

Achievements of GBIF in Asia

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Global Biodiversity Information Facility

A connected community

- Building collaborative solutions and resources
- Enabling national and institutional data mobilization
- Promoting cost-effective open access to data

An informatics infrastructure

- Guiding biodiversity data management and publication
- Helping ensure data persistence
- Increasing recognition and visibility for sharing data

A window on biodiversity

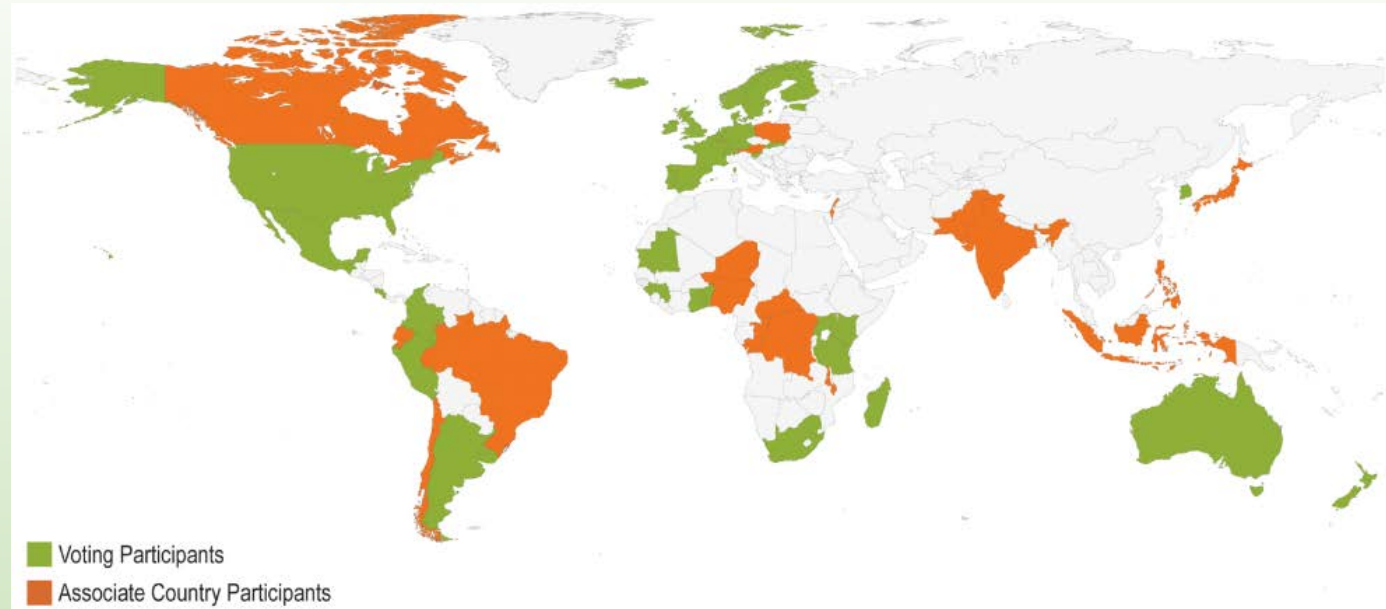
- Offering one-stop shop for 'big data' on biodiversity
- Creating a virtual natural history museum to support taxonomy
- Enabling access to images, sounds and video of specimens and observations

