Winter 2004
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CES holiday dinner

Kellogg House
Boiling sap at Maplefest
Amphibian foray in Hopkins Forest
Connections to the local and regional environment were major design components in the establishment of the CES 36 years ago. These connections continue to be essential to the curricular and non-curricular mission of the Environmental Studies Program, as is abundantly illustrated by student and faculty research projects of this past summer and courses this fall. The updated Open Space and Recreation Plan for Williamstown, environmental/economic analysis of the impact of the arts in North Adams, a program for community preservation of and access to the historical images in private citizens’ collections, and a study of potential community development of Pittsfield’s West Side neighborhood were projects accomplished by student-faculty collaborations during the summer. The connections to the region theme continued independently during the First Days orientation program for incoming students through an Chaplin’s Office sponsored experience that asked the geographically existential question “Where Am I?.” This program was facilitated by Brian Burke ’02 who has returned to Williams for the academic year as an Americorps/VISTA Volunteer in our Office of Community Services.

Kai Lee has incorporated a community service/education component in ENVI 101 – Humans in the Landscape, thereby truly giving our students an early experience of interacting with and experiencing the regional environment. Sarah Gardner, who coincidently is the Chair of the Williamstown Planning Board and town representative to the Berkshire Regional Planning Commission, and I are supervising three exciting local/regional projects as the centerpieces of ENVI 302 – Environmental Planning Workshop. Teams of students are engaged in projects ranging across central Berkshire County and Southwestern Vermont. In Pittsfield they are investigating alternative sites for a community garden in the West Side neighborhood. In Williamstown the abandoned Station Mill (a.k.a. Photech) on Cole Avenue awaits at least partial demolition following its roof collapsing in a storm this past summer, and is the site of various proposals for development ranging from recreation to commercial to housing, or a combination of all three. The third project involves working with local conservation and recreation organizations to plan possible routes of a potential recreational trail that would connect Pownal, VT to the Station Mill site and to the growing network of bike trails in the Berkshires.

A final newsy note is about the CES connection to the celebration of Williamstown’s 250th Birthday celebration in 2003. Drew Jones, as the resident Hopkins Forest Manager, helped to organize and then in August hosted a day-long Northwest Williamstown neighborhood gathering and picnic at the Forest. Then in September and October the President’s office, the History Department, and CES cosponsored a panel discussion series “Williamstown and Williams College: Our Mutual Heritage.” It was a highly successful opportunity to bring back alumni and have them discuss with various faculty members topics ranging from the settlement of the town, through it economic/environmental phases, to where we are likely to be going in the future.

Cheers,
Hank
Gabriel Filippelli, Associate Professor of Geology, Indiana University at Indianapolis, spoke of The Role of Diffuse Soil Lead and Socio Economic Status in Persistent Lead Poisoning of Urban Youth. He stressed that there is still an alarmingly high number of children in lower-income urban areas with high levels of lead in their blood as a result of poor nutrition, poor home maintenance and there little or no education concerning lead poisoning in these areas.

Neal Scott, Assistant Scientist at The Woods Hole Research Center and class of '82, gave a talk addressing the question, "Can land use change help mitigate rising greenhouse gas emissions in New Zealand?" Although New Zealand emits less than half the amount of CO₂ than the U.S., it has high levels of other greenhouse gases such as methane--and no wonder for a country with more sheep than people! New Zealand has been working hard to mitigate their gas emissions because of their reliance on agriculture and commitment to environmental sustainability. Scott’s work has been to look closely at the country’s land use policies and devise methods for offsetting the negative impacts of these emissions and the threat of global climate change.

Sam Arons ’04, spent his summer working on A Visual Impact Study of the Berlin Wind Project. The wind project would include 7-9 wind turbines built on Berlin Pass, and the turbines would provide 190% of Williams’ energy. He produced 60 simulated images from 45 sites, including Williamstown, Mt. Greylock and Grafton Ponds, NY.

Jon Langer ’04, did a summer research project studying Silver in the Ruby Mountains: The Settlement, Exploitation and Abandonment of Irwin, CO. Irwin, CO is an abandoned mining town, and is recognized as a good model for studying sustainability, or lack thereof.

Will Wetzel ’06, did a summer research project concerning Alpine Angiosperm Communities in the Purcell Range of British Columbia. He was interested in the effect of hiking trails on the diverse angiosperm communities in the Purcell Range.

Alex Grashkina ’04, spent her summer working for the Movement of People Without Land in Brazil, a country known for its great disparity of wealth. Alex shared her experience of visiting settlements on privately owned land that is essentially too big to manage. She discussed the media’s perspective on the issue, the government’s role, and the debate over whether these settlements should be considered efficient use of a limited resource or trespassing.

Shawn Powers ’04, spent his summer as at the Worldwatch Institute interning for Sandra Postel, one of the leading experts in freshwater issues. Today, over a billion people do not have access to clean water. In addition to causes of water shortages and contamination, Shawn addressed the critical need to commit political and financial resources, develop policies that target poor and rural areas, reform water pricing, and cut back on excessive and wasteful lifestyles.

Brian Burke ’02, a volunteer for Americore Vista, led a discussion concerning personal engagement. He stressed that learning from and engaging with people and communities (your own as well as foreign) is just as useful and important as learning in the conventional, classroom setting.

Anand Gnanadesikan of the Geophysical Fluid Dynamics Lab in Princeton gave a talk entitled, "Modeling Global Warming," in which he shared the challenges that arise in using simulations to represent and predict global warming. Although obviously important tools for guiding policy, models also have their limitations, and Anand spoke candidly about the problems still plaguing scientists, such as the complicated fluxes between atmosphere and ocean, the variable effects of cloud cover, and the ambiguity of ocean eddies. Even
with revamped models and a $700 million yearly computer budget, it is still unclear exactly where warming is going to occur and how drastic it is likely to be.

