

END-TO-END MODELING WORKSHOP
Woods Hole, Massachusetts
18-22 April 2010

SUNDAY AFTERNOON, 18 April 2010

RECEPTION and PLENARY ADDRESS
Carriage House, Quissett Campus

- 3:30** Registration for Workshop Participants
4:00 Welcome and Introduction, John Steele
4:10 Plenary Address, Steve Murawski. *Ecosystem-based research in the oceans: academic curiosity or operational technology?*
5:15 Reception

Open to the entire WHOI Community. If you plan to attend, please send an RSVP to Mary Schumacher (mschumacher@whoi.edu) with “CAMEO Keynote” in the subject line by Tuesday, April 13.

DAY 1, MONDAY 19 April 2010

THEME PRESENTATIONS, Redfield Auditorium, Chair: Dian Gifford
Open to the entire WHOI/Woods Hole Community

MORNING

- 8.00** Registration for Workshop Participants
Light refreshments
- 8.30** INTRODUCTORY REMARKS AND HOUSEKEEPING: Dian and Mary.
- 8.45** THEME 1: END-TO-END MODELING APPROACHES
- 8:45** Kenneth Rose. *Can end-to-end models be assembled from existing models?*
- 9:30** Eileen Hofmann. *Physical-biological coupling in marine ecosystems and implications for food web models*
- 10:15** COFFEE BREAK
- 10:30** Michael Heath and John Steele. *Ecosystem limits to fisheries yields in the North Sea.*

11:15 THEME 2: MODEL SKILL ASSESSMENT

11:15 Marjorie Friedrichs. *Using data assimilation techniques to assess the advantages and limitations of various marine ecosystem model structures and parameterizations*

12:00 LUNCH ON YOUR OWN

AFTERNOON

1:30 THEME 3: APPLICATIONS TO MANAGEMENT

1:30 Di Jin, Porter Hoagland and Eric Thunberg. *An integrated economic-ecological framework for ecosystem-based fisheries management in New England.*

2:15 Kerim Aydin. *End-to-end models as a tool for ecosystem assessments: incorporating time series data and uncertainties.*

3:00 COFFEE BREAK

3:15 GENERAL DISCUSSION Leaders, Eileen Hofmann, John Steele and Kerim Aydin

3:45 ORGANIZATION OF BREAK-OUT GROUPS Leader, Eileen Hofmann

4:00 BREAKOUT GROUPS MEET

5:00 END DAY 1

DINNER ON YOUR OWN

DAY 2, TUESDAY 20 April 2010
Smith Conference Room, Chair, Kerim Aydin
By Invitation Only

MORNING

8:00 Light refreshments

8:30 Breakout Leaders Report. Rapporteur, TBD

9:15 Tammi Richardson. *Trophic web construction using inverse modeling approaches.*

9:45 Watson Gregg. *Modeling and data assimilation of global oceans using the NASA Ocean Biogeochemical Model.*

10:15 COFFEE BREAK & POSTERS

10:45 Howard Townsend, M. Sigrist, H. Ma and V. Christensen. *Modeling water quality to fisheries ecosystem in the Chesapeake Bay.*

11:15 Richard Brodeur, James Ruzicka and John Steele. *Alternate trophic pathways through gelatinous zooplankton and planktivorous fishes in an upwelling ecosystem.*

11:45 Daniel Costa, *The importance of top predators in marine ecosystems.*

12:15 LUNCH ON YOUR OWN

AFTERNOON

1:30 Jeremy Collie, E. Bohaboy, K. Curti, and M.-J. Rochet. *Multi-species models of the Georges Bank fish community.*

2:00 James Ruzicka, J. Steele and R. Brodeur. *Interannual variability in the Northern California Current food web: trophic relations inferred from annual pelagic surveys and response to variable upwelling-driven productivity.*

2:30 Jerome Fiechter, K. Rose, E. Curchitser, K. Hedstrom, M. Bernal, S. Ito, S. Lluch-Cota, B. Megrey, C. Edwardts, D. Checkley, A. MacCall, J. Koslow, S. McClatchie, K. Denman and F. Werner. *Development of an end-to-end ecosystem model: conceptual approach and application to population dynamics of anchovies and sardines in the California Current system.*

3:00 COFFEE BREAK & POSTERS

3:45 Breakout groups meet

5:00 END DAY 2

6:30 Workshop Dinner at Coonamesett Inn (dinner served at 7 pm)

DAY 3, WEDNESDAY 21 April 2010
Smith Conference Room, Chair, Eileen Hofmann
By Invitation Only

MORNING

8:00 Light refreshments

- 8:30** Breakout group leaders report. Rapporteur, TBD
- 9:15** John Steele and James Ruzicka. *Using ECOPATH data to construct E2E models.*
- 9:45** Jodie Toft, A. Guerry, M. Ruckelshaus, A. Day, K. Arkema, J. Davies, G. Giuannel, C. Kim, M. Papelfus, Y. Qi, and H. Talis *MarineINVEST: a tool for assessing and valuing changes in coastal and marine ecosystem services under alternative functions.*
- 10:15** Raghu Murtugudde. *Regional earth prediction system for CAMEO.*
- 10:45** COFFEE BREAK & POSTERS
- 11:15** Fei Chai, Y. Xu, F. Chavez, Y. Vhao and K. Rose. *Using remote sensing and modeling in operational forecasting of fisheries.*
- 11:45** Sarah Gaichas and Kerim Aydin. *Fishing policy simulations in end-to-end models.*
- 12:15** LUNCH ON YOUR OWN

AFTERNOON

- 1:45** Isaac Kaplan. *Can fisheries policy for the US west coast simultaneously sustain habitat, target species and ecosystem health?*
- 2:15** Thomas Ihde, T.J. Miller, M.J. Wilberg and D.H. Secor. *Project FishSmart: harnessing knowledge and insights of fishery shareholders through a model-informed decision making process.*
- 2:45** Bob Groman. *BCO-DMO: Managing modeling results.*
- 3:15** COFFEE BREAK & POSTERS
- 3:30** Breakout groups meet
- 5:00** END DAY 3

DINNER ON YOUR OWN

DAY 4, THURSDAY 22 April 2010
Smith Conference Room, Chair, John Steele
By Invitation Only

MORNING

- 8:00** Light refreshments

8:30 Breakout group leaders report. Rapporteur, TBD

10:00 COFFEE BREAK

10:30 General discussion & plans for journal volume. Leaders TBD

12:00 ADJOURN

POSTER PRESENTATIONS

Tosca Ballerini, D. Ainley, K. Daly, E. Hofmann, M. Marrari, C. Ribic, W. Smith and J. Steele. *An analysis of consequences of modifications to a Southern Ocean food web*

Dian Gifford and Suzanne Strom. *The importance of parameterizing lower trophic levels in end-to-end models.*

Robert Groman. *BCO-DMO: Management of modeling data.*

Kelly Kearney, C. Stock, J. Sarmiento. *Analyzing links between changing biogeochemistry and ecosystem shifts using an end-to-end ecosystem model.*

David Mountain. *Georges Bank--A case study for development of an E2E model-based management tool: a data analyst's perspective.*

Sevrine Sailley, H. Ducklow, S. Doney and H. Moeller. *Modeling of the West Antarctic Peninsula.*