



ENVIRONMENTAL STUDIES GROWS WITH FACULTY ADDITIONS

International searches produced two new assistant professors in the environmental studies program for the coming academic year. Benjamin Hale (PHIL/ENVS) is an environmental ethicist and Lisa Dilling (CIRES/ENVS) is teaching science and technology policy. Both are also affiliated with the Center for Science and Technology Policy Research (CIRES). They join colleagues Diana Nemergut (INSTAAR/ENVS) and Krister Andersson (PSCI/ENVS) who were added to the faculty a year ago. Seven other faculty members are on the ENVS roster; thirty-five serve as core faculty.

The new faculty additions are just the latest signs that environmental studies continues its vibrant growth after half a century. The program's roots are in Geography but it has been interdisciplinary all along. It began in 1951 with the development of Conservation Education as a major in the joint Department of Geography and Geology. The major required a set of geography, biology, journalism, and communication courses.

In 1972, the major in Conservation Education was replaced by a more heavily



Diana Nemergut (ENVS/INSTAAR) sampling along the Mendenhall Glacier's chronosequence in Juneau, Alaska. She is studying how microbial communities colonize and change in the soils exposed by this receding glacier. (See more *Faculty Updates* on p. 4)

science-based major in Environmental Conservation. The major remained interdisciplinary, allowing students to concentrate on physical or social components within a single track. It was managed by the Geography Department with the cooperation of departments across campus.

The number of students in this major rarely exceeded 100. But beginning

in the late 1980's, the size of the major grew quickly from 120 in 1987-88 to 514 in 1993-94. The major was revamped into a separate program in Environmental Studies in 1993, administered through the Office of Interdisciplinary Studies. By 1995-96, 537 students majored in environmental studies.

In 1997-98, administration of the major moved to Office of Environmental Studies, where it remains. In 2001-2002, graduate degrees in environmental studies were approved. (See *Graduate Program Matters*, p. 2.) The first graduate class entered a year later. The initial 26 graduate students represented a 70% enrollment percentage of those accepted.

In 2004, the first Master of Science in Environmental Studies was awarded and the first Ph.D. was granted in 2006. In 2005, dual degree programs were created with the Leeds School of Business (MS/MBA) and the law school (MS or PhD/JD). An interdisciplinary certificate in Environment, Policy and Society is also available for graduate students in other departments.

ENVS MILESTONES:

- *1951 Conservation Education is developed as an interdisciplinary major in Geography.*
- *1972 the major is replaced with Environmental Conservation, a single track with physical and social components.*
- *1994 a BA in Environmental Studies is offered through the Department of Interdisciplinary Studies.*
- *1997 administration of the BA moves to the Office of Environmental Studies.*
- *2002 first graduate entering class.*
- *2004 First MS awarded.*
- *2005 MS/JD and MS/MBA dual degrees launched.*
- *2006 First PhD awarded.*



Patty Limerick (ENVS/CAW) presents a "A Wistful but Wary Westerner's Water Wish List" as the final speaker in the Spring 2007 ENVS Seminar Series.

THE CHALLENGE AHEAD

SAM FITCH, PROGRAM DIRECTOR

With the renewed public interest in environmental issues, particularly energy and climate change, this is an exciting time for Environmental Studies. Over the last decade, we have grown from a part-time director, one advisor, and no faculty/courses of our own, to a total of ten rostered faculty, 25 volunteer faculty from other departments, 2 dynamite staff members, and unfortunately still only one (great) advisor. The new graduate program is thriving and we are approaching 500 undergraduate majors. Our faculty are in the thick of critical scientific and policy debates from global warming and renewable energy to prairie dogs and environmental ethics. We are completing a strategic planning exercise to clarify our vision of what we want to become and beginning a major restructuring of the undergraduate curriculum to focus on the integration of environmental sciences (natural and social), values, and policy. The revised major will add integrative courses on climate, energy, and natural resources and more critical thinking courses to the already rich environmental offerings of other departments.

