Dear Alumni and Friends:

This fall we will celebrate the 40th anniversary of the Environmental Studies Program and we are looking forward to a series of events that not only celebrate and recognize the accomplishments of our Program and our alumni, but that also help us to plan for an even stronger future. Two events of note include hosting the fall Clifford Symposium on the topic of global climate change, and our dedication of the fall Howard E. Woodin Colloquium Series to alumni speakers from around the country and world.

The Clifford Symposium, scheduled for September 22–24, will feature interdisciplinary panel discussions on issues including environmental justice and climate change, the current state of climate science, the role of creative arts in examining climate change, climate policy and campus initiatives. As you’ll see from this issue of Environmental News, many classes and campus initiatives continue to work towards developing innovative approaches to mitigate climate change at the local level, and we have no doubt the symposium will be a valuable extension of these efforts.

In addition to the fall colloquium series, we also hope to find creative ways to connect with alumni doing volunteer work in environmental fields. Given our Program’s commitment to civic engagement, we want to celebrate alumni who are advocating for the environment as well as those who have made it their vocational work.

An early celebration this spring included the presentation of Andrea Olsen’s Birdhouse Project, a performance focusing on movement, birds, and the land at Middlebury College. We have also received a grant from the US Department of Energy to install a wind turbine on College land. The dedication of the turbine in September 2005 is cause for celebration as it reflects the College’s commitment not only to environmental education and research, but to its sustainable campus program as well. Stay tuned as more details about our 40th anniversary celebrations become available!

Another exciting development is our receipt of a prestigious grant from the Henry Luce Foundation in support of international environmental education. The Luce grant will help fund an initiative linking two of the College’s strongest interdisciplinary programs, Environmental Studies and International Studies, in an effort to better prepare Middlebury students to address environmental concerns that transcend national boundaries. The grant will support a new tenure-track position in International Environmental Economics, a position that will be shared by Environmental Studies and Economics. Economics is a discipline that lies at the crossroads of the concerns of the ES and IS programs, and an appointment in this field will allow us to examine the impact of economic pressures on the global environment as well as the impact of environmental problems on economic development worldwide. The Luce grant will also allow the College to develop a program of integrated ES/IS study by establishing a speaker series, discussion groups, and a major forum on international environmental issues. We look forward to the new opportunities this initiative will offer.

Aside from these brief highlights, we trust you’ll find the accomplishments of our students, faculty, and staff highlighted in the remainder of this newsletter illustrative of our commitment to innovation and excellence.

Nan Jenks-Jay
Director, Environmental Affairs

Peter Crowley Ryan
Director, Environmental Studies Program
Alumni News

Dick Cameron '94 and Lynelle Preston '91 have recently moved, with their 17-month-old, from San Francisco to San Rafael, CA. Dick is a Senior Conservation Planner with the California program of the Nature Conservancy in San Francisco. He is involved with eco-regional planning of terrestrial and freshwater conservation priorities. He also volunteers with the Society for Conservation GIS, an international non-profit that supports training of conservationists in the use of GIS. Lynelle is the Environmental Strategy Manager with Hewlett-Packard designing environmentally friendly IT equipment.

Ben Jervey '01.5, is working on a book that aims to be a guide for green living in New York City and that will serve as a comprehensive resource with sections on Residential Life, Food, Transportation, Recreation, and Community Involvement. He struggled to find such a resource upon moving to New York and felt a single, comprehensive guide would be useful to New Yorkers of a greener persuasion. Ben is currently under contract for a book tentatively titled: "The Green Apple: Sustainable Living in New York City." Ben adds that he'd be more than happy to be available as a resource for anyone planning on spending time down in the "Green Apple." He can be contacted at: bjervey@gmail.com.

Edward T. "Ted" Peach '43, is the amateur forester for the 92 mostly wooded acres he and his two sons own in the Sierra Nevada foothills. Ted, his wife Nancy, and son Jeff live on the property. The property was selectively logged seventy years ago and Ted is working to replant the brushy areas (700 Douglas Fir seedlings to date) and to manage the forest for protection against forest fire. Ted reports his work has been excellent for maintaining the health of an 83-year-old!

Daniel Scheidt '93 works for Ben & Jerry's in South Burlington, VT. One of his main areas of work is on sourcing socially and environmentally responsible ingredients for use in their ice cream.