A tool for science and society

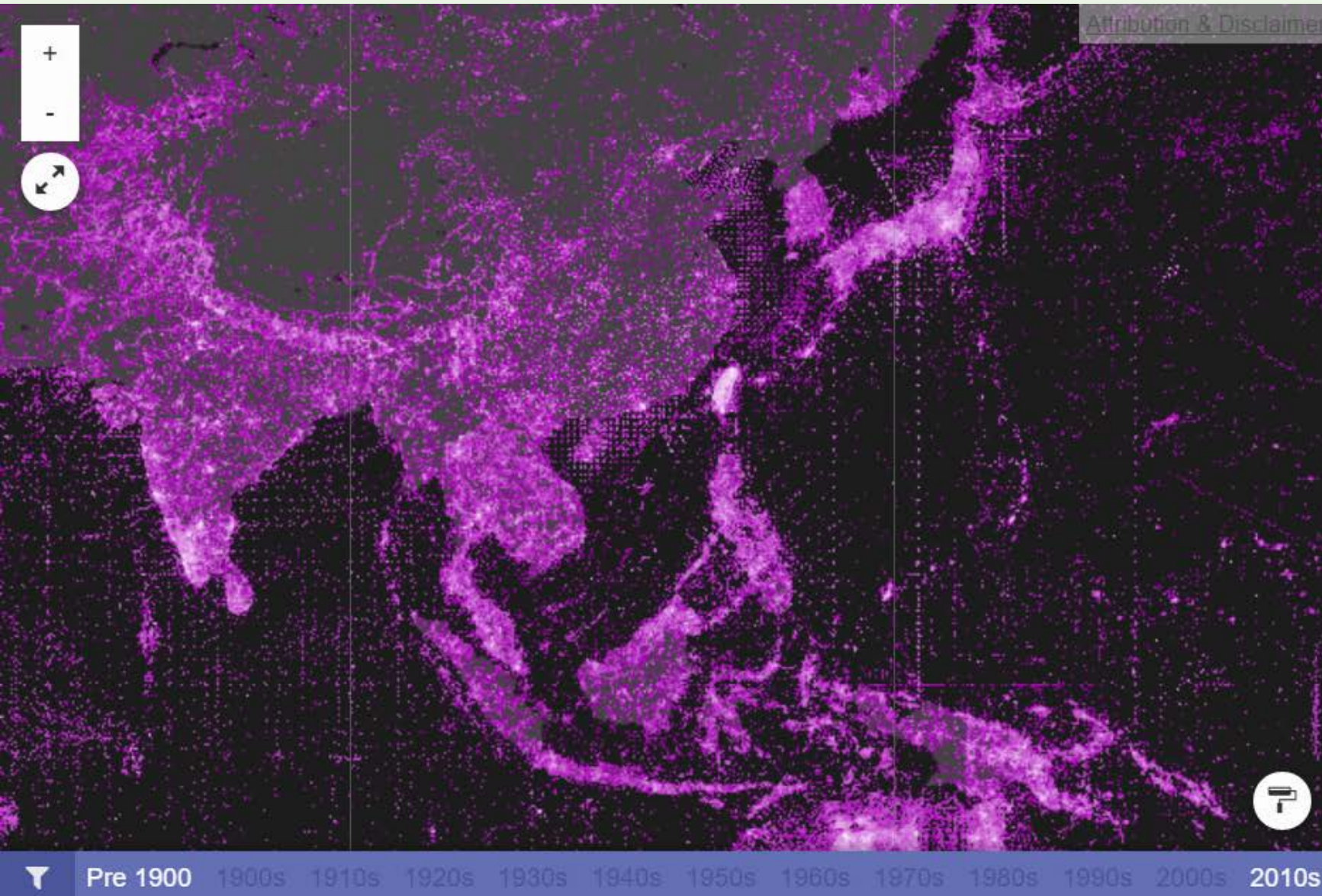
- Supporting national and global information needs
- Enabling applied, policy-relevant research
- Complementing existing investments and initiatives

Participation of GBIF in Asia

- Voting Participant – [Republic of Korea](#) (2001)
- Associate Country Participant – [Japan](#) (2001), [Pakistan](#) (2001), [India](#) (2003), [Indonesia](#) (2004), [Philippines](#) (2005)
- Other Associate Participant – [Chinese Taipei](#) (2001), [ASEAN Centre for Biodiversity](#) (2009), [International Centre for Integrated Mountain Development](#) (2009), [Chinese Academy of Sciences](#) (2013)



Data sharing and repatriation



Georeferenced data

VIEW RECORDS

[All records](#) | [In viewable area](#)

ABOUT

This map shows the density of all 624,688,835 georeferenced occurrence records published through the GBIF network.

