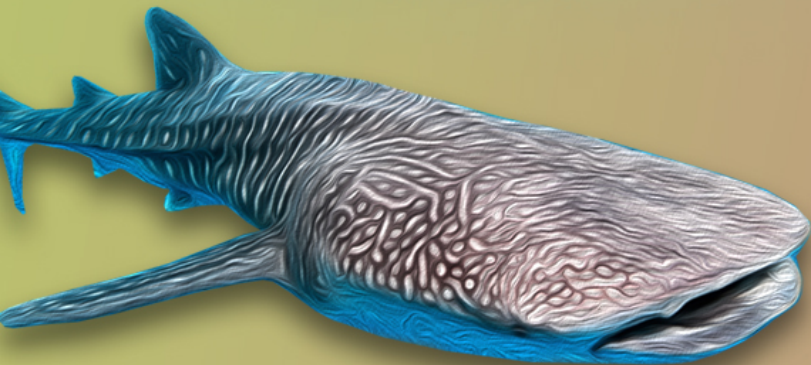


# Coastal and Marine Biodiversity in the ASEAN Region

14<sup>th</sup> APBON

1-2 February 2023  
Fukuoka, Japan  
Kit Elloran



A large, patterned fish with a yellow stripe along its back is swimming over a diverse coral reef. The reef is composed of various types of coral, including branching and table corals, in shades of yellow, orange, and brown. The water is a deep, clear blue, and several smaller fish are visible in the background.

