

Live from IPY!

with Maggie Prevenas & Robyn Staup

3 May 2007

*Aboard the USCGC Healy
in the Bering Sea*





Raise your hand to ask a question

List of all participants

Return to the Lobby or Exit

Slides will be shown here

'Chat' with one person or the entire group

A screenshot of the HorizonWimba software interface. On the left is a chat window with a scrollable list of messages: "Connecting to server...", "You have connected successfully!", "You have entered the lobby.", "You have entered 'Arctic Research Consortium of the United States (ARCUS)'.", and "Your media format is Third-party Conference Call.". Below the messages is a text input field with "ALL" selected. In the center is a participant list with a header "Name" and a sub-header "Heleen_Wiggins". Above the list are icons for "Yes", "No", and a hand icon with a question mark. On the right is a menu with "Exit", "Lobby", and "Help" options. A red oval highlights the hand icon with a question mark, and another red oval highlights the "Exit Lobby - Help" menu item.



What is PolarTREC?

PolarTREC is a professional development experience in which K-12 teachers are paired with researchers in authentic polar research experiences.

In the next three years 36 teachers from around the United States will join scientists in the Arctic and Antarctic in celebration of the International Polar Year!

[*www.polartrec.com*](http://www.polartrec.com)



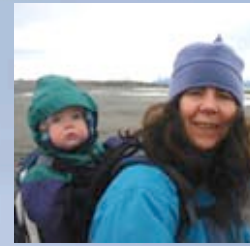
The PolarTREC Team



Wendy Warnick
PolarTREC PI
Executive Director



Helen Wiggins
Program Coordinator



Janet Warburton
PolarTREC
Project Manager



Katie Breen
PolarTREC
Project Manager



Kristin Fischer
PolarTREC
Project Assistant



Ronnie Owens
Web Developer



Ben Wade
Web Developer



Tina Buxbaum
Electronic Media
Project Manager

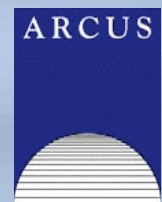


Zeb Polly
Systems Administrator



Joed Polly
Video Production

...with help from
the entire staff
at ARCUS





Who are we talking with today?

**PolarTREC & NOAA
Teacher at Sea Teacher**

Maggie Prevenas

Kalama Intermediate School
Hawaii



**PolarTREC Science
Educator**

Robyn Staup

Boonshoft Museum of Discovery
Ohio



Captain

Ted Lindstrom
USCGC *Healy*



Chief Scientist

Ray Sambrotto
Columbia University
New York



Researcher

Kris Swenson



Researcher

Didier Burdloff



Graduate Student

Emily Davenport

Robyn Staup
2007 PolarTREC Teacher



Maggie Prevenas

*2007 PolarTREC Teacher
& NOAA Teacher at Sea*



Emily Davenport

Graduate Student





***USCGC Healy
Captain
Ted Lindstrom***

***Chief Scientist
Dr. Ray Sambrotto***



Photo by: Jeff Napp



BEST- Bering Ecosystem Study



Josh London

View of the Healy in sea ice from helicopter.

Goal of the project:

Conduct transects over the eastern Bering Sea to measure the productivity and health of the marine ecosystem.

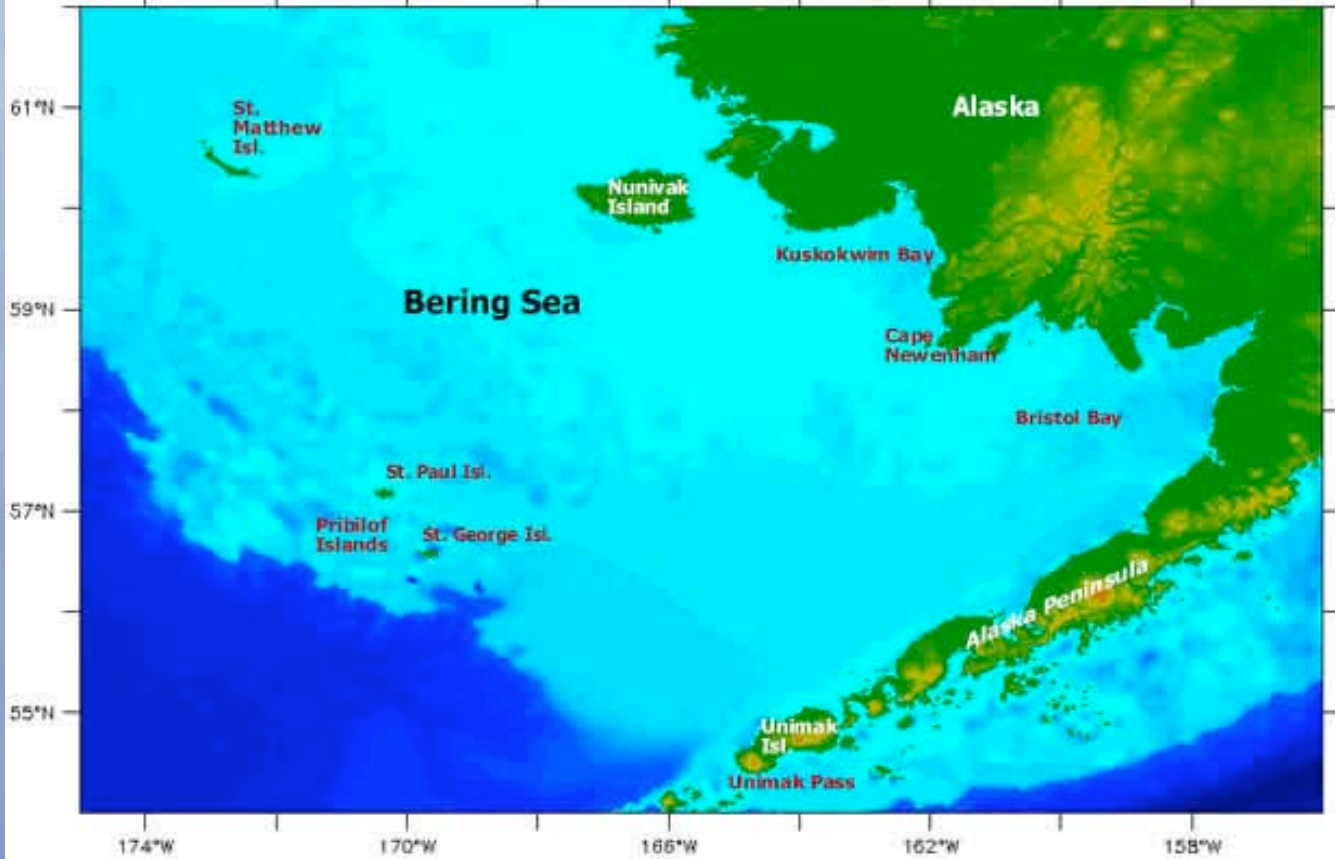
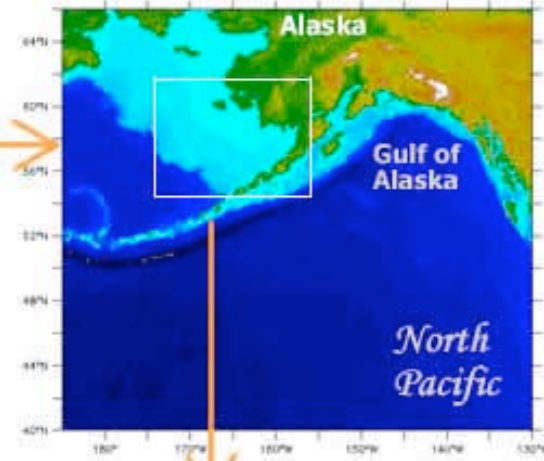
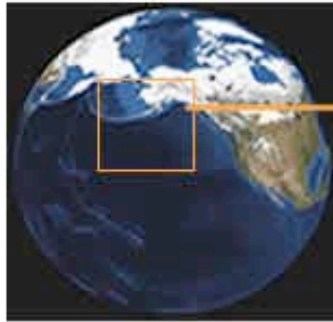
Dates:

7 April - 14 May 2007

Location:

Aboard the US Coast Guard Cutter Healy, in the Bering Sea

Where is the Bering Sea?

