

ENVIRONMENTAL CONNECTIONS

SELF-EXAM — COLLEGE ASSESSES ITS ENVIRONMENTAL SUSTAINABILITY

WHAT IS Connecticut College's carbon footprint—and how can we reduce it? To help answer those and other questions, Connecticut College has undertaken an unprecedented environmental evaluation of its operations and academic activities.

The Environmental Sustainability Baseline Assessment (ESBA), led by consultants Woodard & Curran and begun in fall of 2008, will examine the structural and behavioral aspects of campus operations including energy, water, solid waste, recycling, hazardous waste, pest control, air

quality, greenhouse gas emissions, food, transportation, campus design and growth, purchasing, the workplace environment, management systems and sustainability in the curriculum.

The sustainability assessment is the logical next step in the College's historical commitment to environmental sustainability and stewardship. It will be used to establish a baseline by which the College can gauge its future environmental impacts and activities. It will also inform a strategic sustainability planning effort to meet the goals of

the American College and University Presidents' Climate Commitment, signed by President Lee Higdon in January 2007. The final report will benchmark the College's environmental performance in relation to five liberal arts colleges that are, like Connecticut College, known for their environmental commitments. Last—and of particular importance in the current economic environment—the study will seek to identify specific sustainability initiatives that can help the College reduce costs and operate more efficiently.





GOODWIN-NIERING CENTER FOR
CONSERVATION BIOLOGY
& ENVIRONMENTAL STUDIES

Connecticut College
Box 5293
270 Mohegan Avenue
New London, CT 06320-4196
Phone: 860.439.5417
Fax: 860.439.2418

E-mail: goodwin-nieringcenter@conncoll.edu
<http://goodwin-nieringcenter.conncoll.edu>

Douglas Thompson, *Harrison Director*
Glenn Dreyer, *Executive Director*
Jane Dawson, *Associate Director*
Diana Whitelaw, *Associate Director*
Wei Ying Wong, *Mellon Fellow*
Amy Cabaniss, *Campus Environmental Coordinator*
Mary Villa, *Center Assistant*


STEERING COMMITTEE

Robert Askins, *Biology*
Sanjeeva Balasuriya, *Mathematics*
Robert Baldwin, *Art History*
Anne Bernhard, *Biology*
MaryAnne Borrelli, *Government*
Beverly Chomiak, *Physics*
Ann Devlin, *Psychology*
James Downs, *History*
William Frasure, *Government*
Pamela Hine, *Botany*
Chad Jones, *Botany*
Colleen Kaczmarek, *Chemistry*
Manuel Lizarralde, *Botany & Anthropology*
Stephen Loomis, *Biology*
Arlan Mantz, *Physics*
David Patton, *Government*
Peter Siver, *Botany*
Derek Turner, *Philosophy*
Gerald Visgilio, *Economics*
Marc Zimmer, *Chemistry*

BOARD OF ADVISORS

Wendy Blake-Coleman '75
U.S. EPA
Allen Carroll '73
National Geographic
John Cook
The Nature Conservancy
David Foster '77
Harvard Forest, Harvard University
Linda Lear '62
Environmental Historian
Connecticut College Trustee
Ralph Lewis
Connecticut State Geologist, Retired
Helen Mathieson '52
Connecticut College Trustee Emeritus
Edward Monahan
Connecticut Sea Grant Program, Retired

Established in 1993, the Goodwin-Niering Center for Conservation Biology & Environmental Studies is an interdisciplinary program that draws on the expertise and interests of faculty and students in the liberal arts to address contemporary ecological challenges. The Center strives to integrate all areas of learning to deal with the issues of sustainability and the natural environment. Building on a scientific understanding of the natural world, the Center invites the social sciences, the humanities and the arts to help understand and solve difficult environmental issues.

 Printed on recycled paper

LETTER FROM THE DIRECTOR

The Goodwin-Niering Center is in the midst of an exciting period of growth and, thanks to the hard work of my predecessors, is in a very strong position to face the new challenges brought on by previous success. The biggest changes in the Center occurred in personnel. After 15 years of dedicated leadership, Robert Askins stepped down as director of the Center. Last year, Gerald Visgilio also retired as associate director, after eight years in that position. Over the summer, I moved from the associate director to the director position, and we welcomed Jane Dawson, the Virginia Eason Weinmann '51 Professor of Government, as the new associate director. The previous work by Dr. Askins and Dr. Visgilio helped generate record interest in the Center this year from both faculty and students. As the new director, I am graced with the problem of keeping pace with this growing interest.



