

Williams College
Center for Environmental Studies



N O T E S



Fall 2001-Spring 2002

*A Publication of the Center for Environmental Studies, Kellogg House, Williams College, P.O. Box 632,
Williamstown, MA 01267 <http://www.williams.edu/CES>*

Letter from the Director

It indeed feels good to return to Kellogg House from a refreshing 2001-02 sabbatical, although my studies did not take me to great distances from Williamstown. In fact, I spent most of the year as a fellow of the Williams College Center for Technology in the Arts and Humanities in a multimedia project documenting the changes that have occurred on dairy farms in Williamstown over the past 60 years. When I came to Williams in 1970 there was a vibrant dairy industry in town with over 15 farms, now only two remain: Chenail's Mt. Williams Dairy and Galusha's Fairfields Farm. Berkshire County is down to around 30 dairy farms in total. To date I have over 70 hours of digital video interviews and am piecing the collection together with archival images and aerial photos in the process of creating a DVD on the 20th Century history of the dairy farm in Williamstown.

We have also been busy in putting together a potential curricular innovation that would bring the region and the CES together in an educational adventure somewhat reminiscent of the earliest mission of the Center. We submitted a proposal for a community-based experiential environmental studies project to the Luce Foundation. The proposed project encompasses the development of local / regional courses and course modules that will

engage our students with the Berkshire Region's environment through field work, meetings with regional environmental policy makers, and working in teams on locally-based environmental issues or problems. The project comes at an opportune time in that the College is focusing its attention on interdisciplinary and experiential education initiatives.

Finally, the CES has undergone a bit of renovation in our organizational chart. We welcome Sarah Gardner as the new Assistant Director of CES (see article next page) Rachel Louis will continue to be with us as the CES Project Coordinator through next June when that position will then be phased out.

Please check in periodically at <http://www.williams.edu/CES/> to see what is new, and in some cases what is old (but important).



Hank Art, CES Director

Hank

CES Welcomes New Assistant Director

I'd like to introduce myself as the new Assistant Director of CES. Many of you already know me as I co-taught Environmental Planning last spring. Before that, I was a Research Associate at CES completing my doctoral dissertation in environmental policy.

My background and interests lie in state and local environmental policy and politics. After graduating from Smith College, I worked at the Planned Parenthood national office in New York City, researching domestic and international family planning policies. I then pursued a Masters in Public Administration (MPA) from Columbia University, where I concentrated on public health and environmental policy. After graduate school, I worked in New York City's new Recycling Program (a program that was sadly killed by Mayor Michael Bloomberg several months ago) as a public educator and outreach worker and later in program management. From there I moved on to a doctoral program in political science, during which I was a project manager at the Howard Samuels Center, a comparative state policy research institute. There I secured grants from the Aspen, Ford and MacArthur foundations and designed multi-state comparative studies in urban, educational, and environmental policy. In the final years of my doctoral studies I focused on urban environmental policymaking and I conducted my dissertation research on brownfield policy while working as a planner in the New Jersey Office of State Planning. When I first moved to Williamstown I worked as an environmental lobbyist in Albany, attempting to persuade legislators to pass environmentally progressive legislation.



Sarah Gardner, CES Assistant Director

I have roots in the Berkshires and a strong commitment to preserving the environmental quality and landscapes of this region. To this end, I spend many of my evenings at meetings: I serve on the Williamstown Planning Board, the Williamstown Master Planning Committee, the Williamstown Community Preservation Committee, and as the Williamstown Delegate to the Berkshire Regional Planning Commission (not to mention other smaller committees such as the Berkshire Bike Path Council). My involvement in local and regional environmental matters helps to identify innumerable opportunities for student research and activism, so please talk to me if you are interested in becoming involved with a local project.

As Assistant Director I will co-teach Environmental Planning—a studio course in which students work on actual planning projects in local communities. In addition, I will coordinate the budget and the other administrative tasks of the Center. Along with Rachel Louis, I will help organize Log Lunch and other speaker series, and work closely with students to find summer internships and employment. Many of you will hear from me with requests for help in some of these tasks. Please let me know if you would be interested in speaking on campus or if you know

of internships or jobs that may be appropriate for CES students. I will also be coordinating *Field Notes*, so please feel free to update me on your activities and whereabouts for inclusion in the Alumni Notes section of future issues.

I look forward to getting to know as many students, alumni, and friends as possible, so please stop by and visit next time you are passing through campus. I feel fortunate to work with the wonderful students, staff, and faculty who make CES the vibrant place that it is. I look forward to strengthening links between the Center and other departments and to enriching the Center's role as an environmental hub, not only for Williams College, but for Williamstown and the Berkshires.



Sarah's dog Foxy, occasional visitor at Kellogg House

CES Year In Review

A whole year has passed since the last issue of *Field Notes* and, boy, has it been a busy year. The Center for Environmental Studies co-sponsored a large conference, hosted several distinguished speakers, and benefited from others sponsored by assorted departments and programs.

Our busy season began in October with a conference on “Sustaining Ecology and Economy: The Leadership Challenge”, co-sponsored by CES, the Program in Leadership Studies, and the Department of Economics (see photo spread, page 8). The two day conference included three panel discussions as well as a keynote panel and a lunch speaker.

The conference began on the afternoon of Friday, October 20 with a panel on International Environmental Law and Global Leadership. Panelists included Elizabeth DeSombre, Frost Associate Professor of Environmental Studies and Associate Professor of Political Science, Wellesley College; Nancy Dickson, Senior Research Associate, Belfer Center for Science & International Affairs, The Kennedy School of Government; Bradford Gentry, Lecturer in Sustainable Investments, Yale School of Forestry and Environmental Studies; and David Wirth, Professor, Boston College Law School. The discussion was moderated by Kai N. Lee, then Interim Director of the Center for Environmental Studies.

On Friday evening the Keynote panel discussion was held in Brooks Rogers hall. “Sustaining Ecology and Economy” panelists were Geeta Aiyer, President and Senior Portfolio Manager, Walden Asset Management; Christopher Flavin, Williams ’77, President, Worldwatch Institute; Carl Gagliardi, Director of Environmental Business Services, International Paper; and Andrew S. Hogeland, Williams ’76, Senior Environmental, Health and Safety Counsel, General Electric Plastics. The keynote panel was moderated by Ralph Bradburd, Chair of the Department of Economics.

Saturday morning began with a panel on Government Regulation and Leadership Strategies: A Case Study on Energy Policy. Speakers included Christopher Flavin; Eban Goodstein ’80, Professor of Economics, Lewis and Clark College; and Greg Watson, Director, Massachusetts Renewable Energy Trust.

