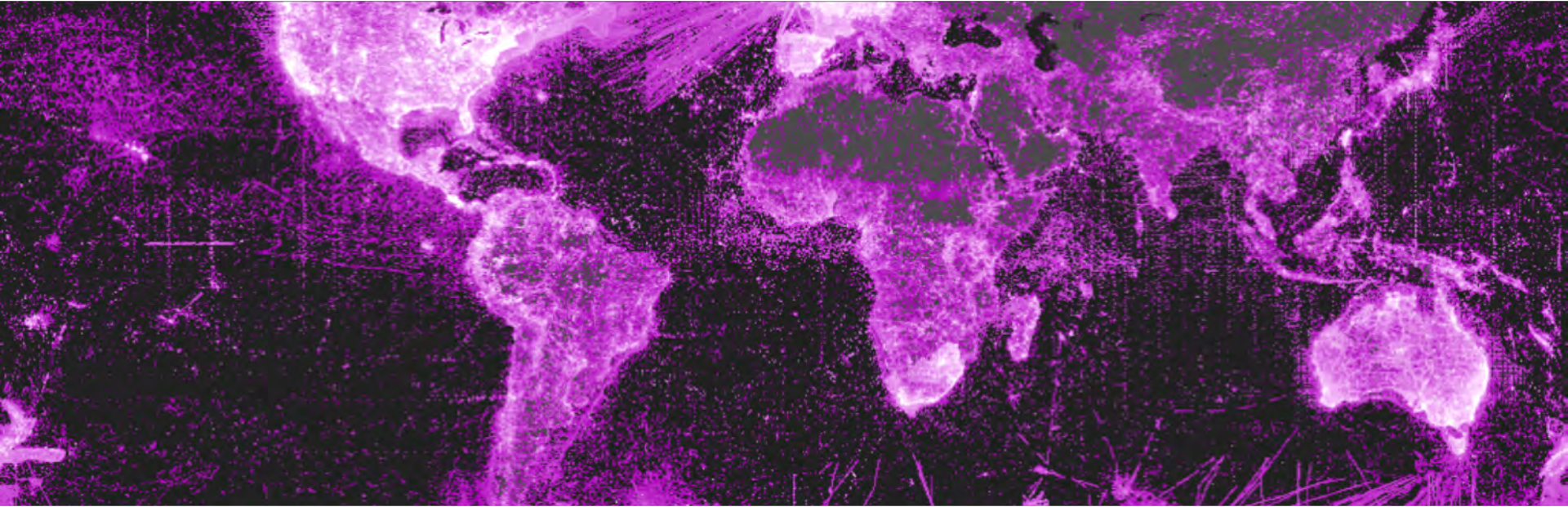




GBIF

Global Biodiversity
Information Facility



Network webinar

GBIF Secretariat

7 MAY 2019

AGENDA

1530-1535

Brief welcome: agenda overview and intro

—*Tim Hirsch*

1535-1545

Welcome message

—*Joe Miller*

1545-1600

Shining a light on dark taxa: Update on sequence-based data mobilization

—*Dmitry Schigel*

1600-1610

Update on BID: Biodiversity Information for Development

—*Tim Hirsch*

1610-1625

Coming attractions

—*Kyle Copas*

1625-1630

Conclusion

PLEASE HOLD FOR THE NEXT PRESENTATION

Next speaker coming up

DATA STREAMS IN GBIF

sequence-based evidence

natural history collections human observations etc.

Molecular names

“taxon hypotheses”, OTUs

UNITE

BOLD
BINs

SILV
A

...

Indexing
dark taxa

Molecular occurrences

Indexing
described
taxa

Latin names

individuals / isolates

species mixes (samples)

Amplicon
(barcoding)
one or more
marker genes

Genomic
shotgun
DNA

Transcriptomic
shotgun
RNA

Amplicon
(metabarcoding)
one or more
marker genes

Metagenomic
shotgun
DNA

Metatranscriptomic
shotgun
RNA

ENA

BOLD
occurrences

UNITE

...

OCCURRENCE DATASETS

MGnify

MGnify

UNITE

...

