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19TH ANNUAL
PACIFIC ISLANDS ROUNDTABLE
FOR NATURE CONSERVATION

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NADI, FIJI
14 JULY 2016



GBIF

Global Biodiversity
Information Facility

What is GBIF?

1 | 3

“the largest publicly accessible biodata resource in the Pacific”

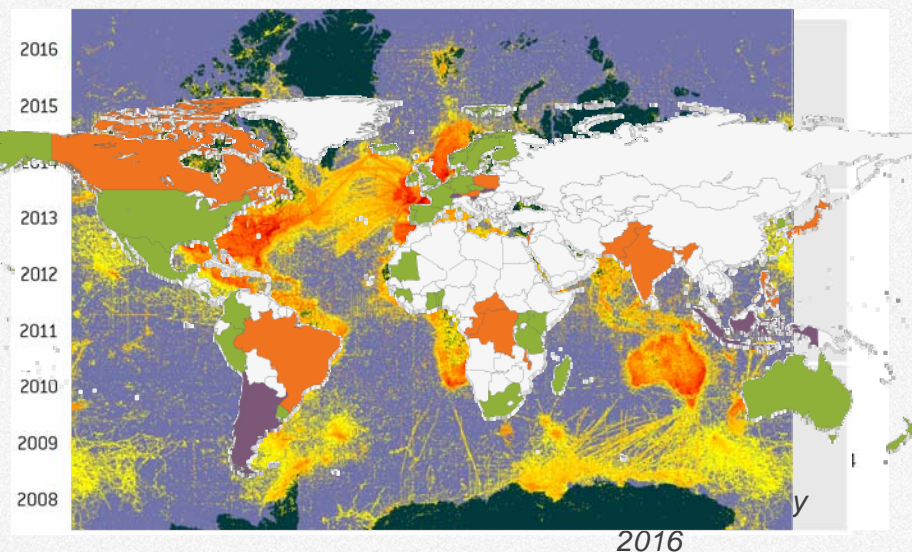
—Cooper & Pagad 2013

* Country/island/territory not included among EU’s ‘ACP’ countries

Country	Contributing countries	Datasets	Occurrence records	Cooper & Pagad	Percentage change
Norfolk Island*	19	121	27928	5142	443.13%
Niue	12	62	10763	3766	185.79%
Wallis and Futuna*	12	54	5977	2501	138.98%
Samoa Western	22	228	34878	15720	121.87%
Pitcairn*	17	67	7110	3490	103.72%
Vanuatu	21	254	88942	45633	94.91%
Solomon Islands	23	296	130752	71318	83.34%
Papua New Guinea	32	571	1133086	627531	80.56%
New Caledonia*	27	359	403762	226145	78.54%
Palau	19	202	104116	58972	76.55%
Tokelau*	9	27	1158	742	56.06%
Tonga	16	198	38715	25591	51.28%
Tuvalu	11	55	4352	2916	49.25%
Guam*	20	188	34235	24270	41.06%
Fiji	23	356	465382	360988	28.92%
French Polynesia*	26	333	183058	148582	23.20%
Northern Marianas	20	217	66847	54662	22.29%
Marshall Islands	15	209	107407	99960	7.45%
Nauru	8	36	1048	1042	0,58%
Samoa American	14	127	20824	21030	-0,98%
Cook Islands	20	153	35081	36086	-2.79%
Federated States of Micronesia	24	269	109727	127313	-13.81%
Kiribati	16	145	35196	43200	-18.53%

What is GBIF?

2 / 3



A connected community

Voluntary partnership between the world's governments to pool knowledge, tools and expertise needed to share biodiversity data

57 national and 39 organizational members

6 July. **Switzerland** added as newest voting Participant

A window on biodiversity

Largest aggregator of species occurrence data, currently comprising

- **653,156,224 records**
- **28,979** checklist, occurrence and sampling-event datasets
- **820 publishing institutions**