Nancy Nylen from the Center for Ecological Technology moderated.

The final panel discussion of the conference focused on Environmental Justice and Social Responsibility. Michael Dorsey, Thurgood Marshall Fellow in Residence, Dartmouth College; Veronica Eady, Director of the Environmental Justice and Brownfields Programs, Massachusetts Executive Office of Environmental Affairs; The Honorable Byron Rushing, Massachusetts House of Representatives; and Ariane van Buren, Director of Energy and Environment Programs, Interfaith Center on Corporate Responsibility served as panelists. Sarah Gardner, Research Associate and Visiting Lecturer of Environmental Planning (and now CES Assistant Director), moderated.

The conference ended with a lunch talk on “Ecology, Economy, and Equity: Leadership for a Sustainable Community” presented by Cheryl Smith, Vice President and Senior Portfolio Manager, Trillium Asset Management.

November saw a visit by James Kennelly, Professor of Business and Management at Skidmore College. Prof. Kennelly’s lecture, sponsored by the Class of 1960 Scholars Program in Environmental Studies was, entitled “Sustainable Development and the Celtic Tiger Economy: How ‘Green’ is Ireland?”

Next on the schedule was a visit by author Bill McKibben in January. Sponsored by the W. Ford Schumann ’50 Visiting Professorship in Democratic Studies, McKibben joined a group of students, alumni, and community members for an afternoon of cross-country skiing in the Hopkins Memorial Forest, followed



Bill McKibben (center) leading a cross-country skiing excursion in the Hopkins Forest

by an evening lecture on “The Environment as Moral Challenge”. The presentation drew a larger than expected crowd to the College Faculty Club, and was covered by the local press.

The Class of 1960 Scholars Program in Environmental Studies hosted a second visitor in February. Reed Zars '77, an environmental attorney based in Wyoming, spoke on “Environmental Justice: You Can’t Get There from Here.” Zars, who also served on the Williams faculty in the early 1990s, drew a large crowd of students and faculty.

Zars was followed by a high profile visit by Bob Durand, Secretary of Environmental Affairs of the Commonwealth of Massachusetts on February 28. Durand spoke on “Community Preservation and Resource Protection: Massachusetts’ Strategies to Address the Environmental Challenges of the 21st Century” (see article this page). April was the busiest month of all for CES. Hunter Lovins, CEO of The Rocky Mountain Institute and Walter Link, Chair of The Link Group, spoke on “Human Dimensions of Natural Capitalism” on April 11, sponsored by W. Ford Schumann ’50 Visiting Professorship in Democratic Studies. The next day CES hosted Ambassador Richard Benedick as the final speaker of the Class of 1960 Scholars Program. Benedick spoke on “Human Population and Environmental Stresses: Policy Diplomacy in the New Century” (see article page 9).

Finally, a full schedule of events for Earth Week was planned by Greensense, the student organization focused on environmental education and advocacy. The highlight of the week was a lecture by renowned environmental architect Bill McDonough. His talk on “Redesigning Design from Molecules to Countries” drew a near capacity crowd to Brooks Rogers Hall.

2002-2003 is looking to be a busy year as well, but you’ll have to wait until the next issue of *Field Notes* to learn all about it!

Secretary of the Environment Visits Williams

On February 28, 2002, the Center for Environmental Studies hosted a public lecture by Bob Durand, Secretary of Environmental Affairs to the Commonwealth of Massachusetts. In his talk, “Community Preservation and Resource Protection: Massachusetts’ Strategies to Address the Environmental Challenges of the 21st Century”, Durand discussed the environmental issues facing the state and the Berkshires, and the programs the administration has put in place to preserve the resources and characteristics of our region.

Durand began the evening by praising Governor Jane Swift for her demonstrated leadership on environmental issues. Her accomplishments include implementing the toughest state regulations on power plants in the country, and a stated goal of protecting of 200,00 acres of land in a decade—a goal which has been half accomplished in only three years. He also commended Governor Swift on “her brave move” of killing the Greylock Glen project.

Durand chose to focus the evening’s presentation on natural resource protection and, specifically, on the Community Preservation Act (CPA) and how community preservation can benefit—and is benefiting—northern Berkshire County. He described the threats to our environment, and particularly to biodiversity, as including habitat loss, invasive species, pollution, population, over-harvesting, and global warming. “These threats are more serious today than ever before, because if we are going to sustain the type of living that we enjoy here in the United States throughout the globe, it will take the natural resources of four worlds . . . we need to put in place a strategy that will sustain all of us in the future.”

When sworn in to office in January, 1999, Durand sought to bridge the gap that existed between education, academia, and the environment. He signed a landmark memorandum of understanding between the University of Massachusetts and the Executive Office of Environmental Affairs—the UMass-EOEA Partnership—bringing together the intellectual power of the University and the policymaking skills of EOEA, making a commitment to meet the environmental needs of the residents of the Commonwealth of Massachusetts through education, research, and public service. This goal is being accomplished through a management framework focused on seven joint work-



Secretary of the Environment Bob Durand speaks with Tad Ames, President of the Berkshire Natural Resources Council

groups: marine science and technology; pollution prevention; environmental technology; biodiversity and ecosystem protection; agriculture; watershed management; and community preservation.

Within this framework, “community preservation focuses on the needs the Commonwealth has in managing growth and development”. In Massachusetts, land development rates have exploded in the past decade. Since 1950, population in the state has increased by 28%, while land development has increased by 188%. Population is increasing most rapidly outside of urban areas: the city of Worcester has lost 15% of its population over the past 50 years, while the population in the surrounding suburbs has increased by 250%.

Farmlands, scenic vistas and historic landscapes are being lost at an alarming rate, averaging 44 acres a day lost to development. “Even here in the Berkshires, perceived as a rural

and pristine region, the special character of our communities can only be preserved if proactive steps are taken to develop a vision for the future, and to ensure that growth and change in our cities and towns is consistent with this vision.” It was with this thought in mind, and a goal of protecting the quality of life in Massachusetts, that the Community Preservation Initiative was launched in 1999.

The Community Preservation Initiative was designed to help local decision-makers preserve and enhance that quality of life community by community or watershed by watershed. Through this initiative, EOEAs provides planning tools to communities to help them make informed and balanced decisions about growth. Durand stated “I believe that by thinking creatively and acting proactively, the Commonwealth—including the Berkshire region communities—can promote future growth patterns that are consistent with keeping their traditional rural character and scenic beauty. With that in mind, community preservation is not about stopping development, but about promoting future growth in the right patterns and places; growth that respects land as a precious resource; growth where infrastructure already exists, not growth in areas that are ripe with prime topsoil, not growth that denigrates our mountaintops; that recognizes the costs of providing sewers and roads to sprawling development; that fully understands the demand that new development places on stressed resources like water supplies, sensitive ecosystems, and municipal budgets, and understands that how we grow affects our sense of place and our quality of life.”