November 14
Tim Gray, from the Housatonic River Initiative, spoke on the PCB contamination (primarily by GE) in the Housatonic River. His talk presented eye-opening facts and raised the awareness level of PCBs in surrounding communities. In the Pittsfield area, many homes were found to be contaminated, humans have high levels of PCBs in their blood, and fish, ducks and minks in the Housatonic are malformed, inedible, or have died out because of the contamination.

November 11
In the second of a two-part series about contamination in the Housatonic River, Andrew Silfer, Senior Technical Manager of General Electric, shared a slightly different perspective on the efforts to mitigate PCB contamination. He described GE’s role in the clean-up, which so far has cost over $200 million, with a proposed $42 million for another section of the river in the works. The talk was received by an unusually responsive audience, and many people stayed behind to ask questions on topics ranging from employee safety to community action.

Campus Environmental Advisory Committee

With winter rapidly approaching and the college’s heating plant producing steam for most campus buildings, a small energy systems investment is helping to reap big rewards. Last year, the college invested in a co-generation upgrade to the heating plant. By directing pressurized steam through turbines at the heating plant, the co-generation system is projected to produce approximately 13% of annual campus electricity needs from the same steam that is used to heat campus buildings. The best part is that this project is a win-win situation. The college benefits both financially and environmentally thanks to the innovative folks at Building & Grounds who identified the potential, to the senior staff who encouraged the project, and to the Trustees who approved this cost-effective upgrade.

With the positive example of the co-generation facility in operation, what other potential projects can provide both environmental improvements and energy savings on campus? The most prominent place to look is the approximately $150 million earmarked for new capital projects in the recently launched $400 million “Climb Far” campaign. With these projects, and the over $13.4 million spent in FY2003 on renovation and repair of existing buildings, the college has an unprecedented opportunity to make further investments in other exciting eco-friendly and economically rewarding green building components. The first step was made earlier this year when the college made a commitment to invest an additional $1 million in cost-effective sustainable design features for the new $36 million student center. A similar green building analysis and commitment have yet to be made for other building projects or for any renovation projects.

In order to help support energy/environmental savings in these campus building projects, CEAC has been researching green building policies at peer institutions. Soon, CEAC will present draft green building policy guidelines to the administration. Our objective is to stimulate dialogue about including more eco-friendly and cost-effective approaches to the myriad of building projects across campus.

by Mark Orlowski ’04, CEAC Chair
Teacup in hand, each Tuesday evening at nine o’clock I grab my usual seat on red couch of the CES living room and have the pleasure of meeting with the caring and committed group that is Greensense, Williams’ all-student environmental action force. Composed of a committed core of invaluable veteran seniors, the sophomore girl “powerhouse”, and an impressive representation of dedicated, amazing frosh, this year’s crew has been tackling a broad range of topics in the past few months, researching everything from emissions standards to sustainable design principles to organic chocolate to “green” cleaning products and paint. Our fall semester efforts have been categorized by communication and cooperation. The majority of our initiatives have involved collaborating with various Williams staff—from custodians, architects, and Environmental Studies profs.

We have been working with cooperatively with Bob Volpi, head of Dining Service, to address the broad issue of consumption, specifically, compost, supporting organic and local farmers, and reducing waste in the form of packaging. The progress shows—an assortment of local apples, pears, and vegetables and local milk have appeared in the dining halls, and convenient (not to mention trendy) canvas bags are available as an alternative to their disposable paper counterpart at Grab and Go, our main take out facility. Several Greensense members have been working to expand the offerings of the Eco Café (be on the look out for new eco-friendly cuisine.)

Together with the Campus Environmental Advisory Committee, Greensense has been meeting with Buildings and Grounds’ Associate Vice President for Facilities and Auxiliary Services, Irene Addison, Manager of Custodial Services/Special Functions, Bea Miles, and has been in contact with Manager of Environmental Health and Safety, Joe Moran on topics of green building and recycling.

We’ve also been visiting first year entries and are looking forward to continuing our educational campaign throughout winter study.

This is one of our main objectives for the immediate future following our usual goal of informing the student body of the eco-friendly steps that have been taken by the college and how to make a difference at a basic, grass roots level with recycling, composting, energy consumption, and food choices using in a series of “Make a Difference” posters, a weekly newsletter for the tables in the Eco Café, and an intense effort with Dining Services centering around a waste reduction competition.

Keep your eyes posted for announcements on these projects and for regular updates join our listserv by sending a blank email to greensense-on@wso.williams.edu. All interested students are welcome to join us at any time; we always meet on Tuesday evenings at nine o’clock in the living room of Kellogg House. Our structure revolves around members purposing projects; so if you are interested, we would love to see you, just bring your vision and your CUPPS cup!

by Erin Blanchard ’06
In the Berkshires, every season moves by too quickly, with the exception of winter. After planting as many vegetables and flowers as possible last spring, most gardeners eagerly left the campus for summer adventures. This summer, Jonathan transplanted himself to the Brooklyn Botanical Gardens, where he interned in their Children’s Garden, while Vivian left her roots in the soil on campus in the Forest Garden.

The garden explodes every summer, but usually few are around to see it, and even fewer to give it the care, especially weeding, it requires. This usually means that we fight a battle during the school year just to break even against the weeds that take over while no one is on campus—but this year was very different. With long summer days and occasional work parties on the weekends, many beds were not only maintained but reclaimed from a long fallow period, with the help of a dozen friends.

Early in the summer, Dave Cooperman ’02 and Kristen Wilmer ’04 converted a many-year-old “no man’s land” of weeds into a bed of three sisters (corn, beans, and squash), whose majestic forest of stalks yielded striking beauty up until recently.

Not long after, Leon Webster ’04 tackled the sunny hill next to Seeley, and Peter Holland ’05 mastered the rampant herb bed. On a face of the sunny hill, Ken Brown ’05 prepared and sowed red and white potatoes, which were dug up in the fall and which we are still enjoying in our weekly farmer’s scrambles. In the herb bed, old favorites (mint, thyme, tarragon) were joined by new varieties, including pineapple and purple sage, lavender, parsley, rosemary, and marjoram. A spilled packet of basil seeds also produced an explosion of the herb throughout the garden.

