

Bering Ecosystem Science | BEST Principal Investigators' Meeting

Bering Ecosystem Study Principal Investigators' Meeting

November 29, 2007
U.S. Coast Guard Base at Pier 36
Seattle, WA
Agenda

Thursday, 29 November 2007

PDF:

Greetings and introductions; overview of meeting goals
Carin Ashjian, Woods Hole Oceanographic Institution, long spring cruise chief scientist

N/A

Topics to be discussed on Friday at Healy meeting
David Forcucci, U.S. Coast Guard science liaison

N/A

Brief project overviews

The impact of changes in sea ice extent on primary production, phytoplankton community structure, and export in the eastern Bering Sea

[PDF: 112K](#)

S. Bradley Moran, University of Rhode Island
Michael Lomas, Bermuda Biological Station for Research

Nitrogen supply for new production and its relation to climatic conditions on the eastern Bering Sea Shelf

[PDF: 223K](#)

Raymond Sambrotto, Columbia University
Daniel Sigman, Princeton University

Mesozooplankton-microbial food web interactions in a climatically changing sea ice environment

[PDF: 525K](#)

Evelyn Sherr, Oregon State University
Barry Sherr, Oregon State University
Carin Ashjian, Woods Hole Oceanographic Institution
Robert Campbell, University of Rhode Island

Fish and macrozooplankton acoustics

[PDF: 200K](#)

Alex De Robertis, National Oceanic and Atmospheric Administration

Ichthyoplankton surveys

[PDF: 499K](#)

Nicola Hillgruber, University of Alaska Fairbanks
Janet Duffy-Anderson, National Oceanic and Atmospheric Administration
Jeff Napp, National Oceanic and Atmospheric Administration
Ann Matarese, National Oceanic and Atmospheric Administration
Lisa Eisner, National Oceanic and Atmospheric Administration

The trophic role of euphausiids in the eastern Bering Sea: Ecosystem responses to changing sea-ice conditions

[PDF: 154K](#)

Evelyn Lessard, University of Washington
H. Harvey, University of Maryland Center for Environmental Sciences

Sea ice algae, a major food source for herbivorous plankton and benthos in the eastern Bering Sea

[PDF: 49K](#)

Rolf Gradinger, University of Alaska Fairbanks
Katrin Iken, University of Alaska Fairbanks
Bodil Bluhm, University of Alaska Fairbanks

The role of ice melting in providing available iron to the surface water of the eastern Bering Sea shelf

[PDF: 273K](#)

Jingfeng Wu, University of Alaska Fairbanks

Denitrification and global change in Bering Sea shelf sediments

[PDF: 229K](#)

Allan Devol, University of Washington
David Shull, Western Washington University

Benthic ecosystem response to changing ice cover in the Bering Sea

[PDF: 560K](#)

Jacqueline Grebmeier, University of Tennessee Knoxville
Lee Cooper, University of Tennessee Knoxville

Stratification on the Bering shelf and its consequences for nutrients and the ecosystem: The effects of ice and coastal water advection

[PDF: 165K](#)

Knut Aagaard, University of Washington
Thomas Weingartner, University of Alaska Fairbanks

The impacts of sea-ice on hydrographic structure and nutrients over the eastern Bering Sea shelf

[PDF: 351K](#)

Phyllis Stabeno, National Oceanic and Atmospheric Administration
Terry Whittedge, University of Alaska Fairbanks

Rolf Sonnerup, University of Washington
Ned Cokelet, National Oceanic and Atmospheric Administration
Calvin Mordy, National Oceanic and Atmospheric Administration
Nancy Kachel, National Oceanic and Atmospheric Administration

Walrus-prey patch dynamics
Chad Jay, U.S. Geological Survey

N/A

Discussion: Identification of scientific gaps and if filled

Cruise sampling priorities and approaches

Short spring cruise (March 13-26)
Lee Cooper, cruise chief scientist

[PDF: 1.2MB](#)

Long spring cruise (March 29-May 6)
Carin Ashjian, cruise chief scientist

[PDF: 332K](#)

Summer cruise (June 20-July 18)
Ray Sambrotto, cruise chief scientist

[PDF: 431K](#)

Focused discussions

Chlorophyll methods and personnel

N/A

- size fractions
- Welshmeyer vs. acidification
- team
- analyze on board vs. freeze and take home

- nets and mesh sizes
- coordination of sampling

Environmental chambers

On-deck incubators

- placement
- water volume needs

Underway sensors - those on ship and those people are bringing

Logistic support and equipment needed from the NSF

- Vans (Rad, Chl, Isotope, Storage)
- Helicopters
- Scripps CTD participants
- Logistic support in ports
- Permitting

Berths - how many extra and what to do with them (by cruise)

Niskin bottles - size and materials

Review and discussion

Station events and sequence

N/A

- Process stations - long spring and summer
- Process stations in ice - long spring
- Short/survey stations - long spring and summer
- Short/survey stations plus daily activities - long spring and summer

Water needs from CTD

- Long spring
- Summer

Cruise tracks

- Short spring
- Long spring
- Summer

Laboratory space needs

- Hoods
- Freezers
- Refrigeration
- Flow-through sea water

- Deionized water
- Room that can be dark
- Gear storage - aft staging area, CTD hanger, room by elevator, hold

Closing discussion

- What do we need the ship to provide? (e.g., lead weights for nets; tie down bolts on bow)
- Connections to NPRB projects on other ships