



CERTIFICATE PROGRAM

CCBES Students Discuss Their Summer Internships

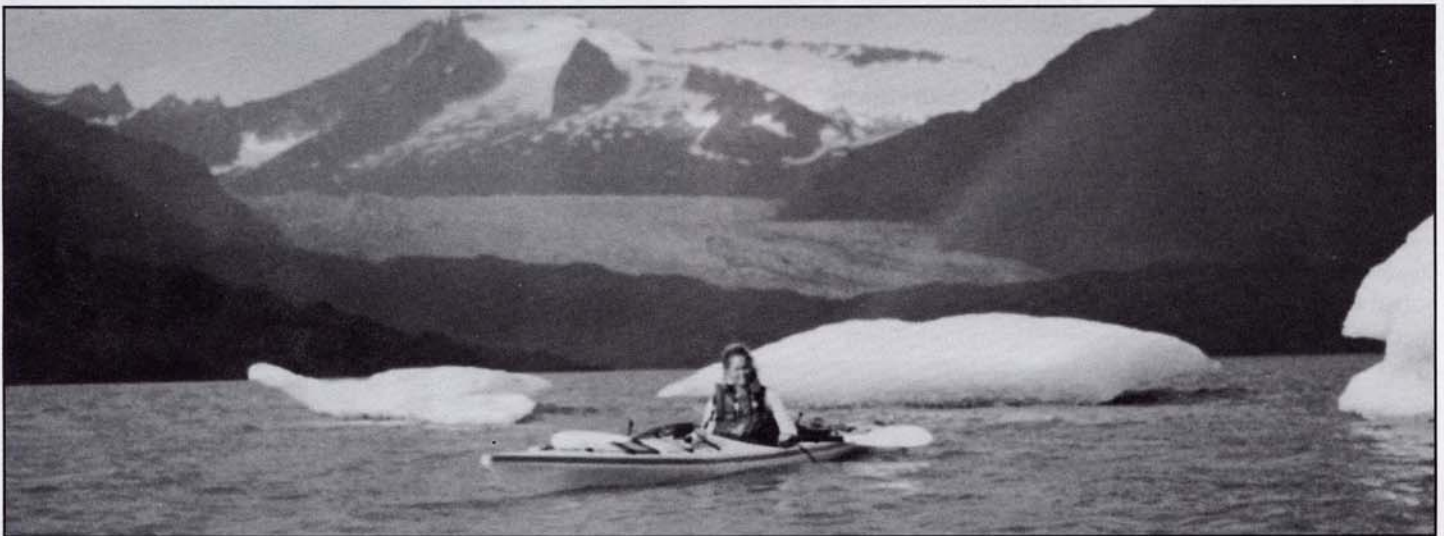
Eleven seniors returned from their summer internships and have shared their wonderful experiences with other students in the first Certificate Seminar this fall. The Seminar prepares students for their senior integrative projects as well as providing them with opportunities to discuss current environmental issues with invited speakers. The students have attended lectures by Dr. David Blockstein and Dr. Michael Toman (see page 4) followed by private dinners with the speakers and Center faculty.

Jaimie Atlas, an Environmental Studies major with a concentration in social science, was looking for an environmental education internship that would allow her to work outdoors with children. She spent her summer with Greenbelt Alliance, the San Francisco Bay Area's leading non-profit, land conservation organization. This organization works to protect the open space around the Bay Area from being overdeveloped. Jaimie worked in the education department coordinating

Youth Outings and Greenbelt Outings. During her internship, Greenbelt Alliance helped win a fight that had been going on for many years, resulting in the protection of 15,000 acres of open land. Jaimie's experience at Greenbelt Alliance helped her realize the difference between doing something "in" nature and doing something "for" nature.

At the Meigs Point Nature Center at Hammonasset Beach State Park in Connecticut, Hope Dalton learned about nature interpretation and conducted field studies. She served as a park interpreter and coordinated the Outdoor Explorers Program for children. Her other duties included planning and leading camp and school programs, canoe trips, nature walks, live animal demonstrations, nature games and nature workshops, feeding animals and maintenance of displays. Hope also collected data for her individual research project on the effects of marsh restoration on invertebrate populations.