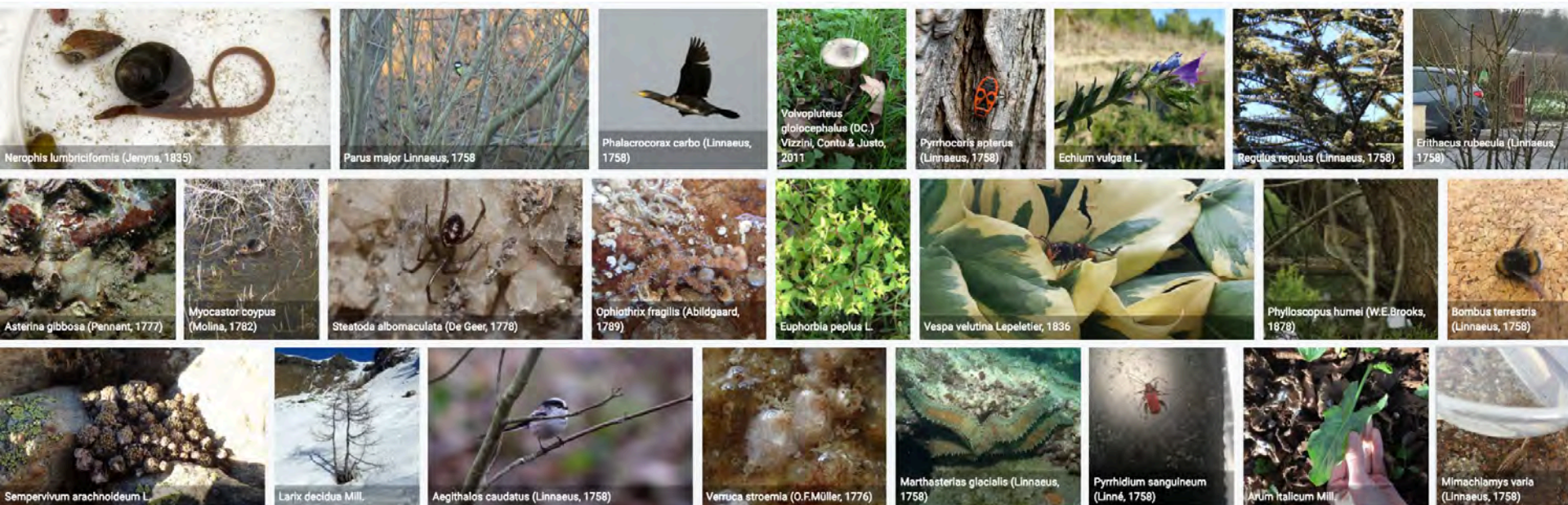
SAMPLING EVENT DATASETS

CHECKLISTS

CHECKLISTS

PLEASE HOLD FOR THE NEXT PRESENTATION

Next speaker coming up

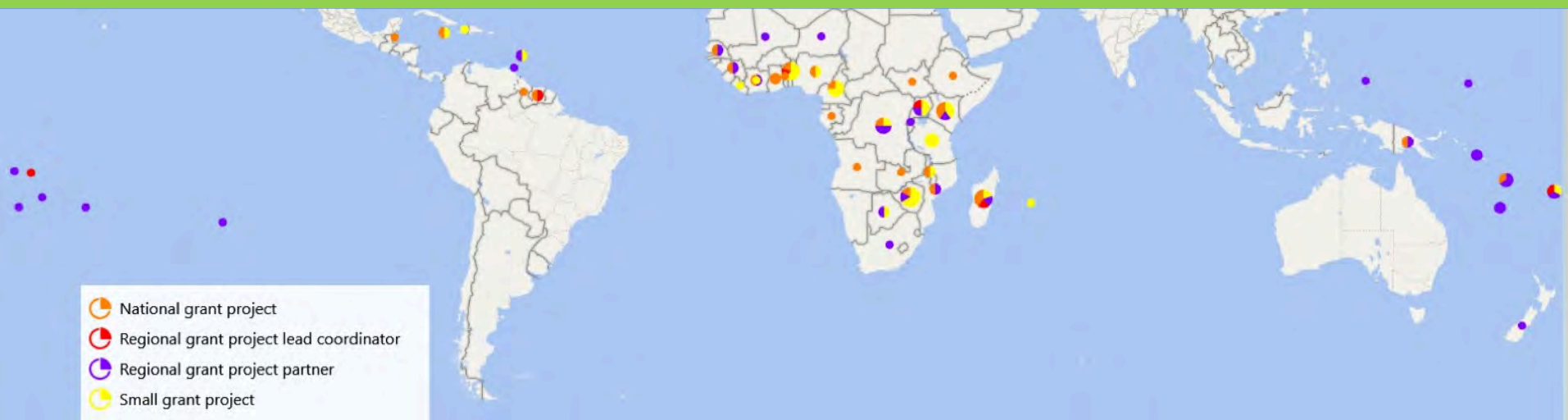


Update on BID and BIFA

Tim Hirsch, Deputy Director

BIODIVERSITY INFORMATION FOR DEVELOPMENT (BID)

Overall objective: Improved management of natural capital for human well-being; through increased application of biodiversity information as evidence for decision making



- €3.9 million grant under the EuropeAid Biodiversity for Life (B4Life) flagship umbrella programme, further €1m in-kind support from GBIF
- 63 projects selected in sub-Saharan Africa, Caribbean, Pacific (ACP) in 4 calls
- March 2019 final completion for all projects in this phase of BID

BUILDING A COMMUNITY OF PRACTICE



- 7 Capacity enhancement workshops for funded projects 2015-2019
- Volunteer mentors from global community assist in face to face training, continue one-on-one remote support
- Today's trainees are tomorrow's mentors!
- Already re-used in Asia, Balkans, Russia/C Asia

Curricula developed in:

- Biodiversity data mobilization (plan digitization, understand standards, tools for sharing)
- Data use for decision making (data cleaning, modelling, mapping, Redlisting, mainstreaming to priority policy needs)



OUTPUTS FROM BID PROJECTS

OCCURRENCE DATASET | REGISTERED AUGUST 17, 2018

Grasses of the Forest Herbarium Ibadan (FHI) Nigeria

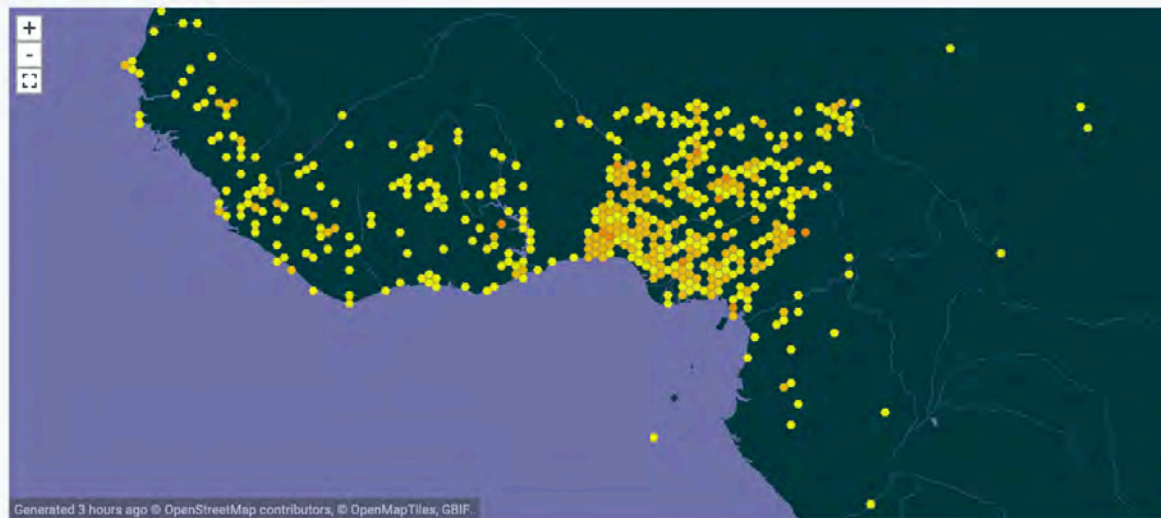
Published by [Forestry Research Institute of Nigeria](#)

Omokafe Ugbo • Oluwaseun Osiyemi • Kehinde Adeniji • Tolulope Okanlawo • Temitope Soyewo • Temitope Oyebola • Emmanuel Chukwuma • Seyifunmi Aina • Akiniyi Odewo

DATASET PROJECT METRICS ACTIVITY DOWNLOAD

4,905 OCCURRENCES

3,785 GEOREFERENCED RECORDS

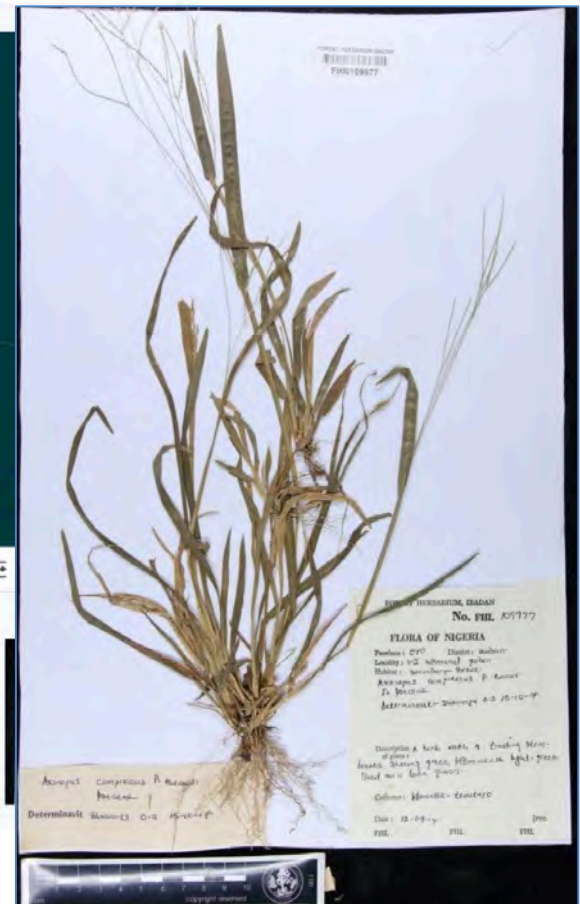


Generated 3 hours ago © OpenStreetMap contributors, © OpenMapTiles, GBIF.

