



20th APBON Webseminar
January 19, 2024
15:00 - 17:00 JST
6:00 - 8:00 UTC

Agenda

0: Greetings from BIODIC/MoEJ director (Mr. Takahashi)

1: Seminar on the latest research on coral reefs in the AP region

1-1: Genetic diversity and hidden species boundaries of corals
Dr. Nina Yasuda, University of Tokyo

1-2: The status of coral reef in Indonesia
Dr. Kakaskasen Andreas Roeroe, Sam Ratulangi University

2: Discussion on APBON's contribution to CBD-KMGBF



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2: Discussion on APBON's contribution to CBD-KMGBF

Agenda

1. Reviewing our activities up to 2023
2. Announcement of the 15th APBON Workshop on Feb. 21-22, 2024 in Tokyo
3. Preparation for the goals of APBON Workshop and follow-up activities

Video Recording available at (internal use only)

<https://omc-webinar.webex.com/omc-webinar/ldr.php?RCID=87f830ec69041669c835d28eeade8cba>

Password: gXBTY8m*

A total length (2h11m)

Past activities

Dec 2022: CBD KMGBF adopted at COP15.

Feb 2023: 14th APBON Workshop in Fukuoka: Start discussing our activity plans in response to the outcome of CBD KMGBF

April 2023: 16th APBON webinar. Andy and Marina (GEOBON HQ) presented GEOBON's strategy for contributing to CBD KMGBF.

Aug 2023: Questionnaire surveys sent to APBON and APMBON community, asking to identify availability and gaps of data, knowledge, and capacity (analyses in progress)

Oct 2023: GEOBON IC Meeting at Secretary Office of CBD, discussing the next step for GEOBON's contribution to CBD KMGBF

Oct 2023: GEOBON Global Conference in Montreal. Hiroyuki, Alice, Yayoi and Massa gave talks on related subjects.

Dec 2023: Presentation and discussion at 19th APBON Webseminar on our activities. Alice, Ryo, Ichiro, Yayoi and Take gave talks.

APBON's Contribution to CBD Kunming-Montreal Global Biodiversity Framework

Agenda

1. Introduction (Alice and Massa)
2. The process of discussion at AHTEG (Ryo Kohsaka)
3. Possible role of APBON in IPBES and KMGBF implementation (Ichiro Hama)
4. Current progress on developing EBVs and other related variables (Take and Yayoi)
5. General Discussion on how we can contribute to KM-GBF

Plans for early 2024

Jan 19, 2024: 20th APBON (+APMBON) Webseminar (this meeting)

Feb 21-22, 2024: Next on-site APBON Workshop in Tokyo

-> Some output possibly requested before next AHTEG in early March?

Apr 2024 or later: AOGEO meeting (in Japan)

Apr 24, 2024: APMBON session on "Marine biodiversity monitoring and research in East and Southeast Asia" in 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference (Bangkok, Thailand)

Ongoing APBON (APMBON) surveys

APBON Survey to identify availability and gaps of data, knowledge, and capacity (August 2023)

APMBON Survey on marine biodiversity monitoring and blue carbon research in Eastern and Southeastern Asia (September 2023)

