

## ES Newsletter, Week of September 15, 2008

### ON CAMPUS EVENTS

#### Welcome Back ES Social

Who: ES Majors and Students Interested in the ES Major

When: Thursday – Sept. 18 6-8

Where: ES Commons Room – first floor Adams Hall

Come and meet the new ES Director Phil Camill. Meet other ES majors and find out what is happening in ES this year. Pizza and refreshments

#### "(Re)exploring Le Petit Nord: A 42-Day Wilderness Canoe Trip Across Northwestern Ontario"

7 pm, Tuesday, September 16th

The Schwartz Outdoor Leadership Center

"(Re)exploring Le Petit Nord: A 42-day Wilderness Canoe Trip Across Northwestern Ontario," describes my summer-long trip for Keewaydin, the world's oldest canoe-trip operator and Canada's oldest youth camp. Once an area heavily traveled by fur traders and dotted with Hudson Bay Company posts, the "Little North" region of Ontario still boasts a verifiable maze of lakes, streams, and rivers as well as several remote Anishinabe First Nation reserves. In addition to remarkable terrain, very few canoeists travel in the region, making it an ideal spot to discover new canoe routes. My slideshow will describe nearly 600 km of paddling, portaging, and exploring across the "Little North."

### OFF CAMPUS EVENTS

#### Cafe Scientifique

With Executive Director, Dr. Graham Shimmield

Presentation & Discussion:

Tuesday, Sept 16 6:00pm-7:00pm | Free, General Admission

Bigelow scientists are committed to expanding our knowledge of ocean systems and sharing their findings with the scientific community and the general public. Dr. Graham Shimmield, the new Executive Director at Bigelow Laboratory for Ocean Sciences, will talk about "Ocean Ecosystems Science - a challenge for the 21st Century".

The science café offers the public the opportunity to engage in a lively conversation with researchers about current topics in ocean science. Dr. Shimmield will begin with a 20-minute presentation describing the growing importance of oceans systems research in addressing the global impacts of the planet's changing climate. Participants are encouraged to ask questions, make comments, and add their perspective to the issue.

### INTERNSHIPS/RESEARCH

### **NSF research—Climate change impacts on Arctic ecosystems**

Phil Camill, ES Director (Environmental Studies and Biology) is currently funded by the National Science Foundation to examine the effects of climate change on Arctic ecosystems in Canada. He is in the process of examining wetland sediments to measure carbon accumulation rates and reconstruct past fire dynamics in high-latitude ecosystems over the past 8,000 years to see how these processes change with past climate change. If you are interested in working in Phil's lab this year (and possibly beyond) as an independent study or honors student, feel free to contact him. Students will learn research techniques and will have the opportunity to coauthor presentations at national meetings and papers in scientific journals. During the summer of 2009, Phil will return to the Canadian Arctic for three weeks of research, and there will be an opportunity for a student to travel on this program. Any questions? Please contact Phil at [pcamill@bowdoin.edu](mailto:pcamill@bowdoin.edu).

### **Energy Internships – Maine Department of Environmental Protection**

*The Maine Green Schools* –is a program to bring greater awareness to Maine schools and communities around the topics of climate change and clean air. DEP will be hiring 2-3 interns whose role will be to build the capacity of the participating organizations and schools by connecting the schools to resources to meet community needs. The projects will address air quality/energy efficiency related issues of concern and actually engages school administrators, building managers, teachers and students in doing Basic Energy Assessments at their schools and in selected homes. The Interns will be asked to facilitate school and community awareness as well as service learning projects with local school teams.

Possible duties include: Making presentations on the Carbon Footprint 2% Solution to challenge students to take certain actions to reduce carbon emissions by 2 percent annually. The presentation is followed with the introduction of the audit kit tools; Working with teacher to support students investigations and facilitating students' efforts to engage the community in awareness and action by documenting their findings/experiences and then create an information campaign for a target audience in the community

*This is a one-two semester time commitment of a minimum of 50 hours of service to be paid a \$500 scholarship cash stipend at end of service terms along with any approved travel expenditures for required trips >25 miles.* The Intern(s) will be assigned a list of tasks and deliverables to be completed over the duration of the service term. Many of the tasks will be independently scheduled while work assisting a teacher or school or community team will need to be coordinated to meet the needs of the partners the Intern is assigned to assist. This should average about 3 hours of service per week over the course of a semester.

