GBIF@25

Converting research relevance into policy action & impact

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GBIF Secretariat



NBN Conference 2026
Leeds, England | 19 Nov 2026

GBIF 25

Datasets

125,503

Hosted portals

80



Country Participants

71

Peer-review papers using data

16,352

Organizational Participants

42

Average records downloaded per month (Jan-Oct 2026)

401.9 billion

Publishers

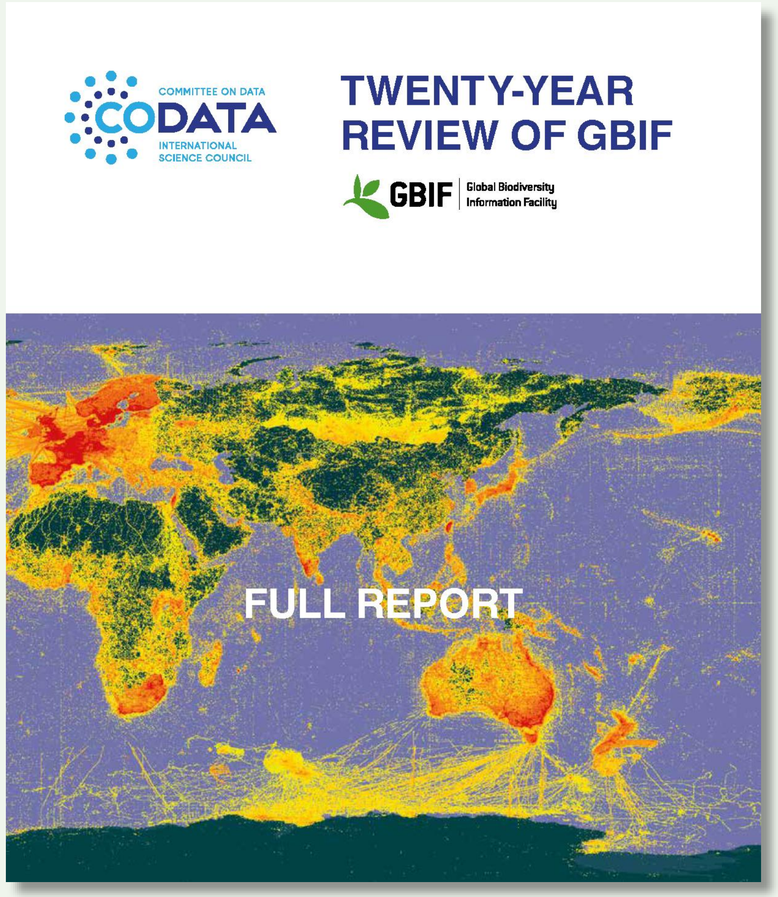
2,843

Species occurrence records

3,757,251,933

By the numbers | 17 November 2026

Recommendations from CODATA *Twenty-year Review of GBIF* (2020)



R3: Visibility / R4a: Value Proposition

- Establish **greater visibility among decision-makers and the policy community** in the biodiversity arena, as well as throughout the scientific community

R20: Organization / R21: Funding

- **Double the core budget, then double it again**
- Help make **node funding** sustainable
- Support **new strategic initiatives**

https://doi.org/10.35035/ctzm-hz97

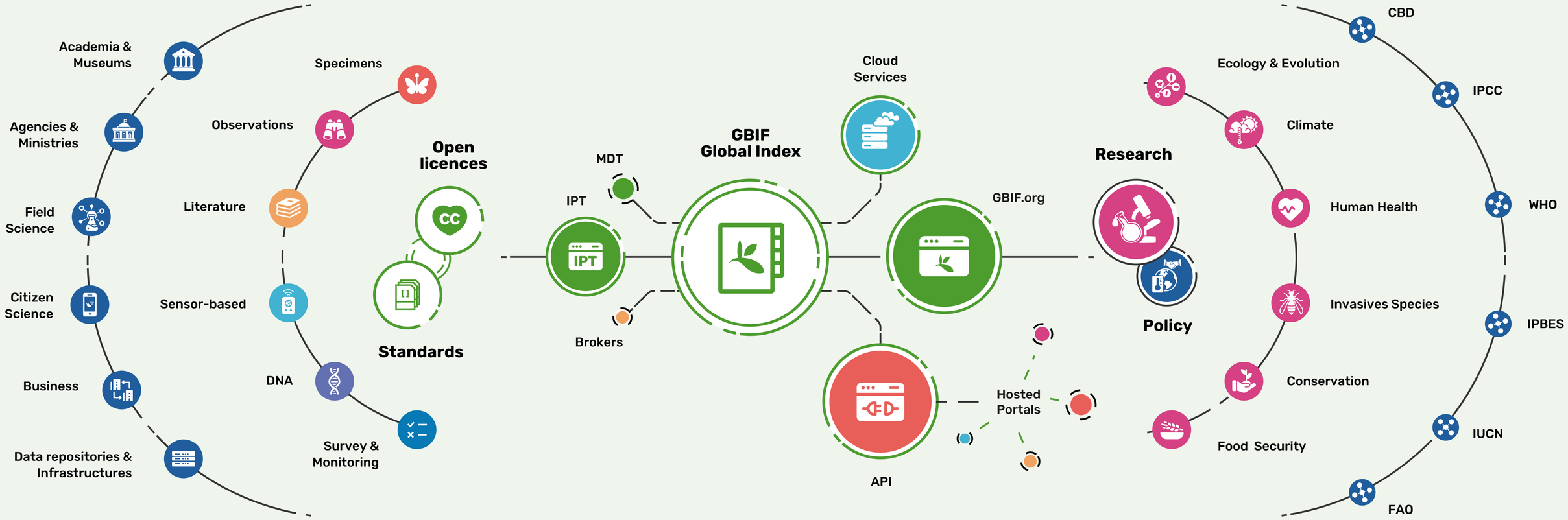
Goal: Increase GBIF's resilience through supplementary funding

- Such **increases can't be accomplished** by just adding new member countries
- Growing need to **address persistent underfunding of GBIF nodes**
- GBIF Executive Committee asked the Secretariat to **diversify our budget to mitigate risk**
- **Past success** in funding additional activities related to and building upon our work programmes—**NOT pursuing money for money's sake**