Under the Community Preservation Initiative, the EOEAs provided GIS based maps to all 351 Massachusetts cities and towns to help them see where their current growth patterns will bring them. In this region, the Berkshire Regional Planning Commission worked with EOEAs to customize this buildout map based on local zoning. These maps have allowed communities to see what they might look like if every piece of developable land was to be developed, and have given them a way to examine their growth and make more informed decisions.

The maps, useful on their own as planning tools, are also the foundation for community development plans. In January 2000, the Swift administration created a \$10.5 million program to help communities develop goals for the future. Executive Order 418 provides each community in Massachusetts \$30,000 to draft a Community Development Plan (CDP). Each CDP must incorporate four key elements: natural resource protection; new housing opportunities, including affordable housing; transportation infrastructure; and commercial development. At the time of this talk, 26 of the 32 towns and cities in Berkshire County had submitted the paperwork to participate in this program.

Of course, without a funding mechanism for actual projects the planning process would be for naught. The Community Preservation Act allows Massachusetts communities to hold a ballot referendum to establish a local preservation fund to be used on open space protection, historic preservation, and affordable housing. The funds are generated through a surcharge of up to 3% on local property taxes. As an incentive, the state will provide matching funds, estimated at \$26 million annually, to communities that adopt the CPA. (Williamstown voted to adopt the CPA in May, 2002 with a surcharge on property tax of 2%, with the first \$100,000 of property value exempt.)

The state mandates that at least 10% of the funds be used for each of the three areas (open space protection, historic preservation, and affordable housing), with the remaining distribution fluid “to fit the needs, desires, and priorities of local communities”. According to Durand, “The CPA is not just about what your money will bring this year or next year. It’s about the future of your community. It’s about projects that will serve the civic good for decades to come, ensuring that what is special to you today will be special to your children and their children tomorrow.”

Durand closed by telling the audience that programs such as “the Community Preservation Act, the Biomap, our Bioreserves, our Open Space Protection Plan, and the Biodiversity Days attempt to protect the unique cultural and natural heritage of this great state, while preserving and enhancing local economies.”

Socially Responsible Investing Now an Option

College Creates “Social Choice Fund” to Provide a Socially Responsible Alternative for Donors

In the Fall of 1999, a group of students concerned about the social impacts of the investments made by Williams College decided to research the College’s investment patterns. Some of the information they found was upsetting. Students who had learned in environmental science classes about the dangers of PCBs and the environmentally irresponsible behavior of General Electric in the Berkshire region learned that not only did the College invest in General Electric, but that the College had voted the year before against a shareholder resolution urging General Electric to report on and commit to anti-PCB efforts. Other students were concerned about the number of tobacco companies in which the College invested.

“Investing in a corporation and benefiting financially from its socially and environmentally harmful activities signals a tacit support for those activities—or at least affirms that the investor’s private gain takes precedence over the public costs,” explains Michael Levien ’01, one of the students leading the effort to put the Social Choice Fund in place. This belief in investing as a political act led students to focus on influencing Williams College to become a more socially responsible investor.

The students viewed the creation of the Social Choice Fund as a step towards that goal. “The school is highly involved in the region around Williamstown, the country, and the global society,” Rebecca Sanborn ’01 explains. “There are positive and negative consequences to that involvement; the creation of a socially responsible fund within our endowment represents a timely acknowledgment of our connections to the rest of the world, and an admirable effort to minimize our negative impact.”

There are three general strategies often employed in socially responsible investing. One such strategy is the use of negative screens that remove companies with exceptionally horrible social or environmental practices from a client’s portfolio. Ninety percent of the Social Choice Fund will be invested in a screened mutual fund.

Another strategy in socially responsible investing is encouraging companies with mixed environmental or

social standards to improve their behavior through the use of shareholder activism. Typically, shareholders write resolutions urging the company to change its behavior in a certain way. All of the shareholders vote on the resolution. If a shareholder resolution has considerable support from the shareholders, the management of the company often works to implement the resolution. Williams College already votes on its shareholder resolutions through the Advisory Committee on Shareholder Responsibility (ACSR), a committee formed in the late 1970s to consider Williams College responsibility in how to act with regards to investing in companies that engaged in business in South Africa. ACSR meetings are open to the Williams community, though only actual committee members have voting privileges.

The third strategy used in socially responsible investing is proactive investment. This can include proactively investing in companies that are considered to be leaders in their social or environmental behavior, investing in companies that are helping to solve social or environmental problems (such as companies engaged in researching alternative fuels), or investing in community development. The Social Choice Fund will invest ten percent of its funds in community development loan funds.

Community development loan funds invest in areas such as affordable housing, local commercial development, and different types of social services. Low-income people and groups designed to help them often have problems getting access to credit to allow them to set up solutions to some of their problems. Community development loan funds try to help solve this problem through the extension of loans with reasonably low interest rates to support community development. Repayment rates are normally quite high, and community development loan funds can thus be a profitable means of investing money. While earnings are normally less high than investing in the stock market, community development loan funds can be a more stable investment. Over the past year, the Social Choice Fund's earnings from community development loan funds have remained relatively stable while the stock market overall has dropped significantly.

In convincing the College to adopt the Social Choice Fund, student activists took measures both to demonstrate the grassroots support the issue had among students and to work with College administrators to convince them that there would be no long-term negative effects to the College by implementing such a fund. Letters and emails in support of the fund were collected from students, alumni, and parents. The details of the finances and implementation of the fund were discussed with the College administration. Mutual funds that employ social and environmental screens have performed competitively with unscreened funds over the past ten years, which was an important point in allaying potential concerns over the creation of the fund.

The Williams College Board of Trustees quickly agreed to the creation of a fund within the endowment that would be invested in a socially screened mutual fund. The more difficult step was convincing the College to take the next step and invest ten percent of the fund in community development.

After much discussion, the College agreed that ten percent of the Social Choice Fund would eventually be invested in community development in the Berkshire region. Daniel Shearer '04 describes his pleasure with this decision: "[Community investment] will surely help to strengthen the ties between the College and the surrounding communities in the Northern Berkshire area." The student activists often referred to community investment in the Berkshire region as a move consistent with being a "good neighbor."

The student activists hope that the fund will serve to provide an alternative means of giving to the College. They also hope that it will serve an educational purpose through creating a dialog within the College about what role social concerns should play in making our financial decisions. "Establishing the Social Choice Fund...advances the College's educational mission by stimulating dialogue at all levels of the Williams community—from students and faculty to administrators and trustees—about the implications and responsibilities of owning and investing wealth," states Mike Levien.