**For more information or to apply, contact Eileen Johnson at [ejohnson@bowdoin.edu](mailto:ejohnson@bowdoin.edu)**

### **Internship – Alternative Energy project**

Midnight Oil Company is a privately held Fuel Distribution and Service Company located in Newcastle Maine. Beginning in the spring of 2008 we have begun to market Geothermal and solar solutions to our customers as a reasonable alternative to using fossil fuels. We also have built a working “lab” of Geothermal systems that encompass many variables including “open” and “closed” loop wells, and various heat distribution methods (Air, radiant heat). We are considering further advancements in the lab including DX wells. All of this technology is working and in fact heats and cools our facility.

Our objective this winter is to meter our various permutations of Geothermal solutions to demonstrate costs of operation vs. heat production to make a case for our customers to invest in

this new technology. To do this we intend to develop scenarios over time and capture kilowatts used vs. heat output, degree days and various other factors. We have made a preliminary selection of a software/hardware tool which we would acquire that would capture and model this data.

Our secondary objective will be to use this data to support financial models to demonstrate the advantage of capital investment (Geothermal Home System) vs. consumption of a post tax commodity (Fossil Fuel).

The appropriate student would have an interest in alternative energy, and a desire to measure practical application of Geothermal Energy in our lab. The student would be expected to build and execute a project plan that includes the following milestones:

1. Select the tools (software and hardware) from a short list and install or assist in the installation of the same.
2. Establish test cases and work with our technicians to set the equipment to run as desired (e.g. A home running radiant heat for 1 month using a heat pump on an "open loop" well).
3. Collect and incorporate other data points (e.g. degree days).
4. Model, test, and report the output.

This program could begin in early September and continue through the winter. Compensation would be negotiated. Hours are flexible so long as they are incorporated into a working project plan.

**Contact: Eileen Johnson at [ejohnson@bowdoin.edu](mailto:ejohnson@bowdoin.edu)**

### **Conservation Finance Forum**

The Conservation Finance Forum is pleased to announce the Conservation Capital in the Americas Conference and Student Competition. This is a great opportunity to participate in an international conference. Funds are available for a Bowdoin student to attend this conference in Chile.

The Conservation Capital in the Americas Conference will be held January 17 through 19, 2009, in Valdivia, Chile, and will explore some of the most effective practices and promising innovations in the field of conservation finance. Approximately 100 invited conservation practitioners, educators and students from North, Central, and South America will participate. The conference includes a student competition to identify, assemble, and support emerging leaders in conservation finance. Students selected on the basis of essays on conservation finance will be awarded the funded opportunity to attend the conference.

To access the competition application information, please visit the Forum website: <http://www.conservationfinanceforum.org/competition.html>

Applications will be accepted September 2 through October 20, 2008. For further inquiries please contact:

- Jim Levitt at [James\\_Levitt@harvard.edu](mailto:James_Levitt@harvard.edu)
- Elizabeth Reardon at [studentcompetition@conservationfinanceforum.org](mailto:studentcompetition@conservationfinanceforum.org)

### **Climate change and the future of the Northern Forest**

Northern Forest Alliance 2008 Climate Change Conference  
November 1 and 2, 2008; day long events  
Dartmouth College, Hanover, New Hampshire  
Note: Registration and lodging are at no cost to Bowdoin students

Who should attend this conference?

- Undergraduate students concerned about the impacts of climate change on the Northern Forest.

Why should you attend?

- Learn from experts in the field
- Develop the best emission reduction options for your campus
- Take action to enhance the future of the Northern Forest
- Contact Shelly Martin to register at [smartin@nfainfo.org](mailto:smartin@nfainfo.org) or at 802.253.8227 ext. 13

Visit the website at [www.northernforestalliance.org](http://www.northernforestalliance.org)).

