

Strengthening Zimbabwe's GBIF node through collaboration with GBIF Spain

CESP PROJECT. 24-27 SEPTEMBER 2019. MADRID SPAIN



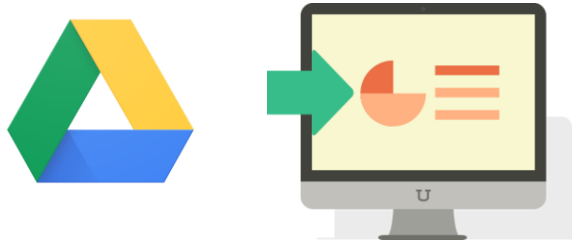
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Work materials

The workshop agenda and materials are online accessible at the following...



...Google Drive link

<https://bit.ly/2mor5lp>

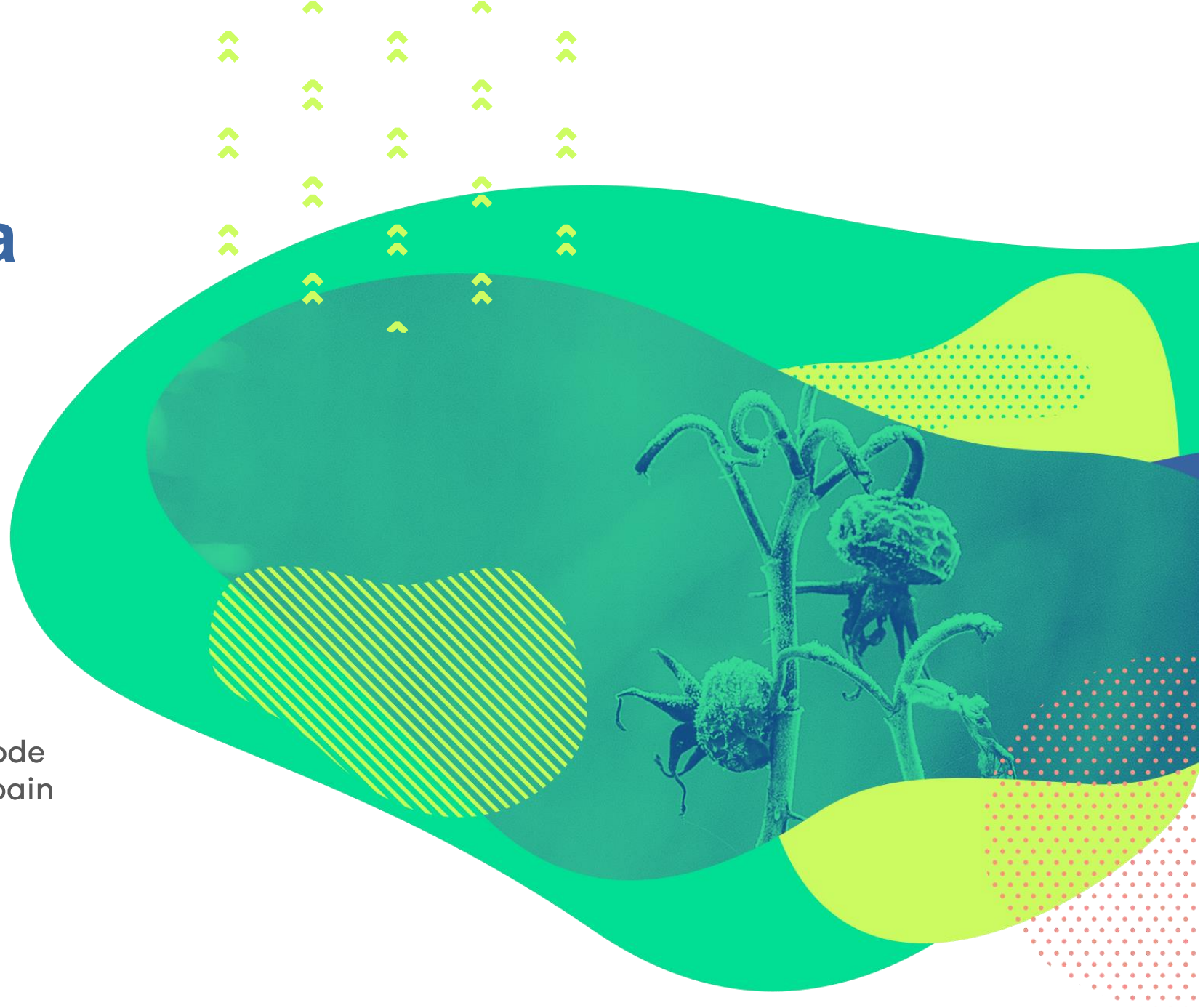


Introduction to biodiversity data publishing

Strengthening Zimbabwe's GBIF node
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Contents

1. What does biodiversity data publishing mean?
2. Why should we publish biodiversity data?
3. Publication barriers
4. What data types may be published?



What does biodiversity data publishing mean?

In the GBIF context, data publishing means sharing biodiversity data using a **standardized** format, making them **freely accessible** for their **visualization and use** according to some established licences.



Why should we publish biodiversity data? – Global benefits

