



TEACHERS AND RESEARCHERS
EXPLORING AND COLLABORATING

Welcome to *PolarConnect*

with Regina Brinker and Arctic Sunlight
and Microbial Interactions 2014 PolarTREC
Expedition

Tuesday, 8 July 2014

10:30 a.m. AKDT

(11:30 am PDT, 12:30 pm MDT, 1:30 pm CDT, 2:30 pm EDT)

Slides will be shown here

Exit the presentation

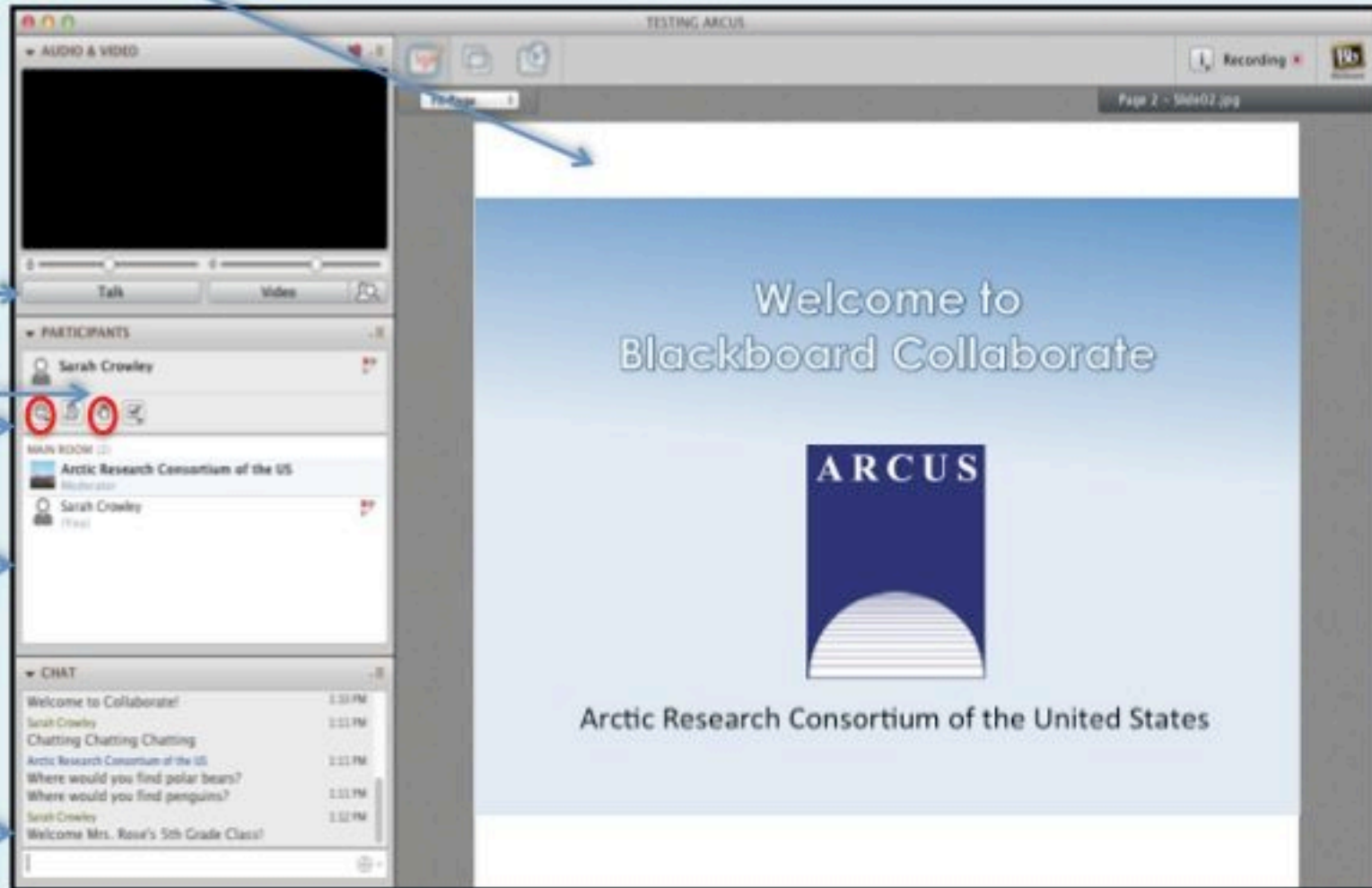
Click to Talk, Unclick to finish talking

Raise your hand to ask a question

Share with emoticons

List of all participants

Chat with one person or the entire group



The screenshot shows the Blackboard Collaborate interface. The main window displays a presentation slide titled "Welcome to Blackboard Collaborate" with the ARCUS logo and the text "Arctic Research Consortium of the United States". The sidebar on the left contains several sections: "AUDIO & VIDEO" with a microphone icon and "Talk" and "Video" buttons; "PARTICIPANTS" with a list of participants including Sarah Crowley and Arctic Research Consortium of the US, and icons for mute, unmute, and raise hand; "MAIN ROOM" with a list of participants; and "CHAT" with a list of chat messages and a text input field.

Please Note:

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

Participant Introductions

Please type in the chat box:

- ✓ Name
- ✓ Affiliation (School, Institution, Etc.)
- ✓ 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 3-6 week research experiences in the polar regions.

From 2010-2015, nearly 70 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

During the Presentation:

- Type your question in the text chat box

At the End of the Presentation:

- Raise your hand with the “hand button”.
- PolarTREC staff will call on you.
- Speak loud and clear and directly into the phone to ask your question.

