

Reference List

Sharing Science: Climate Change Research Learning Center Models TEL Broadcast, August 7, 2008

1.) Resources for Learning and Teaching about Climate Change

Compiled by Alaska Department of Fish & Game Wildlife Education Program Staff

Websites:

- Alaska Department of Fish & Game, Division of Wildlife Conservation at www.wildlife.alaska.gov, teacher resources section has a curriculum search of Project WILD, PLT (Project Learning Tree) and AWC (Alaska Wildlife Curriculum) books (by topics, standards, ages).
- Alaska Department of Natural Resources at www.pltalaska.org, PLT workshops and teacher resources
- State of Alaska Climate Change Strategy at www.climatechange.alaska.gov
- Alaska Youth for Environmental Action at www.ayea.org, student directed conservation projects, 3-2-1
- Arctic Climate Inventory Assessment at www.acia.uaf.edu, overview of Arctic impacts
- Alaska Conservation Solutions at www.alaskaconservationsolutions.com, calculating your carbon footprint
- ALISON (Alaska Lake Ice and Snow Observatory Network) www.gi.alaska.edu/alison
- Arctic Climate Modeling Program at www.arcticclimatemodeling.com, science observation network
- Arctic Research Consortium of the United States at www.arcus.org, directory of Arctic researchers
- Climate Classroom: National Wildlife Federation at www.climateclassroom.org, for parents and teachers
- Climate Change North at www.climatechangenorth.ca, education resources for Northerners
- Defenders of Wildlife at www.defenders.org, summaries for species in Alaska in science and economics section
- Denali Green Tags at www.denaligreentags.org, renewable energy Alaska projects
- Encyclopedia of Earth (EoE) website, an online resource designed “to make authoritative information about the environment widely available and easily accessible”. The reports of the Intergovernmental Panel on Climate Change (IPCC) are posted on this site, www.eoearth.org/article/Climate_Change_%28collection%29
- Focus the Nation at www.focusthenation.org, National climate change teach-in days
- The International Polar Foundation at www.educapoles.org, research and educational resources
- NASA at <http://globalchange.nasa.gov/Resources/pointers/edu.html>, links educators to federal agency sites that provide information and lessons related to different aspects of global warming.
- NASA at <http://education.gsfc.nasa.gov/how/>, History of Winter Project
- National Wildlife Federation at www.nwf.org, policy, politics, educator information
- NOAA at www.oceanexplorer.noaa.gov, research and exploration videos, teacher resources
- Polar Palooza at www.passporttoknowledge.com/polar-palooza, podcasts from the poles, blogs, activities
- Polar Treks at www.polartrec.com, polar science for teachers, researchers, classrooms and the public
- Sierra Club of Canada at www.sierraclub.ca, “Schools in Action” project highlights
- Union of Concerned Scientists at www.climatehotmap.org/curriculum/index.html
- WildBC at www.hctf.ca/wild/educator/ccep.htm, Project WILD lessons about climate change
- World View of Global Warming at www.worldviewofglobalwarming.org: photographs from around the world

Books/DVDS:

- *Arctic Thaw* by P. Laourie for children in grades 6-8
- *Change in the Weather: People, Weather and the Science of Climate* by W.K. Stevens for high school students and adults
- *The Changing Climate* by S. Morgan for children in grades 3-5
- *The Down-to-Earth Guide to Global Warming* by Laurie David and Cambria Gordon for kids and adults
- *Global Warming: What's Up with the Weather?* PBS and NOVA special, a 2-hour fair-minded discussion. The program asks you to decide for yourself where you stand on global warming.
- *How We Know What We Know About Our Changing Climate: Scientists and Kids Explore Global Warming* by Lynne Cherry and Gary Braasch for children in grades 6-8
- *The Kid's Guide to Global Warming* by J. Thornhill for children in grades 3-5.
- *Teaching about Climate Change* by Tim Grant and Gail Littlejohn for K-12 teachers, simple experiments, renewable energy and taking action projects, "What cool schools can do!" (Revised May, 2008)

2.) ALISON: Suggested Reading

Jeffries, M. O., T. Zhang, K. Frey and N. Kozlenko. 1999. Estimating late-winter heat flow to the atmosphere from the lake-dominated Alaskan North Slope. *Journal of Glaciology*, 45(150), 315-324.

Abstract at <http://cat.inist.fr/?aModele=afficheN&cpsid=1940959>

Jeffries, M. O., K. Morris and N. Kozlenko. 2005. Ice characteristics and processes, and remote sensing of frozen rivers and lakes, in *Remote Sensing in Northern Hydrology*, edited by C. R. Duguay and A. Pietroniero, AGU Monograph 163, 63-90.

PDF file at http://www.gi.alaska.edu/alison/downloads/PUB_GP_Jeffriesetal_2.pdf

Jeffries, M. O. and K. Morris. 2006. Instantaneous daytime conductive heat flow through snow on lake ice in Alaska. *Hydrological Processes*, 20(4), 803-815.

PDF file at http://www.gi.alaska.edu/alison/downloads/ESC_Hydrol.Processess.pdf

Abbott, C. and M. Swanson. 2006. A Rewarding Partnership: Critical components of a successful collaborative scientist-student partnership. *The Science Teacher*, April/May 2006, 32-35.

PDF file at <http://www.gi.alaska.edu/alison/downloads/Abbott&Swanson.pdf>

Swanson M. and C. Abbott. 2005. ALISON Guide to Heat and Energy Activities for the Classroom.

PDF file at http://www.gi.alaska.edu/alison/downloads/ALISON_Classroom.pdf

Swanson M. and C. Abbott. 2005. The Educator's Guide to ALISON Measurements.

PDF file at http://www.gi.alaska.edu/alison/downloads/ALISON_Measurements.pdf

Gallego, P. 2004. A Year of Science at Horseshoe Lake. See page 3.

ALISON Web site: www.gi.alaska.edu/alison

- Data Archive: http://www.gi.alaska.edu/alison/ALISON_data.html
- Horseshoe Lake: http://www.gi.alaska.edu/alison/HLY_location.html
- Education materials: http://www.gi.alaska.edu/alison/ALISON_data_guides.html

2.) cont.

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3.) Module 340 References

Jacobson, Susan K., (1999). *Communication Skills for Conservation Professionals*. Washington, D.C.: Island Press.

Whatley, Michael E., (1995). *Interpreting Critical Natural Resource Issues in Canadian and United States National Park Service Areas: Natural Resources Report NPS/NRCACO/NRR- 95/17*. Denver, CO: US Department of the Interior, National Park Service.

Module 340 website:

<http://www.nps.gov/idp/interp/340/module.htm>

Module 340 components curriculum (PDF):

<http://www.nps.gov/idp/interp/340/340components.pdf>

Interpreting Critical Natural Resource Issues in Canadian and United States National Park Service Areas. Natural Resources Report NPS/NRCACO/NRR-95/17.

<http://www1.nrintra.nps.gov/oeo/mission/InterpCriticalNR.pdf>