A tool for science & society

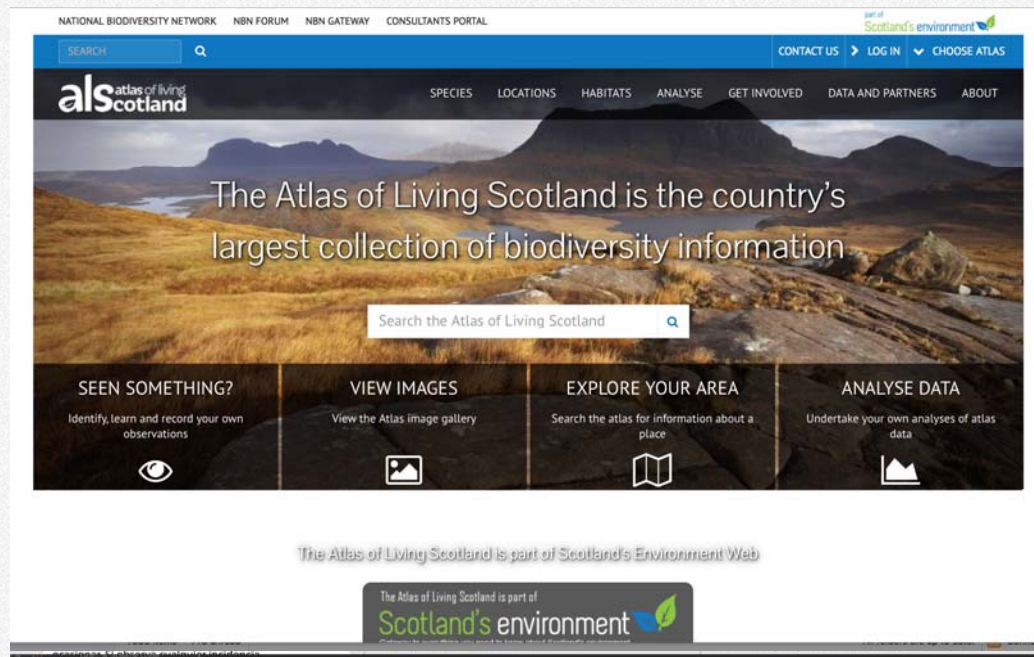
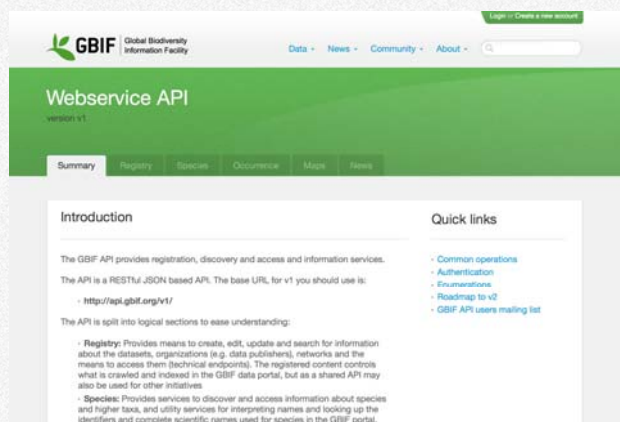
Provides free and open access to primary biodiversity data to support scientific research and policy.

GBIF-mediated data are used in >1 peer-reviewed article per day

Trend in GBIF-mediated data serves as primary global indicator for Aichi Target 19

What is GBIF?

3 / 3



An informatics infrastructure

Near-real time index organized around the Darwin Core standard, served through GBIF.org and API web services, and supported by open-source software like the IPT (developed at the Secretariat), and the Atlas of Living Australia.

'ALX' now powers 11 more atlases, including:

Spain

France

Portugal

Belgium

Costa Rica

Argentina Scotland

Northern



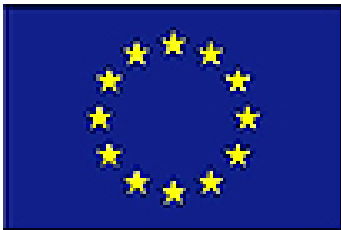
Biodiversity Information for Development

A multi-year, €3.9 million programme funded by the European Union and led by GBIF.

Its aim is to increase the availability and use of biodiversity information for research and decision making in the 'ACP' countries of Africa, the Caribbean and the Pacific Islands.

€2.9 million planned in support of projects that:

- Mobilize biodiversity data relating to protected areas, threatened species & invasive alien species
- Use and extend best practices for digitizing collections and mobilizing other biodiversity data
- Apply open access biodiversity data in support of decision-making and research
- Develop lasting national, regional or thematic networks to support ongoing data sharing & reuse⁶



This programme is funded by the European Union

<http://europa.eu>

Progress to date



2013	Initial discussions with EU DEVCO
Dec 2014	Grant awarded
Apr 2015	Survey of African data holders and decision makers
May 2015	Formal start of programme
	Programme launched at Africa Rising Cape Town event, co-hosted by SANBI
Sep 2015	€900,000 call for proposals from sub-Saharan Africa issued
Nov 2015	143 initial stage proposals involving orgs from 34 of 48 eligible African countries
Dec 2015	55 shortlisted proposals invited to submit
Jun 2016	€972,153 in funding announced for 23 projects supporting 34 organizations

BID Pacific starts... NOW!