Natural history **collections**, databases and projects include relevant information useful to face problems related to biodiversity, and to better know and manage this biodiversity.

NO

- Data forgotten in drawers
- Non-digitized data
- Non-accessible data formats



YES

Published data

=

This supports the global knowledge on biodiversity and the derived strategies for its conservation and use



Why should we publish biodiversity data? – Other benefits

- Our work will get more visibility and recognition
- A brunch of new collaboration possibilities with other institutions may appear
- Increase of networks and relations with experts related to our work fields
- Our studies/research will possibly improve their quality

*DATA
PAPERS*

Why should we publish biodiversity data? – Data usefulness

Traditional uses:

Taxonomic studies, specie distribution studies, red lists development, threatened and invasive species identification, etc.

Modern uses:

Potential distribution models, models related to climate change, etc.

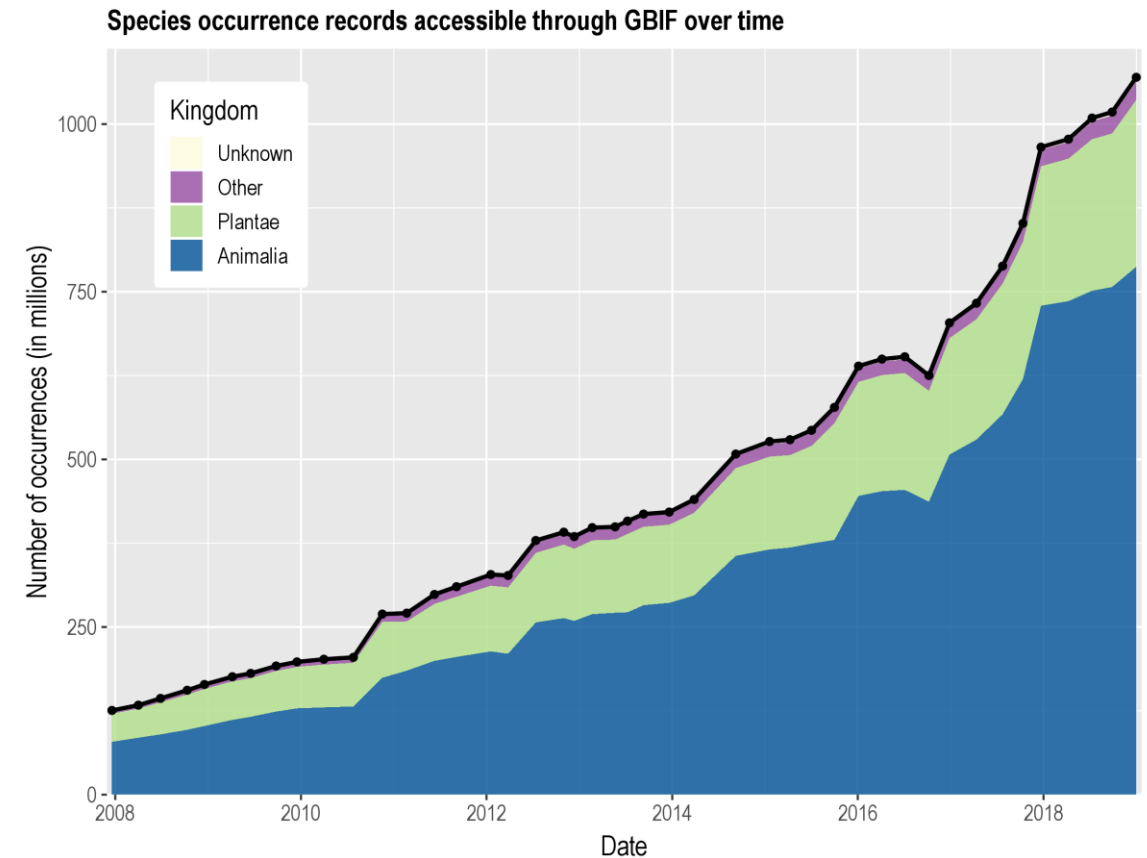
Chapman, A.D., 2005, Uses of Primary Species-Occurrences Data:

<https://www.gbif.org/document/80545/uses-of-primary-species-occurrence-data>



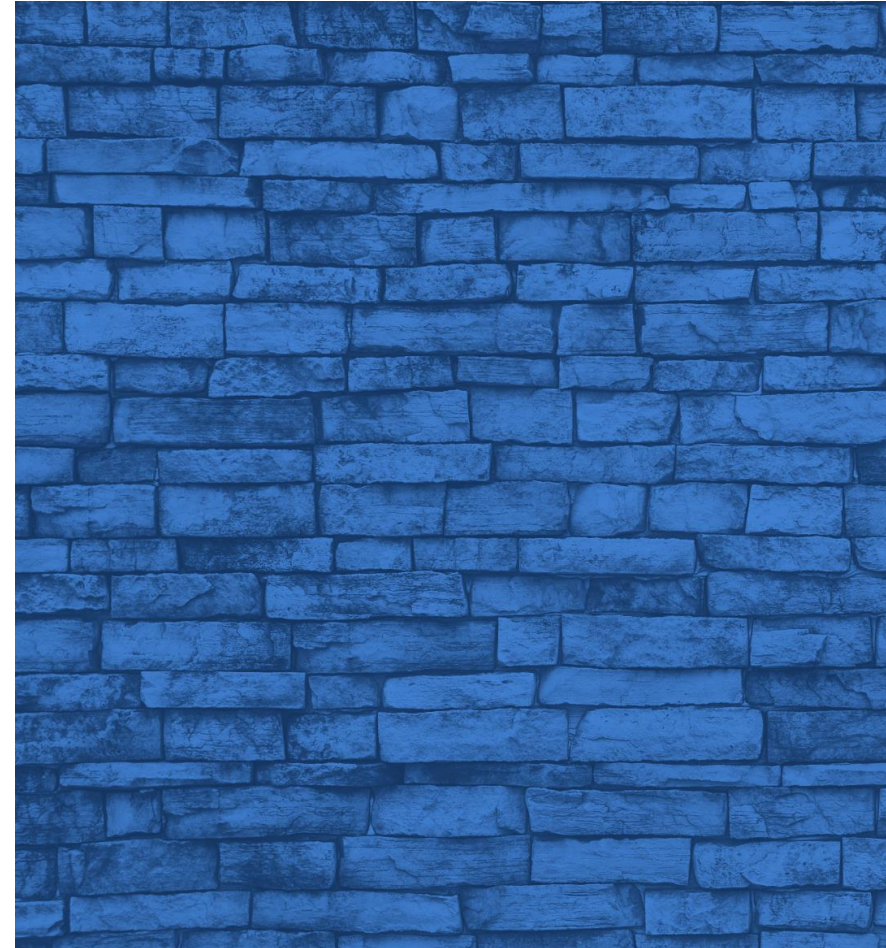
Why should we publish biodiversity data? – Challenges

- Positive trends in data publishing
- Many occurrences are focused in the same places and studying the same taxa
- Scientific collections around the world include roughly 3,000 millions of specimens. Less than 5% of them are digitally accessible!



What barriers can we find when publishing biodiversity data?