# Status and Updates

Support system | Ways Forward

# Coastal and Marine Biodiversity

covers  
**180 MILLION**  
sq km

**173,000**  
kilometers  
ASEAN  
Coastline



**1/3**  
Total surface  
area of the  
world



**50%**  
Earth's  
water  
surface

**13.1-33.6 kg** per capita fish  
consumption (ASEAN)

Coral Triangle

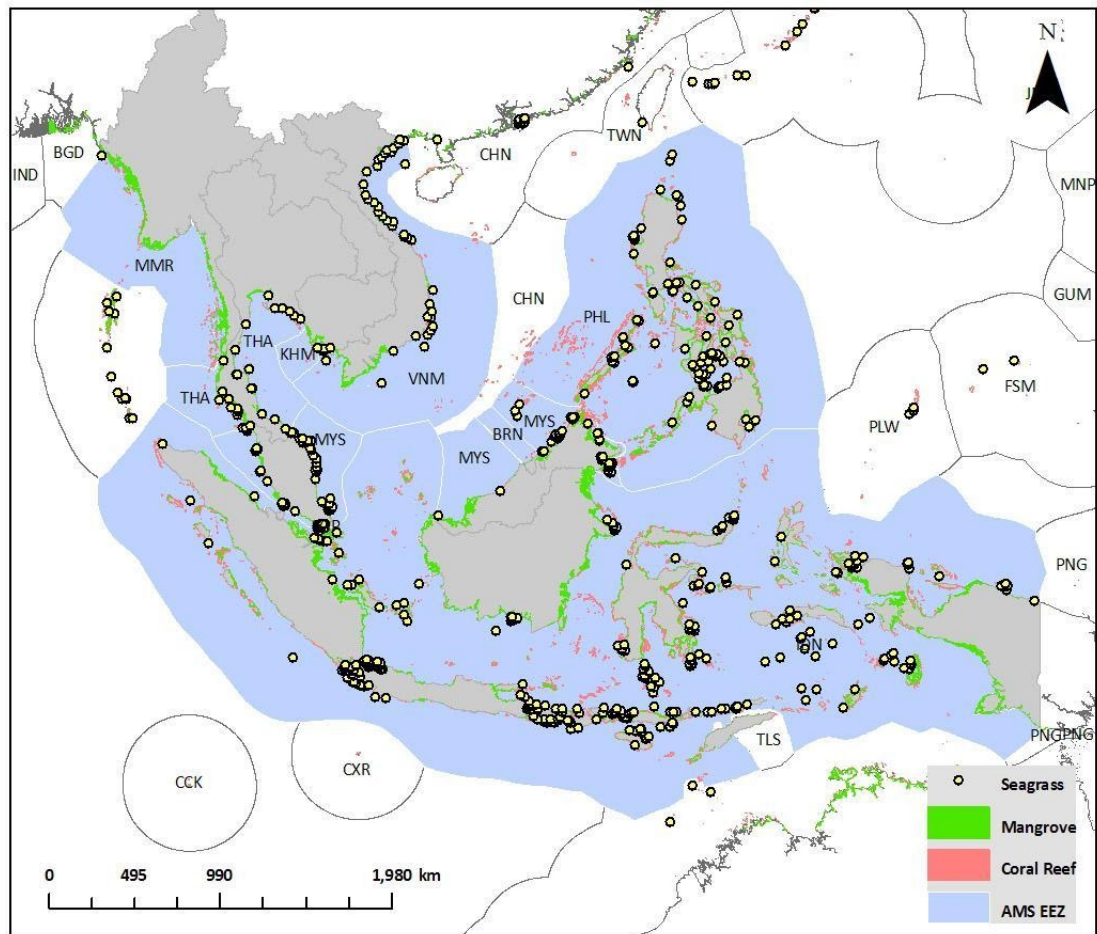
**700**  
species of coral



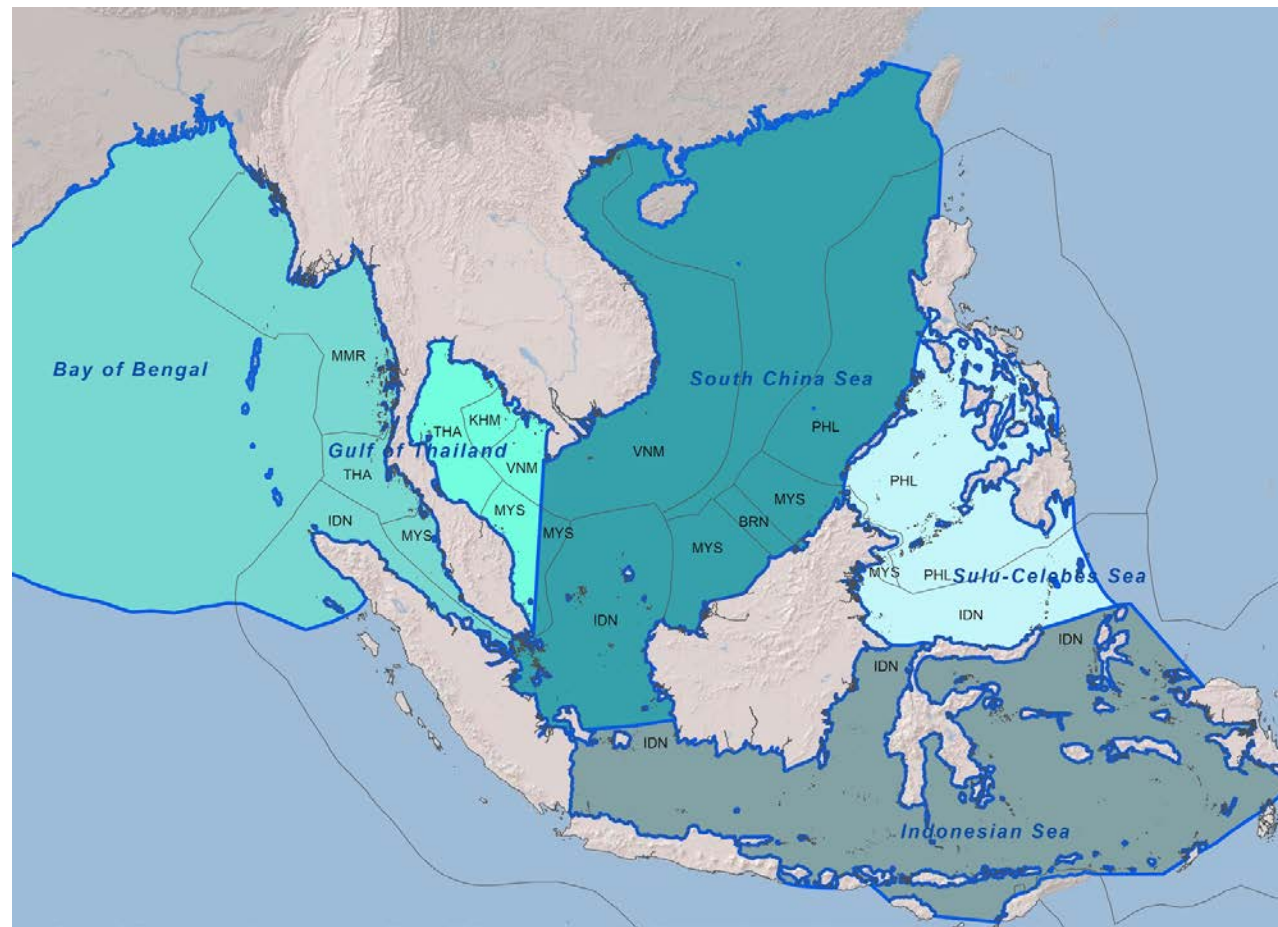
**1/3**

of the world's  
coastal and  
marine habitats





Coastal and marine habitats and the shared waters and EEZs of ASEAN



Large marine ecosystems in the ASEAN region

# Key Biodiversity Areas

Sites that contribute significantly to the global persistence of biodiversity. KBAs are important sites for species conservation and better targeted PA network expansion to represent these important sites would help to improve biodiversity trends in the ASEAN region.

**8%**

KBAs in ASEAN  
of the world total

**1,260**

KBAs in ASEAN

**917,717**

KBA areas (sq km)

**3%**

Marine KBAs of  
ASEAN total

# OECM

Other Effective Area-based Conservation Measure

- A geographically defined area other than protected area
- Governed and managed in ways that achieve positive and sustained long-term outcomes for the in-situ conservation of biodiversity
- With associated ecosystem functions and services
- And where applicable, cultural, spiritual, socio-economic, and other locally relevant values



# ASEAN Heritage Parks

a regional network of representative protected areas created to generate greater collaboration between ASEAN Member States in preserving their shared natural heritage



**Transboundary**



**High Ethno-biological significance**



**Uniqueness**



**Importance for endangered or precious biodiversity**

**CRITERIA FOR NOMINATION**



# Coastal and Marine AHPs

1. Bai Tu Long National Park, Viet Nam
2. Lampi Marine National Park, Myanmar
3. Mu Ko Ang Thong National Park, Thailand
4. Ao Phang Nga-Mu Ko Surin-Mu Ko Similan National Park
5. Hat Chao Mai National Park and Mu Ko Libong Non-hunting Area
6. Tarutao National Park, Thailand
7. Tubbataha Reefs Natural Park, Philippines
8. Kepulauan Seribu National Park, Indonesia
9. Wakatobi National Park, Indonesia