APMBON Survey available at the following google form

<https://docs.google.com/forms/d/1StGiRHFcaPf0KBmq8VPmIX-qVMerWuCkxuxqfMKxDaE/>

APBON Survey

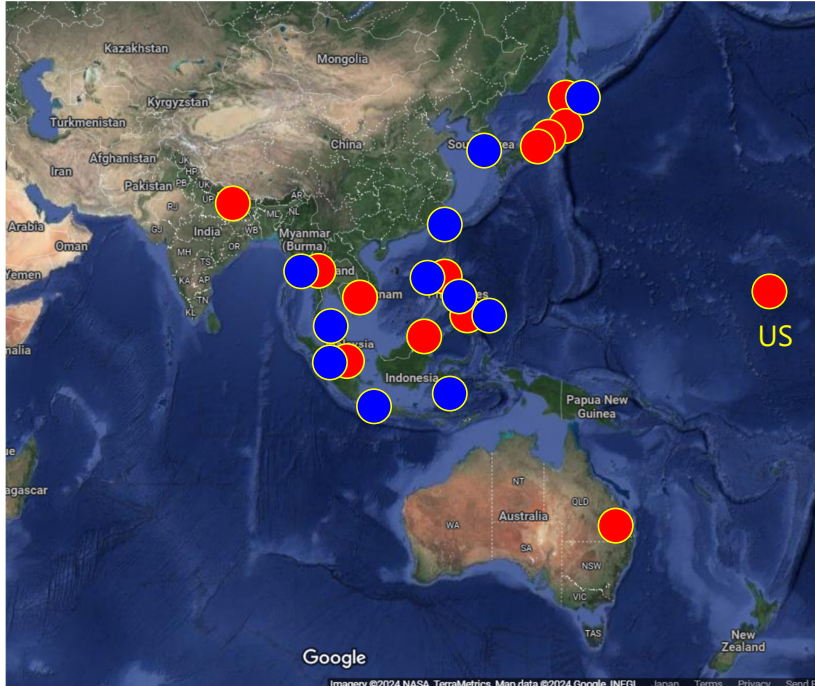
- Q1. First, what is your country (or region)?
- Q2. Please list existing information on biodiversity and ecosystem observations in your country or region.
data type, description, region, taxa, no. of surveys, start and end years, agency, data availability
- Q3. Using the list above as a guide and considering those data sources expected in the Kunming-Montreal GBF, please list the data that we need, focusing on coverage that is lacking for your country or region.
- Q4. Considering the data we need, are there any broad observation gaps for themes/regions (terrestrial, freshwater, coastal, marine)?
- Q5. Please comment on the status of long-term monitoring sites in your country or region
- Q6. How can the observation activities or facilities in your country or region be considered as part of a global biodiversity observation system (GBIOS; see attached presentation by GEO BON)? What are the strengths of APBON to advance biodiversity observations for the globe?
- Q7. What kinds of engagement do we need (or want) to fill the gaps in data and knowledge, as well as address expectations for national, regional and global cooperation? This can include engagement with observation communities, users, etc.
- Q8. Are there opportunities for cooperation with the national GEO secretariat or relevant committee?
- Q9. Please list what is needed for capacity development for different sectors (researchers, data users including facilitators who bridge observations and policy and citizen scientists, indigenous Peoples and Local communities.
- Q10. Please list needed aspects of data infrastructure.

APBON Survey *(Modified from the APBON survey to cover more specific aspects on marine biodiversity monitoring)*

- Q1-4: Demographic questions
- Q5. Please list existing information on biodiversity and ecosystem monitoring in your country or region.
5A: Name, Description, Data type, Taxa, Start and end years, Number of surveys, Agency, Data Availability
- Q6. How have the data from the above-mentioned programs been used in practice, e.g. for actual impact assessment, conservation or ecosystem managements, and what are the major challenges to keep doing the program in the long run?
- Q7. What types of data are lacking in the above-mentioned programs for promoting effective biodiversity conservation? Please note the general data type (spatial, temporal, taxonomic, thematic, etc.) and provide brief summaries of key elements as needed.
- Q8. Considering the needs for promoting effective biodiversity conservation, are there any broad observation gaps in your country/regions?
- Q9. Please give us the general comments on the status of long-term monitoring in your country or region, focusing on the points below: A: Types of data, B: Locations of biodiversity observation, C: Data ownership and accessibility, D: Data curation, E: Language of data, F: Resources (fund, manpower, etc.) to continue long-term monitoring, G: Involvement of research activities by APMBON members and others
- Q10. How can the observation activities or facilities in your country or region be considered as part of a global biodiversity observation system, such as OBIS, GBIF and GBIOS? What are the strengths of APMBON to advance biodiversity observations for the globe?
- Q11. What kinds of engagement do we need (or want) to fill the gaps in data and knowledge, as well as address expectations for national, regional and global cooperation? This can include engagement with observation communities, users, etc.
- Q12. Please list what is needed for capacity development for A: local researchers, B: data and knowledge users (governments, society in general, etc.), C: Data managers, D: facilitators who bridge observations and policy and E: Data collectors
- Q13. Please list needed aspects of data infrastructure



