

REPORT OF ADVISORY PANEL ON MARINE BIRDS AND MAMMALS



The seventh meeting of the PICES Advisory Panel on *Marine Birds and Mammals* (hereafter MBM-AP) was held from 19:00–21:30 hours on October 30, 2007. Drs. Hidehiro Kato and William J. Sydeman, MBM-AP Co-Chairmen, called the meeting to order and welcomed the members and observers (*MBM-AP Endnote 1*). The participants reiterated the need for the Panel which serves to generate interest in marine birds and mammals within the PICES community, and has been active in coordinating and facilitating multi-disciplinary investigations, symposia, and workshops for PICES (see *MBM-AP Endnote 2*). The draft agenda was reviewed and approved (*MBM-AP Endnote 3*).

PICES XVII Topic Session (Agenda Item 3)

The BIO/FIS/POC Topic Session on “*Phenology and climate change in the North Pacific: Implications of variability in the timing of zooplankton production to fish, seabirds, marine mammals and fisheries (humans)*” (S11) was held two days after the MBM-AP meeting. Seventeen oral papers and 2 posters were presented. The session was expanded from ½ day to a full day due to high subscription. It was designed to be multi-disciplinary, including presentations on phytoplankton, zooplankton, fish and birds. A positive response from potential contributors is anticipated about publishing papers from the session in a special issue of a primary journal to be decided.

Updates to WG 11 report on marine birds and mammals and publications from previous MBM-AP workshops (Agenda Item 4)

The Panel discussed publications arising from previous MBM-AP workshops on time series of predator diets in the North Pacific held at PICES XIII and PICES XIV. This issue was discussed at last year’s meeting as well. No progress has been made to publish these data as a compendium or theme section in a journal.

Some material has been published independently by the contributors. Therefore, it was decided that this idea would not be pursued further.

The Panel spent a great deal of time considering the possibility of updating and revising the PICES Scientific Report on “*Predation by marine birds and mammals in the subarctic North Pacific Ocean*” (Hunt *et al.*, 2000) produced by PICES Working Group (WG 11) on *Consumption of Marine Resources by Marine Birds and Mammals*. It was agreed that this report is extremely valuable to the PICES community and that new data are available for an update. MBM-AP thought that providing a new report to the PICES community by 2010 would be a reasonable goal but that funding for the project would probably be necessary to update the document as envisioned. There are many excellent new datasets on both populations and diet that could be brought to the report to improve estimates of prey consumption. The Panel supported this idea as a high priority project, and will be seeking external support for updating the WG 11 report.

Various MBM-AP members volunteered to speak with members of the PICES modeling community to ascertain their needs, and to coordinate the update of the WG 11 report with modelers. The possibility of an inter-sessional PICES-sponsored MBM-AP/CFAME workshop to facilitate use of prey consumption estimates by modelers was discussed.

Activities at PICES XVII (Agenda Item 5)

MBM-AP proposed to convene a ½-day Topic Session on “*Seabirds and marine mammals as environmental indicators*” at PICES XVII (*MBM-AP Endnote 4*). The development of the session will be coordinated with BIO and MEQ.

Other potential Topic Sessions or workshops were “migration” and “birds and mammals as

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oceanographers". These will be addressed in the future.

Participation in MBM-AP (Agenda Item 6)

There has been good participation on the Panel by Canada, Japan and the United States, and a Korean scientist attended the meeting on behalf of Panel member, Dr. Zang-Guen Kim. The Panel is concerned by the lack of national participation in its activities and recommends that:

- China be requested to assign experts on marine birds and mammals to the Panel; and
- Canada and Korea be asked to nominate seabird expert to serve on the Panel.

Report of the Pacific CPR: Marine Bird and Mammal Project (Agenda Item 7)

Dr. Sydeman reported on the accomplishments of the Continuous Plankton Recorder (CPR) Marine Bird and Mammal Project. The project has conducted 16 surveys of the North Pacific between June 2002 and June 2007. Funding for the project has been provided by the North Pacific Research Board. A number of papers have been published or are in preparation. A report on this project was also presented at the CPR-AP meeting on October 28, 2007. The MBM-AP recommends continuation of the project and hopes that existing and new funding can be procured.

MBM-AP Endnote 1

Members

Hidehiro Kato (Japan, Co-Chairman)
Rolf Ream (U.S.A.)
William J. Sydeman (U.S.A., Co-Chairman)
Andrew Trites (Canada)
Yutaka Watanuki (Japan)

National reports on climate change and marine birds and mammals (Agenda Item 8)

Due to time constraints, the Panel did not receive country reports on these activities.

Cooperation with IWC (Agenda Item 9)

Last year, Dr. Kato was nominated to serve as a liaison between PICES and the International Whaling Commission (IWC). His report of the 2007 IWC Scientific Committee meeting is included as *MBM-AP Endnote 5*.

Terms of Reference (Agenda Item 10)

The terms of reference were discussed (*MBM-AP Endnote 2*) and supported as written.

Vision statement (Agenda Item 11)

There was no discussion on this topic.

Other matters (Agenda Item 12)

Content of the PICES website on activities of MBM-AP requires some revision. The Panel members agreed to review the website and make suggestions for improving it.

There was discussion about the PICES North Pacific Ecosystem Status Report, and approach for its update (similar discussions were held last year). MBM-AP members and observers plan to contribute to the revision of this report.