Survey for data holders and decision makers

Data holders (English)

<https://www.surveymonkey.com/r/8VMYWGH>

Data holders (French)

<https://fr.surveymonkey.com/r/7NSCNPW>

Decision makers (English)

<https://www.surveymonkey.com/r/8VQXG7W>

Decision makers (French)

<https://fr.surveymonkey.com/r/9J3T2XS>



Call for proposals

Formal announcement and complete details to be released in September—sign up for alerts at:

<http://bid.gbif.org>

Share the links with data holders and decision makers around the Pacific region

Grant types & themes

Themes

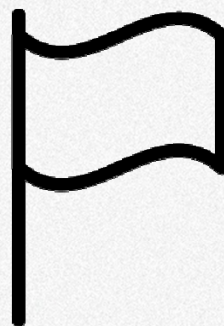
Protected areas

Threatened species Invasive alien species



Regional grants

Establish or strengthen international collaborations to mobilize biodiversity data



National grants

Establish or strengthen national biodiversity information facilities



Small grants

Mobilize biodiversity data relevant for biodiversity conservation priorities

Capacity enhancement support

“Whatever data, information tools and systems become available (or indeed are available now) there is a clearly voiced need for training in the use of such facilities”

—Cooper & Pagad 2013

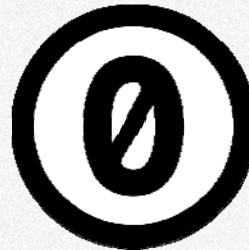
Programme reinforces and expands on GBIF core activities

- **Actions target individual, organizational and enabling environment levels**
- **Self-assessment tools for data holding institutions and for national biodiversity information facilities will measure impact and assist implementation**
- **On-site and online workshops and mentoring will support project grantees while integrating them within the GBIF community**
- **First capacity enhancement workshop to occur in Rwanda in August 2016**

Open-access biodiversity data

“the necessary first ingredient for any synthesis leading to summarised information supporting education, decision making, management activities, and so on”

—Cooper & Pagad 2013



Benefits

After three years of community consultation, GBIF is finishing full implementation of machine-readable licensing. Each dataset on GBIF.org will carry a Creative Commons designation.

Standard open-access licensing

Enables wide reuse of data

Increases transparency and reproducibility of scientific analyses

Makes best-available evidence available to decision makers

Helps demonstrate financial return on investment for research funders

Benefits to publishers

Report on access and use of data

Track research citations

GBIF Global Biodiversity Information Facility

Data - News - Community - About -

Bernice P. Bishop Museum

Occurrence dataset published by Bernice Pauahi Bishop Museum

836,971 Occurrences
[View occurrences](#)

Information Stats **Activity**

35,364 download events

DOWNLOAD	doi:10.15468/dl.vfebmq 14th July 2016
RECORDS	1 records from this dataset included at time of download
QUERY	TAXON <i>Fraxinus mandshurica</i> Rupr. query latest data
DOWNLOAD	doi:10.15468/dl.6zp3lx 14th July 2016
RECORDS	7 records from this dataset included at time of download
QUERY	TAXON <i>Bryophyta</i> LOCATION POLYGON((-179.9 85,-179.9 50,-0.1 50,-0.1 85,-179.9 85)) query latest data
DOWNLOAD	doi:10.15468/dl.eiltzc 14th July 2016
RECORDS	1 records from this dataset included at time of download
QUERY	TAXON <i>Phellodendron amurense</i> Rupr.

Research example

*Published 20 June
2016*

Keppel G, Gillespie TW, Ormerod P & Fricker GA (2016) Habitat diversity predicts orchid diversity in the tropical south-west Pacific. *Journal of Biogeography*
doi:10.1111/jbi.12805

- **Paper analyses all described orchid species on eight archipelagos east of New Ireland**
- **Which biogeographical variables predict orchid diversity and endemism?**
- **Can climatic and/or topographic variables reliably predict**

Table 1 Orchid species richness, endemism and collection records in the Global Biodiversity Facility (GBIF; www.gbif.org) for eight archipelagos in the south-west Pacific. Note that New Caledonian collections held at the herbarium of the Muséum National d'Histoire Naturelle in Paris (MNHN) and at the herbarium of IRD in Nouméa (NOU) were excluded because other herbaria within the eight archipelagos are not included in GBIF.

