



TEACHERS AND RESEARCHERS  
EXPLORING AND COLLABORATING

# Welcome to PolarConnect!

With Michael League and the research  
team at McMurdo Station, Antarctica

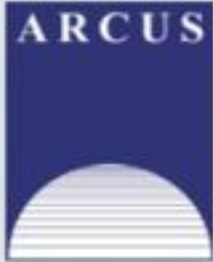
29 September 2011

[www.polartrac.com](http://www.polartrac.com)



Wimba Classroom - Arctic Research Consortium of the United States (ARCUS)

# WELCOME TO WIMBA



ARCTIC RESEARCH CONSORTIUM OF THE UNITED STATES

Connection strength: [Signal strength icon]

TALK [Microphone icon]

Options [Settings icon]

Exit - Lobby - Help

Chat window:  
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	[Mute/Unmute]
kristina_creek	[Mute/Unmute]
Kristin_Timm	[Mute/Unmute]

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

Raise your hand to ask a question

List of all participants

Return to the lobby or exit

**Please note:**

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



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# Participant Introductions

**When called, please state your:**

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



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# 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.

# 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.

# Adaptations of Marine Worms in Antarctica



McMurdo Station, Antarctica

# Who are you talking with?



Dr. Adam Marsh



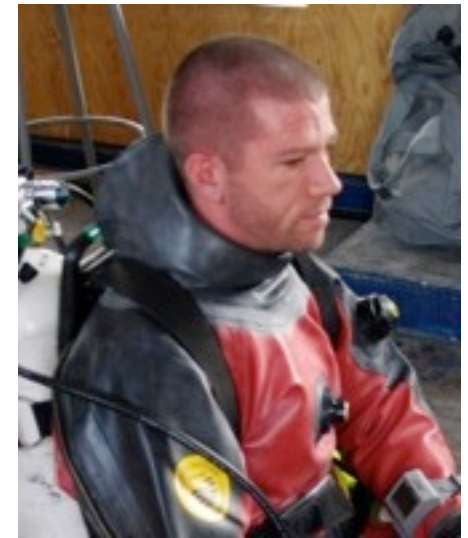
Dr. Stacy Kim



Stephanie Guida

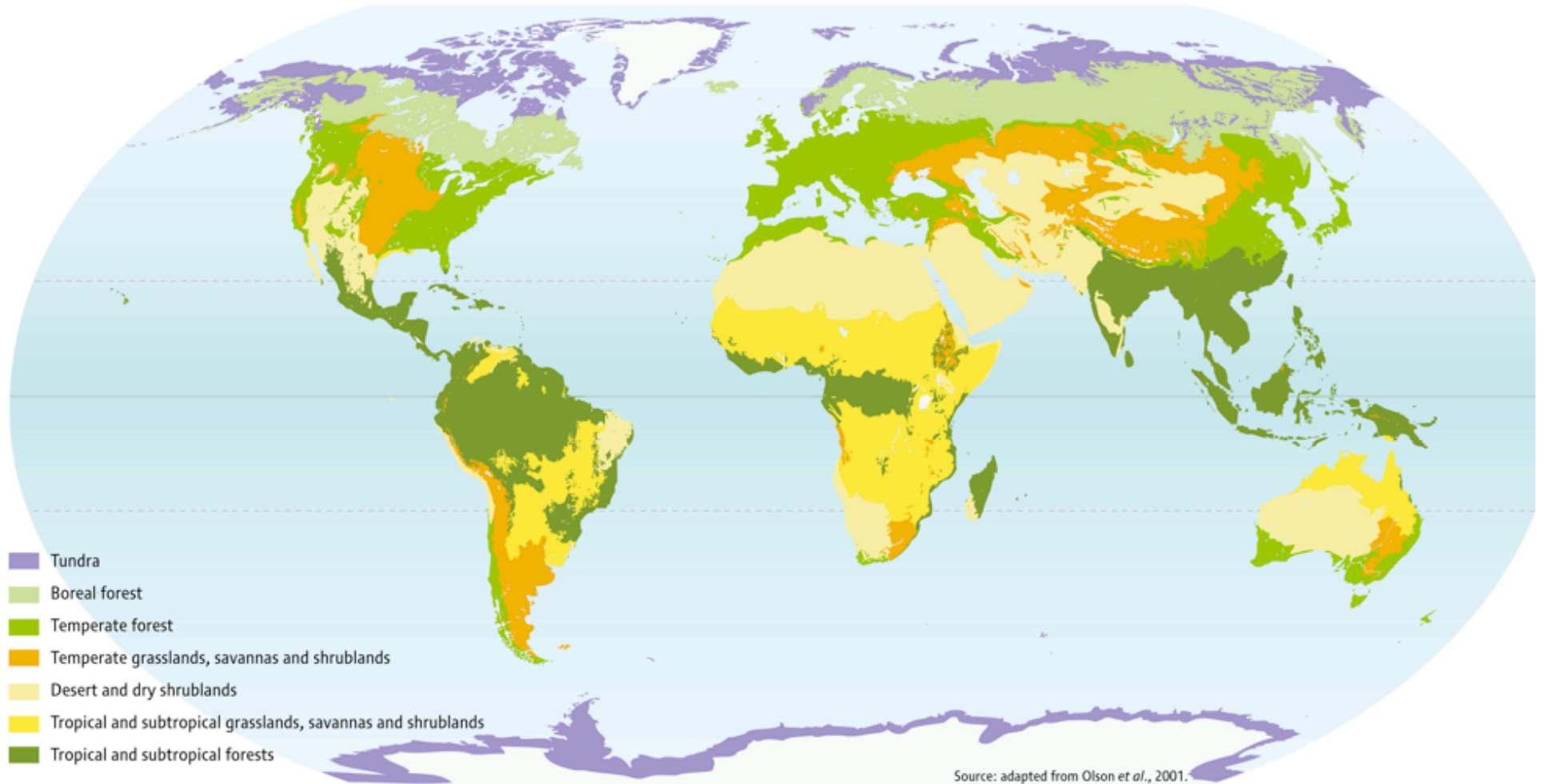


Annamarie Pasqualone



Mike League

# What biome are we in?



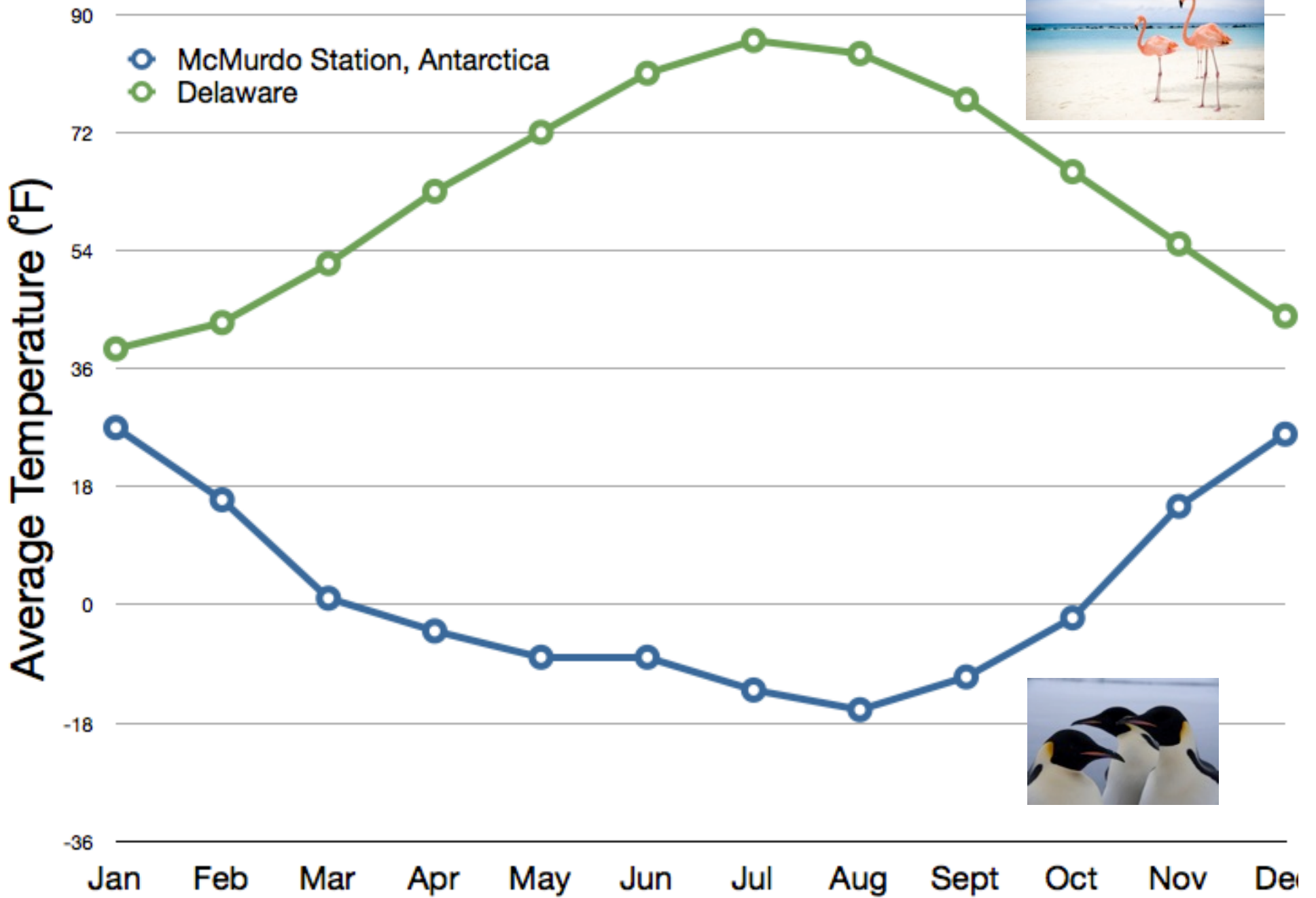


# Where are we?





# Average Temperature by Month

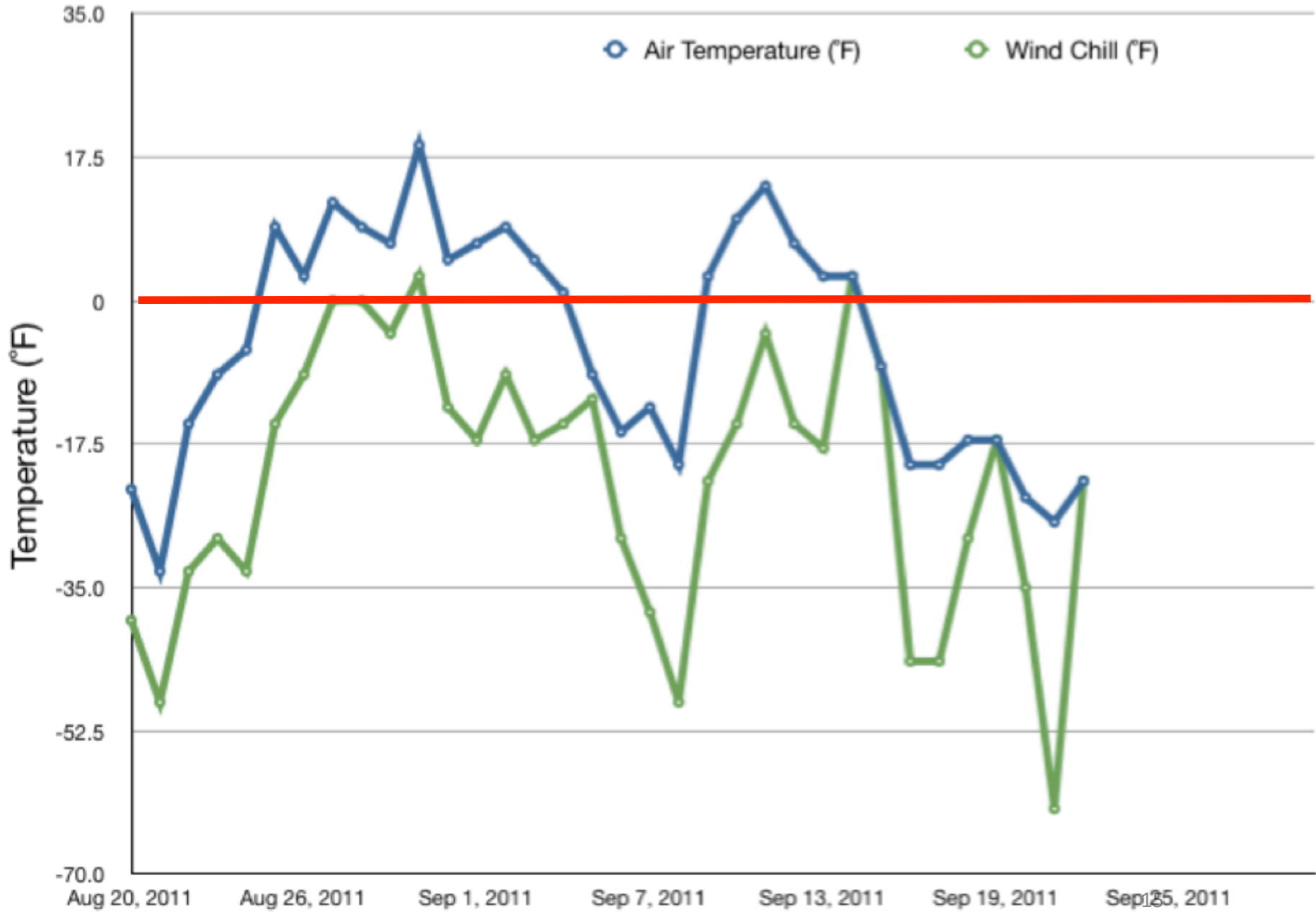


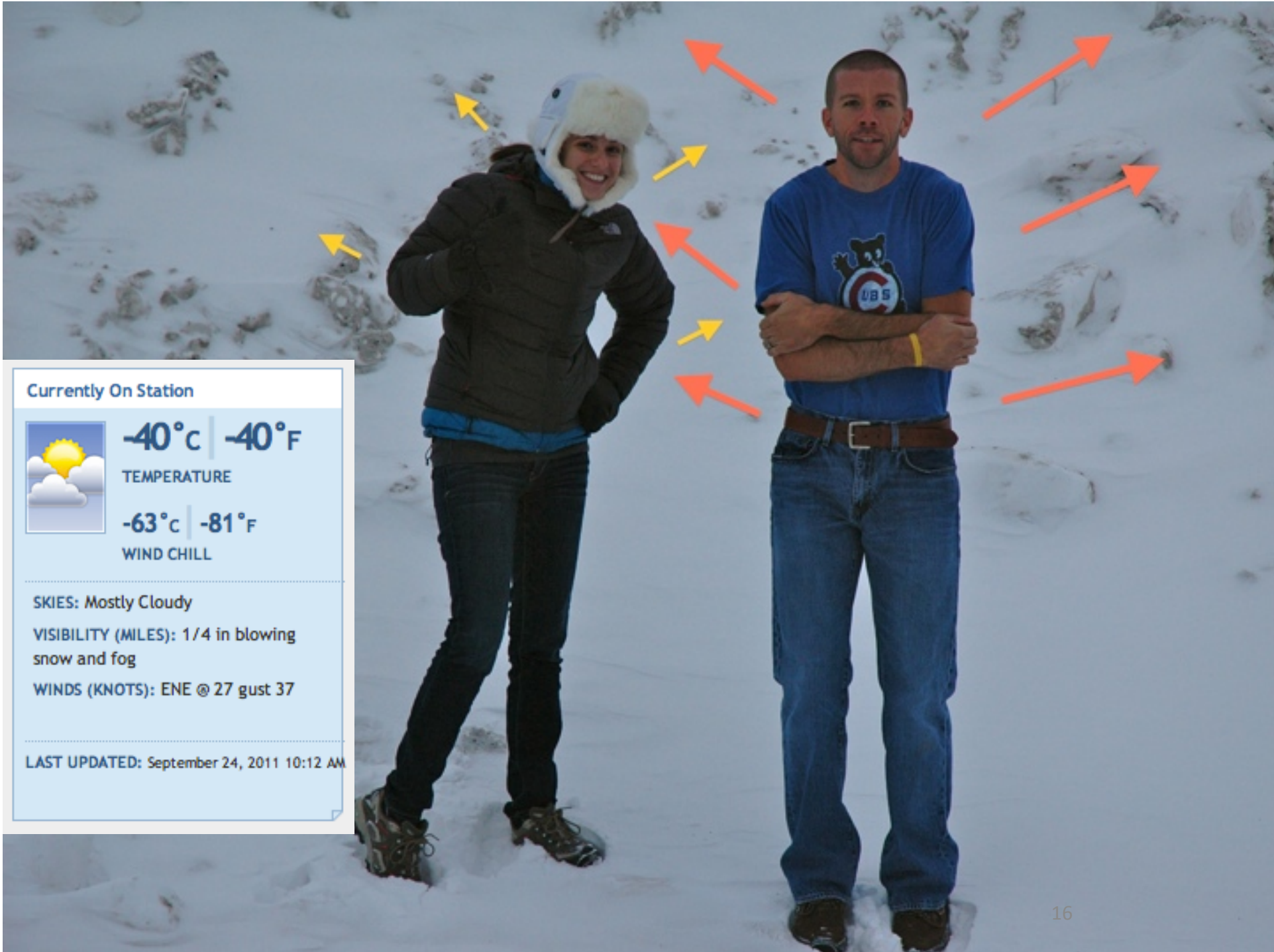






# Air Temperature and Wind Chill versus Time





Currently On Station



**-40°C | -40°F**

TEMPERATURE

**-63°C | -81°F**

WIND CHILL

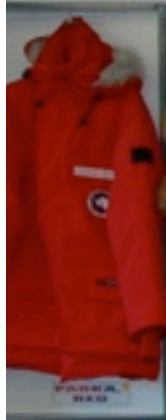
SKIES: Mostly Cloudy

VISIBILITY (MILES): 1/4 in blowing snow and fog

WINDS (KNOTS): ENE @ 27 gust 37

LAST UPDATED: September 24, 2011 10:12 AM





Informational cards with diagrams and text, including "POLAR FLEECE" and "POLAR FLEECE".



# What are we doing in Antarctica?

We are studying marine worms that live in the sediment underwater around McMurdo Station. So far we have been:

Drilling holes in sea ice

SCUBA diving under ice

Collecting sediment

Sorting worms (*Capitella*) from sediment

Taking underwater photo and video





























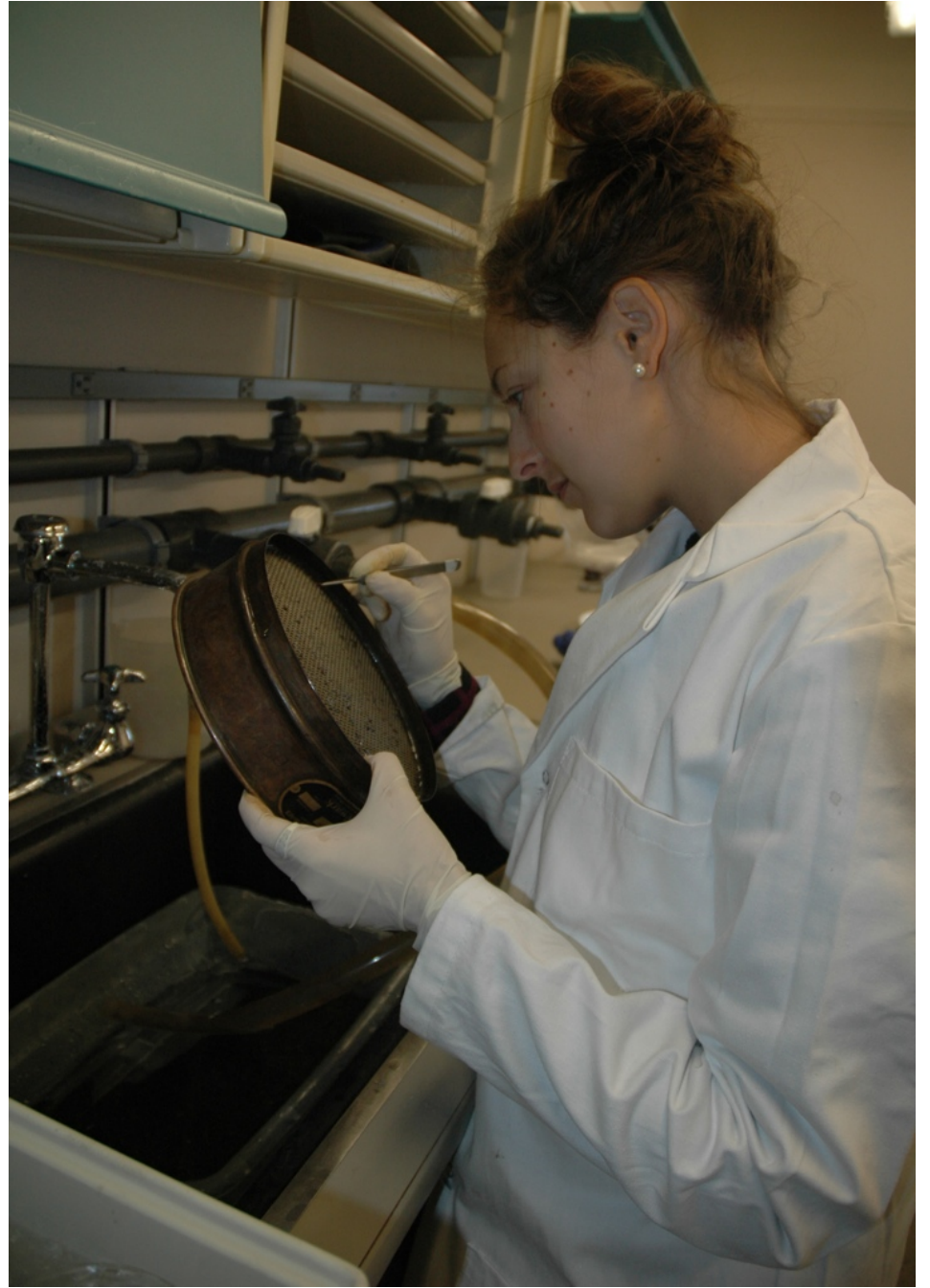






# Human Impacts







# What do we mean by “Adaptation”?

- a body structure (including DNA)
- a behavior
- a special skill or process
  
- all allow an organism to succeed in its environment
  
- How is an organism successful? What does that mean?



The sea urchins in this photo are as big as your hand.  
How big do you think this Antarctic sea star is?











