

Workshop on Marine Biodiversity Conservation and Marine Protected Areas in the Northwest Pacific

by Vladimir Kulik



Fig. 1 The participants of the NOWPAP/NEASPEC workshop on “Marine biodiversity conservation and marine protected areas in the Northwest Pacific”, March 13–14, 2013, in Toyama, Japan. The photo was provided by the Special Monitoring and Coastal Environmental Assessment Regional Activity Centre (CEARAC) of NOWPAP.

The beautiful city of Toyama, Japan, 300 km northeast of Tokyo, was the setting on March 13–14, 2013, for a workshop on “Marine biodiversity conservation and marine protected areas in the Northwest Pacific”. The workshop was convened by NOWPAP (Action Plan for the Protection, Management and Development of the Marine and Coastal Environment of the Northwest Pacific Region; part of the Regional Seas Program of the United Nations Environment Program; <http://www.nowpap.org/>) and NEASPEC (North-east Asian Sub-program for Environmental Cooperation; <http://www.neaspec.org/>). The objectives of the workshop were: (1) to share information on methodologies for marine environment assessment and the current status of Marine Protected Areas (MPAs) in member states of NOWPAP, and (2) to discuss the programs and operations of the proposed North-east Asian MPA network. PICES was invited to participate in this workshop, and was represented by Dr. Vladimir Kulik, a member of the PICES Working Group 28 on *Development of Ecosystem Indicators to Characterize Ecosystem Responses to Multiple Stressors*. In addition to PICES, other participants at the workshop

included experts from all NOWPAP member states (Japan, People’s Republic of China, Republic of Korea and the Russian Federation) and from international organizations such as the Helsinki Commission (HELCOM; <http://www.helcom.fi/>) and the IOC Sub-Commission for the Western Pacific (IOC/WESTPAC; <http://www.unescobkk.org/westpac>). In total, more than 20 people attended the workshop (Fig. 1).

The motivation for the workshop was responsibilities to contribute to marine biodiversity conservation and sustainable use of marine ecosystem services in the NOWPAP region. The meeting had presentations and shared information on details of MPAs in the region, including definition, categories and monitoring/management status in each member state of NOWPAP. An information sheet was developed and will be finalized based on additional information provided after the workshop. The meeting discussed the similarities and differences in the definitions of MPAs among the member states and recognized the usefulness of such information for future considerations to improve the management of MPAs. Information was also shared on the challenges of

maintaining and managing MPAs, as well as future plans to design and expand these areas, including the possible application of the Ecologically or Biologically Significant Sea Area (EBSA) concept developed by the United Nations (UN) Convention on Biological Diversity (CBD; <http://www.cbd.int>) and other organizations.

The meeting learned about ongoing related activities for assessing the marine environment being conducted by PICES, HELCOM and IOC/WESTPAC, which were recognized as being useful for the conservation of marine biodiversity in the NOWPAP region. The necessity of Ecological Quality Objectives for the NOWPAP region was stressed as a basis for setting targets for assessment and appropriate management. Collaborations among the NOWPAP member states and other regional organizations such as PICES towards the conservation of marine biodiversity were acknowledged as being crucial. Of special interest to PICES was a presentation by Dr. Maria Laamanen (HELCOM) on “*Comprehensive ecosystem assessment for marine biodiversity conservation*”. She noted that they have reached the 10 % target set by the UN CBD for a regional network of MPAs in the Baltic Sea. However, the present network may not be entirely ecologically coherent if adequacy, representativity, replication and connectivity are the primary criteria used for its assessment. The most important problems they have encountered in evaluating the effectiveness of this network of MPAs are nonlinearities and thresholds in the ecosystem recovery process. Therefore, reaching some of the targets did not lead to convergence with other targets from the same domain. As a result, widely used simplifications in the models of ecosystem assessment such as linearity and additivity must be reconsidered. HELCOM member states are in the process of summarizing their achievements in assessing the progress towards reaching HELCOM objectives for a healthy Baltic Sea, which are available at http://www.helcom.fi/BSAP_assessment/en_GB/main.

At its conclusion, the NOWPAP/NEASPEC workshop recommended the following:

- The regional monitoring centre for NOWPAP to assess the availability of data and to consider the collection of metadata and the development of assessment tools based on the available data for marine biodiversity conservation in the NOWPAP region;
- Recognizing that the indicators employed by HELCOM and those being studied by PICES are useful references for the NOWPAP region, to consider the availability of data and different conditions in the marine environment in the NOWPAP region when selecting indicators;
- Strengthen collaboration with relevant partners, for example, PICES, HELCOM and IOC/WESTPAC, when conducting the above tasks.



Fig. 2 PICES WG 28 presentation at the NOWPAP/NEASPEC workshop.

The full meeting report, with details from each NOWPAP member state, and all presentations (including that given by the author of this article (Fig. 2) on behalf of PICES WG 28) are available on the workshop website at http://www.cearac-project.org/NOWPAP_NEASPEC_Workshop/NOWPAP_NEASPEC_Joint_Workshop.htm.



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