In addition to the changes in the director and associate director positions, we were joined in September by Wei Ying Wong, an environmental communications specialist hired for a two-year position under the new Andrew W. Mellon postdoctoral fellowship program. Dr. Wong adds a new field of study to the curriculum and is an integral member of the teaching team for the certificate seminar. This semester we are also excited about the arrival of a visiting scholar, Kaggere Lokesh, a professor of environmental engineering in the S.J. College of Engineering, Mysore, India. Dr. Lokesh will teach a course on water quality, pollution and management and help the Center students prepare for our upcoming Water Scarcity and Conflict conference.

On April 3 and 4, the Center will host its seventh environmental conference. The Elizabeth Babbot Conant Interdisciplinary Conference is a biennial event that is always the highlight of the year for the Center. This year we look forward to bringing 14 tremendous speakers to campus to discuss the science, policy and challenges associated with water supply and the increased demand of this scarce resource. Students, faculty, alumni and the local community should find the symposium both engaging and enlightening.

The certificate program had a record number of candidates this fall with double the number of applicants relative to the number of available spots. We were disappointed to turn away some excellent students, but equally excited about the quality of the class. The new recruits will immediately be involved in a new project-based component of the seminar initiated last semester. The group project component of the certificate program is a new idea that we hope will have a lasting positive environmental impact on various activities on campus and simultaneously improve the visibility of the Center. For our first project, we opted to investigate the use of bottled water on campus with the hope of making recommendations to reduce the use of one-time-use bottles. The topic is an important and highly visible environmental issue that will also serve as excellent preparation for the students for the Water Scarcity and Conflict conference. The Center is leading the charge by eliminating its own use of bottled water for events as part of a general movement to minimize waste and to use more locally grown and organic food products whenever possible.

Like any biological organism, the Goodwin-Niering Center continues to evolve and adapt to meet future challenges and opportunities. Our planning for the future began with a meeting and brainstorming session of the advisory board last fall. This spring we will hold a retreat to discuss future directions for the Center and options for handling the increased student demand. Whatever the future holds, it is clear that the Center is in an extremely strong position thanks to years of leadership by Robert Askins, Glenn Dreyer, Gerald Visgilio and Diana Whitelaw. Everyone associated with the Center owes these four a large debt of gratitude.

Douglas Thompson, *Harrison Director*

Please Help Us Conserve

You can help the College conserve paper and energy by reading our newsletters online at:
<http://goodwin-nieringcenter.conncoll.edu>



To be removed from our paper mailing list, contact us at goodwin-nieringcenter@conncoll.edu

NEW CENTER FACULTY

PART OF THE GOODWIN-NIERING Center's mission is to support the increasingly popular Environmental Studies major. One form of our support is to encourage faculty from different departments to offer environmentally oriented classes within their disciplines. Professors Balasuriya and Downs from Mathematics and History are the latest to add new courses to our catalog.

Assistant Professor of Mathematics Sanjeeva Balasuriya joined the Center Steering Committee in the spring of 2008. Thanks to a Mellon Foundation Grant to the Center, Dr. Balasuriya recently developed a new course on Environmental Modeling, which focuses on biological, ecological and geophysical applications. He came to Connecticut College in 2006 and had prior teaching experience across three continents: the University of Peradeniya, Sri Lanka, Oberlin College, Ohio, and the University of Sydney, Australia. With degrees in applied mathematics, physics and engineering, Dr. Balasuriya specializes in applied analysis, dynamical systems, ordinary differential equations and fluid mechanics. Some projects he has worked on include assessing the leakage of heat from Gulf Stream rings, investigating chaotic motion in our oceans, studying flame front propagation, and analyzing how populations spread into new regions via ecological models.

Assistant Professor of History James Downs also joined Connecticut College in 2006, the Center Steering Committee in



Professor Sanjeeva Balasuriya

spring 2008, and developed a new course with Center and Mellon Foundation support. Dr. Downs has specialized in 19th-century United States history, African-American studies, and history of medicine and public health. His new offering is titled Environmental History of the South, and it is the first Environmental Studies course taught by a member of the College's History Department. He is especially interested in the way nature and the environment interacted with politics, economics and labor in the American South. The new course covers the subject chronologically from colonization to hurricane Katrina.

