



SCIENCE BYTES

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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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NSTA Conferences 2009-2010

March 17-20, 2010 Philadelphia, PA

Science Olympiad

March 20, 2009 Teeland & Mat-Su Career and Tech HS

Alaska State Science & Engineering Fair

March 26-28, 2010 Begich Middle School

Celebrate - ASD Science Center 32nd Birthday

April 27, 2010 2pm @ the ASD Warehouse

National Lab Day(s) - Everyday is Lab Day @ ASD

April 26 - April 30, 2010

2010 IEEE International Conference on Robotics and Automation (ICRA2010)

The 2010 IEEE International Conference on Robotics and Automation (ICRA2010) will be held in Anchorage, Alaska, May 3 - 8, 2010. The theme of the conference is "50 Years of Robotics," reflecting on the amazing achievements of the field and the broad impact of robotics and automation research, development and education. Embraced by six mountain ranges and warmed by a mari-

time climate, Anchorage is alive year round with adventure, recreation, seasonal festivities, sporting events and more. Recognized as a four-time All-America City and surrounded by spectacular wilderness, Anchorage is an adventure waiting to happen!

<http://icra2010.grasp.upenn.edu/>

Anchorage Museum - STAR WARS - Robotics Exhibit

Part of the Star Wars exhibit at the museum has an excellent presentation / show on robotics on the 4th floor.

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NASA's Digital Learning Network

NASA's Digital Learning Network presents a series of webcasts to assist educators in staying current on NASA education resources and related products.

During each event, product producers, authors and experts will demonstrate their materials designed to optimize awareness and understanding of science concepts. Instructional objectives, accessing the materials and primary contacts for the materials will also be discussed. During the webcasts, participants will be able to submit questions to the presenter that will be addressed during the presentation.

In the coming months, the following topics will be covered:

-- **NASA Fit Explorers** Feb. 24, 2010, 4-5 p.m. EST

-- **NASA eProfessional Development Network -- Robotics Course:** March 31, 2010, 4-5 p.m. EDT

-- **MoonWorld:** April 28, 2010, 4-5 p.m. EDT

-- **On the Moon:** May 26, 2010, 4-5 p.m. EDT

For more information about these webcasts, visit

<http://dln.nasa.gov/dln/content/webcast/>.

Questions about these events should be directed to Caryn Long at caryn.long@nasa.gov.

from ANROE e-Newsletter

Classroom Earth National High School Challenge

Application Deadline: February 22-

A program encouraging teachers to incorporate environmental education into all subject areas through innovative teaching strategies. Teachers from around the nation can receive up to \$4,000 to make their ideas become reality. Teachers from all subject areas should apply. Classroom Earth's mission is to increase the ability of high school teachers to integrate environmental education into curricula so that students are prepared to be a part of environmental solutions.

<http://classroomearth.org/challenge/2010>

<<http://classroomearth.org/challenge/2010>>

Arctic Audubon Small Grants Program

Application deadline March 15:

This program is for conservation related projects that support their mission to protect Alaska's ecosystems by encouraging research, education, and management that will contribute to appreciation and good stewardship of our natural heritage. Arctic Audubon will consider applications for small grants of up to \$1000. Applicants should submit: A one page cover letter introducing themselves and including contact information; A one page project description that includes a budget and timeline for completion. Please submit by email to arcticaudubon@gmail.com or by mail to Arctic Audubon, PO Box 82098, Fairbanks, Alaska 99708. For more information about Arctic Audubon go to www.arcticaudubon.org. Please direct questions to arcticaudubon@gmail.com.

The Iditarod at 100: Celebrating the Centennial

Anchorage: February 17

Celebrating the Centennial of the National Historic Trail- will be presented at 7pm at the BLM Campbell Creek Science Center. Learn about the history of the Iditarod National Historic Trail from Seward to Nome and all points in between including little known details on Native, Russian, and American use of the Historic Iditarod Trail, how BLM and trail partners keep it open today, and where to visit the Trail in Anchorage.

Winter Trails Day 2010

Anchorage: February 20, 2010

This activity will be held from 10am to 4pm (last gear checkout is 3:30pm) at the BLM Campbell Tract. Activities offered at this annual event include free use of cross-country skis, skate skis, and snowshoes; a GPS navigation and geocache activity; a self-guided snowshoe hike and classical ski touring loop; and clinics on outdoor safety basics, avalanche beacons, snow shelter construction, skijoring, winter mountain biking, winter running, and ski-waxing. Science Center staff offer complimentary hot chocolate, coffee, cookies, and marshmallows for roasting.

