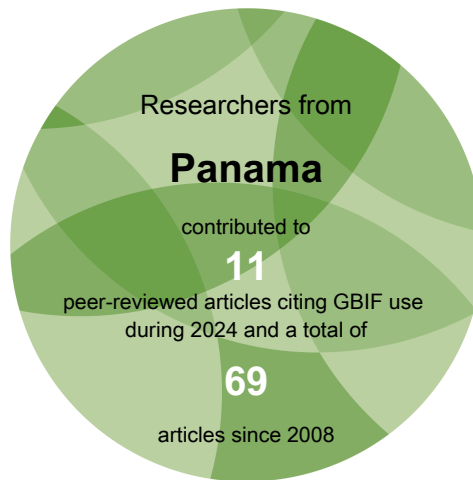


generated January 2025

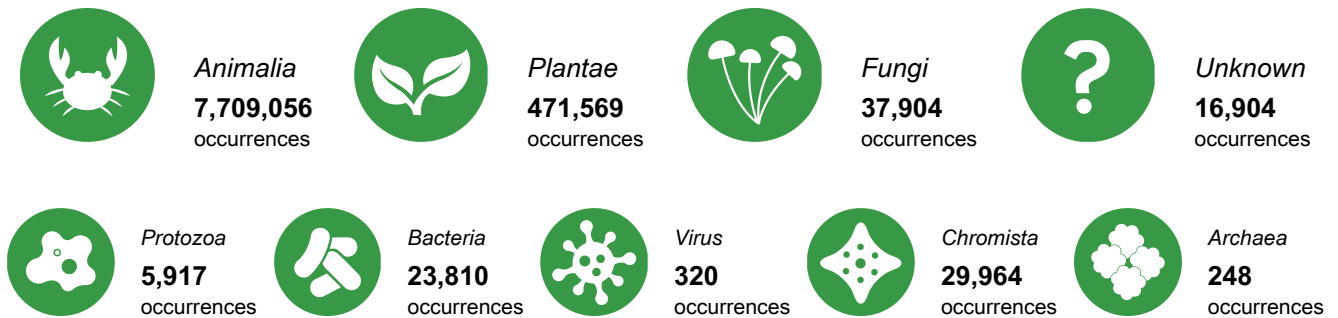
Panama

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 Panama. 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.

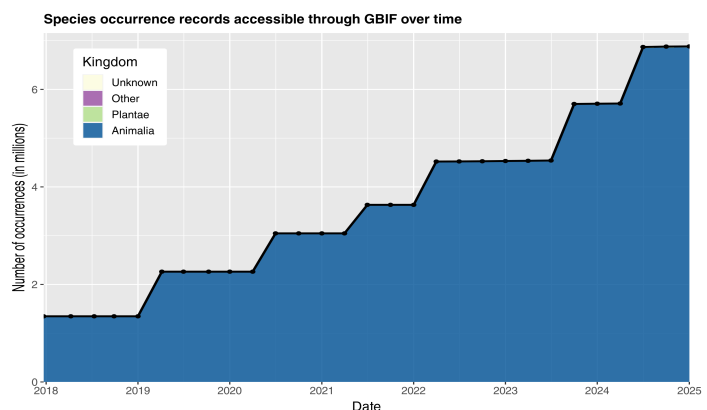
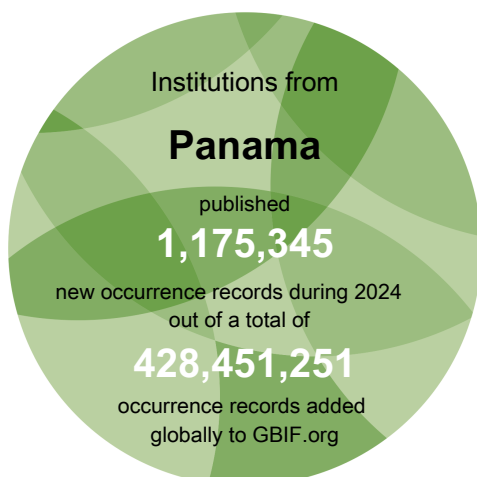
► Access and usage



