Oct 19, 2021 | APBON workshop

Marine Working Group

Attendees:

Massa Nakaoka Angela Quiros Mangal Shakya Po Teen Lim Ryosuke Sahara Tadashi Kajita Yoshihisa Shirayama

Notes

Kit Elloran, ASEAN Centre for Biodiversity

- Current status of OBIS: how to increase its contents and accessibility
- Most data are from national museums and landing sites and there is a gap in Asean countries. Open access, greater users from USA, Australia, Canada, England, Germany, France
- Most data coming from ASEAN Countries are in various formats
- Not interoperable in Darwincore format

Summary

It is evident that there are still various challenges that may arise to address the biodiversity data gaps and these are

- Delay in data availability and accessibility
- New data types, structures, technologies
- Taxonomic, temporal and geographical gaps
- Multi-partnership engagements
- Various clients, different thematic interests

Comment by Yoshihisa Shirayama: we can handle data from any region and can share with OBIS if authors agree

Dr. Tadashi Kajita, University of the Ryukyus

- Formation of a Research Network toward Global Scale Biodiversity monitoring of Mangrove Ecosystem by Using eDNA Metabarcoding
- Summary
 - eDNA metabarcoding method will be an effective tool to study diversity of fishes and crustaceans in the mangrove environment.
 - By developing research methods for other organisms (various benthic animals such as mollusks), we can rapidly and massively accumulate data on biodiversity in mangrove environments.
 - The most fundamental basis of eDNA metabarcoding is the accumulation of reference data by conventional taxonomic studies. In parallel with the research using eDNA, it is necessary to enrich the reference database.
 - Through the JSPS C2C project, we aim to establish an infrastructure to use eDNA metabarcoding in mangroves on a global scale.

- Comments:
 - Comment by Mangal Shakya: mangroves in Bangladesh are linked to the Himalayas
 - Comment by Yoshihisa Shirayama: OBIS is starting work with eDNA, international webinar to start soon, (28 Oct. 2021. "OBIS webinar on genetic data"
 "<u>https://obis.org/2021/10/13/gendatawebinar/</u>). The new movement of UNESCO for eDNA can be seen here: https://ednaexpeditions.org
 - Comment by Po Teen Lim: to consider other groups of marine organisms in assessment of ecosystem health and changes https://www.sciencedirect.com/science/article/pii/S1568988321001074

Dr. Massa Nakaoka, Hokkaido University

- UN Decade of Ocean Science and ML2030 (Massa Nakaoka)
 - Lead institution: Smithsonian
 - Collection of on-going activities, a way to link networks and to link the networks to stakeholders and decision makers
 - Project time period: July 2021 Dec 2030, global framework that covers every ocean
 - Fundraising the most important objective
 - Integrate MBON and OBIS for more effective biodiversity monitoring
 - Endorsed by the UN Decade of Ocean Science

- Ongoing activity: UN Ocean Decade kick off conference for Western Pacific and its adjacent areas; AP-MBON session accepted in the incubation session for Nov 25-26 <u>https://www.ioc-westpac.org/decade-kickoff-conference/</u>

Action items

- Linking ocean with its sources rivers, mountain and himalaya
- Identifying funding opportunities and secure new funding to support these initiatives and plans
- Reaching out and engaging wider marine communities especially young researchers and conservationist in these initiatives
- Exploring corporate funding possibilities for AP MBON initiatives
- Capacity building in digitization of Marine Biodiversity Data
- Identifying the knowledge gap and the need for capacity building in data poor region