REQUEST FOR NOMINATIONS

THE GOODWIN-NIERING Center seeks nominations for its Alumni Environmental Achievement Award. This award recognizes and celebrates Connecticut College alumni who have made significant contributions in any area of environmental endeavor, including research, education, land preservation, conservation, communications and activism. This is an ongoing request with no deadline, but we do ask that nominations come with as much information about the person and their accomplishments as possible.

To nominate a Connecticut College graduate for the Center's Environmental Achievement Award, please contact Glenn Dreyer at 860-439-2144 or gddre@conncoll.edu



Professor James Downs



The Annual Center Banquet on Oct. 25, 2008, brought certificate students, their parents and professors together to share internship memories and good food.

PHOTO BY A. VINCENT SCARANO

WELCOME TO THE CERTIFICATE CLASS OF 2011!

THE GOODWIN-NIERING CENTER is pleased to welcome 10 new sophomores into the certificate program. This year there was unprecedented interest in the program and admission was highly competitive. The students are listed alphabetically, along with their majors and environmental interests:

Sarah Berkley, with a double major in History and ES, plans to focus on civil rights and the green collar economy.

Catharine Brookes, with a double major in Government and ES, will be looking into the economics of waste reduction.

An International Relations major with minors in Dance and Religious Studies, **Nita Contreras** plans to delve into water issues in India.

Biological Sciences major **Flora Drury** is interested in tidal energy projects.

ES major **Janan Evans-Wilent** plans to research cetacean conservation.

ES major **Christopher Haight** plans to focus on marine pollution laws and policies.

Kristiane Huber, with a double major in Government and ES, will be investigating climate change and the international refugee crisis.

With a double major in Government and Hispanic Studies and a minor in Economics, **Fiona Jensen** plans to explore environmental conservation in Chile.



An ES major with a minor in French, **Christopher Krupenye** plans to focus on conservation of endangered primates.

An ES major with a minor in Music, **Eric Leflore** will be investigating biodiversity degradation and human population growth.

Architectural Studies major **Cynthia Rosen** is keenly interested in green architecture.

Scott Siedor, with a double major in ES and Economics, plans to explore effective strategies for emissions reduction.

SUMMER STUDENT AND FACULTY RESEARCH

EACH SUMMER, students collaborate with faculty on research projects. The following are projects conducted during the summer on environmental or ecological subjects:

David Marshall '09, Independent Study: "Bacterial Diversity Patterns along Latitudinal Gradients." David is studying whether bacterial diversity decreases along increasing latitudinal gradients, a well-known ecological pattern of biodiversity observed among many macroorganisms. David is compiling data from the literature to determine whether there is evidence to support this common ecological pattern among bacteria. He is using the ribosomal RNA gene as a diversity marker. *Faculty Adviser: Anne Bernhard*

Rachel Zwick '08, Honors Thesis Research: "Diversity of Denitrifying

Bacteria in Salt Marsh Sediments Based on Sequence Analysis of the *nirS* Gene." Rachel's main focus is identifying how diversity of denitrifiers changes with sediment depth. Denitrifying bacteria convert oxidized forms of nitrogen back to atmospheric nitrogen gas and mediate the loss of nitrogen from coastal ecosystems where nitrogen plays an important role in regulating productivity. Rachel is using DNA sequences of the dissimilatory nitrite reductase gene (*nirS*) to characterize the denitrifying communities. These genes serve as functional markers, and are responsible for generating the enzymes necessary to reduce nitrite to nitrous oxide and then to elemental nitrogen. *Faculty Adviser: Anne Bernhard*

Adam Campos '08, Honors Thesis Research: "Changes in Brackish Marsh Vegetation and Macrofaunal

Communities Following *Phragmites australis* Control." Adam participated in summer field work on tidal marshes with a team of faculty and students. For his thesis, he is comparing data on vegetation and populations of invertebrates and fish in control marshes and marshes that have been restored by eradication of an invasive plant (*Phragmites*). The results should show whether marsh restoration projects sponsored by The Nature Conservancy and the Connecticut Department of Environmental Protection have been effective at restoring the biological diversity and productivity of marshes. *Faculty Advisers: Scott Warren and Robert Askins*

Billy Karis '09, Honors Thesis: "Testate Amoebae of the Giraffe Pipe." *Faculty Adviser: Peter Siver*

LEARNING TO LISTEN AND OBSERVE

ENVIRONMENTAL COMMUNICATION is about telling people what to do, right? Students in the Goodwin-Niering certificate seminar learned that perhaps there is more to environmental communication than just telling people how to save the environment.