Needless to say, much pesto was made this summer, but despite the basil takeover, we had many other solid harvests as well. Currants and blackberries were boiled into jams, garlic scapes savored once chopped and cooked, and handfuls of wild strawberries eaten sweet right off the plant. As summer mellowed into fall, pumpkins plumped and colored, squash fruits swelled from sprawling vines, and the garden held its breath to reunite with returning friends and entice new ones.

Our first work party had over ten gardeners, and parties after that averaged about eight workers—a sweet success beyond our hopes, and a great start to a great year. We continue to make breakfasts every work party, passing around bowls of raspberries, a heaping plate of farmer’s scramble with Jonathan and Leon’s special garden ingredient (Jalapeños!), and Clarksburg goodies.

After breakfast, we brought the garden to life. Alison Koppe and Lauren Moscoe, two of our biggest freshman enthusiasts, continued the painstaking work on the top of the sunny hill, blazing new paths through the currants. Tamanna Rahman’s ’07 special red tulips were lain to sleep under the ground with other early-spring bloomers that we won’t list, in hopes for a big surprise this spring. Michael Gallagher ’06 spent quality time...
in the compost heap, with Erin Blanchard '06 on wheelbarrow duty. Leon and Marty Mudd '04 did Herculean work restacking the sprawling thicket into a neat, ready-to-decompose pile.

The highlight of the fall was perhaps the pasta cookoff, a friendly competition to produce the best herbivore or omnivore pasta dish, using some garden produce and a budget for groceries. Over twenty people crowded into the CES dining room to help themselves to the bounty. Said Lucy Thiboutot '05, it was a “fabulous, multi-class, all-inclusive, all-delicious evening.”

Overall, a season of great harvests makes it impossible to choose a favorite. Certainly the veggie patch devoted to snow peas and green beans sowed last spring bore well -- Jonathan loves snow peas! The red currant tomatoes, which produced literally hundreds of tiny juicy fruits also lured people, while the larger Gilberties, Brandywines, and Big Boys gave us a few ripe treasures and lots of greens. Our cucumbers, though mysteriously yellow, were one of the most refreshing, juiciest vegetables imaginable – and the sweetest part, we discovered, was its seeds.

We love our garden, we've loved this season, but most of all we love our group. What other people voluntarily wake at 9:00 on a weekend morning to play with dirt? This winter we look forward to planning for spring over warm breakfasts, and sign- and trellis-building from the many stakes we've collected from across campus. As always, no experience or gardening knowledge is necessary, so come prepared to get your hands dirty. We meet to cook and eat breakfast at 9:00 a.m., and start work at 10:00 a.m. on Saturdays or Sunday mornings. Email one of us with questions or to find out when our next meeting is. We hope to see you!

by Jonathan Landsman '05 and Vivian Schoung '04
throughout the United States and Canada whose goals are to learn more about the biology, seasonal movements and population status of this, one of North America's smallest owls. We hope that, with a few more years of operation, HMF will make valuable contributions toward the field of owl biology.

In other Hopkins Forest activities, Williams students were busy this fall teaching fourth graders from North Adams the ways of the woods. This series of ten experiential programs, part of a collaboration with MassMoca's Kidspace, was focused on showing students ways in which nature can be integrated into art. It was made possible through a grant from the Hughes Foundation.

In August—with organizational help from its neighbors—HMF hosted a community picnic as part of a summer long series of local events to commemorate Williamstown's 250th anniversary. The event, which drew about 450 participants, featured displays of arts, crafts and literary works from around the neighborhood, a string band, kids activities, pork bar-b-cue, and the planting of a commemorative maple tree at the head of Bulkley Street.

This fall saw the long awaited installation of all-weather interpretive panels along the Lower Loop to educate forest visitors as to the natural and historical features of the forest. These twelve signs, designed by Alicia Arevalos '05, now stand in front of various natural and cultural features along the trail—including the Moon Barn, Sugarbush, Canopy Walkway, and Forest Service plantation.

The enlargement of the main weather station field begun in '03 was oft-delayed by the wet and volatile summer and fall weather that beset the region. This job—which will result in a three acre meadow to be used for research, demonstration and class activities—is nearing completion. Another development involving the weather station was the installation of a monitoring well, comprised of three vertical shafts outfitted with electronic probes to track groundwater movement. This latest update will allow Geosciences faculty and students to model groundwater flow—the last link in the Forest’s hydrological monitoring program.

In related news, Jason Racela of Adams joined the team as the new Environmental Lab Technical Assistant; in this capacity, ‘Jay’ will be busy keeping the weather and stream gauging equipment functioning, running chemical analyses of rainfall and stream samples, and keeping the various databases up-to-date. We’re excited to have someone of Jay’s high caliber aboard, and we’re eager to see how he copes with his first winter in the field!

by Drew Jones, HMF Manager
Having done their homework (a Wendell Berry article on local economy and a chapter on natural capitalism), the Class of 1960’s scholars walked into Griffin 6 for the first lecture of the semester, ready to meet their professor. Eric Zencey is certainly a professor in every sense of the word because despite teaching at Empire State College, he also lives for intellectual pursuits, venturing into the unknown, and making connections across disciplines.

It might be strange to imagine a scholar of history and keen observer of nature, looking at the world in terms of energy flow and flux, but in his talk entitled “Entropy and all that,” Zencey uses his knowledge of language and metaphor to give an invigorating perspective on an old topic.

According to Zencey, traditional economics “swallows the environment” by confusing virtual wealth with real wealth. Virtual wealth, which he defines as money, is “immortal” because it can multiply without limit. Real wealth, which he defines as the things people need to live, has limits. By confusing virtual wealth and real wealth, economics skews our view of what real things are worth and ignores the hidden costs associated with certain activities and behaviors. In particular, it devalues precious natural resources like clean air, and ignores outputs such as pollution. If he could rewrite introductory economics textbooks, Zencey says he would change the famous circular flow model to include smoke spewing from the chimney of the “household”.