To explore the records, zoom into the map or click on the links above and add further filters to customize search results.

Biodiversity data of Asian countries mediated by GBIF

Country	Occurrence datasets	Occurrence records	Checklist dataset
Bangladesh	191	76,277	N/A
Bhutan	134	62,742	N/A
Brunei Darussalam	133	27,430	N/A
Cambodia	213	110,952	N/A
China	969	2,459,373	N/A
Hong Kong	183	211,929	N/A
India	926	3,440,504	1
Indonesia	819	1,638,738	N/A
Japan	1,139	3,959,865	N/A
DPR Korea	188	13,409	N/A
Republic of Korea	476	1,635,384	N/A
Lao PDR	247	97,924	N/A
Macao	31	1,546	N/A
Malaysia	622	829,921	N/A
Maldives	159	58,113	N/A
Mongolia	307	171,606	N/A

Country	Occurrence Datasets	Occurrence Records	Checklist
Myanmar	382	121,927	N/A
Nepal	402	186,526	N/A
Pakistan	437	220,537	N/A
Palau	208	99,568	N/A
Papua New Guinea	593	1,100,070	N/A
Philippines	710	1,004,060	N/A
Singapore	365	85,122	N/A
Sri Lanka	509	217,013	N/A
Taiwan	571	1,919,449	4
Thailand	627	960,614	N/A
Timor-Leste	89	15,085	N/A
Viet Nam	518	295,892	N/A

Total:

12,148 Occurrence datasets

21,021,576 Occurrence records

5 checklist datasets

Data papers

- Narwade S, Kalra M, Jagdish R, et al (2011) Literature based species occurrence data of birds of northeast India. Zookeys 417:407–17. doi: 10.3897/zookeys.150.2002
- Shao K-T, Lin J, Wu C-H, et al (2012) A dataset from bottom trawl survey around Taiwan. Zookeys 109:103–9. doi: 10.3897/zookeys.198.3032
- Huang C-W, Hsiung T-W, Lin S-M, Wu W-L (2013) Molluscan fauna of Gueishan Island, Taiwan. Zookeys 13:1–13. doi: 10.3897/zookeys.261.4197
- Shao K, Lin J, Yeh H, et al (2014) A Dataset of Deep-Sea Fishes Surveyed by Research Vessels in the Waters around Taiwan. Zookeys 466:103–110. doi: 10.3897/zookeys.466.8523

Mobilizing Data in Asia through **Capacity building on biodiversity informatics**

- [BIFA](#)—the Biodiversity Information Fund for Asia—is the outcome of a contribution from the Ministry of the Environment, Government of Japan, earmarked for activities in Asia.
- **Activities supported by BIFA**
 - helped establish and strengthen national biodiversity information facilities,
 - expanded the GBIF network in the region and
 - Improved the capacity of Asian researchers and decision-makers to access data required for the management of the region's biodiversity.
 - Were selected among proposals submitted by members of the network

Strengthening National Biodiversity Information Facilities



Background

- BIFA Funded Project Implemented by Biodiversity Management Bureau (PhilBIF) of DENR
- ASEAN Center for Biodiversity (ACB) as co-implementer of the project
- Belgium Biodiversity Platform facilitated the 1st Batch of the training
- Project duration is from June – December 2016



Objectives:

- facilitate the organization and sharing of available biodiversity data collected and recorded by various organizations in the Philippines;
- align the data formats and mobilize data from surveys conducted by various academic, research and non-government organization to support the science-policy needs of the country ;
- enhance the data publishing capacities of BIOWEB partners and BMB Informatics personnel.



Project Implementation

- Two(2) batches of capacity building activities participated by 60 Scientists and IT experts from 20 institutions
- Training materials, presentations (annex 25) and exercises derived from the GB22 Nodes Training Event in Madagascar was retrofitted to suit the Philippine situation and the needs of the participants.