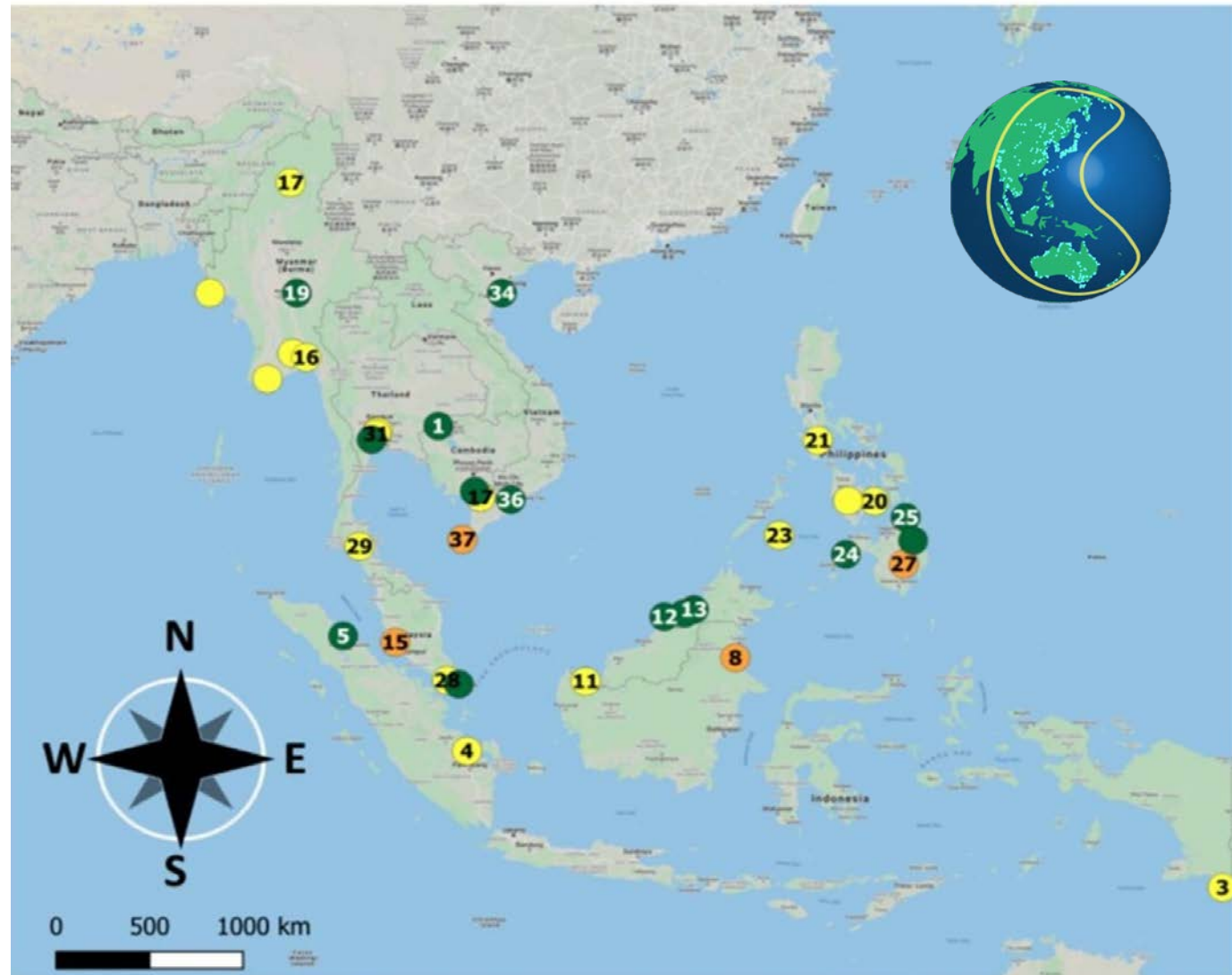


Japan-ASEAN Cooperation



# ASEAN Flyway Network

A cooperation of government and non-government sectors in the ASEAN that aims to conserve and protect the wetland habitats in the EAAF and the migratory waterbirds they support.



# Regional Platforms and Mechanisms to strengthen the Networks



**ACB 2020  
MALAYSIA**

ASEAN Conference  
on Biodiversity



ASEAN  
Heritage  
Parks  
Conference



ASEAN  
Clearing-house  
Mechanism



# Mainstreaming Biodiversity

integrating biodiversity conservation in non-environmental sectors



Business



Infrastructure



Health



Agriculture



Finance



Tourism



ASEAN Multi-sectoral Workshop on Mainstreaming Biodiversity for Education and Agriculture



webinar

## Biodiversity and Preventing Future Pandemics

- ▶ COVID-19 situation in ASEAN
- ▶ Biodiversity and zoonoses
- ▶ Health and Biodiversity in the Post-2020 Global Biodiversity Framework and developments
- ▶ Highlights of the ASEAN Scoping Study on Interlinkages of Health and Biodiversity
- ▶ Updates on ASEAN response to wildlife management to curb zoonoses
- ▶ A socio-economist's point of view on integrating biodiversity solutions into the COVID-19 response