Excerpts from the Field—

Watson Fellow, Will Roush '03.5

"Envisioning a Changing Alpine Environment through Repeat Photography"

October 4, 2004—North of Fish Lakes
Banff National Park

There were two photo-locations, one up and to the West of the pass and as it looked Northwest, I went there first for the best lighting. It was a place out of time, snow covering the ground and bright light reflecting everywhere. I found the location from which the historic photographs were taken quite easily and suspect I was within inches of the old location. As I began retaking the old photographs I moved into a place and rhythm which may be akin to what a musician feels when playing a long piece with many movements or perhaps that which a runner feels when there is only a strong pace which flows for miles. As I began to work a slow rhythm and cycle developed as I loaded film, changed filters, metered off places in the landscape, wrote my speed and exposures, centered the frame, took bearings, wiped the lens clean, waited for bulls in the wind, wound the shutter, changed the aperature, changed the film, flipped the mirror lock-up, changed filters, wound the film, wrote the exposure speed, centered the frame, waited for a calm in the wind over and over, six times for two and a half hours in constant concentration and in a space where time melted away and all that was left was the photos and a slow dance between me, the light, the landscape and the wind. When it was over I packed my bag and left a stake and a small pile of rocks and walked quickly away from the place, complete.

Campus Updates

Sustainable Buildings

The two new residence halls of Atwater Commons feature a natural ventilation system with buildings oriented north-south to take advantage of the seasonal prevailing winds and vertical ventilation stacks for the removal of air from each suite. Atwater Dining Hall utilizes extensive daylighting and introduces a green (planted) roof to the campus. Environmental benefits of the green roof include storm water management, improved thermal and acoustical insulation, and aesthetic appeal. The architect for both facilities was Kiernan Timberlake Associates from Philadelphia.

An extensive description of sustainability features of these buildings is available at http://web.middlebury.edu/offices/enviro/initiatives/green_wood/green_building/

Architecture and the Environment

The Environmental Studies Program and the Pre-Architecture Program in the Department of History of Art and Architecture have established a new joint major, called "Architecture and the Environment." This joint major builds and expands upon Environmental Studies, one of the academic peaks of excellence at Middlebury, the steadily growing Pre-Architecture program in the Department of the History of Art and Architecture, and the College's own "green" building philosophy. It was designed in direct response to student demand, expressed over the last couple of years by students in ES, Pre-Architecture, and a variety of other disciplines, and even by prospective students.
Faculty Profile

Helen Young - Local Research, Local Impact

Helen Young, Associate Professor of Biology, has been affiliated with the Environmental Studies Program since she joined the faculty of Middlebury College in 1998. In fact, she credits the emphasis on the environment and the teaching approach of the ES Program as a large factor in her decision to move to Middlebury from a previous position.

"To focus not just on biological sciences, but also on the more applied aspects, and to do so in a rigorous and exciting way, is fun to be a part of and I wanted to join the ES program in any way possible."

Helen has taken this integrated and applied approach to heart through her teaching, research, service to the College, and community service. Her primary courses are Genetics and Evolution, Plant Biology, and Advanced Evolution. She has also collaborated with ES Program Chair and geology professor Pete Ryan to lead a winter-term course to Costa Rica in 2000 where 18 students experienced the field study of geology, natural history, biology, and the integration of the three. Future course plans include a First-Year or Senior Seminar focusing on Darwinian medicine and human health, and incorporating research and monitoring of the plantings at Atwater Dining Hall’s “green roof” (see page 2) into the lab curriculum of Plant Biology.

Students are an active part of Helen’s research, much of which is grounded in the local area. For the past 5 years, Helen has focused on the reproductive biology of jewelweed, work that began after noticing bees “nectar robbing” from this species. 2-5 students work with her each summer at field sites near Bristol, VT and another site closer to campus. Helen insists that students split their summer time assisting with her research half-time and conducting their own research the rest of the time because of the valuable skills they gain developing research questions, designing their own experiments, and analyzing their own data.

Helen and her students are heading in a new research direction, one that has, in part, been inspired by other ES research and teaching on habitat fragmentation. Through studying the effect of habitat fragmentation on pollination service and the role of native bees vs. non-native honey bees, Helen hopes to address the importance of native bees to local crops and whether a more natural, unfragmented habitat surrounding local gardens impacts the population of native bees. The College’s Organic Garden will be the first study site for this work.

Helen has also been integral to Environmental Council research efforts. Serving on the Council for 2 years, she worked on early carbon reduction efforts and continues to serve on the Carbon Reduction Initiative working group. “Being on Environmental Council allowed me to meet interested students and connect with dedicated staff which led to really positive collaborations.” A prime example was an innovative environmental grant to examine the effectiveness of “vending misers” on reducing the electricity consumption of vending machines when not in use. After very positive results from a pilot test, these devices are now standard on all new Middlebury vending machines. Beyond campus, Farrell Vending now installs misers on all of its machines.

Beyond her service to the College, Helen is also making a community impact. The wattage meters purchased to study the vending misers were part of the 6th grade curriculum at the Bridge School when one of her daughters, Sarah, was there. The course included topics such as energy efficiency, composting, and urban ecology. “My thinking about environmental issues has a lot to do with being a parent and teaching my kids (Sarah, 10 and Margaret, 13) how to live responsibly in the environment.” Helen is also quite active with The Watershed Center in Bristol, VT, serving on the board (and as outgoing president).