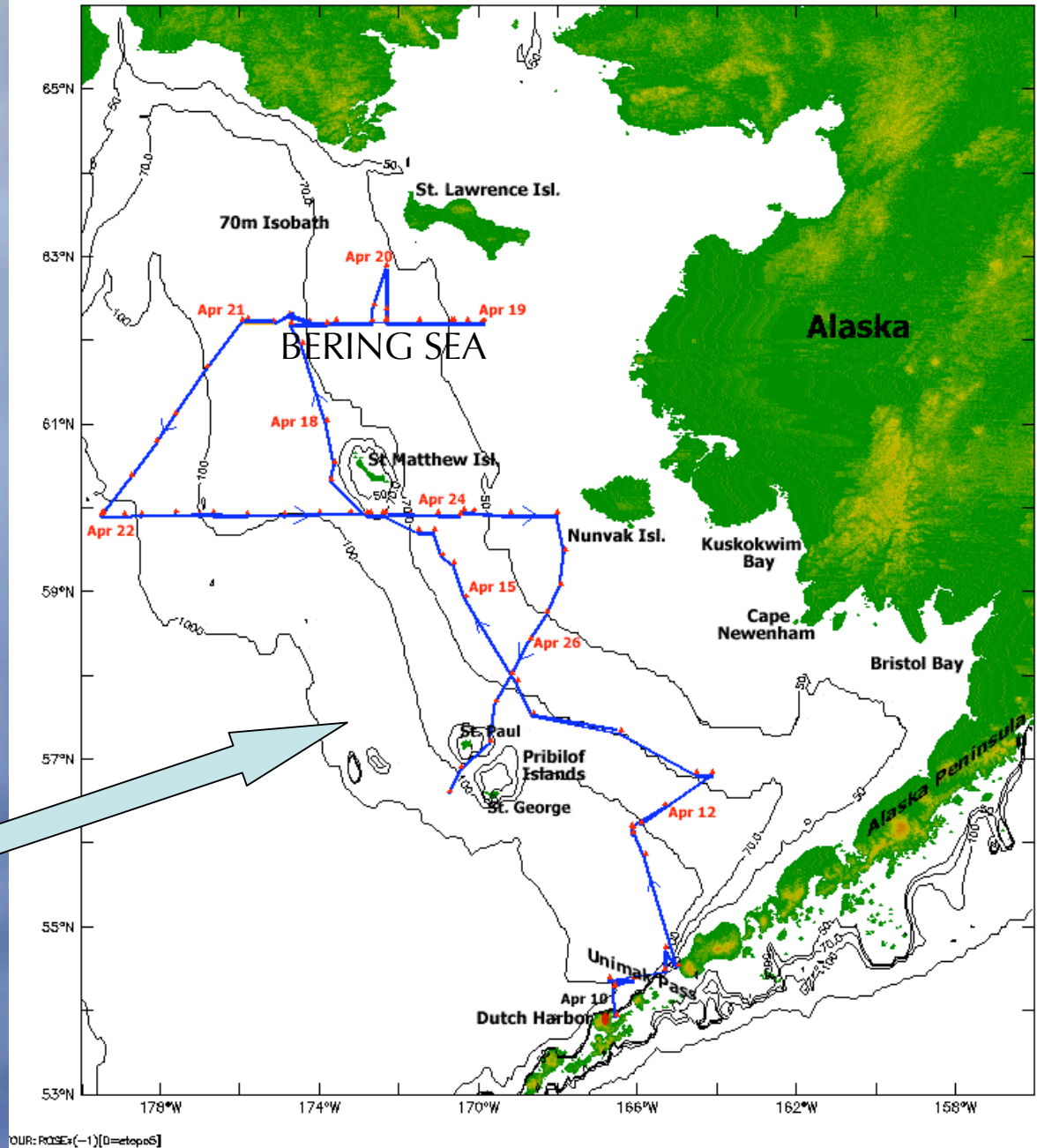


Where is the USCGC Healy?



Approximate
Location of the
USCGC Healy

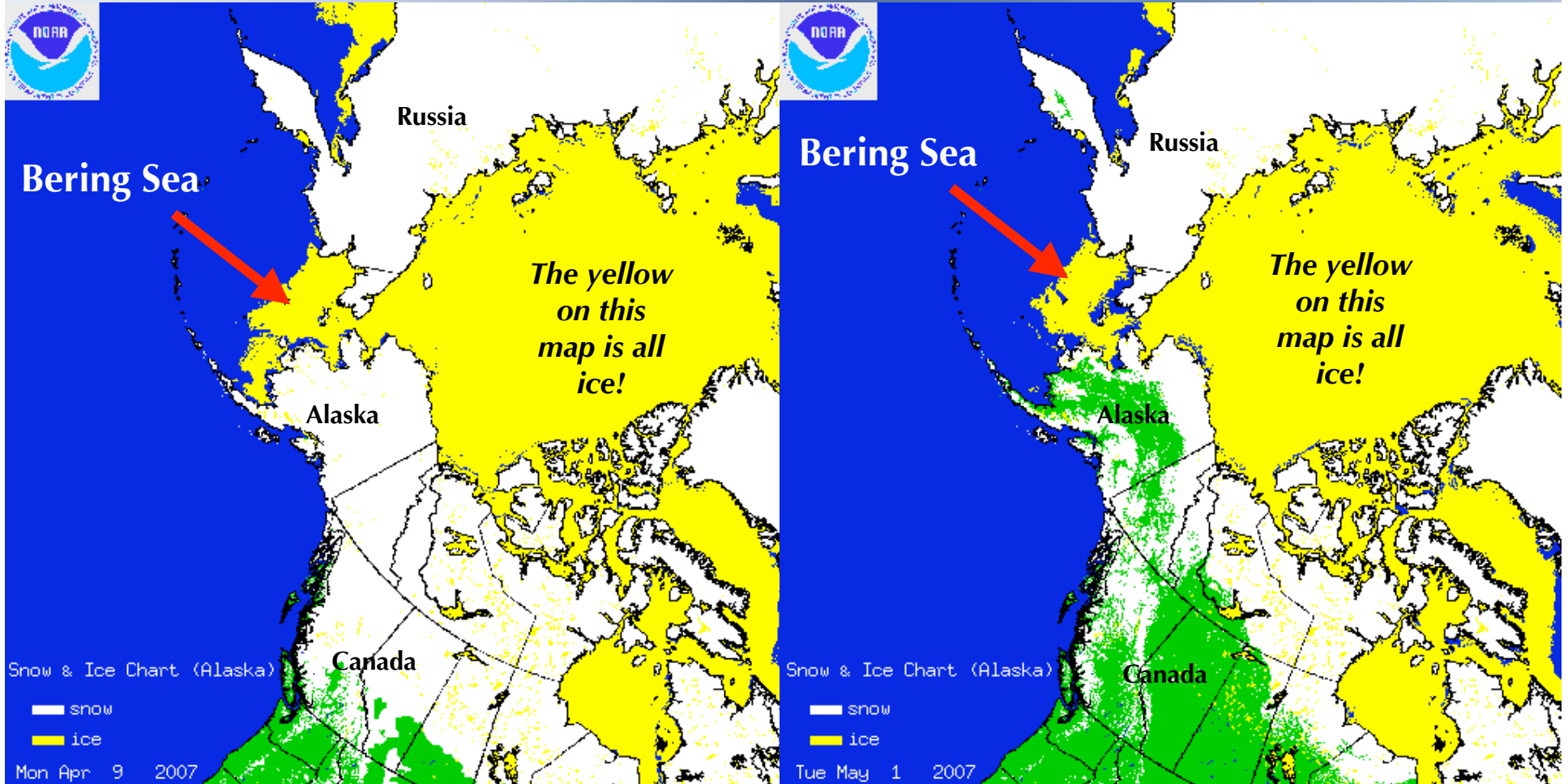
Bering Sea Map with Ship Tracks
updated 4/26/2007