The Social Choice Fund will only continue to exist if sufficient funds are raised for it to compensate for the extra administrative burden of running a separate endowment fund. Interested donors should contact Joan Callahan at the Development Office at (413) 597-4031. Every donation helps support the fund and the College.

Sustaining Ecology and Economy: The Leadership Challenge
Photos from October 19-20, 2001



The Honorable Byron Rushing,
Massachusetts House of Representatives



Geeta Aiyer, Walden Asset Management



Keynote panelists Carl Gagliardi, International Paper, and
Andrew S. Hogeland, Williams '76, General Electric Plastics



Professor Bradford Gentry, Yale School of
Forestry and Environmental Studies



Ariane van Buren, Interfaith Center
on Corporate Responsibility

Ambassador Richard Elliot Benedick speaks on Human Population and Environmental Stresses

On April 11, CES hosted Ambassador Richard Benedick as the final distinguished speaker for the Class of 1960 Scholars Program. Ambassador Benedick spoke on “Human Population and Environmental Stresses: Policy Diplomacy in the New Century”.

Ambassador Benedick is a career diplomat and former Deputy Assistant Secretary of State with a distinguished career in global environmental affairs. He was the chief US negotiator and a principal architect of the **historic 1987 Montreal Protocol on protecting the ozone layer**. His acclaimed book, *One Diplomacy: New Directions in Safeguarding the Planet*, is used in universities around the world. He has lectured at numerous universities, served on several boards, and consulted for international agencies, governments, and industries. After serving for several years on the International Advisory Board of Battelle, Dr. Benedick joined their Washington, D.C. office in 1998 as a Deputy Director. He is concurrently a Visiting Fellow at the Wissenschaftszentrum Berlin, as well as President of the Board of Directors of the Committee for the National Institute for the Environment. From 1990 to 1994, he was Special Advisor to Secretaries-General of both the United Nations Conference on Environment and Development (Rio de Janeiro, 1992) and the International Conference on Population and Development (Cairo, 1994), assisting the negotiations and drafting chapters of Agenda 21 and the Cairo Programme of Action.

Ambassador Benedick has served on diplomatic assignments in Iran, Pakistan, Paris, Bonn, and Athens. As Deputy Assistant Secretary of State for Environment, Health, and Natural Resources he supervised policy formation and international negotiations on several global issues. Elected a Fellow of the World Academy of Art and Science in 1991, Benedick has also received the two highest Presidential career public service honors (the Distinguished and two Meritorious Service Awards), the State Department’s John Jacob Rogers medal, and the 1997 United Nations Tenth Anniversary Ozone Award. Ambassador Benedick is the author of over 90 publications in the U.S. and abroad.

In his talk at Williams, Ambassador Benedick recounted that in 1804 the world’s population numbered 1 billion people. In the following hundred years, a second billion were added. However, in recent years, the sixth billion was added to world population in only twelve years.

Until recently, Ambassador Benedick explained, human impacts on the environment were largely local. Civilizations collapsed due to scarcity or depletion of resources, sometimes exacerbated by environmental conditions such as drought. Historically, environmental stresses have been continual, but regional. However, with a current population of well over 6 billion people, environmental impacts are seen that have the potential to affect fragile planetary systems and cycles on which life depends. He described this as “an assault on the planet by land and sea . . . if it was coming from outer space, every country would consider it their number one national security issue.”

The new generation of environmental problems are global, with climate change being the most serious. Other crucial global issues include the threat to stratospheric ozone, loss of biodiversity, spread of arid lands, pollution of marine systems, destruction of forests, and worldwide diffusion of hazardous substances. All of these issues are affected by human population—both population growth, and migration of people. While there are many intervening influences—income, wealth, consumption—that make it difficult to show that human population changes are causing these problems, the least likely scenario, according to Benedick, is that there is no relationship.

The human population growth rate peaked from 1965-1970 at 2% per year, with a population doubling time of only 35 years. 90 million people were added to the population each year. The current growth rate may seem modest in comparison, at only 1.2%, with population increasing by 80 million people each year. By the year 2050, world population is expected to reach 8-11 billion, with the most likely scenario recently revised upwards by 5% to 9.3 billion. Whether we reach the maximum estimate of 11 billion or the minimum estimate of 8 billion

depends in large part on the willingness and ability of people in developing countries to voluntarily reduce their family size.

Population growth has been—and will continue to be—skewed. In the second half of the 20th century 90% of population increase took place in the developing world. In the 1990s that figure grew to 97%, and is expected to grow to virtually 100% over the next 50 years. According to Benedick, this is not the “fault” of developing countries, but rather the responsibility lies with the developed world. During the 1950s “well meaning but prudish” development programs increased life expectancy and health, while decreasing child mortality in developing countries, but these programs did not include family planning components. Developing countries have reduced birth rates, but the number of surviving children has increased.

These trends have led to a significant redistribution of world population. In 1950 industrialized countries made up approximately 33% of world population; by 1990 this figure fell to below 20%. Observed environmental impacts have been caused by a combination of poverty, early stages of industrial development, and population growth.

Such environmental problems are becoming a security issue for nations. Boutros Boutros-Ghali, former Secretary-General of the United Nations, has predicted that the next war over resources in the Middle East will focus on water, not oil.



Ambassador Richard E. Benedick

Africa is the fastest growing and poorest region of the world today. In 1950, 9% of the world’s population lived in Africa; by 2050 that figure is expected to grow to more than 20% of a much larger total population, despite a growth rate slowed by the AIDS epidemic. Most industrial countries have stable or declining populations with the exception of the United States, Canada, and Australia that have growing populations due to immigration. Moslem countries in the Near East have the highest population growth rates.

Developing countries also have greater growth momentum—even if future families have fewer children, there is a continuing growth factor because the number

of people that are entering into their reproductive years is greater than the number that are leaving those years. Thus, populations continue to grow significantly for many decades even after fertility rates begin to decline.

Benedick stated that a related concern is the increasing population of urban areas as many flee rural poverty. In 1950 there was only one “megacity” of over 10 million people—New York City. Today there are 17 megacities, with an expected 26 existing by 2015—24 of them in developing countries. Growing cities encroach on environmentally sensitive regions leaving them more fragile and susceptible to natural disasters. In addition, city dwellers use more resources than those in rural areas.

So what can be done to change these dire forecasts? Benedick outlines three factors that could lead to a decrease in a country’s growth rate: a decline in fertility, an increase in death rate, or a change in migration. Projections of a country’s future population will change only if one or more of these three factors changes. The countries most affected by population growth are already in environmentally and politically fragile situations, yet the leadership acts as if they don’t know this.

