

ENVIRONMENTAL CONNECTIONS



Left to right, Kevin Essington and Steven McCormick of the Nature Conservancy, with Richard Goodwin.

THE NATURE CONSERVANCY HONORS RICHARD GOODWIN

By Patti Handy

RICHARD H. GOODWIN, Katherine Blunt Professor Emeritus of Botany, was honored at a celebration on October 5. The forum, "Protecting Biological Diversity Across the Globe: A Program Honoring Richard Goodwin and the 50th Anniversary of the Nature Conservancy," was sponsored by Connecticut and Rhode Island chapters of TNC and the Goodwin-Niering Center for Conservation Biology and Environmental Studies. More than 200 people attended the event held in John C. Evans Hall.

Goodwin, 91, was the chair of Connecticut College's botany department for 32 years, until his retirement in the mid-1970s. After being introduced by Professor Robert Askins, director of the Goodwin-Niering Center, Goodwin

opened the event to an overwhelming standing ovation. Deeply moved by the reception, he responded with gentle humor: "As my daughter said to me, 'If you hadn't lived so long, you wouldn't know that you've been appreciated.'"

Goodwin has been with The Nature Conservancy for nearly a half-century, serving as its last volunteer president from 1956 to 1958, and again from 1964 to 1966. Using metaphors of sprouting seeds and acorns, Goodwin spoke of how he has watched the difficult transition of TNC as it evolved. The Conservancy has successfully grown from a small, volunteer-run organization into an international entity that now has a professional staff of 3,500. He also described the politics involved in creating the organization that today has more than a million members worldwide and has helped preserve more

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DYNAMIC FIELDS AND FORESTS REFLECTIONS ON SUMMER RESEARCH

By Christine Small, assistant professor of botany, Connecticut College

NEW ENGLAND FORESTS are changing. In many ways the forests, fields, and wetlands found on the landscape today differ from those of the past, and these may only faintly resemble the plant communities of the future. This was a lesson learned first-hand this summer by the field researchers in the plant ecology lab at Connecticut College.

The long history of ecological research at Connecticut College continued this past summer as students Melanie Small '03, Emily Weidner '05, both Goodwin-Niering Center Certificate candidates, Bethany Lucas '04, Susan Munger RTC, and Goodwin-Niering Center Certificate recipient Marjorie Lundgren '02, worked under my direction and braved the summer humidity, greenbriers, poison ivy, and hordes of mosquitoes and ticks. The team spent the summer working on three research projects in natural areas of Southeastern Connecticut. The first examined the impacts of intensive white-tailed deer browsing on natural plant communities of The Nature Conservancy's Burnham Brook Preserve in East Haddam. Our group constructed four 10 x 10 m (33' x 33') deer exclosures to study vegetation recovery in the absence of deer browse at Burnham Brook. The plant species in each exclosure will be monitored annually, along with sample plots outside these areas, to compare forest composition and diversity in the presence and absence of deer.

The second study of the summer examined the use of prescribed burning in the restoration of a unique and regionally rare plant community at the Hopeville Pond Natural Area Preserve in Griswold,

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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.

FROM THE EXECUTIVE DIRECTOR

Glenn Dreyer

Fall 2002 was a successful and busy semester for the Goodwin-Niering Center, and one important thing not mentioned elsewhere in this newsletter was the recruiting effort to assemble the certificate class of 2005. A total of 14 sophomores accepted the Center's invitation to become part of our unique undergraduate environmental program, and they comprised our most competitive applicant pool to date. More information on the new students will be available in our next issue.

A committee of College and outside experts has been working hard since last spring to plan the Center's fourth interdisciplinary conference on environmental issues, "Our Changing Coast: Private Rights and Public Trust." See our web site or the back cover of this newsletter for more information.

Diana Whitelaw and Gerald Visgilio are putting the finishing touches on a compilation of papers from the Center's 2001 Environmental Justice Conference. This hardcover book, conceived as a "reader" for undergraduate and graduate courses in the social sciences, will be available from The Rowman & Littlefield Publishing Group in spring of 2003.

