

Welcome to PolarConnect



Arctic Glacial Lakes

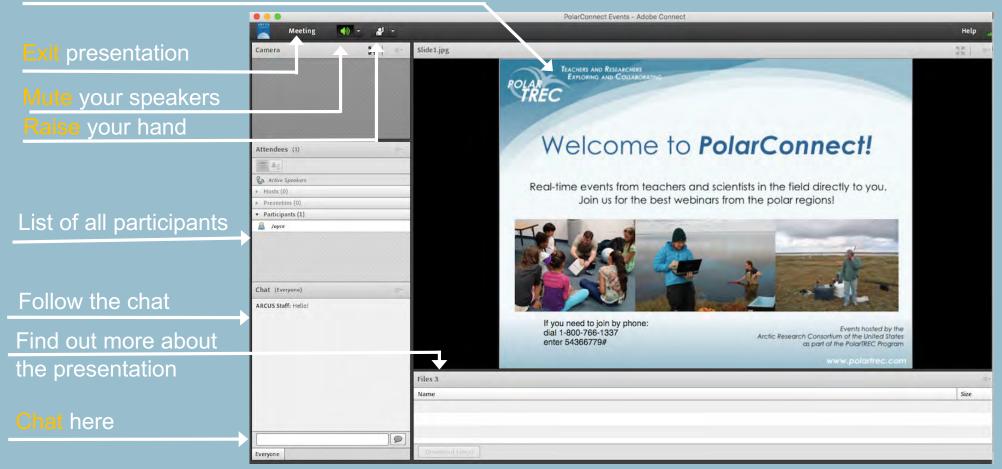
With PolarTREC Teacher Rebecca Harris

& Team Researcher Ellie Broadman

24 August, 2017

Getting to Know Adobe Connect

Slides will be shown here





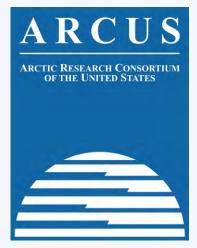
Participant Introductions

In the Chat box, please introduce yourself by typing in your:

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

What is PolarTREC?

- Since 2004, the Arctic Research Consortium of the United States (ARCUS), a non-profit organization, has been administrating the PolarTREC Program.
- PolarTREC is professional development for K-12 teachers. They are paired with researchers for 2-6 week research experiences in the polar regions.
- Over 150 teachers from around the United States have joined 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.



25 Years of Connecting Arctic Research www.arcus.org Teachers and Researchers Exploring and Collaborating



During the Presentation:

• Type your question in the text chat box

At the End of the Presentation, two options:

- 1. Type your question in the text chat box, or
- 2. Raise your hand with the "hand button".
- PolarTREC staff will call on you and activate your microphone.
- Speak loud and clear, directly into the computer microphone or the phone to ask your question.

Introductions

Ellie Broadman

Earth Science graduate student at Northern Arizona University



Rebecca Harris

Secondary science teacher at Escalante High School, UT

Research Team

Darrell Kaufman, Chris Benson, Ellie Broadman, Rebecca Harris



Arctic Glacial Lakes Project



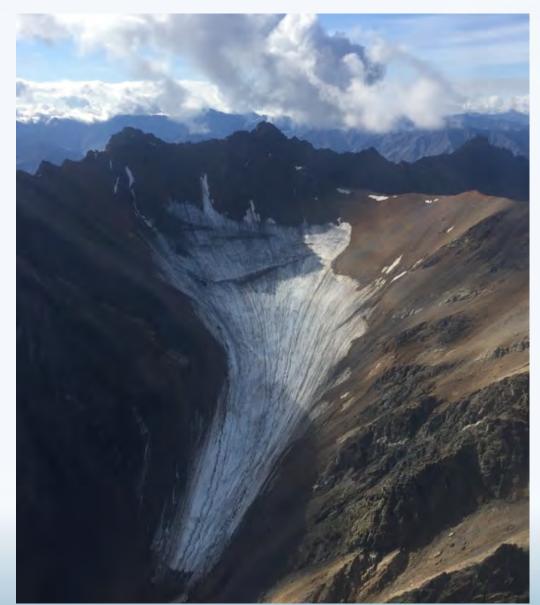
- 3 universities and 8 lead scientists
- 3 different lakes from sub-arctic to high arctic
- Study lakes to understand influence of:
 - Weather
 - Glacier
 - Rivers
 - Sediment
 - How they're related!