In the discussion following Zencey’s lecture, each scholar was asked to introduce him or herself, and describe what watershed he or she lives in. Then the seminar proceeded to look at solutions to the “problem” of traditional economics, starting with an investigation of Berry’s vision of a local economy and ending with a debate over some practical examples of sustainable business ventures.

Sharing a perspective derived from his unique background of history, writing, and natural observation, Professor Zencey exposed the scholars to what he calls “thermodynamically enlightened economics,” and taught them all to see the world a bit differently.

Doug Scott, Policy Director of Campaign for America’s Wilderness, was the second Environmental Studies Class of 1960s Scholar speaker of the semester. As a former lobbyist for such organizations as The Wilderness Society, Sierra Club, and Alaska Coalition, Scott is intimately and personally knowledgeable about the history of wilderness preservation in the United States. In his experience, success has come about through the intersection of politics, policy, and values.

According to Scott, “valuing wilderness is something that came slowly in human culture and happened primarily on this continent.” Historically, wilderness was considered to be wild, fearful land needing to be tamed by human cultivation and civilization. Slowly, however, wilderness came to be valued positively as something “fundamental to americansm.” Although the president of the United States and the president of the Sierra Club are less than likely to be found together today, standing on the rim of the Yosemite Valley as President Roosevelt and John Muir once did, they both realized the importance of wilderness for the national consciousness.

In 1935, deciding that wilderness represented a serious human need, a few visionaries including Aldo Leopold, Bob Marshall and others launched the Wilderness Society. In their platform they describe how, “the wilderness has come to us from the eternity of the past and…we have the boldness to project eternity into the future.” However as of 1940, there was still no coherent definition of wilderness, and certainly no formal system of protection under the law. After a famous five-year stand over Dinosaur Monument, and the less well-known 8-year battle behind the scenes and in the chambers of Congress, the Wilderness Act was adopted in 1964.

Today, The Wilderness Act presents a clear definition of what constitutes wilderness, as well as a concrete and unambiguous set of policies for subsequent protection and management of wilderness lands. Currently, 4.7% of the land in all the U.S. is designated as wilderness, which translates into 106 million acres managed by 2 different departments and 4 different federal agencies. Such a feat should not be underestimated, for it took the dedication and vision of many individuals over the course of many years.

In the discussion following his lecture, Scott told the scholars some interesting anecdotes about being in Washington on the brink of such monumental legislation. He conveyed the excitement, as well as the challenges of working as a lobbyist during this time and also shared some of his present feelings on lobbying. Although for Scott, Washington has lost some of its allure, wilderness preservation remains an important battlefield for environmental activism.

by Emily Russell-Roy ‘06
This summer I returned home to rural upstate New York where I interned at the Ostego County Conservation Association (OCCA), a county-wide environmental advocacy org. The area residents consider the area’s natural treasure to be the nine-mile glaciated Ostego Lake. The water quality of the lake is an important concern, not only for area residents who draw their drinking water from the lake, but also because it is the headwater of the Susquehanna River, which flows through NY, PA, MD and into the Chesapeake Bay.

I was able to delve into local environmental issues from recycling to sanitation law. I helped lobby state government officials about the health and environmental perils of trash burning and wrote letters to state representatives urging them to adopt legislation about aquatic invasive species education, among other things. My biggest lesson from the internship was what a crossroad OCCA is for environmental policies and issues from all levels. The real strength in conservation comes from digging to the heart of an issue and using that knowledge to empower citizens to love and protect their environment. Many thanks to the John H. Ohly ’33 Memorial Fund for supporting this internship.

Alexandra Gashkina ’04

The movement MST (Movimento Sem Terra or Movement without Land) is a Brazilian social movement that organizes landless, extremely poor people into large groups, to occupy the land of wealthy Brazilians. In the past, one of MST’s justifications about misappropriating private owner’s land was an environmental one: land remained unused, suffered the damages of unsuitable crops, or was used to plant the same crop year after year. MST emphasized the importance of the physical and emotional connection of workers with their land, a connection that wealthy land-owners failed to develop.

Yet, while MST is playing Robin Hood and meeting with the Brazilian president, Luis Ignacio da Silva-Lula, many middle-class citizens believe that some of the occupied land is just getting sold back to the wealthy. Thus, while some people in Brazil are perhaps rising from poverty and rich landowners do not employ masked men with guns to guard their property, land remains a means of exchange and a resource, whose fate will depend both on the attitude of MST as well as on the decision of the government in the long run. Supported by the A.W. Mellon Fund for CES.

Sarah Meserve ’05

Quebec Labrador Foundation is a non-profit organization also called the Atlantic Center for the Environment. It is a bi-national organization with offices in Ipswich, MA and Montreal, Quebec. I spent 10 weeks working out of the Ipswich office as the Environmental Education intern, with support from the D.B. Miller Fund for CES. QLF supports a number of educational programs, two of which became my major responsibility. I undertook one of the Discovery Communities projects and composed a 21-page review of 21 different environmental education curricula that were for similar age groups and had a similar focus and teaching technique. I also created a workbook for middle school students that would not only allow students to calculate their CO₂ emissions but also teaches them through calculations how much pollution could be avoided by riding bicycles or walking.

Bob Quay ’04

For six weeks during the summer of 2003, I interned at Downtown, Inc., an organization dedicated to promoting economic development in Pittsfield, MA. During my time at Downtown, Inc., I focused on two big projects – compiling an inventory of downtown businesses and studying downtown parking. Downtown, Inc. was interested in compiling an inventory of downtown businesses so that the organization would have a sense of how many businesses there were in the downtown area, what types of businesses they were, and how many people they employed. This information would be helpful in efforts to market the downtown area to potential shoppers as well as potential business
tenants. Downtown Inc. was interested in studying downtown parking because the area’s lack of parking for employees and shoppers is a frequently-cited reason for downtown businesses closing or relocating to other parts of the city.