- 1 Cultural and psychological barriers
 - Lack of knowledge
 - Lack of commitment
 - Data quality
- 2 Institutional barriers
 - Privacy concerns
 - Lack of authorisation
- 3 Capacity and resource barriers
 - Lack of time / planification
 - Lack of capacity
- 4 Practical barriers
 - Lack of funds
 - Lack of infrastructure



What barriers can we find when publishing biodiversity data? – Data restrictions

- ~~Economical compensation for data sharing.~~
- Insufficient data exploitation.
- Threatened species.
- Inadequate data quality.

**Few data are better
than no-data**

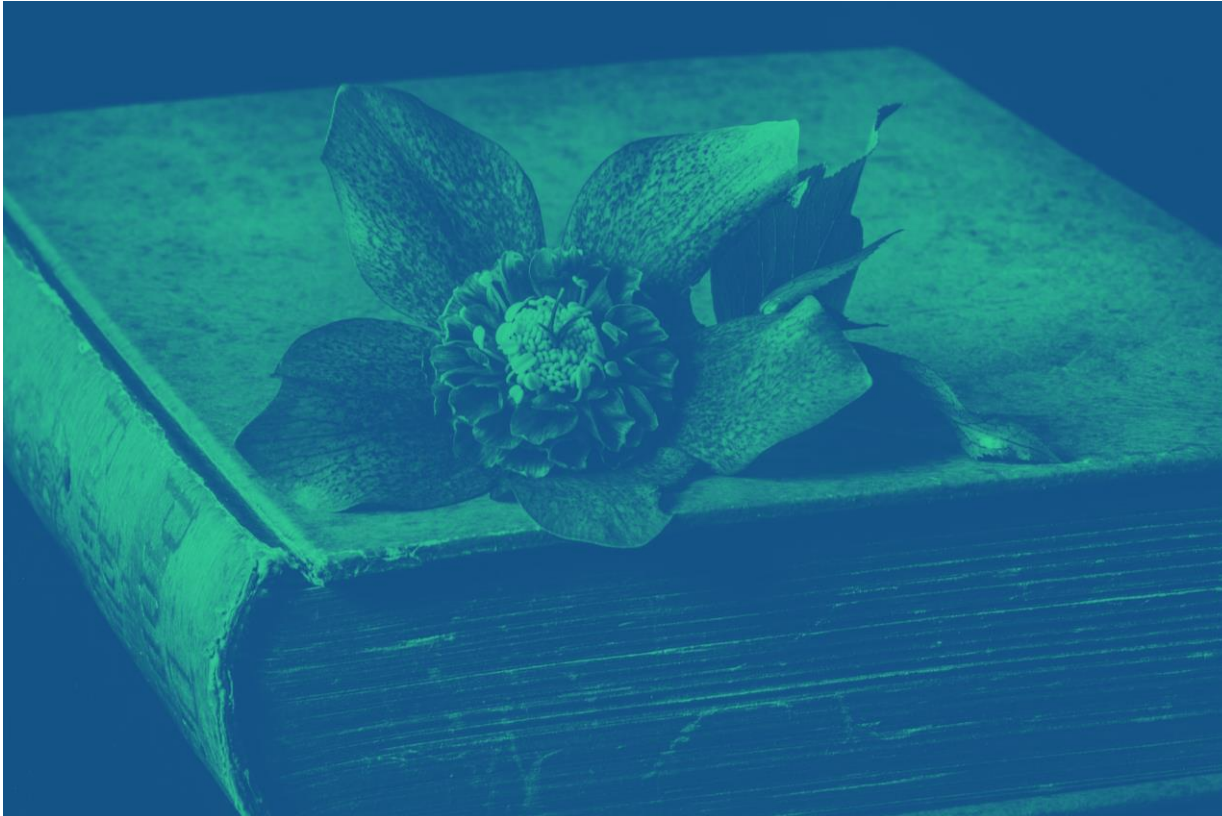


What barriers can we find when publishing biodiversity data? – Data restrictions

- Insufficient data exploitation → publishing today what I have already exploited and the rest in the future.
- Threatened species → set diffuse locations (e.g. 10 km radius).
- Inadequate data quality → depending on the use.