The challenges are also daunting. Except in our research institutes, CU has been slow to embrace interdisciplinary programs. Over the longer run, we probably need to double our rostered faculty to make environmental studies a sustainable enterprise, as opposed to a do-it-yourself project for our students. Funding for our graduate students is limited. Having no space of our own limits the interaction of both faculty and students. Still, we are blessed by a very real sense that what we do can make a difference on issues that are central to the survival and well-being of our planet. That sense motivates us to try to think beyond the existing academic boundaries and beyond what we have been able to achieve so far.



Elizabeth Lokey with advisor Frank Barnes (EER). Lizzie has published "How the Next U.S. President Should Slow Global Warming," *Energy Policy*, In Press and "Valuing Renewable Energy in Carbon Markets," *Electricity Journal*, In Press.

GRADUATE PROGRAM MATURES

CORLIN AMBLER, PROGRAM ASSISTANT

With the success of the undergraduate degree came the realization that the desire for graduate degrees in the environmental field here at CU Boulder was strong as well. Drawing on the resources of the entire University of Colorado system, the ENVS ground-breakers designed a truly interdisciplinary Graduate Program in Environmental Studies that awards two degrees: Master of Science and Doctor of Philosophy.

Somewhat to the surprise of program administrators (since the announcement of the new degree offerings had been delayed) 125 applications were received for the first graduate class of Fall 2002. Twenty-six graduate students were welcomed to campus that first year.

Initially the curriculum focused on specializations in Policy, Water Resources and Biogeoscience, but in recent years Energy and Environmental Social Science have emerged as important programs of study as well. A self-designed area of specialization is also an option that is limited only by the expertise of our faculty.

Six students have completed the PhD, 30 the MS, one the MS/JD and six the MS/MBA. Our website includes a link to an alumni page that describes the varied and exciting pursuits of our alumni to date.

This newsletter is funded by a gift to the Environmental Studies Program from the estate of Jin-Hyun Ahn Cho, made possible by her daughter Jane L. Weatherly, wife of Ryan Dylan Williams (ENVS 1999). Their gift also supports other program activities. ENVS appreciates their support and that of all our donors.

ENVS DONOR HONOR ROLL

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RECOGNITION CEREMONY HONORS NEW ENVS GRADUATES

New graduates were honored in the Environmental Studies Program Recognition Ceremony Thursday, May 10, 2007 in Muenzinger Auditorium. Student speakers Amanda Hixson (B.A.), Zachariah Tupper (B.A.) and Elizabeth Lokey (M.S.) addressed their peers.

Fifty undergraduate, five M.S. and one Ph.D. student completed their studies in May.

MS GRADS

COLLEEN FLANAGAN
SCOTT LEACH (MBA)
JAMES HAGUE
JANE PATER (MBA)
ELIZABETH LOKEY

For 2006/07, a total of 96 graduates received a B.A.: 61 in May, 15 in August and 20 in December.

With an undergraduate enrollment of around 500, ENVS ranks in the top third of arts and sciences majors at CU-Boulder.



Graduate Dir. Sharon Collinge (EBIO/ENVS) congratulates Jimmy Hague while Program Dir. Sam Fitch (PSCI) looks on. (above). Dr. Ken Strzepek (CVEN) hoods Ph.D recipient Paul Flack and Paul Komor (ENVS) hoods MS/MBA grad Jane Pater (below).

OUTSTANDING UNDERGRADUATES

ENVS has one of the highest percentages of graduates receiving honors in the College of Arts and Sciences. Nine environmental studies undergraduates earned honors this year. Fifteen more students are now working on thesis projects.

Vice Chancellor Paul Tabolt attended Carrie Gibaldo's thesis defense on green cleaners because her group asked the administration to adopt a green cleaners standard. She also received a CU Campus Environmental Award. Alexis

Nelson was awarded a \$35,000 grant from Griffith University in Australia to continue her work on alternative wastewater treatment.