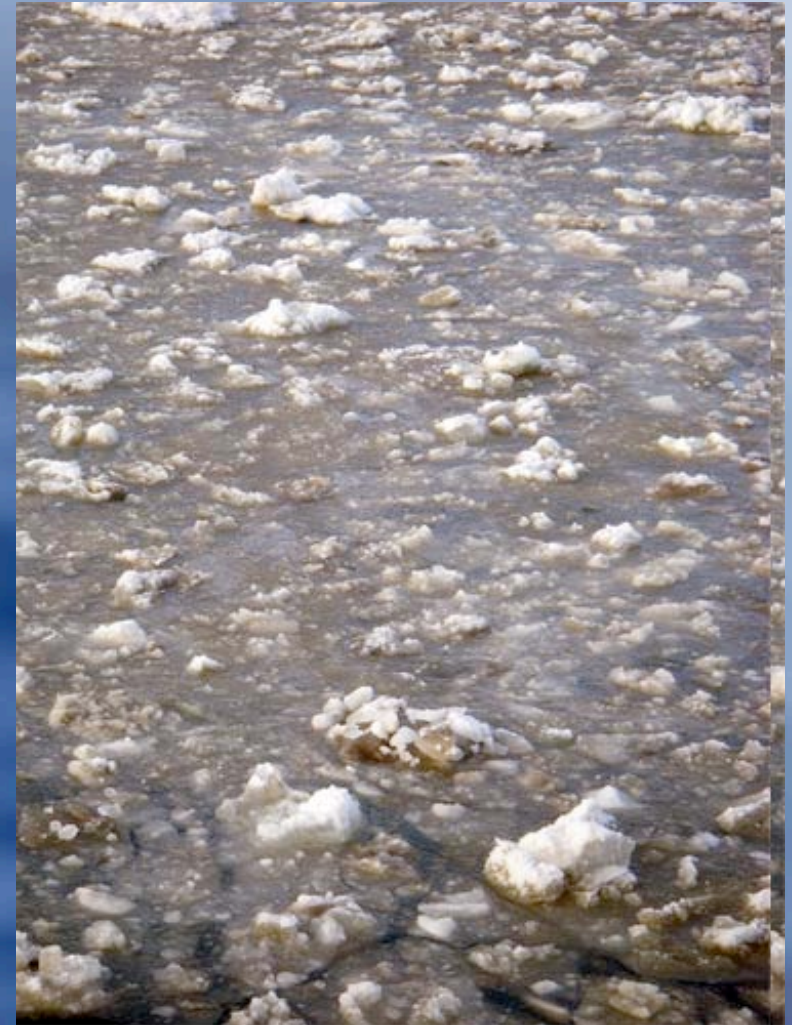
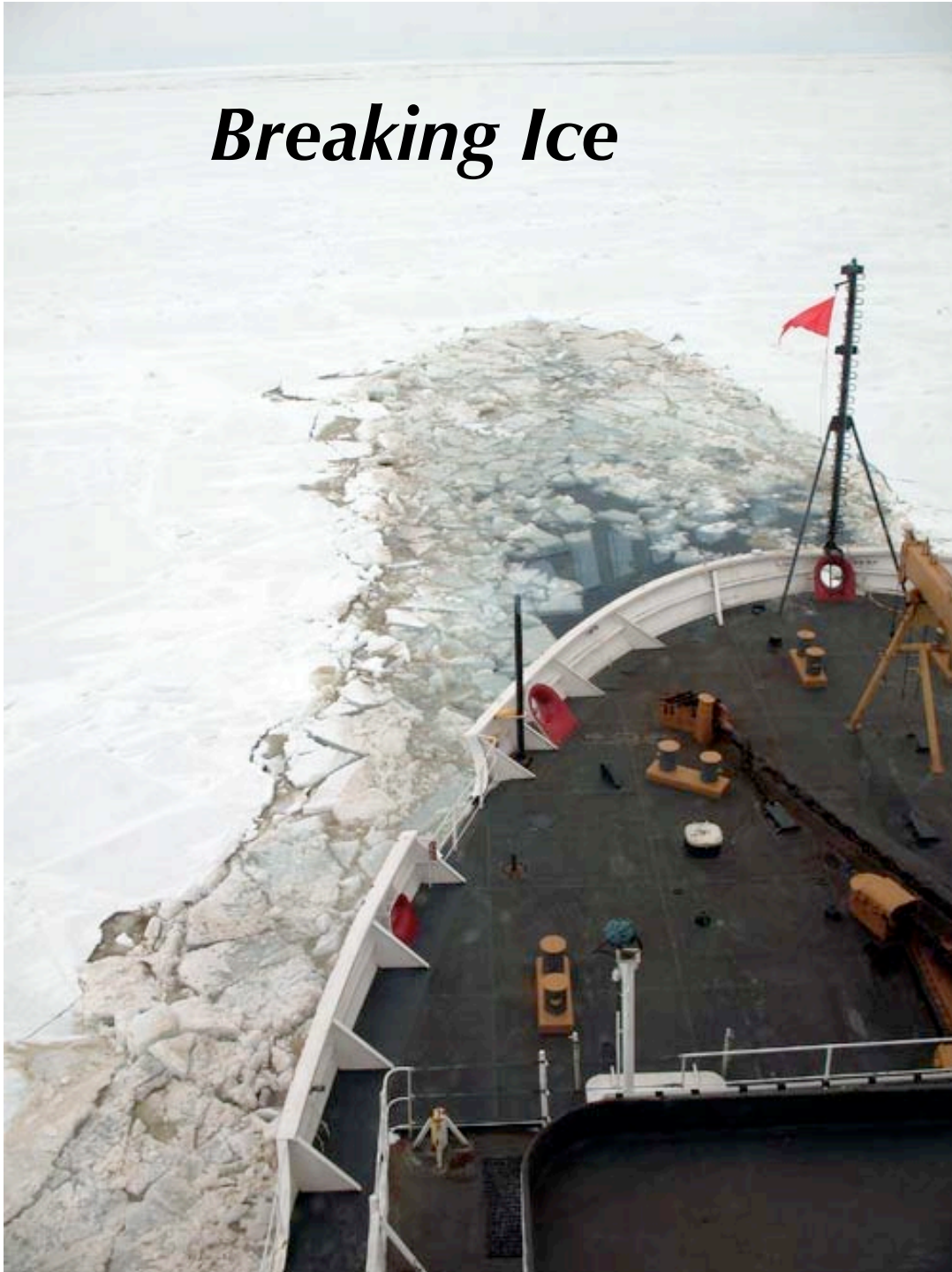
Can you see the seasonal changes in sea-ice cover?

Start of Expedition

Present



Breaking Ice



Ice Algae



Take a ride
down to the
ice...



The Science: Seals

Make a plan...



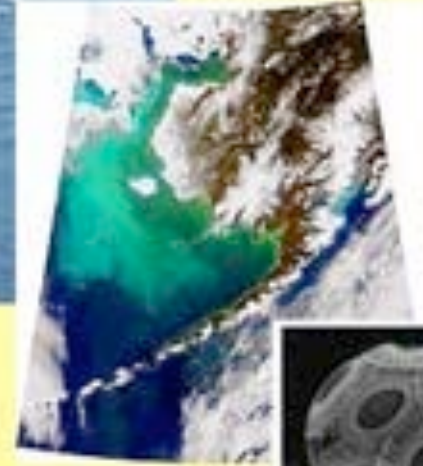
Seals are hard to sneak up on...