H.E. Kung Phoak  
Deputy Secretary-General of ASEAN  
for ASEAN Socio-Cultural Community



Drg. Oscar Primadi, MPH  
Secretary General  
Ministry of Health, Indonesia  
Chair of Senior Officials Meeting on  
Health and Development (SOMHD)



Dr. Theresa Mundita S. Lim  
Executive Director of the  
ASEAN Centre for Biodiversity



Prof. Zakri Abdul Hamid  
Founding Chair of IPSES and  
ASEAN Biodiversity Hero-Malaysia



Dr. Unnikrishnan  
Payyappallimana  
International Institute for  
Global Health of the  
Tropics, National University



Dr. Marian S. Delos Angeles  
Resource economics and environmental  
relation expert, Board Member, Scientific  
and Senior Advisor to the Department of  
Environment and Economic Center for  
Southeast, Inc. (SECEC), Philippines

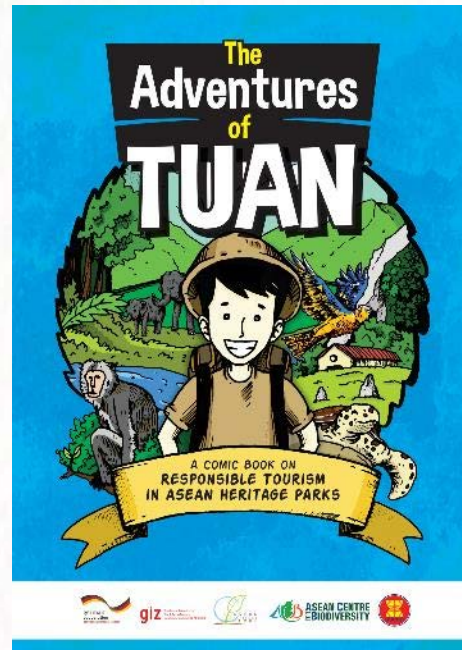


Ms. Antoinette Taus  
Moderator  
LIFE Environment Programme's  
National Goodwill Ambassador  
for the Philippines



Regional Workshop to Address Interlinkages between Human Health and Biodiversity in the ASEAN Region

# Communicating Biodiversity



**ASEAN BIODIVERSITY OUTLOOK 2**  
**POLICY BRIEF SERIES**  
 January 2019

## Save our ASEAN Seas: Healthy Coasts and Healthy ASEAN

Photo by Eric Muech

The ASEAN region has 64 percent more marine area compared to its total land area. Thus, marine and coastal ecosystems should be considered as one of its most valuable natural assets. However, these assets and the ecosystem services that they provide are at risk from land-based sources of pollution and sedimentation, and activities that are related to coastal industries such as tourism, agriculture, fisheries, ports and shipping, and infrastructure. If these threats are not abated at the soonest, seagrasses, coral reefs, mangrove forests, beaches and other coastal habitats will lose their ability to provide food, nurture marine plants and animals, regulate climate and provide areas for worship, education, leisure, and research. ASEAN Member States (AMS) have responded to such threats through various projects and programs but more aggressive, targeted and highly complementary actions are necessary to address these threats to ensure that these natural assets will persist.

**How valuable are coastal and marine habitats?**

ASEAN hosts a third of the area covered by the world's coastal and marine habitats that include coral reefs, mangroves, estuaries, sandy and rocky beaches, seagrass and seaweed beds and other soft bottom communities (ABO 1, 2010). These habitats and their resident species provide various forms of ecosystem services including breeding, nursing, and feeding grounds for marine plants and animals and resources important to livelihoods of coastal communities. Their regulatory services include carbon sequestration and storage, climate regulation, sediment protection, and shoreline retention to buffer coastal areas from storm surges. Coastal habitats provide cultural services in the form of recreation and tourism, education, research, and places of worship. It is estimated that the total potential sustainable annual economic net benefits per square kilometer of healthy coral reefs in ASEAN ranges from USD 23,100 to USD 270,000 arising from fisheries, shoreline protection, tourism, recreation, and aesthetic values (Burke et al. 2002).

Target 6 (sustainable management of marine living resources), Target 7 (sustainable agriculture, aquaculture and forestry), Target 10 (pressures on vulnerable ecosystems reduced), Target 11 (protected areas increased and improved), and Target 12 (extinction prevented) present applicable guidance to promote the recognition of the values, current, and potential benefits of coastal and marine areas and the urgency of their conservation and sustainable use.

## SEA OBIS

South-East Asian OBIS node

<http://chm.aseanbiodiversity.org>

<http://aseanbiodiversity.org>



Christian Elloran

[cbelloran@aseanbiodiversity.org](mailto:cbelloran@aseanbiodiversity.org)



Pauline Carmel Joy Eje

[pcjeje@aseanbiodiversity.org](mailto:pcjeje@aseanbiodiversity.org)

# Southeast Asia SEA OBIS

34  
Regional  
Nodes

## SEA OBIS

Feeds <http://ipt.obis.org/seaobis/rss.do>

Description The ASEAN Centre for Biodiversity (ACB), established in 2005, is ASEAN's response to the challenge of biodiversity loss. It is an intergovernmental organization that facilitates cooperation and coordination among the ten ASEAN Member States (AMS) and with regional and international organizations on the conservation and sustainable use of biological diversity, and the fair and equitable sharing of benefits arising from the use of such natural resources.