Over the course of the past year the Center and the College's Environmental Studies program successfully negotiated the revival of the College's Geographic Information Systems (GIS) Laboratory and a GIS course, which had become somewhat technologically outdated. There is now reliable funding in place to both regularly upgrade the technology and to offer at least one course each year. Many thanks are due to those who understood the importance of these tools to modern environmental studies, including Dean of Faculty Helen Regan and Vice President for Information Service W. Lee Hisle, and many faculty members.

Our front-page article recounts the enjoyable and well-attended celebration of Richard Goodwin's contributions to land conservation and The Nature Conservancy's 50th birthday. I know I speak for all those involved in the Center in expressing gratitude for Richard Goodwin's many accomplishments on behalf of the College and conservation. I am also grateful that he has lived long enough to provide us with his autobiography. *A Botanist's Window on the Twentieth Century* will be required reading for his many students and admirers. Dr. Goodwin led a privileged and accomplished life, and his flowing writing style makes reading his book a most pleasant experience. After reminiscing about his early years growing up outside of Boston as the son of an MIT professor, he covers his days at Harvard and as a budding scientist, and then devotes a long chapter to the adventurous honeymoon he and his wife Esther took in Africa just before World War II. Much of the rest of the book documents his interest and his many successes in promoting land conservation and environmental research, including the early days of The Nature Conservancy

A Botanist's Window on the Twentieth Century, by Richard H. Goodwin. Harvard Forest, 2002. Hardcover book, 336 pages. \$20.00 including shipping and handling. Make check payable to Connecticut College Arboretum and send to:
Connecticut College Arboretum
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and the establishment and growth of the Burnham Brook Preserve in East Haddam, Connecticut near his Dolbia Hill Farm home. In 1952 the Goodwin family established the Conservation and Research Foundation, and a sizeable chapter recounts the many projects all over the world that were aided by grants from the Foundation. The book is certainly inspirational in its record of how much good an individual can achieve through focus and dedication to one's principles. It is available by mail from the Connecticut College Arboretum (see left) and in person at the Arboretum Office and the Connecticut College Bookstore.

PLEASE HELP US CONSERVE!

In order to cut down on paper and general costs we would like to recommend you read our newsletter on the web at <http://ccbес.conncoll.edu>. Please contact us at 860-439-5417 or ccbес@conncoll.edu to be removed from our hard copy mailing list.



NATURE CONSERVANCY

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than 92 million acres around the world. Goodwin told of his first foray into conservation with a group that was trying to save Bergen Swamp near Rochester, N.Y. He helped the group purchase five acres of adjoining farmland for the sum of \$125. Today, the Bergen Swamp Preservation Society protects almost 3,000 acres. Goodwin said that he learned a valuable lesson from this early experience as a con-

servationist: "You have to get your hands dirty" he quipped.

Helen Mathieson '52, member of the College Board of Trustees and the Goodwin-Niering Center Advisory Board, introduced Steven J. McCormick, president and CEO of The Nature Conservancy. "Steve does not shy away from bold land deals," according to Mathieson. McCormick assumed the posi-

tion of president of TNC nearly two years ago with the express intent of "turning The Nature Conservancy into a truly global presence, capable of leveraging its resources to promote conservation in precious places around the world." Under his leadership TNC has launched joint-international ventures with other conservation groups including Conservation International, World Resources Institute and the World Wildlife Fund. McCormick described how The Nature Conservancy has not only become an effective national conservation organization, but has also helped to generate a nationwide system of state natural diversity databases which document the distribution of endangered and declining species. In addition, TNC has also helped to establish independent land trusts that protect natural areas in particular towns or counties.

Another speaker at the forum was Kevin Essington, project director of the Pawcatuck Borderlands, a joint project of the Connecticut and Rhode Island chapters of TNC. This combined initiative is dedicated to protecting 50,000 acres of high-quality forest that encompasses 10 towns and four counties along the eastern Connecticut and Rhode Island border. Mr. Essington explained how this project aims to ensure the health of several watersheds and to retain the area's rural character through cooperative efforts with other non-profit organizations, government agencies and private landowners.

