



TEACHERS AND RESEARCHERS
EXPLORING AND COLLABORATING

Welcome to a live ***PolarConnect Event!***

with PolarTREC teacher Chantelle Rose
and the Winter Sampling expedition

Wednesday 16 November 2011

8:00 am AST

(9:00 am PDT, 10:00 pm MDT, 11:00 pm CDT, 12:00 pm EDT)



Raise your hand to ask a question

List of all participants

Return to the lobby or exit

Slides will be shown here

If using VOIP, press and hold here to talk

Your connection strength

'Chat' with one person or the entire group

Control bar icons: Connection strength, TALK, Mute, Video, Audio, Options

Chat window content:

You have entered the lobby.
You have entered 'Arctic Research Consortium of the United States (ARCUS)'.
Your media format is WimbaMedia.
You say, "I'm going to change the slide momentarily- to show the one I need for my new screen shot"

To: Main Room

People (3)

Kristin_Timm			
kristina_creek			
Kristin_Timm			

Please note:

- Participant using the telephone can mute/unmute by pressing *6 on the phone.
- Today's event will be recorded and archived.

Participant Introductions

When called, please state your:

- ✓ Name
- ✓ School / Institution
- ✓ The number of students and adults participating with you in the same location

What is PolarTREC?

PolarTREC is a professional development experience in which K-12 teachers are paired with researchers for 2-6 week research experiences in the polar regions.

From 2010-2013, nearly 50 teachers from around the United States will join scientists in the Arctic and Antarctica to learn about science, the polar regions, and to share what they have learned with their students and communities.

Winter Sampling The Team



**Dr. Carin Ashjian, Woods Hole
Oceanographic Institution**



Bob Campbell, University of Rhode Island



**Steve Okkonen, University of
Alaska, Fairbanks**



**Donna Van Kueren,
University of Rhode Island**



**Celia Gelfman,
University of Rhode Island**



**Joel Llopiz, Woods Hole
Oceanographic Institution**



**Phil Alatalo, Woods Hole Oceanographic
Institute**



Kristina Terpis, University of Rhode Island
www.polarrec.com



Chad McLaren, National Ice Center



David Leech, University of Alaska



Krista Longnecker, Woods Hole Oceanographic Institution



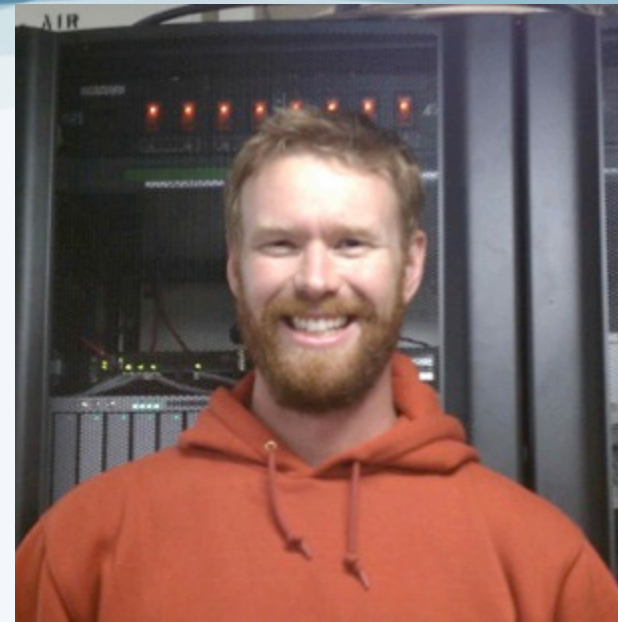
Sam Laney, Woods Hole Oceanographic Institution