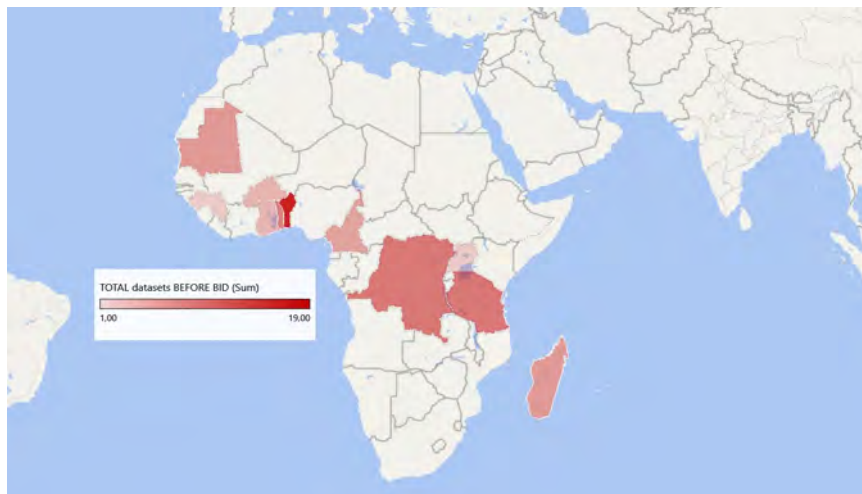
Any year 1902 - 2015

EXPLORE AREA

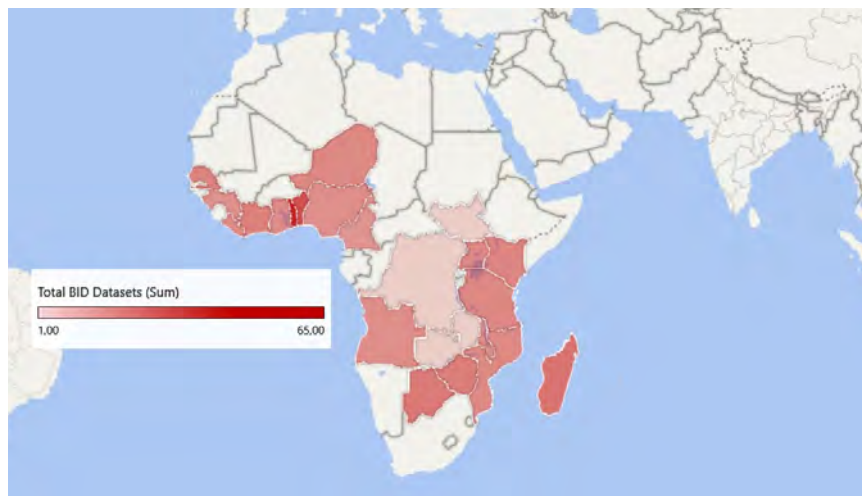
4,846 OCCURRENCES WITH IMAGES



BID IMPACT IN SUB-SAHARAN AFRICA



Datasets published by BID target countries **before** BID



Datasets published under a **BID** project ID so far

65

datasets
BEFORE
BID

483

BID
datasets
(so far)

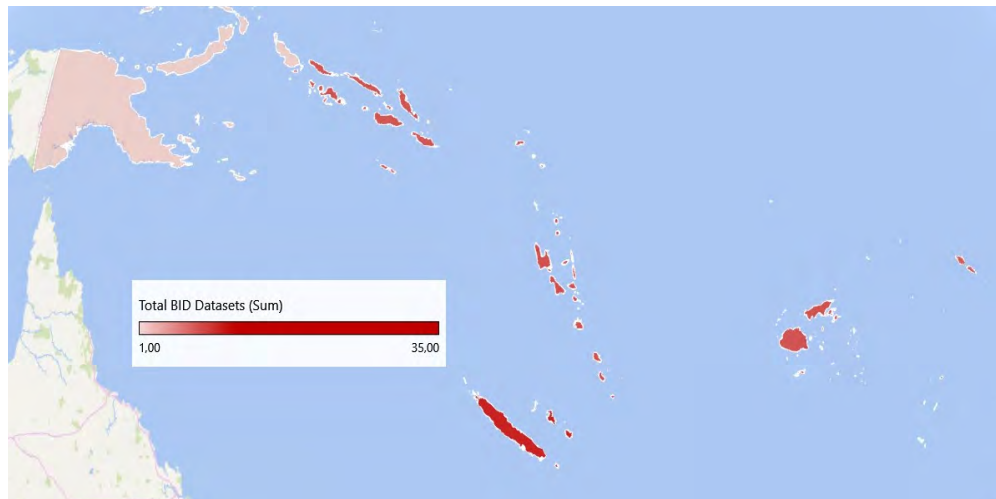
90

New GBIF
data
publishers

BID IMPACT IN THE PACIFIC



Datasets published by BID target countries **before** BID



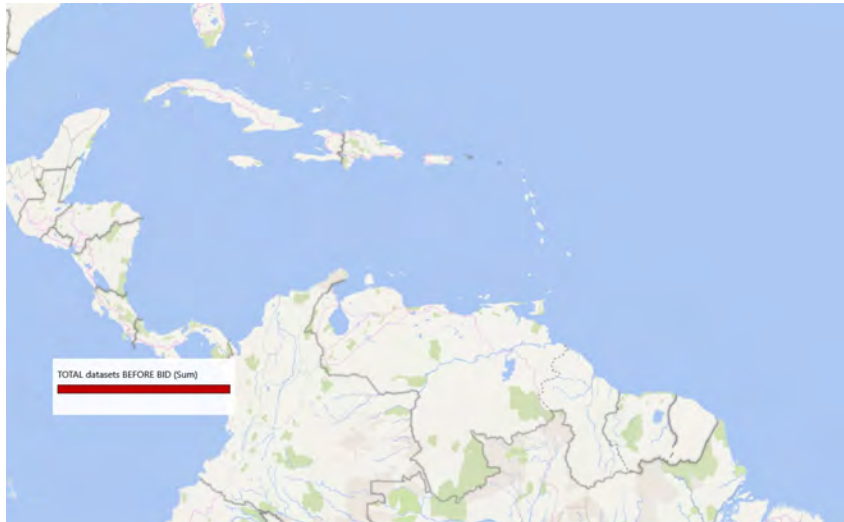
Datasets published under a **BID** project ID so far