Sara Gersen ‘05

This summer, I worked for Sarasota County Environmental Services, devoting most of my time to the Sea Turtle Protection Program. This program is responsible for almost every aspect of sea turtle code enforcement, monitoring, and education within Sarasota County. The first task I was assigned was to help monitor sea turtle activity. Twice a week, I would walk Zone 6 of Manasota Key’s beaches, noting any hatchings and predation that had occurred on the marked nests. These records are used to document trends in the county’s sea turtle population and to spot manageable disturbances that are affecting the nests. Through all of the work, I benefited from working with genuinely concerned, energetic people who were really inspiring. Many thanks to the John H. Ohly ‘33 Memorial Fund for supporting this internship.

Katie Stevens ‘05

The debate over how to most appropriately manage land in the West is a passionate one, historically pitting those who call themselves environmentalists against those who call themselves ranchers. Succinctly put, environmentalists often argue that irresponsible ranching practices make unhealthy landscapes with decreased biodiversity of plants and animals – the worst cases leading to irreversible damage to the land. Ranchers, on the other hand, consider themselves producers of a necessary commodity and protectors of the open space in the west.

If I were to write only one thing I have learned from ranchers it is that they possess a deep, often spiritual love of the land and the animals with which they work. I have met ranchers who call themselves stewards of the land and consider themselves environmentalists, ranchers who promote the growth and health of their land by protecting riparian areas, encouraging native plant growth and striving for wildlife diversity. Supported by the A.W. Mellon Fund for CES.

Maura Commito ‘04

With support from the D.B. Miller Fund for CES, I worked as an intern for the Williamstown Rural Lands Foundation and had the opportunity of working, along with Jocelyn Gardner ‘05, on a project updating the Williamstown Open Space and Recreation Plan. This project involved the analysis of the community’s current recreational needs and the current requirements for the preservation of open space lands. Williamstown’s history, regional setting, geology, vegetation and wildlife, water resources, development patterns, infrastructure, and unique environmental aspects were all researched and included to provide a natural history description and context. The main purpose of an Open Space and Recreation Plan is to examine the town’s recreation potential, community desires, and to promote discussion of open space preservation as an aspect of the town development process.

Shawn Powers ‘04

As an intern at Worldwatch, I had the privilege of assisting in the research behind the book, State of the World 2004, which will be published in about two dozen languages and read by an impressive cross-section of society: students and educators, policymakers and NGO leaders, scientists and the general public.

Most of my work centered on the over-consumption of water. Even as the industrialized countries have engineered oasis cities, boasting lush lawns and swimming pools in arid climates, over one billion people worldwide lack access to a safe source of water. My time was divided between digesting periodicals and reports with relevance to the topic. Throughout the summer, I felt very well integrated into the staff and work of Worldwatch, which was a wonderful experience in its own right. Many thanks to the John H. Ohly ‘33 Memorial Fund for supporting this internship.

Elise Leduc ‘06

This summer, with the help of CES and the W. Conant Brewer ’18 Fund, I had the opportunity to work for the New England Aquarium as a volunteer intern and educator at the Exploration Center in Newport, RI. The Exploration Center is a small satellite of the New England Aquarium in Boston and
specializes in hands on learning for the public, especially children.

As an educator, I played an important role in interpreting the exhibits for visitors and answering any marine science and biology questions they had. In addition, I was also able to work with the head aquarist on a number of projects, such as feeding and caring of the animals, and collecting new fish for the exhibits. This was an interesting twist to the job to be able to get outside and do a more “hands on” type of project.

Melanie Malone ‘05

This summer I had the pleasure of working for Glen Helen Ecology Institute, a nature preserve expanding over one thousand acres. Glen Helen is located in Yellow Springs, Ohio, a village of less than four thousand people. The nature preserve is home to a wide variety of plants and animals and has much beautiful scenery. My official title was “Glen Helen Trailside Manager,” because my largest responsibility was running and maintaining the small trailside museum in the nature preserve. In the museum, I received many visits from hikers, outdoor education groups, and students from Antioch University. My work was centered on planning activities for various groups and doing my own creative projects for the museum. The creative projects included painting small stools around different learning stations and making my own visitor display comprised of pictures of groups that had visited the museum. I can honestly say that I enjoyed my summer job and had a lot of fun working with various groups and doing my own creative projects. Many thanks to the John H. Ohly ’33 Memorial Fund for supporting this internship.

Mark Orlowski ’04

My CES Summer Research Project, supported by the CES Student Research Fund, explored how colleges and universities use their investments to influence corporate environmental and social policies. Most of the 14 colleges and universities selected for my research are leaders in various aspects of shareholder advocacy and investment screening. By casting proxy votes endorsing shareholder resolutions sponsored by foundations, religious institutions and public pension funds, schools have been able to promote more environmentally and socially supportive corporate policies. In each case, student activism has been a crucial influence in generating social and environmental awareness concerning college endowment policies.

One outgrowth of my project was to organize and moderate a panel on college endowments at the Green Mountain Summit on Investor Responsibility in September, 2003. This provided an unprecedented forum for an exchange of ideas among students, alumni, administrators and SRI executives.

Elise Henson ’06

The Finca Loma Linda Internship Program is based in southern Costa Rica. Through this program, I lived for ten weeks with a local family in rural Agua Buena and participated in various activities, such as reforestation projects, teaching in local schools, and working with the local coffee cooperative, while improving my Spanish, learning about the culture, and getting to know the community. This internship program is promoted as focused on “agroecology,” but is not actually that specific.

The reforestation projects included information gathering for the cooperative’s large-scale proposal and working directly on a thesis project on reforestation in Costa Rica. Another of my other main projects was teaching English and agroecology in two local elementary schools. Other projects that I worked on dealt with the local coffee cooperative and the issues that they are dealing with in the face of the coffee market crisis and the economic stress into which it has thrown the region. Many thanks to the Bernard M. Schuyler Memorial Internship Fund for supporting this internship.

