

W1 BIO Workshop

Lessons learned during MIE-1 and MIE-2: Reconciling acoustics and trawl data

Co-Convenors: *Evgeny A. Pakhomov (Canada) and Orio Yamamura (Japan)*

Micronekton is one of the important but largely understudied components of marine ecosystems functionally linking small zooplankton and higher trophic levels. Recent advances in acoustic devices and efforts to standardize sampling gears undertaken by both PICES and ICES communities have made the sampling of micronekton more precise. Nevertheless, the issue of inter-calibrating the growing number of micronektonic gears is still unresolved. The PICES Advisory Panel on *Micronekton Sampling Inter-calibration Experiment* (MIE-AP) has organized two field experiments (off Hawaii in 2004 and off Japan in 2005) to collect comparative data for several micronekton sampling gears and a wealth of acoustic information. The main objective of this workshop will be: (1) to finalize the analysis and to compare MIE-1 and MIE-2 data sets; (2) to present and discuss acoustic data sets from both cruises; (3) to compare ICES and PICES inter-calibration experiments; and finally (4) to discuss new developments in the field of micronekton quantitative techniques.

Sunday, October 28, 2007 18:00 – 21:30

- 18:00 **Introduction by convenors**
- 18:10 **Hiroya Sugisaki and Koichi Sawada (Invited)**
Introduction to J-QUEST research project: Quantification of micronekton using an integrated system of echosounder and stereo TV cameras (W1-4113)
- 18:40 **Réka Domokos, Evgeny A. Pakhomov, Michael P. Seki and Jeffrey J. Polovina (Invited)**
Acoustic characterization of the mesopelagic community off the Leeward coast of Oahu, Hawaii (W1-4229)
- 19:10 **Hiroki Yasuma, Kazushi Miyashita and Orio Yamamura**
Acoustic monitoring of a lanternfish *Diaphus theta* in the northwestern Pacific (W1-4331)
- 19:30 **Evgeny A. Pakhomov, M.P. Seki, A.V. Suntov, R.D. Brodeur and K.R. Owen**
Inter-comparison of three sampling gears during the first Micronekton Intercalibration Experiment (MIE-1): Size composition approach (W1-4086)
- 19:50 **Orio Yamamura**
Preliminary results of the 2007 MIE-3
- 20:10 **Discussion on:**
- New developments in the field of micronekton quantification: could acoustics be the way forward?
 - Is it possible to undertake a comparison between ICES and PICES inter-calibration experiments?
 - How far are we in the acoustic data set analyses?
 - Compatibility of acoustic and trawl data: Caveats, problems and solutions
 - Lessons from the MIE-3 cruise
 - An inter-sessional workshop to look at the data from 3 inter-calibration experiments and discuss drafting of the MIE-AP report (schedule, contents and allotment of writers)