



TEACHERS AND RESEARCHERS
EXPLORING AND COLLABORATING

Welcome to PolarTREC Webinar: Meet and Greet

Program & Project Overview for 2014-2015

www.polartrec.com

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 displays the Blackboard Collaborate interface. At the top, the title bar reads "TESTING ARCUS". Below it, the "AUDIO & VIDEO" section includes a video player (currently black) and controls for "Talk" and "Video". The "PARTICIPANTS" section lists "Sarah Crowley" and "Arctic Research Consortium of the US" (Moderator). The "CHAT" section shows a list of messages, including "Welcome to Collaborate!", "Sarah Crowley: Chatting Chatting Chatting", and "Arctic Research Consortium of the US: Where would you find polar bears?". A blue arrow points from the "Slides will be shown here" text to the main presentation area on the right.

Please Note:

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

Agenda for Webinar

1. Overview of PolarTREC Program (5 min)
2. Program Requirements for Teachers & Researchers (10 min)
3. Program Evaluation (5 min)
4. Introduction to the 2014-2015 PolarTREC Projects, including Teacher and Researcher Introductions (35 min - 3 min/project)
5. Questions & Answers (5 min)



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PolarTREC Overview

Meet the PolarTREC Team

Janet Warburton

PolarTREC PI and
Project Manager



Sarah Bartholow

PolarTREC
Project Manager



Heidi Roop

Science Liaison



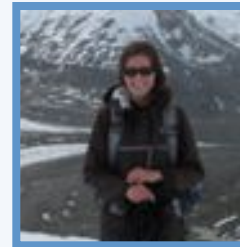
Angela Larson

Evaluation



Joed Polly

Video Production



Reija Shnoro

Orientation Asst.



**Ronnie
Owens**

Web Developer



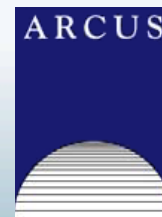
Zeb Polly

Systems Administrator

Katie Breen

Contract Work

...with help from the
entire staff at ARCUS



Support and Funding



We are funded by the National Science Foundation Office of Polar Programs for the 2014-15 season.



We are administered by the Arctic Research Consortium of the United States, a non-profit member consortium based in Fairbanks, Alaska. www.arcus.org



Arctic logistics support (including teacher travel, clothing, and equipment provided by CPS).



Antarctic logistics support (including teacher travel, clothing, and equipment provided by Antarctic Support Contractor ASC)

...With other support and funding provided for specific projects on a situational basis.

What is PolarTREC?

The goal of PolarTREC is to invigorate polar science education by bringing K-12 educators and polar researchers together through hands-on field experiences.



The PolarTREC field experience



Scientific Process
and Methods



Scientific Content

Goals of PolarTREC



- To improve **teacher science and content knowledge** of the Polar Regions and integration of topics into their classroom instruction.
- To increase teachers' **knowledge and use of science and engineering practices** with their students in the classroom.
- To develop teachers' **educational leadership skills**.
- To increase **students' understanding and engagement in the Polar Regions** and interest in polar STEM careers.
- To develop **long-term professional relationships** between teachers and researchers and **to develop researcher understanding of K-12 education** to strengthen outreach and dissemination of their research.