Website <http://chm.aseanbiodiversity.org>  
<http://aseanbiodiversity.org>

Contacts Christian Elloran [cbelloran@aseanbiodiversity.org](mailto:cbelloran@aseanbiodiversity.org)  
Pauline Carmel Joy Eje [pcjeje@aseanbiodiversity.org](mailto:pcjeje@aseanbiodiversity.org)

to mapper

### STATISTICS

Occurrence records	61,005
> Species level	42,355
Absence records	1,348
Species	2,245
Taxa	2,794
Datasets	12
Time range	1908 - 2008

### DISTRIBUTION



### DATA QUALITY

#### DROPPED RECORDS

Dropped records	3,449
> Not marine	610
> No WoRMS match	2,838
> No coordinates	0
> Zero coordinates	12

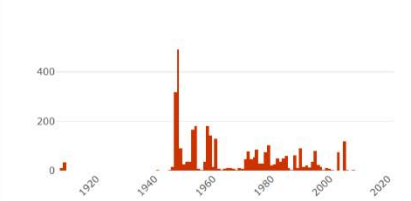
#### TAXONOMIC ISSUES

Line unsure	70
Accepted name available	260

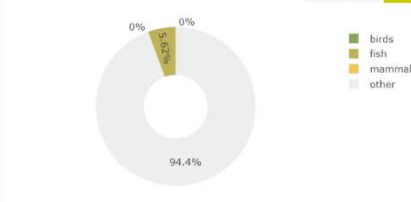
#### AND INVALID FIELDS

	Missing	Invalid
certaintyInMeters	65,802	0
depthInMeters	61,432	0
widthInMeters	65,734	0
heightInMeters	65,737	0

### RECORDS

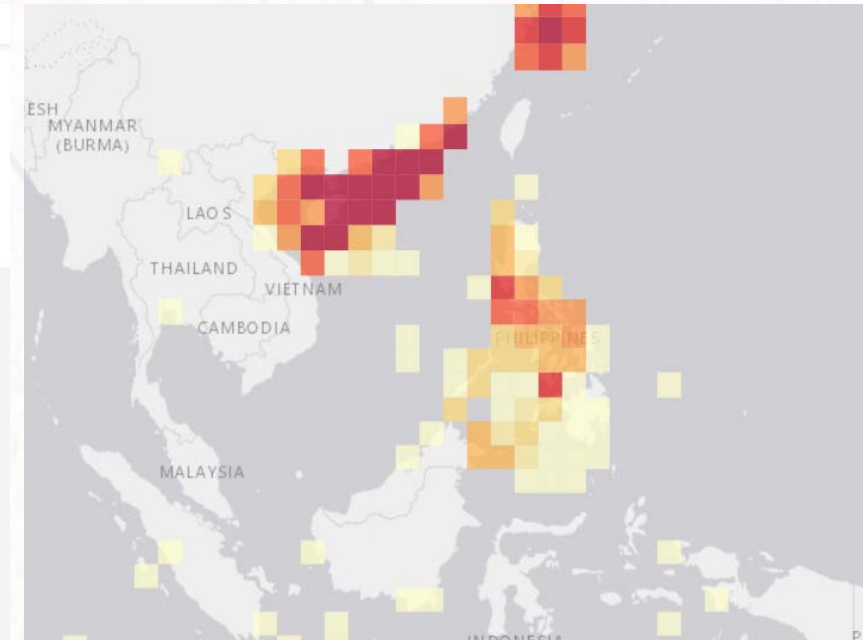


### COMPOSITION



### TOP TAXA

Scientific name	Records
Lumbrineris Blanville, 1828	1,879



### SPATIAL ISSUES

Records on land	1,324
> More than 20 km from shore	591
Depth exceeds bathymetric depth	3

### TOP DATASETS

Dataset	Records
NCOS1959_Crustacea Published 2024-9-11	25,084
NCOS1959_Mollusca Published 2018-9-12	14,429
National Comprehensive Oceanographic Survey (NCOS) - Polychaeta Published 2024-9-11	7,882
Fish Collection of National Museum, Philippines Published 2022-01-24	3,242
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (YS-Part I) Published 2024-9-12	2,556
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (YS-Part II) Published 2024-9-12	2,270
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (SCS-Part I) Published 2024-9-12	1,852
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (ESC-Part I) Published 2024-9-11	1,231
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (ESC-Part II) Published 2024-9-12	1,231
Observation data collected by Marine Biological Museum, Chinese Academy of Sciences (ESC-Part III) Published 2024-9-12	1,055

### TOP TAXA

Scientific name	Records
Lumbrineris Blanville, 1828 Phylum Annelida > Class Polychaeta	1,879
Polychaeta Grube, 1850 Phylum Annelida > Class Polychaeta	1,317
Glycera unicornis Lamarck, 1818 Phylum Annelida > Class Polychaeta	913
Sternaspis scutata (Ranzani, 1817) Phylum Annelida > Class Polychaeta	806
Terebellides stroemi Sars, 1835 Phylum Annelida > Class Polychaeta	762
Alpheus Fabricius, 1798 Phylum Arthropoda > Class Malacostraca	666
Seraphisidae Gray, 1853 Phylum Mollusca > Class Gastropoda	619
Moldanidius Moltingren, 1867 Phylum Annelida > Class Polychaeta	585
Trachysalambria curvirostris (Simpson, 1860) Phylum Arthropoda > Class Malacostraca	581
Ampelisca Kueyer, 1942 Phylum Arthropoda > Class Malacostraca	557