Steve Roberts, UCAR



David Pavlik, US Fish and Wildlife



Eric Arnesen, Oregon State University



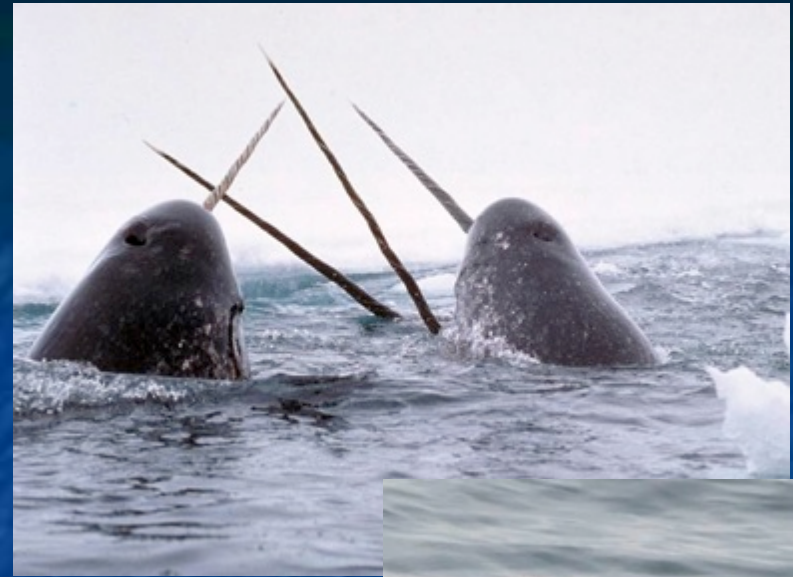
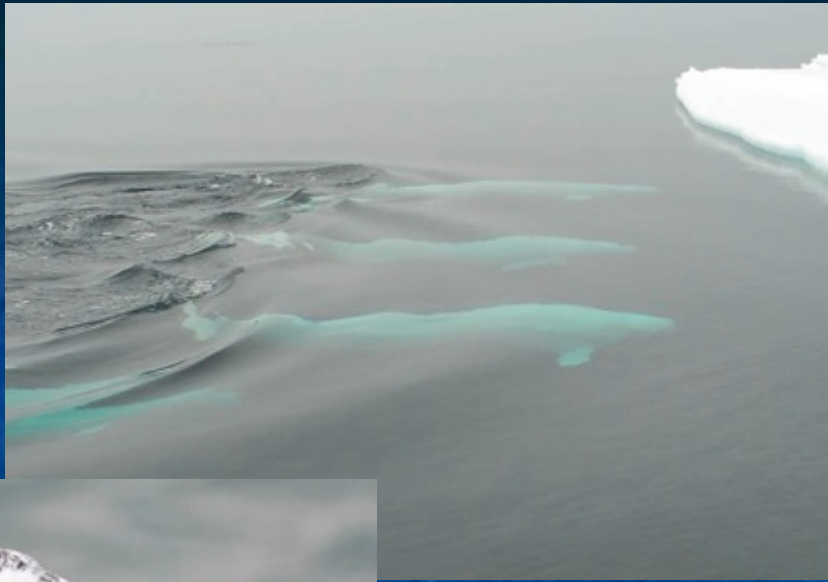
Dean Stockwell, University of Alaska



Toby Martin, Oregon State University

Captain of the USCGC Cutter Healy, Captain Beverly Havlik and Executive Officer Commander Gregory Tlapa