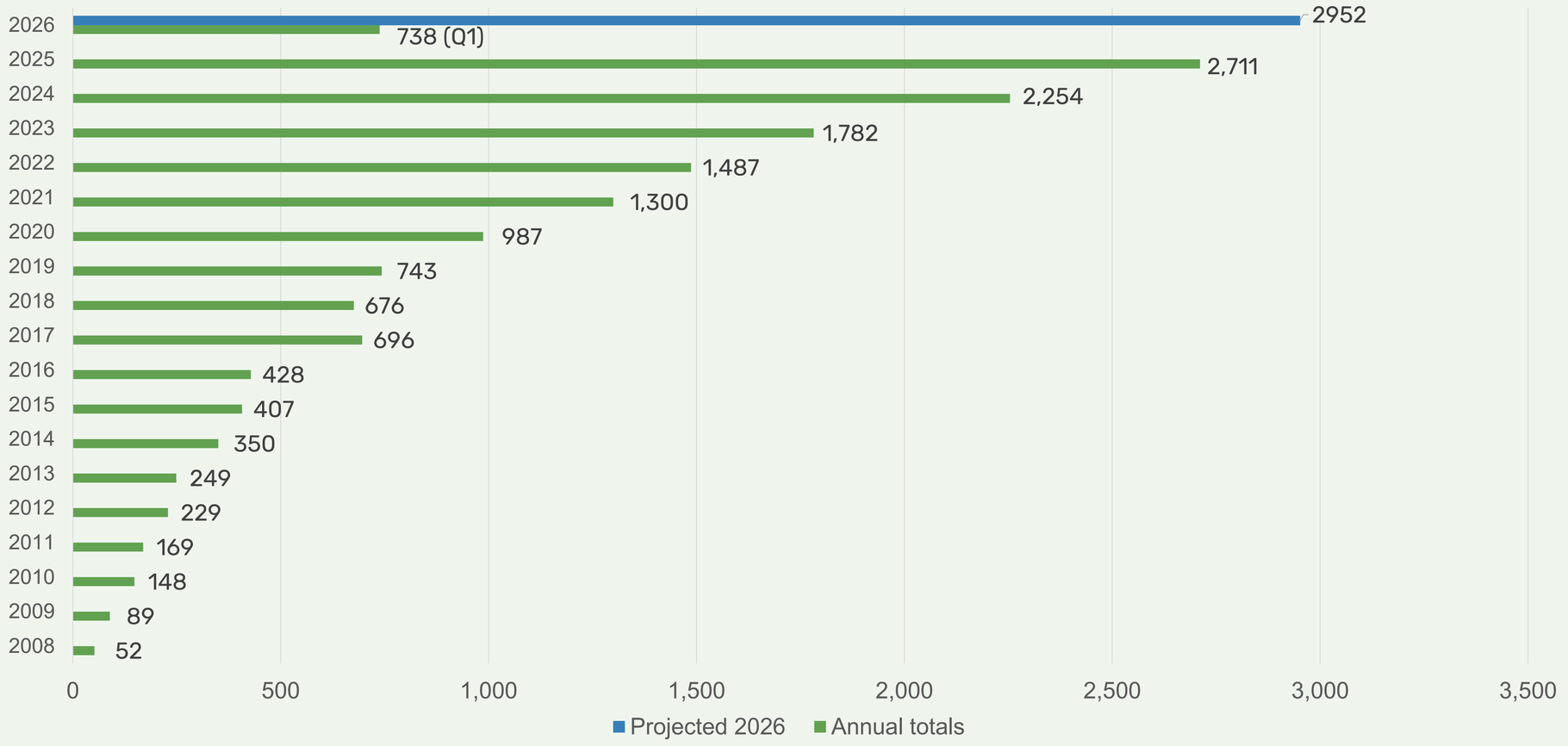


Cheetah (*Acinonyx jubatus* subsp. *jubatus*), observed in South Africa. Photo 2026 Jeanette Zitzer via iNaturalist.org (CC BY-NC 4.0) https://www.gbif.org/occurrence/5938175461

