuador

publishes data from
106
countries, territories and islands
including
9,685,597
occurrences in
134
occurrence datasets

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

Top data contributors about biodiversity in Ecuador

Rank	Country or area	No. of occurrences
1	Ecuador	9,621,197
2	United States of America	1,645,112
3	Denmark	158,951
4	International organization or unknown country	117,925
5	Netherlands	103,185
6	United Kingdom	97,016
7	Venezuela	93,524
8	Sweden	77,308
9	Germany	57,066
10	Poland	28,515

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

Top datasets contributing data about Ecuador

EOD – eBird Observation Dataset. *9,065,016 occurrences in Ecuador.* (Last updated 27 Sep 2024)

iNaturalist Research-grade Observations. *457,063 occurrences in Ecuador.* (Last updated 30 Dec 2024)

Tropicos Specimens Non-MO. *402,344 occurrences in Ecuador.* (Last updated 4 Jan 2025)

Tropicos MO Specimen Data. *262,717 occurrences in Ecuador.* (Last updated 4 Jan 2025)

NMNH Extant Specimen Records (USNM, US). *132,801 occurrences in Ecuador.* (Last updated 2 Jan 2025)

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

Ecuador participates in the following projects coordinated by GBIF

Improving the visibility of Latin American Natural Science Collections through a Global Collections
Network Campaign
Capacity Enhancement Support Programme, 2023–2024
https://www.gbif.org/project/CESP2022-012

National portals addressing national challenges
Capacity Enhancement Support Programme, 2023–2024
https://www.gbif.org/project/CESP2023-010

Enhancing data publication, access and use capacities in the private sector
Capacity Enhancement Support Programme, 2022–2024
https://www.gbif.org/project/CESP2022-010

From shared experiences to shared knowledge and common
solutions: collaborating to improve web-based 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

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