The ES Program is fortunate to have such an active affiliate in Helen and we look forward to seeing the fruits of her collaborations, both on-campus and off, for years to come.

Faculty Books


Bill’s latest book includes an account of his journey from his home in Vermont to his former home in the Adirondacks, and reflections on why he finds such hope in these areas. A number of familiar sights—the College organic garden, John Elder’s sugarbush, and Don Mitchell’s farm—are part of his story.

Rebecca Kneale Gould  At Home in Nature: Modern Homesteading and Spiritual Practice in America (October 2005)

Rebecca’s book investigates the lives of famous figures such as Henry David Thoreau, John Burroughs, Ralph Borsodi, Wendell Berry, and Helen and Scott Nearing, and she presents penetrating interviews with many contemporary homesteaders. She also considers homesteading as a form of dissent from consumer culture, as a departure from traditional religious life, and as a practice of environmental ethics.
April 14, 2005
“Climate Change and the Business Challenge”

Eileen Claussen is the President of the Pew Center on Global Climate Change, an independent, non-profit, non-partisan organization dedicated to providing credible information, straight answers, and innovative solutions in the effort to address global climate change. The Pew Center’s Business Environmental Leadership Council, the primary focus of Claussen’s talk, is a group of 38 leading companies that demonstrate leadership by establishing and meeting emission reduction objectives; investing in new, more efficient products, practices and technologies; and supporting action to achieve cost-effective emission reductions.

With the Kyoto Protocol officially entered into force, the Pew Center and its Business Council are proactively thinking about the challenges facing the U.S. business community. Claussen stated that while “the immediate impact of Kyoto appears to be for those companies with operations in Kyoto countries... most companies have said they would prefer a global approach because if you’re a multinational company, it’s more efficient to manage your greenhouse gas emissions company-wide.” Further, “U.S. companies simply won’t have the same incentive as their competitors in the other industrialized countries to innovate and develop new technologies. Whatever modest competitive advantage they may realize in the near-term could be far outweighed by the loss in competitive edge in the long-term.” Claussen ended by talking about what is in store for businesses beyond 2012—as other countries begin planning for this, U.S. companies want the U.S. to have a seat at the table. One major barrier to this participation that she highlighted is the current Administration policy saying that discussions about the future are “premature.”
Student Awards, Internships, Independent Study Projects, and Theses

2004–2005 AWARDS

The 2005 Margolin Award, given annually to an outstanding senior Environmental Studies Major was given to: Trevor Cloak '05.

Erwin "Bennett" Konesni '04.5 (Environmental Studies, Music) was one of two Middlebury College students who were awarded Watson Fellowships in 2005. The prestigious Thomas J. Watson Fellowship program funds a year abroad to pursue an in-depth innovative project. Bennett’s project is entitled “Haul Away, Joe: Exploring Musical Labor of the Land and Sea.” He expects to spend time in The Netherlands, Germany, Ghana, Tanzania, Vietnam, Switzerland, and Mongolia.

Lauren Throop '04 was awarded the Nuquist Award for the best student research on Vermont by the Center for Research on Vermont. The award honors Lauren's senior thesis, “A Multi-Dimensional Analysis of Wind Energy Potential at Middlebury College’s Worth Mountain.”

2005 THESSES

Emily Owen '04.5, "A Meta-Analysis of Rapid Biodiversity Assessments as a Conservation Tool"

Judith Schutter '04.5, "The Coastal Landscapes of Zanzibar and Mafia as Borderlands to Knowledge: Applying Harding’s Concept of Strong Objectivity to Coral Reef Ecology"

Sarah Weldon '04.5, "Fallen Heroes and Future Villains: Can Ecological Crises Jeopardize the Legitimacy of Governments"

Allison Beck '05, "Man and Plant: An Exploration of Man’s Relationship to Healing Plants"

Trevor Cloak '05, "Sequential Chemical Extractions of Costa Rican and Green Mountain Soils"

Karin Colyer '05, "Patriarchy Lives: The Demographic and Social Implications of the Great Leap Famine"

Nicole Groholski '05, "Sequential Chemical Extraction: A Review of Trace Metal Selectivity from Eight Mineral Standards"

Andrea Hamre '05, "An Exposition of Political Symbolism: Advertising as a Naturalizer of Ideological Constructions"

Cailtyn Long '05, "Acid Precipitation and Nutrients: Analysis of a Watershed in the Breadloaf Area of Ripton, VT"

Rebecca Hewitt '05, "Spatial Regeneration Patterns of Old-Growth Hemlock Forest Gaps in the Battell Research Forest, VT"