Project Implementation

- Topics discussed in the training:
 - ✓ benefits of data publishing
 - ✓ data transformation process
 - ✓ mapping different data types
 - ✓ Darwin Core Standard
 - ✓ Integrated Publishing Toolkit (IPT)
 - ✓ publishing various data types to GBIF and
 - ✓ data visualization using GBIF available data
- IPT Facility for the training was provided by ACB
- Training included hands-on exercises



Project Outputs

- BIOWEB partner institutions were endorsed by Phil BIF as GBIF data publishers:
 - ✓ Institute of Biological Sciences, University of the Philippines Los Banos
 - ✓ Mindanao State University (Tawi-Tawi)
 - ✓ Practical Genomics Laboratory, Technologies for Biodiversity Use and Conservation, Center for Natural Science and Environmental Research, De La Salle University
 - ✓ RB Gonzales Museum of Natural History



Project Outputs

- ✓ Increase in Philippine biodiversity data published in GBIF (expected to have a continuous rise this year);
- ✓ Expected operationalization of the BMB IPT Facility to be used by BIOWEB partners in publishing data to GBIF;
- ✓ Willingness of non-BIOWEB partners in joining which would expand the GBIF network
- ✓ Project Midterm and Final Report submitted and approved by GBIF

Photos (1st Batch)



Mentoring conducted last June 20-24, 2016 (1st Batch)

Photos (2ND Batch)



Mentoring conducted last October 10-14, 2016 (2nd Batch)



Expanding the GBIF network in the ASEAN region

Mobilizing Biodiversity Data from ASEAN Protected Areas (GBIF Grant / Biodiversity Information Fund for Asia (BIFA))



Orientation Workshop on Mobilizing Biodiversity Data from ASEAN Protected Areas

OBJECTIVES

- to facilitate the organization of species data from ASEAN Heritage Parks (AHPs) into globally accepted formats
- expose ASEAN Park Managers and staff on the use of camera traps and the processing of information gathered from this method
- orient ASEAN Park Managers and staff on the publication of species information with the use of species encoding and publication tools developed by ACB and GBIF



Orientation Workshop on Mobilizing Biodiversity Data from ASEAN Protected Areas

EXPECTED OUTCOMES

- Increased availability of biodiversity information in interoperable databases
- Exposure and awareness on the use/function of camera traps as a helpful tool for acquiring real time biodiversity information and complement transect information
- Convinced and increased willingness of AHP Managers and/or staff to share biodiversity information
- Science informed decision making and policy development promoted at the level of the AHP and the ability to contribute to national and regional conservation efforts
- Project Duration: April – July 2016



Orientation workshop on Mobilizing Biodiversity Data from ASEAN Protected Areas



- 24 AHP Managers/ Technical Staff
- 18 AHPs
- 8 AMS
- 4 Partner Experts
- 7 ACB Staff