### DATA PROVIDERS

Name	Records
ASEAN Centre for Biodiversity	61,005
Institute of Oceanology Chinese Academy of Sciences, Qingdao	57,590
Intergovernmental Oceanographic Commission of UNESCO	32,966
Mindanao State University - Tawi-Tawi College of Technology and Oceanography	121

ASEAN BIODIVERSITY Dashboard

ABOUT BIODIVERSITY DATA INDICATOR TRENDS COUNTRY PROFILES TIME ANIMATIONS

# ASEAN Biodiversity Dashboard

an interactive, online platform for visualising trends and geographic variation in biodiversity indicators

ABOUT | HOW TO USE

 <p><b>1,398,108</b> Species Occurrences</p>	 <p><b>2,648</b> Protected areas</p>	 <p><b>50</b> ASEAN Heritage Parks</p>	 <p><b>13,579</b> E-Library</p>
--	--	--	---

## SPECIES OCCURENCES

- Density of observations
- Birds
- Invasive species
- Mammals
- Other vascular plants
- Pollinators

### HOW DOES IT HELP?

The ASEAN Biodiversity Dashboard is designed to facilitate more effective and timely conservation decisions through the flexible provision of the most up-to-date biodiversity data holdings for the ASEAN region. This platform pools information from the AMS, the ACB and, where relevant, global data sources, including from data sources found on the ASEAN Regional Clearinghouse Mechanism. The ASEAN Biodiversity Dashboard is also designed to:

- Streamline national and regional reporting and assessment processes
- Enable more powerful and near-real time national and regional biodiversity target tracking
- Facilitate more effective and ongoing evaluations of the success of conservation investments
- Identify critical emerging issues facing biodiversity in the ASEAN region
- Reveal key gaps in our understanding of biodiversity and the pressures they face
- Inform more effective protected area management
- Strengthen trans-boundary conservation actions such as for the establishment of more contiguous and representative protected areas in the region

## Integrated Publishing Toolkit

Resources you have rights to manage

Name	Organization	Type	Subtype	Records	Last modified	Last publication	Next publication	Visibility	Author
UP Los Baños Museum of Natural History Predatory Arachnids from Luzon	Unknown organization	Occurrence	Specimen	2,522	2022-04-10	2022-04-09	--	Public	Christian Elloran
Rubiaceae of Luzon Island from the University of the Philippines Los Baños Museum of Natural History Botanical Herbarium	Unknown organization	Occurrence	--	1,219	2022-04-09	2022-04-09	--	Public	Christian Elloran
University of the Philippines Los Baños Museum of Natural History Dioscoro Rabor Collection: Luzon Birds	Unknown organization	Occurrence	--	999	2022-04-09	2022-04-09	--	Public	Christian Elloran
ASEAN Fish Occurrences Literature	Unknown organization	Occurrence	--	2,029	2022-03-06	2022-03-06	--	Public	Christian Elloran
Philippines National Museum Birds Collection	Unknown organization	Occurrence	--	10	2022-03-05	2022-03-05	--	Public	Christian Elloran
MMFR Zingiberaceae Botanical	Unknown organization	Occurrence	--	109	2022-03-05	2022-03-05	--	Public	Christian Elloran
Non Fish Species Occurrence in ASEAN Region	Unknown organization	Occurrence	--	3,740	2022-03-05	2022-03-05	--	Public	Christian Elloran
Integrated Protected Area System of Kitanglad	Unknown organization	Occurrence	--	186	2022-03-05	2022-03-05	--	Public	Christian Elloran
Threatened Tree Species in the Philippines	Unknown organization	Occurrence	--	1,751	2022-03-05	2022-03-05	--	Public	Christian Elloran
Negros Cave Frog Observation	Unknown organization	Occurrence	--	6	2022-03-04	2022-03-04	--	Public	Christian Elloran

Showing 1 to 10 of 23

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

OCCURRENCE DATASET | REGISTERED MARCH 5, 2021

### Fish Collection of National Museum, Philippines

Published by [ASEAN Centre for Biodiversity \(ACB\)](#)  
Elloran C

3,661 OCCURRENCES | 6 CITATIONS

Home | Manage Resources | Administration | About

Overview: Fish Collection of National Museum, Philippines

Resource overview. Upload or connect to source data, map data to Darwin Core, complete metadata, publish the resource and register it with the GBIF network.

Source Data

Database:  Connect

Your source data files and SQL sources for generating a Darwin Core Archive.

Not modified since last publication

occurrence [file] 973.4 KB, 3,661 rows, 30 columns  
04-Mar-2020 16:21:20  
Readable

Darwin Core Mappings

Darwin Core Occurrence:  Add

Your mapping between the source data and Darwin Core terms.

Not modified since last publication

Core  
Darwin Core Occurrence 29 terms mapped to occurrence.