Providing biodiversity evidence for research and policy



Peer-reviewed publications using GBIF-mediated data

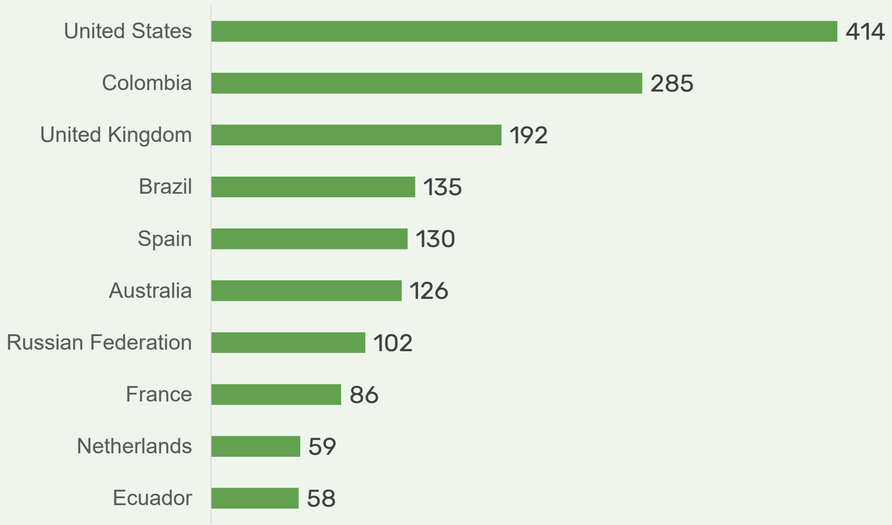


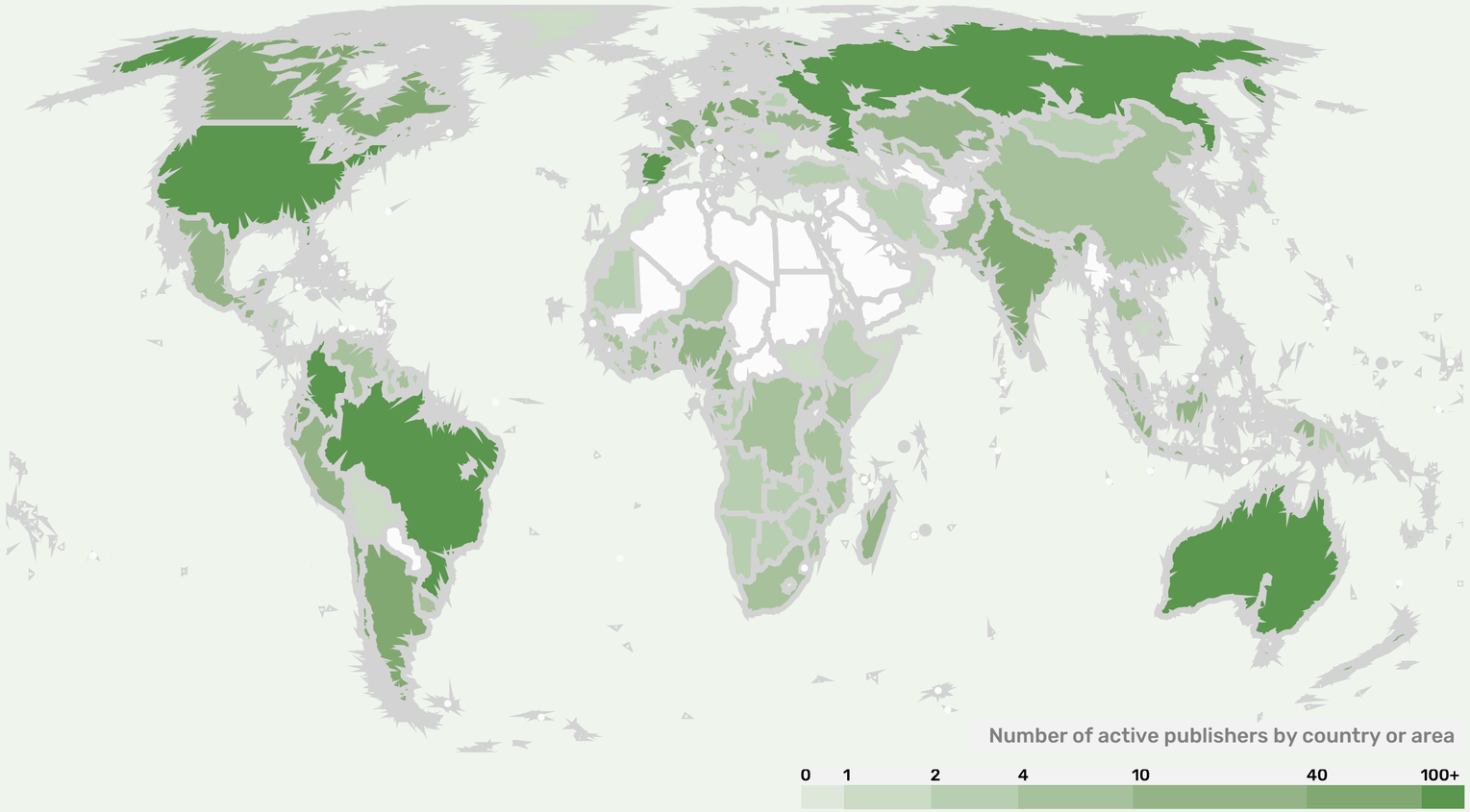
https://www.gbif.org/resource/search?contentType=literature&literatureType=journal&relevance=GBIF_USED&peerReview=true