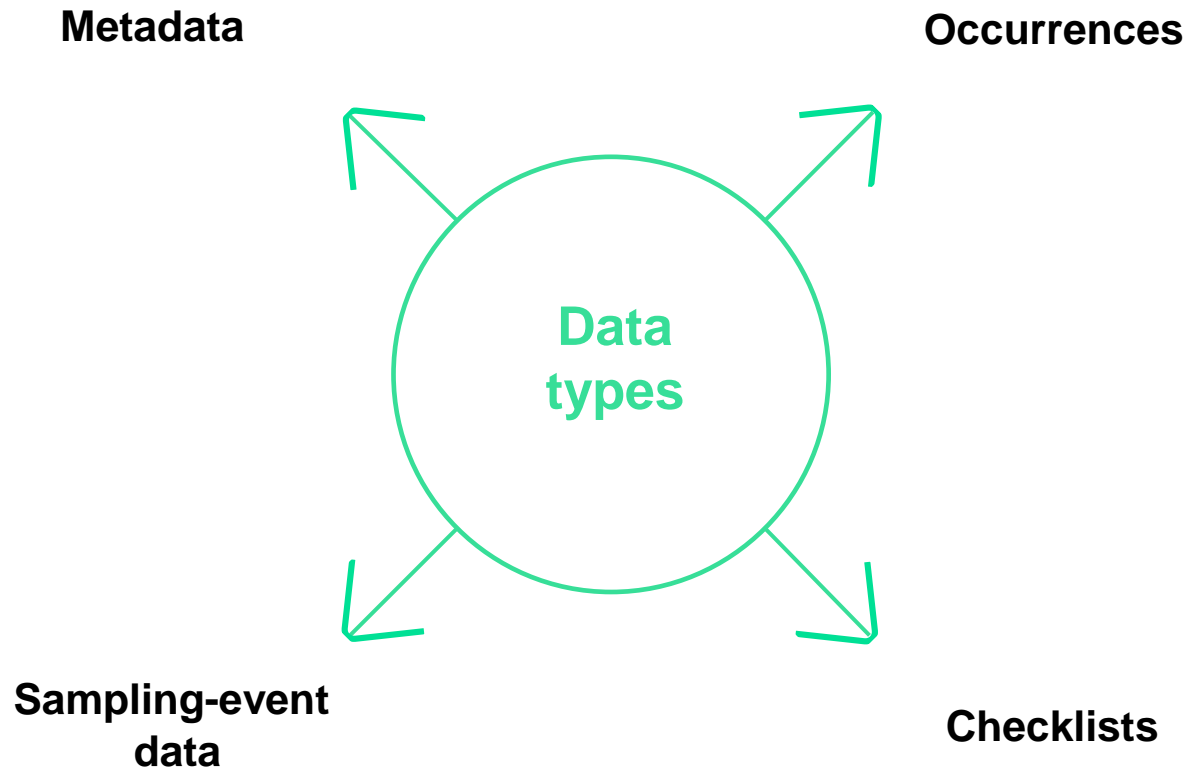


What data types may be published? – Data sources



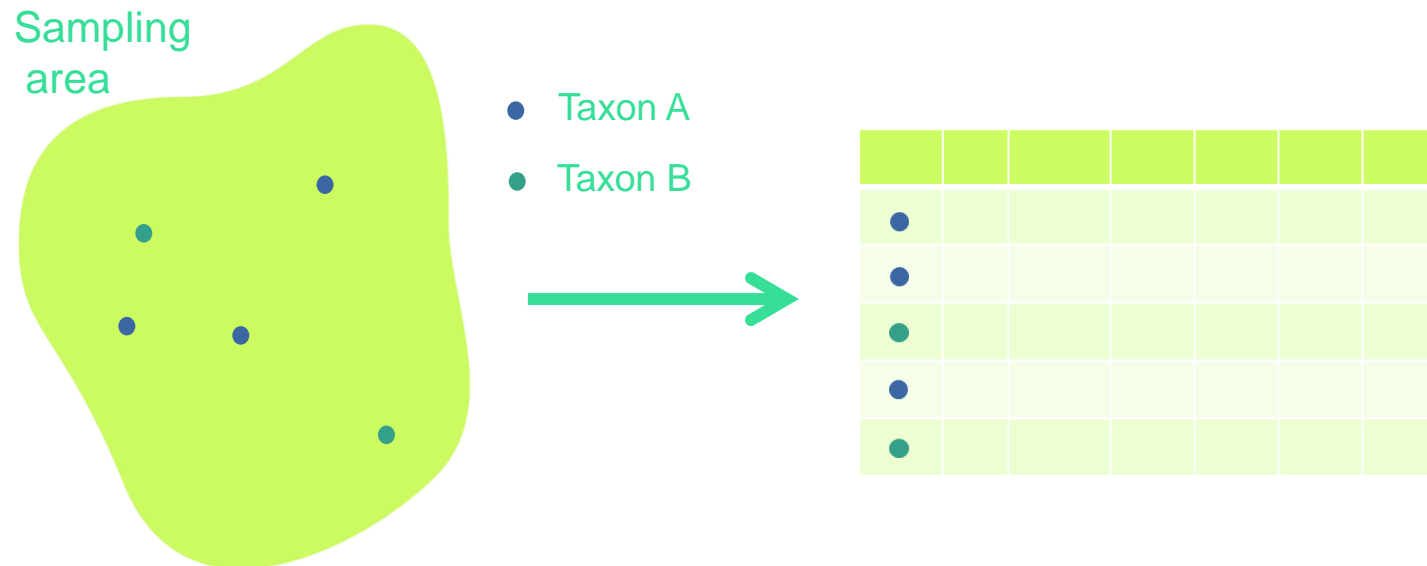
- Specimens from natural history collections, herbarium samples, tissues, DNA, etc.
- Checklists, red lists.
- Thesis, literature, reports, etc.
- Satellite data, audio and video records, photo tramp, etc.
- Environmental impact studies, inventories, citizen science projects, etc.