Glacial Systems

- Glaciers influence:
 - Water

TREC

- Sediment
- Landscape & Ecosystems
- Sensitive to changing climate
- Rare but important



Getting There

 Boulder -> SLC -> Fairbanks -> Coldfoot -> Lake Peters





Field Camp

Bunkhouse and tents





Life in the Field

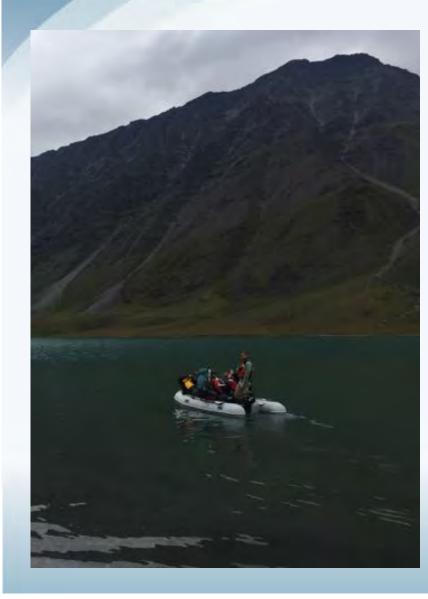
Buggy, rainy, dirty, exhausting... exciting, fulfilling, fun!







Getting Around





Field Work

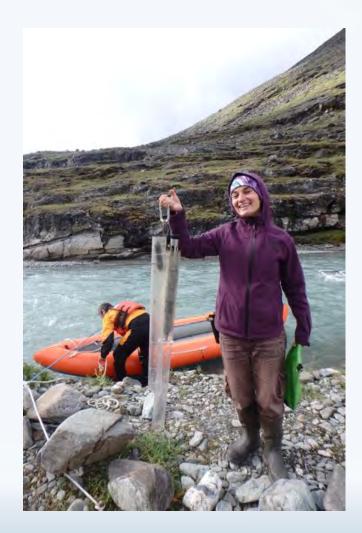
- Data Loggers
- Lake
- Creeks
- Glacier
- Moraines



TREC Loggers: HOBOs and Trolls







Field Work: Lake

• Pulled sediment traps

TREC

 Download data: temperature at different depths, pressure, turbidity, conductivity





Field Work: Creeks

- Measure discharge
- Check cameras and download data: temperature, turbidity, conductivity, pressure





Field work: Glacier

- Download data and cameras
- Break down weather stations and ablation stakes and carry out





TEACHERS AND RESEARCHERS EXPLORING AND COLLABORATING FIELD FIELD W

Field work: Moraines

- Walk moraine ridges
- Measure lichens







Weather









www.poiumec.com

Tundra

• Soft, wet, squelchy, full of berries and mushrooms



Animals











Outreach in Kaktovik



Teachers and Researchers Exploring and Collaborating



Join PolarTREC!

www.polartrec.com/about/join

Everyone can participate in different ways:

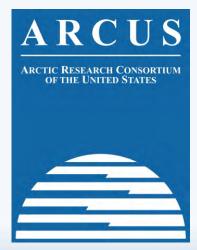
- Follow Expeditions
- Participate in PolarConnect Events
- Join the Polar Education Email List
- Check out the great resources
- Become a PolarTREC Teacher or Researcher
- Become a member of ARCUS



Thank You!

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





25 Years of Connecting Arctic Research www.arcus.org