



Colby



Environmental Studies Alumni Newsletter Summer 2005

Check us out on the web: <http://www.colby.edu/environ/>

ES Program Continues to Grow!

Newsflash: The ES Program received a second \$300,000 grant from the Andrew W. Mellon Foundation to further environmental initiatives on campus!

We are pleased to deliver this 2005 addition of the Environmental Studies alumni newsletter. It has been a busy and fulfilling year for the ES Program. We graduated ten ES majors and look forward to 15 senior ES majors next year. After five years directing the program, **Tom Tietenberg** took a well deserved year-long sabbatical in which he completed two book projects on climate change policy. The first project, a major revision of his best-selling textbook, *Environmental and Natural Resource Economics*, was published in July. The second project, a book entitled *Emissions Trading: Principles and*

Practice, has been accepted for publication and is scheduled to be published in 2006. **Russ Cole** has taken over as Program Director. In addition, Russ has been helping to lead the effort to integrate campus sustainability into the Colby culture. **Liliana Andonova** joined our faculty in February 2004 in a joint tenure track position in ES and Government. She has added considerable strength to our program in the area of international environmental policy. **Philip Nyhus** completed his first year of teaching at Colby and adds significant strength to our program in GIS and domestic environmental policy in general and endangered species policy in

particular. Adding Liliana and Philip to the ES faculty has enabled us to meet our long-term goals of providing more depth in both domestic and international environmental policy. **Beth Kopp** joined the program this year replacing **Sharon Treat** as the Environmental Studies Program Coor-



Carolyn Hunt '05 spent the summer working with the Sierra Club of Maine with funding from the Mellon Foundation grant to the ES Program.

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Nine Alumni Participate in ES Colloquia

The ES Colloquium Series is designed to expose students to the breadth of the ES discipline. Students welcome the opportunity to meet practitioners and potentially guide their career decisions. Again this semester we were able to bring an impressive array of speakers to campus. Among this year's line up were nine alumni. **Spencer**

Aitel '77, local Organic Farmer, **Joth Davis '76**, Director of Hatchery Research and Development for Taylor Shellfish Farms, Inc., **Kristen Haley '99** and **Mary Pierce '98**, Maine Department of Environmental Protection, **Gary Lawless '88**, internationally-acclaimed poet, **Janet McMahon '79**, Consulting

Ness '02, Sen. George J. Mitchell Center for Environmental and Watershed Research, **Riki Ott '76**, Environmental Writer, & **Josie Quintrell '80**, Chief Operating Officer at the Gulf of Maine Ocean Observing System (GoMOOS). A complete list of speakers is posted on the **ES website**.

Campus Greening

The Environmental Studies Program has worked with faculty, staff, and students on a number of projects to promote campus sustainability.

Dining Services A major focus this year was a partnership with Dining Services. We made great strides in increasing the amount of local food available in the dining halls. Colby has begun purchasing some produce through the *Farm Fresh Connection* which directly helps to sustain Maine farms, boost the local economy, and provide Colby students with fresh, healthy, and tasty food.

In response to concerns about overfishing and destructive fishing practices, Colby has established a purchasing

policy for the Dining Services board plan that adheres and exceeds the nationally recognized guideline for making eco-friendly and sustainable seafood purchasing choices, *The Fish List*.

Green Computing . Colby has also taken strategic steps to reduce the amount of energy used by computers and related equipment. Steps taken include purchasing energy efficient computers and peripherals, configuring energy management options on all machines, distributing printers ca-



The Apple Farm is just one of hundreds of Maine suppliers Colby's dining services uses.

pable of duplex printing, purchasing 100% recycled paper, recycling old computers. We have been raising environmental awareness by producing a number of pamphlets and online resources which offer green computing guidelines.

Green Energy: Colby has made a commitment to purchasing only electricity generated from sustainable Maine sources, including 50% from hydropower and 50% from non-waste biomass. Since 1999, Colby has produced roughly 10% of its annual electricity from co-generation on campus.