**KIM WICKHOLM
MEMORIAL SCHOLARSHIP**
JONATHAN BORTLES

**DONALD & MARGARET
GIBSON MEMORIAL
SCHOLARSHIP**
AMY HARRIS



DEPARTMENTAL HONORS IN ENVIRONMENTAL STUDIES

Carrie Gibaldo, cum laude, "Time for a Change: A Look at the Chemical Cleaners Used at the University of Colorado, Boulder". **Amanda Hixson**, summa cum laude, "Cattle and Deforestation of the Amazon Rainforest: The U.S. and Other Industrialized Countries' Contribution and Responsibility to Make a Change". **Zachariah Tupper**, summa cum laude, "Residential Energy Efficiency Retrofits". **Alexander Arensberg**, magna cum laude, "Sustainable Economies in Colorado through Alternative Tourism". **Gregory O'Brien**, magna cum laude, "The Effectiveness of the Environmental Movement". **Jessica Steinitz**, magna cum laude, "Going with the Grain: Why Environmental and Human Rights Groups Should Have a Beef with Eating Meat". **Eric Cellucci**, cum laude, "Lost in 'Civilization': A Vision for Redefining America's Human-Nature Relationship with Native American Ecological Principles for Living". **Kristin Jolly**, cum laude, "Nitrogen Effects on the Ecosystems of Rocky Mountain National Park: Evidence for Human Caused Changes in N Deposition, Ecological Processes, and an Evaluation of Potential Policy Options". **Alexis Nelson**, cum laude, "Changing the Human-Waste Relationship: Alternative Wastewater Treatment in the U.S."

GRAD STUDENTS

Rich Barone was a member of the team that won First Place at the West Regional Venture Capital Investment Competition and Entrepreneur's Choice at the International Finals. **Ghita Carroll** is working at NREL on the impact of future carbon regulation on the voluntary renewable energy market, a winner of the CU-NREL Seed Grant Competition. **Elizabeth McNie** (Doctoral Research Fellow, Kennedy School of Government, Harvard University) is

working on a case study in Indonesia on the use of scientific information in decision making. **Erik Noble** received the 2008 NASA Graduate Student Research Program Fellowship for the remainder of his Ph.D. work. **Julie Shapiro** worked with The Nature Conservancy and the Natural Resources Law Center

researching water policy. **Susie Strife** (EPA Science to Achieve Results Fellow) presented papers at the American Sociological Ass'n Conference on understanding why modern societies behave in environmentally destructive ways and on exploring environmental perceptions in rural South Africa. **Lindsay Weber** in-

terned with Denver Water's Conservation and General Planning Dept. and did field work in the Green Lakes Valley looking at long-term change of an alpine lake in response to climate change. **Mariah Zebrowski** is the newsletter and events coordinator for the Energy & Environmental Security Initiative (ESSI) in the law school.



UNIVERSITY OF COLORADO
BOULDER

ENVIRONMENTAL STUDIES
246 Benson Earth Sciences, UCB 397
University of Colorado
Boulder, CO 80309-0397
Phone: 303.492.5420
Fax: 303.492.5207
gogreen@Colorado.edu

ENVS.COLORADO.EDU

Sam Fitch, Program Director
Sharon Collinge, Graduate Director
Sarah Rogers, Undergraduate Advising
Corlin Ambler, Program Assistant
Cindy Scheopner, Admin. Assistant