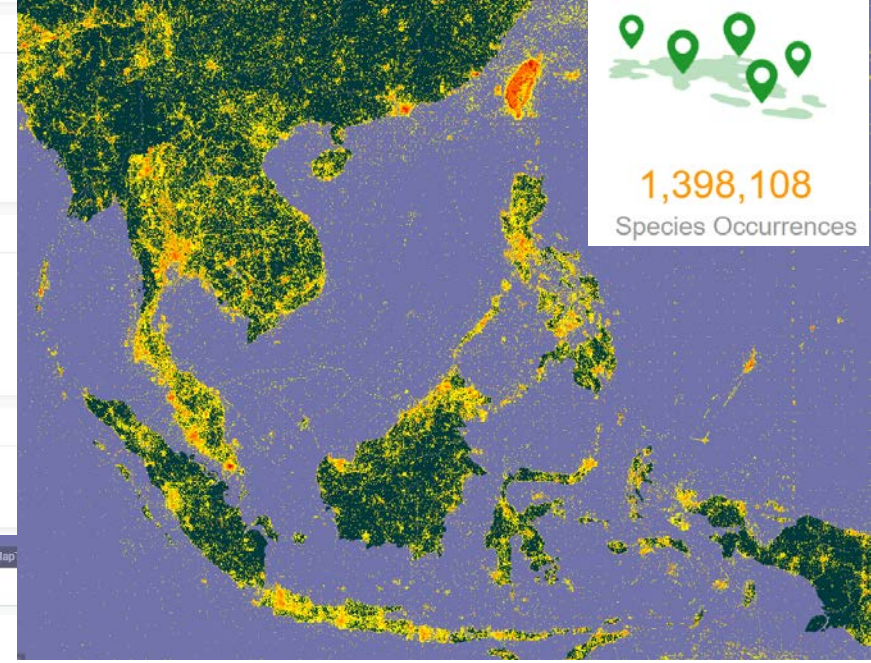
Metadata

Choose File No file chosen

Your resource metadata.

Not modified since last publication

Publication date: November 18, 2021  
Metadata last modified: November 17, 2021  
Hosted by: ASEAN Centre for Biodiversity (ACB)  
Licence: CC BY 4.0