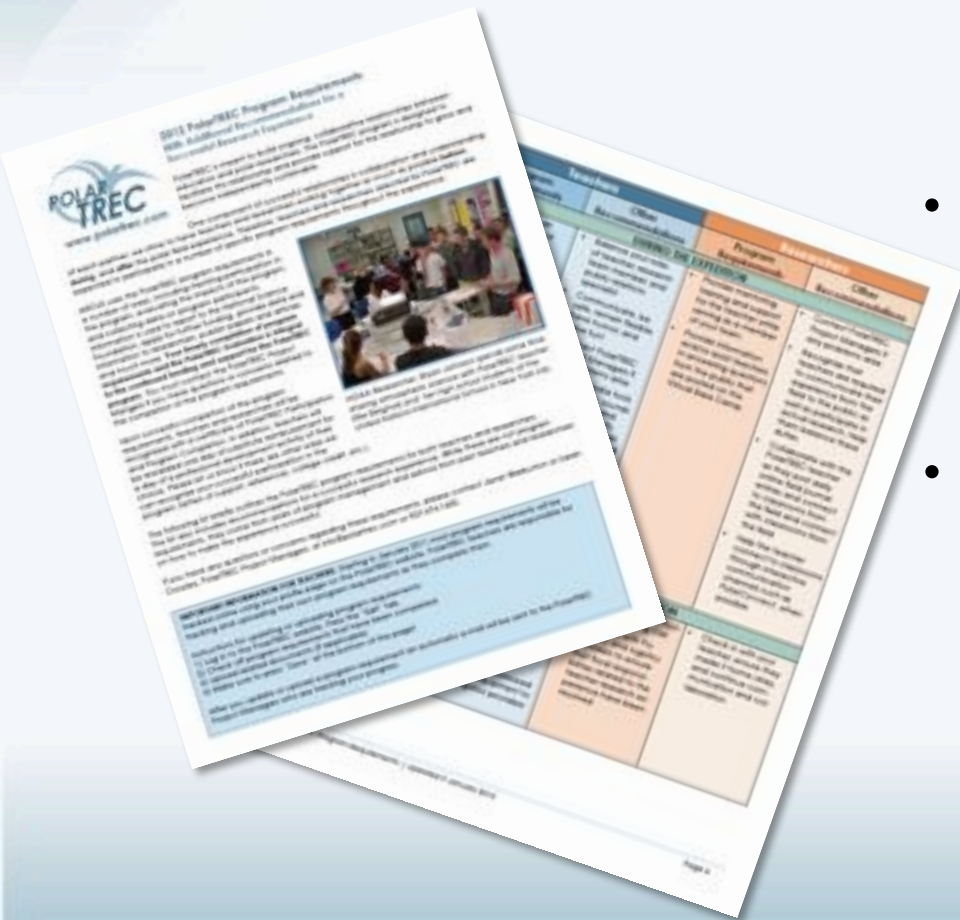


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PolarTREC Program Requirements

Program Requirements

- There are detailed program requirements and recommendations for before, during, and after the expedition
- Teachers have “deliverables”, but will need the support of and communication with the research teams to accomplish these goals
- Just like evaluation, important to our tracking, reporting, and continuation of the program