Essington returned to the campus on October 10 to speak to the students currently enrolled in the Goodwin-Niering Center certificate program. He explained the Borderlands project and the importance of conservation. He also gave details on a stream restoration in Stonington, where protected historical structures such as dams must be taken into consideration when restoring streams and rivers to their natural state. In this case TNC is restoring the dam and building a fish ladder to aid the fish that return to spawn upstream. He discussed the legal and political ramifications of large-scale conservation projects. The informal classroom setting gave the students a wonderful opportunity to interact with Essington.

DYNAMIC FORESTS

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Connecticut. This preserve is largely comprised of Pitch Pine-Scrub Oak Woodlands, a vegetation type found in only a few scattered locations throughout New England. However, without significant fire for many decades, more aggressive, fire-sensitive species such as white pine and red maple have invaded the site. In an attempt to restore the rare community native to this site, the Connecticut Department of Environmental Protection (DEP) initiated a program to reintroduce fire to a portion of the preserve. Here, the plant ecology lab conducted a DEP-funded study to evaluate the role of fire in the restoration and maintenance of this vegetation type.

The greatest portion of the summer was spent in the 160-acre Bolleswood Natural Area of the Connecticut College Arboretum. This project was a continuation of the long-term study initiated in 1952 by Connecticut College professors Richard H. Goodwin and William A. Niering. The plant ecology lab continued six decades of research by surveying nearly 900 permanent study plots and examining changes in the natural plant communities of the Arboretum over time. While the sampling methods and locations have remained virtually unchanged over the past six decades, many of the plant communities of the Bolleswood Natural Area have changed dramatically. The Natural Area spans a great diversity of vegetation types, including hardwood forests, hemlock stands, red maple swamps, abandoned pastures, peat bogs, and the Arboretum pond. This study documented many vegetation changes, including the effects of The Great Hurricane of 1938, the natural transition of abandoned agri-

cultural fields to young hardwood forests, the conversion of open wetlands to tree dominated swamps and the effects of non-native invasive plants and insects. As one of the longest and most extensive studies of its kind, it has resulted in numerous student and faculty research projects and publications and provides a rich source of ecological data on the natural history of New England, thus serving as an invaluable historic reference for future ecological investigations.

Through these projects, students gained first-hand experience in field research, including plant identification, vegetation sampling, hemispherical photography (for canopy light analysis), tree coring (to study annual growth rings), Global Positioning Systems, and data entry and analysis.

Some students are now using these skills to initiate further studies of New England forests. For example, Daisy Small '03 is working on her honors thesis and Goodwin-Niering Center Certificate using a portion of Bolleswood Natural Area data to study forest changes caused by the introduction of the hemlock woolly adelgid (an insect pest) on eastern hemlock trees. Her internship reflection paper provides more information on these projects and can be viewed on the Goodwin-Niering Center's web site at: <http://ccbcs.conncoll.edu>

Throughout the summer of 2002, all of the students in the plant ecology lab were wonderfully enthusiastic and hard-working. Hopefully, the knowledge and experience they gained this summer has heightened their interest and awareness of the diversity and intricate beauty of our New England natural areas.

CLASS OF 2003 CERTIFICATE STUDENTS SHARE THEIR INTERNSHIP EXPERIENCES

THE TWELVE SENIORS IN the Certificate Class of 2003 have returned from summer environmental internships that were sponsored by a grant from the A.W. Mellon Foundation. Their interests took some of them to the far reaches of the globe, while others chose to stay closer to home. The variety of majors and individual interests led to internships that include teaching children in India about the majestic tiger, working on a biodynamic farm in Germany and studying the vegetation in the college's own Bolleswood Natural Area. The certificate students will be incorporating their intern experiences into their senior integrated projects. To learn more about our Certificate seniors and their internships, please check out their page on our web site at: <http://ccbes.conncoll.edu/certificateclass2003>

STEFAN APSE, a philosophy major with a minor in German, spent the summer working on a biodynamic farm in southern Germany. At the Hofgut Brachenreute Farm in Überlingen, Stefan was assigned various tasks that included caring for a variety of farm animals. Stefan worked closely with the animals, observing both their treatment and their behavior. Inspired by the works of moral philosopher Peter Singer, Stefan gained valuable insight into the life of farm animals. In his senior integrated project Stefan will elucidate Peter Singer's argument and conclusion, and devote a significant portion to the beneficial economic opportunities of manipulating animals genetically. He would also like to place Singer's moral philosophy in the context of a capitalist economy.