23 Resources and datasets published to GBIF  
<http://bim-mirror.aseanbiodiversity.org:8080/ipt/>

Generated 11 hours ago © OpenStreetMap contributors, © OpenMap

Any year 1908 - 2003

# Best practices in managing data

Centralized platform

Data life-cycle control

Identifying data quality and quantity

Data security

Data documentation and organization

Data Access, Sharing, and Dissemination

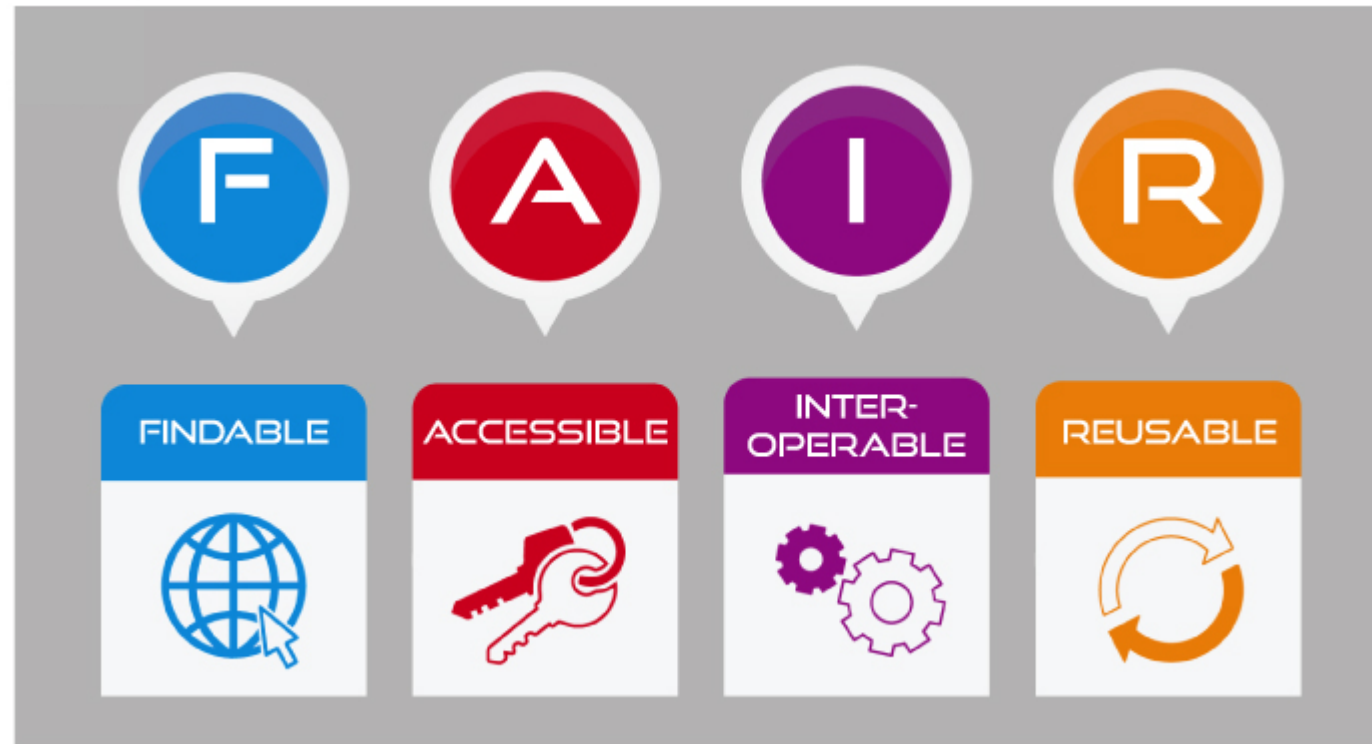
Data standards

Data publishing

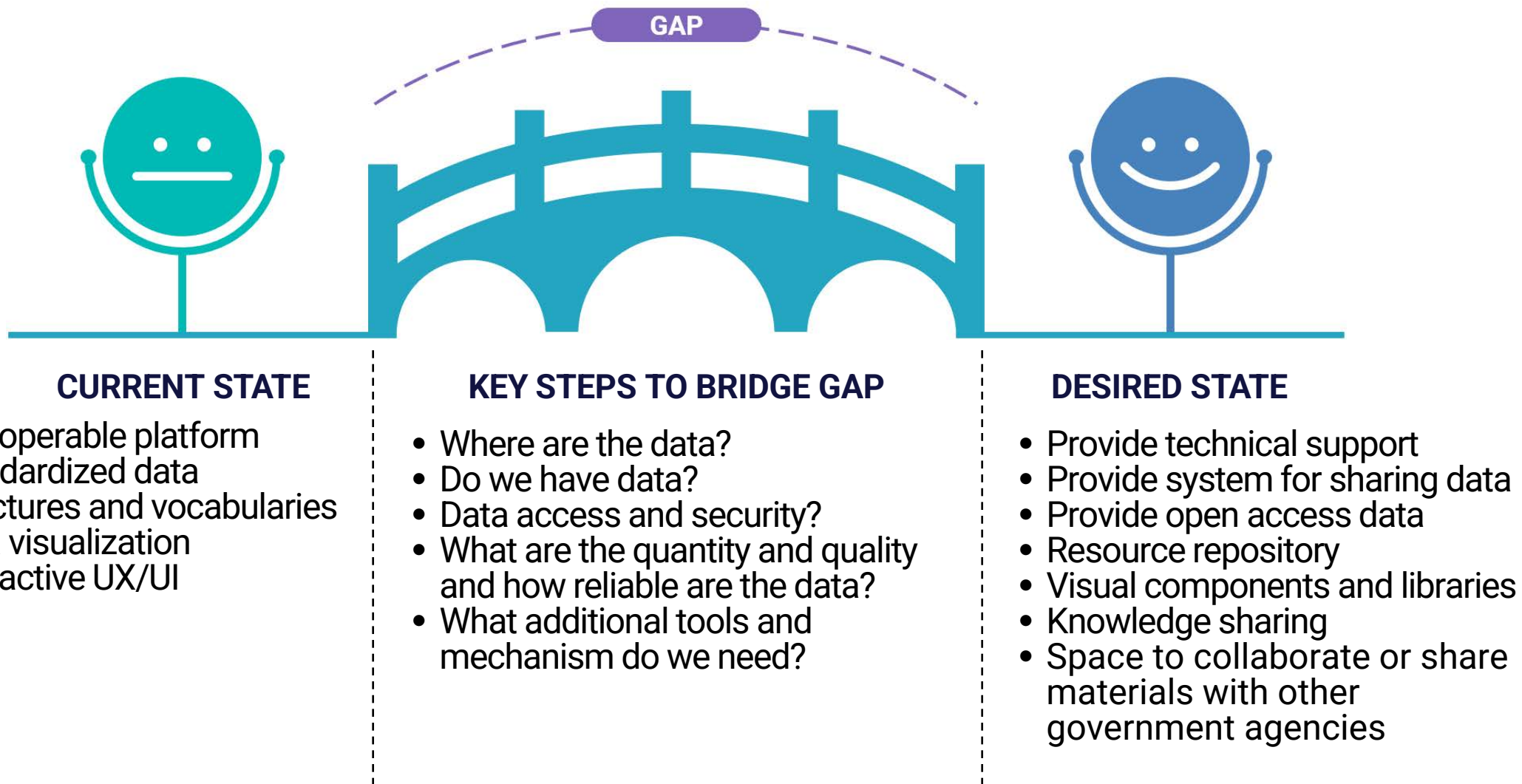




# OPEN ACCESS



## Understanding the gaps





# Who will be the main users of ASEAN Biodiversity Dashboard

Local, national, regional and global scale biodiversity data are needed by



## ASEAN Clearing House Mechanism and ASEAN Biodiversity Dashboard

- Rich source of up-to-date biodiversity data from the ASEAN region
- Data sourced from the official sources
- Publicly available and open access
- Enhancements and updates are ongoing
- Established through ACB and operates in parallel to the Clearing-House Mechanism of the Convention on Biological Diversity
- Source of biodiversity data and capacity building tools to aid conservation planning, monitoring, and decision making among AMS
- Serves as gateway to national CHMs of AMS


# #WeAreASEANBiodiversity

OUR HOME • OUR LIVES • OUR STORIES

[weare.aseanbiodiversity.org](http://weare.aseanbiodiversity.org)



For more information, log on to  
[www.aseanbiodiversity.org](http://www.aseanbiodiversity.org)

 D.M. Lantican Avenue  
University of the Philippines Los Baños  
Laguna, Philippines 4031



[facebook.com/ASEANbiodiversity](https://facebook.com/ASEANbiodiversity)



[@ASEANBiodiversity](https://@ASEANBiodiversity)



[@ABiodiversity](https://@ABiodiversity)



[TheASEANBiodiversity](https://TheASEANBiodiversity)



ASEAN Clearing  
House Mechanism



ASEAN Biodiversity  
Dashboard



ACB e-learning