Vivian Schoung ’04

Located in Pittsfield, MA., Berkshire Housing specializes in helping communities obtain and utilize federal funds from the Massachusetts Department of Housing and Community Development, and strives to increase and improve housing opportunities by undertaking a wide array of development projects. In the Community Development Office where I worked this summer, these goals are achieved by working with private developers, non-profit organizations and municipalities on affordable housing projects, downtown revitalization and housing rehabilitation,
as well as constructing senior centers and handicap-accessible structures.

I helped the Community Development Office in a variety of ways, most significantly by preparing grant applications for submission. I felt most involved with the Community Development Block Grant (CDBG) Application, which requested aid for housing rehabilitation and the construction of new senior centers. This internship allowed me to experience the difficulties and benefits of urban planning, as well as the complicated steps to ensure the success of a city.

Meredith Jones ‘04

Loggerhead sea turtles (Caretta caretta) have recently been given the status of endangered species on the Gulf Coast of Florida. Leatherback sea turtles (Dermochelys coriacea) have only 30 years to survive according to marine researchers speaking at the annual meeting of the American Association for the Advancement of Science in Denver. These staggering facts make loggerhead and leatherback nests on Dog Island especially valuable.

Sea turtle monitoring involves waking up very early every morning to walk the beach, checking for turtle crawls. The three possible types of sea turtles nest on Dog Island, all easily distinguishable by their crawl pattern. If a crawl is found, the first thing to check for is the body pit, an area dug out by the mother sea turtle. The permit holder is then allowed to dig into the nest to verify the presence of eggs. If eggs are found, the new nest is marked, measured, and entered into the GPS. Many thanks to the W.C. Brewer Internship Fund.

Carlos Silva ‘04

As an intern with the EPA’s Climate Protection Partnership Division (CPPD) of the Office of Air and Radiation, I gained extraordinary insight into how cooperative relationships between industry and a government regulatory agency are constructed and how these relationships can be made global through collaboration with equivalent regulatory agencies in other nations. Throughout the summer I served as a research assistant supporting a partnership the CPPD has developed with car manufacturers and car air-conditioning system manufacturers.

My primary summer project was to gather into a searchable database research results on the fuel efficiency, cooling performance, environmental impact, and safety risk of two alternative refrigerants currently under consideration as replacements for the current refrigerant in car air conditioners. I also helped research existing literature to determine the potential dangers associated with a possible refrigerant leak into the passenger compartment of a car. My internship also provided me with the opportunity to attend a number of lectures, demonstrations of new, environmentally intelligent technology, and environmental briefings on Capitol Hill. Many thanks to the Bernard M. Schuyler Memorial Internship Fund for supporting this internship.

Lal Hahn ‘04

This summer I was privileged to work in the Joseph P. Kennedy laboratory for developmental neurobiology, located at the Charlestown campus of Massachusetts General Hospital. The principle investigator, Dr. Pradeep Bhide, graciously provided the space, technical expertise, and materials to initiate my independent project, supported by a grant from the Williams Center for Environmental Studies. Over the course of my pre-medical studies at Williams, I have become interested in the relationship between the environment and human health, and paraquat has been implicated as a neurotoxin potentially involved in the etiology of Parkinson’s disease.

My project was designed to explore the effects of the industrial herbicide paraquat on neurodevelopment, using mice as a model system. At the end of 10 weeks, preliminary results indicated that paraquat was affecting the dopaminergic system of developing animals. Many thanks to the John H. Ohly ‘33 Memorial Fund for supporting this internship.

Jonathan Langer ‘04

In the summer of 1879, two hundred prospectors searching for silver ore found their way into the previously uninhabited Elk Mountains in Gunnison County, Colorado. By August, 1880, there were at least 3,000 hopeful prospectors and merchants hoping to get their hands on profits from the bounty of silver. The good times did not last for
long however. By 1885 the town was nearly deserted and only a few mines saw any activity.

While the miners had almost all disappeared by the beginning of the 20th century, the mines remain a visible scar on the land. Throughout the surrounding hillsides lie deep shafts, blown with explosives and boarded up generations ago. With each shaft comes its requisite tailings pile, below which lies deadly heavy metal pollution from the exposed ore. What occurred in under a decade with little thought beyond immediate profit will persist for centuries. It teaches us that the consequences of our unchecked exploitation of the land will outlast the profits that were its cause. Supported by the A.W. Mellon Fund for CES.

Anna Brittain ‘04

I spent this summer in Boston researching public perceptions and knowledge about invasive species. There are over 50,000 non-indigenous species living in the U.S. While the first non-native species were transported to the United States some four centuries ago, many members of the public are as of yet unaware of their presence and potentially harmful effects once established in a foreign ecosystem.

My research advisor was Dr. James Carlton, the Director of the Williams-Mystic program, and a leading bioinvasive species specialist. Together we chose six invasive species, two terrestrial, two freshwater, and two marine for me to study. Beyond researching these specific species I attempted to interview various members of the public who had some stake in the impacts of invasive species. I also developed a survey which garnered some twenty responses. I found that unless a species has an economic or human health impact it is unlikely to gain public attention. Supported by the A.W. Mellon Fund for CES.

Environmental Planning Workshop

A core course for advanced Environmental Studies concentrators co-taught by Sarah Gardner and Hank Art, the Environmental Planning Workshop (Envi 302), offers students hands-on experience addressing current issues. Students in the class form teams to serve as consultants for local governments and non-profit organizations working on actual environmental planning problems. Envi 302 uses the community as a classroom, and the arrangement is mutually beneficial. This fall, student teams worked to establish a community garden in Pittsfield’s impoverished West Side, plan a bike path from Williamstown to North Pownal, Vermont, and design a redevelopment plan for an abandoned industrial site.

In addition to experiencing the challenges of group work and the rewards of engaging with people in a wide range of professions, students in Envi 302 experience the satisfaction of seeing their research appreciated, their reports read, and -- sometimes -- their recommendations implemented! In the past, class projects have been the catalysts that initiated local projects, such as a wind farm, a composting program, and a Superfund site reuse plan. Students in the Environmental Planning Workshop help CES contribute to the local community and spread the gospel of sound environmental planning. Their efforts help to protect the Berkshires and improve the quality of life in our cities and towns.