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Kristen Park '01 kayaking in Juneau, Alaska during her internship with the U. S. Forest Service.

Established in 1993, The Center for Conservation Biology & Environmental Studies (CCBES) is an interdisciplinary program that draws on the expertise and interests of faculty and students in the liberal arts to address contemporary ecological challenges. CCBES 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 faculty and students from the social sciences, humanities, and arts to help understand and solve difficult environmental issues.

From the Executive Director

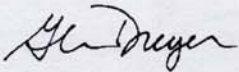
Dear Friends,

As we embark on the Center's eighth year, much of our efforts are focused on developing our undergraduate certificate program. We have just evaluated applications from the current sophomore class, our second, and we are still a year and a half away from congratulating our first graduates. Happily, faculty and students have enthusiastically welcomed the certificate program.

Please consider attending the Center's Environmental Justice Conference in April (see back cover). With a broad focus from local New London issues through international concerns, it is shaping up to be a very significant event. In a related development, the proceedings of our 1999 Conference "History, Status and Future of the New England Offshore Fishery" have been published as an issue of the journal *Northeastern Naturalist* (Vol. 7, No. 4). Featuring 12 articles by conference presenters, copies are available through the Center office for \$10.

Honors and acknowledgements continue to accrue to our Center's namesakes. On December 4, 2000 Connecticut Governor John Rowland officially named a State Natural Area preserve in nearby Waterford for Dr. William A. Niering. Approximately 150 people braved the cold to participate in an outdoor ceremony at Harkness Memorial Park. The same week *The Nature Conservancy* mailed its January/February 2001 magazine, a special issue titled "50 Years of Saving Great Places." A two page spread titled "Dick Goodwin, Father of the Land Deal" confirms Dr. Goodwin's early and continuing role in helping to make TNC the most successful land preservation organization the world has ever seen.

These developments remind me that one of the unstated goals of this Center is to ensure that every future generation has its Goodwins and Nierings, people who will lead by the inspiring nature of their personal dedication to environmental education and protection.



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Newsletter Designed by Rosemary Buonocore

THE GOODWIN-NIERING CENTER ALUMNI ENVIRONMENTAL ACHIEVEMENT AWARD

Recipient is a Documentary Filmmaker

Judith Irving '68 remembers having mixed feelings of excitement and nervousness when she first held out a handful of sunflower seeds to feed the birds. She will always remember it as the first time something wild touched her, turning her into a nature lover. Judy decided to turn her interest into a career by making films about nature and the environment. She is the award-winning filmmaker of *Alaska: Land in Balance*, *Nagasaki Journey*, *Secrets of the Bay*, and *Dark Circle*, for which she won a Special Merit Award from the Academy Awards Documentary Committee, The Grand Prize at the Sundance Film Festival, and a National Emmy Award. She also did camera, sound, and editorial consulting on the film *Roger and Me*.

Judy was invited to speak and show film clips after The Goodwin-Niering Center proudly presented her with the Alumni Environmental Achievement Award for her filmmaking. The award recognizes and celebrates alumni who have made significant contributions to all categories of environmental endeavors, including research, education, conservation, and activism. She was nominated by Muriel Crowell '38, who says she is Judy's "biggest fan."

After receiving the award, Judy showed clips from some of her films to a packed audience, including footage from her current work-in-progress, *The Wild Parrots of San Francisco*. She focused on radiation issues for ten years for her film *Dark Circle*, a documentary feature about nuclear weapons and power, told by those directly affected. After this depressing topic she decided to work on something "lighter," so she focused on nature. Her latest feature is about a bird lover named Mark Bittner who bonded with a flock of wild parrots in San Francisco, the city named for the protector of birds, Saint Francis. This modern-day Saint Francis fed, named, studied, and protected this flock of