0
datasets
BEFORE
BID

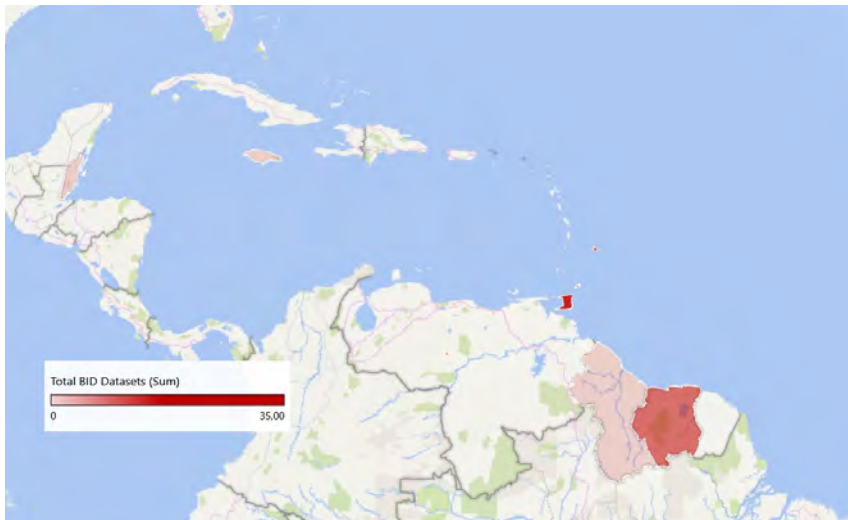
100
BID
datasets
(so far)

24
New GBIF
publishers

BID IMPACT IN THE CARIBBEAN



Datasets published by BID target countries **before** BID



Datasets published under a **BID** project ID so far

0
datasets
BEFORE
BID

96
BID
datasets
(so far)

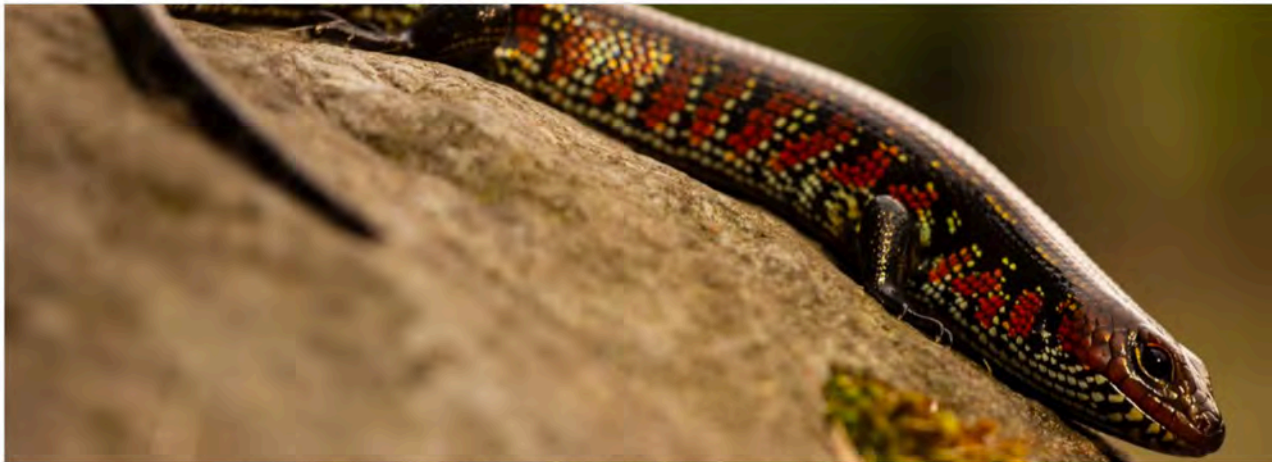
8
New GBIF
publishers

EXPANDED GBIF MEMBERSHIP

NEWS | 12 OCTOBER 2018

Cameroon and Liberia boost GBIF Africa membership to 20 countries

Two new participating countries enter, linked to involvement in the European Union-funded Biodiversity Information for Development programme



Fire skink (*Lepidothyris fernandi*), Buea, Cameroon. The native range of this tropical lizard extends throughout West and west Central Africa, including both Liberia and Cameroon. Photo by Lennart Hud via iNaturalist research-grade observations, licensed under CC BY-NC 4.0.

New countries and organizations joining GBIF during BID programme

- Angola
- Cameroon
- Democratic Republic of Congo
- Liberia
- Mali
- Niger
- Nigeria
- South Sudan
- Zimbabwe
- SPREP

**Deadline
for all final
reports**

31 Mar
2019

**Guiding
examples
of data
use in
decision
making**

May 2019

**Pacific
phase 1
regional
closing
meeting**

Fiji
5-9 Aug
2019

**BID phase
1 closing
event**

Brussels
24-25 Sept
2019

**BID impact
study**

May 2019

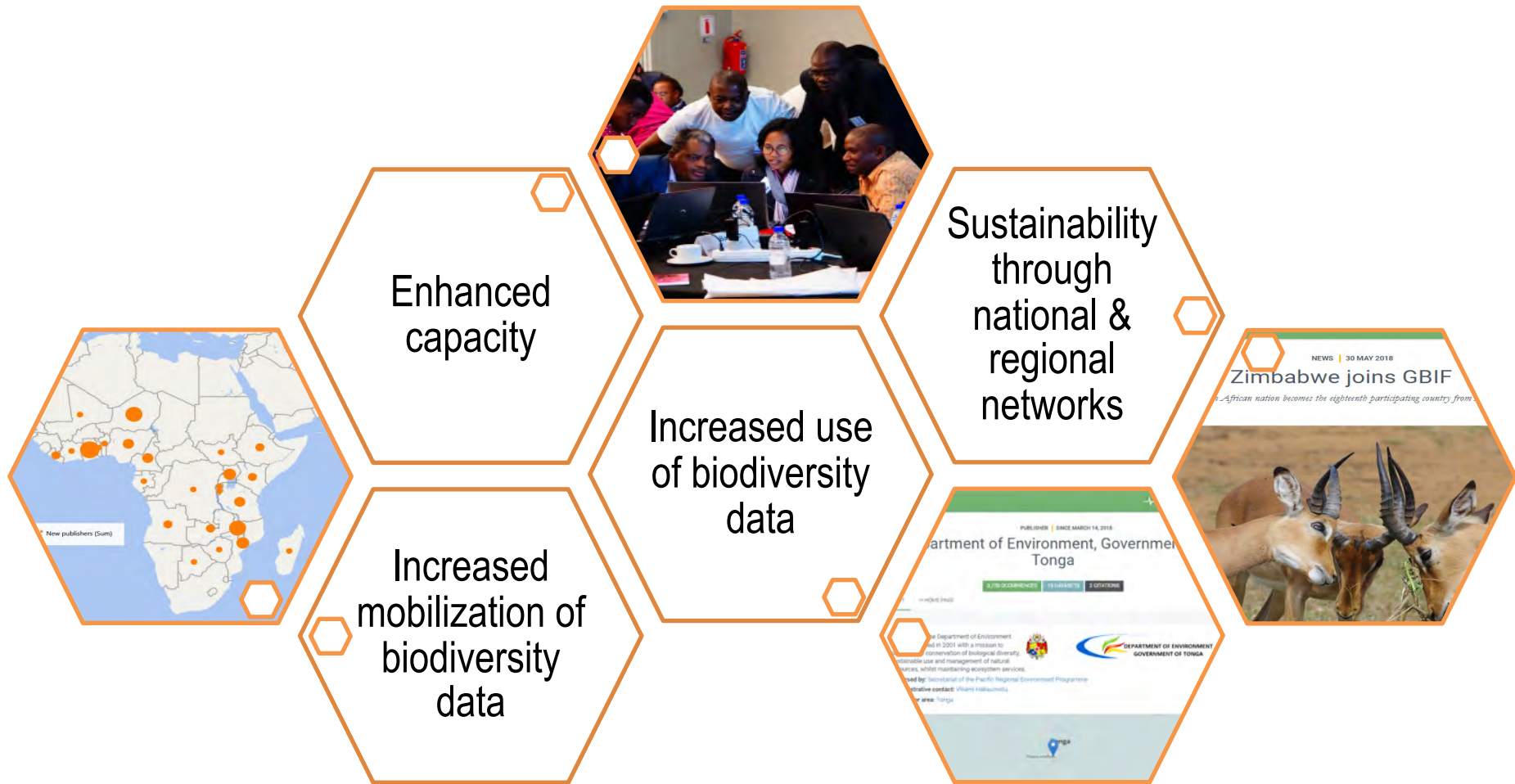
**Caribbean
phase 1
regional
closing
meeting**