Matthew Kling '05, "Winter Physiology of Balsam Fir at Alpine Treeline on Mount Abe"

Richard Root '05, "Faith in a Landscape: A Personal History of Home"

2004–2005 INDEPENDENT STUDIES

Asher Burns-Burg '05, "A Socio-economic Study of Energy Efficiency Awareness in Vermont"

Dan Dunning '06, "Project BioBus: Lasting Change"

Alex Fuller '06 and Spencer Taylor '06, "Living with the Land: Motivations for Sustainable Use in Addison County"

Devin Green '04.5, "Starr Axinn Winter Garden Study: A Research Project of Living Systems and Sustainable Design in Winter Gardens"

Jean Hamilton '05, "Vishnu’s Navel, Black Rice, and Tree ‘Embracing’: The Role of Religion in Conservation of Botanical Biodiversity in India"

Remy Mansfield '06, "Small Enough: A Film Bridging the Nature Shared Between Rivers and Humans"

Tamara Jacobi '06, "Opening the Outdoor Eye"

Thomas Hand '06, Jeremy Osborn '06, and Julia West '06, "Preserving the Future: A Deconstruction of the Climate Movement"

Brian Reavy '06, "Economics of a Biofuel: A Microeconomic Study on the Feasibility of a Locally Produced Biodiesel made from Waste Vegetable Oil" and "Sustainability and the College Campus"

Lyne Zunmo '06, "The Road to Horseshoe Canyon"

2004–2005 INTERNSHIPS

Dana Allen '05, USGS Glacier Nat’l Park Field Station
Dalul Al-Abdelrazak '07, Monterey Bay Aquarium
Nellie Barbard '06, Northwest Youth Corp
Hillary Billman '05, National Park Service
Zoey Burrows '06, U. of Nevada Cooperative Extension
Caroline Chilal '06.5, Appalachian Mountain Club
Caroline Chilbi '06.5, USGS Glacier Nat’l Park Field Station
Sara Dewey '07, NH Sierra Club
Andrea Hane '05, Minnesota Conservation Corps
Alexander Hopcraft '06, The Swara Plains Estate
Laura Kelly '06, Langan Environmental Engineering
Shara Lewis-Gren '07, Lake Champlain Land Trust
Katherine North '05, Sandia National Laboratories
Clare O’Reilly '05, Addison County Regional Planning Commission
Greg Petrier '05.5, Mt. Washington Observatory/UNH
James Rogers '06, Forest Service/SCA
Kira Ventura '05, JSI Center for Environmental Health Studies
Tyler Williams '06, Middlebury College Environmental Research Assistant
Meg Young '07, Environment Colorado
Climate Strategies

Building the New Climate Movement

Students tested climate strategies through service-learning projects with 6 local and national leaders on climate change. These included:

- Working with the Middlebury Area Global Warming Action Coalition to build a broad, non-partisan coalition of Vermonters in support of state-wide climate legislation. This work was continued by students in Jon Isham’s ES 211 class during the spring semester.
- Partnering with Environmental Defense, students crafted a strategic proposal for how to convince Senator John Sununu (R-NH) to support the McCain-Lieberman Climate Stewardship Act.
- Researching Clean Air-Cool Planet’s (CACP) current relationships with businesses and universities, students developed a 5-year plan for CACP that draws on identified motivations to provide steps for taking action to broaden the climate movement through non-traditional partnerships.
- To gain publicity on the urgency of the climate crisis, students worked with the Green House Network to develop the “Flat Earth Award” for climate-crisis nay-sayers. Out of a field that included Michael Crichton, Rush Limbaugh, and Fred Singer, Singer took home the inaugural award (www.flatearthaward.org).
- With the goal of expanding the national base of support for the climate movement, students identified potential partner organizations in four areas of interest—religion, labor, agriculture/farming and peace and justice—and strategically connected them to the Energy Action Coalition.
- Students conducting market research for Ben & Jerry’s had some added perks—free samples! Through their research, students provided recommendations for educational packaging labeling for B&J’s latest flavor, “Fossil Fuel.”

Middlebury College has been the locus for numerous discussions on strategies—and actions to address—the global climate crisis. Through a national conference, innovative student service-learning projects, and a new-found commitment to activism on campus, we are proud to be a part of a growing movement to address climate change.

Students in Professor Jon Isham’s Winter-Term course, Building the New Climate Movement, worked throughout the semester studying the successful strategies of historic social movements to develop modern-day strategies for the growing climate movement. Students tested these strategies through service-learning projects (see sidebar) and presented and discussed their ideas during the What Works? New Strategies for a Melting Planet conference that was the culmination of their Winter-Term course.