Broadly speaking, environmental communication is any activity that engages in a discussion around environmental issues. It encompasses a range of subdisciplines that include green marketing, journalism, science writing, risk communication, discourse analysis, social marketing and community-based social marketing.

This fall, we explored the use of environmental communication as an agent for behavioral change (also known as community-based social marketing). What stops people from acting in an environmentally responsible way? Why do 85 percent of Americans consider themselves environmentally conscious, and yet America continues to be one of the top emitters of carbon? How do we encourage people to act in more environmentally responsible ways?

Effective communication requires that we go beyond just telling to listening and observing. Instead of assuming that

we know why people are not doing the “right” (or environmentally appropriate) thing, sometimes we need to talk to people and observe their actions. Why do students of a college that touts environmental consciousness as one of its tenets of identity consume so many single-use plastic water bottles?

Learning to listen and observe requires that we take a step back from our personal assumptions. We cannot, and must not, assume that people are ignorant. Sometimes it is true that they lack information, but oftentimes there are other barriers to actions. And we tested this idea with the example of single-use plastic water bottles.

Certificate students put theory into action by going around campus, listening and observing. One group found out that a reason why students consume and discard single-use plastic water bottles is because they are provided abundantly at sports events, and students are encouraged to take unopened bottles at the end of the event. Another group learned that convenience and the lack of accessible filtered water in dorms were some of the driving factors behind high usage.

We will be putting more of our learning



Dr. Wong, Mellon Fellow

into practice this semester. With the Goodwin-Niering Center’s upcoming conference on Water Scarcity and Conflict (April 3-4), what better time to understand water consumption patterns and the rising trend of bottled water? We hope that the study will yield interesting and informative data that can be presented to President Higdon and result in actionable plans for the reduction of single-use plastic water bottles on the Connecticut College campus.

Sometimes big things can come from listening and observing.

— *Wei Ying Wong*

CLASS OF 2009 CERTIFICATE STUDENTS SHARE INTERNSHIP EXPERIENCES

THE 12 SENIORS in the Certificate class of 2009 have returned from their summer environmental internships. The variety of majors and individual interests led to internships that included “environmental strategy assistant” for a cutting-edge advertising agency in New York City, researching medicinal plant traditions in Great Britain, and working with biofuel crops in Hawaii. The students will be incorporating their experiences into their senior integrative projects. Read more about our certificate students at <http://ccbcs.conncoll.edu/Seniors.html>. Read on for more about their research.



History major **Sarah Ayres** completed her internship at the Gulf of Maine Research Institute (GMRI), Portland,

Maine. GMRI works to sustain the future for communities who rely on fishing for their livelihood by building knowledge and promoting education about commercial fish species, critical habitat, fishing gear, technologies and human behavior in order to create more effective management of the Gulf of Maine bioregion.

“While interviewing fishermen, I discovered a very effective method for leading discussions so that they provide useful data, while not being too pushy and allowing the interviewee to feel in control. The most valuable thing I learned during my internship was through my view

into the fisheries management process. It is a very bureaucratic system, which I found very slow and ineffective. In addition, I now understand how fisheries management works, which will certainly help me understand its history, and how it affects communities.”

For her senior project, Sarah plans to explore the historic, economic and environmental contexts of the Maine lobster fishery in order to trace the policies that have shaped Maine’s fishing communities along with a discussion of the consequences of the industry’s changing policies.



Rebecca Beachell, a government and East Asian studies major, worked as a program assistant for the Berkshire

continued on page 4

Pioneer Resource Conservation and Development Group (BPRC&D), Amherst, Mass. BPRC&D is a nonprofit organization whose mission is to help citizens stimulate economic opportunities, conserve natural resources and improve the general quality of life in rural areas.