Tentative results of the survey



● **APBON Survey**
13 reports (from 8 countries/regions)

● **APMBON Survey**
11 reports (from 7 countries/regions)

2 overlaps



Types of data and coverage (APBON)



In situ observation data

Database from various sources

Internet media (SNS etc.)

Remote sensing

Herbarium

eDNA

Policy data (e.g. protected area)



Program period, budget and data access (Marine monitoring programs)

	Start year	End year	Budget size (\$US/yr)	Data access
Japan	2008	2023+	ca. 500,000	Open to public, Link to OBIS
Korea	2015	2023+	ca. 3,000,000	Open to public
Taiwan	2023	2024	100,000	Restricted to members
Philippines	2022	2024+	80,000	Restricted to members
Philippines	2015	2023+	?	Open to public
Philippines	2022	2023	?	Limited access
Indonesia	2014	2019	?	Restricted to members
Indonesia	2008	2012	ca.1,000	Restricted to members
Malaysia	1972	2016	1,730,000	Restricted to members
Thailand	2015	2023+	?	By paper publications



What are the major challenges to continue the programs?

- Even it is successful at the moment, it may face with **budget cut** in any times.
- **Funding**
- Systematically and comprehensively integrated analysis of collected data
- **Manpower**
- Funding and **community engagement**
- The capacity and capability of **the local people's organizations and LGUs**
- **Long-term support** of government
- **Fund and human resources**
- **Dedicated funding** to run the surveys
- **Connection between collected data (and resulting analysis) and decision making**
- **Financial support**



Language issues



- Local languages are necessary when non-scientists are involved in the programs.
- Additional resources (manpower and money) are required to translate them to English and put them to global databases.
- Automatic translators will solve this problem?



How can we link the output of the monitoring programs to the global biodiversity observation systems?

- We need **more systematic approach** to link the data to global database. Monitoring Sites 1000 Coastal Program, the data are uploaded to OBIS although the efforts are **based on voluntary efforts** and thus not sustainable.
- **Cooperation with institutes** related to long-term monitoring and biodiversity
- Regular compilation, sharing and reporting of datasets should be publicly available
- Appropriate institutional arrangements such as a **MOU** may be undertaken to facilitate such a linkage for global biodiversity observation programs.
- **Knowledge of researchers to these existing global biodiversity database should be enhanced.**
- The data we collected were isolated to institutions, but should be open for data sharing through applicable platforms.
- Alignment with the country protocol



Take home messages

- Marine biodiversity monitoring programs exist in most countries of east and SE Asia, either by governmental or institutional supports. However, the recourses are quite limited to cover the wide coastline of this region and to continue the regular monitoring over the long run.
- Sustainable financing from multiple sources beyond government-based sources would be essential to ensure longevity of monitoring programmes.
- Not only resources, but also awareness on the importance of monitoring and on sharing the data with international community is insufficient, which should be increased with appropriate communication and education.
- To upload more EBVs/EOVs to global databases, more systematic approaches should be developed with appropriate resources (funds and manpower).



Next steps

- Increasing the number of responses to the survey
- Ongoing biodiversity monitoring vs the use of data collected by other activities
- Conversion of observed data to EBVs, and to Key Indicators
- Listing up gaps, challenges, opportunities and perspectives.

Will be discussed in the workshop on Feb 21-22

Output

- While paper to send our recommendation to CBD-KMGBF authorities (GEOBON, IPBES and person in charge in each government (like BIODIC in Japan)
- Perspective submitted to a peer-review journal (e.g. Ecological Research)