What data types may be published? – Data types



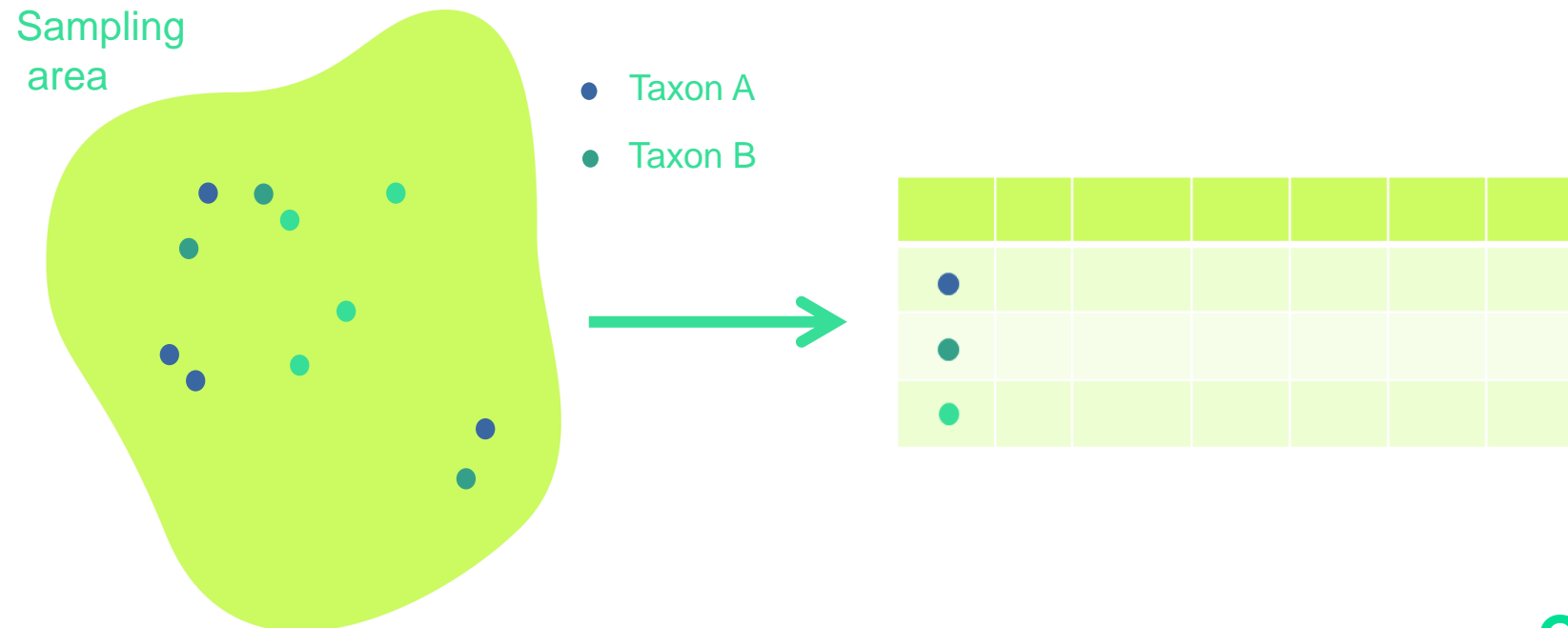
Data types: Occurrences

- Specimens from herbaria and biological collections or observations made in the field.
- Evidences that a specific specie or taxon is located in a determined place and date.
- Examples: herbarium samples, germplasm/seed banks, specimens conserved in alcohol or formalin, fossils, tissues, etc.



Data types: Checklists

- Lists of scientific names or taxa which can be restricted to a specific taxonomic group, geographical region, concrete topic or a combination of this three restrictions.
- Examples: Taxonomic Reference Lists, Red Lists, etc.



Data types: Sampling-event data

- They inform about the sampling-events, their methodology and its relative abundance.
- Examples: plant sampling, camera traps, bird censuses, etc.



Data types: Metadata

- Used to describe digitized and non-digitized datasets.
- Useful to set up digitization priorities between different non-digitized datasets.
- They include DOIs needed for a correct citation.

The screenshot shows the GBIF Occurrence Dataset page for the dataset titled "Occurrence data set for wild food plant species in Zimbabwe's biodiversity hotspots". The page is published by Bindura University Of Science Education and lists several authors: Lizzie Mujuru, Justice Muvengwi, Luke Jimu, Admore Mureva, Anthony Mapaura, Innocent Nyakudya, and Anthony Mapaura. The dataset is registered on August 24, 2018, and contains 1,579 occurrences. The page includes a description of the data set, project information (Project ID: BID-AF2017-0237-NAC), metadata