Conference attendees came from all over the country, and speakers included Executive Director of Greenpeace USA John Passacantando; Michael Shellenberger and Ted Nordhaus, co-authors of “The Death of Environmentalism;” Eban Goodstein, founder of the Green House Network; and Mary Lou Finley, author of Doing Democracy and former staffer for Dr. Martin Luther King. Presentations by invited speakers and the students laid the groundwork for the bulk of the conference—informal large and small group discussions to share the good news about current grassroots efforts, and then to plan how the climate movement can expand its political base.

One particularly effective strategy that emerged from the conference was the announcement of the Flat Earth Award. This award—designed by students to gain publicity on the urgency of the climate crisis by nominating three prominent climate-change naysayers—registered close to 6000 votes on its Web site and received national press coverage, most recently in the April 29 issue of the Chronicle of Higher Education.

Other aspects of the conference have reverberated throughout the national
press including coverage in the New York Times and Bill McKibben’s daily Web blog entries for the online environmental publication Grist Magazine. Also look for portions of the conference to be featured in Judith Helfand and Daniel Gold’s (co-directors and co-producers of documentary film “Blue Vinyl”) forthcoming “Melting Planet: A Toxic Comedy about Global Warming.” Full details on the conference and press coverage can be found at: http://www.whatworks-climate.org.

The impressive list of conference attendees, outcomes, and press coverage is rivaled by the list of impressive initiatives that students in the course have developed and advanced this spring. These include the formation of the Middlebury Climate Campaign (aka the Sunday Night Group because of their regular meeting time) which has done significant campus and community education including a climate change “teach-in,” Kyoto Protocol Ratification celebration in the new library, a “Save Winter Carnival” bike ride to the Snow Bowl clad in “Slush Sucks” posters, advocacy for clean energy legislation in Vermont via a bike ride from Burlington to Montpelier (see sidebar), and organizing a Faith & Climate service. This group is also working with Energy Action on a national clean energy campaign, entitled “The Road to Detroit” because of its focus on the auto industry.

This student energy was also put towards a May workshop entitled, “Finding Common Ground: an Exploratory Workshop on Vermont’s Future in the Age of Climate Change” with the goal of finding strategies to address climate change that make sense to all Vermonters. Stay tuned for the outcomes of this event and other student initiatives in the future!

Students Win Biodiesel Research Grant
Students Charles Acher, Leland Bourdon, Nicholas Janson, Brian Reavey, and Thomas Hand (all ‘05), under the guidance of ES faculty member Amy Seidl, received an $8,000 research grant from the US Environmental Protection Agency’s sustainable design competition, People, Prosperity, and Planet (P3). The Middlebury team hopes to demonstrate the economic, geographic, and chemical feasibility and utility of biodiesel made from waste cooking oil—thereby replacing a portion of the #2 heating oil and diesel consumed by the College with biodiesel.

In May, these students joined 65 other college teams from across the country on the National Mall in Washington to exhibit their research. Winners of this judged competition will be eligible for additional funding from EPA.

Greener Mowing & Heating
Last summer, Facilities Management tested B20 biodiesel (a blend of 20% biodiesel/80% diesel) in two of its lawn mowers. “We’ve had no problems with this fuel switch,” notes Assistant Director of Facilities Management Mike Moser, “and better yet, it required no modification of the equipment.” Members of Facilities staff were so pleased with the performance of the biodiesel in the mowers that they purchased a new diesel gator to run exclusively on B20. Facilities plans to continue to expand its use in other fleet vehicles.

Weybridge House, the Environmental Studies academic interest house, also got in on the biodiesel research this year. Facilities Management replaced the #2 heating oil burned in its furnace with B20. While Weybridge residents did not notice a difference, the shift to biodiesel did reduce campus carbon emissions slightly due to the 20% reduction in petroleum in the fuel mix. In the next heating season, the College will request bids for biodiesel to displace all of the #2 heating oil consumed on campus—about 175,000 gallons. Hopefully these needs can be met by a local biodiesel manufacturer—Green Technologies LLC out of Winooski, VT.
Focus on Local Foods

How Local is Middlebury's Food?
As part of research for an environmental assessment, Tyler Williams '06 reviewed all of Dining Services food purchases for FY04. What he discovered was that, by dollar value, 89% of the food consumed on campus is distributed, produced, or grown in Vermont. Taking a closer look, 20% was produced or grown in Vermont; and 10% was produced or grown within ten miles of campus.

Asher Burns-Burg '05 developed this map to highlight the sources of food for the breakfast celebrating local foods that the Board of Trustees hosted for over 160 staff in February.

Bill McKibben, Scholar in Residence in Environmental Science at Middlebury College, spent the winter subsisting entirely on the food of the Champlain Valley—"partly in an effort to see if it could be done (it can), partly to see what barriers exist to using more local food (lots of structural things, like the lack of food processing facilities) and partly because I wanted to meet more of my neighbors (there turn out to be many, many fascinating farmers in this place)." The results will be published in Gourmet magazine sometime this summer.