Trinidad
24-28 Jun
2019

**Africa
phase 1
regional
closing
meeting**

Cameroon
2-6 Sept
2019

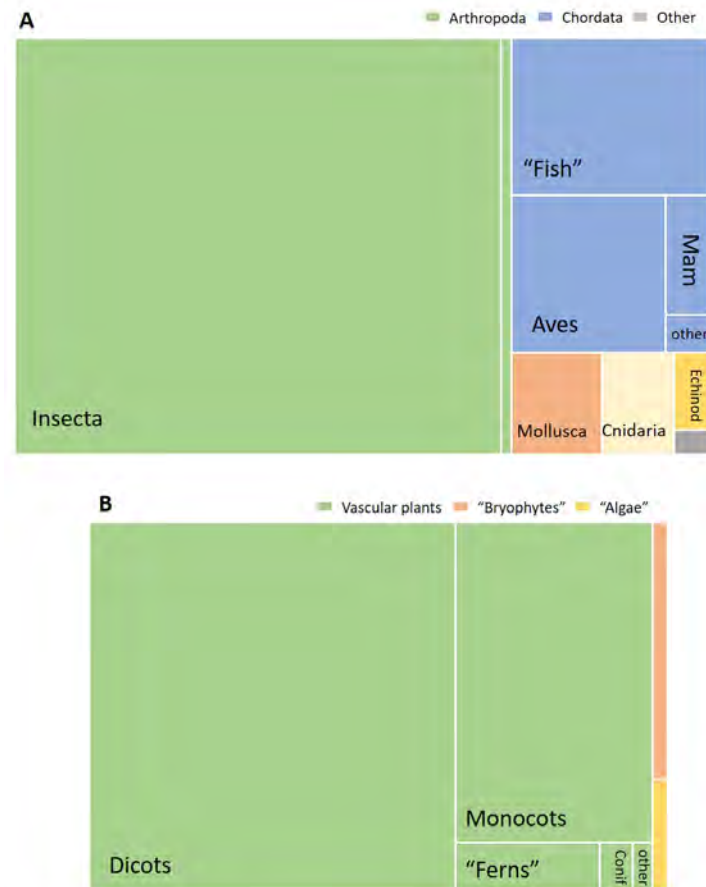
BID IMPACT STUDY



BID IMPACT STUDY (UNDER CONSTRUCTION)

| Kingdom | # distinct scientific names published by BID | | |
|--------------|--|----------------------------------|---------------|
| | Already in GBIF for reported country | New to GBIF for reported country | Total |
| Animalia | 19,967 | 14,203 (41.6%) | 34,170 |
| Plantae | 38,897 | 7,252 (15.7%) | 46,149 |
| Bacteria | 8 | 29 (78.4%) | 37 |
| Fungi | 46 | 87 (65.4%) | 133 |
| Chromista | 43 | 108 (71.5%) | 151 |
| Viruses | 0 | 2 (100%) | 2 |
| Unknown | 31 | 7 (18.4%) | 38 |
| Total | 58,992 | 21,688 | 80,680 |

Of some 80 thousand species recorded in BID project datasets, **more than one-quarter** did not previously have records in GBIF.org for the country of occurrence



BID CONSULTATION

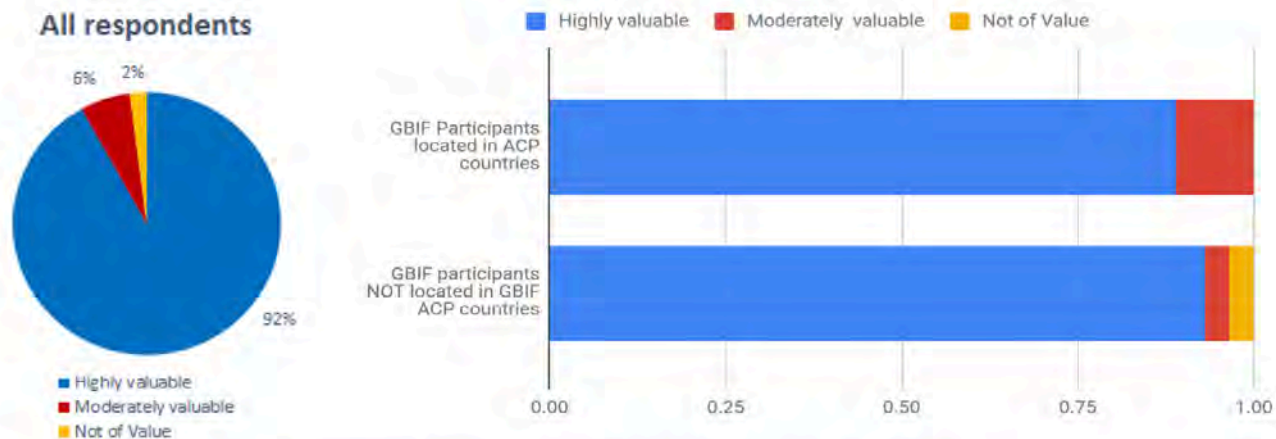


Fig. 1: How valuable do you perceive the BID programme to be for the BID target Region (ACP)?