“There are things about environmental groups that cannot be learned in class. As students of environmental policy we learn that there are difficulties in putting policy into practice on the ground, but it is impossible to really understand the difficulties until you are the one trying to make programs fit under policies and criteria that are unclear or impossible to apply. I witnessed the difficulties and obstacles that environmental groups must overcome to simply do their work. The determination and talents that the BPRC&D council and office workers brought to their work re-inspired me to try and further their beneficial efforts.”

For her senior project Rebeccah plans to use her newfound understanding of the interrelationship between a nonprofit environmental group and a government and apply that to an investigation of Chinese environmental groups in the Yellow River watershed, along with their linkages with the Chinese government.



Environmental studies major **Tyler Dunham** was the “Environmental Strategy Assistant” for Collins: in New York

City. Collins: is a brand design firm specializing in increasing a brand’s interactions with customers.

“I hoped to learn what it is like to work in an advertising agency, and see if I could prepare for my senior integrative project by seeing how effective successful marketing can be for NGOs. After getting over the culture shock of being in New York City, my experience as an intern was one of the most eye-opening experiences in my life. Although the firm was not only involved with environmental projects, the opportunity to be able to observe and contribute to a top-rate design team working on projects designing buildings to bottles opened my mind creatively. After a summer at Collins: I fully understand the power effective branding

can have on an individual and the creative potential of green marketing.”

For his senior project, Tyler plans to analyze how effective marketing can be in bringing positive environmental change and to quantify the costs and benefits of green advertising: while comparing green washing vs. environmental transformational design.



International relations major **Hans Eysenbach** spent his summer working at Silverbrook Farm in

Dartmouth, Mass. Silverbrook Farm is a 30-acre organic farm that strives to be a successful, environmentally and community-friendly farm that provides people with healthy and fresh produce.

“Aside from the daily care of animals (pigs and chickens) there was always a focus for the day that generally fell into four categories: field preparation, planting, weeding or picking. Field preparation could mean picking rocks out of a relatively young field or tilling and cultivating with the tractor. Sometimes the preparation was for a future season and involved a trip to the zoo where the elephants served as a free and abundant source of manure to fertilize the fields. The preparation also took the form of planning what to plant where and what if any plants could be planted to reduce the negative impact of pests. One particularly effective piece of planning was to plant buckwheat among the rows of our potato field; the buckwheat grew to hip level and effectively hid the plants from the potato beetles. Planting could mean a ride on the back of the planter towed behind the tractor or back breaking hand seeding or plug planting.”

Hans plans to conduct an individual study of the Connecticut College food system to determine where the College gets its food, what kind of farming is producing the food, and the programs that are underway to dispose of food waste. He would like to find out to what extent the College is fostering a local food system and whether there are any farms that could supply fresh local foods for a small college with 2,000 students and faculty.



Botany major **Rick Hederstrom** interned with the Ethnomedica project at Kew Royal Botanic Gardens in

London, England. A well-organized research program, the project’s mission is to collect and preserve a fast disappearing aspect of the British heritage—its medicinal plant traditions. The mission of Kew Royal Botanic Gardens is to inspire and deliver science-based plant conservation worldwide, enhancing the quality of life.

“The internship was a very valuable learning experience. I was able to learn about how a large-scale ethnobotanical research project is run in a developed country, as well as the issues involved in managing a project such as this. I learned much about British ethnobotany, folklore and interviewing techniques. I also developed advanced skills in working with collected information in database form. Through this internship, I have acquired a greater appreciation for just how much work it takes to organize and implement a nationwide oral history project. Although my primary interest was to collect information through interviews that could hopefully lead to the discovery and development of new cures and treatments, I have come to see that the stories that come with the remedies are just as important as the remedies themselves because it is within these stories that the human element, which makes each culture unique, is to be found.”

For his senior project, Rick plans to write a thesis that will include a summary of the history of medicinal plant use and associated folklore in Britain, an analysis of traditional British plant medicine, and a comparative study between traditional British ethnobotany and Native American ethnobotany.



Maya Jacobs, who is majoring in environmental studies and Hispanic studies, interned with Ceres in Boston. Ceres

NATIONAL RECYCLING COALITION'S RECYCLEMANIA

CHAMPIONED BY   

RecycleMania 2009 began on Jan. 18, running for 10 weeks through March 28. This intercollegiate recycling and waste reduction competition involves hundreds of U.S. colleges and universities. This year, 510 are enrolled to compete.

