

DRAFT PICES Annual Meeting, Qingdao, China

S-CCME Meeting Agenda

Saturday, October 17, 2015, 8:55 -18:00

Chairman: Anne Hollowed (U.S.A.) and Shin-ichi Ito (Japan)

October 17

- 1) Welcome of new members, introductions, and nomination of a rapporteur
- 2) Adoption of agenda
- 3) Review of 2015 activities
 - a) 3rd Climate Change Effects on the World's Oceans symposium, Santos Brazil
 - b) Our common future under climate change symposium, Paris, France
 - c) Topic session G ICES Annual Science Conference, Copenhagen, Denmark
 - d) 2nd International Ocean Research Conference "One Planet One Ocean", Barcelona, Spain
- 4) Outcome of WKSICCME
 - a) IPCC scenarios
 - b) Model selection
 - c) Candidate regions
 - d) Core contacts for regional modeling teams
 - e) Core species
 - f) Core modeling approaches
- 5) Proposals for workshops and topic sessions for 2016
 - a) ICES/PICES intersessional workshop on socio-economic pathways, Brest, France May 2016
 - b) ICES workshop on SICCMME modeling update
 - c) PICES workshop on SICCMME modeling updates
- 6) Collaboration with other groups
 - a) Decadal forecasting
 - b) Scientific collaboration between PICES and ISC
- 7) Proposals for new meetings/workshops/conferences with PICES as co-sponsor
 - a) 2018 4th Climate Change Effects on the World's Oceans meeting
 - b) "Species on the Move International Conference", Hobart Tasmania. Conference sponsors: University of Tasmania and Institute for Marine and Antarctic Studies (<http://www.speciesonthemove.com/>). **See Appendix II "Species on the move letter.doc"**
- 8) Adjourn

Appendix I “S-CCME Goals”

Goals:

- Define, coordinate and integrate the research activities needed to understand, assess and project climate change impacts on marine ecosystems;
- Plan strategies for sustaining the delivery of ecosystem goods and services, and when possible predictions should include quantifying estimations of uncertainty;
- Define and quantify the vulnerability and sustainability of marine ecosystems to climate change, including the cumulative impacts and synergetic effects of climate and marine resource use;
- Build global ocean prediction frameworks, through international collaborations and research, building on ICES and PICES monitoring programs.

Core Elements of S-CCME Implementation Plan Phases (3 years in duration)

- Synthesis of existing knowledge;
- Advancement of new science and methodology;
- Communication of research findings.

Phase 1: 2012-2014

- **Synthesis of existing knowledge:**
 - Complete synthesis papers from the 2010 Sendai Symposium and 2012 Yeosu Symposium;
 - Interpret the vulnerabilities of marine ecosystems to changing climate.
- **Advancement of new science and methodology:**
 - Identify techniques for predicting climate change impacts in systems impacted by decadal variability;
 - Define the vulnerability of commercial species to climate change and identify which species would be most likely to experience shifts in spatial distributions;
 - Engage the global earth system modelling community in modelling climate change effects on marine ecosystems and identify opportunities for collaborations;
 - Build response scenarios for how the human community will respond to climate change.
- **Communication and integration of science through international symposiums:**
 - Publish results in peer reviewed literature;
 - Serve as symposium/session co-convenors;
 - Assist in preparing and convening the PICES/ICES/IOC Symposium on “*Effects of climate change on the world’s oceans*” (May 2012, Yeosu, Korea).

Phase 2: 2015-2017

- Continue to advance new science focused on climate change effects on marine ecosystems

through theme/topic sessions and workshops;

- Update and improve forecasts with IPCC AR5 scenarios;
- Convene an international symposium in 2016;
- Develop regional synthesis reports;
- Initiate inter-sessional training for projecting climate change impacts on marine ecosystems;
- Continue collaboration with global climate change research community.

Phase 3: 2018-2020

- Continue to advance new science focused on climate change effects on marine ecosystems through theme/topic Sessions and workshops;
- Update and improve predictions with IPCC AR6 scenarios;
- Develop regional synthesis reports;
- Convene an international symposium in 2018.