Respondents:

- 47 GBIF Participants of which 18 are in BID target regions
- 20 voluntary mentors/trainers

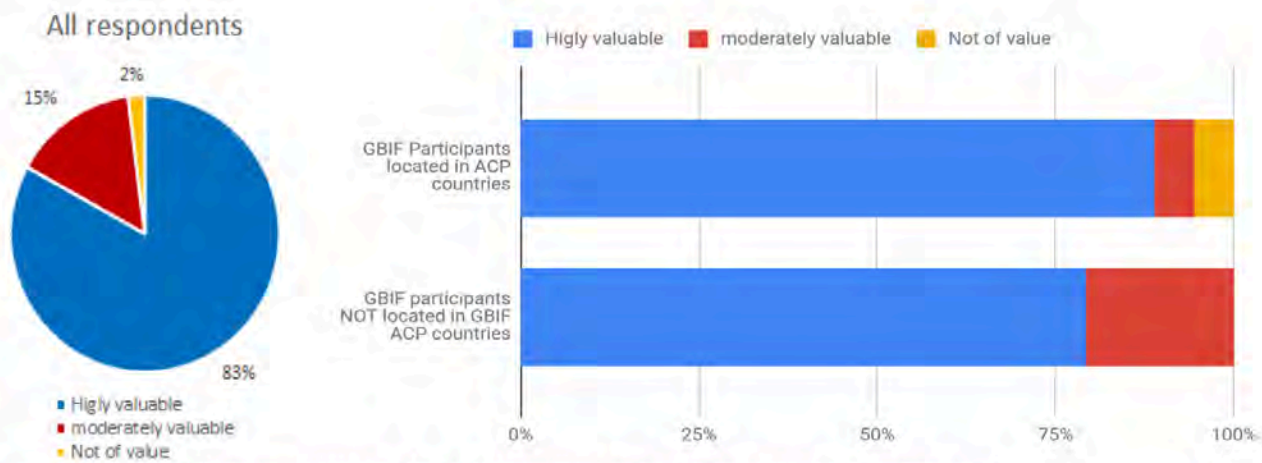


Fig. 2: How valuable do you perceive the BID programme to be for the whole GBIF community?

BID CONSULTATION

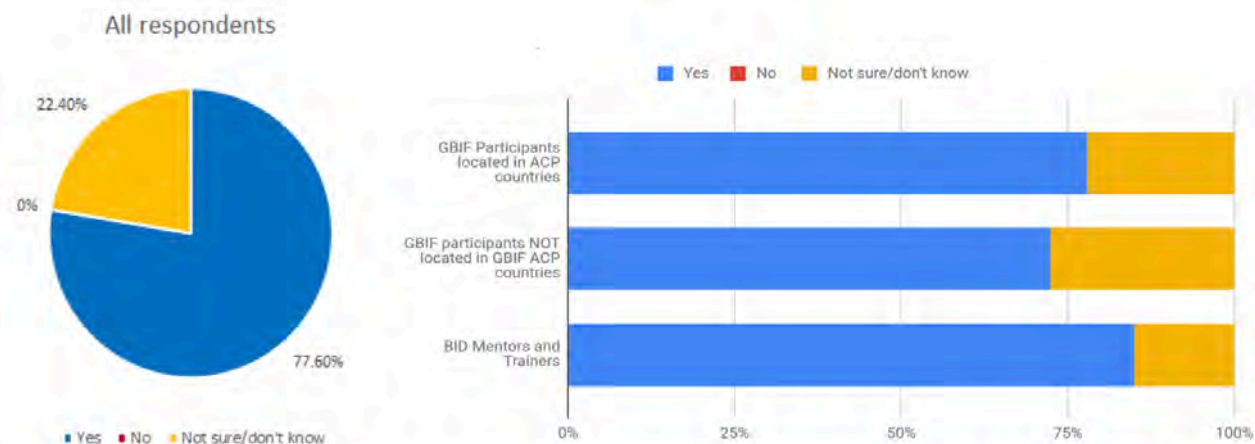


Fig. 3: In your view, is there sufficient demand to run a second phase of the BID programme within the same ACP regions—sub-Saharan Africa (excluding South Africa), the Pacific Islands and the Caribbean—that are the focus of the first phase

Respondents:

- 47 GBIF Participants of which 18 are in BID target regions
- 20 voluntary mentors/trainers

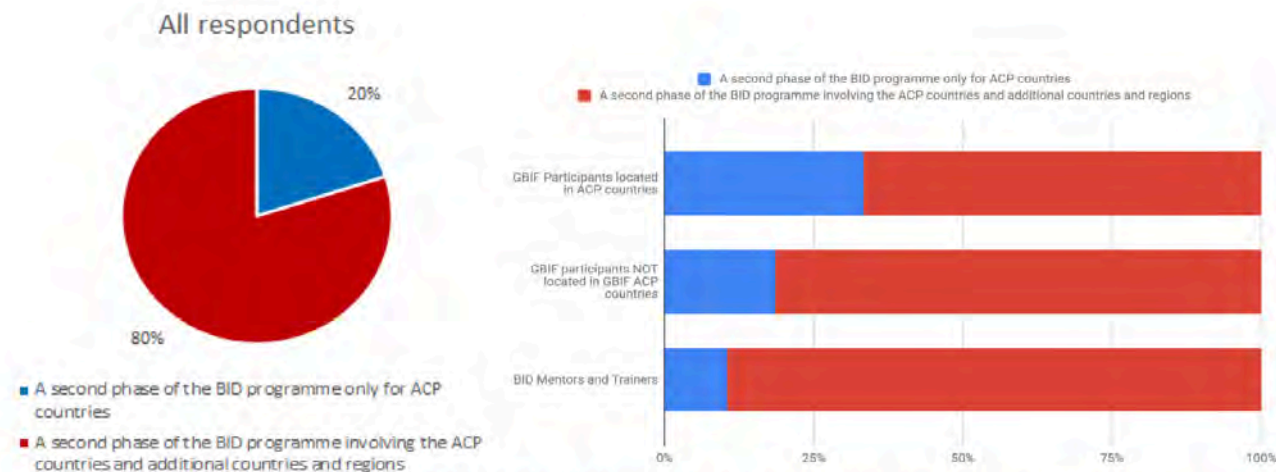


Fig. 5: If you support both a second phase of the BID programme that would focus on the same ACP regions and a BID programme that would involve a broader set of developing countries and regions, which would you prefer?