This is the third year Connecticut College is participating in RecycleMania. We have had impressive recycling results in the past, especially in the “Per Capita Classic,” placing fifth out of 93 schools in 2006, 24th out of 201 in 2007, and eighth out of 401 in 2008. As

demonstrated by the increasing enrollment, RecycleMania is catching on!

Last year marks our first entry into the Waste Minimization category, with a less impressive ranking of 73rd place. With obvious need for improvement in decreasing our waste generation, the College is undertaking a more aggressive waste minimization effort this year. To track the RecycleMania 2009 competition, visit www.recyclemaniacs.org.

— Amy Cabaniss

CLIMATE RIDE 2008: SENIORS BIKE TO SAVE THE ENVIRONMENT

GLACIERS ARE MELTING, the migration habits of animals are changing and the Earth’s temperature is steadily rising, scientists say. But instead of sitting back and watching, Connecticut College seniors Tyler Dunham and Mike Seager sprung into action.

In September, Dunham and Seager participated in a 320-mile bike ride from New York City to Washington, D.C., to raise awareness about climate change, renewable energy and green jobs. Participants in the appropriately titled Climate Ride are encouraging citizens to call for meaningful climate change and energy policies. They hope to inspire individuals to take responsibility for reducing fossil fuel energy consumption, according to the ride’s Web site. The ride concluded in a political protest on the steps of Capitol Hill.

The money raised from the ride will go to “nonprofits dedicated to helping the U.S. government move towards a more sustainable future,” Seager said in a letter to friends and family.

Neither of the men had participated in rigorous biking before deciding to participate in the Climate Ride. Seager said he was “a little skeptical about how

physically challenging it would be,” but that Dunham convinced him it would be a great opportunity to get in shape and learn about important issues. Dunham first brought Climate Ride to Seager’s attention after he found out about the ride through his contacts with Renewable Energy Club (both men are members and Dunham is the president). “On the whole, the choice to join Climate Ride was pretty spontaneous,” the two said. But they had been training for weeks.

Dunham and Seager were proud to wear Connecticut College jerseys on their quest. The jerseys included the name of the College but also the businesses that supported them. “We’re excited to stand for the school and to serve as representatives at the end of the ride,” Dunham said.

To date, Dunham and Seager raised \$5,500 for their cause. If you are interested in following Dunham’s and Seager’s adventures, check out climateride.org and <http://tylerandmike.blogspot.com>.

— Amy M. Falk '11. This article has been modified since it originally appeared in *The College Voice*, Sept. 24, 2008.



Climate Riders Tyler Dunham (l) and Mike Seager

continued from page 4

is a nonprofit comprised of investors, environmental organizations and public interest groups all over the country who work with companies and investors to ensure sustainability and address climate change. Ceres' mission: integrating sustainability into capital markets for the health of the planet and its people.

"My first project was search engine optimization. This consisted of typing key words into Google, such as climate risk, corporate governance and investor network to see if and where Ceres falls. I researched which companies were ranked before and after us and why. Are other companies making better use of key search terms? Are their Web sites more accessible than ours? After this was complete I wrote short reports on some of our top competitors to figure out what they are doing differently and why they are ranked before us. I found that there were not very many pages with Ceres links, which is how we came up with my next project: going through Ceres Company and Coalition members and seeing if they link to us on their Web sites and if not whether there is an easy place on their Web site to add a link."

For her senior project, Maya plans to research what cities in the U.S. are doing to address climate change while looking at the pressures that cities face, whether economic, public or political.



Jeff Nemec, who is majoring in philosophy and environmental studies, worked at the Adirondack Museum in

Blue Mountain Lake, N.Y. Located in the heart of the Adirondack Park, a unique 6-million-acre mixture of public and private land, the museum's mission is to expand understanding of the area's important history and the relationship between people and the Adirondack wilderness in order to foster informed environmental choices for the future.

"The objective of the internship was to gain a greater understanding of the Adirondack Park and the conflicts that go on within its boundaries. Before the park was established, the mining industry was very important to the region. The changing perceptions of the value of

nature along with over-exploitation and economic hardships tempered the area's mining industry, but mining still occurs on private land (for the most part, it is not large scale). Mining seems to embody the motivation of the Adirondack Park: to integrate the protection of the environment on large tracts of public land while allowing proper development and growth on the private land. This integration is what makes the park special (and controversial)."

