



# SCIENCE BYTES

FEBRUARY 23, 2009 VOLUME 26

This is an information exchange that is available to all teachers in the Anchorage School District. Please read and then DO it!

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## For your Calendar:

### NSTA Conferences 2008-2009

#### 2009 National NSTA Conference

New Orleans, LA – March 19-22, 2009

#### Science Fair 2008 - 2009

#### Alaska Science and Engineering Fair

March 27-29, 2008 @ Begich Middle School - Anchorage

Looking for volunteers for the SF Board.

#### Science Olympiad 2008-09

April 4, 2009 @ Begich Middle School - Anchorage

#### 2009 - Alaska Math & Science Conference

#### INQUIRY - The Bridge to Understanding

October 14-17, 2009 Juneau, AK

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## Current Grant Opportunities

### March 13

Florida State University Science Inquiry for K-12 Teachers Program

Provides a **six-week residential science research experience for teachers** at the Florida State University Marine Laboratory in Florida **for teachers to learn how to develop and use science inquiry effectively in the classroom.**

\$3,600 stipend, housing and travel for non-locals, and inservice or college credit

<http://bio.fsu.edu/osta/RET/>

### March 13

#### National Energy Foundation 8th annual Igniting Creative Energy Challenge

Students K-12 are asked to use their creative energy to develop entries in the categories of Visual Arts and Music, Science and Technology, and Language Arts and relate to the theme "Igniting Creative Energy" and demonstrate character building as it applies to wise energy choices and environmental stewardship.

A total of 4 Grand Prizes will be awarded to 3 students (in K-5, 6-8, and 9-12 grade clusters) and 1 teacher. Winners will be invited to Washington, D.C., in the summer to participate in the National Energy Efficiency Forum.

<http://www.ignitingcreativeenergy.org/guidelines1.html#challenge>

### March 15

#### Siemens' We Can Change the World Challenge

Challenges teams of two or three students in grades 6-8 to identify and solve local environmental problems. The teams must work with a teacher/mentor to research the problem, develop a plan, collect data, analyze that data and share the results with a teacher/mentor.

\$5,000 savings bonds; an appearance on Green planet; a once-in-a-lifetime Discovery adventure trip; and more.

[www.wecanchange.com](http://www.wecanchange.com)

### March 15

#### National Association of Biology Teachers (NABT) Outstanding New Biology Teacher Achievement Award

Recognizes outstanding teaching (grades 7-12) by a "new" biology/life science instructor within his/her first three years of teaching (when nominated) who has developed an original and outstanding program or technique and made a contribution to the profession at the start of his/her career.

One winner in each of 50 states receives \$500, a recognition plaque presented at the NABT Professional Development Conference, and a complimentary one-year NABT membership.

<http://www.nabt.org/sites/S1/index.php?p=290>

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## from LPI Earth and Space Science Newsletter for Winter 2009

### March 20 - Sun-Earth Day

<http://sunearthday.nasa.gov/2009/index.php>

### March 20 - The Vernal Equinox Explained

<http://www.timeanddate.com/calendar/vernal-equinox.html>

### April 2-5 - 100 Hours of Astronomy

<http://www.100hoursofastronomy.org/>

**May 2 - Astronomy Day**

<http://www.astroleague.org/al/astroday/astroday.html>

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**from ANROE Electronic Newsletter**

**Homer: March 6 & 8- 2009**

**Kachemak Bay Science Conference: Navigating Environmental Change** will be held at the Islands & Ocean Visitor Center. Presentations on research, citizen science, and Local and Traditional Knowledge (LTEK) projects on some aspect of Kachemak Bay or research being conducted elsewhere with strong linkages to the dynamics of the bay. A K-8 teacher workshop is being planned in conjunction with the conference to introduce the new Alaska Seas and Rivers curriculum developed by Alaska Sea Grant. For more information:

<http://www.kachemakbayscience.org>

**Girdwood: March 4 – 6-**

**Alaska Wilderness Recreation and Tourism Association (AWRTA)**, will hold its 2009 Ecotourism conference: **20 Years of Turning the Tide**. Find out more and register on-line at: [www.awrta.org](http://www.awrta.org)

**University of Washington: June 29-July 24**

**Summer Institute in Life Sciences (SILS)**

Free for teachers in grades 3-8. For more information visit: <http://monera.biology.washington.edu/hhmi/k12.php>  
<<http://monera.biology.washington.edu/hhmi/k12.php>>

To apply on line:

<https://catalysttools.washington.edu/webq/survey/uwhhmi/68321>

<<https://catalysttools.washington.edu/webq/survey/uwhhmi/68321>>

**Follow Sandhill Cranes**

Follow Sandhill Cranes as they return to Alaska. The ten Lesser Sandhill Cranes were tagged with a satellite GPS transmitter and a radio tracking device to allow researchers to gather more information to help protect habitat for these ancient birds. The cranes will leave their wintering area in California between February 15 and March 1 and will arrive in Homer around mid-April. Maps and access to the Google Earth information is found at <http://www.werc.usgs.gov/sattrack/cranes/maps.html>.

<<http://www.werc.usgs.gov/sattrack/cranes/maps.html>>

Additional information can be found at

<http://www.cranewatch.org>.

<<http://www.cranewatch.org/>>

**Anchorage: February 28-**

**Owl Prowl** is the program beginning at 6:30pm at the BLM Campbell Creek Science Center. You'll meet live captive owls, take a close up look at owl pellets and other owl artifacts, and take a guided walk to try to find owls by sound. Program fee is \$10 per person. Space is limited. Advanced reservations required. Please call 267-1247 for more information and to make reservations. Program is sponsored by the BLM Campbell Creek Science Center and the Alaska Department of Fish and Game.