Classes and Events

ENVS 1005, WINTER 2005
Will Stevens
"Eating Locally, Thinking Globally"

This course examined how our attitudes toward food affect the health of our communities and our personal, spiritual, and social lives. Focusing on the factors that influence the relative health of a community, students learned how sustainable agriculture can contribute to an alternative vision of 'Homeland Security.' Will Stevens is co-owner/operator of Golden Russet Farm, a certified organic market garden and CSA (community supported agriculture) farm in Shoreham, Vermont, with his wife Judy. They have promoted agriculturally-supported communities in Addison County since 1981.

ENVS 401, SPRING 2005
Nan Jenks-Jay
Advancing the Local Foods Movement

Breaking Down Barriers
Students tackled cost and accessibility barriers to local food use and developed a multi-media presentation that Vermont Fresh Network, Shelburne Farms, and VT FEED (Food Education Every Day) can use in their discussions with entities across the state.

Solving the Distribution Puzzle
Students researched the feasibility of a centralized aggregation and distribution facility for Addison County as a potential solution to accessibility issues. Their research findings, however, show that a more pressing need is more local farmers.

Seniors Christina Tittich and Lea Davison in the classroom at Cornwall Elementary School before the all-local ingredient pizza taste-test.

Social Marketing
Working with Shelburne Farms' representative for the "Food Education Every Day" program, students developed lesson plans and an all-local pizza taste test for the Cornwall Elementary School. Secondly, they worked with the Addison County Organic Farmer's Association to develop a cookbook/guide to farms and their products.

WINTER TERM 2005 EVENTS

Tasting and Touring Vermont's Farmstead Cheeses
Instructors: Brad Kocher, General Manager of Commons Dining Operations and Amy Tidbeck, Vermont Fresh Network
This workshop gave us the opportunity to take a quick journey into the vibrant world of Vermont farmstead cheeses, exploring tastes; traditions, and cheese making.

Food for Thought Roundtable Discussion
Winter term faculty and visiting instructors shared different perspectives about food in different cultures and regions as well as locally/sustainably produced food. Moderated by Bill McKibben.

Organic Garden Symposium
Golden Beets or Golden Arches: Exploring the Culture and Politics of Food
Events included a keynote speech by David Zuckerman (organic farmer, legislator, and chair of the State Agriculture Committee), about the future of agriculture in VT, farm tours, panel discussions, and fabulous local foods.
Alumni in Action
Daniel Stahler ’96
Balancing Science and Society

Daniel Stahler, a fourth generation Vermonter with degrees from Middlebury College and the University of Vermont, is making his mark out west as Project Biologist for the Yellowstone Gray Wolf Restoration Program in Yellowstone National Park. Being a part of this restoration effort has demanded an understanding of both ecological and socio-political systems—an interdisciplinary realm he is quite adept at working in.

Realizing that his passion for science was very much tied to the inseparable connection between humans and the natural world, Dan pursued an Environmental Studies major with a Conservation Biology focus while at Middlebury. “The Environmental Studies Program, with its interdisciplinary approach to education, provided a platform for me to not only gain a solid scientific foundation, but to also benefit from the interface between science and the socio-political realm that is paramount to conservation biology.”

He further credits the opportunities to pursue off-campus experiences and for “learning by doing,” as essential to his education. He spent his junior year at the Center for Northern Studies (CNS) in Wolcott, Vermont and then worked as a summer research assistant under Steve Trombulak and the Vermont Institute of Natural Science, creating an index of biological integrity for forested ecosystems.

After graduation, Dan was hired as a field technician on the Superior National Forest Wolf and Deer Study area. From 1997–2000, Dan worked as a field technician and graduate student with the Yellowstone Gray Wolf Restoration Program and earned a Master of Science in Ecology, Evolution, and Behavior from the University of Vermont. Dan reminisces that, “obtaining a graduate degree was a highlight of my educational experience, as being surrounded by the energy and knowledge of professors and fellow graduate students in an advanced academic setting is a distinctive time for a young scientist. However, with my work as a field biologist, it is crucial to balance structured academic experiences with the un-matched education you receive when you spend every day out in the natural world trying to understand how everything fits together.” After graduate school, he studied mountain lions as a biologist on the Yellowstone Cougar Project for the Wildlife Conservation Society, before switching to his current position with the National Park Service.

“As our nation’s first national park, Yellowstone is indeed a special place, full of rich natural and cultural history. The birth of the National Park Service occurred here, and I feel fortunate to be part of that inheritance.” There are also many challenges though—“While Yellowstone is one of the few places left on earth where all the natural conditions of an ecosystem are in place, even with all of its ecological and historical magnificence, is not immune to worldwide destruction of ecosystems we face and need to fight to protect.”