For his senior project, Jeff will explore how the interrelationship of public natural preserves and regulated private land affects the individuals, communities and environment of the Adirondacks. Many would argue that the strict environmental regulations keep the region impoverished. Jeff feels it should be viewed as an opportunity for the communities to adjust toward a more sustaining lifestyle.



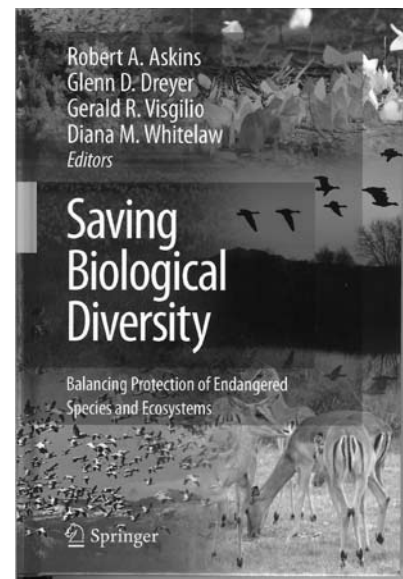
Environmental studies major **Katherine Sacca** interned for World Camp Inc. in Lilongwe, Malawi. World Camp Inc. is

a nonprofit organization committed to empowering children in impoverished communities around the world through education. Since 2000, World Camp has worked in rural schools and street shelters in several countries teaching children about challenging issues that affect their future and communities.

"My main learning objectives were to learn more about environmental issues facing Malawi, implement new projects for World Camp, and learn more about offering solutions and education for Malawi's children and teachers. I learned a lot about the setup and operation of small nonprofit organizations, and had tremendous responsibility within the organization. Being out in the field was absolutely essential to my internship and my senior project, and my studies as a whole; studying deforestation in Malawi and even spending a semester mapping it in GIS class cannot compare to being there and seeing the multifaceted faces of poverty and deforestation manifesting themselves in every aspect of life in Malawi."

continued on page 6

CONFERENCE PROCEEDINGS PUBLISHED



SAVING BIOLOGICAL DIVERSITY: Balancing Protection of Endangered Species and Ecosystems is now available from Springer Science + Business Media, LLC. A compilation of presentations from the Center's 2007 conference, the book was edited by Robert Askins, Glenn Dreyer, Gerald Visgilio and Diana Whitelaw. In addition to the traditional printed format, Springer also offers individual chapters for purchase in electronic form on their Web site. All five previous Center conferences were also published as either books or dedicated issues of professional journals.

EARTH FEST 09!

Saturday, April 18, from 11 a.m. – 3 p.m. Connecticut College will hold its annual Earth Day celebration. To be held on Tempel Green, Earth Fest! will include music, food, dancing, hands-on children's activities and more. Rain date: April 19. For information contact Amy Cabaniss at 439-5218.

For her senior project, Katherine plans to investigate deforestation in Malawi with a GIS (Geographic Information System) study of ecological and anthropological data in order to determine causes and solutions for deforestation in Malawi.



International relations major **Michael Seager** spent his summer working for an NGO called FUNDAPAZ in Salta,

Argentina. FUNDAPAZ, a Spanish acronym that stands for the foundation for the development of justice and peace, has been working since the '70s to give a political voice to indigenous communities, farming families and poor rural populations. FUNDAPAZ encourages political involvement and community organization and lobbies in Salta and Buenos Aires to try to bring about legislation that promotes sustainable land use legislation and protection of indigenous people's rights.

"I learned about how difficult NGO work can be, and how workers must find ways not to become discouraged with their work, as it is often extremely difficult to realize the change that one might desire. Simple problems arose in our offices, such as when the electricity of the whole town would cut off for hours on end, which would halt any chance of significant progress on the day's to-do list. However, we would always find other ways to further our daily progress by focusing on another impending issue, or we would drive out to a community and do some field work for the day."

For his senior project, Michael plans to investigate the theory and criticism of participatory democracy in order to discern whether this form of governance could be more successful at creating ecologically minded national policy.



Jamey Smith, who is majoring in biology and environmental studies, interned at the Hawaii Agricultural Research Center

(HARC) to pursue his interest in biofuel crops. HARC's research encompasses many tropical crops important to both state and national economies such as papaya, coffee, asparagus, corn and most recently biofuels.