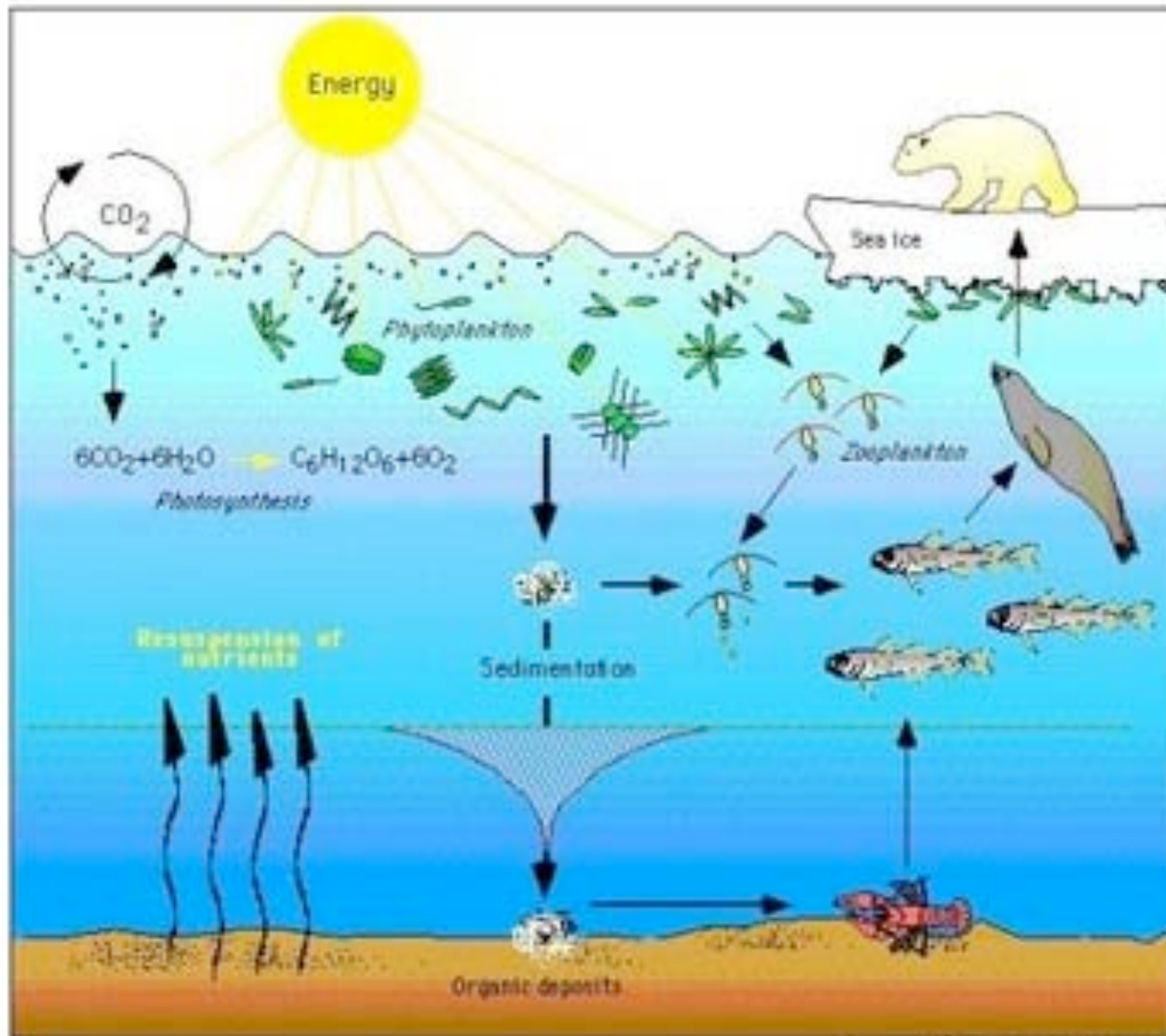
Baby-sitting the pup



Bering Sea Ecosystem Study

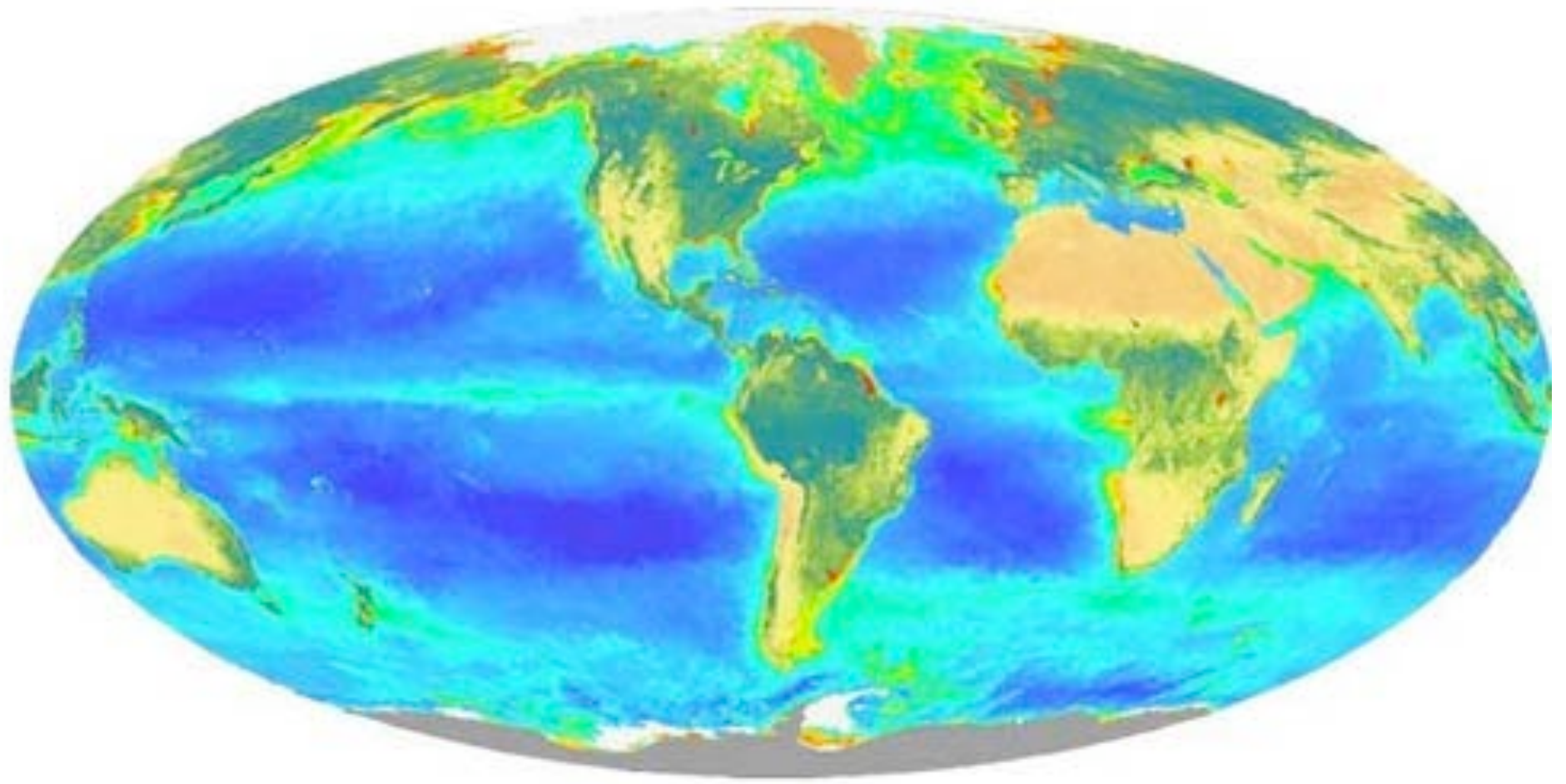


Arctic Marine food Web

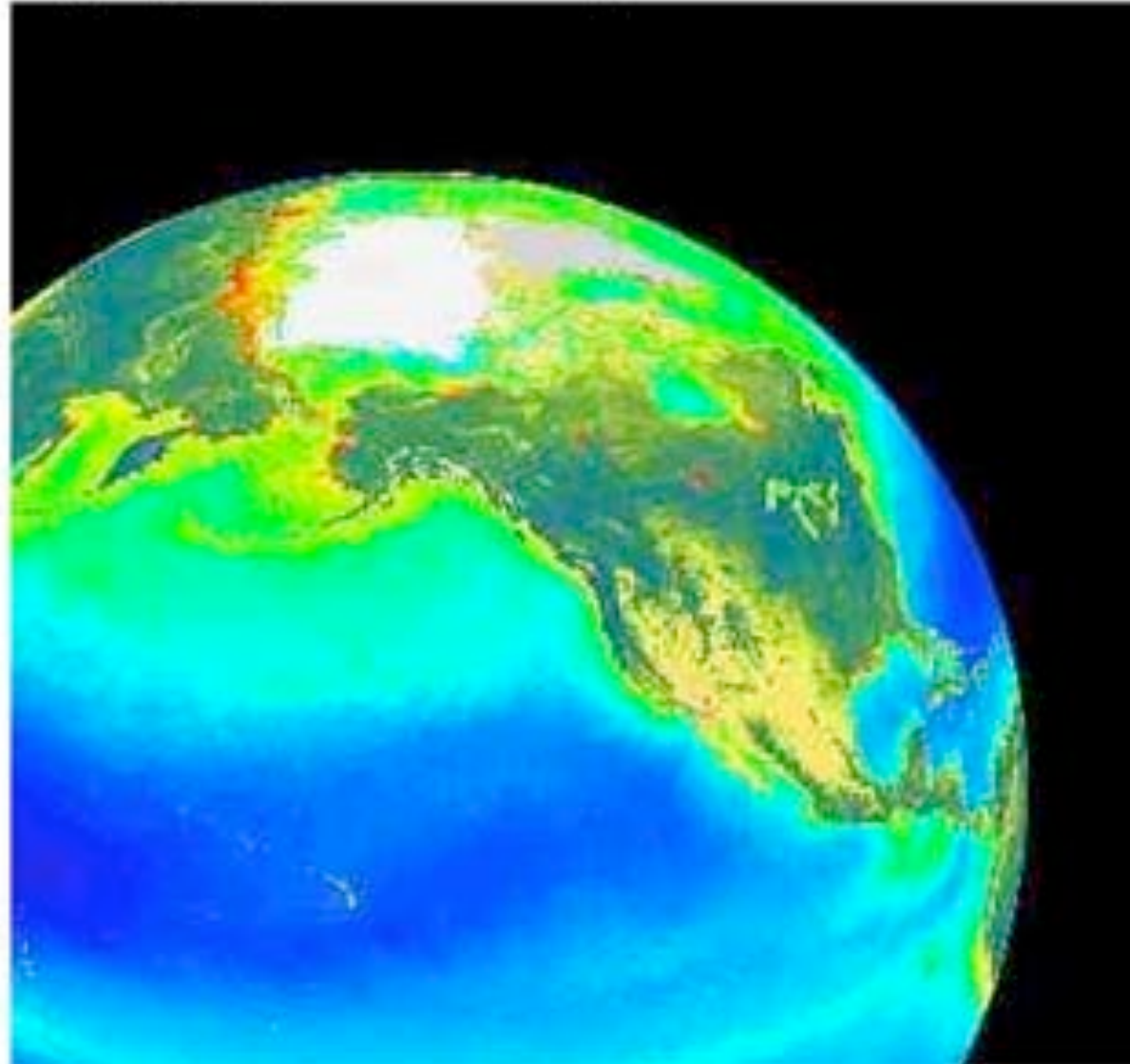


Drawn by Christopher Krembs