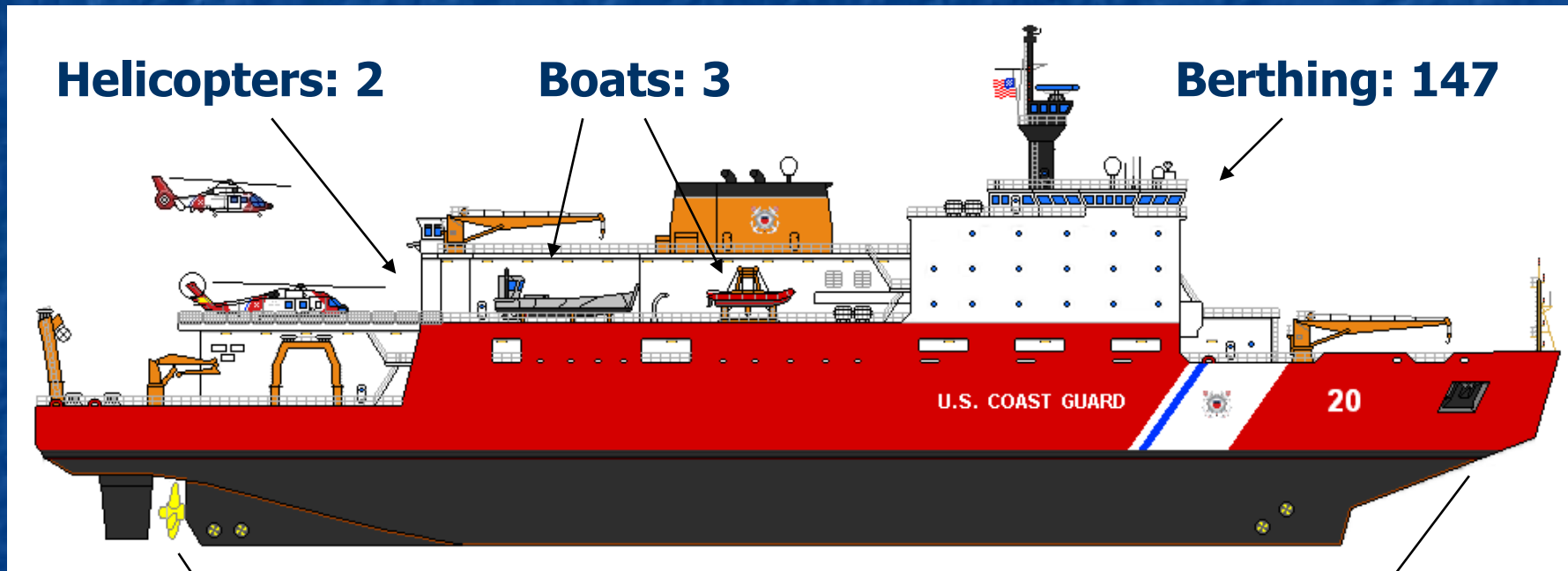


Arctic Wildlife



HEALY statistics

Length: 420 ft



Helicopters: 2

Boats: 3

Berthing: 147

**Height:
135 ft**

**Draft:
30 ft**

Fastest Speed: 17 kts

**Icebreaking: 4.5 ft at 3 kts
8 ft Backing & Ramming**

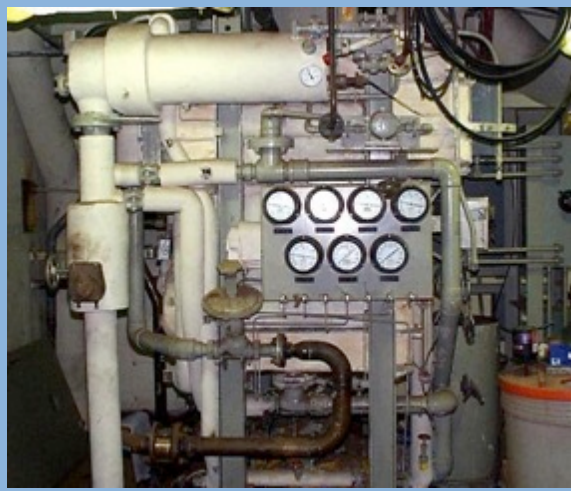
Weight: 16,000 long tons (36 million pounds)