It is not enough to simply provide contraceptive options to people in developing countries. To slow the population growth rate it is necessary to improve education, job opportunities, and the overall status of women. This, in addition to improved access to health care and family planning, has shown to be effective in many vastly different countries. These improvements tend to lead to later marriage, later first birth, and children spaced farther apart. Research shows that given the choice and means, most women in developing countries would have fewer children than their mothers.

Population issues were widely ignored at the 1992 United Nations Conference on Environment and Development, as they were considered not to be an environmental issue. Two years later at the United Nations International Conference on Population and Development twenty-year targets for education and family planning were set. Eight years later it is already apparent that yet another set of UN targets will be unmet, even though we know what needs to be done. Population continues to rise while “industrialized countries give a tiny percentage of aid to family planning and developing countries spend more on weapons than on educating women”.

There is no question that improving standards of living in the developing world will increase the demand for resources. It is prudent to err on the side of caution—slowing population growth will aid in efforts to protect the environment and to lower the ultimate costs. If population and consumption patterns remain unchanged no one can ensure the survival of our species. Decisions we make now are critical to our future. It is not merely a problem of feeding all of the people; it is a question of quality of life including dignity, security, and beauty.

Ambassador Benedick’s lecture was sponsored by the Class of 1960 Scholars Program and by the Population Resource Center.

Summer Intern Reports

In the summer of 2001, CES funded eleven students to participate in a variety of internships, research projects, and creative endeavors. For a taste of what they were involved in, keep on reading.

Janna Rearick ‘02, Bernard M. Schuyler Memorial Fund

Idly browsing for summer internships, a small notice posted on the website of the New England Aquarium caught my eye. The posting offered an intern the opportunity to be involved in the creation of a network which would link American scientists to African grassroots conservation organizations in need of scientific advice. As a biology major with an interest in resource management, recently returned from a semester in Africa, the job seemed custom made for me. I applied, and was accepted. Then, in May, came disappointing news. The internship was being cancelled while the director left the country to adopt a baby. “Would I like to accept another position?” the aquarium offered.

That’s how I began my summer as an Aquarist intern at the Boston Aquarium. Unsure of what an aquarist’s job entailed, I knew only that I would be involved in the daily care of animals. My assignment was in the Fishes department, working with the Edge of the Sea exhibit and the WetLab. Edge of the Sea is one of the more popular exhibits among younger visitors, due to its large touch tank holding sea urchins, sea stars, and hermit crabs. The WetLab, on the other hand, is a place most aquarium visitors never see. Located in another building on the wharf, it provides a holding area for animals used in educational outreach programs. Although permanently assigned to these two galleries, I soon learned that, like the aquarists themselves, I was required to be flexible. Because of the small number of full time staff members, all aquarists are trained to cover any of the galleries in case of their colleagues’ vacations or sick days. Learning the intricacies of each gallery is no small feat. The aquarium holds warm water fish, cold water fish, fish that require total darkness, fish that are poisonous to the touch, and so on, and all require specialized care. In addition to the massive variety of fish species, sea birds, snakes, crocodiles, hedgehogs, and African spiders can all be found amongst the exhibits. Aquarists must be able to meet the basic daily needs of all these animals, in addition to noticing the nuances of their behavior that could indicate ill health. Beyond these basic duties, aquarists must plan new exhibits, go on collecting trips (to California, Uganda, or simply Boston Harbor), conduct research, and handle any crises that might arise. One aquarist has the job of devising new toys for the octopus, which will become bored and depressed in the event of inadequate mental stimulation.

As an aquarist intern, I relieved the aquarists of their more menial duties. The bulk of my days were spent

preparing food, taking water temperatures, and cleaning tanks. I was also placed in charge of some horseshoe crab research. Generally, horseshoe crabs molt once a year, shedding their old shells and forming larger carapaces. The animals at the aquarium do not shed, and there are actually no reported cases of any horseshoe crabs in captivity undergoing the annual ecdysis. My research was aimed at determining the reason for this aberrant behavior. By the end of the summer, we were able to establish experimental tanks where environmental variables were closely controlled, in an attempt to simulate environmental cues that may cause horseshoe crab molting. Although I had to leave the aquarium before we could begin to see results, I am hopeful that molting will be facilitated. Though the internship was not one I would originally have chosen, it was enjoyable to have a behind the scenes view of the running of an aquarium. I certainly learned how the aquarist staff is instrumental in achieving the aquarium's mission to "promote, present, and protect the world of water."

Jenny Wetzel '02, W. Conant Brewer '18 Fund

New Zealand is known around the world for its untouched wilderness and pristine environment. I traveled to New Zealand to learn how they avoid environmental problems facing many other developed countries as well as how they integrate concepts of sustainability and environmentalism into everyday local government. One of the many contributing factors to their success is the government's environmental legislation and resource management laws. These were "upgraded" and strengthened in the mid 1980's to focus on issues like sustainability. After a large amount of privatization, deregulation of economic activity, and a move away from inefficient subsidized industry, New Zealand's new free market economy enacted strict policy in order to protect the environment from primary industry. These new policies and laws were an attempt to have sustainable development while still maintaining economic growth.

One of the first groundbreaking legislation introducing sustainability and environmental management was New Zealand's Resource Management Act (RMA), enacted in 1991. The RMA has had huge positive effects on resource management in New Zealand; however, it is criticized for being extremely vague, open to interpretation, and reactionary in nature. The most positive effect coming from the RMA is that court cases can now rule in favor of social, cultural, and environmental sustainability in the face of greater economic prosperity. It also forces developers to address issues of sustainability when applying for resource consents (permits).

For example, the RMA was pivotal to the Labour government's decision to halt all logging operations of the indigenous forests on the West Coast of the South Island. To compensate for the subsequent drop in the economy, the central government provided a welfare package for the West Coast Region including 28,120 hectares of exotic pine plantations worth \$68 million dollars. The money is being used to develop the tourism industry in hopes of increasing sustainable economic activity. However, tourism offers a limited range of employment that is seasonal and consists mostly of low paying positions. The millions of visitors that see New Zealand every year not only bring money to the economy, but also increase the strain on existing infrastructure as well as increased consumption of gasoline and garbage that litters the rest areas around the country. The good news is that there is also an increase in the number of "eco-tourism" companies that provide environmentally friendly alternatives to traditional tourism.

In urban areas, the RMA along with the new revisions of the Local Government Act have aided progress towards sustainable development by empowering local governments. In Waitakere City, former Mayor Dorothy Wilson and Mayor Bob Harvey have been motivational leaders and have started many projects and clean-up operations to improve their community. "[The] Council believes the pursuit of environmental sustainability will generate jobs, will encourage social cohesion and produce fairer, more just, more attractive and safer communities...and offers a positive agenda for the city's future."

