

FRA/ APN/ IAI/ GLOBEC/ PICES Joint Workshop

***"Global comparison of sardine, anchovy and other small pelagics
– building towards a multi-species model "***

- Date:** 14-17 Nov. 2005
- Venue:** "Kiku no Ma" (Chrysanthemum room) in Hotel BlueWave Inn Asakusa
TEL +81-3-5828-4321
FAX +81-3-5828-6421
2-33-7, Asakusa, Taito, Tokyo, Japan
<http://www.orix.co.jp/bwinn/asakusa/index.html>
- Conveners:** S. Ito, M. Kishi, C. Werner, B. Megrey and K. Rose
- Organized by:** Fisheries Research Agency (FRA) Japan
- Sponsored by:** Fisheries Research Agency (FRA) Japan
Asia-Pacific Network for Global Change Research (APN)
Inter-American Institute for Global Change Research (IAI)
Global Ocean Ecosystem Dynamics (GLOBEC)
North Pacific Marine Science Organization (PICES)

Background and Objectives

Large scale, global fluctuations in populations of sardines and anchovies have been observed for the past century. The amplitude of fluctuation is high and contribute a disproportionate share of the total variability of the world harvest of fish. There are several intensive fishery grounds for sardine and anchovy and sardine and anchovy show asynchrony in all areas. Moreover, sardine shows synchrony in the whole Pacific (Humboldt Current, California Current, and Kuroshio Current areas). On the other hand, sardine does not show any systematic synchrony between Pacific and Atlantic. The out-phase asynchrony between sardine and anchovy reflects not only the differences of the life histories of them, but also bottom-up process driven by climate shifts. The in-phase synchrony of sardine population in the whole Pacific also suggests a bottom-up, climate driven component.

This climate induced variability have attracted many scientists in the world and an international

symposium "Long-term variability of pelagic fish populations and their environment" was held in Japan more than 15 years ago, in 1989. In the symposium, the sardine variability in the world were synthesized and some factors cause the variability were discussed. However, in recent decade, model techniques represent ecosystem response to the climate changes and computer powers have been evolved rapidly. For example, PICES MODEL Task Team built up an community ecosystem model "North Pacific Ecosystem MODEL for Understanding Regional Oceanography (NEMURO)", embedded with a fish bioenergetics model and applied to herring and saury, and compared their responses to the same climate scenarios.

In this workshop, focused on sardine and anchovy, 1) inter-annual and inter-decadal variability of marine ecosystems in key regions in the world are re-reviewed as the revisit of the 1989's symposium, 2) factors may cause the variability are discussed, 3) models applied to the variability are reviewed and 4) common model approaches applied to the world wide synchrony and asynchrony of sardine and anchovy are discussed and compare the response of them to the climate change in the model are compared in the key areas.

Agenda

Monday, November 14th

Review of variability of growth and biomass of sardine and anchovy in each region.

Tuesday, November 15th

Review of NEMURO.FISH and other models related to fish growth and population.

Wednesday, November 16th

NEMURO.FISH hands on.

Thursday, November 17th

NEMURO.FISH hands on and discussion on future collaborations

Abstract Submission

To help the understandings of each presentations and enhance the discussions beyond the native language gaps, printed abstracts will be circulate to the participants priori to the workshop. Also the abstracts will be opened on the FRA web page after the submission. The deadline for submission of abstract is November 1st, 2005. Please send a computer file of your abstract (PDF or Word file, Power Point File) by e-mail to goito@affrc.go.jp. Abstract format must comply with guidelines provided below.

Use 12 point pitch throughout the abstract and as the header information at least following information is needed:

TITLE (ALL CAPITAL LETTTERS)

Authors

Affiliations of all authors, postal & email addresses for the corresponding author.

After the header, leave one line blank and insert the contents. There are no page limitation and no restriction for figures except to keep 2 cm margins on A4 size papers.

Accommodation

A number of rooms are blocked and special rates have been negotiated at Hotel BlueWave Inn Asakusa, the venue hotel. The rate of the hotel is 10,625 yen for one night (including breakfast and lunch). Please send your check in & out date by e-mail to goito@affrc.go.jp to make reservation.