► Data availability in Panama



► Data mobilization

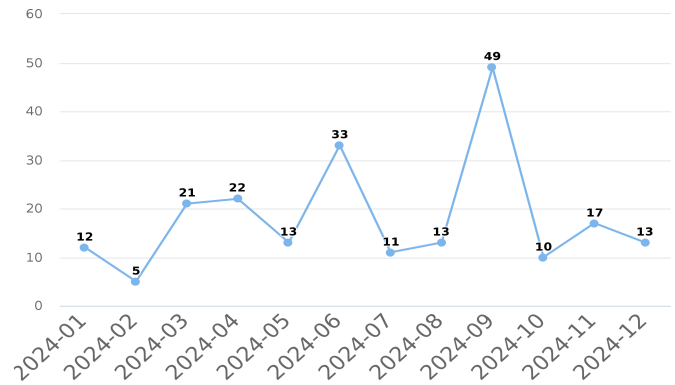
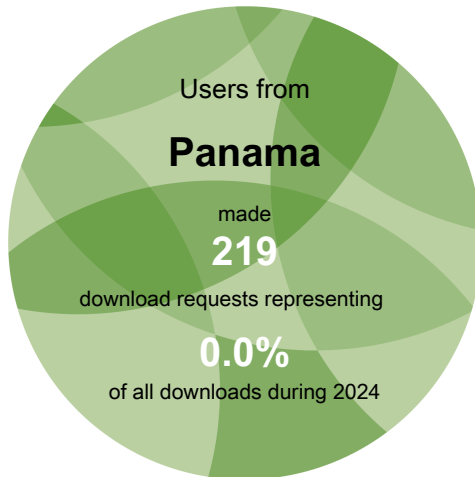


Number of records published by institutions in Panama, categorized by kingdom



Access and usage

Data downloads on GBIF.org from users in Panama



Monthly downloads requested by users in Panama

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

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 Panama.

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

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>

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>

Carmona-Higueta, Mendieta-Leiva, Gómez-Díaz *et al.* (2024) Endemism Centres of the Five Richest Vascular Epiphyte Families in the Neotropics. *Journal of Biogeography*.
<https://doi.org/10.1111/jbi.15016>

Fernández-Alonso, Campos-Pineda. (2023) *Matisia gentryi* and *M. tinamastiana* (Malvaceae), two species newly recorded from Panama and an updated key to *Matisia* species in this country. *Check List*.
<https://doi.org/10.15560/19.6.1013>

Journé, Bogdziewicz, Courbaud *et al.* (2024) The Relationship Between Maturation Size and Maximum Tree Size From Tropical to Boreal Climates. *Ecology Letters*.
<https://doi.org/10.1111/ele.14500>

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



Data availability

Total data available for selected taxonomic groups in Panama



Mammals
66,598
occurrences



Birds
6,969,122
occurrences



Bony fish
79,064
occurrences



Amphibians
45,350
occurrences



Insects
299,155
occurrences



Reptiles
40,127
occurrences



Molluscs
102,658
occurrences



Arachnids
19,717
occurrences



Flowering plants
407,480
occurrences



Ferns
35,486
occurrences



Gymnosperms
896
occurrences



Mosses
9,874
occurrences



Sac fungi
21,971
occurrences



Basidiomycota
10,920
occurrences

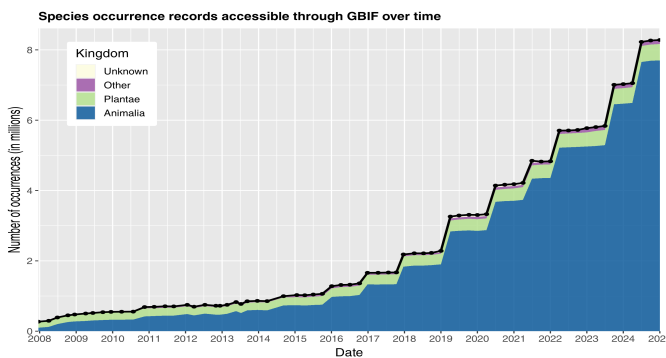
Mammals = Class *Mammalia*
Birds = Class *Aves*
Bony fish = Superclass
Osteichthyes p.p.
Amphibians = Class *Amphibia*

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

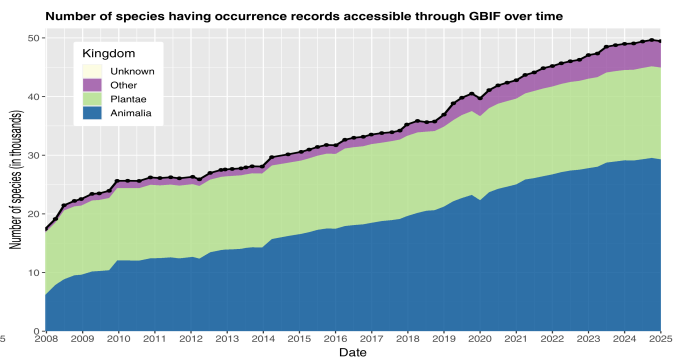
Arachnids = Class *Arachnida*
Flowering plants = Phylum
Magnoliophyta
Gymnosperms = Superclass
Gymnospermae

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

Change over time in records about biodiversity in Panama



Occurrence records available about species occurring in Panama



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

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 Panama

Caracterización de Flora y Fauna en el área del proyecto "Baco Solar" en Chiriquí, Panamá.