Mid-Term Review of The 'Biodiversity Information for Development' project (DCI-ENV/2014/352603)

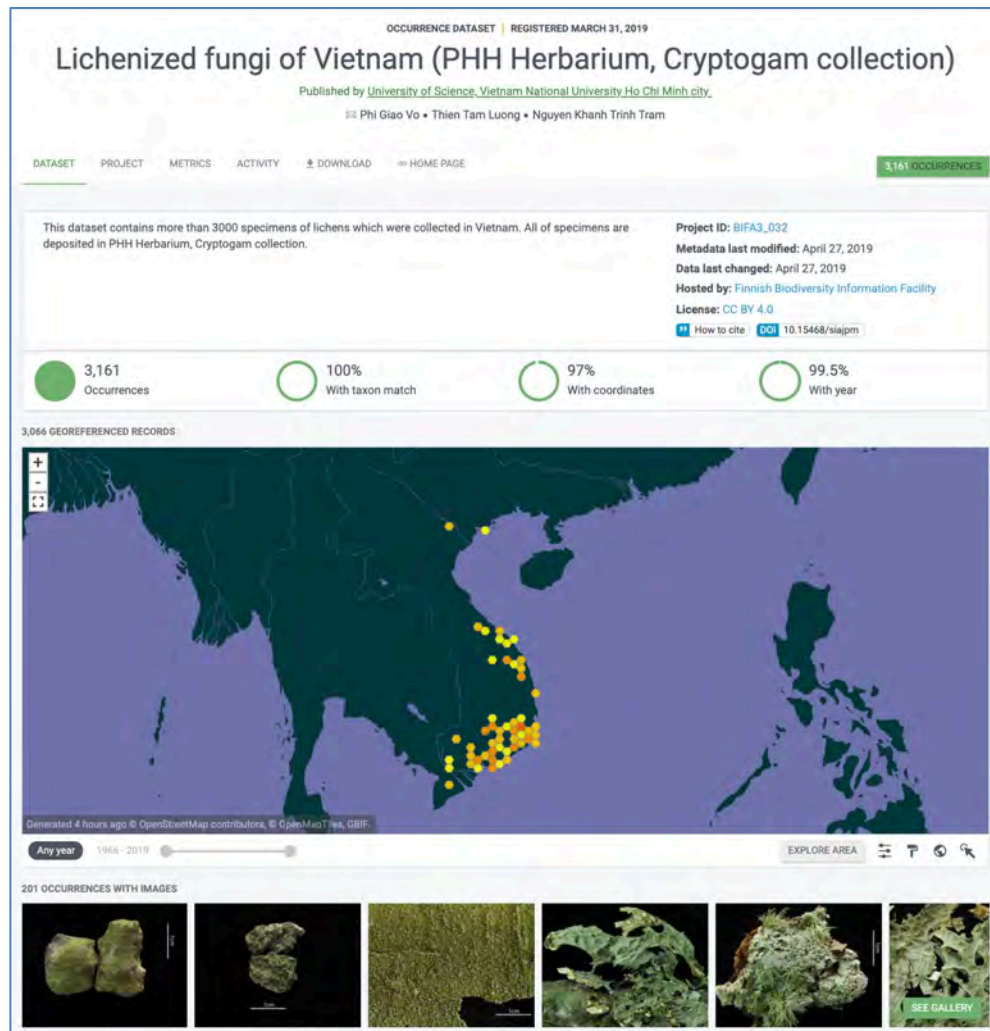
The outcome of this evaluation suggests that this project as a whole is **(very) satisfactory**, as it globally meets most of its objectives. The BID team has shown very positive results through the management of the capacity enhancement workshops and the establishment of the network of mentors, whose main role is to bring technical support to the funded projects. The participants and projects teams were very satisfied with the topics addressed and the general organization of these workshops (average score of 4.5/5 for all the 'data mobilization' workshops; the first 'data use' one will only be conducted in April 2018).



BIODIVERSITY INFORMATION FUND FOR ASIA

BIFA 4 project call:

- 38 in-scope concept notes from 16 Asian countries/areas
- 17 invited to submit full proposals, 17 submitted, 9 selected
- Data mobilization workshop for funded projects/nodes (July)
- 5th round of BIFA confirmed by MoE-J



Ministry of the Environment
Government of Japan

PLEASE HOLD FOR THE NEXT PRESENTATION

Next speaker coming up

**THE FOLLOWING PREVIEW HAS BEEN APPROVED FOR
ALL AUDIENCES
BY THE GBIF SECRETARIAT**



an alliance for biodiversity knowledge

Post-GBIC2 follow-up

- Report/paper published: doi.org/10.3897/BDJ.7.e33679
- Meeting website repurposed (with new one on the way!)
- Call issued (in 12 languages) for an *alliance for biodiversity knowledge* via email & Twitter ([@AllianceforBio](https://twitter.com/AllianceforBio))
- Planning virtual conference to develop “defining questions” along with SYNTHESYS+ meetings on GBIO focal areas: opportunity to be involved as participants, curators & facilitators
- Support materials (flyers, PPT, video) in preparation
- GBIC2 steering committee ➡ Interim steering committee

DIGITAL DOCUMENTATION

- Work programme item to ‘establish system for reviewing, prioritizing, updating and creating new documentation to support GBIF data publishers and users” (lead: Laura Russell)
- Real-time system now publishing GitHub source material to HTML and PDF with full multilingual support
- Prototype example updates ‘nodes guidance document’;
call for updated translations coming very soon:
<https://github.com/gbif/doc-effective-nodes-guidance>
- First of set of five VertNet publications—a Spanish-language guide to OpenRefine—is nearly ready for network peer review

SPECIES LIST DOWNLOAD

New feature on GBIF.org:

- Run an occurrence search
- Choose 'Download'
- Select '**Species List as CSV**'
- Resulting table provides a list of taxa included in the search, sorted by number of occurrences
- Possible jumpstart for building national or thematic checklists based on available data

SEARCH OCCURRENCES | 4,108 RESULTS

TABLE GALLERY MAP TAXONOMY METRICS **DOWNLOAD**

Total: 4,108
License: CC BY-NC 4.0
Year range: 1682–2017
With year: 90 %
With coordinates: 64 %
With taxon match: 100 %

CSV
Tab delimited CSV. Only contains the data after GBIF interpretation. No multimedia included. ⓘ
Estimated data size **2 MB** (275 KB zipped for download)

DARWIN CORE ARCHIVE
The Darwin Core Archive contains both the original data as publisher provided it and the GBIF interpretation. Links (but not files) to multimedia included. ⓘ
Estimated data size **5 MB** (697 KB zipped for download)

SPECIES LIST AS CSV
Tab delimited CSV with the distinct list of species in the search result. ⓘ

Known issues
A part of the GBIF processing is to flag occurrences that have suspicious fields