1 October 2026

GBIF network of data publishing institutions

152 countries/areas with institutions sharing data through GBIF





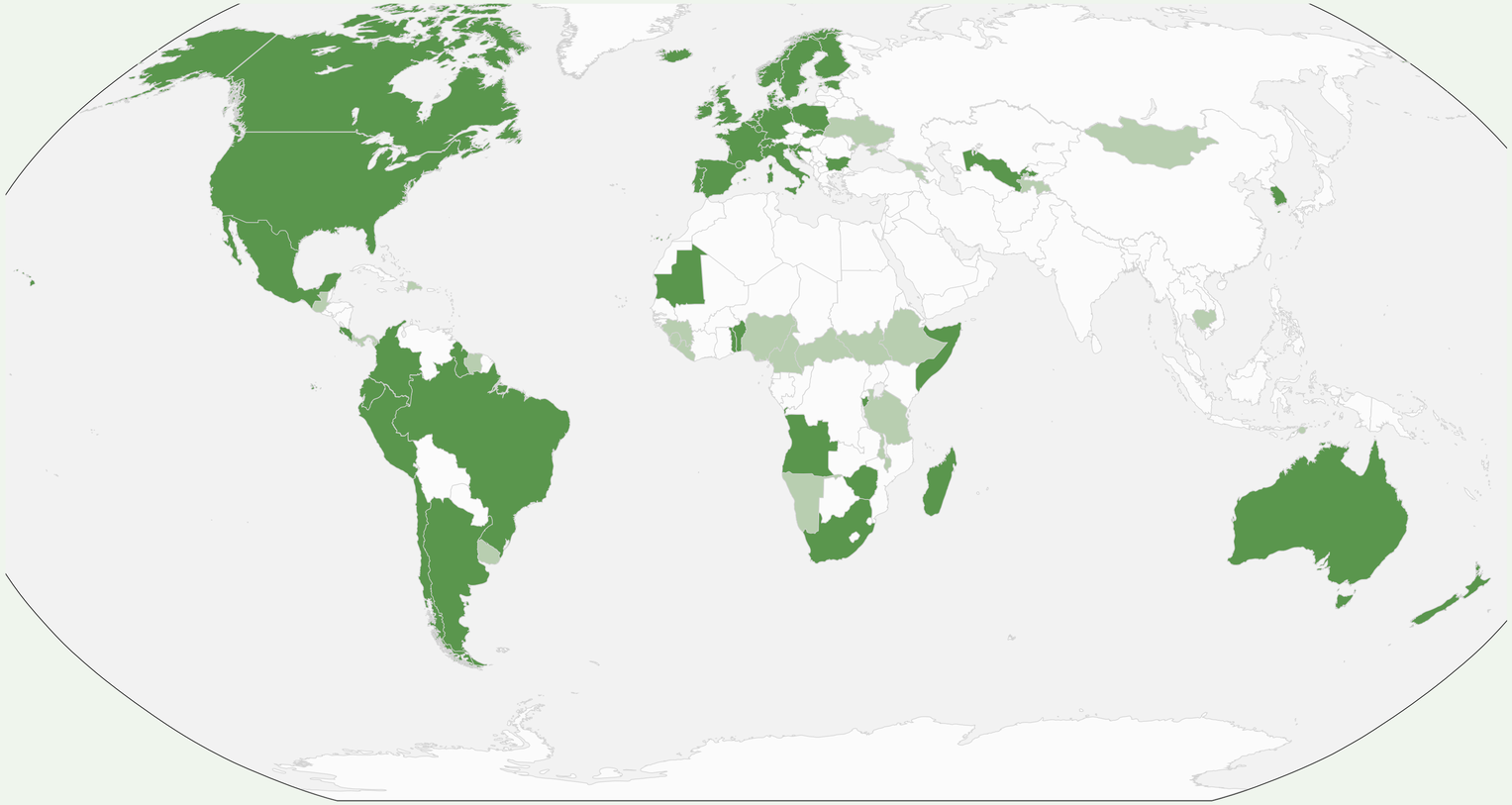
https://www.gbif.org/publisher/search

16 November 2026

GBIF Participant countries

48 Voting Participants

23 Associate Participants

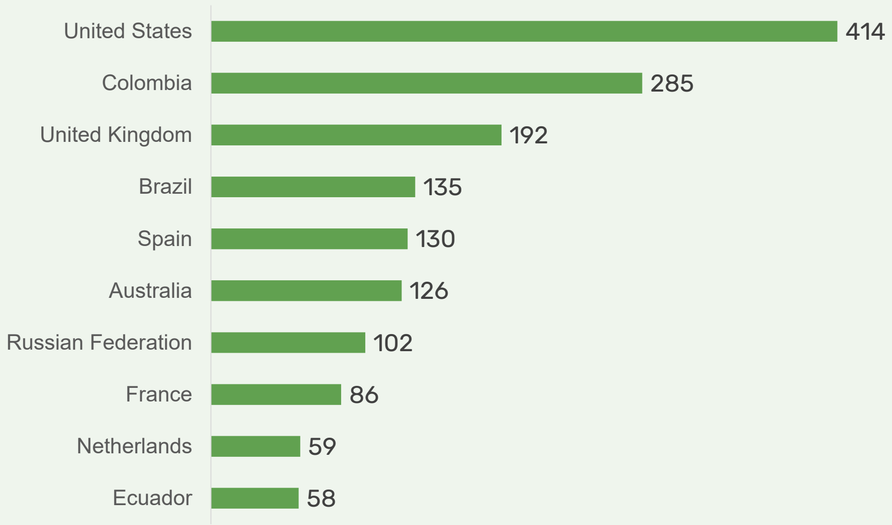


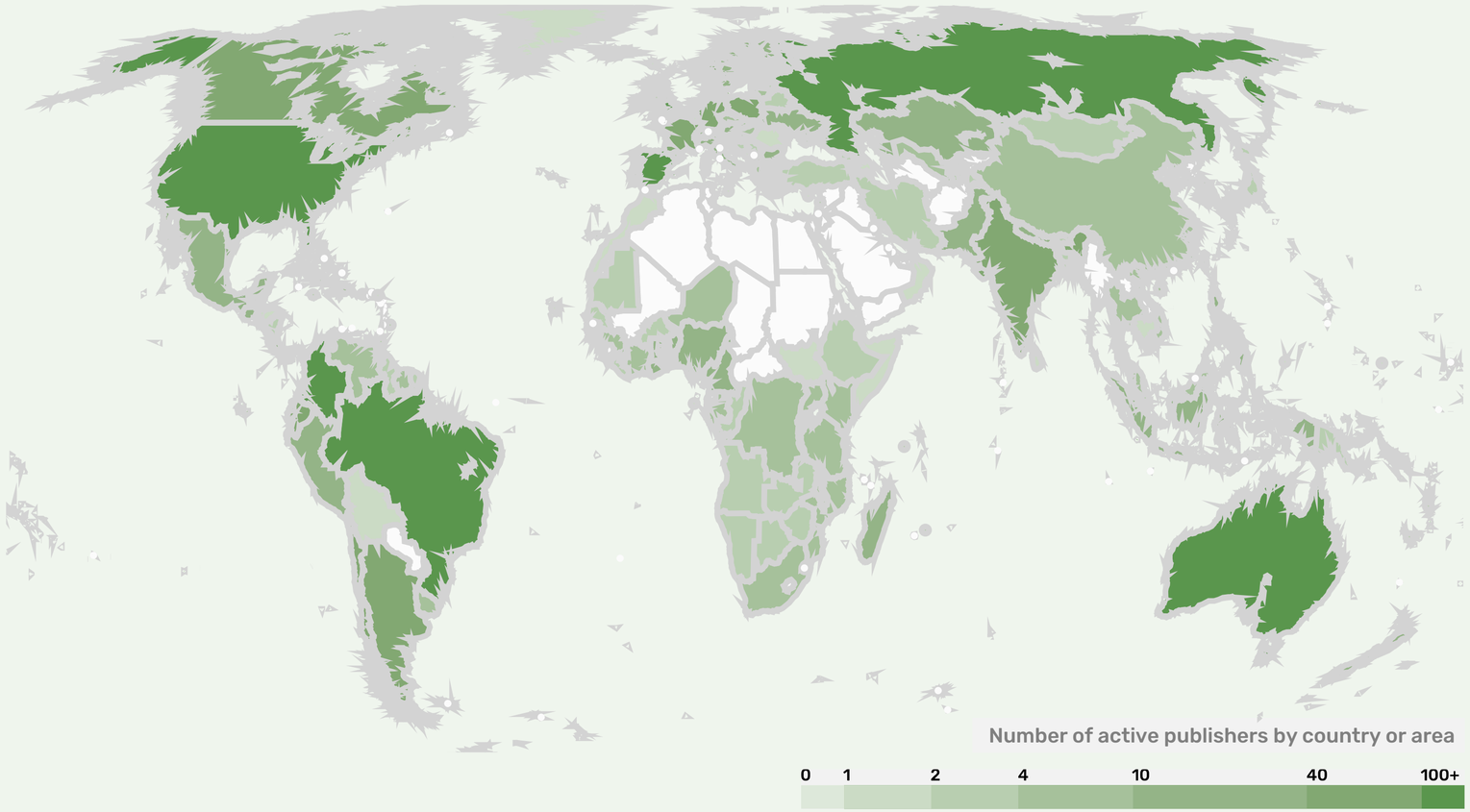
https://www.gbif.org/the-gbif-network

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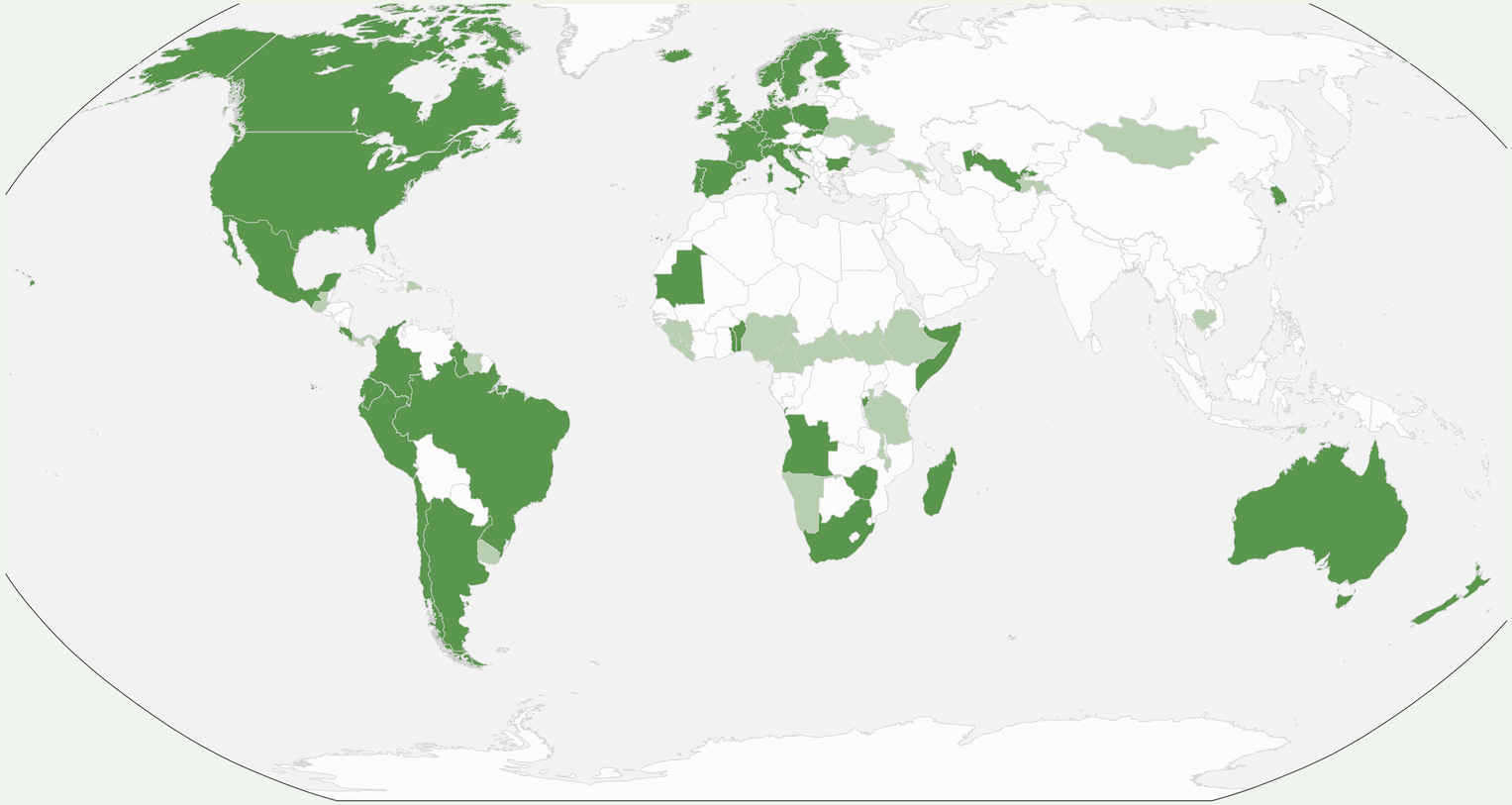
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The GBIF network supports GBF targets, metrics & indicators