Appendix II "Species on the move letter"

From: **Stewart Frusher** <Stewart.Frusher@utas.edu.au>

Date: Thu, Jul 9, 2015 at 8:16 PM

Subject: RE: PICES and moving species!

To: Libby Logerwell - NOAA Federal <libby.logerwell@noaa.gov>, Anne Hollowed - NOAA Federal <anne.hollowed@noaa.gov>

Cc: Cisco Werner - NOAA Federal <Cisco.Werner@noaa.gov>, Michelle McClure - NOAA Federal <Michelle.Mcclure@noaa.gov>, "King, Jackie" <Jackie.King@dfo-mpo.gc.ca>, Gretta Pecl <Gretta.Pecl@utas.edu.au>

Dear Libby and Anne,

Thanks you for your quick response.

From your options I would suggest option B: Co-sponsorship – light. PICES puts in some money and helps with attendance of a few key PICES scientists; possibly as invited speakers and potentially also uses the Trust Fund to help get early career scientists to the meeting.

Two themes which we believe would be of particular interest to PICES, and we welcome PICES providing suggestions for keynote or invited speakers, would be "*Implications of species range change for health, food security and ecosystem services*" and "*Cultural, social and economic dimensions of range shifts and changing ecosystems*". Please also refer to the website (<http://www.speciesonthemove.com/>) for other themes or workshops that you may have interest in.

We are very keen to support the next generation of scientists to be working in this space and have a range of opportunities available. These include a *Mentor Matching* program (see attached) and an *Early Career Networking Function* where ECRs will have the opportunity to meet and discuss their research with the plenary and invited speakers. We have also allocated space in the program for "*Lightening Plenary's*" which we will allocate to top ECRs. PICES would be welcome to nominate and support a person for one of these Plenaries.

Finally, the special issue of Global Change Biology will include summary and synthesis papers from the Conference and we have still to put these teams together so there is substantial scope for PICES involvement in these large team papers, in addition to individual contributions from PICES scientists on their particular areas of research.

Kind regards

Stewart Frusher, Gretta Pecl and Alistair Hobday, on behalf of the Species on the Move Organising Committee.

Appendix III "PICES 2016 Topic Session and Workshop Proposals"

FIS/BIO Topic Session (1 day) for PICES in USA (San Diego) in 2016

Early life history stages as Indicators and Predictors of Climate Variability and Ecosystem Change

Conveners: Tony Koslow (USA), Richard Brodeur (USA), Ian Perry (Canada), Motomitsu Takahashi (Japan)

As management strategies become more ecosystem-based and climate-driven, there is a need for more information on the influence of oceanographic variability and climate change in regulating fisheries resources and on marine communities more generally. Ichthyoplankton abundance provides proxies for adult spawning stock biomass, so insight into changing fish communities can be obtained from ichthyoplankton time series. The early life stages of fish and invertebrates may also be critical in determining year class success and subsequent recruitment to fisheries. This session will examine changes in the abundance, distribution, and ecological relationships of early life stages (eggs to juveniles) of fish and invertebrate taxa in relation to climate. Studies that use these stages as indicators of ecosystem stress or long-term variability in relation to the ocean environment are encouraged, as are studies that use them as an indicator of future adult recruitment. Examples of the uses of ichthyoplankton or juvenile surveys in ocean observation programs and ecosystem assessment or management of stocks and in forecasting future trends in fisheries and fish communities are highly encouraged. The conveners especially seek presentations that examine the role early life stages may play in assessing ecosystem structure and dynamics and the vulnerability of ecosystems to climate change.

Possible Invited Speakers: Jon Hare (USA), John Dower (Canada), Akinori Takasuka (Japan), Yoshiro Watanabe (Japan), Suam Kim (Korea), Janet Duffy-Anderson (USA), John Field (USA), Miriam Doyle (USA), Sam McClatchie (USA), Zac Hsieh (China)

Non-PICES Collaboration: We would like to request co-sponsorship from ICES if we can get their approval. Will contact Jon Hare from the Northwest Atlantic and other members of the ICES Working Group on Atlantic Fish Larvae and Egg Surveys (WGALES) for possible co-sponsorship.