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FACULTY UPDATES

Krister Andersson was awarded the Giorgio Ruffolo Senior Research Fellowship in Sustainability Science at Harvard's Center for International Development for academic year 2007-2008. He also received NSF funding for research on "Decentralization, Local Institutions, and Environmental Change: A Cross-Sectional Time Series Study of Forest Governance in Latin America". **Lisa Barlow** presented two papers at the Association for Advancement of Sustainability in Higher Education (AASHE) national meeting and at the Rocky Mountain Sustainability Conference: the first on environmental service learning, using ENVS 3001 as a model, and the second on building a culture of sustainability among first year university students. Baker Hall now has recycling cabinets on each floor in the central hallways, and a green dorm room display on the first floor. **Ben Hale** has had the following papers accepted for publication: "Crossing the Property Line: A New Direction for Environmental Ethics," *Metaphilosophy* (forthcoming, October 2008), "Choosing to Sleep," with Lauren Hale, in the *Philosophy of Public Health*, (Aldershot: Ashgate, 2007, forthcoming), "Technology, the Environment, and the Moral Considerability of Artifacts," in *New Waves in Philosophy of Technology*, (Aldershot: Ashgate, 2007, forthcoming), and a review of *Do Animals Have Rights*, by Alison Hills (forthcoming in the *Philosophical Quarterly*). **Doug Kenney** was on a panel titled "Residential Water Demand Management in Aurora, Colorado: Lessons Learned and Remaining Questions," at the 2007 Regional Water Symposium in Arizona Aug 29-Sept.

1, 2007. **Paul Komor** gave a reading and signed copies of his book *Renewable Energy Policy* at the Alternative Energy Expo, Tucson AZ last September. The book is now a required text at the University of California, Santa Barbara (UCSB) and is required or recommended reading for courses at several other universities. **Diane McKnight** and colleagues have launched the Schoolyard Series of NSF's Long Term Ecological Research Network. *My Water Comes from the Mountains* tells the story of the flow of water from the alpine snowpack to the plains. The second book in the series, *The Lost Seal*, recounts a true event of an encounter with stranded seal by scientists studying the Dry Valleys on the coast of Antarctica. **Roger Pielke Jr.**, who has directed the CIRES Center for Science and Technology Policy Research since its inception in 2001, has ended his term as director and is headed for a year-long sabbatical at Oxford. His book, *The Honest Broker: Making Sense of Science in Policy and Politics* was published this spring by Cambridge University Press. **Joe Ryan** is doing an outreach project helping the Coal Creek Watershed Coalition in Crested Butte find the sources of metal contamination from abandoned mines in their watershed. In April, he conducted a metal-loading tracer test to locate tributaries bringing metals to Coal Creek, which Crested Butte uses for its water supply. **Tom Yulsman** received a \$10,000 grant from the LEAP program to transform himself into a multimedia journalist and journalism instructor. He co-produced video story on cellulosic ethanol that is part of a multimedia package on Audubon magazine's website. It accompanies a feature article he wrote for Audubon maga-

zine on biofuels, appearing online and in print in the September/October issue. **Michael Zimmerman** has co-authored, with Sean Esbjorn-Hargens, *Integral Ecology: Uniting Multiple Perspectives on the Natural World* (Shambhala Press, forthcoming). He is also giving a keynote address at The Fourth Tamkang International Conference on Ecological Discourse, Crisscrossing Word and World: Ecocriticism, Crisis, and Representation, May 23-24, 2008, Taipei, Taiwan.

Jim Ruttenber served on the faculty of the University of Colorado Health Sciences Center in Denver and was a member of the Environmental Studies faculty at CU Boulder. He co-taught a graduate seminar on the Nuclear West for the past three years. Ruttenber first encountered nuclear radiation issues in 1970 when he was a graduate student in environmental biology at the University of Miami. That interest grew as he completed his Ph.D. in human ecology in 1979 and earned his M.D. in 1981, both at Emory University. While there, Ruttenber began working as an epidemiologist at the Centers for Disease Control (CDC). After joining the CU medical school faculty in 1991, Ruttenber focused on radiation exposures to workers at Rocky Flats. He drowned on June 16 in Colima, Mexico, where he had been instrumental in setting up an exchange program with CU. He was 59 years old.

A full obituary is at envs.colorado.edu

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