- **1** Data to identify key biodiversity areas
- **2** Data to monitor restoration
- **3** Data to locate & monitor protected areas
- **6** Data on invasive species occurrence
- **8** Data on species impacted by climate change
- **10** Data on species relevant to agriculture and sustainable production



- **4** Data for species conservation
- **5** Data for harvesting and trade of wild species
- **9** Data for sustainable use and management of wild species
- **15** Platform for sharing corporate biodiversity data
- **20** Strengthen capacity for data mobilization & use
- **21** Ensuring access to best-available data

https://www.cbd.int/gbf

Ongoing review of GBIF use in 7th National Reports

- **More than two thirds 7NRs** (91/148) reference data, nodes, services or resources from the GBIF network
- **7NRs link GBIF to all 23 GBF targets** (*GBIF estimates relevance to 12/23*)
- Most frequently reported:
  - **Target 21** (knowledge)
  - **Target 6** (invasives)
  - **Target 20** (capacity building)
- 7NRs from **14 Participants don't mention GBIF** (*the UK does + NBN*)



Kunming–Montreal
GLOBAL BIODIVERSITY FRAMEWORK

https://www.cbd.int/gbf

What can GBIF provide ~~countries~~ parties?

- Community-based **data standards** and open-source **software**
- Tools & processes for building authoritative **national species lists** (*in partnership with Catalogue of Life*)
- Scalable data access via **hosted portals**
- Data mobilization supported through **capacity & skills development**
- **Regional support** via CBD technical support & collaboration centres (TSCCs)



Entoloma hochstetteri, observed in New Zealand. Photo 2026 roaming_eye via iNaturalist (CC BY-NC 4.0) gbif.org/occurrence/6129981855

The GEF: Global Environment Facility

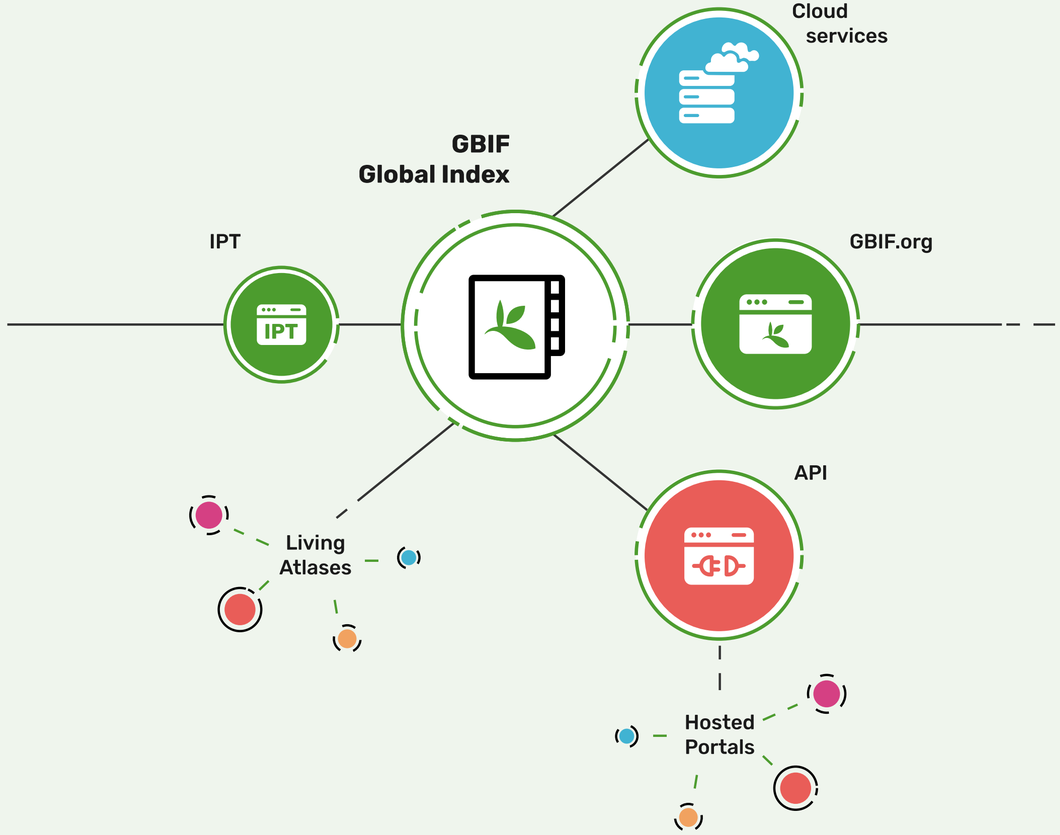
- **World's largest public funder of biodiversity-related projects**
- Supports recipient countries to **prioritize environmental action** that delivers global environmental benefits
- Serves as **financial mechanism for five conventions**, including CBD & UNCCD
- Active in **148 countries** with 18 agencies & additional institutions

gef | global environment facility
INVESTING IN OUR PLANET

GBIF meets data holders where they are

Biodiversity data holders publish records, datasets & associated metadata via **multiple tools & technologies**:

- Integrated Publishing Toolkit (IPT)
- Living Atlas platform
- Direct API connections
- Collection management systems
- Scheduled monitoring/crawling
- Metabarcoding Data Toolkit (MDT)