Regarding the future development of New Zealand's forest industry and urban environments, I am confident that policies like the Resource Management Act can and will provide a framework under which sustainability issues must be incorporated into the planning process of every event, and so will ensure the well-being of coming generations. New Zealand has been a role-model country in showing that economic prosperity and environmental sustainability can simultaneously occur in a developed nation.

Jonathan Wiener '02, John H. Ohly '33 Memorial Fund

Reuben Espinoza was just a truck driver before he threw a block of wood at a group of San Francisco bike messengers and then won a deadly game of chicken with one of them. The D.A. took four months to file charges against him, of which the judge promptly threw out the strongest ones. When he finally got off, he became a pariah among San Francisco bicyclists, along with the judge and everyone in the district attorney's office.

Katherine Pope was a 21-year old student at Smith College and a budding physicist. She was not a bicycle advocate and certainly not an environmental activist. Then someone ran her over from behind as she was biking to her summer job in Menlo Park and she became a martyr to Peninsula bicyclists determined to avoid the marginalized status that has long enraged their cohorts in San Francisco.

This summer, thanks to a grant from the Center for Environmental Studies' John H. Ohly '33 Memorial Fund, I had the opportunity to try my hand at freelance writing for magazines on environmental topics. I found myself following both of these cases as they developed. At first glance, there does not seem to be much "environmental" about them. This was true of many of the stories that I covered. These included the battle over sprawl in the small coastal town of Half Moon Bay and class-based transportation inequality in Santa Clara County. During the course of my interviews, I frequently found myself defending my interest in these stories. Though my environmental studies education has trained me to see the competition for and management of physical resources as inherently environmental, I would find that both the characters in the stories and the publications where I sent the stories were not interested in that aspect so much as the human details.

Frequently, I struggled to factor the environmental perspective into these stories while trying to avoid the appearance of forcing irrelevant ideology upon them. I did cover two stories where the environmental side of the things was clearly important – the Trinity River flow decision (similar to the controversy in Klamath Falls, Ore.) and the restoration of San Francisco Bay's multicolored salt ponds (triggered by the expansion of San Francisco Airport). Even so, depending where I sold these stories, I had to mute the ecology some in favor of the perspective of fishermen or air traveler.

Mike Saari spent seven years of his life and almost all of his savings tinkering with electric recumbent bicycles in his garage. He saw his innovation as a revolutionary solution to the Bay Area's traffic-choked streets. I wrote about it because I saw it as a solution to the primarily environmental problem of air pollution. The editor at the local paper asked to print the story for an entirely different reason, because she viewed Saari as a tragic hero, a Palo Alto Sisyphus.

Ultimately, my editor had control over what this story (as it ran in that paper, at least) conveyed. She even cut some of the more poignant sections because she wanted the story to have a happy ending. Though I was happy to see the story get coverage, and Saari was grateful for the press, I am still selling other forms of it to other publications.

The painstaking sales process freelancers must go through and the trickiness of the "environmental" perspective's importance in these stories will be among the most enduring lessons I carry with me from this summer. I believe this latter concept especially has broad implications for environmentalism in general, whether in journalism, academia, politics, education or a number of other field. I am grateful to CES for this opportunity.

Marshall Dines '03, Thomas C. Black '80 Fund

With an eight-week mission to discover and capture the extent to which human invasion has marked the Colorado landscape, I set out to document my findings through artwork. Whether it be the suburban sprawl, consuming my home county faster than any other in the country, the scars of ski slopes sprinkled throughout the state, or the less conspicuous signs found nearly everywhere, I was at no shortage of potential material to work with. My goal was to choose images that were most poignant and representative of the constant dynamic unfolding between people and the environment. In the end, the proposal was as much a product of evolution as it was of my initial vision.

I was given the freedom to experiment with stylistically and with different media, using everything from pastels, to watercolor, oil paints, scratchboard, and even trash I collected. In some cases, artistic freedom allowed me to use materials I thought best conveyed the feeling of the piece, or in other cases, simply to experiment with different media and techniques. And while I was not always completely pleased with the finished product artistically, if I felt it was still able to convey what I had hoped environmentally, then there was a redeeming quality to the work.

The issue of growth is not unique to Colorado, and National Geographic revisited the same issue most recently in the July, 2001 publication, documenting the irony of “Urban Sprawl.” John Mitchell concisely describes the new American phenomenon. “The American Dream has long promised life, liberty, and the pursuit of a spacious single-family home in the suburbs. But as new generations of home seekers look for breathing room in the ‘burbs and the lands beyond, the dream has been displaced by all too familiar worlds- places plagued by traffic jams, high taxes, and pollution.”

The artwork is the tangible product of my own personal exploration and the conclusions I made about the environmental impact man has had and will continue to have. The final piece, depicting pronghorn antelope and the encroaching wall of development, shows no indication of cessation to the growth. It is that uncertainty that I am left with after my project. At what point will untouched land be of enough significance to be preserved? The likely answer is that it will only become significant enough when it economically more valuable than the developed alternative. The harsh reality of balancing open spaces with development is that it operates on a foundation of money. And the disheartening realization, for now and for years to come, is that the economy takes precedent, even over the world that must sustain us.

Matt Jungers ‘03, The Miranda Heller 1978 and Jerry Tone 1977 Environmental Student Research Fund, and the Donald B. Miller Fund

I spent my past summer working in Hopkins Memorial Forest located in Williamstown, Massachusetts. My goal for the summer was to describe the geomorphological features of Ford Glen Brook, a small stream toward the eastern edge of Hopkins Forest.

I learned as much as a could about the brook by carefully surveying its slope profile, mapping its features, studying soil outcrops, and even reading archival documents provided to me by Professor Hank Art. The story that unfolded was one that included a joint effort between humans and nature to shape Ford Glen into what we see today.

Hopkins himself had ordered the construction of an ice pond at the eastern edge of Hopkins Forest, just upstream from the point at which Ford Glen crosses beneath Northwest Hill Road. As sediment backed up behind this dam, it formed various sediment terraces from which we can now infer the former height of the dam and how extensive the pond may have been.

Upstream from where the ice pond was, I discovered the remnants of two check dams that had been constructed to keep sediment from clogging the ice pond. Terraces also formed behind these dams, and by coring trees on these terraces I was able to give them a relative age of 50-60 years old. This means that that the dams would have had to have been removed some time in the mid-20th century for the terraces to stabilize and support trees of that age.

