CCCC/CFAME Workshop on the development of a CFAME work plan and hypotheses for CCCC synthesis

Conveners: Kerim Aydin (U.S.A.) and Akihiko Yatsu (Japan)

The synthesis of CCCC (PICES-GLOBEC Climate Change and Carrying Capacity Program) knowledge of climate change and carrying capacity may focus on developing a workplan based on the proposed CFAME (*Climate Forcing and Marine Ecosystem Response*) Task Team guiding hypothesis. To facilitate this synthesis, CFAME recommends an interim workshop for a core group of CFAME scientists, in order to develop recommendations from the Study Group on *Fisheries and Ecosystem Responses to Recent Regime Shifts* and Working Group 16 on *Climate Change, Shifts in Fish Production, and Fisheries Management* into a concrete program for progress and the development of a CFAME workplan.

The scientific focus of this workshop will be the **TIME SCALES OF RESPONSE MECHANISMS** to specific climate shifts. It will approach the question: "Is there a sufficiently general conceptual model which may relate each life history strategist to patterns in lower trophic-level production?" It is hoped that tractable hypotheses may be outlined, for example the "flow hypothesis" for Pacific sardine, as discussed in the PICES III workshop on "Linking open ocean and coastal ecosystems II". Two invited scientists will aid in providing current hypotheses.

The development of the work plan will center on the comparison of the response of multiple life-history strategists in relation to climate. The preliminary list for discussion is: euphausiids, pollock, squid, sardines, pink salmon, saury, capelin, anchovy.

It is expected that preliminary results from the work initiated at this workshop will be submitted as one or more CFAME presentations at the CCCC synthesis symposium, in to be held in 2006.

### **AGENDA**

revised 2005/05/06

May 14-15, 2005 Salon B on the 2nd floor, Chateau Victoria Hotel Victoria, BC, Canada

### Saturday, May 14

17:30 Introduction, presentations and discussions of on-going national GLOBEC and
17:30 GLOBEC-like programs relevant to spatial and temporal scales and processes of response mechanisms to specific climatic regime shifts (1970/71, 1976/77, 1988/89 and 1998/99), especially with respect to carrying capacity using focus species: euphausiids, pollock, squid, sardines, pink salmon, saury, capelin, and anchovy.

## Sunday, May 15

09:30 - Development and adoption of CFAME work plan based on comparisons of presentations in Day-1.

#### DAY-1

- 09:00-09:30 Introduction, adoption of agenda, appointment of reporters, logistics: lead by Kerim Aydin and Akihiko Yatsu
- 09:30-09:45 CFAME hypotheses and purposes of the workshop: Akihiko Yatsu and Kerim Aydin
- 09:45-10:15 Inputs from FERRRS: Jackie King
- 10:15-10:45 Coffee
- 10:45-11:15 CCCC integration/synthesis and 2006 April Honolulu meeting: Hal Batchelder
- 11:15-11:45 Invited talk and discussion: Kazuaki Tadokoro "Decadal variations in mesozooplankton biomass in North Pacific with comparison of their environments"
- 11:45-12:05 A short review of climate indices and their suitability for what we are trying to understand: Skip McKinnell
- 12:05-12:20 A new POC WG on Climate Forcing: Mike Foreman
- 12:20-12:30 Exchange National figures produced with templates for KEY SPECIES
- 12:30-14:00 Lunch
- 14:00-14:45 Presentation by Canada and discussion:
- 14:45-15:30 Presentation by Japan and discussion: Akihiko Yatsu and Sanae Chiba
- 15:30-15:50 Coffee
- 15:50-16:35 Presentation by Korea and discussion: Sukyung Kang
- 16:35-17:15 Presentation by USA and discussion: Kerim Aydin and Jim Overland
- 17:15-17:30 Production-based models: Kerim Aydin

# DAY-2: lead by Kerim Aydin and Akihiko Yatsu

- 09:30-10:30 Commonalities and differences of biological responses among regions and target species (make tables similar to Table 2.1 of FERRRS report and comparative figures using templates)
- 10:30-11:00 Coffee
- 11:00-12:00 Possible causes of match and mismatch among species/strategy/area
- 12:00-14:00 Lunch
- 14:00-15:00 DEVELOPMENT and ADOPTION OF CFAME WORK PLAN and Recommendations for CFAME activities in conjunction to MODEL TT.
  - a. 2005 September/October annual meeting (Vladivostok)
  - b. 2006 April CCCC synthesis workshop (Honolulu)
  - c. 2006 annual meeting (Yokohama, Japan) proposal for recruitment issues under either CFAME or CCCC.
- 15:00-15:30 Coffee
- 15:30-16:45 DEVELOPMENT and ADOPTION OF CFAME WORK PLAN (continued)
- 16:45-17:00 Closing remarks and future activities