

GBIF SWEDEN

SESSION 1 · 2026-09-11

Introduction to GBIF

Find, download and correctly cite biodiversity data from GBIF

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CC-BY



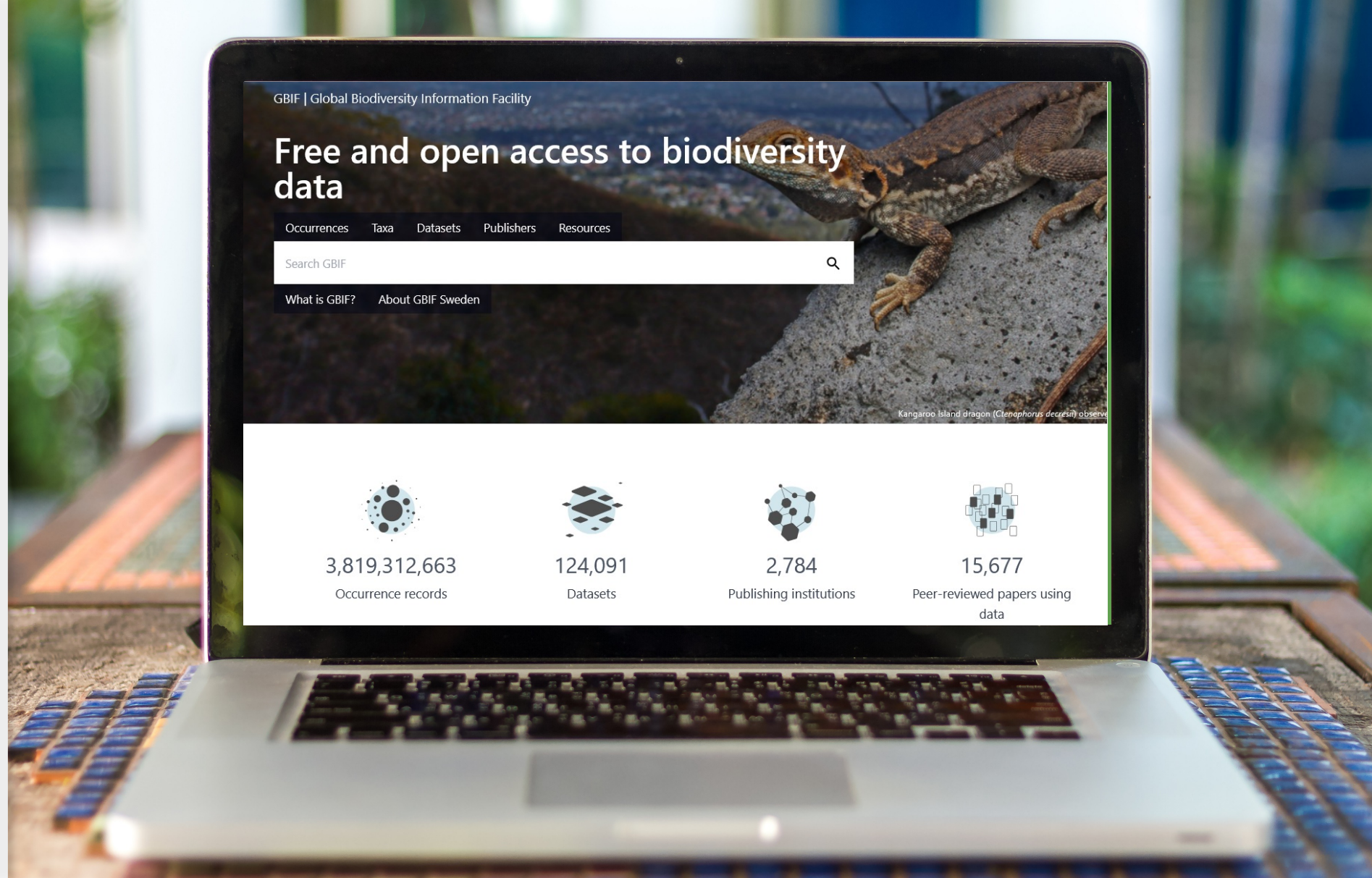
What participants should leave with

- Understand GBIF's role between data publishers and users
- Distinguish a dataset DOI from a download DOI
- Request and correctly cite a first download