**Application deadline: February 28**

**Video submissions for the Alaska Wilderness League's 2020 Vision for the Future of America's Arctic Youth project**. Twenty winning videos will be shown at Vision Fest film festivals across the country to commemorate the 20th Anniversary of the Exxon Valdez Oil Spill. They are looking for a short film illustrating what America's Arctic means to you personally, to America, and to the world. The video must be produced by youth ages 18-30. More information on how to submit your film and the submission guidelines can be found at [www.alaskawild.org/visionfest](http://www.alaskawild.org/visionfest). If you have questions, call 907-222-4046 or email-[betsy@alaskawild.org](mailto:betsy@alaskawild.org).

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**Stockholm Junior Water Prize**

The Stockholm Junior Water Prize is the world's most prestigious youth award for a water-related science project. The prize challenges today's young scientists to explore, protect and enhance our planet's greatest resource.

The competition is open to students grades 9 - 12 with science projects aimed at increasing the quality of life through the improvement of water quality, water resource management, or water and wastewater treatment.

Papers must be submitted by April 15th. One winning project is selected from each state to compete at the national level. The student winners and their teachers win a trip to the host city, which this year is Anchorage, Alaska. We would love to have Alaskan students represented. One student from the national competition will go on to represent the United States in the International Competition in Stockholm Sweden.

For more information, and specific rules for Alaska visit: [www.sjwp.org](http://www.sjwp.org) <<http://www.sjwp.org>>

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**NASA Science - Spectacular Photo Op on Saturn**

Something is about to happen on Saturn that is so pretty, even Hubble will pause to take a look. Backyard astronomers can see it, too. Four of Saturn's moons will

transit Saturn and cast their shadows on the planet's cloudtops at the same time. FULL STORY at: [http://science.nasa.gov/headlines/y2009/19feb\\_quadruplet\\_ransit.htm?list1278282](http://science.nasa.gov/headlines/y2009/19feb_quadruplet_ransit.htm?list1278282)

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### **Solar Week March 9-13, 2009**

[www.solarweek.org](http://www.solarweek.org)

Once every fall and spring since 2000, Solar Week provides a week of series of web-based educational classroom activities and games geared for upper-elementary, middle and high school students, with a focus on the Sun-Earth connection. Initiated as a means of encouraging girls in the sciences, one of Solar Week's special strengths is a role model approach, expressed through on-line interaction between (all) students and leading women solar scientists (via interactive message board).

#### **WEEK-LONG CURRICULUM AND ACTIVITIES:**

Students learn about solar eclipses, sunspots, and solar storms through a series of activities, games, and lessons.

Monday – The Sun As A Star

Tuesday – Solar Close-ups, including solar flares and coronal mass ejections.

Wednesday – The Active Sun

Thursday – Let's Observe the Sun Safely

Friday – Solar Careers, including Women in Science,

Research Jobs and Salaries, and Scientist Blogs.

Solar Week is ideal for students studying the solar system, the stars, and astronomy in general. It's also for kids wondering what it's like being a scientist, and possible career choices. Participation makes for a fun computer lab activity as well.

#### **WEEK-LONG INTERACTIVE MESSAGE BOARD:**

<http://www.solarweek.org/CS>

Solar Week has an interactive message board, where classrooms can pose questions of leading solar scientists. Want to know what they know about the Sun? (please read the FAQs before posting).

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### **from National American Association for Environmental Education (NAAEE) newsletter**

#### ***Grounding in Botany Teachers Professional Development ~ California***

June 22 - July 16, 2009 ~ San Marino, California

Grounding in Botany is a standards-based, 4-week professional development course for high school life science teachers. Instruction includes practice of hands-on experiments, exciting lectures, networking, resource reviews, and more. Topics include plant reproduction, the cell, genetics, respiration, photosynthesis, and more. Participants receive a \$1,500 stipend

and a \$500 classroom supply grant. Follow-up workshops throughout the school year carry \$100 stipends each. Out-of-area participants will receive a travel and housing allowance of \$2,600.

<http://www.huntington.org/Education/gib.html>

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### ***Teaching Ambassador Fellowship***

Application Deadline: March 16, 2009

Applications for the U.S. Department of Education, 2009-2010 Teaching Ambassador Fellowship is open for currently practicing, state certified Pre-Kindergarten to 12th grade public school teachers and instructional specialists/coaches with at least three years of teaching experience. Currently 20 part-time Classroom Fellows and five full-time Washington Fellows are serving as Teaching Ambassador Fellows for the pilot year (2008-2009).

<http://www.ed.gov/programs/teacherfellowship>

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### ***Curriculum Unit on Climate Change***

Facing the Future is offering Climate Change: Connections and Solutions, a set of two-week interdisciplinary curriculum units for students in grades 6-8 and grades 9-12, in pdf format. Aligned with national science and social studies standards, the lessons begin by building a foundation of understanding climate change and ends with students being able to communicate complex and interconnected issues related to climate change.

<http://www.facingthefuture.org/Curriculum/Download...>

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### ***Aerospace Careers Website***

<http://www.careervoyages.gov/aerospace-main.cfm>

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### ***AWC Publishes Campbell Creek Trail Map and Nature Guide***

Our new 11" x 17" water and tear-resistant map and nature guide is now available. One side has a detailed map of Campbell Creek that is adjacent to the Campbell Creek Trail. The reverse side has information on local native plants, invasive species, common wildlife, and other interesting aspects of the trail. Location of interpretive signs is also marked on the map. It is only \$5, and can be picked up from the AWC office or ordered by emailing [awc@anchoragecreeks.org](mailto:awc@anchoragecreeks.org) (postage and handling add \$2) or calling us at 27C-REEK, ext. 3. All proceeds go toward protecting our creeks