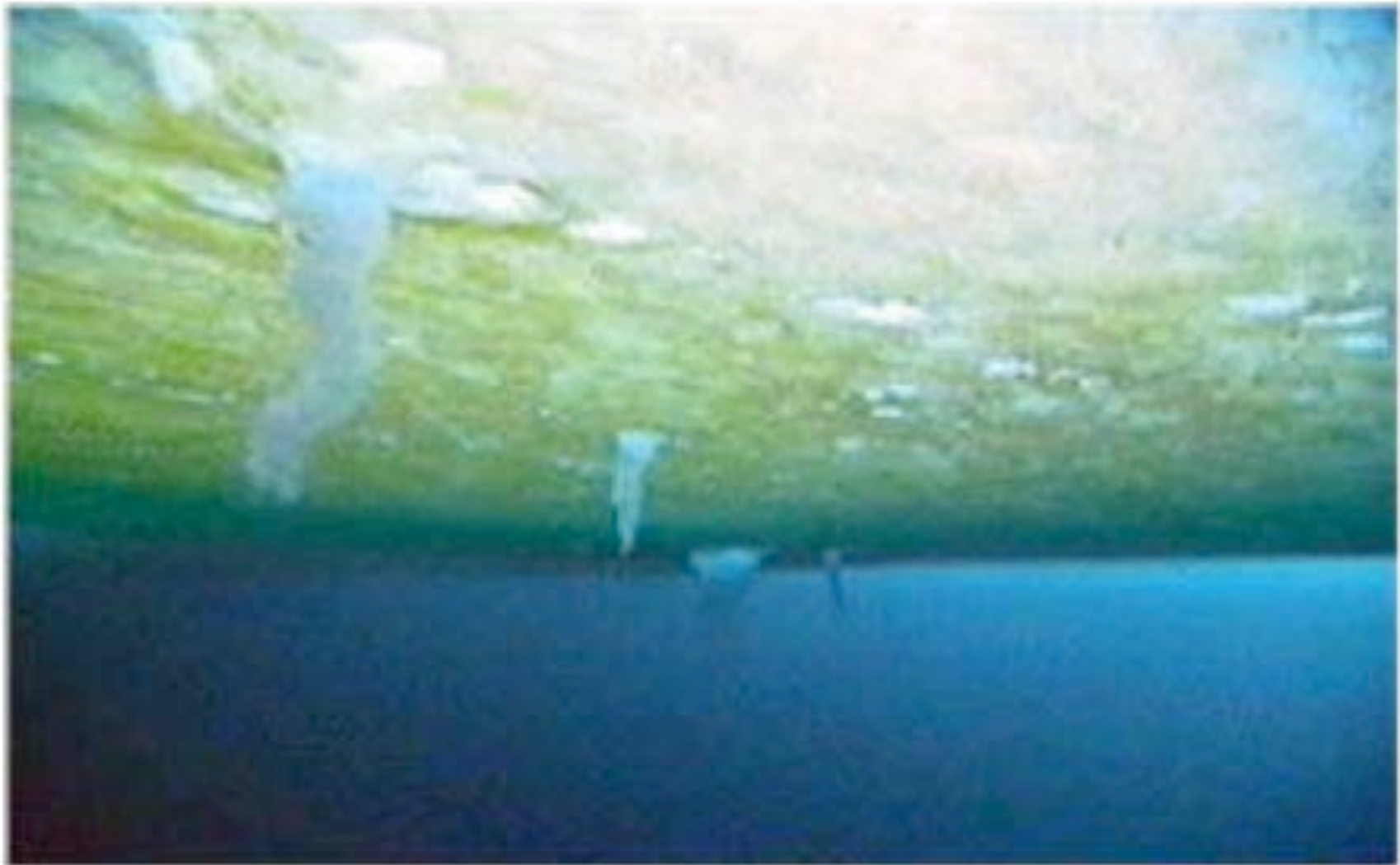
There is photosynthesis in the ocean just like that on land



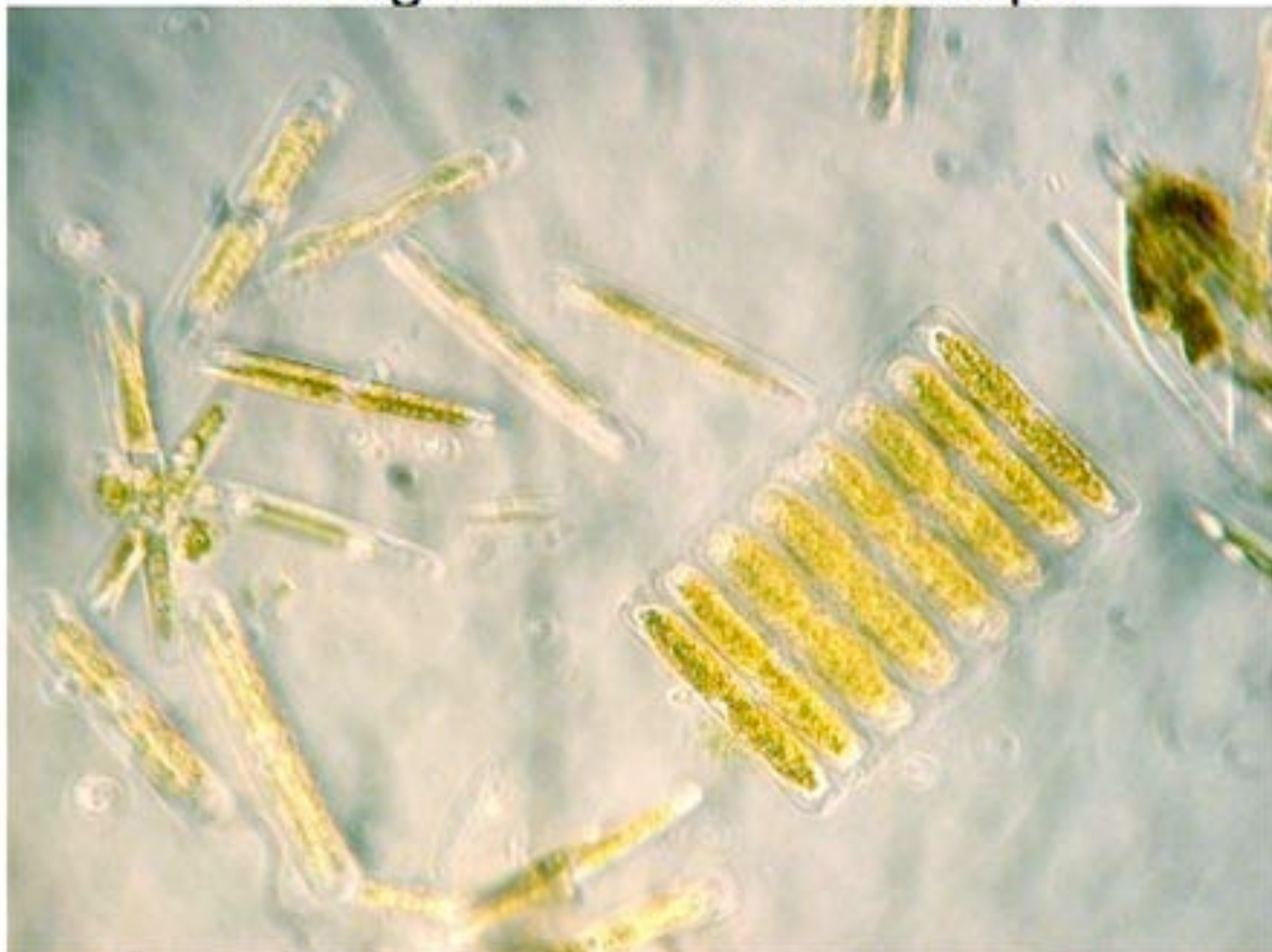
The poles are regions of greater phytoplankton production