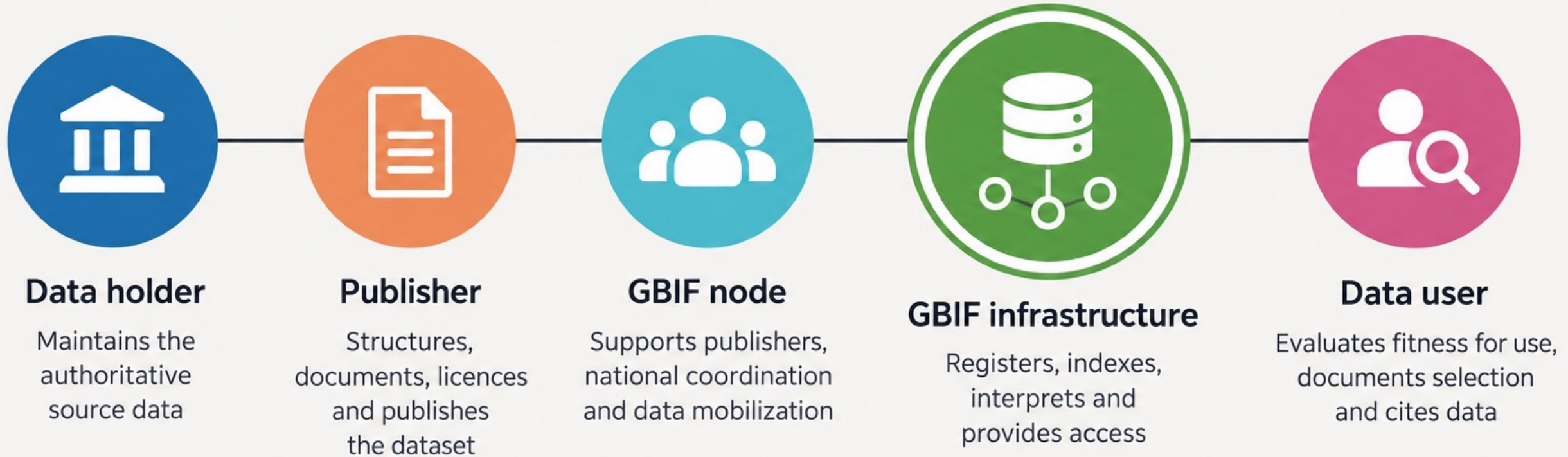
What is GBIF?

GBIF—the Global Biodiversity Information Facility—is an **international network** and **data infrastructure** aimed at **providing anyone, anywhere, open access** to data about all types of **life on Earth**.