Student Engaged in Service Learning

Again this year, the students in **Russ Cole's** and **Dave Firmage's** class, *Problems in Environmental Science* produced a detailed and well-written report documenting the results of their investigation of land use patterns and the water quality status of Togus Pond. Their results were presented at an open meeting attended by over 50 watershed residents, including members of the local lake association. This course is the capstone course for the Environmental Studies: Science Concentration and it continues to serve as an excellent model of project-based, service learning. See the report at <http://www.colby.edu/biology/BI493/BI493.html>

The capstone course for the Policy concentration, *Environmental Policy Practicum* has been completely reorganized and taught for the first time in its new form this year by **Philip Nyhus**. This year's class produced the first of what we hope will become a regular series of papers assessing the state of Maine's environment. The students evaluated climate, fisheries, forests, solid waste, and freshwater resources. This information is available to interested citizens through a new State of Maine 2004 An Environment Assessment website. To see the web site the students created and to read their papers visit:



Natalie Maida and Dan Tierney collect data on Togus Pond in Augusta

<http://www.colby.edu/environ/ES493/stateofmaine2004/>.

Building GIS Capacity in the ES Program

The academic year was an exciting one for our on-going efforts to develop geographic information system (GIS) capacity in the Environmental Studies Program. ES Professor **Philip Nyhus** has been leading the campus GIS initiatives. He began the year by hosting a hands-on workshop designed to introduce GIS to Environmental Studies and Social Science faculty and students. This workshop led to two interdiscipli-

nary research collaborations and also a Goldfarb Center grant to fund three students to do GIS research.

Progress so far includes GIS projects that were carried out in three of our non-GIS courses, a semester-long GIS course was offered as part of the ES curriculum for the first time, and GIS was used by student researchers, including one of the ES senior honors students.

Dr. Sandra Steingraber Delivers Keynote Address

Ecologist and author Sandra Steingraber delivered the keynote address for the Undergraduate Research Symposium in April titled, "Contaminated Without Consent: A Human Rights Approach to Environmental Health". The topic fit well with our program's development of coverage in environmental health. ES students were among the 550 to participate in the sixth annual research symposium. ES faculty **Russ Cole** and **David Firmage** have coordinated the symposium since its inception.



Green Campus Summit

Students from campuses throughout Maine and Atlantic Canada came together April 2 and 3 at Colby for a Green Campus Summit. This summit was a student-planned conference designed to promote sustainability on campuses and to discuss transnational climate change issues. The goals of the conference were to explore issues around climate change, to see what campuses can do to promote sustainability, and to share best practices toward achieving sustainability goals and positively affecting climate change. About 100 students, staff, faculty and administration from colleges, nonprofit environmental organizations, and foundations participated in the two-day

summit.

The conference itself was a model in sustainability. Planners insisted on green practices whenever possible. Paper products were avoided when possible and were 100% recycled when required. "Green Tags" (A payment toward costs of production of wind energy) were purchased at the close of the conference to offset the participants' travel and the weekend's energy use. The food for the weekend was 90% from Maine, an impressive feat in early April. The summit was planned and organized by Colby ES students **Allison Stewart '05**, **Elli Jenkins '06J**, **Sarah Becker '06**, **Ryan Weaver '07**, & **Casey Lyons '07**,



Professor Russ Cole and Summit Coordinator Allison Stewart '05 highlight Colby's green campus.

with support from the Henry P. Kendall Foundation. Check out the website: <http://www.colby.edu/envIRON/climate>

Student–Faculty Research

South China Tiger Conservation

Assistant Professor of Environmental Studies **Philip Nyhus** and his students, are working with an international team of researchers to conserve one of the world's most imperiled large carnivores - the tiger. At the invitation of the Chinese government, Nyhus and his collaborators are now evaluating opportunities to reintroduce some of these animals back into the wild, beginning with a rapid assessment of potential South China tiger recovery zones during summer 2005. ES students (now alumni) **Brendan Carroll '05** and **Carolyn Hunt '05** helped Philip analyze satellite imagery and to develop detailed geographic information system (GIS) maps and models to support this research.



Philip Nyhus with one of his Chinese counterparts looking at potential tiger habitat in Hunan Province,

UN Conference

Professor **Liliana Andonova** represented Colby and the Goldfarb Center (a co-sponsor) at the UN workshop on the role of the private sector and the public-private partnerships in sustainable development.