I worked to retrace evidence from the ponds behind all of the aforementioned dams to understand the extent to which water backed behind the dams and how much sediment subsequently built up in these ponds. Studying the dynamics between Ford Glen and the dams built in the stream allows us to understand the impact we as humans can have on a landscape. Changes that seem small to us may play out as dramatic geomorphological features that can last for many years to come.

There is still much work that needs to be done in Ford Glen. This work includes not only investigating the sites of where other dams may have been, but also further cataloguing the data that was collected this past summer. There is still much that Ford Glen can teach us.

Malin Pinsky '03, George H. Dorion '51 Family Fund

I spent the second half of this summer working on a documentary project funded by the Center for Environmental Studies. The project had been proposed as a creative endeavor that would allow me to learn more about natural resource issues important to the area I have grown up in: downeast Maine. I also saw it as a chance to gain practical experience on subjects that I have recently grappled with in the Environmental Policy class taught by Kai Lee. Downeast Maine is a region whose economic well-being is tightly tied to the wealth harvested from the land and sea, and which largely sees itself as distinct and independent from the outside world. This seemed like a likely setting for conflict between environmental protection and the lives of people. I felt that I had spent the past semester looking at the big picture of environmental policy from a governing standpoint, and now I wanted to flip that around and learn instead what it looked like to the people who become regulated.

The method I chose was creative, which allowed me to be more holistic and exploratory in my approach. The grant money from CES provided me with a minidisc recorder and a microphone, which I used to record the conversations that I had during this project. I sought out individuals in five resource industries important to downeast Maine: lobstering, logging, blueberry farming, clamming, and urchin diving. Urchin diving is not traditionally important to the area, but I found it fascinating for the boom and bust that it has gone through in the past ten years to supply the Japanese market for sea urchin roe. Through conversations with people making a living from these resources, I have been able to document a sampling of opinions and views on the health of these resources, the need to regulate or abstain, and the ways in which changes in the health of these resources or the ways in which they have been regulated have affected the fishermen, loggers, and farmers in the area. Hearing these people talk was a fascinating combination of the expected and the unexpected, providing evidence of both things going right and things gone wrong, at least from one point of view. In addition, I worked with a manual camera and black and white film throughout the period, documenting in images the industries and the people involved.

The audio was then edited and recorded to a computer, while the photos were scanned in. This allowed both to be combined in a multimedia presentation, similar to a series of slide-shows, and burned onto a CD-ROM for distribution.

Mark Robertson '02, The Goethals-Hirsch-Satterthwaite Fund and the Tom Hardie '78 Fund

I spent my summer as an intern at the U.S. Environmental Protection Agency in Washington, D.C. working for Dr. Steve Andersen and Mr. Caley Johnson. Dr. Andersen is an economist who works within the EPA's Climate Protection Partnerships Division (CPPD) in several areas, including stratospheric ozone protection, environmental protection in the military and industry-government partnerships for climate change prevention.

Most of the projects I worked on related to a book that Dr. Andersen is currently co-writing with Dr. Madhava Sarma, the United Nations Environmental Programme Ozone Secretariat. The book is to serve as the UN's official history of the development, signing and implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer, a landmark international environmental agreement signed in 1987. The treaty and its subsequent amendments have worked to phase out ozone depleting substances (ODSs) and protect the stratospheric ozone layer that protects the earth and its inhabitants from the sun's harmful ultraviolet radiation. I also worked on projects relating to an EPA-industry partnership developing new mobile air conditioning systems and to environmental measures taken by the U.S. and foreign militaries.

My major undertakings with regard to the book were the compilation of a comprehensive bibliography, the continuation of work on a timeline of events relating to ozone protection and the research of associations and organizations that played a major role in the ODS phase-out and the development of ODS alternatives.

Over the course of the summer, I came to discover that the nature of Dr. Andersen's work is unique—he is one of the few people I met at EPA who is granted great leeway in determining his own projects. This affords him the luxury of seeking out that which interests him the most and following up on leads that others would be unable to do. His success in bringing together corporations and trade associations to generate desired results, such as the

development and marketing of alternative chemicals and processes, has given him the deserved reputation as an effective government-industry liaison. I was not expecting to find a bureaucrat given the relative autonomy that he was given, and his situation was impressive and refreshing.

After the internship, I see more clearly the value of clear science and economics in making policy and in engaging disparate parties and actors. These are lessons that I've learned in the classroom before, but this engagement gave me a more direct appreciation. I believe it is work like Dr. Andersen's, where progress is made through vigorous research and practical and adaptive partnerships, that will lead to more comprehensive environmental protection.

Nina Trautmann '03

I spent four weeks this summer creating a website of environmental education activities for Tompkins County, NY homeschoolers and their families. By creating a resource of hands-on activities and local field trips, my goal was to encourage homeschoolers to explore their own local environment including Tompkins County's glacial history, wildlife habitats, and environmental issues.

Working under the supervision of a former high school science teacher, I learned about the homeschooling community in Tompkins County, researched environmental education activities in the area, and compiled a website. After learning that the majority of local homeschoolers have Internet access at home and use their computers for a variety of educational purposes, I determined that the best (and cheapest!) way to publicize my final project would be to create a web site. This I did—at <http://wso.williams.edu/~ntrautma/TC.html>.

I decided to break the website into three parts exploring Tompkins County's physical environment, its ecology and wildlife habitats, and what happens to water, electricity, recycling, and garbage around the home. I compiled my activities from a variety of sources including personal experience, public school science lab manuals, Cornell University environmental science publications, history and information pamphlets, and other online sources. For each subject, I tried to include a section of information and a hands-on activity or two. For example, in addition to including a short article about local geology written by Ithaca High School students, I described a short hike through the gorge a well-known state park and added questions to help families learn about geologic features along the trail. I also included links to local environmental education resources such as Cornell University's well-hidden mineral displays and the Paleontological Research Institution's fossil collecting trips.

I publicized my website through the Finger Lakes Unschoolers Network (FUN) listserver and newsletter, and it has gotten over 80 hits this summer. While I was disappointed not to receive any entries for a summer contest I created offering local homeschoolers the opportunity to create new activities for the website, I have gotten several e-mails thanking me for the activities and website. Parts of it are still under construction, and I plan to add more activities and field trips over the next few years.

The internship has given me the opportunity to spend time exploring my hometown and its parks, gorges, museums, and libraries as well as to investigate the disadvantages of public education. I have already used some of the activities I compiled on the website while working as "wilderness specialist" at a camp for homeless NYC children later in the summer, and I plan to draw on others for science classes I teach at the Williamstown Elementary School. I intend to add more to the web site over the next several years.