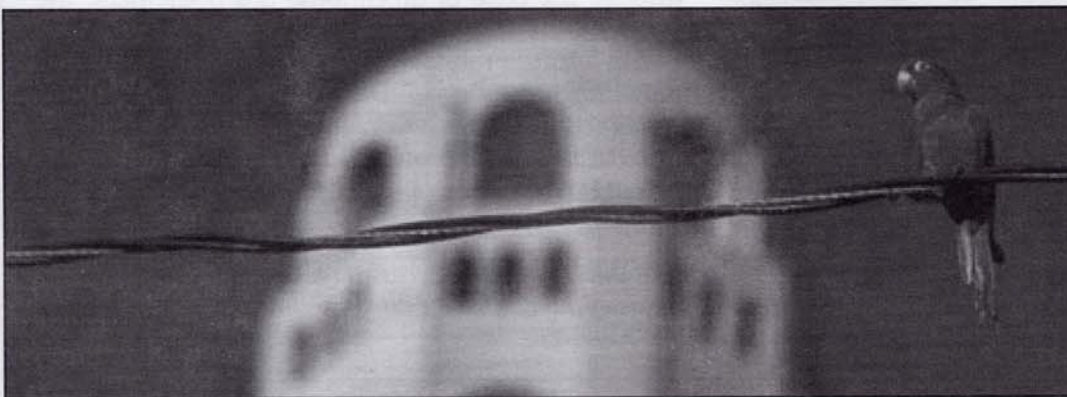


Judith Irving '68, a Psychology major, receives the Environmental Achievement Award from Glenn Dreyer, The Center's Executive Director, and Claire Matthews, Vice President for Development.

escaped pets who bred in the "wilds" of the city. Judy is excited about the evolution of the film and says that her work with Mark Bittner took her back to the time when she felt something wild touch her for the first time.

During her two days at Connecticut College, Judy spent time with the Film Studies class "Documentary Theory and Production" viewing *Dark Circle* and discussing the film and documentary filmmaking with students. She also visited the Art Department's "Photography" class to view the film *Nagasaki Journey* and discuss the film and her photography book. At the dinner given for her by the Center, she entertained faculty and staff with stories of her many "escape" swims from Alcatraz, the shack she built on a raft in Canada, and the various countries she had visited.

Looking back, Judy realized that her work had evolved from a view of nature as pristine and separate from people, to documenting people's impact on nature, and now to her latest effort documenting people as part of nature. More information on Judy can be found at www.idgfilms.com or www.wildparrots.com.



A photograph of a wild parrot taken by Mark Bittner.

GUEST LECTURERS IN SEMINAR SERIES MEET WITH CERTIFICATE PROGRAM STUDENTS

ENVIRONMENTAL DECISIONMAKING: Bridging the Gap Between Science and Policy

"How do we make the human system integrate with the environment?" This was one of the many issues addressed by Dr. David Blockstein in his lecture "National Perspectives on Environmental Research: Impact on Environmental Decisionmaking." He discussed his desire for people to become more mindful of the environment and also asked the audience in the Biology Seminar Series to help him achieve his goal in bridging the gap between science and policy. Dr. Blockstein began by dedicating his lecture to Dr. William Niering. He then compared a list of terms and how they've evolved from being "out" to "in." For instance the term "climate change" is an "out" term and the more acceptable "in" term is "global change." The "out" examples usually evolved into words with a more holistic and comprehensive definition. For example, the term "department" is now used less than the term "center," connoting integrated academic programs.

Dr. Blockstein is a Senior Scientist for The National Council for Science and the Environment in Washington, D.C., a nonpartisan organization of specialists (scientists, environmentalists, business people, and policymakers) who are working to improve the scientific basis for environmental decision making. He has also worked on other policy issues such as increasing minority representation in science and communicating scientific information on the environment through electronic processes. The NCSE offers internships on their web page at www.cnie.org.