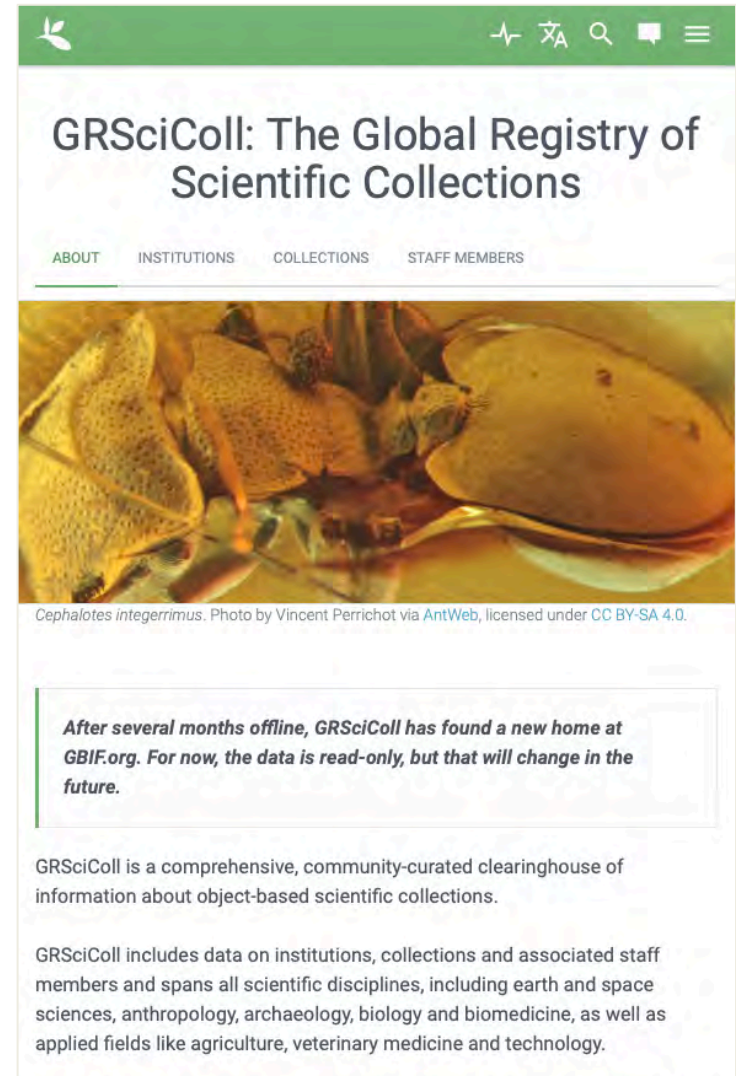
| | | | | | |
|-------|----------------------------------|-------|------------------------------------|----|-------------------------|
| 2,317 | Country derived from coordinates | 1,434 | Country invalid | 70 | Taxon match higherrank |
| 52 | Coordinate precision invalid | 43 | Taxon match fuzzy | 26 | Basis of record invalid |
| 5 | Country coordinate mismatch | 4 | Depth min/max swapped | 2 | Depth non numeric |
| 2 | Presumed negated longitude | 1 | Coordinate reprojection suspicious | 1 | Modified date unlikely |
| 1 | Recorded date invalid | 1 | Recorded date mismatch | | |

Fossils
There are fossils among your results. That can mean species occurrences at unexpected locations

FILTERS

GLOBAL REGISTRY OF SCIENTIFIC COLLECTIONS

- Completed migration of GRSciColl into new GBIF registry
- Basis for collaborative development of a comprehensive, high-quality collections catalogue
- GBIF Norway to pilot node editing of registry
- Will establish dynamic read-write links with sources like Index Herbariorum
- Future improvements could link collections and specimen records, produce more detailed use reports



GDPR

MORE THAN JUST A FOUR-LETTER WORD

- Continued engagement after implementation of last year's new EU (global) regulation
- GBIF's legal advice suggests proactive engagement of data publishers regarding its policies and suggested best practices
- Need to engage nodes regarding the possibility of a twice-yearly publisher newsletter on operational issues



THANKS

GBIF incentive-prize competition on biodiversity data solutions

- **€34,000** in prizes
- Open to individuals or teams
- Deadline: **1 September 2019**



bit.ly/ebbe2019



Trumpeter swans (*Cygnus buccinator*), migrating south over Alberta, Canada. Photo by karrin via [iNaturalist research-grade observations](https://www.inaturalist.org/observations), licensed under CC BY-NC 4.0.

Biodiversity Open Data Ambassador

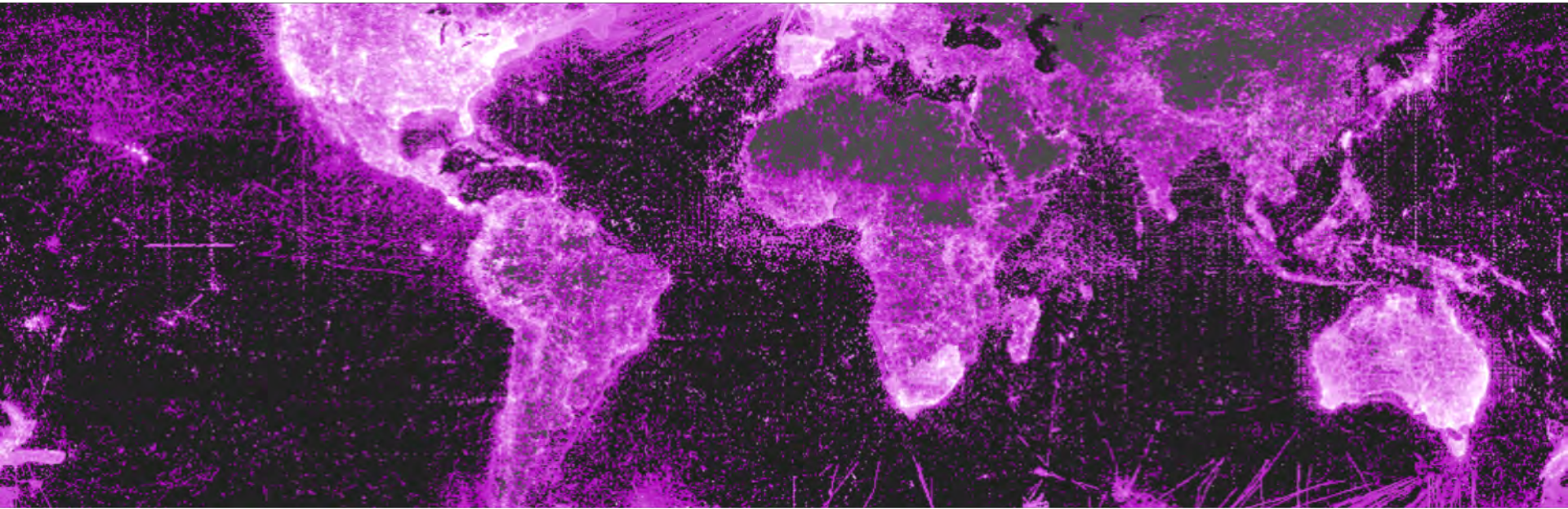
- Volunteer to represent GBIF network, promote open data sharing and use
- Presentation resources from GBIF
- Apply now www.bit.ly/gbifamb

bit.ly/gbif-amb



GBIF

Global Biodiversity
Information Facility



Network webinar

GBIF Secretariat

7 MAY 2019