Program Coordinator for Youth Employment in Parks

Anchorage

The Anchorage Park Foundation is seeking a nine month grant-funded program coordinator to accomplish program planning and development. For more information, please review the position description http://www.anchorageparkfoundation.org/pdf/projects/YEP_Coordinator.pdf. For more information, contact Kelly Meeker at 907-274-1003, Fax 907-276-2584 or go to www.AnchorageParkFoundation.org. <http://www.anchorageparkfoundation.org/pdf/projects/YEP_Coordinator.pdf>

MG Statewide Conference "Back to Our Roots"

The Master Gardener Statewide Conference, "Back to Our Roots" is coming soon. It is set for March 5 & 6 at the Grandview Inn, Wasilla. This promises to be a very educational and exciting conference with Dr. Marianne Krasny as keynote speaker. Marianne is Professor and Chair in the Department of Natural Resources at Cornell University. She will be addressing such topics as community gardening, urban restoration, community forestry and connecting youth and elders to investigate the mosaic of plants, people and cultures in gardens.

Other topics include: hardy perennials, dividing perennials, compost panel, interplanting vegetables, herbs and flowers, garden photography, native plants, winter gardening, fruit.

Payment is now available online through paypal at www.matsumastergardeners.org. The schedule of events is also available for viewing on our website.

Come on out to the Valley to enjoy a 2 day gardening "retreat" and then take in the Iditarod on Sunday.

Register early as space is limited.

NASA's Electronic Professional Development Network

Are you a K-12 teacher of STEM disciplines? Are you looking for a way to enhance your instructional skills, meet your professional development goals, or find new and exciting resources to use in your learning environments?

Then NASA's Electronic Professional Development Network is for you!

NASA's Learning Environments and Research Network and the Georgia Institute of Technology have teamed up to create the ePDN, a new initiative dedicated to preparing teachers to engage their students in STEM (science, technology, engineering and mathematics) through the use of NASA-developed learning materials and resources.

Applications are now open for two courses:

What is Project-Based Inquiry Learning? -- Designed for science teachers in grades 5-12 who are new to inquiry and project-based learning. In this course, participants will develop skill in using project-based inquiry learning, or PBIL, to enhance conceptual understanding, critical thinking, scientific reasoning and problem solving. The application period for this course closes on **April 1, 2010**.

How to Represent & Interpret One Variable Data -- Designed for high school math teachers. In this course, participants will deepen their understanding of exploratory data analysis and lay the foundations for sampling and inference. The application period for this course closes on **March 15, 2010**.

To apply for these courses, visit

http://nasaepdn.gatech.edu/nasa_epdn_application_processes.php.

The ePDN offers:

- Free certificate programs (52 hours) in robotics, mathematics, Earth/space science and technology integration
- Flexibility to take individual courses within a certificate or the entire certificate program, both for CEU credit
- Resources that teachers can use in the classroom or for personal development.

For more information on the ePDN, visit

www.nasaepdn.gatech.edu

Campbell Creek Science Center Fireside Chat Lecture Series

Astronomy Series: What Galileo Saw

Thursday, March 11 7pm

It's been 400 years since Galileo Galilei first pointed a telescope at the night sky. What he saw would eventually lead to the rejection of the Earth-centered universe in favor of a Sun-centered model. In fact, 2009 was designated the International Year of Astronomy in celebration of his pivotal role in the development of modern science. Dr. Andy Puckett, an astronomer at the University of Alaska Anchorage, will discuss Galileo's observations and how they forever changed our perspective on the Universe. He'll also bring a galileoscope to see. The program begins at 7:00pm on Thursday March 11 at the BLM Campbell Creek Science Center (5600 Science Center Drive). Star gazing--with both telescopes and the galileoscope--will follow if skies are clear. Please call 267-1247 for more information.

Climbing the High One: Managing Mountaineering in Denali National Park

Wednesday, March 17 7pm

It's North America's tallest peak and a mecca for mountain climbers. How does the National Park Service simultaneously protect the mountain, keep visitors safe, and help mountaineers from all over the world have a wilderness experience? What challenges do the climbers create for the Park Service? What challenges do terrain and altitude present? Join us as John Leonard of the National Park Service takes us up the mountain to discuss mountaineering history and management in one of the nation's largest national parks. The program begins at 7:00pm on Wednesday March 17 at the BLM Campbell Creek Science Center (5600 Science Center Drive). Please call 267-1247 for more information.

Field Seminars in Denali National Park!

The Murie Science and Learning Center, in cooperation with the National Park Service and Alaska Geographic, announces its summer courses designed to immerse participants in different aspects of Denali National Park and Preserve.