Participation list

Observers

Douglas F. Bertram (Canada)*
Seok-Gwan Choi (Korea)

* former MBM-AP Co-Chairman

MBM-AP Endnote 2**MBM-AP Terms of Reference**

1. Provide information and scientific expertise to the Biological Oceanography Committee, the CCCC Program, especially the Climate Forcing and Marine Ecosystems (CFAME) Task Team, and when necessary, to other Scientific and Technical Committees with regard to the biology and ecological roles of marine mammals and seabirds;
2. Identify important problems, scientific questions, and knowledge gaps in assessing the roles of marine mammals and seabirds in marine ecosystems;
3. Assemble relevant information on the biology of marine mammals and sea birds and disseminate it to the PICES community through scientific reports and symposia;
4. Develop strategies to improve collaborative, interdisciplinary research with marine mammal and seabird researchers and the PICES scientific community.

MBM-AP Endnote 3**MBM-AP meeting agenda**

1. Welcome and introductions
2. Adoption of agenda
3. Review of upcoming BIO/FIS/POC Topic Session on “*Phenology and climate change in the North Pacific*” (S11)
4. Discussion of revision to the WG 11 final report and publication of results arising from previous MBM-AP workshops (PICES XIII and PICES XIV) on time series of predator diets in the North Pacific
5. Planning for PICES XVII (Dalian, China)
6. Participation in MBM-AP from member countries
7. Report of the Pacific CPR Program: Marine Bird and Mammal Project
8. Country reports – climate change and marine birds and mammals
9. Cooperation with the International Whaling Commission (IWC)
10. MBM-AP terms of reference – review
11. Vision statement – review
12. Other matters

MBM-AP Endnote 4

**Proposal for a ½-day BIO/MEQ Topic Session at PICES XVII on
“*Seabirds and marine mammals as environmental indicators*”**

Marine birds and mammals have been shown to be sensitive indicators to changes in marine ecosystems. As highly visible upper trophic level secondary and tertiary consumers with high metabolic rates, changes in food webs and human impacts on marine environments are often amplified and revealed in the biology of these predators. For this session, we seek papers that: (1) demonstrate how and when marine birds and mammals can be used to monitor and evaluate ecosystem status and “health” (*e.g.*, HABs, contaminants, prey fields); (2) address new studies to improve the concept of seabirds

and marine mammals as ecosystem indicators; and (3) present case studies on how this approach and information is and/or can be applied to pressing management and conservation questions.

Recommended convenors: Hidehiro Kato (Japan), Rolf Ream (U.S.A.) and Andrew Trites (Canada).

Recommended invited speakers: William Montevecchi (Canada) and Peter Ross (Canada).

MBM-AP Endnote 5

PICES observer report on the 59th IWC Scientific Committee Meeting
(Hidehiro Kato, Tokyo University of Marine Science and Technology, Japan)

The 59th Scientific Committee (SC) meeting of the International Whaling Commission (IWC) was held May 7–18, 2007, in Anchorage, Alaska. A total of 224 participants from 32 countries, including 64 invited experts, participated. A total of 13 international organizations (CMS, ICES, IATTC, ICCAT, CCAMLR, SO-GLOBEC, NAMMCO, IUCN, FAO-COFI, PICES, CITES, ECCO and SPAW) sent their observers to the meeting. PICES was especially welcomed by the IWC/SC.

There are seven sub-committees (*Revised management procedure; Aboriginal Subsistence Whaling Management Procedure; Bowhead, Right and Gray whales; In-depth assessment; Southern Hemisphere whales; Small cetaceans; Whale watching*) and six working groups (*Aboriginal whaling management procedure; Stock definition; Bycatch and other human-induced mortality; Environmental concerns; Ecosystem modeling; Special permit*) under the Scientific Committee. Every substantial issue has to be discussed by the sub-committee or the working group, and then forwarded to plenary of the committee. The Scientific Committee has worked mainly on comprehensive assessments (CA) of whale stocks, on implementation trials of Revised Management Procedure (RMP) after the cessation of commercial whaling, and agreed on the scientific base of RMP in 1996.

This year, the Scientific Committee focused especially on reviewing stock status of Southern Hemisphere humpback whales, Antarctic and

North Pacific minke whales under the CA, as well as Western North Pacific gray whales with some concerns of recent entanglements. For a renewal of catch quota by aboriginal and subsistence whaling, there were comprehensive reviews on stock structure and other population parameters of bowhead whale stocks. Also discussions on JARPA (the Japanese scientific permit program in the Antarctic) review workshop were highlighted. The Scientific Committee also continued work on the general RMP issue, including implementation trials for Western North Pacific Bryde's whales and North Atlantic fin whales.

Under environmental issues, emerging and resurging diseases, handling of cetacean entanglements were mainly dealt with by the Working Group on *Environmental Concerns*, in addition to a review of pollution (Pollution 2000+) and cetacean habitats (SOCER – State of Cetacean Environment Report) programs including collaboration with SOWS and CCAMLR. It is also planned to have a workshop on “*Climate change and cetaceans*” in the near future.

This year, the Scientific Committee established an ecosystem modeling sub-group with focus on modeling of krill–krill predators in the Antarctic (in cooperation with CCAMLR) and ecological interaction (in cooperation with FAO).

The next annual Scientific Committee meeting will be held June 1–13, 2008, in Santiago, Chile.