last modified date (May 15, 2019), data last changed date (May 15, 2019), hosted by (GBIF Secretariat), and license (CC BY-NC 4.0). A red circle highlights the DOI: 10.15468/tixwop. The page also features a progress bar showing 100% completion for taxon match, coordinates, and year, and a total of 1,579 georeferenced records.

Get data Share Tools Inside GBIF

OccURRENCE DATASET | REGISTERED AUGUST 24, 2018

Occurrence data set for wild food plant species in Zimbabwe's biodiversity hotspots

Published by [Bindura University Of Science Education](#)

Lizzie Mujuru • Justice Muvengwi • Luke Jimu • Admore Mureva • Anthony Mapaura • Innocent Nyakudya • Anthony Mapaura

DATASET PROJECT METRICS ACTIVITY DOWNLOAD

1,579 OCCURRENCES

This data set contains some occurrence data set for non-timber forest products used as food sources in five of the biodiversity hotspots of Zimbabwe. Community meeting were held to come up with a checklist of species used for food in each of the biodiversity hotspot areas under consideration. The checklist was then used as a basis for constructing an occurrence data set using specimen at National Herbarium and Botanical Gardens, Harare, Zimbabwe.

Project ID: BID-AF2017-0237-NAC
Metadata last modified: May 15, 2019
Data last changed: May 15, 2019
Hosted by: GBIF Secretariat
License: CC BY-NC 4.0
How to cite **DOI** 10.15468/tixwop

1,579 Occurrences 100% With taxon match 100% With coordinates 100% With year

1,579 GEOREFERENCED RECORDS

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Thanks for your attention!

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