<https://www.gbif.org/>
<https://www.gbif.se/>

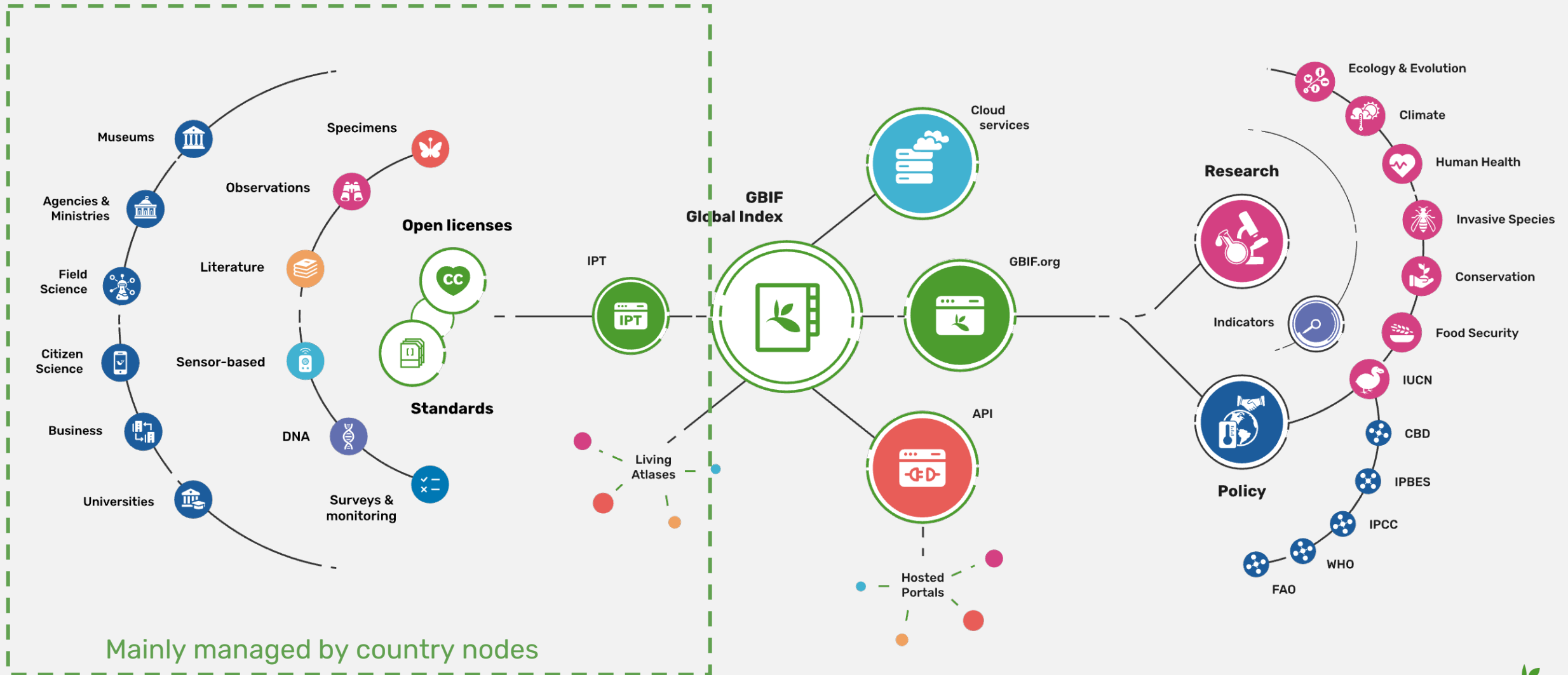
GBIF as distributed infrastructure



Publishers retain ownership and responsibility for their data. GBIF enables discovery, integration and access.