The Green Team spent the semester immersing themselves in Pittsfield’s poorest neighborhood, the West Side. Neighborhood residents wanted a community garden and the DCD asked the team to find a suitable site. Students pounded the pavement investigating vacant lots, interviewing residents, attending meetings and church services, and even talking with local children about community gardens. In addition to preparing their planning report, the Green Team produced a How-To-Guide for community garden planners. At their public presentation at the West Side community resource center a long-time resident praised their efforts: “they know more about the West Side than I do.”
Playfully designating themselves the Pho-NY team, these students tackled the daunting task of planning a bike path from Williamstown's Photech Mill through Pownal, Vermont to the New York border. This project is an extension of two larger efforts, one to create a north-south bike path through Massachusetts connecting Connecticut and Vermont, and another to create an east-west path from Boston to Albany. The Williamstown-Pownal section would fill a gap in both of these plans. This is a topographically challenging route, marked by steep slopes and the Hoosic River. In addition, the path could partially locate on the abandoned rail line, but the railroad has proven to be a reluctant participant. Finally, the task of coordinating two towns and two states made this project especially complex -- but an excellent pedagogical experience! The Pho-NY team did an admirable job assessing public opinion in Williamstown and Pownal, and plotting three alternate routes. Their report generated a great deal of interest. At their public presentation Representative Botzow was so enthusiastic about the proposal that he asked the team to repeat their talk to the Pownal Board of Selectmen.

The Green Team, Briana Halpin '04, Nicholas Brandon '04, and Tisha Joseph '04 with clients Mark Amuso, Director, Pittsfield Department of Community Development (DCD).

The Photech-New York Bike Path (Pho-NY) team, Kenneth Brown '05, Mark Orlowski '04, and Amanda Stout '04, with client Lauren Stevens of the Berkshire Bike Path Council and Bill Botzow, State Representative from Pownal and Woodford, Vermont.
The Photech Team worked on a redevelopment plan for Williamstown’s Photech Mill, a former textile mill in the historic Station Mill section of town. The mill, which has been vacant since 1989, occupies 10 acres of industrial land in downtown Williamstown. Structurally unsound and expensive to demolish, the site has failed to appeal to any developers and remains a continuing blight that town officials have been unable to redress.

The Photech team conducted a survey of the Station Mill neighborhood, researched affordable housing development options, constructed a sophisticated cost analysis, and designed a mixed-use redevelopment plan for the site. The client, Williamstown Town Manager Peter Fohlin, asked the members of the team to give their presentation to the Board of Selectmen, where it was televised on the local access network. Fohlin commented that this was “the most thorough and thoughtful redevelopment plan I’ve ever seen.”

by Sarah Gardner
Lecturer in Environmental Studies and Assistant Director, CES

The Photech Mill site
Do quality high performance buildings cost a lot more money to build? Not necessarily, according to award-winning sustainable design consultant, Marc Rosenbaum, featured speaker in a recent Town/Gown event series titled, WHAT DOES IT MEAN TO BE GREEN? Rosenbaum challenged public perceptions of the limits of sustainable design in his talk entitled, “Exploding the Myths of Building Green.” Speaking at the Williamstown Elementary School on October 2nd to an audience of Williamstown residents, local school officials and Williams students and faculty, Rosenbaum outlined the ways in which investment in high performance building design pays off through lower operational costs (energy efficiency, building durability, etc.) and improved workplace health and comfort.

“Green” buildings are commonly perceived to be a lot more expensive than conventional buildings and often not worth the extra cost. A recent article in the New York Times entitled “Not Building Green Is Called a Matter of Economics” quotes a Senior Director of Cushman & Wakefield saying that building a green building “can be very costly, and at the end of the day, you get a plaque.”

Rosenbaum challenged this perception, detailing examples of cost-effective ways in which “green” (he prefers the term, “high performance”) building design elements were incorporated in the construction of major buildings throughout the Northeast, many of them located on college and university campuses such as Dartmouth and the Vermont Law School. Rosenbaum was hired by the Williamstown Elementary School through the Massachusetts Technology Collaborative’s (MTC) Green School Grant Program to review energy efficiency issues associated with the new school building. His visit coincided with the installation of photovoltaic panels on the roof of the elementary school on October 3rd, an investment also financed by MTC. The event series ended with a Saturday morning Green Energy Fair, “It’s Getting Easier To Be Green,” which featured hybrid cars, exhibits and tours of the elementary school. The new school building, which opened a year ago, received funding from the Massachusetts Renewable Energy Trust “Green Schools” program to explore and implement many green building features including the installation of a 24kW photovoltaic system. A recent study showed that the school is extremely efficient, using 30% less energy than it would if built only to meet the Massachusetts Building Code. “Green” features include siting to take advantage of solar gain, high efficiency windows and lighting, a heat recovery ventilation system, energy efficient heating and cooling, placement of windows to maximize natural light, and floor coverings made from natural and recycled materials. A recently released comprehensive study of actual costs and financial benefits of “green” buildings puts the Elementary School’s building efficiency in perspective and corroborates Rosenbaum’s claims. The report from the California Governor’s Office, authored by Greg Kats, et al., found that the total financial benefits of green buildings are, (conservatively estimated) in the range of 20% of the cost of construction, about 10 times the 2% additional cost ($3-$5/sq.ft.) associated with building green. With results like these, it makes good financial sense to build green!

by Paula Consolini
Coordinator of Experiential Education

Atrium of the French Wing at the Society for the Protection of New Hampshire Forests, New England’s first LEED building
Jan Goldman-Carter ’76

For the last six years, I have been living in the Twin Cities, along with Mark Carter (’76) and sons Phil (12th grade) and Nat (10th grade), both aspiring to Williams. Since leaving my wetlands counsel job at National Wildlife Federation in 1991, I continue to advise NWF and other national, regional, and state conservation organizations on wetlands policy and legal matters as a part-time solo practice attorney and consultant. I am also an active member of the board of the Minnesota Center for Environmental Advocacy (MCEA).