Published by Enel Panamá

<https://doi.org/10.15468/2ndfq9>

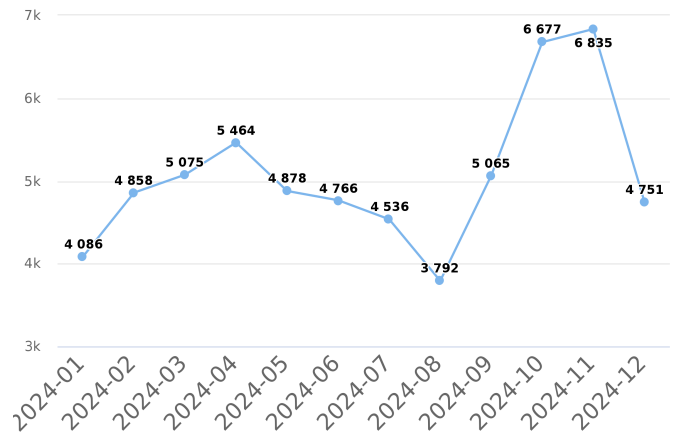
See all datasets from this country or area: gbif.org/dataset/search?publishing_country=PA

Newest publishers from Panama

Enel Panamá

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

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

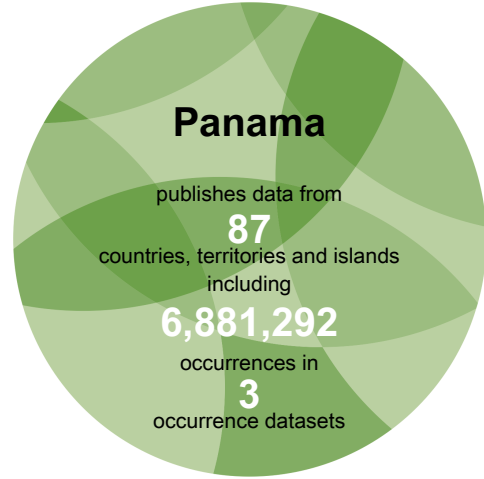
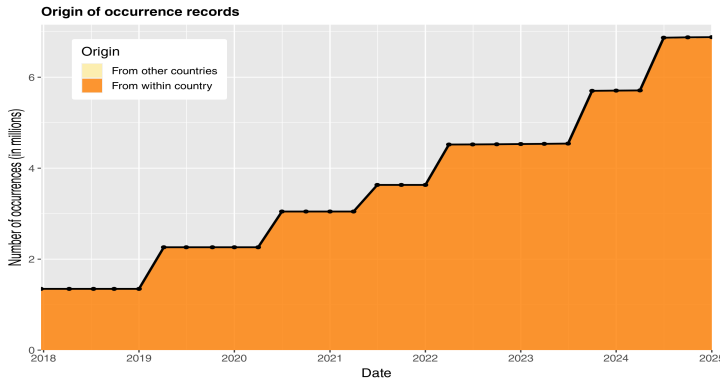


Number of occurrence records downloaded via GBIF.org published by institutions in Panama



Data mobilization

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



Data sharing with country or area of origin

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

Top data contributors about biodiversity in Panama

Rank	Country or area	No. of occurrences
1	Panama	6,857,982
2	United States of America	1,097,738
3	United Kingdom	96,402
4	International organization or unknown country	45,796
5	Netherlands	33,294
6	Mexico	22,681
7	Estonia	19,137
8	Germany	15,525
9	Australia	14,701
10	Spain	12,070

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

Top datasets contributing data about Panama

- EOD – eBird Observation Dataset. *6,784,185 occurrences in Panama.* (Last updated 27 Sep 2024)
- iNaturalist Research-grade Observations. *200,129 occurrences in Panama.* (Last updated 30 Dec 2024)
- Tropicos MO Specimen Data. *192,735 occurrences in Panama.* (Last updated 4 Jan 2025)
- NMNH Extant Specimen Records (USNM, US). *191,011 occurrences in Panama.* (Last updated 2 Jan 2025)
- Snow Entomological Museum Collection. *51,596 occurrences in Panama.* (Last updated 2 Dec 2024)

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