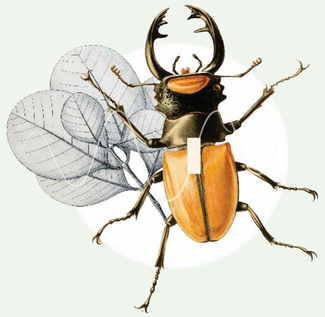


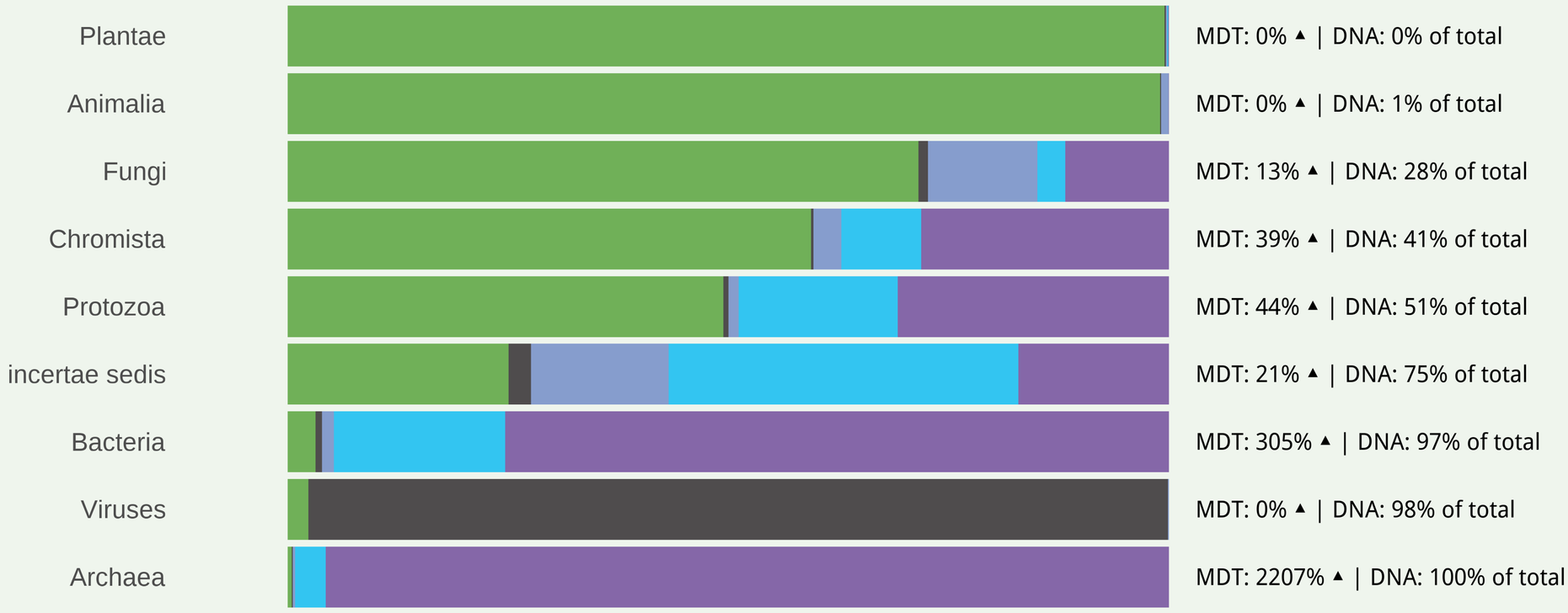
Data from biological surveys and monitoring (SAM)

- **Humboldt Extension for Ecological Inventories** improves capture of structured survey context
- Build on nearly 5k datasets already available to **scale up data mobilization**
- Enables expansion of services for **data search, visualization & export**
- DwC-DP further supports shift towards an **event-centric infrastructure**
- **eBird**, the largest dataset shared through GBIF, **became the largest of 5k+ event-based datasets** in October 2026



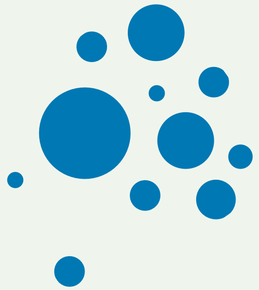
Taxonomic complementarity of DNA data





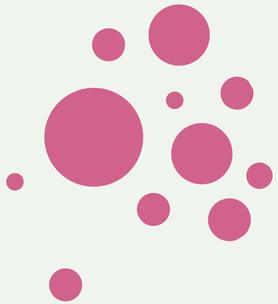
Catalogue of Life eXtended Release

Regional, national & specialized checklists

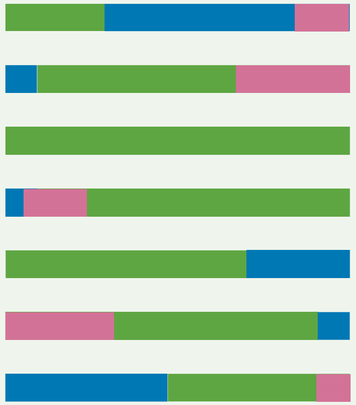


eDNA reference libraries

- BOLD
- UNITE
- GTDB



ChecklistBank



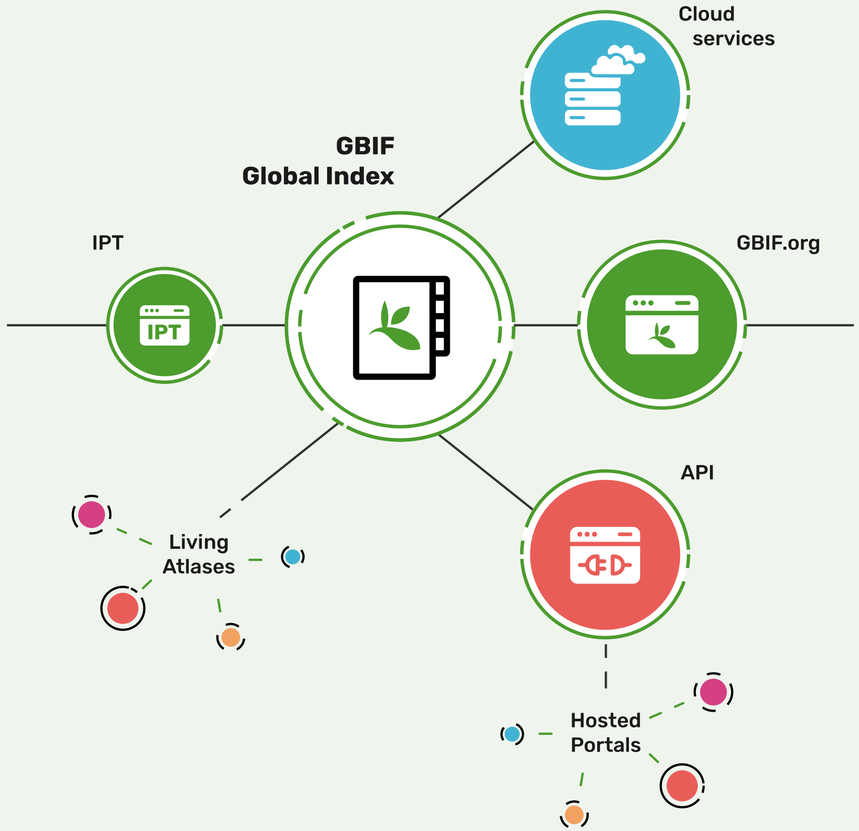
- Merge sectors
- Homotypic grouping
- Performance tests
- Editorial decisions