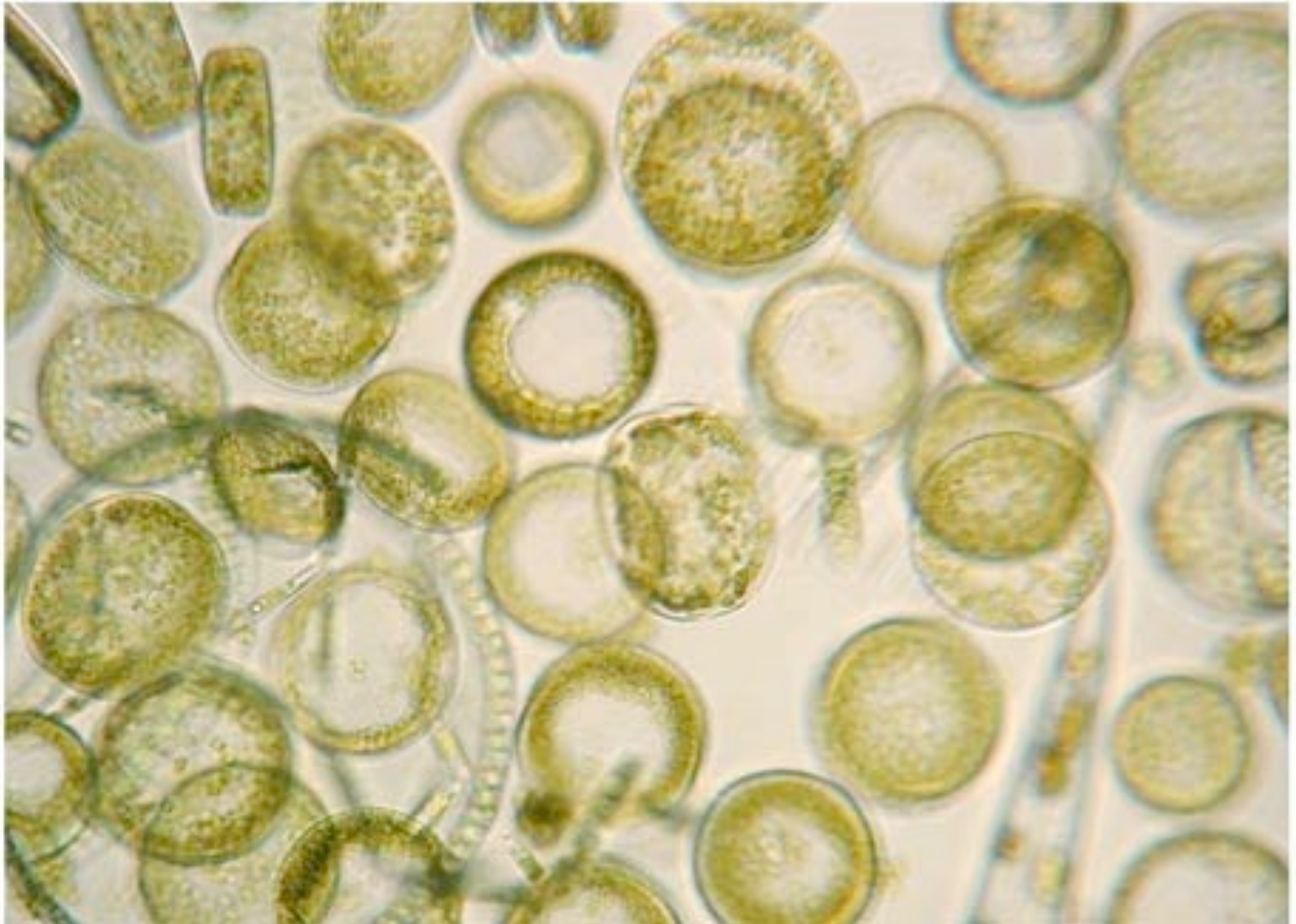
Ice algae lives on the bottom side of ice