Dan is obviously passionate about his work, and about what having wolves back in Yellowstone symbolizes. “We live in a time where we are losing most things in our natural world. But wolf restoration to the west symbolizes progress in a world that seems so laden with regression. To be in Yellowstone today and see wolves back on the landscape influencing the structure and function of an ecosystem in their age-old ways, is truly a triumphant success for ecosystem recovery. This is the result of human choices and public attitudes, and serves as a lesson that humans can make right on something they’ve previously made wrong.”

Dan feels strongly about some day returning to his roots and working in some capacity in his home state. “Vermont, with all its social and environmental progressiveness, is surely a gem in this country. There exists vigor to its landscape that exemplifies just how possible it is that humans and the natural world they live on can coexist and function as they should. In the west, we need to look to places like Vermont as a model for sustainable ecosystems. Communities like the one I grew up in, as well as the Middlebury College community, serve as important stewards for teaching these values.”

Dan was the alumni speaker for the Spring 2005 Howard E. Woodin Colloquium Series. The title of his talk was “Wolves in Yellowstone: Lessons on Trophic and Societal Cascades.”
Service-Learning in Environmental Studies

NEW: Service-Learning language added to Environmental Studies Mission Statement: “Courses at all levels of the Environmental Studies major incorporate service-learning to enhance the learning experience, engage students in community issues, strengthen professional environmental skills, and promote civic responsibility.”

ENVS 401 Senior Seminar Projects

**Fall 2004 Rebecca Kneale Gould**

Interfaith Environmental Action in Vermont
Students interviewed over 100 religious institutions in the state to provide a “state of the state” report to Vermont Interfaith Power and Light documenting religious responses to climate change and other environmental issues.

**Vermont Homeowner Renewable Energy Incentives**
Partnering with Renewable Energy Vermont (REV), students analyzed renewable energy incentive program options and developed specific recommendations for Vermont.

Homeowner Barriers and Options in the Renewable Energy Market
This report, also for REV, introduces barriers to incorporating renewable energy technologies at the homeowner level and makes suggestions for how to overcome these barriers.

Vermont Renewable Energies: A Study of the Distribution and Application of Renewables in Vermont
Students developed a comprehensive, web-based database of renewable energy installations in Vermont and provided case-studies for exemplary installations, both by technology and building type. This database will be used by both REV and the Vermont Public Interest Research Group (VIPRG).

In Search of Lt. Governor Dubie’s Green Valley
Students conducted an economic analysis of what current “green” businesses bring to the State of Vermont and proposed ideas for increasing these economic and environmental benefits.

**Spring 2005 Marc Lapin**

River Corridor Conservation Planning
Partnering with the Vermont River Conservancy (VRC), a statewide organization working on conserving properties along water resources, students in this section developed a model for how VRC could approach conservation projects in the future by focusing in on one of VRC’s interest areas—a stretch of the Otter Creek between Vergennes and Weybridge. Their work included detailed GIS analysis of various riparian buffer scenarios, landowner interviews, economic analyses, compiling information on applicable conservation programs, and historic change analyses.

**Spring 2005 Nan Jones-Lay**

Advancing the Local Foods Movement
Students worked on several projects in partnership with the Vermont Fresh Network, Shelburne Farms, and VT FEED, all aimed at addressing barriers to the utilization of more local foods. These projects are detailed on page 8.

Winter Term 2005 Projects

**Jonathan Lehan**

Building the New Climate Movement
Students worked with several local and national leaders in the climate change field on a diverse array of projects. These are highlighted on page 6.

**Nadine Barnicle**

Social Marketing and Environmental Affairs
Working on a project entitled, “Turn Your Key, Be Idle Free,” students researched the environmental and health effects of idling cars at the Weybridge Elementary School. They developed and distributed an informational brochure, gave a presentation to fourth-sixth graders, and motivated the school to post signs in its pick-up/drop-off areas and parking lots.

ENVS 211 Conservation and Environmental Policy Projects

**Fall 2004 Steve Mener**

**Spring 2005 Jonathan Lehan**

72 Hours of Light
Partnering with Efficiency Vermont, the goal of this project was to distribute energy efficient light bulbs (compact fluorescent light bulbs or CFLs) to residents of the town of Middlebury in hopes of reducing the community’s overall energy consumption. Additionally, students hoped to raise awareness within the community about energy efficiency and its potential to mitigate global warming. Over 7000 CFLs were distributed to 800 households helping residents and homeowners save an estimated 1.4 million kilowatt hours of energy and $350,000 in electricity costs! Efficiency Vermont and Middlebury College were recognized at Vermont Campus Compact’s Service-Learning Gala for an “exemplary partnership that has contributed to both the community and the campus” for this project.

