

## National Science Foundation IPY Research and Funding Priorities



Understanding
 Environmental Change in
 Polar Regions



 Human and Biotic Systems in Polar Regions

 Education and Public Outreach







# National Science Foundation International Polar Year



- Informal Science Education
- Undergraduates, graduates, and K-12 teachers, including Alaska Native undergraduates
- K-12 teachers in polar research experiences
- Teacher professional development and curriculum resources about IPY and polar science
- Total funding: \$9.3 million





# Formal Science Education





Expedition 2 – Sedna Arctic sea ice study is underway

www.polartrec.com



practices











http://www.polartrec.com/node/227







Getting Started Latest Headlines ARCUS ARCUS WebMail PolarTREC

Dec. 27 McMurdo Station - Ol... @

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- Oden Expedition
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  - Ask Questions
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- Past Expeditions

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#### **Upcoming Events**

· no upcoming events available

more

## **Photo Gallery** Random Image



#### Dec. 27 McMurdo Station - Old Friends and Science

#### Dec. 27 McMurdo Station - Old Friends and Science



Author

We reached McMurdo Station at about 10 AM and only had four hours until we had to gather ourselves at the transport center to catch a ride out to Willy Field - the ice runway. As I look back it might be the richest four hours of the entire trip - full of sights and sounds that I'll never forget. This was the first face to greet me at McMurdo -



Yes this is a local showing me what a real beard looks like! It's also Erik Boraas from Soldotna, Alaska - he had been in my Russian classes and skied on the cross country ski team that I coached back in the mid-90's at Skyview High School. My legs still ache from the day he skied over 100 km in our skiathon to outdo me by about 2 km! He's working this summer season at McMurdo as a general laborer (do it all guy) for Raytheon Polar Contracting. He met our helicopter to say "hi" and then we had a chance to catch up over lunch - imagine traveling that far and being surprised by a friend - it was awesome!

## Teleconferences with classrooms









The Oden team connected with 27 different schools 18 states
US, Sweden and Chile over 400 students grades 1-12







## Teachers' Domain - Online

teaching resource library capturing new and existing IPY science materials (video, animations, content) for use in classrooms, addressing national science education standards with current polar research WGBH, Education Foundation

www.teachersdomain.org







# POLAR PALOOZA!

## 3 components:

1.Hi-Def Video Science Story Capture Corps

2. Podcasts, vodcasts, blogs

3. "Stories of a Changing Planet" national tour













Snowstar 2007 — snowmachine traverse from Fairbanks, Alaska to Hudson Bay. Five scientists linking with schools and students through the Internet. Enroute today!

http://www.barrenlands.org



Alaska - Canada Barrenlands Traverse (AC-BT) (a 2007 International Polar Year (IPY) Expedition)

## International IPY website www.ipy.org



#### WHAT IS IPY?

The International Polar Year is a large scientific programme focused on the Arctic and the Antarctic from March 2007 to March 2009. <u>Learn more about IPY</u>.

- » Contact IPY
- » National IPY Committees
- » Youth and Early Career
- » Get Involved
- » Who's Who
- » IPY History
- » IPV Events

#### HIGHLIGHTS



ANDRILL - Geological Drilling in Antarctica



## Virtual balloons for IPY

On March 1, hundreds of schools conducted ice experiments. See where. More...



## IPY in Google Earth

Learn more about IPY projects using Google Earth More...

## International IPY website www.ipy.org









→ Go	
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MEWS & ANNOUNCEMENTS		TRIENDS OF IPY
New issue of IPY IPO Newsletter now available Nicola Munro, Mar 29, 2007 Exploratorium Webcast with the South Pole: Celebrating the International Polar Year Nicola Munro, Mar 29, 2007 Thinning of West Antarctic Ice Sheet Demands Improved Monitoring Nicola Munro, Mar 29, 2007 Announcement of PhD grant in Polar Sciences for vegetation and permafrost studies in Antarctica Nicola Munro, Mar 28, 2007 Live webcast today, March 27, Breaking-The-Ice - Conference - Prospects of the Transarctic Route Arctic Portal, Mar 27, 2007 India announces new IPY outr Breaking-The-Ice Arctic Portal, Mar 26, 2007 Extended deadline for 2nd International Neumayer-Symposium on Polar Research Nicola Munro, Mar 23, 2007 More	ice - Conference - Prospects of the	» IPY: When the ice quakes Far North Science, Mar 29, 2007  » The show is on! Frozen Five, Mar 29, 2007  » Tundra Traverse: trailing the Mad Trapper Far North Science, Mar 28, 2007  » Of sharks, seals and ocean perch Far North Science, Mar 28, 2007  » Communicating with the F5 Frozen Five, Mar 28, 2007  » The time has come Frozen Five, Mar 28, 2007  » Media Watch: Catalog people and outdoor chic Far North Science, Mar 28, 2007  » More

## U.S. and NSF IPY website www.ipy.gov

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## PY 2007-2008 International Polar Year

SEARCH

□ Tell a friend

- Science & Nature Animals & environment
- People & Culture Life at the poles
- Explore & Learn For students & teachers
- Multimedia Images, video, audio
- News & Events Press releases, speeches, meetings, & more
- About IPY
- U.S. Participants
  - Gov't Agencies and Orgs
  - Logistics Organizations
  - Funded Research
  - Funding Opportunities
- Resources



#### News

3/29/2007 University of Alaska Fairbanks Scientist to Lead Arctic Sea-Ice Expedition More >

3/27/2007 Dust in Antarctic Ice Reveals Important Climate Clues More >

3/2/2007 Massive South Pole Telescope Completed: Will Investigate Origins, Composition of the Universe More >

- All News



#### Exploratorium South Pole IPY Live Webcast March 30

3/29/2007 In the latest in a series of live Webcasts, educators at the Exploratorium, the San Francisco

science museum, will connect with Amundsen-Scott South Pole Station at 10:30 p.m. PDT on March 30, 2007. They'll talk about IPY history and converse with scientists preparing a new 10-meter telescope to begin its observations. More >



#### Unique New Survey Gauges Arctic Indigenous People's Views on Living Conditions

3/21/2007 According to a unique, newly released survey of indigenous

## What Can Educators Do?

Explore at least one of these resources

Find a way to include a polar perspective in some aspect of your curriculur

Share your great ideas with others