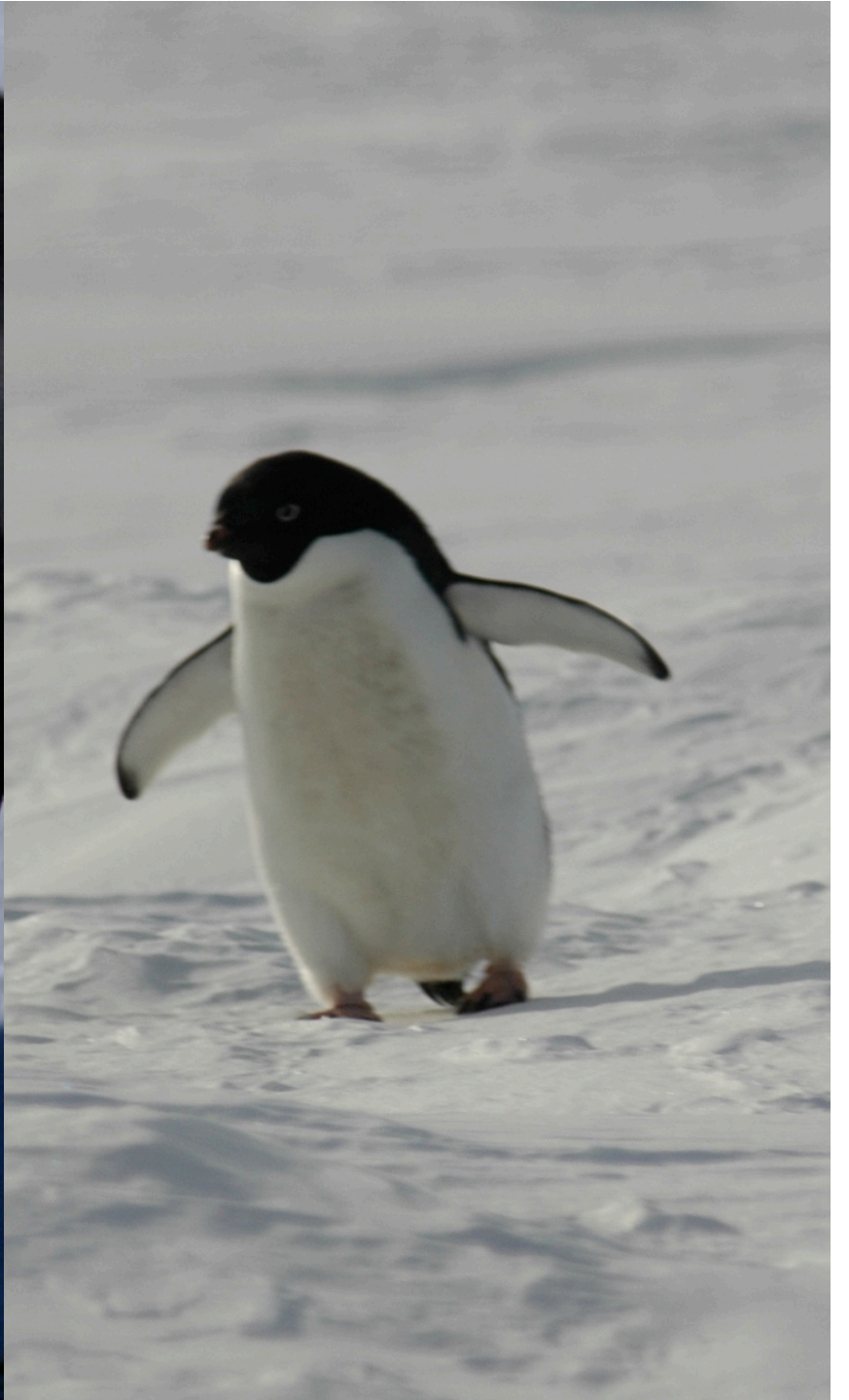
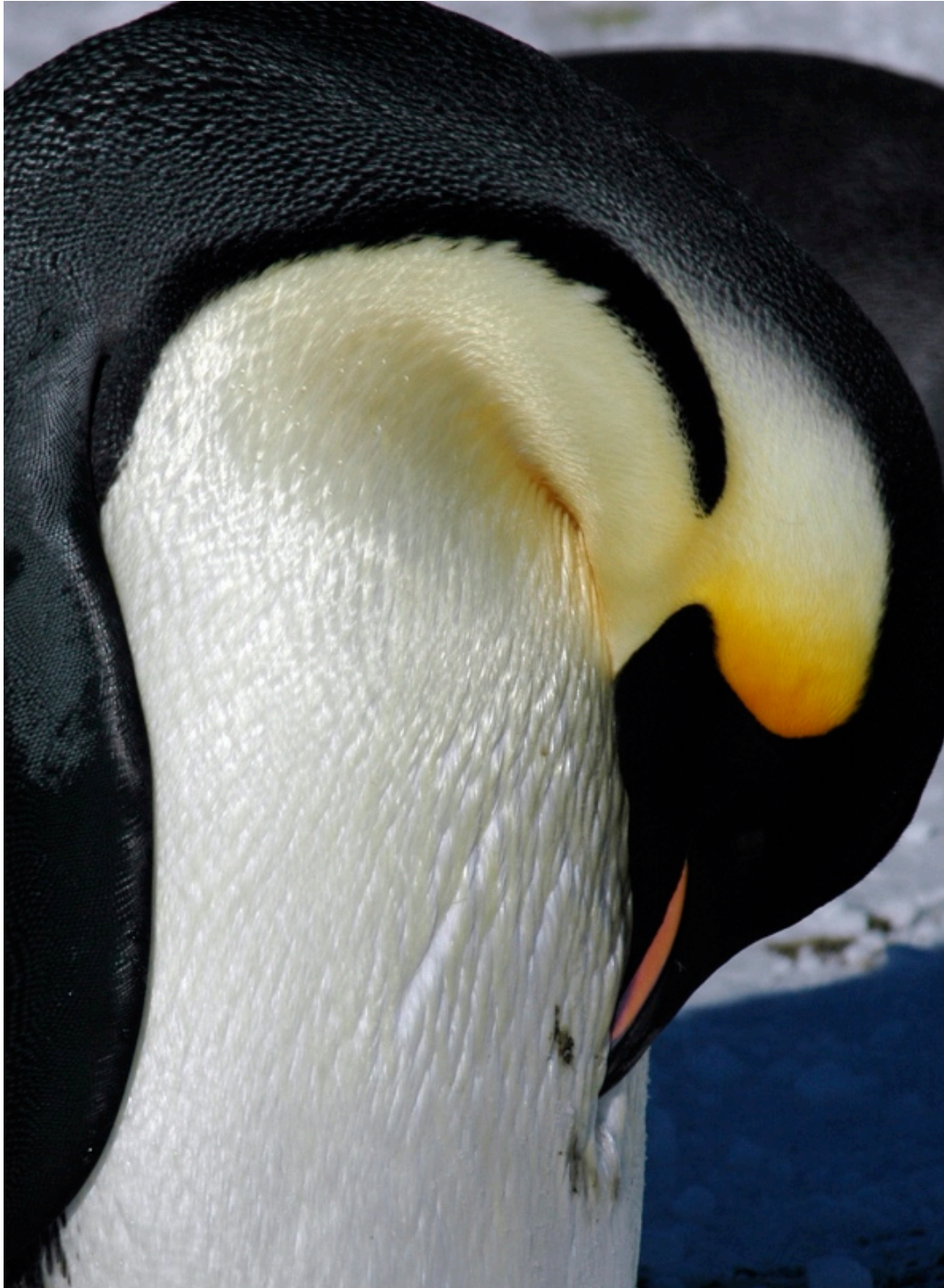