Catalogue of Life

COL XR has replaced the GBIF taxonomic backbone as the primary taxonomic data service

GBIF

GBIF meets users where they are

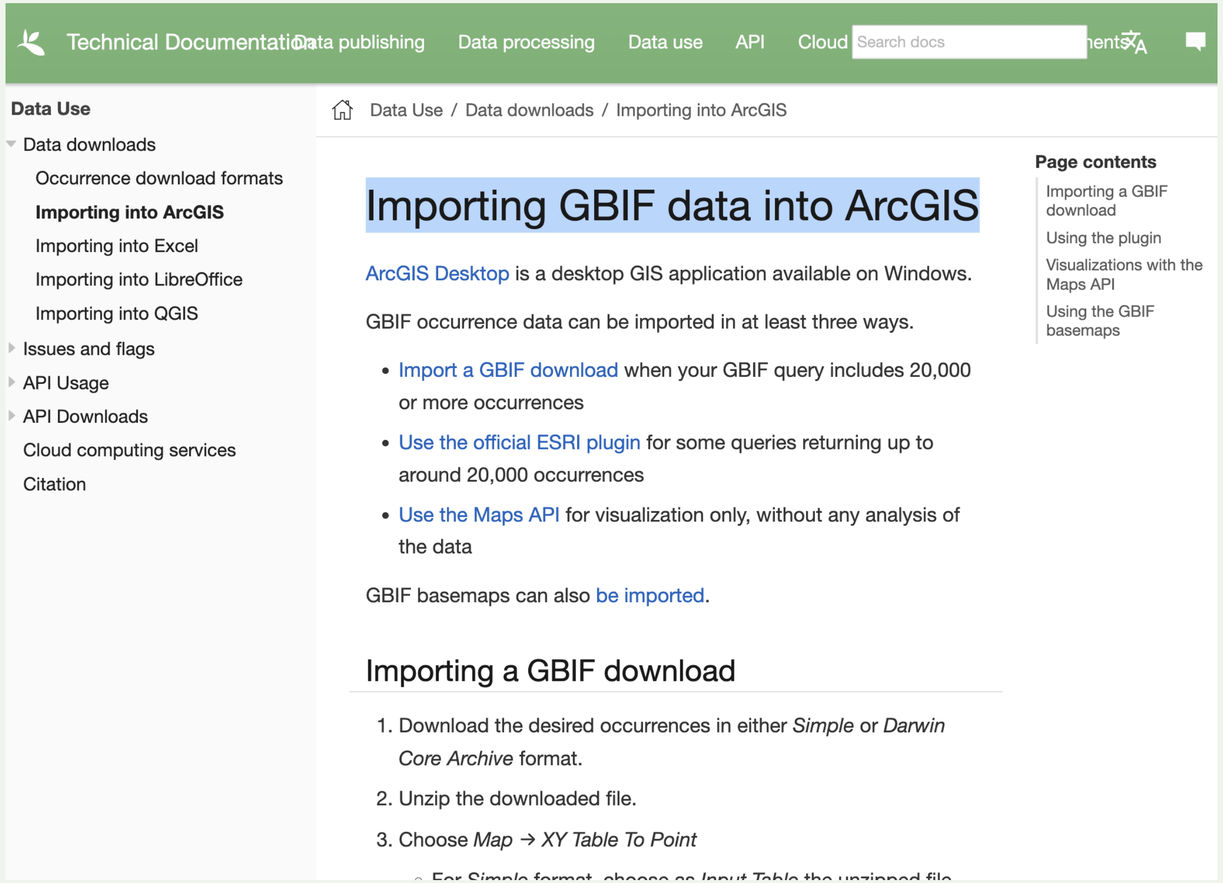


Users can access all records, datasets & associated metadata via **multiple channels**:

- GBIF.org
- REST API (JSON)
- Community-developed software libraries for R, Python, Julia et al.
- SQL-based species occurrence cubes
- Commercial cloud services
- Nature reporting/footprinting tools & platforms
- Hosted portals

Importing GBIF-mediated data into ArcGIS

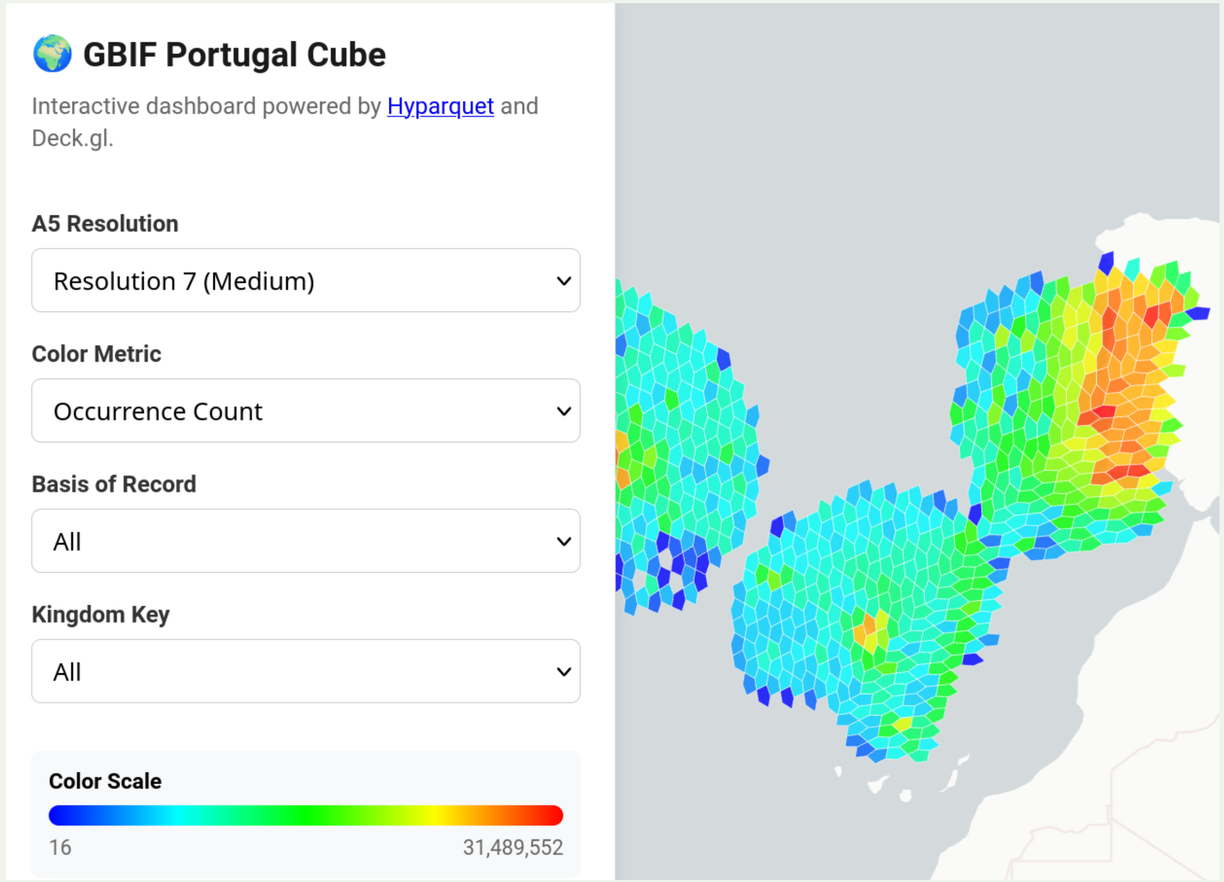
- Python-based download tool provides direct import of data into **both ArcGIS Pro & ArcGIS Online**
- Users **use & filter search results** within their study areas
- DOI-based citation preserves data provenance for easy citation, reproducability & **credit/ attribution to data publishers**