Greg Weber ’79

A professor of law since 1990 at the McGeorge School of Law, University of the Pacific, in Sacramento, California (www.mcgeorge.edu), I am also the co-founder and director of the new Institute for Sustainable Development at Pacific/McGeorge. It will focus on the development and application of law, policy and conflict-resolution processes for internationally-shared natural resources. Its initial focus will be on the sustainable development of international water and forestry resources, with particular emphasis on multi-national, multi-stakeholder collaborative resource management and conflict resolution. The Institute builds on my work as a water resources lawyer and scholar as well as a mediator of complex public policy collaborative for the Center for Collaborative Policy (www.csus.edu/ccp). In addition, it will allow me to continue my work as a dispute resolution advisor to the Forest Stewardship Council (www.fscoaux.org) an international NGO devoted to the promotion of sustainable forestry practices.

Kin Ma ’89

Hello! I have several items of news. 
1) Birth of my son, Joshua Inwoo Ma, on Oct. 19, 2003, 11:50PM, 6 lbs. 4 oz., 18 in. in Grand Rapids, Michigan. He may potentially join Williams CLASS of 2024.
2) I have begun a Assistant Professor tenure-track position (Aug. 2003) at Grand Valley State University, a regional university in Grand Rapids, Michigan.
3) In late Aug. 2003, our family also moved into a new ranch-style house in Grandville, MI, a southwestern suburb of Grand Rapids.

Lisa West Norwood ’89

I am teaching American literature and environmental literature at Drake University in Des Moines, IA. I am interested in any books other alums would recommend for general education (environment) courses. Recently, I have taught a web course with Refuge, Prodigal Summer, A River Runs Through It, and a few others. Next term I am piloting a new class on slave narratives, in which we will look at plantation paintings and representations of Southern places as well as the expected texts. Research is on the backburner, but I am looking a lot at historic sites and archaeology in connection with literature. John ’87 and I also added Sarah Ware N. to our family on July 4. She joins her big brother, Brook, who is 4. I feel that I am a poster child for the challenges of combining academic life and family. Sarah came to my office daily for her first 6 months and even attended class when necessary. “Multitasking” currently means nursing while typing, or grading papers while burping a baby....So family issues are taking precedence in my mind politically over environmental ones – at least for a while. I would love to get back in touch with other CES alums, particularly those engaged in education of any sort.

Ellen Schneider ’93

Just a short note to say that I think the website is great - I liked Sandy Zepka’s page especially - and hello to old CES friends. I am in the second year of a master’s program in landscape architecture which is really rewarding....if anyone has interest in the design professions as a post-CES path I would be happy to talk about it. Hope you are still having giant chili picnic extravaganzas on the lawn at Kellogg House....Happy New Year to all.

Dan Bolnick ’96

I’m pleased to say that in September (’03) I both finished my Ph.D at the Center for Population Biology at the University of California, Davis, and accepted a position as an Assistant Professor in Integrative Biology at the University of Texas at Austin. Having spent the past 5 years living in a place where it is flat, hot in the summer, and never snows, I’m a little perplexed by my choosing to move...
somewhere even hotter, and also free of snow and mountains. But I hear nothing but good things about Austin, so we’ll give it a try. I start my position in the fall of 2004, and in the meantime am staying at Davis for postdoctoral work on mechanisms of speciation and methods for measuring biodiversity from the perspective of ecological function, while my wife (Deborah Weiss) finishes her PhD in Anthropology. We really lucked out and managed to negotiate a faculty position for her, too.

While most of my research is on mechanisms of evolution and speciation (doing field research in freshwater lakes in British Columbia), I have gotten involved in some work more closely allied to environmental research. Working with my PhD advisor, I’ve done some extensive surveys of reef fish population density, species diversity, and age structure in coral reefs in Palau, Micronesia. We hope this will lay a foundation for monitoring fish densities in some of the most spectacular reefs in the world - for anyone in this line of work, the new Pacific International Coral Reef Center (PICRC) in Palau is a great new research station.

Irena Hollowell ‘02
I’m spending this year (September-about September) at the Rudolf Steiner Fellowship Community, just 30 miles from Manhattan, but we have a farm, several areas of woods, and mixed-use buildings spread out from one another. The main single thing we do here is take care of elderly people in a much more individualized and holistic way than most elder-care providers do. And many people of different ages live here, including families with kids. There are about 140 residents and some volunteers. Cooking here is a lot like cooking for log lunch. There’s a lot of cleaning to do. I also get to work in the pottery, in the greenhouses, in the barn, and other cool places. The farm is biodynamic, which means that in addition to all of the principles of organic farming, we use a lot of more spiritual and philosophical guidelines. Altogether, I think this is a wonderful place to be.

Jon Wiener ‘02
I’ve managed to accomplish my career goals earlier than most -- having at 23 years old become the head water polo coach at both my college and now high school alma maters. I am also working for a San Francisco-based non-profit called City CarShare. I never thought I’d be trying to recruit people into cars instead of out them. The main goal of our program is to reduce private car membership and all of its attendant problems and at the same increase people’s mobility. On the side I continue to be involved with bicycle safety education programming through the League of American Bicyclists and the Silicon Valley Bicycle Coalition.

Nina Trautman ‘03
I’m in Hong Kong now with a teaching fellowship. I’m working at the Chinese University of Hong Kong’s Department of Geography & Resource Management as a TA for an intro geography course similar to ENVI 101, and I’m also an English helper for the department. I’ve been editing postgrad student thesis chapters and leading weekly English table discussions. Right now I’m busy creating a humorous powerpoint presentation to give to the freshman to highlight how to fix common English mistakes I’ve seen them make.

Keep in touch with CES alums through the Alumni Notes: send us updates for the next issue through the CES website at http://www.williams.edu/ces/resources/alumninotes.htm

If you’d like to stay in touch with CES and with each other, consider subscribing to one of the CES list servers. Go to http://www.williams.edu/ces/resources/alumni.htm for more information.

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