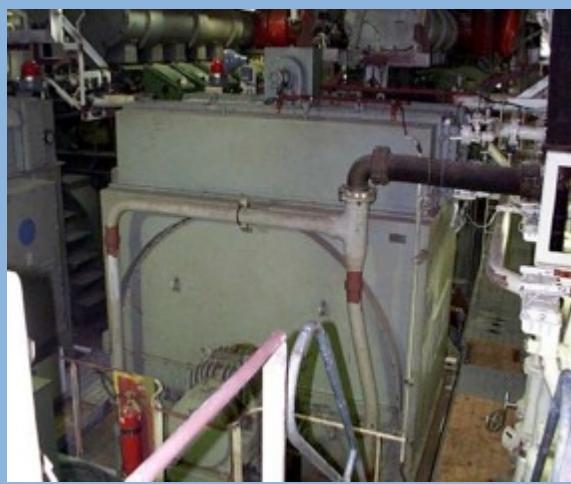
Mess deck

Store

Sick Bay



Water plant



Power plant



HEALY: A floating city



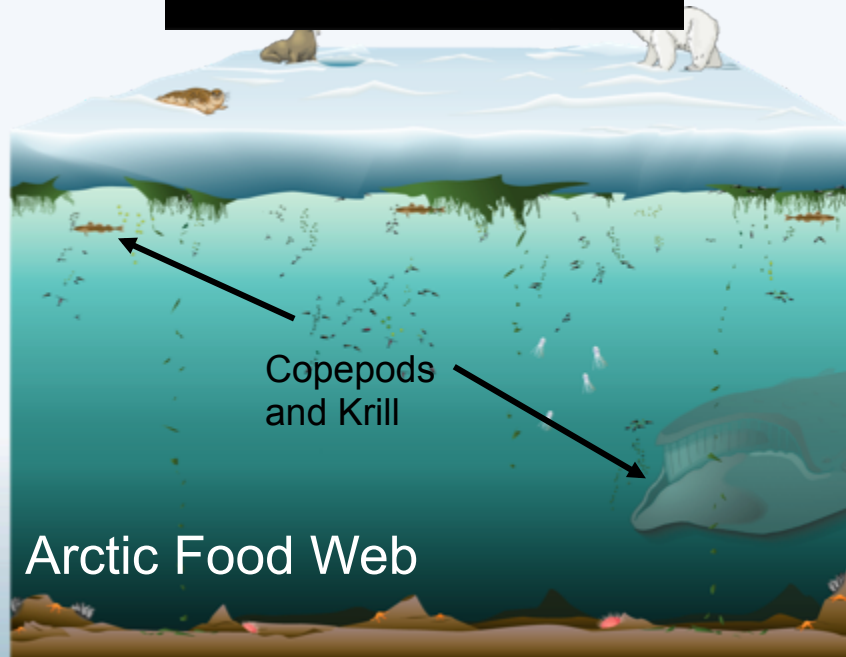
Life aboard Healy



Our travels so far...



Why go to the Arctic in Winter?



- We know very little about the biology and physical oceanography of the Bering and Chukchi Seas in winter.
- We are particularly interested in the large copepods *Calanus* and krill – where are they during the winter? In other regions, these animals spend the winter in deeper water – deeper than the Chukchi and Bering shelves.
- Our poor understanding of the winter ecology of these animals hampers our ability to predict and model the impact of climate change in the Arctic ecosystem.