Providing biodiversity evidence for research and policy



Steinke et al. 2025: <https://doi.org/10.1073/pnas.2519119122>

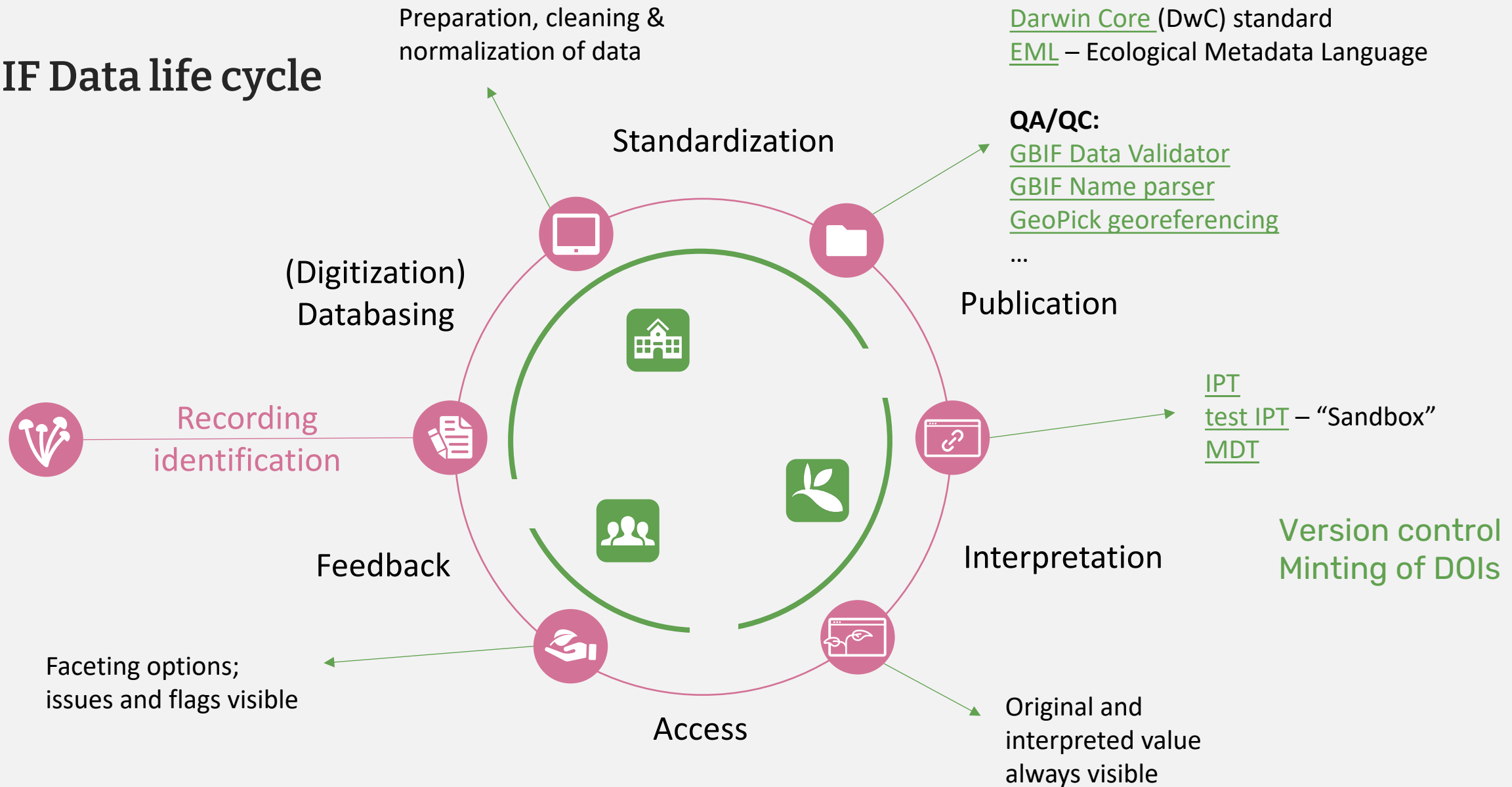
GBIF Science Review: <https://www.gbif.org/science-review>



GBIF Data life cycle



GBIF Data life cycle



GBIF Tools Catalogue:

<https://www.gbif.org/resource/search?contentType=tool>



Dataset page & literature tracking DEMO



FAIR before FAIR



FAIR before FAIR

GBIF is Machine-actionable
FAIR – not only open data!

Open data still require assessment of provenance, quality, bias and fitness for purpose



FAIR Principles

GO FAIR is committed to making data and services **findable, accessible, interoperable** and **reusable (FAIR)**.



Findable: Metadata and data should be easy to find for both humans and computers.



Accessible: The exact conditions under which the data is accessible should be provided in such a way that humans and machines can understand them.



Interoperable: The (meta)data should be based on standardized vocabularies, ontologies, thesauri etc. so that it integrates with existing applications or workflows.



Reusable: Metadata and data should be well-described so that they can be replicated and/or combined in different research settings.



<https://www.nature.com/articles/sdata201618>



FAIR before FAIR

FINDABLE

GBIF has [requirements](#) for metadata and datasets. All datasets are identified by [Digital Object Identifiers](#) (DOIs).

ACCESSIBLE

The [GBIF Portal API](#) provides a machine readable interface (REST + JSON) and use the [Integrated Publishing Toolkit](#) (IPT) as trusted data repository.

INTEROPERABLE

GBIF recommends using the [Ecological Metadata Language](#) (EML) for datasets and [Darwin Core](#) for occurrence data.

REUSABLE

GBIF require creative common data licenses ([CC0](#), [CC BY](#), or [CC BY-NC](#)). Provenance available from the GBIF portal.



