**Final - Teacher and Researcher Networking Strategy – 2014**

**(For 2011-2012 see page 2)**

**Alex Eilers – PolarTREC Teacher 2014**

**Collaboration before the field experience:**

**What are the ways you will communicate with your researcher or team members before the experience?**

* Programmatic planning calls
* E-mail communication
* PolarTREC Conference Calls

**Are there ways you can collaborate before the expedition to inform the public, media, and other schools about the upcoming expedition?**

Our plan was to get the word out and we were successful!

* There were over 15 interviews to the media.
* Many of these are listed under the PolarTREC Resources page
  + Over 11 articles written
  + TV interviews with local stations- NBC, ABC
  + Radio interview- Outdoors with Larry Rhea
  + Interview with Library channel show

To reach out to schools and involve teachers and classes, I attended many teacher in-services and staff meetings. Many classroom visits were booked prior to the expedition (as of 10/1/14)

* Over 42 presentations to teachers, librarians and principals
* Presentations to Memphis Public Library Staff, Girls Inc and City of Memphis Wellness Coordinator
* Over 49 school presentations to students
* 9 schools presentations by the team in Alaska

**During the field experience:**

**What science topics or issues would you like to discuss as a team while in the field?**

* Dr. Burns and I have decided to focus on the following topics.
  + Animal physiology/Animal adaptations
    - Blood
    - Blubber
    - Eyes
    - Family
    - Fur & Molting
    - Lungs
    - Milk
    - Muscles
    - Nose
    - Teeth and Jaw
    - Sound/Vocalization
    - Seal Pups
* I also focused on the following topics:
  + Weather
    - Antarctic Weather Conditions
    - Katabatic Winds and Wind Chill
  + Others
    - Ice/Glaciers
    - Mt. Erebus
    - Penguins
    - Extreme Cold Weather Gear
    - McMurdo Station

**After the field experience:**

Host a several K-12 outreach component

* + Recipients of this outreach program would be selected from participants in the challenges

**Final - Teacher and Researcher Networking Strategy**

**Alex Eilers – PolarTREC Teacher 2011-12**

**Collaboration before the field experience:**

**What are the ways you will communicate with your researcher or team members before the experience?**

Yes, there are many:

* Personal meetings
  + In February of 2011 I met with UAA Graduate Assistant Linnea Pearson. She provided me with both basic and specific information regarding the expedition.
* Programmatic planning calls
  + On at least 3 different occasion Dr. Burns and I have had 1 hour + phone conversations
  + The purpose was to outline and plan our educational and public outreach.
* E-mail communication
  + Dr. Burns and I have had extensive e-mail communications regarding the educational and public outreach plan.
* PolarTREC Conference Calls
  + Participated in the Pre-field call on Oct 7th

**Are there ways you can collaborate before the expedition to inform the public, media, and other schools about the upcoming expedition?**

Our plan was to get the word out and we were successful!

* There were over 13 interviews to the media.
* Many of these are listed under the PolarTREC Resources page
  + Over 20 articles written
  + 2 radio interviews
  + 4 TV interviews with local stations- ABC, CBS, NBC, Fox

**What journals, books or other materials will the teacher use to learn this content?**

Reading list

* The Hunters Breath – Dr. Terrie Williams
* TOPPs articles on the Weddell Seal project

Journals

* [Daniel P. Costa](http://icb.oxfordjournals.org/search?author1=Daniel+P.+Costa&sortspec=date&submit=Submit)[1](http://icb.oxfordjournals.org/content/50/6/1018.abstract#corresp-1),[\*](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1), [Luis A. Huckstadt](http://icb.oxfordjournals.org/search?author1=Luis+A.+Huckstadt&sortspec=date&submit=Submit)[\*](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1), [Daniel E. Crocker](http://icb.oxfordjournals.org/search?author1=Daniel+E.+Crocker&sortspec=date&submit=Submit)[†](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1), [Birgitte I. McDonald](http://icb.oxfordjournals.org/search?author1=Birgitte+I.+McDonald&sortspec=date&submit=Submit)[\*](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1), [Michael E. Goebel](http://icb.oxfordjournals.org/search?author1=Michael+E.+Goebel&sortspec=date&submit=Submit)[‡](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1) and [Michael A. Fedak](http://icb.oxfordjournals.org/search?author1=Michael+A.+Fedak&sortspec=date&submit=Submit)[§](http://icb.oxfordjournals.org/content/50/6/1018.abstract#aff-1) 2010. Approaches to Studying Climatic Change and its Role on the Habitat Selection of Antarctic Pinnipeds. Integrative and Comparative Biology. June 3, 2010: 1-13
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**Are there classes the teacher needs to use take before the expedition?**

* I participated in an on-line course through the University of Alaska Anchorage. This was a basic course about working with the IACUC which focused on the rules, regulations and procedures of working with live animals. Participation in this class was necessary in order to provide documentations for the teams approved animal care protocol - all people who are working with animals must be listed.
* Passed class in May 2011

**During the field experience:**

**What science topics or issues would you like to discuss as a team while in the field?**

* Dr. Burns and I have decided to focus on the following topics.
  + The Tagging process
  + The Equipment
  + Animal physiology/Animal adaptations
    - Blood
    - Blubber
    - Body
    - Diet
    - Eyes
    - Family
    - Flippers
    - Fur and molting
    - Habitat
    - Lings
    - Milk
    - Muscles
    - Nose
    - Teeth and Jaw
    - Temperament
    - Seal ‘stats’
    - Sounds and vocalization
    - Whiskers
* I also focused on the following topics:
  + Weather
    - Weather - Condition 1, 2 and 3
    - Weather part 2 - katabatic winds
    - Wind Chill
  + Explorers
    - 100th year of the Race to the South Pole - Amundsen and Scott
  + Others
    - Ice/Glaciers
    - Mt. Erebus
    - Adélie Penguins
    - Emperor Penguins
    - Weddell Seal Predators - Leopard Seal and Antarctic Killer Whale

**After the field experience:**

I submitted an application to ARCUS’s ‘Host an Antarctic Visiting Speaker’ and the visit was granted. Dr. Jennifer Burns visited Memphis from May 7-11, 2012.

Our main priorities were to:

* Deliver follow-up presentations to area schools
  + Presentations were made at 5 different schools to a total of 365 students and 26 teachers
* Provide follow-up presentation to local media
  + Nine interviews were given
    - Four print media - Bartlett Express, Parent Magazine, Memphis Flyer, Commercial Appeal
    - Two radio interviews - WUMR and Outdoors with Larry Rea
    - Three TV interviews with local stations - ABC, CBS, Fox
* Host luncheons for staff, board members and donors
  + Two presentations were made to over 20 people
* Host a public lecture
  + Dr. Burns and Alex presented the lecture entitled “Passport to Antarctica – Where Adventure Meets Seal Science” to approximately 170 people

**Continued collaboration:**

The team plans to go back to Antarctica in October of this year (2012) to retrieve the tags. We plan on hosting a PolarConnect event sometime during their expedition. More details to come.