Two students interned with the United States Environmental Protection Agency (U.S. EPA) over the summer. SCOTT EPSTEIN, an environmental studies major with a minor in psychology, worked with the Water Quality Branch of Region I EPA at the New England Regional Laboratory in Chelmsford, Mass. Scott spent the majority of his time working on the Charles River 2005 Initiative and the New England Wadeable Streams Project. He learned a variety of field and lab techniques and participated in a sediment-oxy-



Scott Epstein '03, working with the Water Quality Branch of Region I EPA at the New England Regional Laboratory in Chelmsford, Mass.

gen demand study in Aroostook County, Maine, toxicity testing on the Nashua River, and testing for *E. coli*, fecal coliform and *Enterococcus* in the microbiology lab. For his honors thesis Scott will examine nuclear fuel waste disposal in the United States, the European Union and the Russian Bloc through the perspective of environmental justice and equity issues.

Environmental studies major JARED FERTMAN also interned with the U.S. EPA, working out of the Region III Wetlands Enforcement Division in Philadelphia, Penn. Jared assisted in all aspects of the Wetlands and Clean Water Act enforcement. Since Jared plans to attend law school next year, his internship was extremely valuable as it allowed him to explore the legal issues associated with the EPA. He also gained experience in the field. Jared plans to apply his internship experience to his honors thesis that will be based on a series of wetlands cases which he worked on extensively while at the EPA. In his honors thesis Jared will explore the legal basis behind the "Tulloch Loophole," how it was closed and how it was eventually reopened through an analysis of the relevant case law, legislation and regulation.

To incorporate her double major in philosophy and environmental studies, LAUREN HARTZELL completed two internships over the summer. For her philosophy major, Lauren worked with Professor Derek Turner in the Connecticut College philosophy department to produce a paper on the precautionary principle entitled "Precautionary Overkill." The paper has since been submitted for publi-

cation to *Environmental Values*, a peer-reviewed philosophy journal.

Lauren also served as a special programs intern for Environmental and Human Health, Inc. (EHHI) in North Haven, Conn., where she spent most of her summer working on the new EHHI project dealing with pesticides used for lawn care. Her independent research was used by EHHI in a press conference held during the summer and will also be used in a future report on lawn care chemicals. In her honors thesis Lauren will explore how environmental ethics deals with the issue of decisions involving the future.

Environmental studies major KATIE JONES chose to do her internship with the Appalachian Mountain Club (AMC) in Boston, Mass. While working with the AMC Katie assisted with the preparation and implementation of the club's Mountain Leadership School, assembled educational materials and hiked extensively in order to photograph the activities in the program. She also undertook a large-scale revision of the AMC Leader Handbook with a specific emphasis on backcountry ethics and minimum impact travel skills. During her internship Katie also authored and issued a survey on the established wilderness ethic "Leave No Trace." In her senior integrated project Katie plans to further examine the "Leave No Trace" ethic.

LINDSEY KRAVITZ interned at the Mystic Aquarium Institute for Exploration in Mystic, Conn., where she assisted teachers in the educational programs. Lindsey, an environmental studies major with a minor in art, also created and led classes for the Aquarium's new swamp exhibit. Lindsey was responsible for the care and feeding of the classroom animals, and worked extensively with the public. Lindsey's strong background in the natural sciences and education were essential to her success in leading and creating public programs. For her honors thesis Lindsey will explore how environmental education and ethics are taught in the educational programs of different countries.