Tisha Joseph '04

Poverty and pressure on land resources are causing degradation in many Caribbean countries such as the Dominican Republic, Cuba, Haiti and Jamaica. Islands like Barbados and St. Vincent are also suffering from severe water shortages and face the threat of drought. Antigua & Barbuda has been lashed by hurricanes that destroy the soil and many other natural resources. Grenadian soils are being eroded at a rate of 700 tons per year. This summer I completed an internship at the Caribbean Network for Rural Integrated Development, located in Trinidad, to study these issues.

Desertification is not a problem that is limited to Africa. It has arrived in the Caribbean and is spreading fast

across the region. The people who are most severely affected by land degradation are among the region's poorest, however, they are continuously driven to extract as much out of the land as possible. The land is their most important asset, as the Caribbean islands support small developing economies that are strongly dependent on agricultural products and tourism. Unsustainable practices that scar the land are poor agricultural practices, excessive irrigation, inappropriate use of soil, overuse of fertilizers and pesticides, overgrazing and intensive exploitation of forests. Combined with frequent droughts and forest fires, these practices inevitably lead to land degradation that triggers a sharp drop in land productivity accompanied by a disturbing rise in impoverishment and social distress in many island nations.

The United Nations Convention to Combat Desertification is an effort by the international community to promote universal participation to help local people to prevent and reverse land degradation. Successful implementation of the Convention would improve living conditions, and reduce poverty while also helping to alleviate related problems such as migration, loss of plant and animal species, climate change and the need for emergency aid to populations in crisis.

West Indians take pride in preserving their rich varieties of cultures, languages, music and food. This same pride is exhibited in preserving their equally diverse environments. By ratifying the Convention, all Caribbean states have affirmed on an international platform, their pledge to combat land degradation and drought through the development and implementation of National Action Plans, recognizing the growing problem in the region as one that must be addressed before the damage becomes irreparable. The Convention stresses the integral role that civil society must play in the development and implementation of the Action Plans. Yet the solutions cannot just remain as script on paper. Words must be supported by assertive action. And the time for action is now.

CES Has a New Website!

Take a look at the newly re-designed, re-vamped, and re-beautified website of the Center for Environmental Studies at www.williams.edu/ces

On the new site you can read about the history of CES, find out about upcoming events, read student papers and back issues of Field Notes, and much more! Wonder who's speaking at Log Lunch this week? Want to know which faculty members are involved with CES? Thinking about visiting the Hopkins Forest? This is the place to look.

The site also links to important sites such as the College course catalogue and the Williams-Mystic Program website.

Any feedback on the website can be sent to RLouis@williams.edu. Please let us know what you think!

The Center For Environmental Studies At Williams College



[Enter the CES website](http://www.williams.edu/ces)

Visiting Professor of Global Environmental Studies and the Humanities

The Center for Environmental Studies at Williams College is seeking applications and nominations for the Class of 1946 Visiting Professor of International Environmental Studies with an emphasis on the humanities for the fall 2003 semester or the spring 2004 semester. We seek to recruit a distinguished scholar or experienced practitioner in a discipline of the humanities, including but not limited to English, literature, art, history, religion or philosophy, to teach a 12-week course concerned with global environmental concerns. The course content will be flexible and will reflect the interest and experience of the Class of 1946 Visiting Professor. We strongly encourage applicants with extensive experience outside the United States.

In addition, the Class of 1946 Visiting Professor will participate in the intellectual life of the College by giving several public lectures and guest lectures in courses in various departments, as well as interacting informally with students and faculty during the semester.

Qualifications: Candidates should have a Ph.D. or equivalent accomplishment in letters or arts and at least ten years of experience or work on international environmental matters outside of the United States, either globally or in a specific country or region. Applicants with an equivalent combination of education and experience will also be considered. Fluency in spoken and written English is required for this position. Salary will be commensurate with experience.

Applications will be considered starting on December 16, 2002 and will continue to be reviewed until the position is filled. Send nominations or curriculum vitae with list of three references to:

Sarah Gardner, Assistant Director
Center for Environmental Studies
Williams College
P.O. Box 632
Williamstown, MA 01267

Inquiries may be addressed by e-mail to: sgardner@williams.edu

Williams College is a coeducational liberal arts institution, offering undergraduate education to its 2,000 students. The college has built its reputation on a long tradition of outstanding teaching and scholarship and on the academic excellence of its students. Among the opportunities that Williams offers its students and approximately 260 faculty members are interdisciplinary programs and centers, including the Multicultural Center, the Oakley Center for the Humanities and Social Sciences, and the Center for Environmental Studies as well as extensive library and museum collections, a center for information technology, and well-equipped laboratories. See also Williams College website: <http://www.williams.edu>

An Affirmative Action/Equal Opportunity Employer, Williams College especially welcomes and encourages applications from women and minority candidates

Alumni Corner

Where, oh, where have our alumni gone? We love to print alumni notes in *Field Notes* to let the CES community know where our former students are and what they are doing. But we can't print them if you don't send them! Now you can submit alumni notes directly from our website at www.williams.edu/ces/resources/alumninotes.htm

We invite alumni to also submit articles for publication in *Field Notes*. If you are working on a project or research that may interest other alumni, write up a short article and send it to us. You may also write about any environmental issue of interest to you.

Alumni also have the opportunity to teach Winter Study courses either on campus or off. While CES is authorized to hire only a limited number of adjunct instructors to teach each January, we are especially happy to consider proposals submitted by alumni. Winter Study runs for four weeks each January, and instructors must be available for the entire term. The College offers a stipend to all instructors. If you have an idea for a winter study course, please contact Hank Art, CES director, at Henry.W.Art@williams.edu to discuss your proposal.

Please look on the new CES website for information on how to subscribe to any of the CES listservers. We have lists used to disseminate environmental employment opportunities, as well as a list for alumni discussion.

Finally, we hope you'll stop by to see us anytime you pass through Williamstown.



Scott Lewis, Director of the Williams College Outing Club,
inspects trail conditions at the Hopkins Memorial Forest

The Center for Environmental Studies

Kellogg House
Williams College
P.O. Box 632
Williamstown, MA 01267
<http://www.williams.edu/ces>

Non-Profit Org
US Postage PAID
Williamstown, MA
Permit #3



FIELD NOTES, Fall 2001-Spring 2002

A PUBLICATION OF THE CENTER FOR ENVIRONMENTAL STUDIES

The Williams program in environmental studies allows students to focus some of their elective courses in an integrated, interdisciplinary study of the environment—that is, the natural world, both in itself and as it has been modified by human activity. The program provides students with the tools and ideas needed to engage constructively with the environmental and social issues brought about by changes in population, economic activity, and values.

Field Notes is printed on paper containing 30% post-consumer waste.