"Because the demand for biofuels is increasing at such a drastic rate, HARC has placed the majority of its man power and funding into biofuel crop development. My responsibilities with HARC included assisting in several aspects of crop development of several potential biofuel crops. All of the crops being researched were perennial, oil-seed-bearing tree species including *Jatropha curcus*, *moringa* and *kakui*. The crop development consisted of three major components: mechanization of harvesting, breeding and co-product development."

For his senior project, Jamey plans to study the various ecological impacts associated with large-scale biofuel plantations, including inputs and related consequences of "first-generation" biofuel crops as well as *Jatropha*, invasion potential of *Jatropha* in areas in which commercial operations may be established, and potential conservation co-projects associated with large-scale plantations.



Government major **Andrew Watts** spent his summer working for the Environmental Protection Agency in

Boston. The EPA New England is currently working on a wide variety of projects including regional conservation, energy and pollution initiatives as well as carrying out the broader national mandate of the agency.

"My main focus this summer was to provide support for the EPA's CARE (Community Action for a Renewed Environment) grant program. The CARE grant program provides assistance, both financial and technical, to community based initiatives aimed at local environmental amelioration. My projects varied depending on the specific community organizations' needs. I researched everything from chemical compounds found in automobile paint to beach ecology in an effort to garner as much information and support as possible for whatever the community group

needed. The main overarching summer-long project I completed was the creation of a resource guide for community groups undertaking the CARE process. This guide starts with aid for communities during the application process and walks them all the way through to the final stage when the project becomes self-sufficient."

For his senior project, Andrew plans to examine community initiatives in East Africa with the goal of providing analysis and suggestions for more effective community involvement, utilizing what he learned from his study abroad in Kenya with the wide array of environmental issues facing that country and from working for an organization in his own country striving to empower local communities.



Samantha Wright, who is majoring in environmental studies and Hispanic studies, interned with Ocean and Coastal

Consultants (OCC) in Trumbull, Conn. OCC is a consulting firm that provides engineering and planning services for coastal and waterfront projects.

"My responsibilities were numerous and were different on any given day. They ranged from mastering the ever-important skills of photocopying, scanning and binding to researching design solutions, ordering nautical charts and working in the field with clients. More specifically, I was involved in a beach nourishment project on Laurel Beach in Milford, Conn., in which I took measurements in the field and helped with calculations and designs to determine what volume of sand was necessary and where the sand should be placed in order to achieve the goals of our client, the Laurel Beach Association. Environmental impacts also had to be assessed, including disturbance of shore bird nesting sites, in order to complete a permit application that would hopefully be accepted at the local, state and federal level."

Samantha's senior project will be a thesis discussing the flaws of conventional beach stabilization, coastal protection techniques and the use of artificial reefs designed to mimic nature's way of protecting the shoreline.

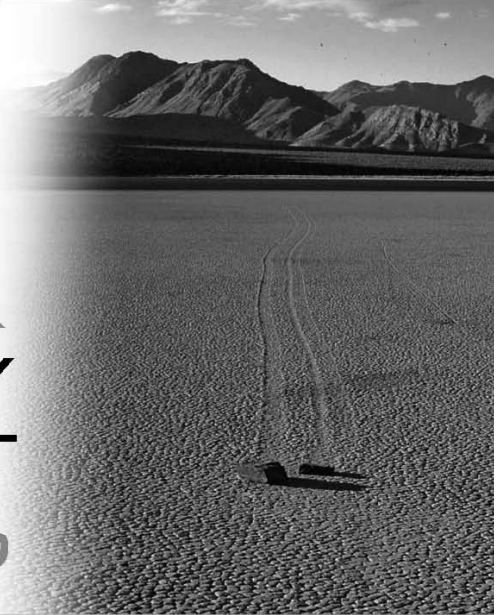
— *Compiled by Mary Villa*



Goodwin-Niering Center for Conservation Biology
and Environmental Studies at Connecticut College

presents

WATER SCARCITY & CONFLICT APRIL 3 & 4, 2009



2009 ELIZABETH BABBOTT CONANT INTERDISCIPLINARY CONFERENCE ON THE ENVIRONMENT

Non-Profit Org.
U.S. Postage
PAID
New London, CT
Permit No. 35

CONNECTICUT COLLEGE
CCBES Box 5293
270 Mohegan Avenue
New London, CT 06320