SARAH LATHROP, an English major with a minor in religious studies, completed her internship at Littlewood

Organic Farm in Plainfield, Vt. Sarah experienced many facets of organic farming during her internship, which included organizing and running a farmers' market stand as well as a variety of farming tasks such as seeding, weeding and harvesting the organic crop. Sarah also gained valuable insight about the organic farming industry. For her senior integrated project Sarah will examine selections from postmodern and contemporary American poetry in the context of ecocriticism. Key themes of discussion will include personification, domestication and episodes of encounter. She will use concepts of ecocriticism to interpret poems by Elizabeth Bishop, Robert Bly, Annie Dillard, Phillip Lavine, Audre Lorde, Sylvia Plath, Adrienne Riche, Theodore Rothke, Wallace Stevens, May Swenson and James Wright.



Sarah Lathrop '03 with Joey Klein, owner of Littlewood Organic Farm.



Human development major Molly Lippman '03 (third from the left) is pictured with some of her young friends from the Roughing It Day Camp.

Human development major MOLLY LIPPMAN served her internship with the Roughing It Day Camp in Orinda, Calif., where she worked as a counselor for the day camp. Molly concentrated on learning more about children and the ways in which they learn, and consequently gained valuable insight into how this particular camp functions and its effectiveness in the lives of the children and in their interactions with the environment.

In her senior integrated project Molly plans to unite her knowledge of human development with environmental studies by examining how the attitudes about the natural environment change in children attending a summer camp.

VETRI NATHAN traveled to Bombay, India for his internship with the Conservation Education Center (CEC) of the Bombay Natural History Society. Vetri is majoring in Italian and has double minors in zoology and government. While in India he worked with "Kids for Tigers," an environmental awareness program for children. His duties included organizing workshops for teachers in schools throughout India as well as giving slide shows for school children. He also produced a teacher's guide and CD ROM for the program. For his senior integrated project Vetri will assess the contemporary cultural and political norms in India that affect the environmental situation in the country.

At the Center for Resource Solutions in San Francisco, Calif., KASSIE ROHRBACH, worked on renewable energy certification programs. She gained work place knowledge and valuable insight into the operations of non-profit organizations. Her previous experience working to switch Connecticut College to electricity providers to those using renewable energy sources was particularly helpful in her internship. For her honors thesis Kassie, a gender and women's studies major, will explore how renewable energy development is transforming the patriarchal system of the energy industry to include more women and people of color.

For her internship, MELANIE "DAISY" SMALL participated in vegetation surveys in southeastern Connecticut natural areas. Her double major in botany and environmental studies enabled Daisy to lead fellow students in field research at three separate

sites that included the Bolleswood Natural Area at Connecticut College, the Burnham Brook Nature Conservancy Preserve, and a state natural area at Hopeville State Park. She worked under the guidance of Christine Small, assistant professor of botany. In her honors thesis Daisy will examine the response of the forest canopy and understory vegetation to the loss of hemlock in a southern New England forest.



Zoology major John Traversi '03, gets a kiss from a sea lion at the New England Aquarium.

JOHN TRAVERSI spent his summer in Boston as an intern with the recently expanded New England Aquarium. While at the Aquarium, John participated in two intensive training programs that involved turtles. The knowledge that John has gained as a zoology major was helpful as he conducted a study of sound sensitivity in an adult green sea turtle and a vision study in loggerhead turtle hatchlings. For his honors thesis John will apply his experience from the Aquarium to study what impact sound has on the behavior of freshwater turtles. He plans to use operant conditioning training to explore the hearing capabilities of the red slider turtle.

All of the certificate students will give public presentations on their senior projects at the end of the spring semester. In addition, a special recognition ceremony will be held on Saturday May 17 in the Ernst Common Room from 1:30 to 3:00pm to honor the Center Certificate Class of 2003.



Pictured left to right are: Marjorie Lundgren '02, Daisy Small '03, Bethany Lucas '04 and Emily Weidner '05. Not pictured: Susan Munger RTC and Assistant Professor Christine Small, botany, leader of the project. (See page 1 for related article.)

STUDENT AND FACULTY RESEARCH COLLABORATIONS DURING SUMMER '02

Four students worked on assessing the effectiveness of a giant reed (*Phragmites*) control method and the impact of this method on macroinvertebrate and fish use of the treated marshes.