TOMAN WANTS US TO MOVE AHEAD WITH CLIMATE POLICY



Dr. Michael Toman

More than 160 nations showed their commitment to addressing the problem of climate change by signing the Kyoto Protocol in 1997, but questions remain about whether, when, and how the Protocol will be ratified and implemented. The Kyoto Protocol states that industrialized countries must reduce their total carbon dioxide and greenhouse gas (GHG) emissions by approximately 5% compared to 1990 levels by 2008-2012. Developing countries are not required to meet the same emission goals, but they do have certain obligations to measure and report their emissions and encourage more climate-friendly activities. Climate negotiators have made key policy decisions over the past decade that have passed up options that might have lowered the costs of achieving the long-term objectives of the 1992 United Nations Framework Convention on Climate Change. Dr. Michael A. Toman believes that the long-term success in limiting GHGs will come from reconsidering these options in international negotiations.

Dr. Toman is the Senior Fellow and Director of Climate Economics and Policy at Resources for the Future in Washington, D.C. (www.weathervane.rff.org). He says that "climate change is a risk requiring some action," and believes that climate change is enough of a long-term risk to warrant response measures today. He thinks that the following four aspects are crucial to the current climate debate: the Kyoto flexibility mechanisms; the pace of greenhouse gas abatement; the value of the U.S. domestic actions to reduce GHGs; and the future role developing countries will play in reducing emissions. Dr. Toman attended the November 2000 Sixth Conference of Parties to the UN Convention on Climate Change, held at the Hague, Netherlands.

Left: David Blockstein discussed the importance of communicating scientific results to environmental policy makers.

CCBES Internships continued from front page

David Fyrberg spent ten weeks with the National Marine Fisheries Service (NMFS) in Gloucester, Massachusetts. The NMFS is the division of the U.S. Department of Commerce responsible for controlling populations of recreational and commercially targeted fish species and marine mammals. As an intern with the Highly Migratory Species Division, he constructed a cost analysis questionnaire for the East Coast tuna purse seine fleet, specifically five vessels that fish for the Western Atlantic Bluefin Tuna, one of the world's most valuable fish. David feels that his internship provided him with hands-on experience in an office environment, accessing databases, learning computer programs, and interacting with professionals who love their work. He hopes to return and compile the results of his questionnaire.

At the U.S. Forest Service in Juneau, Alaska, Kristen Park kept busy with three related responsibilities – making trail inventories, collecting data for a Forest Service database, and counting the number of people who use the major trails maintained by the Forest Service. This job was significant because of the debate in Juneau over the noise pollution caused by tour company helicopters and float planes. There have been complaints that the noise is disrupting hikers and Kristen hopes that her data on trail use will contribute to the research being done on this issue. She feels that she made a contribution to an important study, while experiencing one of the most beautiful places she has ever seen.

The Massachusetts Audubon Society Coastal Waterbird Program in Marshfield, Massachusetts provides direct protection of beach-nesting birds on the South Shore, Cape Cod and the Islands of Massachusetts. Elizabeth Robinson's many tasks included collecting data on the different bird populations, educating the public, patrolling the nesting areas and protecting the nests of Piping Plovers and terns. The Piping Plover nests were fully surrounded with wire fencing topped with netting because they are not actively aggressive against intruders and their nests are isolated as well as easy to overlook. The various tern species were also protected by "symbolic fencing" to alert the public or by wire fencing, in the case of larger colonies. They need less protection because they nest in colonies and attack intruders who approach their nests. Elizabeth felt that her experience was educational, as well as career-enhancing. She benefited by learning field techniques, educating the public, and working within an organization.

Paige Woodward interned at the Mystic Aquarium in Mystic, Connecticut, where she worked in the marine mammals husbandry department. Her tasks

included feeding, training, cleaning and food preparation for the animals. She was assigned to pinnipeds (sea lions, seals, walruses), whales, dolphins, and sometimes penguins. Aside from daily routines, Paige also worked on northern fur seal breeding behavior research for her independent study. She is currently analyzing data and doing a literature search to compare the breeding behavior of seals in captivity and in their natural environment. Paige's experience at the Aquarium has led her to seek a career as a trainer or an aquarist after graduation.



Paige Woodward '01 feeds seals at the Mystic Aquarium.

