

W7: Climate Forcing and Marine Ecosystems Workshop

Friday, October 13, 2006

Co-Convenors

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CFAME Workpan

Three main stages outlined in CFAME Task Team's Terms of Reference (May 2005)

1. Mechanisms

- conceptual models of key biological processes in relation to climate forcing
 - growth, survival recruitment
- comparison, based on common methods, of key species and different life history strategies
 - January 2006 Workshop in Japan
 - presented at PICES/GLOBEC Symposium on “*Climate variability and ecosystem impacts on the North Pacific: A basin-scale synthesis*” April 2006, Honolulu, U.S.A.
 - A. Yatsu and CFAME Task Team “Mechanistic linkages of fish population dynamics to climatic forcing: Comparative study on selected stocks representing five life history strategies in the North Pacific”
 - manuscript submitted

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2. Ecosystems

- review and develop ecosystem indices
 - represent key processes linking climate, ocean and biology
 - review key ecosystems and outline **conceptual mechanisms** that link climate forcing to biota
 - identify **regional indicators** of interest and applicability for use in Scenarios
- October 13, 2006 Workshop in Japan
- changes in ecosystem structure in respons to climate forcing
 - in preparation for 2007 joint POC/CFAME collaboration

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3. Scenarios

- build upon identified mechanisms to investigate range of species and ecosystem responses to climate forcing scenarios and forecasts
 - distributional changes
 - changes in ecosystem community structure
 - changes in survival at life stages
- upcoming POC/CFAME workshop in 2007 for climate modelers to provide **regional indicators** identified in this workshop, and for CFAME to apply climate output to **developed conceptual models**
 - CFAME Business Meeting Sunday, October 14th 9:00 a.m.-12:30 p.m.

Workshop Objectives

Afternoon session

- methods of classifying ecosystems
- approaches for comparing ecosystem responses
- discussion on future ecosystem comparison work for CFAME
 - building on the overviews and conceptual models identified today
 - overall theme and focus
 - suggest topics for inter-sessional meetings
- in order to complete the “Scenarios” portion of the workplan and future CFAME/POC collaboration:
 - identify climate variables required from POC modelling work
- W7 workshop report and assignment of tasks