### **Maine Environmental News Volunteer opportunity**

Maine Environmental News is looking for student volunteers to help update this webpage by posting articles in the area of contemporary environmental issues.

If you would like to find out more and become involved, contact Eileen Johnson at [ejohnson@bowdoin.edu](mailto:ejohnson@bowdoin.edu).

Link for Maine Environmental News: [www.maineenvironews.com](http://www.maineenvironews.com)

### **OFF CAMPUS EVENTS**

#### **Patagonia Presents the Wild & Scenic Environmental Film Festival On Tour**

Friends of Casco Bay is thrilled to host "Patagonia Presents the Wild & Scenic Environmental Film Festival On Tour", Saturday, October 4th. We hope you will join us for an evening of inspiring, thought-provoking, and entertaining films.

Tickets are now on sale at the following locations:

- Whole Foods Market, Portland
- Cycle Mania, Portland
- Patagonia Outlet, Freeport
- Bull Moose Music, all locations
- [or buy tickets online at Brown Paper Tickets](#)

#### **Climate Change 21 -- Choices for the 21st Century (CC21)**

October 23 & 24, 2008

**\*\*SPACES ARE FILLING FAST!\*\***

All undergraduate and graduate students from Maine's colleges and universities are invited to submit abstracts describing posters or presentations they would like to display at CC21 in October 2008.

There will be five categories of student work at CC21:

- Undergraduate student posters -- research on climate change causes, effects, and choices
- Graduate student posters -- research on climate change causes, effects, and choices
- Arts and humanities presentations related to climate change (performance, fine arts, etc.)
- Public education posters on climate change causes, effects, and choices
- Student team report posters on campus initiatives related to climate change

In each category there will be a cash prize of \$500 and recognition at the conference session during Day 2 for the best poster or presentation. In addition there will be up to ten honorable mention awards drawn from any of the five categories.

The competition judging team will be led by internationally-recognized climate scientist Dr. Paul Mayewski, Director, Climate Change Institute, The University of Maine. Honorary Judge and awards presenter will be Scott Pelley of "60 Minutes" -- CBS News.

To register your poster or presentation, please send the following by Tuesday, September 30 to Mark W. Anderson, Coordinator, Ecology & Environmental Sciences Program, 5782 Winslow Hall, University of Maine, Orono, Maine 04469-5782. Inquiries to: mark.anderson@umit.maine.edu

Name:

Email address:

Institution:

Title:

Abstract: (no more than 100 words)

Merrymeeting Bay, at the junction of 6 rivers drains nearly 40% of Maine and is recognized as an internationally significant resource for its migratory waterfowl, anadromous fish populations including sturgeon and salmon, as well as its bald eagles and rare plants. Friends of Merrymeeting Bay works to protect and improve the Bay through land protection, education, research and advocacy. For more information on FOMB programs, contact Executive Coordinator Misty Gorski at 582-5608 or fomb@gwi.net . The complete Outside schedule and lots more, may be seen at [www.friendsofmerrymeetingbay.org](http://www.friendsofmerrymeetingbay.org)

### **2008 Senator George J. Mitchell Lecture on the Environment**

Thursday, September 18th at 1pm

Hauck Auditorium, University of Maine, Orono

The 2008 Mitchell Lecture on the Environment is entitled "The Environmental Crisis as a Moral and Spiritual Challenge". The lecture will be delivered by Mary Evelyn Tucker, a senior lecturer at Yale University. Ms. Tucker is one of the world's leading experts on the role of religion and religious movements in confronting the growing environmental crisis. Senator Mitchell will provide remarks.

This event is free and open to the public. Tickets are required and can be reserved by calling 207/581-3244.

A reception with refreshments will follow and all are welcome to attend.

Additional information is available at:

<http://www.umaine.edu/waterresearch/>

**\*For Previous Newsletters, Please Visit <http://www.bowdoin.edu/environmental-studies/resources/newsletter.shtml>**