Annie Curtis '04
Erin Steiner '03
Maggie Gentz '04
Kelton McMahon (Bates College)
Scott Warren, *Jean C. Tempel '65
Professor of Botany*
Paul Fell, *Katherine Blunt Professor of
Zoology*

Five students worked on the following three separate research projects:

- 1) Vegetation dynamics on long-term study transects in the Bolleswood Natural Area, Connecticut College Arboretum.
- 2) Effects of prescribed burning on the restoration of regionally rare Pitch Pine/Sand Plain communities at the Hopeville Pond Natural Area Preserve, Griswold, Conn.
- 3) Impacts of intensive white-tailed deer browse in natural plant communities of the Burnham Brook Preserve, East Haddam, Conn.

Bethany Lucas '04
Marjorie Lundgren '02
Susan Munger RTC
Melanie (Daisy) Small '03
Emily Weidner '05
Christine Small, *Assistant Professor of
Botany*

Biodiversity of the diatom genus *Brachysira* in the Ocala National Forest, Fla.

Hanna Shayler '02
Peter Siver, *Charles and Sarah P. Becker
'27 Professor of Botany*

Training whales for veterinary procedures.

Justin Richard '03
Robert Askins, *Professor of Zoology*

Water chemistry and trophic conditions of lakes located in the eastern United States on Cape Cod, Ocala National Forest, North Carolina and Connecticut.

Corrie Pesczar '02
Peter Siver, *Charles and Sarah P. Becker
'27 Professor of Botany*

Investigations of *Frustulia rhomboids* morphology.

George Baskette RTC
Peter Siver, *Charles and Sarah P. Becker
'27 Professor of Botany*

Dominion Resources, Inc. Environmental Internship

Christine Culver '04
Sean LaBrie '03
Peter Siver, *Charles and Sarah P. Becker
'27 Professor of Botany*

Characterization of channel morphology and hydraulics for stream-restoration design.

Adam Weinberg '04
Douglas Thompson, *Assistant Professor of
Physics*

Migration and dispersal among island and mainland populations of *Peromyscus leucopus* in Southeastern Connecticut.

Meredith Greene '03
Denise Lee '04
Phillip Barnes, *Associate Professor of
Zoology*

The effect of long-term laboratory culture on the flight performance of *Drosophila melanogaster*.

Elinor Pisano '04
Phillip Barnes, *Associate Professor of
Zoology*

Niche overlap of early-successional warbler species on power line corridors.

Nathan Marcy '02
Robert Askins, *Professor of Zoology*

CENTER WELCOMES NEW INTERN

THE GOODWIN-NIERING CENTER WELCOMED A NEW intern for the 2002-2003 academic year. Patti Handy filled the position previously held by Jana Savanapridi '00. Patti is a 2001 graduate of Eastern Connecticut State University where she majored in English and minored in communication, with an emphasis on writing for publication. She also has studied environmental history, earth science and plant biology and has a strong personal interest in the environment.



*Patti Handy,
Goodwin-Niering
Center Assistant.*

Patti plans to exercise her writing skills by maintaining the Center's web page and writing for the newsletter; she also is available to assist the certificate students with their writing assignments for the certificate program. Patti will help to organize and promote the Center's fourth biennial environmental conference in March 2003. Originally from Orono, Maine, Patti moved to Connecticut in 1984. She and her husband, Joe, and daughter Emily live in Lebanon.

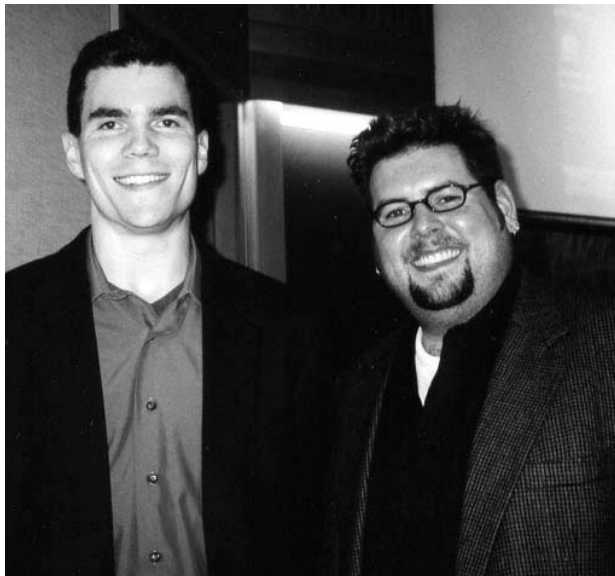
CERTIFICATE PROGRAM GUEST LECTURE SERIES