Education and Outreach Plan

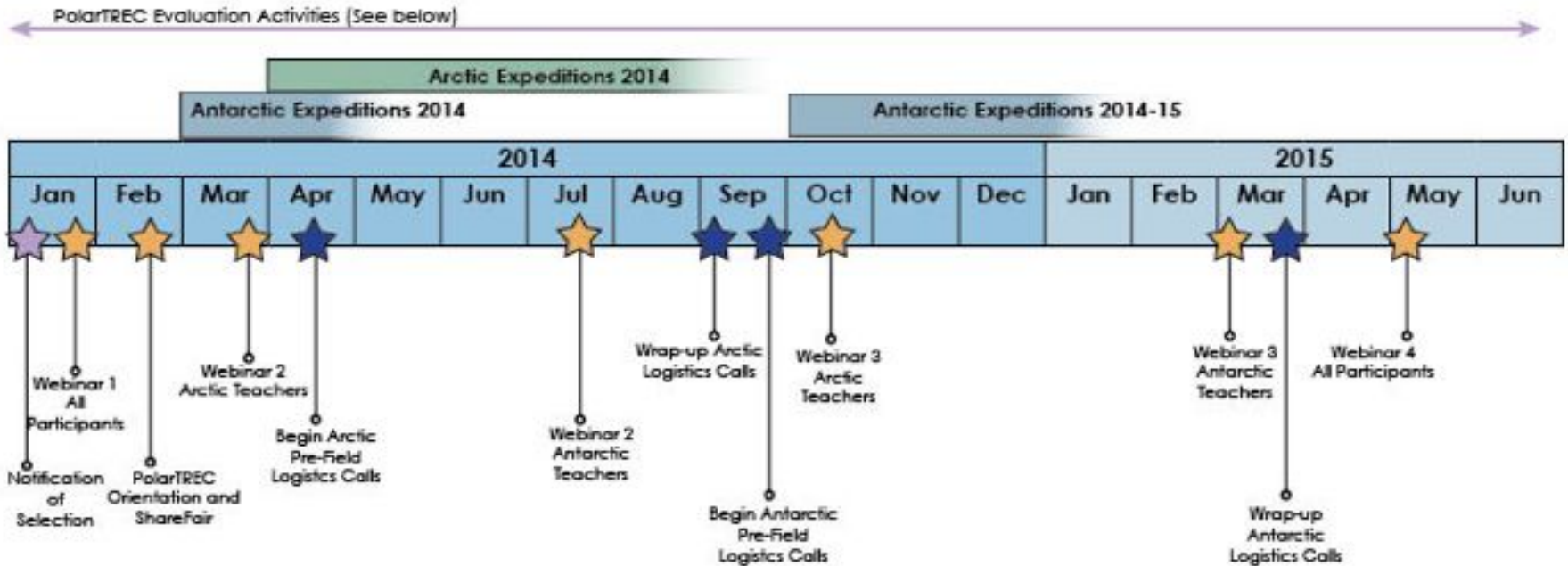


Phone Calls and Webinars

- Important to make sure program activities are progressing
- Consists of a series of 4 webinars (web seminars)
- We encourage researcher participation for Webinar 1 and 4
- Consists of 2 phone calls, one pre-field call and one post field call which includes teacher, researchers, logistics providers, and PolarTREC staff



2014-2015 Timeline of Major Program Activities



★ Evaluation Activities
 Angela Larson/Goldstream Group

All participating teachers and researchers are asked to contribute to our program evaluation throughout their experience. We aim to understand the PolarTREC program's effect on:

- teacher polar science & content knowledge
- teacher integration of polar science into classrooms
- student understanding and interest in science
- researcher engagement in K-12 education

- ★ Phone Calls, In-Person Meetings, and Webinars
- ★ Note: Additional training webinars may be held for teachers as demand warrants.
- ★ PolarTREC will offer enrichment/professional development opportunities throughout the year which may include of webinars, field courses, and presentations at regional and national conferences.

Program Evaluation

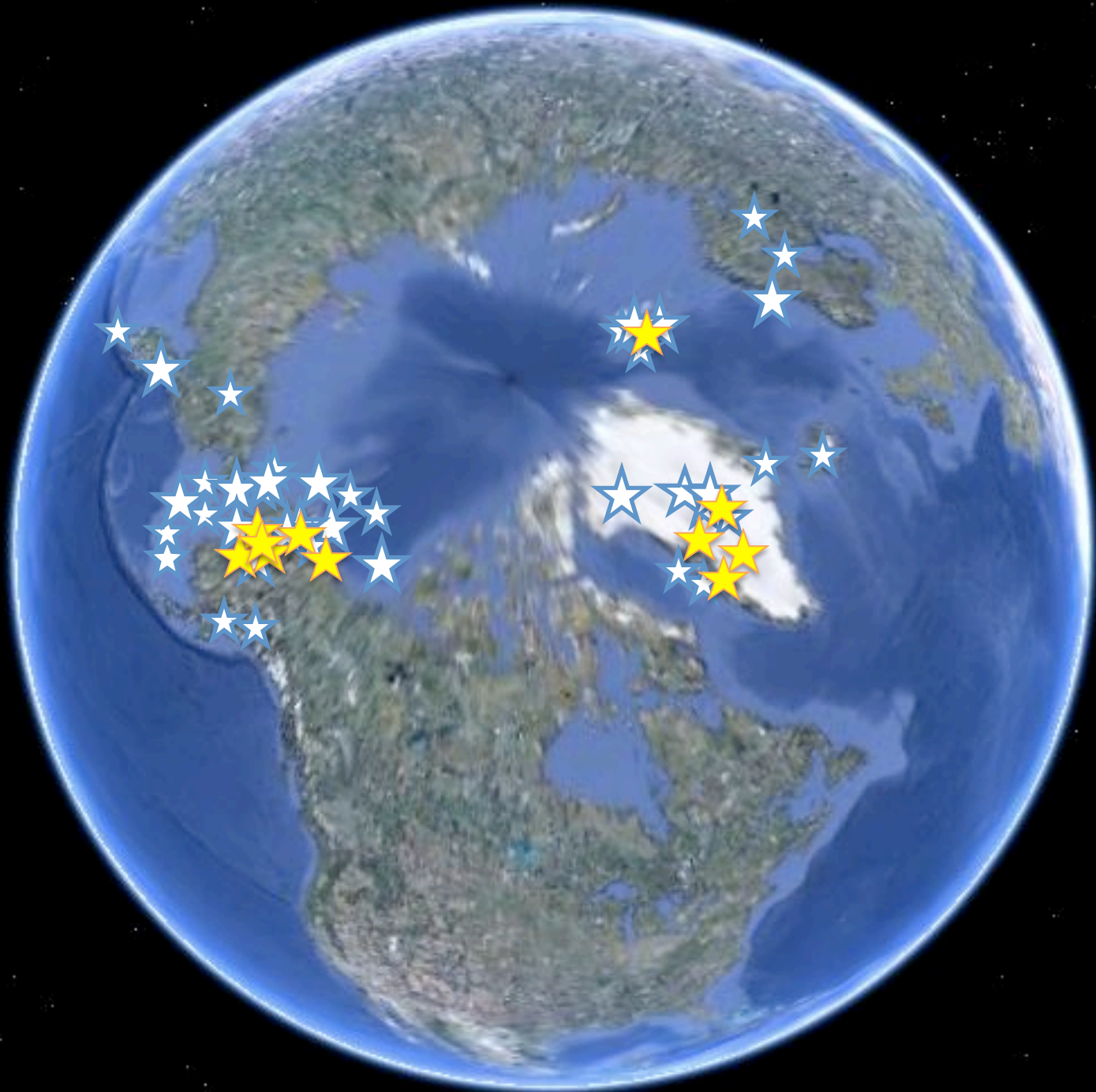
- We work with Angela Larson of Goldstream Group
- We need your help collecting data. **Participate in the evaluation**
- Teachers: Bring evaluation form to orientation.