Brunei Darussalam



Malaysia



Indonesia



Singapore



Thailand



Lao PDR



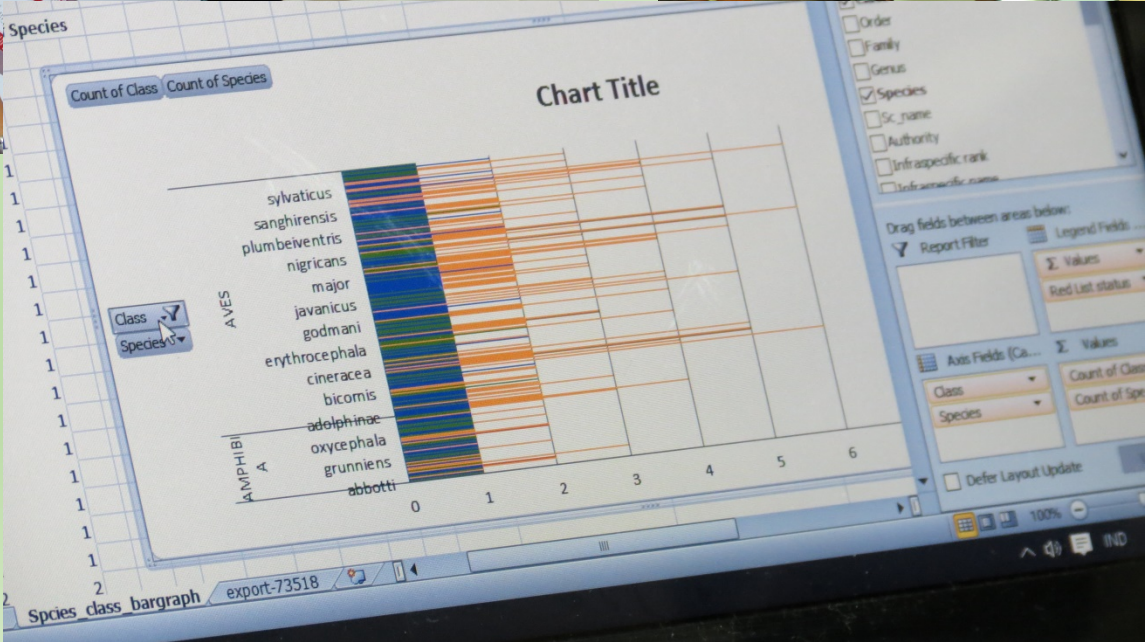
Myanmar



Philippines



Data encoding, harvesting, processing & mapping



Camera Trap Deployment at Mt. Makiling Forest Reserve



- Deployed 12 camera traps
- Location details:
 - ✓ Latitude: 14.13195
 - ✓ Longitude: 121.219553
 - ✓ Elevation: 439 masl (SAR DEM)
 - ✓ GPS: 370.24 masl

Processing of data from images collected





- [Home](#)
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- [About](#)

Hosted resources available through this IPT

Filter:

Logo	Name	Organisation	Type	Subtype	Records	Last modified	Last publication	Next publication
--	Camiguin, Philippines Fauna	ASEAN Centre for Biodiversity (ACB)	Occurrence	--	18	2016-07-13	2016-07-13	2017-07-13 13:46:32
--	Fauna for Borneo	ASEAN Centre for Biodiversity (ACB)	Checklist	--	55	2016-07-13	2016-07-13	2017-01-11 13:50:18
--	Flora of Agusan Marsh	ASEAN Centre for Biodiversity (ACB)	Checklist	--	23	2016-07-18	2016-07-18	2017-07-18 15:29:46
--	ICCEM CLSU-RSA Pantabangan Fauna	ASEAN Centre for Biodiversity (ACB)	Checklist	--	43	2016-07-18	2016-07-18	2017-07-18 15:33:07
--	IPAS Kitanglad	ASEAN Centre for Biodiversity (ACB)	Occurrence	--	186	2016-07-13	2016-07-13	2017-07-13 13:19:34
	MCME UPLB Museum Plant Collection	ASEAN Centre for Biodiversity (ACB)	Checklist	--	268	2016-07-11	2016-07-11	2017-01-09 12:51:54
--	MMER Zingiberaceae Botanical	ASEAN Centre for Biodiversity (ACB)	Occurrence	--	109	2016-07-13	2016-07-13	2017-07-13 13:36:00
	Mt. Hamiguitan RWS Avifauna	ASEAN Centre for Biodiversity (ACB)	Checklist	--	102	2016-07-13	2016-07-13	2017-07-13 13:08:52
--	Negros Cave Frog Observation	ASEAN Centre for Biodiversity (ACB)	Occurrence	--	6	2016-07-18	2016-07-18	2017-07-18 15:37:00
--	Philippines Museum Collections	ASEAN Centre for Biodiversity (ACB)	Occurrence	--	20	2016-07-18	2016-07-18	2017-07-18 15:42:58
--	Tawi Tawi, Philippines Reef Fishes	ASEAN Centre for Biodiversity (ACB)	Checklist	--	135	2016-07-18	2016-07-18	2017-07-18 15:39:45

Showing 1 to 11 of 11 ◀ previous next ▶

The most recently updated resources are also available as an [RSS feed](#).