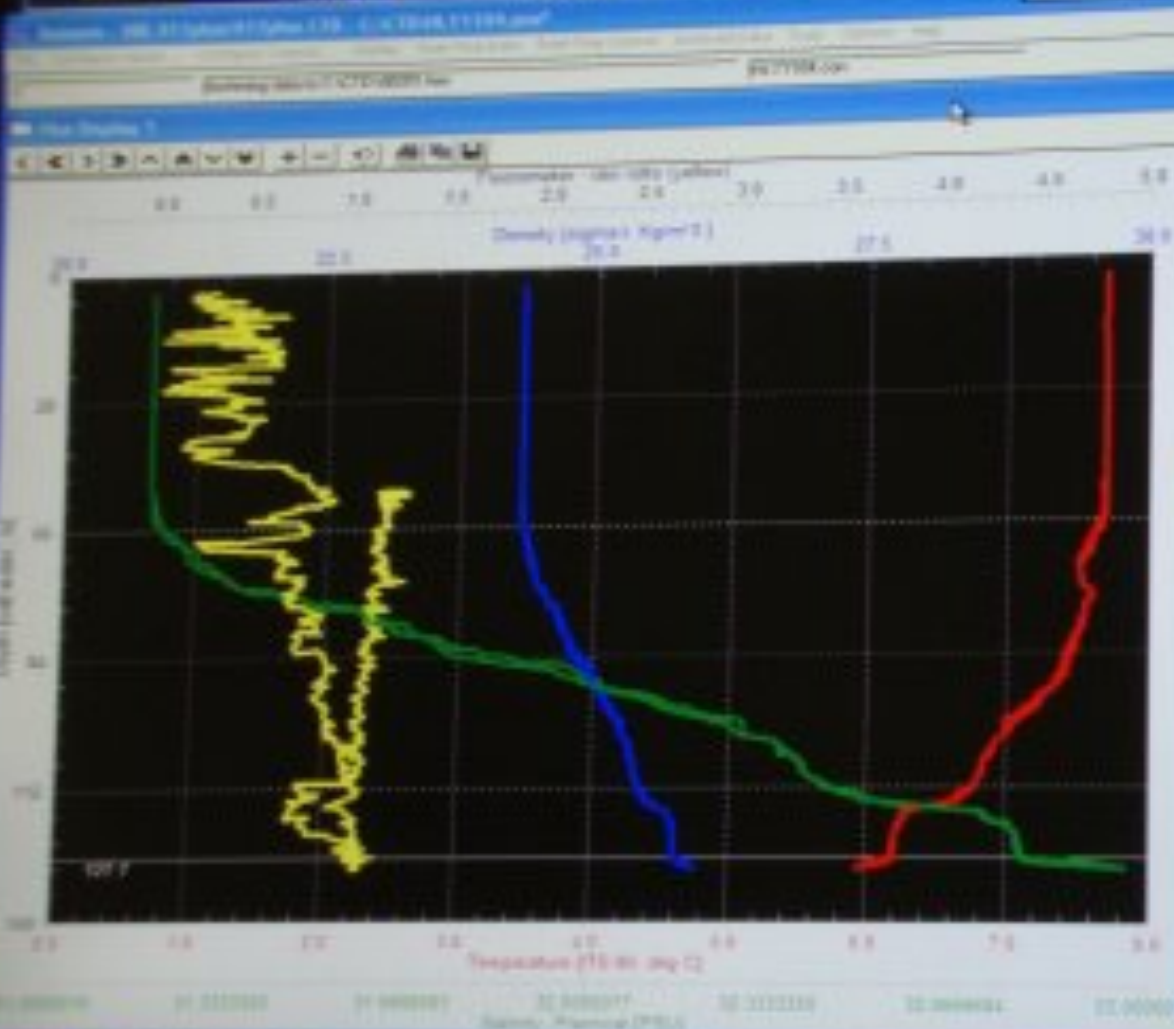
What We Have Been Sampling

- Water temperature, saltness, temperature and currents
- Chlorophyll (phytoplankton), microzooplankton and zooplankton (Calanus copepods, krill abundances)
- Bird and Mammal distributions (besides the dark)
- Dissolved Organic Matter
- As well as conducting some experiments with the animals we have collected



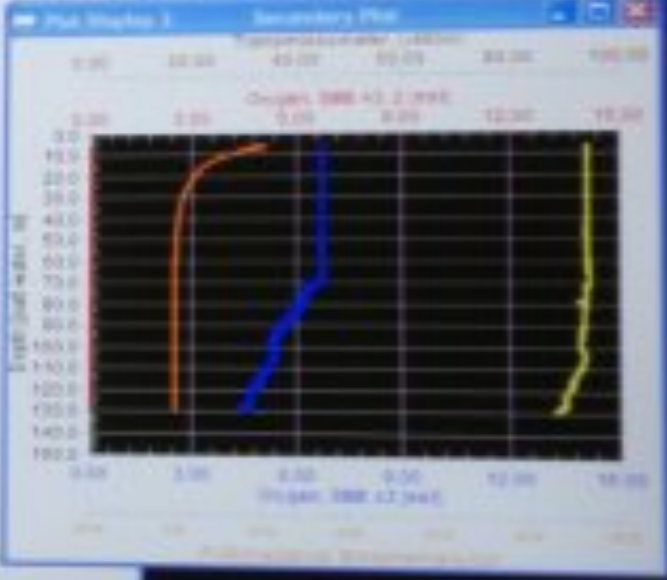
Depth 129.2 WIRE OUT 46.0 SPEED RPM 0.0 TENSION LBS 610

Sequential Bottle Fill



Fluid Display 1

Pressure, Deepwell (psi)	46.04
Depth (feet water)	129.2
Temperature (ITS-90 deg C)	7.68
Temperature (ITS-90 deg C)	7.68
Temperature Difference 2 - 1 (ITS-90 deg C)	0.000
Salinity Practical (PSU)	0.172
Salinity Practical 2 (PSU)	0.172
Salinity Practical Difference 2 - 1 (PSU)	0.000
Oxygen, SBT 43 (wt%)	6.70
Sal/Inhibitor, Stockroom/Log	4.00e-001
Motor Error Count	0
Pump Status	OK
Scan Count	2000
Latitude (deg)	36.023447 N
Longitude (deg)	121.758227 W
Altitude (m)	0.0