“THE SIMPSONS” AND THE ETHICS OF LIFE SCIENCES

By Patti Handy

CANADIAN PROFESSOR

Jason Scott Robert kicked off the Center’s Certificate Seminar Series with an enlightening and entertaining lecture entitled “Polly Shouldn’t Be? The Ethics of Creating Novel Beings.” The lecture was co-sponsored by the Goodwin-Niering Center for Conservation Biology and Environmental Studies and the Philosophy Department. Robert, an assistant professor of Philosophy at Dalhousie University in Halifax Nova Scotia, has an impressive background in research that involves philosophy of the life sciences. He also has written a book entitled “Taking Development Seriously: Embryology, Epigenesis, and Evolution” that is currently under review.



Assistant Professor of Philosophy Derek Turner and Dalhousie University professor Jason Robert.

Robert’s lecture was based on a rhetorical question he posed to his audience: “Is there anything wrong with creating a being out of genetic material from creatures belonging to different species? If yes, why? If no, would it matter if any of those species were *Homo sapiens*?” Robert explained that for ethical purposes the concerns intensify depending on the type

of transfer of the genetic material involved. He broke the transfers down into five categories: animal to animal intraspecific (same species); animal to animal interspecific (different species); human to animal; human to human; and animal to human. According to Robert, the level of concern and objection rises progressively as one moves through these categories, with both scientific and moral objections to be taken into consideration.

In order to understand the justification of transgenic creatures, Robert began by explaining the scientific rationale. He stated that animal-to-animal transfers could potentially help us to better understand animal development.

Animal-to-animal as well as human-to-animal transfers may be biologically and biomedically useful, whereas human-to-human and animal-to-human transfers are potentially helpful in augmenting human capacities. Robert emphasized that while these techniques are currently used “in-mouse,” that is, animal-to-animal intra-species, they might also be beneficial when applied to humans. For instance, Robert explained, scientists might create “humanized” pigs that could then produce compatible

organs for human transplants. “Transgenic creatures can help us to better understand animal development; some transgenic creatures can help us to better understand human development and, possibly, to develop therapeutics,” stated Robert.

Although there may be a scientific rationale Robert said, it does not mean

that we have a “moral imperative” to attempt these studies. Robert cited several infamous attempts at transgenic experiments that gave rise to public concern. Whereas the cloning of the sheep “Dolly” was not widely objected to, Robert told of a transgenic experiment using a rabbit that was injected with the green fluorescence from a jellyfish. Apparently the Green Fluorescent Protein (GFP) bunny, known as Alba, glows green under the right conditions. This transgenic art experiment, which can be viewed at the web site of Eduardo Kac (www.ekac.org), has raised considerable objections in the public sector, as well as the moral question of “playing God.”

Robert used a video clip from the humorous and often-moralistic animated television series “The Simpsons” to illustrate several points of his lecture, hence, the connection to his title. In the episode shown by Robert, Homer Simpson visits “The Screaming Monkey Medical Research Institute” where he encounters a genetically manipulated parrot that has octopus tentacles in place of its wings. The parrot squawks, “Polly shouldn’t be!” The core of Robert’s lecture became clear: Why shouldn’t Polly be? His answer? “I’m just not sure,” Robert admitted. “Transgenic creatures have entered the public consciousness,” he stated, changing the definition of “what it means to be, or not to be, human.” Now that is the question.

REQUEST FOR NOMINATIONS

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



Our Changing Coast: *Private Rights & Public Trust*

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Co-sponsored by the the Connecticut College Environmental Studies Program,
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The Nature Conservancy

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