Data Publication through GBIF's Integrated Publishing Toolkit

Future Needs Identified



Needs	
Capacity Building	Database management
	Camera trap orientation
	Mapping
	Database / Technical Officers
	Training for data partners
Funds	To conduct surveys
	Procurement of equipment
	Internet access
Commitments	Willingness to share data in open source

Next Steps Identified

- Increase coverage of training to the rest of the AHPs
- Involve other data partners at the National Level
 - Museums
 - Other departments / ministries
 - LGUs
 - NGOs (local and International)
- Potential Outputs / Products
 - Management plan
 - Increase in tourism / park visitors
 - GIS data
 - Improve education on Parks / PAs
 - Improve conservation



Capacity building on biodiversity informatics

Training Workshops



2016/09/07-10

Improving the capacity of Asian researchers and decision-makers to access data required for the management of the region's biodiversity



2012/06/25-27



2012 Asia-Pacific workshop on sharing biodiversity information and the Integrated Publishing Toolkit (IPT2)

2016 GBIF BIFA Biodiversity Informatics Training Workshop

(<https://sites.google.com/site/2016bifabric/>)

2016 GBIF BIFA Biodiversity Informatics Training Workshop

About the workshop
▼ Programme
07 September 2016 (Wednesday) 1st day
08 September 2016 (Thursday) 2nd day
09 September 2016 (Friday) 3rd day
10 September 2016 (Saturday) 4th day
Sitemap

About the workshop



We are in the era of explosive growth in information technology and data deluge. Meanwhile, we are facing the crisis of rapid loss in biodiversity and ecosystem services. We all know information technology can help solve complicated biodiversity issues, however, there is a big knowledge gap between knowing and doing. Where are the data sources and open source tools? How to use these resources to generate essential information and knowledge to inform policy and actions for saving biodiversity? Biodiversity informatics is a new field of adopting informatics for managing, sharing, publishing, and reusing biodiversity data. Biodiversity Informatics is essential to leverage the biodiversity research in large scale to support conservation and to resolve the crisis of biodiversity loss. Although Global Biodiversity Information Facility (GBIF) has promoted open biodiversity data since its inception in 2001 and Asian nodes of GBIF also held several workshops on mobilizing and publishing biodiversity data in the past few years, there are still many data and knowledge gaps in Asia.

To promote the development of biodiversity informatics in Asia, Ministry of Environment of Japan donated to GBIF for establishing Biodiversity Information Fund for Asia (BIFA). GBIF Asian nodes are supported by BIFA and collaborate on training seed trainers to disseminate the knowledge on biodiversity informatics. This four-day training workshop will focus on introducing data standards, methods, and tools for publishing and reusing biodiversity open data as well as submitting biodiversity data papers. Through this training workshop we hope participants will become seed trainers of biodiversity informatics to help node managers promote the development of biodiversity informatics in each country.

Organizers

Taiwan Biodiversity Information Facility
Japan Biodiversity Information Facility

Sponsors

Ministry of Environment, Japan / Global Biodiversity Information Facility
Ministry of Science and Technology, Taiwan
Biodiversity Research Center, Academia Sinica, Taiwan