Seminars are taught by experts in each subject area and are two to four days in length. Professional development credit is available for all courses through the University of Alaska.

Field Seminars

June 4 - 6: *Birds of Denali*

<<http://www.murieslc.org/static/1981/birds-of-denali-field-seminar>>

with Nan Eagleson

June 12 - 13: *Geology of Nenana Canyon*

<<http://www.murieslc.org/static/1237/geology-of-the-nenana-canyon-field-seminar>>

with Phil Brease

June 14 - 16: *High Country Wildflowers for Beginners*

<<http://www.murieslc.org/static/1238/high-country-wildflowers-field-seminar>>

with Verna Pratt

June 21 - 23: *Knowledge informs Art: Drawing inspiration from Denali*

<<http://www.murieslc.org/static/1241/knowledge-informs-art-drawing-inspiration-from-denali-field-seminar>>

with Karin Franzen

June 25 - 27: *Denali's Large Mammals*

<<http://www.murieslc.org/static/1244/denalis-large-mammals-field-seminar>>

with nj Gates

July 2 - 4: *Wildlife Tracking and Signs*

<<http://www.murieslc.org/static/1246/wildlife-tracking-field-seminar>>

with Tim Buechle

July 9 - 11: *Drawing Denali's Wildlife*

<<http://www.murieslc.org/static/1979/drawing-denalis-wildlife>>

with Todd Sherman

July 17 - 18: *The Science of Fly-Fishing*

<<http://www.murieslc.org/static/1248/science-of-fly-fishing-field-seminar>>

with Shann Jones

July 26 - 28: Wolves of Denali

<<http://www.murieslc.org/static/1984/wolves-of-denali-field-seminar>>
with Tom Meier

July 30 - Aug 1: Denali Field Journaling

<<http://www.murieslc.org/static/1250/denali-field-journaling-seminar>>
with Tom Walker

August 2 - 4: Bears of Denali

<<http://www.murieslc.org/static/424/bears-of-denali-field-seminar>> with
Pat Owen

August 5 - 8: Landscape Painting

<<http://www.murieslc.org/static/1240/landscape-painting-field-seminar>>
with David Mollett

August 13 - 15: Predators and Prey

<<http://www.murieslc.org/static/1983/predators-and-prey-field-seminar>>
with Ken Whitten

August 27 - 29: The Turning Tundra: How Plants and Animals Prepare for Winter

<<http://www.murieslc.org/static/1253/the-turning-tundra-a-field-seminar>>
with Nan Eagleson

Seminars for Families

July 12 - 14: Denali Wildlife

<<http://www.murieslc.org/static/1247/denali-wildlife-a-family-seminar>>
(for families with children ages 8 and younger) with Martha Tomeo

July 23 - 25: Denali Wilderness

<<http://www.murieslc.org/static/1988/denali-wilderness-a-family-seminar>>
(for families with children ages 8 and older) with Martha Tomeo

Teacher Trainings

June 7 - 9: iMovie: Movie Making and Podcasting in Denali

<<http://www.murieslc.org/static/1980/imovie-movie-making-and-podcasting-in-denali-teacher-training>> with Chris Romine

Jun 28 - Jul 1: Science Writing in the Heart of Denali

<<http://www.murieslc.org/static/530/science-writing-in-the-heart-of-denali-teacher-training>> with Sondra Porter

July 19 - 21: Geology of Denali

<<http://www.murieslc.org/static/1989/geology-of-denali-teacher-training>>
with Phil Brease and Kristen Friesen

Courses include:

- * Small group size of 10 participants.
- * Staying at a field camp located 29 miles inside Denali National Park along the Teklanika River.
- * All meals, accommodations, transportation, and instruction.
- * 10% discount available to members of Alaska Geographic.
- * Professional development credit is available through University of Alaska.

For more information or to register:

- * go to www.murieslc.org, or click on the links above
- * email courses@murieslc.org
- * call 1-888-688-1269.

Courses offered by Alaska Geographic through the Murie Science and Learning Center at Denali National Park and Preserve.

GLOBE at Night - Hunt for Stars

Join thousands of teachers, students and families around the globe **March 3-16, 2010**, in a hunt for stars. Take part in this international event to observe the nighttime sky and learn more about light pollution around the world. GLOBE at Night is an easy observation and reporting activity that takes approximately 15-30 minutes to complete.

Global Learning and Observations to Benefit the Environment, also known as GLOBE, is a worldwide, hands-on science and education program for primary and secondary schools.

For more information about the event, visit <http://www.globe.gov/GaN/>. Please e-mail questions about this event to globeatnight@globe.gov.
