

# **Action Plan for the Biological Oceanography Committee for the period between the end of the PICES XVI in Victoria, Canada and the end of PICES XVII in Dalian, China**

**December 4, 2007**

## **Mission**

The Biological Oceanography Committee will be active within PICES to (a) better understand North Pacific ecosystems and how they are changing (b) help identify actions needed by society to cope with change, minimize damage and/or restore North Pacific ecosystems, and (c) demonstrate how various ecosystem states in the North Pacific Ocean can affect humans. This mission requires research and monitoring to provide increased knowledge and better models, and enhancement of linkages between science and society.

## **Strategy**

The Biological Oceanography Committee will address each of the themes and goals in the PICES Strategic Plan

### Theme A. Advancing Scientific Knowledge

Goal 1. Understand the physical, chemical and biological functioning of marine ecosystems

Action 1.1 Convene theme sessions and workshops on biological aspects of this goal at annual PICES meetings

- Task 1.1.1 Convene or co-convene four sessions at PICES XVII to improve the understanding of marine ecosystems of the North Pacific Ocean:
1. BIO paper session – ½ day or 1 day. Conveners: M. Dagg, M. Kishi and A. Pena
  2. BIO/MEQ ½ day session on “*Seabirds and Marine Mammals as Environmental Indicators*”. Conveners: Andrew Trites, Rolf Ream and Hidehiro Kato
  3. BIO 1 day session - “*End to End Foodwebs: Impacts of a Changing Ocean.*” Conveners: Sinjae Yoo, Hidehiro Kato, 1 other TBN. (IMBER co-sponsored)
  4. MONITOR/BIO session on “*Linking Biology, Chemistry and Physics in our Observational Systems – Present Status and FUTURE needs.*” Conveners: Jeffrey Napp, Young-Jae Ro, others

- Task 1.1.2 Facilitate and encourage the activity of the BIO Advisory Panels and Working Groups.
1. A new working group (WG 22) titled “*Iron Supply and its Impact on Biogeochemistry and Ecosystems in the North Pacific Ocean*” has been initiated. Co-chairmen will be Dr. Shigenobu Takeda (Japan) and Dr. Fei Chai (USA).
  2. A new working group (WG 23) titled “*Comparative Ecology of krill in coastal and oceanic waters around the Pacific Rim*” has been initiated. Co-chairman will be William Peterson (USA), Sun Song (China), and Hiroaki Saito (Japan).
- Task 1.1.3 Convene a workshop on the Okhotsk Sea in August 2008
- Task 1.1.4 Convene a workshop on OECOS at PICES XVII
- Task 1.1.5 Convene a summer school in 2008 titled “Biomass Based Management”
- Task 1.1.6 Review and approve new Terms of Reference for the POC/BIO CC-S.

Goal 2. Understand and quantify the impacts of human activities and climate on marine ecosystems.

Action 2.1 Convene theme sessions and workshops at annual PICES meetings

- Task 2.1.1 Team with other committees, especially POC and FIS, to convene theme sessions at PICES XVII for understanding and predicting human and climate impacts on North Pacific ecosystems (see 1.1.1)

Goal 3. Provide advice on methods and tools to guide scientific activities

Action 3.1 Provide input to development of PICES’ “Future Integrated Science Program”

- Task 3.1.1 Conduct final review of the FUTURE Science Plan and provide input before final deadline.
- Task 3.1.2 Select a member of BIO to become a member of the FUTURE Implementation Strategy Writing Team

Action 3.2 Recommend standards for micronekton sampling

Task 3.2.1 MIE-AP to complete analysis of data from the Micronekton Intercalibration Experiments and submit draft report to BIO Committee at PICES XVII.

Action 3.3. Recommend standards for sampling of giant jellyfish

Task 3.3.1 Dr. Young Shil Kang (Korea) will lead the preparation of a report on sampling methodology and standards for giant jellyfish. This jellyfish is an increasing problem in coastal waters of the western Pacific. The report will be presented to the BIO Committee at the 2008 PICES meeting.

## Theme 2. Applying scientific knowledge

Goal 4. Provide scientific advice towards wise use of the North Pacific Ocean

Action 4.1 Provide the PICES Science Board and Governing Council with information necessary for PICES actions and endorsement regarding management of North Pacific resources.

Task 4.1.1 Provide input to the Science Board on FUTURE Implementation Strategy

Action 4.2 Publish reports and workshop proceedings

Task 4.2.1 Provide preliminary report at PICES XVII on the Sea of Okhotsk workshop to be held in August 2008

Task 4.2.2 Provide preliminary report at PICES XVII on the PICES/CREAMS Summer School to be held in August 2008

Task 4.2.3 MIE-AP to provide draft report on “Micronekton Intercalibration Experiments” to BIO Committee at PICES XVII.

Task 4.2.4 Provide preliminary report at PICES XVII on the OECOS workshop.

## Theme 3. Fostering partnerships

Goal 5. Promote collaboration with organizations, scientific programs and stakeholders that are relevant to the PICES goals

Action 5.1 Collaborate with organizations sharing BIO committee goals

Task 5.1.1 Provide report on PICES/ICES session at the 2008 ICES meeting in Halifax.

## Goal 6. Promote collaboration among scientists within PICES

Action 6.1. Collaborate with other PICES committees and groups within PICES to ensure cross-disciplinary understanding of the North Pacific Ocean and to strengthen linkages between empirical, monitoring, and modeling activities.

Task 6.1.1 All BIO theme sessions at PICES XVII to have co-chairs from more than one PICES country

## Theme 4. Ensuring a modern organization in support of PICES activities

### Goal 7. Provide an effective infrastructure to support PICES programs

Action 7.1 The Biological Oceanography Committee will function in an open and efficient manner in order to contribute effectively to the PICES mission

Task 7.1.1 Review the BIO Action plan and BIO committee science goals and priorities

Task 7.1.2 Report BIO committee activities including workshops, symposia, results from special sessions at society or other regular meetings, and results from theme sessions at annual PICES meetings to the Science Board in a timely fashion.

Action 7.2 Support active involvement of young scientists and graduate students in each BIO-sponsored activity.

Task 7.2.1. Conduct the 2<sup>nd</sup> PICES/CREAMS Summer School in August 2008

Task 7.2.2 Encourage young scientists to contribute oral presentations to the BIO paper session at PICES XVII.

## Theme 5. Distributing PICES scientific information

### Goal 8. Make the scientific products of PICES accessible

Action 8.1 Understand, quantify and broadly communicate the impacts of human activities on marine ecosystems, and how these impacts feed back to have consequences for humans.

Task 8.1.1 Work with PICES secretariat and other PICES committees to assure broad BIO outreach to the public