Click on the Talk button to speak.

Unclick when you are done.



Crossing into the Arctic! Regina Brinker, PolarTREC Teacher





Teachers and researchers working together in polar regions



Arctic
destination

Toolik Field Station

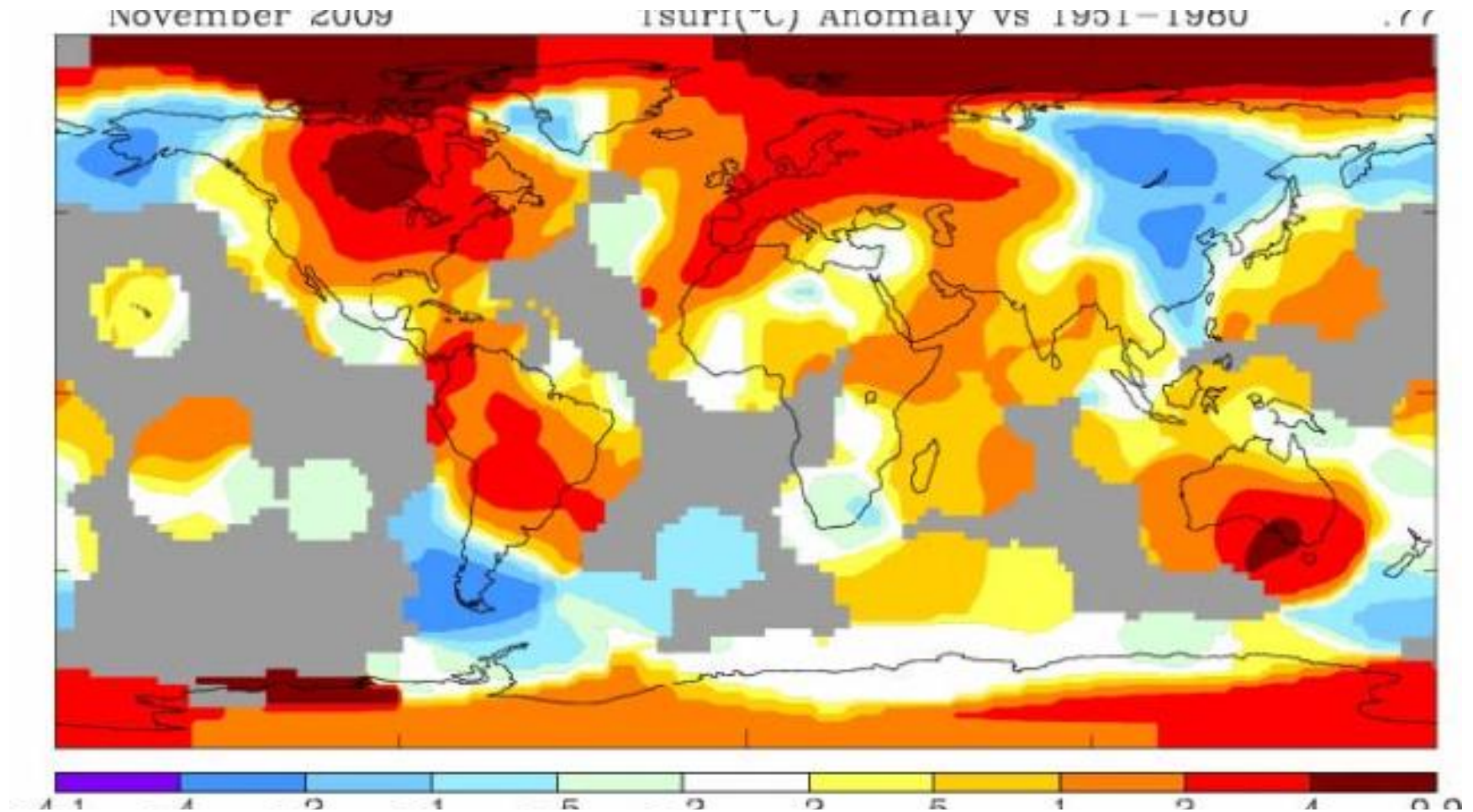


INSTITUTE OF ARCTIC BIOLOGY
Lat. 68 38' N Long. 149 36' W



Why study
polar
regions?

Polar regions are warming faster



100,000s of acres of permafrost in Arctic regions



Permafrost = soil frozen for 1+ year



Tundra stores decayed plants, carbon





Soil cracks when permafrost thaws.

Carbon dioxide is released into water and atmosphere.



Thermokarst



Researchers collect water samples in watershed



Checking
Water pH



Dr. Rose Cory,
University of
Michigan,
studies carbon
dioxide released
into atmosphere
from tundra.



Measuring how much light goes into water through water and ice.



Collecting data in the field



Water samples tested
in a lab.





Lots of research
goes on at
Toolik Field Station





Toolik Field Station







Many layers
needed
on some
days of
field work!



Lots of mosquitos!



Lapland rosebay plant; rhododendron family



A tussock plant



What time do you think this picture was taken?



11:00 PM (23:00)



Musk ox



Caribou



Fox!



For more expedition photos and stories, read journal postings at PolarTREC.com.

Teachers: Join PolarTREC!

www.polartrec.com/about/join

Every teacher can participate in different ways:

- **Following Expeditions**
- **Participate in PolarConnect Events**
- **Join the Polar Education Email List**
- **Become a PolarTREC Teacher!**

Upcoming Events

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

Thank You!

An archive of the event will be available shortly.

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