The common loon population is in decline due to a number of factors such as habitat loss, human activity, and predation by animals. Another possible cause of the decrease in the loon population is contamination by heavy metals such as mercury, which can affect a bird's motor skills. Elayna Zachko interned at the Loon Preservation Committee in Moultonborough, New Hampshire, where she observed loons in lakes that contain high mercury levels. She compared the behavior of pairs with normal mercury levels with those with higher levels. The most exciting part of the job for Elayna was loon banding. She had already studied the wintering behavior of the common loon in Rhode Island and her internship experience allowed her to expand her research by studying their summer behavior.

The remaining Seniors will share their experiences in the spring semester. The Goodwin-Niering Center environmental internships are made possible by a grant from the A.W. Mellon Foundation.

CONNECTICUT COLLEGE RECEIVES A GREENCIRCLE AWARD

The Department of Environmental Protection Recognizes College for Its Environmental Contributions

Connecticut businesses, government agencies, community organizations and individuals were honored by the Department of Environmental Protection (DEP) for outstanding environmental projects which contribute to or improve the quality of the environment. The focus of this year's GreenCircle Award was "Pollution Prevention."



Environmental Coordinator Daniel Leptuck '00 accepts the GreenCircle Award from Assistant Commissioner David Leff.

Micah Mortali, the 1999-2000 Environmental Coordinator, submitted a nomination describing many of the environmental projects at the college. These included separating 1600 lbs. of food waste from other trash in seven dining halls so that it can be used as animal feed, forming a partnership with the Southeastern Connecticut Regional Resource Recovery Authority (SCRRA) to chip bulky wood waste, then using the organic waste for landscaping and gardening. Connecticut College also collaborated with "Reforest the Tropics" by planting 37 acres of trees in Costa Rica. The trees will collect and store an amount of carbon dioxide equivalent to the emissions generated by total energy use in the Crozier-Williams College Center over the next 25 years, making us the first college in the United States to participate in a carbon-offset program (see Fall 1999 *Connections*).

Connecticut College was specifically nominated in the category of "separating organic materials at the college for composting or animal feed; successfully implementing an innovative and unique recycling program

WHAT ARE CONN'S PLANS FOR GREEN BUILDING?

*The goal of the Environmental Model Committee's Green Building Program is to set campus-wide standards for the renovation and building of environmentally friendly structures on campus. These standards will lead to more efficient energy use and new building materials that will lower the environmental impact of each building. A preliminary study was completed using criteria established by the Leadership in Energy and Environmental Design (LEED) Certification Program (see Spring 2000 *Connections*). Although Lambdin dormitory was renovated without the use of LEED criteria, it nevertheless came very close to meeting their standards.*

Over the summer, the first college sustainability intern, Leys Bostrom '02, worked with Micah Mortali '99 Environmental Coordinator, Glenn Dreyer, Arboretum Director and CCBES Executive Director, Norman Richards, Director of the Environmental Management Division for The Mohegan Tribe, and Steven George, Manager of Capital Projects, to develop a definition of green building and create a mission statement enumerating goals for the college. They also organized a Green Building Workshop introducing the benefits of green buildings to the college community. A draft mission statement has been written, along with the goals and criteria for green building.

The next step will be educating the campus community and convincing them that the college should adopt a new approach to construction and renovation projects.

and exceeding mandatory recycling requirements and goals and donating significant time or resources to assist with environmental projects sponsored by youth groups, community or conservation organizations." Interns Dan Leptuck '00 and Jana Savanapridi '00 were present at the October ceremony to accept the award.

The GreenCircle Program was established by Governor Rowland in 1998 to honor businesses, institutions, schools, civic organizations and individuals whose positive contributions promote natural resource conservation and environmental awareness.

CENTER WELCOMES TWO NEW INTERNS

The Goodwin-Niering Center has welcomed two new interns for the 2000-2001 academic year. The pair are excited to join the Center during one of the most eventful years in its history. They hope that their diverse backgrounds will bring fresh ideas and expanded and improved programs.



Environmental Coordinator Daniel Leptuck '00 and CCBES Assistant Jana Savanapridi '00.