<https://github.com/ropensci/rgbif>



<https://github.com/gbif/pygbif>



<https://www.gbif.org/occurrence-cubes>



[ArcGIS plugin](#)



By the numbers | 08 September 2026

Species occurrence records

3,820,146,060

Datasets

123,931

Hosted portals

72

Country
Participants

70

Organizational
Participants

42

Publishers

2,783

Peer-review papers
using data

15,597

Average records downloaded per month
(2024)

201.1 billion



Why open biodiversity data matters



Access

Discover and combine data
across institutions, countries and time



Research & learning

Explore questions, test methods
and develop new analyses



Policy & practice

Support assessments, planning,
conservation and decisions



Transparency

Examine the evidence behind
research and policy conclusions



Collaboration

Connect data producers, users
and expertise



Continuity

Preserve data beyond projects
for future questions

Data collected for one purpose can become evidence for many others



Downloading data

DEMO



YOUR TURN

Make your first simple download

- To make downloads from GBIF you need an account - you will need this for future Data Fika sessions (ORCID, GitHub; Google)
- Search for a taxa or map area of interest
- Filter out data relevant to you
- Download a checklist or simple occurrence data
- Where do you find the doi?

15 minutes · ask in the chat



Demo search parameters



Get data ▾How-to ▾Tools ▾Community ▾About ▾

Occurrences | Table | Gallery | Map | Related | **Dashboard** | Download

Occurrence status

Scientific name : Chimaphila umbellata ×

Year

Country or area : Sweden ×

Issues and flags

Location

Licence 2 ×

Basis of record : Preserved specimen ×

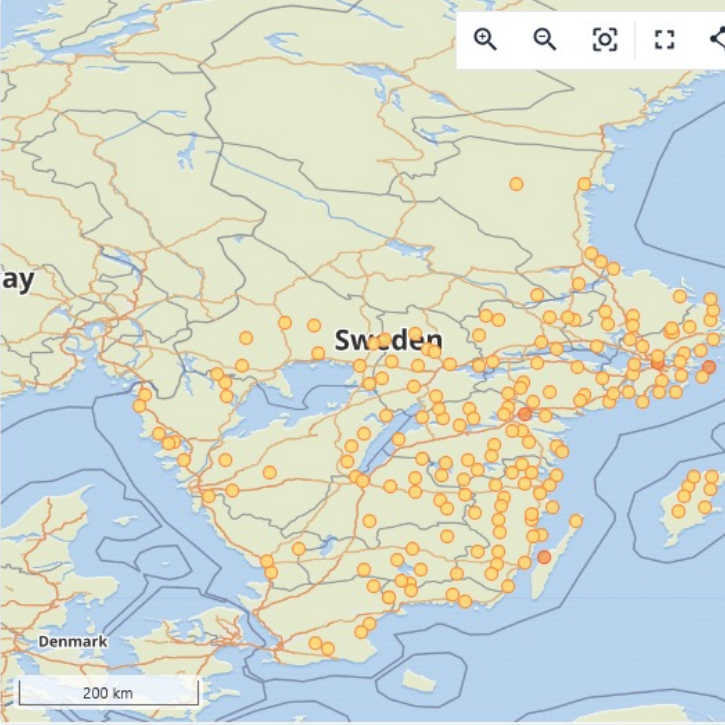
More filters

1,201 results

Scientific name	Features	Country or area	Coordinates	Year	Basis of record	Dataset
 Chimaphila umbellata		Sweden	57.29N, 16.47E	2025	Preserved specimen	 Oskarshamn herbariu
 Chimaphila umbellata		Sweden	56.29N, 15.37E	2012	Preserved specimen	 Artportalen
 Chimaphila umbellata		Sweden	57.80N, 15.94E	2011	Preserved specimen	 Oskarshamn herbariu
 Chimaphila umbellata		Sweden		2010	Preserved specimen	 Phanerogamic Botani
 Chimaphila umbellata		Sweden		2009	Preserved specimen	 Phanerogamic Botani
 Chimaphila umbellata		Sweden	57.30N, 16.29E	2000	Preserved specimen	 Oskarshamn herbariu
 Chimaphila umbellata		Sweden	57.81N, 15.52E	1999	Preserved specimen	 Oskarshamn herbariu
 Chimaphila umbellata		Sweden	57.82N, 15.52E	1999	Preserved specimen	 Artportalen
 Chimaphila umbellata		Sweden	59.49N, 18.32E	1999	Preserved specimen	 Artportalen

Page 1 of 25

514 results with coordinates



Dashboard link:
https://www.gbif.org/occurrence/search?taxonKey=69RX6&country=SE&basisOfRecord=PRESERVED_SPECIMEN&layout=table_year*map_gallery&view=dashboard&license=CC_BY_4_0&license=CC0_1_0



514 occurrences downloaded

Licence CC BY 4.0



Unless [GBIF discovers citations](#) of this download, the data file is eligible for deletion after 9 March 2027.