Gloeotrichia Project

Professors **Whitney King** and **David Firmage** have received funding to do a study during the summer of 2005 on the nature of recent *Gloeotrichia* blooms in Great and Long Ponds. *Gloeotrichia* is a blue-green bacteria that resides on lake sediments over winter and becomes buoyant, rising to the surface during the summer months.

The Belgrade Lakes Association provided funds for the salaries of two students during the summer months in addition to funds for some equipment and supplies to study the nature of the *Gloeotrichia* bloom. **Andrew Johnson '06** and **Ta-Chung Ong '07** were hired to work on the project.

Dialogue Housing Initiative

The Environmental Studies Program, the Dean of Students Office, and interested students have collaborated effectively to design a Green Dialogue House to respond to this new Student Residential Life initiative. The Green House will be a coeducational, inclusive residence, which anyone with an interest in discussing environmental issues outside of the classroom is encouraged to

participate. The mission of the Green House as envisioned by the student organizers is threefold. Firstly, it will serve as a living space where students interested in or curious about environmental issues can explore and discuss classroom concepts in another light. Secondly, the house would also serve as a model to initiate and/or strengthen campus wide greening ef-

"I am really excited about the Green Dialogue House and I think the proposed activities sound both interesting and fun. I look forward to the interactions we will have during the year"

David Firmage, Faculty Advisor

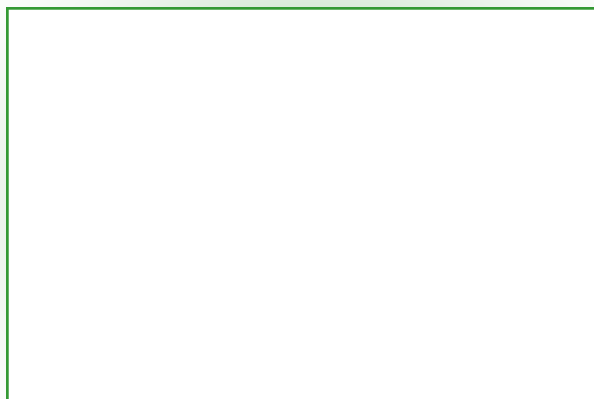
forts both through setting an example, and through interactive activities for the rest of campus. Thirdly, the above missions should be carried out in as inclusive, interesting, and fun ways as possible.



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Don't forget us on the Web:
www.colby.edu/environ/



Students and Faculty Take LEED in New Buildings

Schair-Swenson-Watson Alumni Center

Colby's commitment to campus sustainability practices that emphasize energy efficiency and resource conservation are being showcased in construction of three new buildings that will border the Colby Green. The Schair-Swenson-Watson Alumni Center, pictured here, is the first of the buildings to be constructed. The combination of the College's desire to expand the main quadrangle and the existence of green building principles provided the perfect opportunity to implement green construction goals and practices. A sustainable building is one that maximizes the use



of renewable resources while minimizing the waste during both the construction period and energy use throughout the building's lifetime. This included construction of geothermal wells for heating and cooling, using recycled building materials, installing water-saving and low-energy appliances, an indoor air quality management plan and more. Colby will seek LEED certification from the U.S. Green Building Council for the three buildings. LEED - Leadership in Energy and Environmental Design - is a voluntary set of national standards for developing high-performance, sustainable buildings. Colby's **Environmental Advisory Group** along with ES faculty have been a tireless force working with the architects and builders on the certification for the new buildings.

When she heard about the Alumni Center's LEED (Leadership in Energy & Environmental Design) aspirations, **Kristin Ralff Douglas '87** weighed in. "I was actually the first managing director of the U.S. Green Building Council and helped develop and launch LEED, so you can imagine how pleased I would be that my alma mater was actually using it!" she wrote.

(from FYI, the newsletter for Colby employees)

Diamond Building

Tom Tietenberg served on both the program committee and the building committee for the next building to be constructed, the Diamond Building. Plans include a GIS laboratory, an ES seminar room and office space, group project research classrooms, and student research space. The Oak Foundation recently contributed \$250,000 toward construction of a state-of-the-art GIS laboratory.