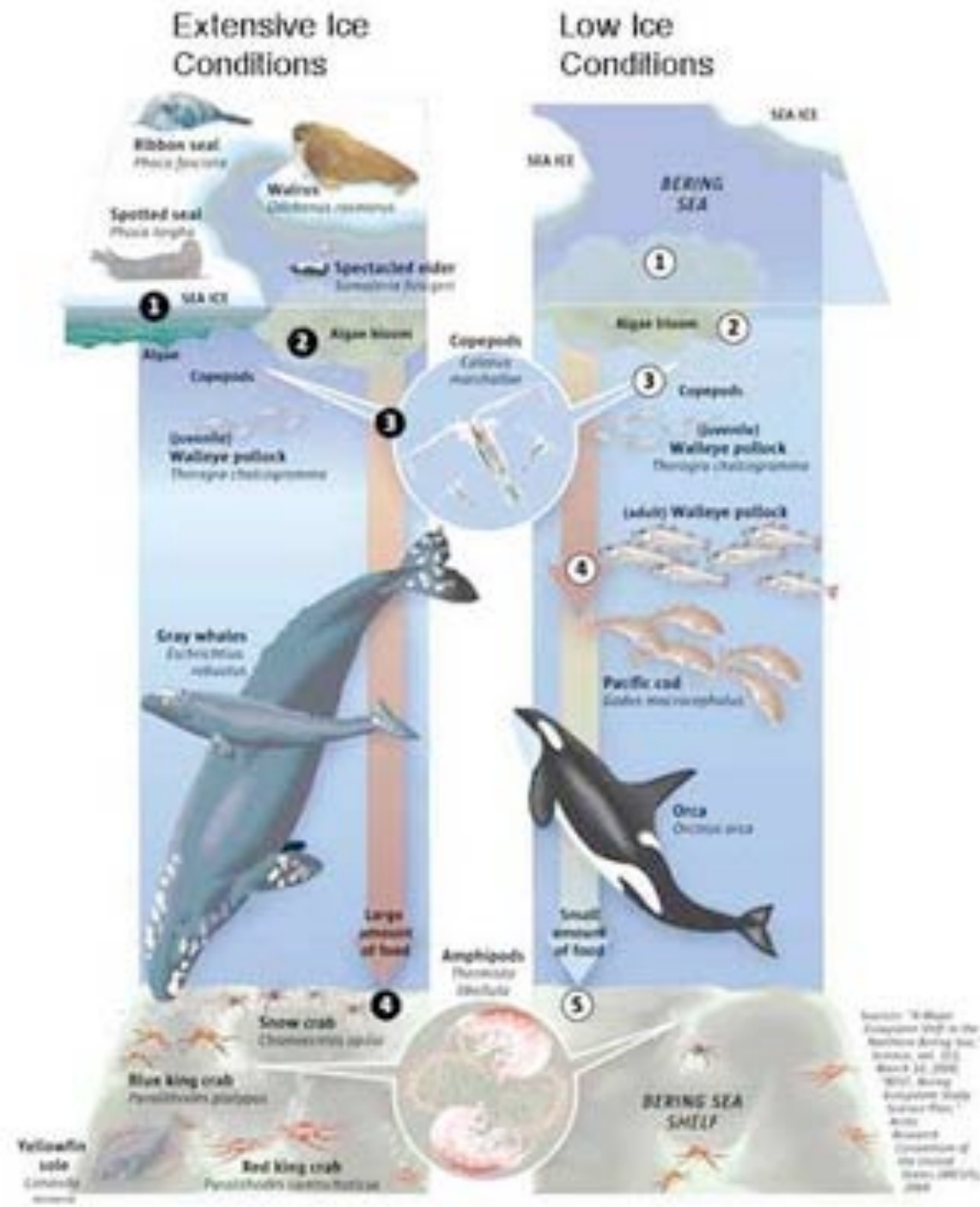
Ice algae under a microscope



Diatoms in open water



Food web differences with and without ice



2007 was a moderate ice year

Late-April ice edge



Source: ESR, NOAA/PMEL

MARK NOWLIN / THE SEATTLE TIMES

Collecting Water for Sampling





Incubator



























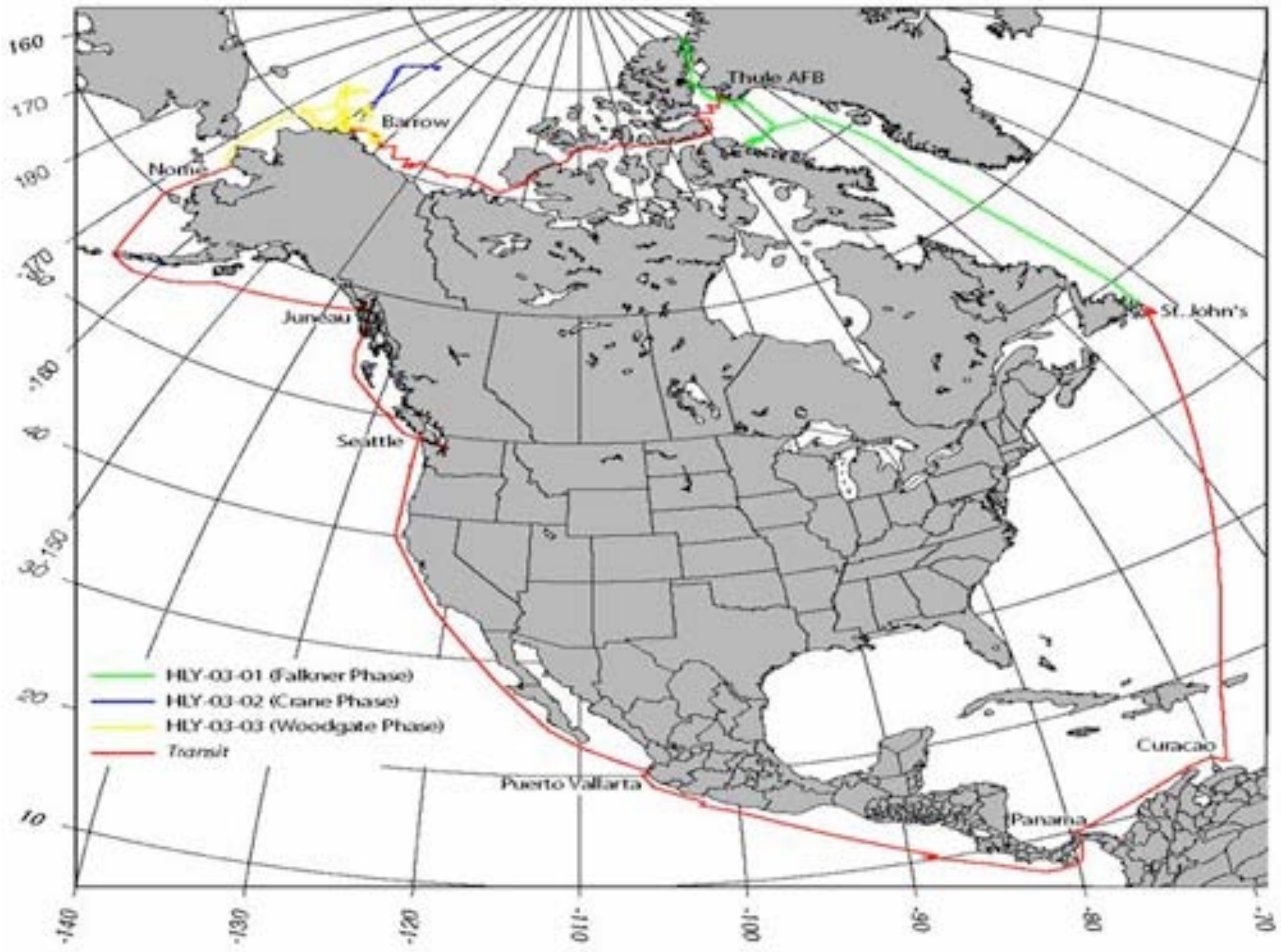














THE WILD WORLD OF MRS. P!



AND KOLOHE THE
NAUGHTY MONKEY!



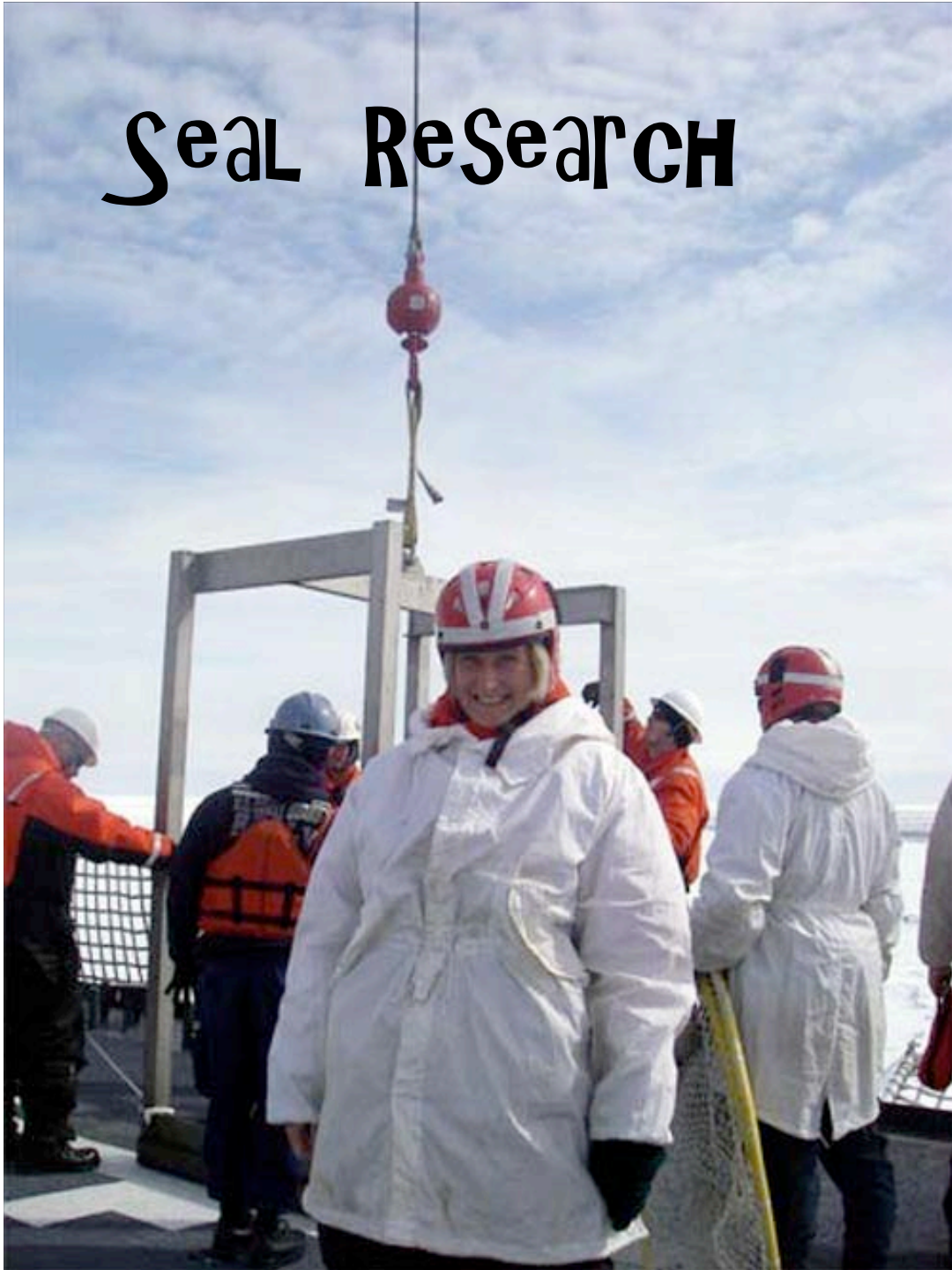
SOME NEW FRIENDS!



Mrs. P'S Seal iMPerSONation



Seal Research







St. George Visit





St. George ISLAND



St. Paul Island



StyroFoam Experiment



After being 2700 meters deep in the Bering Sea!

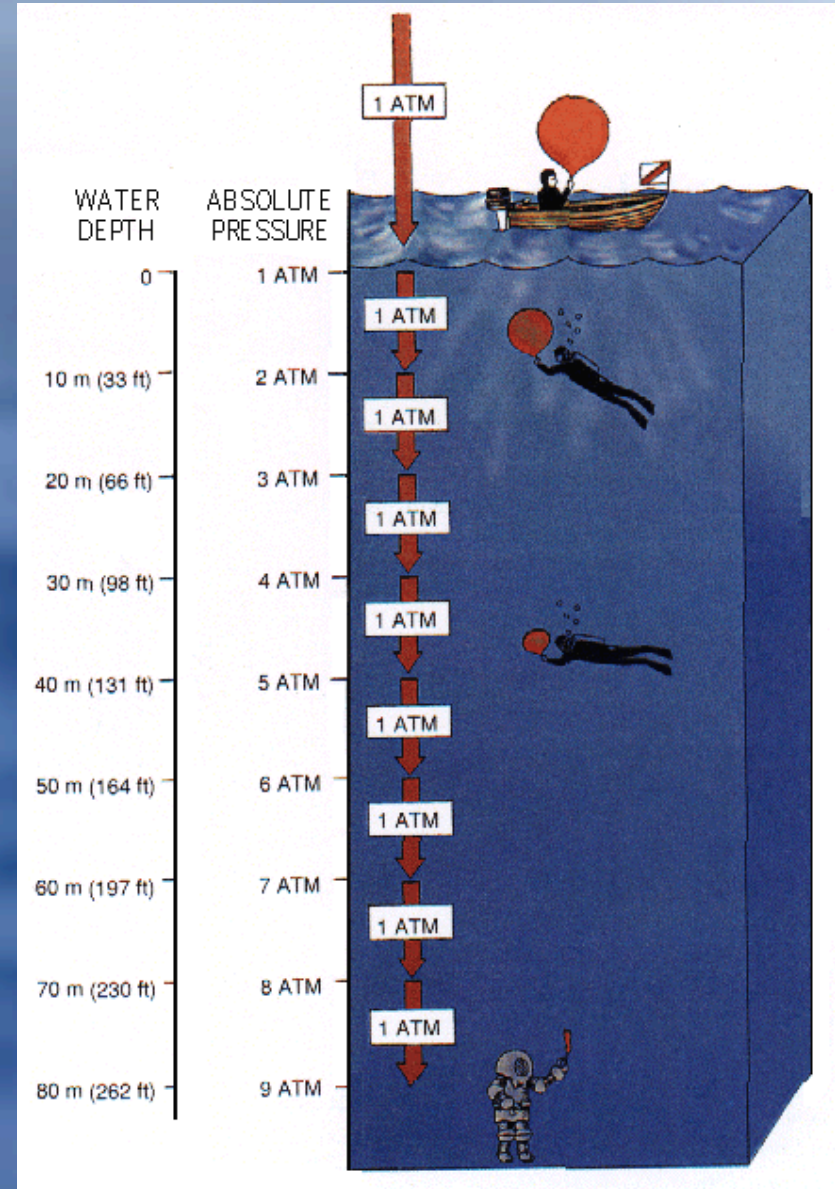




The CTD



Attaching the Cups



The Wildlife: Whales



View of beluga whales from the helicopter.