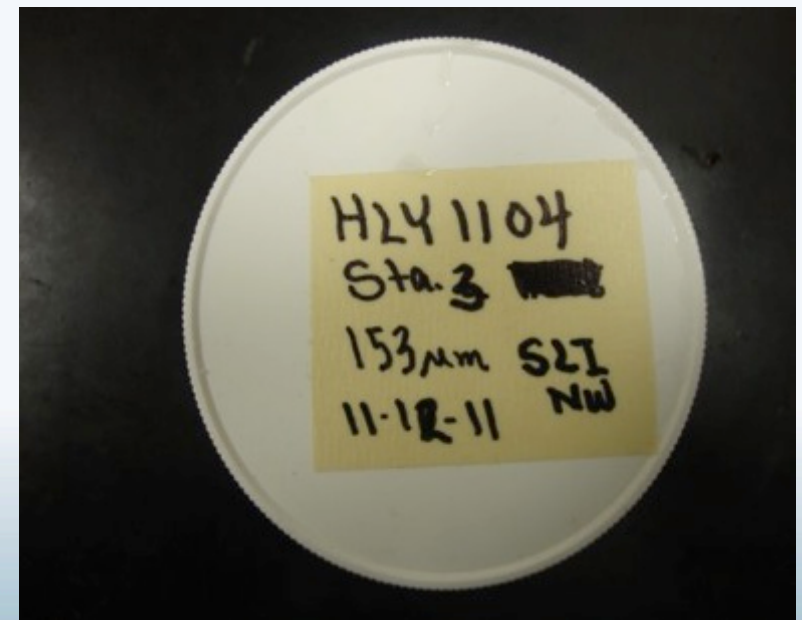
Samples from the Nisken Bottles

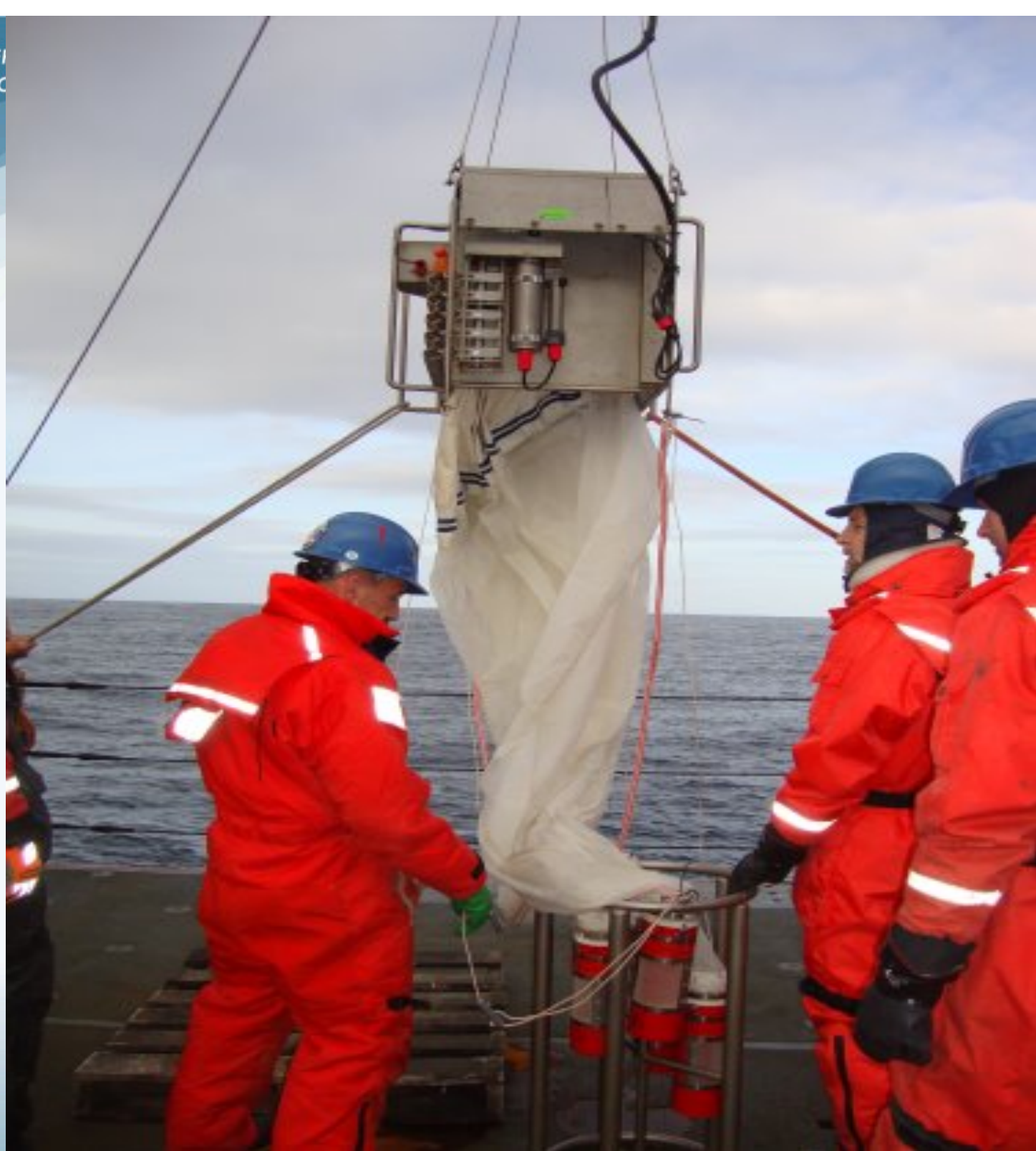


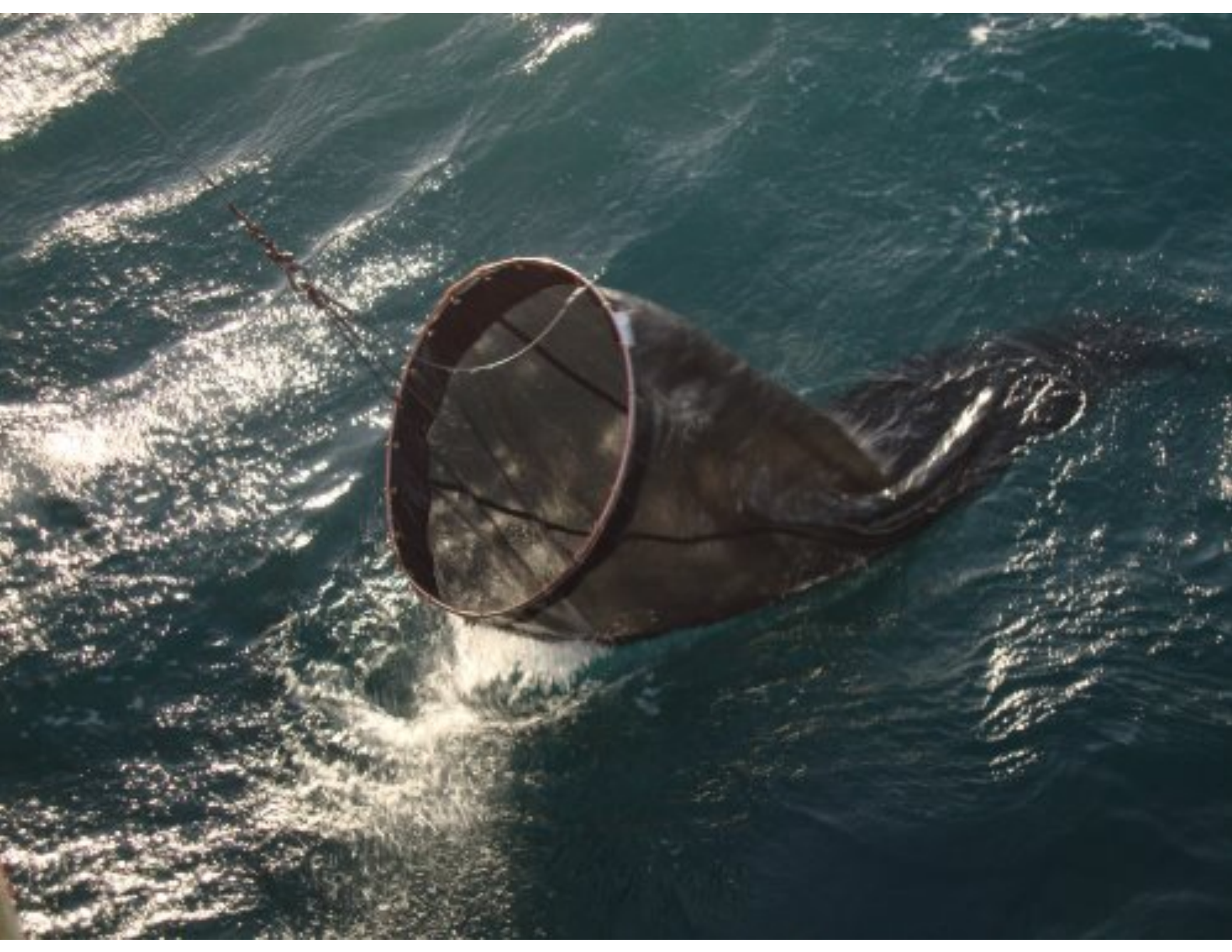




Bongo Net Samples







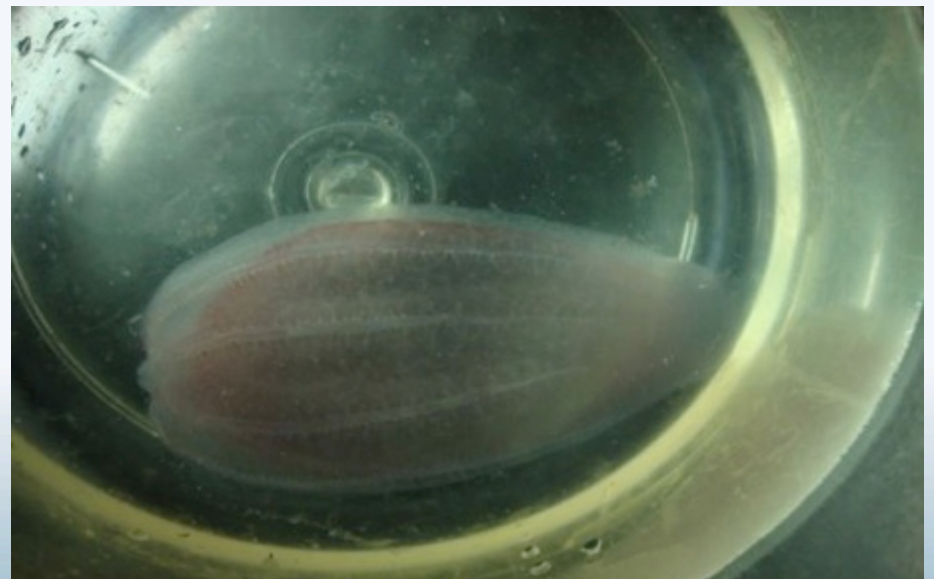




Animals of Special Interest



All Animals are Interesting!



Questions

To Ask a Question:

- ✓ Raise your hand with the “hand button”
- ✓ Type your question in the text chat box
- ✓ Speak loud and clear and directly into the phone to ask your question.



TEACHERS AND RESEARCHERS
EXPLORING AND COLLABORATING

Teachers: Join PolarTREC!

www.polartrac.com/about/join

Every teacher can participate in different ways:

Following Expeditions

Participate in PolarConnect Events

Join the Polar Education Email List

Take Online Professional Development Courses

Become a PolarTREC Teacher!

Upcoming Events

Watch for and register for upcoming events at www.polartrec.com!

Celebrate ANTARCTICA DAY!

1 December 2011

with PolarTREC Teacher Michelle Brown
at McMurdo Station, Antarctica

Thank You!

An archive of the event will be available shortly.

<http://www.polartrac.com/polar-connect/archive>