Daniel Leptuck graduated in May with a BA in Economics and is taking over the position formerly held by Micah Mortali '99. As the Environmental Coordinator, Dan is responsible for the environmental and sustainability programs on campus. An example

of this is coordinating the recycling program and finding new ways to improve the system. He also heads the Environmental Model Committee which implements the environmental policies on campus, and consists of students, faculty, staff and administration. He believes that the foundation for environmentalism is education: once an individual learns about the current deterioration of natural resources and ever-increasing pollution, as well as many other issues, he or she can decide whether to add to the destruction or try to fix it. He believes that the choice should be a personal one and that, for example, a person should not only recycle because it is a law, but because it is the right and responsible thing to do.

Dan believes that the college is fortunate to have so many environmentally dedicated students, faculty, and staff. He hopes to become even more aware of environmental issues and looks forward to making major progress on campus this year. Dan trusts that as people look at nature and see beauty, they will realize that the only way the planet will stay beautiful is if we all do something about it.

Jana Savanapridi '00 has assumed Johanna Blasi's '99 position as Center Assistant. She double-majored in Asian Studies and Chinese Studies and minored in History. As an Asian Studies major she learned the "real" history of the bombings of Hiroshima and Nagasaki, which led to her interest in the effects of nuclear radiation and fallout. This is especially relevant in a community like New London, which is at Ground Zero and located

near a nuclear power plant. The high point of her year thus far, was meeting Judith Irving '68, (see page 3) who documented the effects of the bomb on the people of Nagasaki as well as the effects of long-term radiation exposure on a town in the United States.

Jana will keep people informed about the latest news at the Center by maintaining the Center's web page and writing for the newsletter. She will also help students find internships as well as help organize the Environmental Justice Conference in April 2001. She hopes to bring more exposure to the Center and to the Certificate Program by working with the college and local newspapers as well as organizing a weekly half hour radio show on WCNI 91.1 FM. The show will publicize the Center's latest events and discuss environmental issues.

STUDENT SUMMER RESEARCH PROVIDES HANDS-ON EXPERIENCE

Use of Phragmites-Dominated Brackish Marshes by Fishes and Macroinvertebrates: Comparison with Largely Uninvaded and Treated Marshes

Rob Rawson '01, Kris Light '01, and Sean Fairley '01

Professor Paul Fell, Zoology and Professor Scott Warren, Botany

Migration and Dispersal in White-footed Mice

Lori Walter '00 and Catherine Hulford '02

Professor Phillip Barnes, Zoology

Evaluation of Instream Structures on the Blackledge River

Eliot Pitney '01

Professor Douglas Thompson, Physics

The History of Channel Restoration in New England Streams and Rivers

Greg Stull '01

Professor Douglas Thompson, Physics

Pool and Riffle Spacing in New England Streams and Rivers

Jamie Goode '02

Professor Douglas Thompson, Physics

Breeding Behavior of Pot-Bellied Seahorses

Mystic Aquarium Internship

David McElroy '01

Professor Robert Askins, Zoology

Biogeography of Algal Communities

Hannah Shayler '02

Professor Peter A. Siver, Botany

Alkalinity Generation in New England Lakes

Rich Ricard '00

Professor Peter A. Siver, Botany

The Effects of Zebra Mussels on Historical Shipwrecks of Lake Champlain

Megan S. Valentine '01

Professor Mary Watzin, University of Vermont

Supported by the Mathieson CCBES Research Grant

Northeast Utilities Environmental Internships

Jason Hill '01 and Michael Keaney '01

A Quest for Environmental Justice:
Healthy, High Quality Environments for All Communities

A Conference presented by
The Goodwin-Niering Center for Conservation Biology
and Environmental Studies at Connecticut College

Co-sponsored by:
Connecticut Coalition for Environmental Justice
and Southeastern Connecticut Indoor Air Quality Coalition

FRIDAY AND SATURDAY
APRIL 20 AND 21, 2001
Oliva Hall, Cummings Arts Center,
Connecticut College

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