https://techdocs.gbif.org/en/data-use/importing-gbif-data-into-arcgis

Seeking feedback on expanding Parquet format

- **Improved support** for geographic data types & tooling enables
  - Partitioning
  - Better compression
  - Indexing
- New Parquet support introduced in **ArcGIS** & **QGIS**
- **Feedback sought on three possible structures** for expanded Parquet download format



gbif.link/parquet-feedback

16 November 2026

Hosted portals programme



12
Institutional



17
GBIF national Participants and regions

80
Hosted portals in production

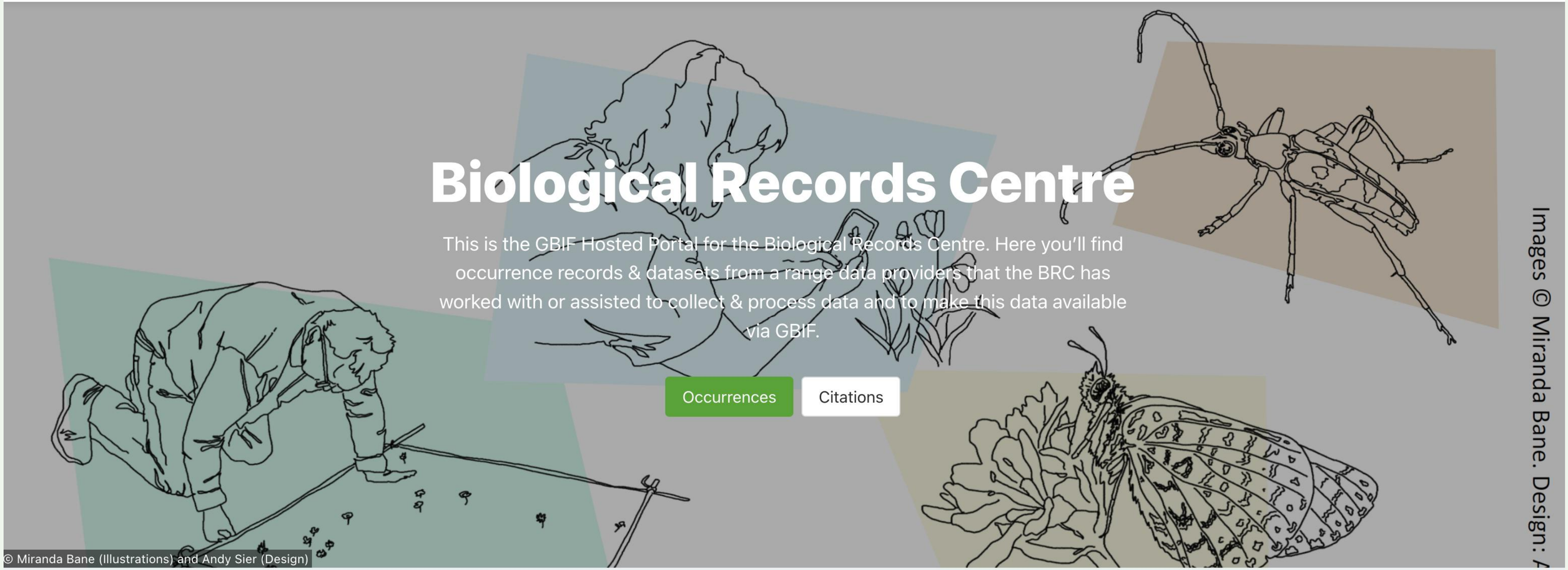


34
Scientific journal



17
Networks/thematic networks

https://www.gbif.org/hosted-portals



146,663,480
Occurrences

30
Organisations

143
Datasets

24,582
Species

8,368
Occurrences with photos

Steady growth in data available from businesses through GBIF

- Real-time table lists **150+** companies from **30** countries
- Together that publish a total of **15 million** records in **1,700+** datasets
- Like all data shared via GBIF, their contributions inform:
  - Peer-reviewed **scientific research**
  - **Policy reports**, such as IUCN Red List & IPBES assessments
  - GBF indicators & metrics in **7NRs**



https://gbif.link/business-data-publishers

GBIF & the Taskforce on Nature-based Financial Disclosures (TNFD)



TNFD Recommendation 5(b)

on unlocking corporate nature data

“Scale up efforts by international actors, such as GBIF, to engage companies across high land/sea/freshwater use sectors and prepare their data for contribution into the global public commons”

https://gbif.link/TNFD

GBIF & the Nature Positive Initiative State of Nature metrics

CBD/COP/17/INF/3

on alignment of NPI SoN with KMGBF

"…the potential for data collected by actors as they apply the SoN metrics and underlying standards can only be reached if these data are shared openly, with governments, national and global data infrastructure (e.g. GBIF), and indigenous traditional owners…"



https://www.cbd.int/doc/c/de8d/1336/3f6b3190ba64eb846e3d781a/cop-17-inf-03-en.pdf

Anticipating future risks in GBIF Work Programme 2027

- Assess use of GBIF-mediated data in **AI systems & models**
- Explore updates/adjustments to GBIF's terms of service to **address unregulated API access**
- Draft **"data broker" agreement** to discuss with participants, publishers & market intermediaries
- Survey GBIF community members on their **current use/understanding of non-commercial licences**



https://doi.org/10.35035/doc-et3m-hp79

Vision for the GBIF network

A world in which the best possible biodiversity data underpins research, policy and decisions.



Thank you!

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