Postpone deletion

Delete download

Please use this citation in publications

GBIF.org (9 September 2026) GBIF Occurrence Download <https://doi.org/10.15468/dl.qmqat9>

Copy

RIS

BibTex

Tell us about usage

Download archive

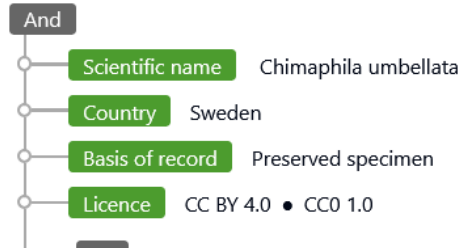
32 KB
Simple

Make sure to read the [data user agreement](#) and [citation guidelines](#).

- See also
- [How do I open tab-delimited CSV files downloaded from GBIF.org in Excel?](#) ⓘ
 - [About download formats](#)

Query Rerun query

The predicate is too complex to be converted to regular filters in the UI. This also happens if the original download used a checklist that is no longer used. Instead it will show as a Complex Query that can be edited as JSON.



API



Hello veronika,

Your download is available at the following address:

<https://api.gbif.org/v1/occurrence/download/request/0008519-260903145123482.zip>

Citation

When using this dataset **please use the following citation:**

GBIF.org (9 September 2026) GBIF Occurrence Download
<https://doi.org/10.15468/dl.qmqat9>

Download Information

DOI: <https://doi.org/10.15468/dl.qmqat9> (may take some hours before being active)

Creation Date: 07:38:22 9 September 2026

Records included: 514 records from 7 published datasets

Compressed data size: 32.1 kB

Download format: simple tab-separated values (TSV)

Filter used:

```
{  
  "and" : [  
    "TaxonKey is one of (Chimaphila umbellata [Catalogue of  
    life])"
```



The one thing to remember from this session

Every GBIF download has a DOI - save and cite it so others can trace the exact data you used!

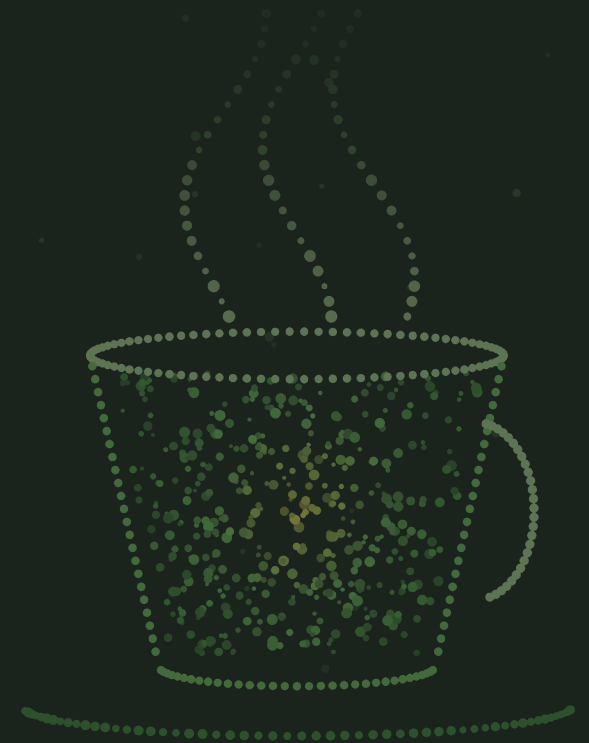
#citethedoi



Questions?

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Slides and recording: gbif.se/data-fika



Next fika

Session 2 · Friday 09 October, 11:00–11:45

Reusing Data from GBIF

Thank you for the fika — see you next month.



gbif.se/data-fika

Slides, recording and all materials