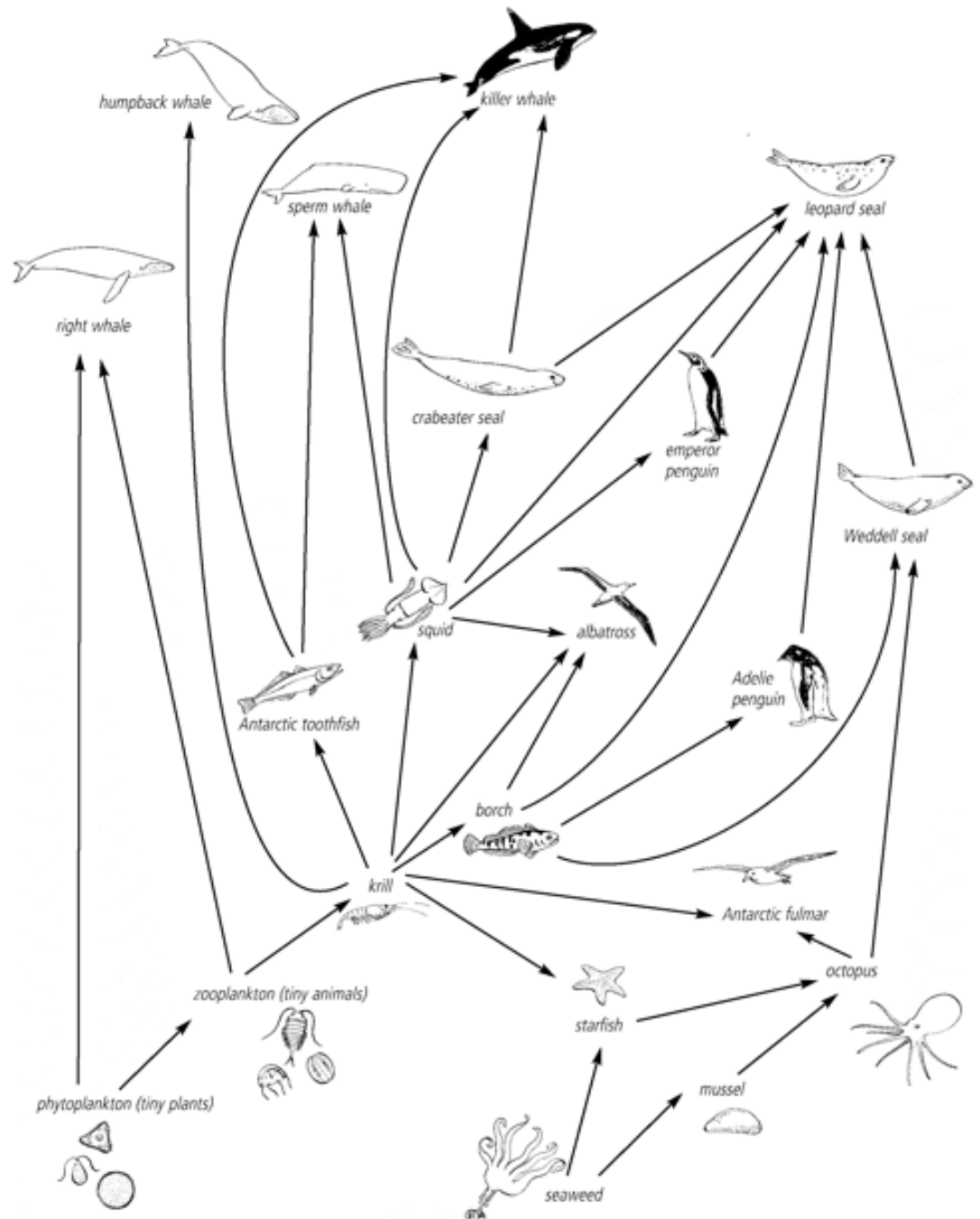


# Food Webs

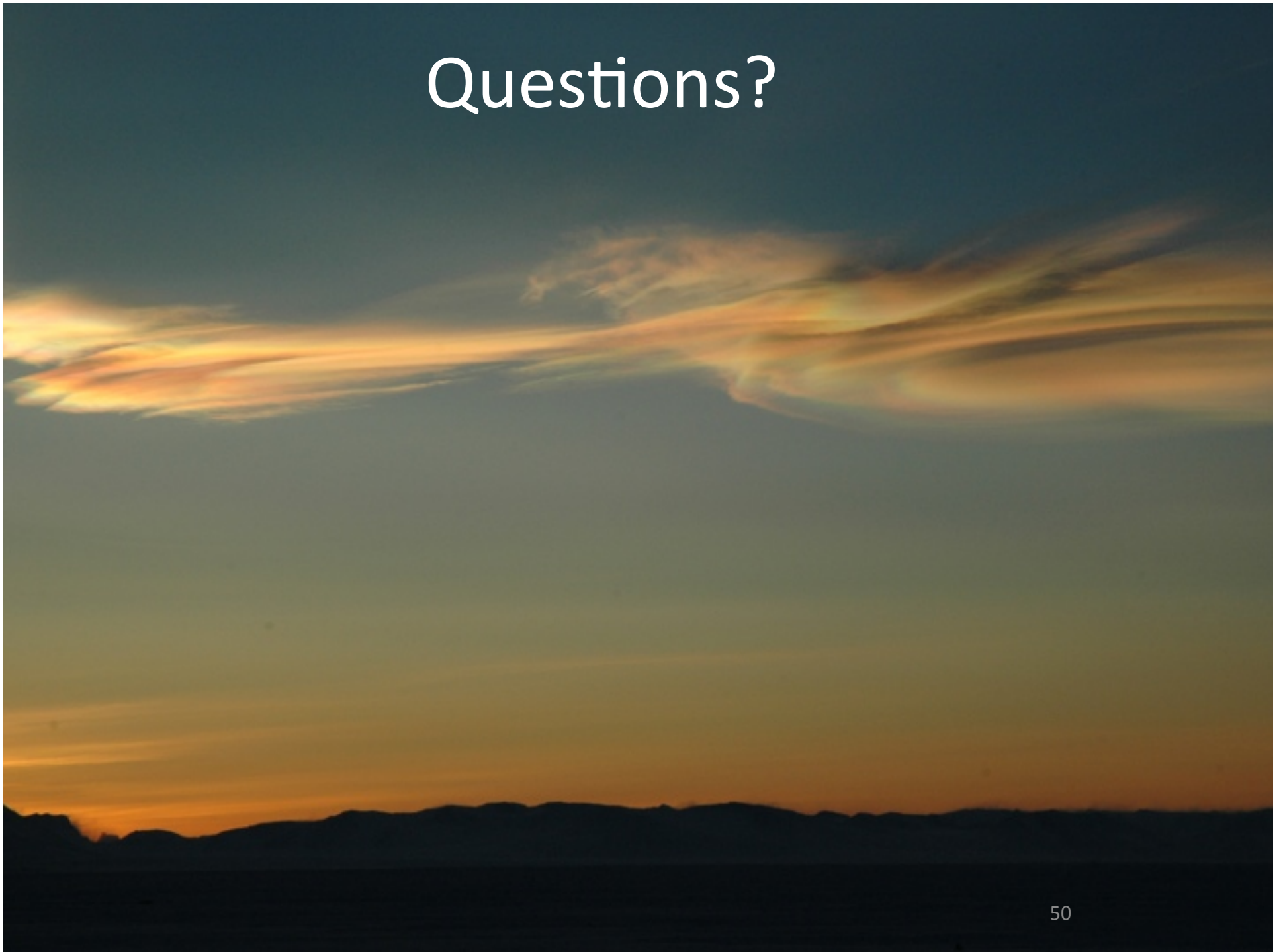
Food webs follow the flow of energy through an ecosystem

We look at who eats who in the ecosystem.

An Antarctic food web might look like this.



# Questions?







WASH YOUR HANDS

Do you can make it a safer place?

Hand sanitizer

# Saturday <sup>Aug.</sup> 27th

.....

**Lunch:** Delectable Gyros  
Scrumptious Chicken Souvlaki  
Fantastic Falafels

**Supper:** Tasty Balls of Meat  
Delicious Cacciatore of Chicken  
Sensational Parmesan of Eggplant

yum!



### Dining Room Hours

Monday-Saturday  
Breakfast: 6:30am - 7:30am  
Lunch: 11:00am - 1:00pm  
Dinner: 5:00pm - 10:00pm

REASON

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# Communication = No Cell Phones





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# Teachers: Join PolarTREC!

**Application Period:** Monday, 1 August 2011 through  
Friday, 30 September 2011

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





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# Upcoming Events

Watch for and register for upcoming events at [www.polartrec.com!](http://www.polartrec.com)



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# Thank You!

*An archive of the event will be available shortly.*  
<http://www.polartrec.com/polar-connect/archive>