Finding Common Ground for Action on Climate Change in Vermont
Students worked with the Vermont Natural Resources Council and Vermont Businesses for Social Responsibility to convene a half-day conference with leaders of eight prominent sectors in Vermont: agriculture, business, environment, fraternal organizations, outdoor recreation, religious, secondary and higher education, and social justice. The goals of the workshop included participants sharing their long-term visions for Vermont’s future and exchanging possible strategies for building a new broad-based coalition of Vermonter to support of cost-effective climate policy.

More information on all service-learning projects can be found on the new service-learning page of the Environmental Studies Program Web page: http://www.middlebury.edu/academics/ump/majors/es/academic/service
Faculty and Staff News

Glen Andres (History of Art and Architecture) led a workshop on campus planning and building for the New England Regional Meeting of the American Institute of Architects in November 2004. Glenn chairs the planning committee for the Axinn Center for Literary and Cultural Studies to be housed in a renovated Starr Library. During his leave, he is working on a Getty Foundation Campus Heritage Grant to develop a preservation plan for the campus buildings and their historic settings.

David Bain's (English) historical travel memoir, "The Old Iron Road: An Epic of Rails, Roads, and the Urge to Go West" (Viking, 2004), has just been republished in softcover by Penguin Books. He was featured in a 2004 History Channel documentary, "Tech Effect: First Transcontinental Railroad."

John Elder (English/ES) received a Guggenheim Fellowship, which he will take during his 2006–2007 sabbatical. John's project is a work of creative nonfiction related to three sustainable forestry projects in northeastern Addison County.

Nadia Horning (Political Science) introduced a new course called Local Green Politics, a course on community-based natural resource management, and published "The Cost of Ignoring Rules: Forest Conservation and Rural Medicaid Outcomes in Madagascar" in a special issue of "Forests, Trees and Livelihoods."


Chris Klyza (Political Science/ES), along with Andrew Savage '03.5, and Jon Isham, published their article on the greening of social capital in Vermont in Rural Sociology. Andrew, the lead author, worked on this as a summer research assistant funded by the Mellon Foundation.

Matt Landis (Biology) received a grant from Vermont EPSCoR to start a research project called "The demographic basis of elevation range limits in Vermont tree species: the role of competition for light." The funds will support two undergraduates this summer on Mt. Abe. The results of this research should have implications for predicting the response of forests to climate change. Matt has also had two recent publications in "Ecology and Forest Ecology and Management."

Pat Manley (Geology) returned to work on the Buffalo River superfund site, Buffalo, NY, after a 5-year hiatus. She was named "Outstanding Educator of the Year 2004" by the Association of Women Geoscientists. In June 2004, Pat was elected as a Council of Undergraduate Research Geosciences Councillor and was granted Full Professor by Middlebury College.

Jeff Munroe (Geology) spent last summer in Utah with two Middlebury students retrieving sediment cores from high elevation lakes to document past drought episodes and investigate dynamics of the last deglaciation. In Vermont, he and a third Middlebury student initiated a study of alpine soils on Mt. Mansfield aimed at documenting the properties and distribution of soils on the summit ridge, and determining the processes responsible for their formation. He received funding from the Lintilhac Foundation to continue this work in '05–06.

Pete Ryan (Geology/ES) has taken two research trips to Costa Rica over the past year to study rates of soil formation, and presented those results, as well as results of research on trace metals in ground water in Vermont, at regional and national conferences. Pete will also host the annual meeting of the Clay Minerals Society in Burlington in June 2005.

Andrea Olsen (Dance) presented the Birdhouse Project, a performance focusing on movement, birds, and the land at Middlebury College; she will be faculty at the Summer Session of Contemplative Curricular Development at Smith College; the American Dance Festival in Durham, North Carolina; and in a residential retreat at Pyn Pynfarch, Wales teaching Body and Earth—Anatomy, Movement, Place.

Amy Seidl (Environmental Studies) and five students were awarded an EPA "People, Prosperity and the Planet" grant to study the feasibility of biodiesel at Middlebury College (see page 7).


Gretchen Augat Reilly ’60 Environmental Studies Fund Continues to Support Student/Faculty Research
Established in 1999 by Gretchen Augat Reilly ’60, this fund generously supports environmental studies programs and College environmental initiatives. For 2004–2005, this fund has enabled eight faculty/student summer research fellowships, assisted in bringing four visiting speakers to campus, and provided support for the What Works conference (see page 6) in January. Gretchen (Augat) Reilly ’60 majored in psychology at Middlebury, was a member of Kappa Kappa Gamma and participated in the Mountain Club and the Women’s Forum. Gretchen is looking forward to being on campus for her 45th Reunion in June.