Archipelago	Species richness	Archipelago endemics	GBIF collections ^a
Cook Islands	14	1	193
Fiji	160	47	1645
New Caledonia	199	83	3789 ^b
Niue	17	0	61
Samoa	101	15	837
Solomon Islands & Bougainville	282	37	1021
Tonga	43	1	204
Vanuatu	163	14	1185
Total	552	314	8935

^aData downloaded on 29 January 2016 from www.gbif.org (http://doi.org/10.15468/X, where X = dl.s8mur6, dl.wnct0y, dl.erjsxj, dl.u6ekom, dl.ie7xpp, dl.0l7hj3, dl.k2fglk, dl.zcb9rz, dl.2i1osg for nine separate downloads).

^bTotal collections for New Caledonia were 9073 (including MNHN and NOU).

DATASET [Australia's Virtual Herbarium](#)
RECORDS 60 records from this dataset included at time of download
IDENTIFIER [doi:10.15468/rhzrxw](https://doi.org/10.15468/rhzrxw)
CITATION Council of Heads of Australasian Herbaria (CHAH): Australia's Virtual Herbarium

DATASET [Natural History Museum \(London\) Collection Specimens](#)
RECORDS 1 records from this dataset included at time of download
IDENTIFIER [doi:10.5519/0002965](https://doi.org/10.5519/0002965)
CITATION Natural History Museum (2015): Collection specimens data.nhm.ac.uk.

DATASET [Australian National Herbarium \(CANB\)](#)
RECORDS 45 records from this dataset included at time of download
IDENTIFIER [doi:10.15468/9oxkif](https://doi.org/10.15468/9oxkif)
CITATION <http://www.cpbr.gov.au/cpbr/herbarium>

DATASET [Plants of Papua New Guinea](#)
RECORDS 114 records from this dataset included at time of download
IDENTIFIER [doi:10.15468/adw1tp](https://doi.org/10.15468/adw1tp)
CITATION Plants of Papua New Guinea, Repatriation of Electronic Accession Data to the Papua New Guinea National Herbarium, an online database provided by the National Herbarium of New South Wales (NSW) for the Papua New Guinea National Herbarium (LAE). Online at: <http://plantnet.rbgsyd.nsw.gov.au/PNGplants/>

DATASET [Harvard University Herbaria](#)
RECORDS 2 records from this dataset included at time of download
IDENTIFIER [doi:10.15468/o3pvnh](https://doi.org/10.15468/o3pvnh)
CITATION Harvard University Herbaria, Index of Botanical Specimens.

DATASET [Bernice P. Bishop Museum](#)
RECORDS 2 records from this dataset included at time of download
IDENTIFIER [doi:10.15468/s6ctus](https://doi.org/10.15468/s6ctus)
CITATION Bernice Pauahi Bishop Museum: Bernice P. Bishop Museum

Policy examples

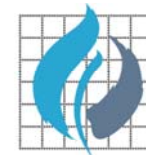
Endangered Listing of Five
Species of Sawfish Under
the Endangered Species Act
[https://federalregister.gov/
a/2014-29201](https://federalregister.gov/a/2014-29201)

Listing Determinations for 23
Guam and Northern Mariana
Islands Species
[https://federalregister.gov/
a/2014-22776](https://federalregister.gov/a/2014-22776)



Holotype specimen of smalltooth sawfish (*Pristis pectinata*) from the fishes collection of the Muséum national d'Histoire naturelle, Paris <http://www.gbif.org/occurrence/583525142>

Providing evidence to connect national and regional efforts to global initiatives



UNEP WCMC



Oceania BON?

Discussion at 'all-hands' meeting in Leipzig last week

GEO BON focuses on two aspects

- **EBVs as a framework for agreeing and coordinating priorities for data collection and modelling**
- **BONs as an approach to stimulating and supporting networking**

Neither GBIF nor GEO BON is interested in adding structures and processes for their own sake. Instead, we hope to support national and regional networks to benefit from global collaborations and to develop their own capacity.

The BID programme offers an opportunity to develop Pacific-based projects that build capacity and contribute to both GBIF's and GEO BON's areas of interest.



In addition, members of the GBIF and GEO BON networks in nearby countries—particularly Australia and New Zealand—have skills and tools which are available to support Pacific projects.

Vinaka vakalevu

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gbif.org
Grantseekers' site
bid.gbif.org

twitter.org/GBIF

facebook.com/gbifnews

linkedin.com/groups/55171

Sign up for alerts on September call for proposals

<http://bid.gbif.org>

Take (and share) BID Pacific survey

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Decision makers (French)

<https://fr.surveymonkey.com/r/9J3T2XS>