2016 GBIF BIFA Biodiversity Informatics Training Workshop

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Programme >

07 September 2016 (Wednesday) 1st day

Introduction to biodiversity informatics		
Time	Lecturer	Topic
08:30 – 09:00		Registration
09:00 – 09:30	Marisa Takayama	Opening address (Deputy Director, Global Biodiversity Strategy Office, Nature Conservation Bureau, Ministry of Environment Japan)
	Wen-Hsiung Li	Opening address (Director, Dep. International Cooperation and Science Education, Ministry of Science and Technology, Taiwan)
	Kwang-Tsao Shao	Opening address (Director, Biodiversity Research Center, Academia Sinica, Taiwan) Workshop introduction
09:30 – 10:10	Tsuyoshi Hosoya	Introduction to biodiversity informatics [ppt] [video]
		Group photo Coffee break
10:30 – 11:10	Yu-Huang Wang	Introduction to data standards and data license for sharing biodiversity data [ppt] [video]
11:10 - 11:50	Takeshi Osawa	Introduction to publishing biodiversity data [ppt] [video]
11:50 – 12:00	Tsuyoshi Hosoya	Discussion [video]
		Lunch Time
		1.Data standardization
13:00 – 13:40	Tsuyoshi Hosoya	1-1.Darwin Core terms [ppt] [video]
13:40 – 14:30	Tsuyoshi Hosoya	Hands-on: Finding suitable DwC terms for the dataset [data] [video]
		Coffee Break
15:00 – 15:40	Tsuyoshi Hosoya	1-2. Data standardization [ppt] [video] [Summarize participants' discussions and suggest better way]
15:40 – 16:30	Tsuyoshi Hosoya	Hands-on: Merging example datasets into one dataset following standards Discussion on checking errors in example datasets [data] [video]
16:30 – 16:45	Tsuyoshi Hosoya	Wrapping up

Comments

You do not have permission to add comments.

Participants of the 2016 GBIF BIFA

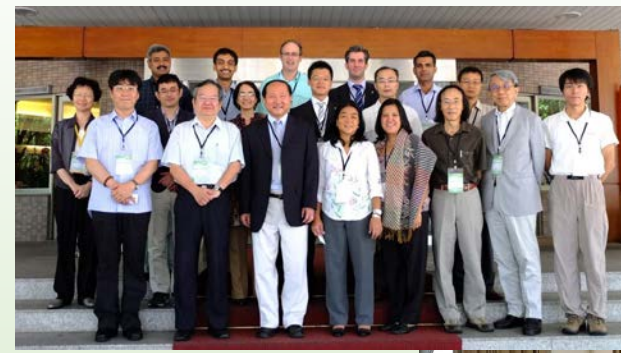
Biodiversity Informatics Training Workshop

Country	Number of Participants	Country	Number of Participants
Bhutan	1	Nepal	1
China	1	Philippines	7
India	2	Singapore	2
Indonesia	3	Taiwan	13
Japan	7	Total	41
Malaysia	2		
Myanmar	2		

Regional collaboration

GBIF Asia Regional Nodes Meetings

1. 2009.9 Thailand
2. 2010.11 India
3. 2012.3 Japan (Tokyo)
4. 2012.6 Taiwan (4th Asian Node Manager Meeting in Taipei)
2012-2016 Regional Strategies composed
Regional representative: Sheila Vergara (ACB)
Regional deputy: Nakul Chettri (ICIMOD)
5. 2014.7 Japan (Tsukuba)
Regional representative: Tsuyoshi Hosoya (JBIF)
Regional deputy: Yu-Huang Wang (TaiBIF)
6. 2015.6 Taiwan (6th Asian Node Manager Meeting in Nantou, Taiwan)
Biodiversity Information Fund for Asia projects proposed
7. 2016.6 Philippines (Tagaytay)
2017-2021 Regional Strategies composed
Regional representative: Tsuyoshi Hosoya (JBIF)
Regional deputy: Yu-Huang Wang (TaiBIF)



Regional collaboration

- The 8th Asian nodes meeting
 - will take place in June 2017 in Vietnam
 - will be expanded from the standard
- For expanding regional collaboration and participation, this meeting will invite:
 - Selected Asian non-Participant country representatives
 - External networks – IUCN Asia, AP-BON, ILTER, IPBES Asia/Pacific, ABCD-Net

Thank You