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2014-2015 Projects & Participants





< 3-4 Minutes / Team

Teacher Introduction (1 min)

Name, School, City, State

One thing you are looking forward to with PolarTREC



Researcher Introduction (1 min)

Name, Institution, City State

One thing you are looking forward to with PolarTREC



Project Information (2 min)

Project Location

Primary goal of the research project



Teachers Headed To the Arctic Part 1



Tina Ciarametaro

Greenland with
Jason Briner



Lauren Watel

Toolik Field Station, AK
with Byron Crump



Emily Dodson

Greenland with
Christine Urbanowicz

Lynn Reed

Einstein Fellow with
JSEP program



Andre Wille

Toolik Field Station, AK
with Cory Williams



Peggy McNeal

Svalbard, Norway with
Julie Brigham-Grette and
Ross Powell



Teachers Headed To the Arctic Part 2



Russell Hood

Greenland with
Michael Studinger
and George Hale

Tom Lane

Healy, AK with
Margurite Mauritz



Sian Proctor

Barrow, AK with
Anne Garland

Lisa Seff

Barrow, AK with
Carin Ashjian



Regina Brinker

Toolik Field Station, AK with
Rose Cory

Teachers Headed To Antarctica



Armando Cassaude

South Pole Station with
Jim Madsen



Dominique Richardson

R/V NB Palmer
with Frank Nitsche



Lucy Coleman

Dry Valleys (Lake Joyce)
with Dawn Sumner

Alex Eilers

McMurdo Station
with Jennifer Burns



Yamini Bala

WAIS Divide with
Erin Pettit and
Rachel Obbard



Some of your support staff

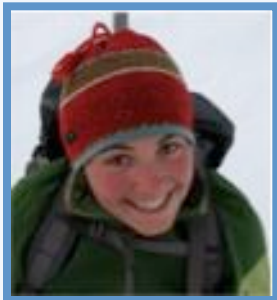
Janet Warburton

PolarTREC PI and
Project Manager



Sarah Bartholow

PolarTREC
Project Manager



Heidi Roop

Science Liaison

Robbie Score

Polar Field Services
CPS



Elaine Hood

Antarctic Support
Contractor
Communications/
Education and Outreach



Closing Thoughts & Next Steps

How to Succeed

Communicate

Expectations, instruction, outreach plans, problems/praise to ARCUS

Be Flexible – roll with whatever comes

Plans change moment to moment, be prepared

Research comes first

Be an excellent research assistant, be a sponge, not all field work is sexy!

Make sacrifices to meet goals

Sleep, fun, comfort, status/authority

Bring your unique skills to the team

Readiness to lend a hand, humor, special skill/strength, positive attitude

NSF Hopes for PolarTREC

- Support the integration of research and education
- Convey research experience to K-12 classrooms
- Develop inquiry-based activities for students
- Share with PIs the experience of K-12 educators, develop long-term relationships
- Professional development for your career
- Improve outreach, education, broader impacts

Travel Support

- We have a limited amount of funding to support pre- or post- field collaborations between teachers and researchers
- Please consider:
 - Teacher Visit to Lab or Researcher's Inst.
 - Researcher Visit to School or Classroom
 - Data Workshop or Preparatory Meeting
 - Team Conference Presentation



Questions?

Thank You for Participating in PolarTREC!

For Questions & More Information:

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Sarah Bartholow, Project Manager

sbartholow@arcus.org

907-474-1600

www.polartrec.com