The Wildlife: Other Sea Mammals



Walrus



Ribbon Seal pup



Bearded Seal



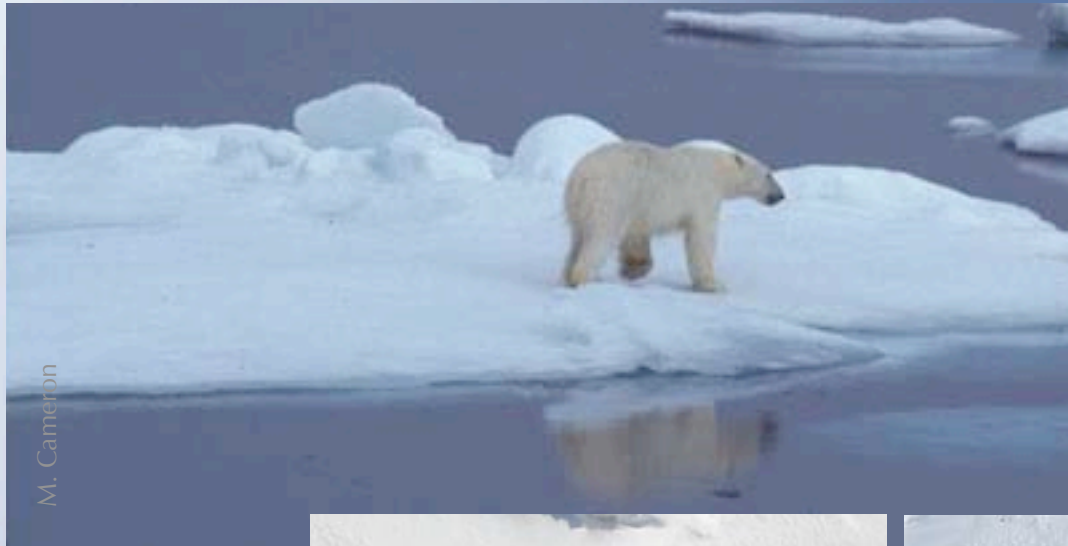
Univ. of Alaska

Spotted Seal

The Wildlife: Polar Bears

Polar Bear from the Healy in 2006

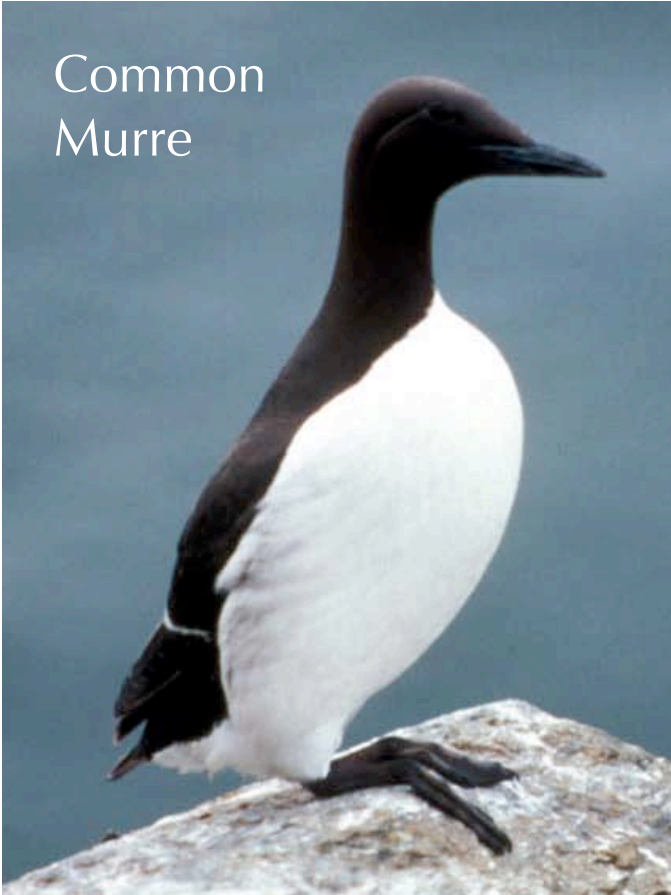
On Polar Bear Watch



2007 Polar Bear and "kill spot" viewed from Helicopter



Common
Murre

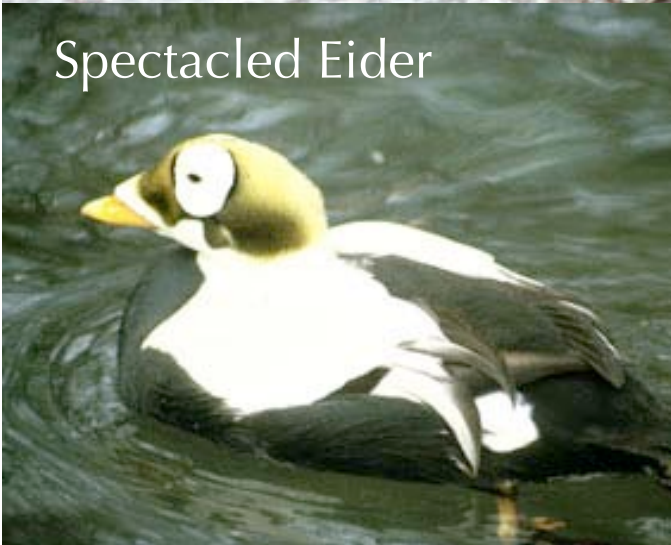


The Wildlife:
Sea Birds



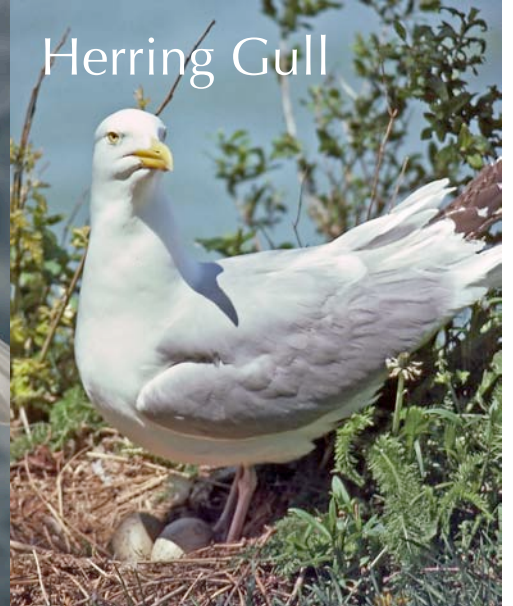
Ivory Gull

Spectacled Eider



Northern Fulmar

Herring Gull



The Wildlife: Fish



Pollock

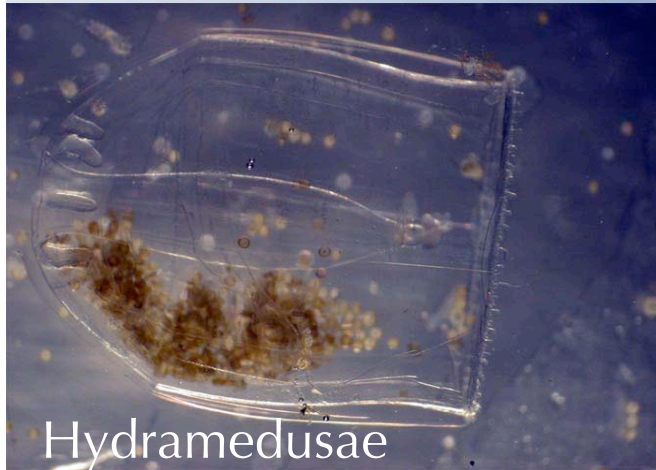


Pacific Salmon



Cod

The Wildlife: Zooplankton





*Life onboard the
USCGC Healy*

The ship's "Movie Theatre"



Berth
(bedroom)



Pizza day!



Everyone has
ship pagers

Safety on the USCGC Healy



Join us again next week!

**Thursday, May 10 at
10:30-11:30 a.m. Alaska Daylight Time**

Last Live from IPY! From the USCGC Healy!



Laysan Albatross

Photo by Gavin Brady

Thank You!

*Check out www.polartrec.com
to see more pictures and keep
posted on upcoming events!*



POLAR
TREC

The logo features the words "POLAR" and "TREC" in a bold, sans-serif font. "POLAR" is in a dark blue color, and "TREC" is in a lighter blue color. A large, stylized silhouette of a bird in flight is positioned behind the text, with its wings spread wide. The background is a gradient of blue.

*If you have further questions,
please contact us at
info@polartrec.com or call
1-907-474-1600*

