

# ENVIRONMENTAL NEWS

Issue #1 • Summer 1999 • The Newsletter of the Environmental Peak at Middlebury • Middlebury College • Middlebury, VT 05753



For the past 35 years, the Environmental Studies Program at Middlebury College has worked to provide the best curriculum for the study of humans and their environment at any liberal arts college in the country. The Program has grown from a small but stable core group of dedicated faculty and students to the fourth largest major on campus, involving 40 faculty and more than 150 students. Middlebury's long history of curriculum development, faculty commitment, campus greening initiatives, and overwhelming student interest in environmental studies has recently led President McCardell to name the environment as one of the College's Peaks of Excellence, and the ES Program is proud of the role that it now plays in helping to facilitate the development of this Peak.

One of the hallmarks of the ES Program since its inception has been our effort to act as a catalyst for environmental education and outreach across the entire campus, not just within the program itself.

We now want to expand our efforts to include the alumni of the College.

Hence, the birth of this newsletter. Its purpose is to foster a network of alumni. Our goal is to provide a forum for the exchange of news and ideas. Its specific character will evolve over time in response to alumni interest and the further development of the Environmental Peak at Middlebury.

The benefits of such a network are almost limitless; for example; spreading information about your work or the work of your organization, keeping abreast of what others are doing, and learning about developments in environmental studies at Middlebury.

Welcome to the network!

Steve Trombulak  
*Program Director*  
*Environmental Studies*

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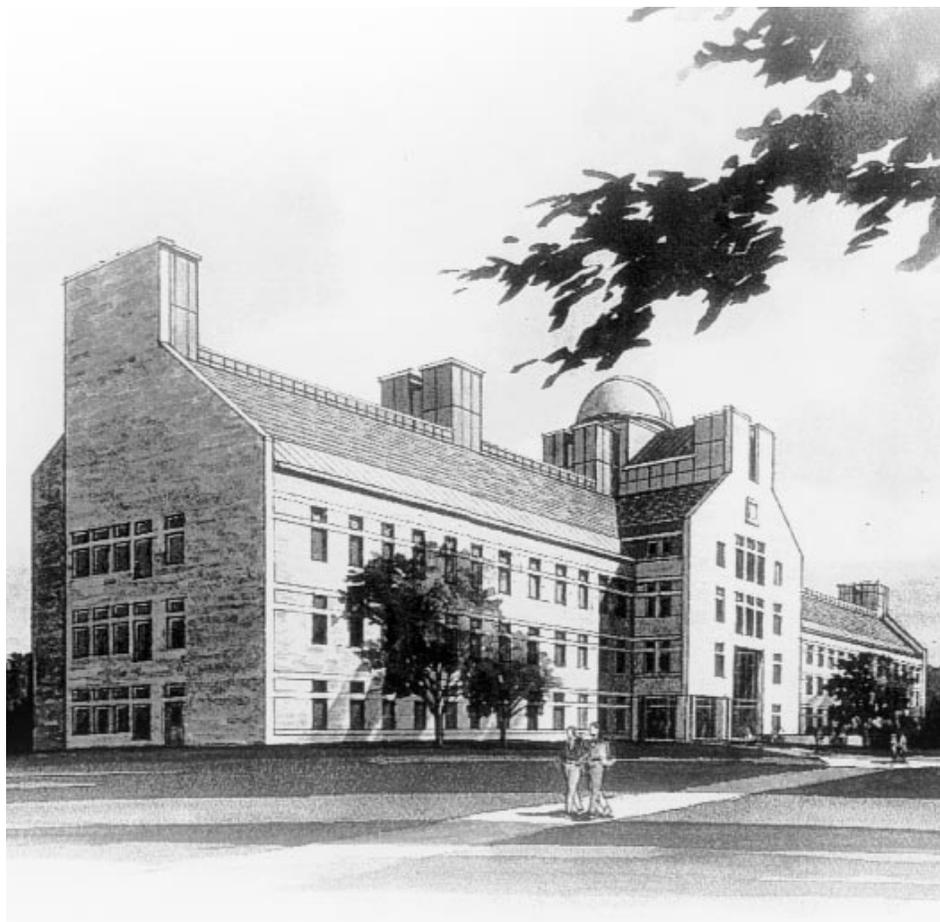
# MIDDLEBURY GOES “GREEN” WITH BICENTENNIAL HALL

The construction of Bicentennial Hall marks the 200-year anniversary of Middlebury College and a new era for the design of academic buildings. The facility is the largest academic structure in the nation to contain green certified wood.

During the 1800s, many of the original structures at the College were built from wood bartered by students as tuition from their families' nearby wood lots. In a modern environmental twist, the construction of Bicentennial Hall marks Middlebury's return to a reliance on local wood—resulting in the employment of more than 30 foresters, loggers, timber truckers, and sawmill and kiln operators in the College's home state of Vermont.

Middlebury broke ground in 1997 for construction of the building, which is projected to cost the College \$47 million dollars. Upon the building's completion in the fall of 1999, at least half of Middlebury's students will enter its doors on a weekly basis for classes in the natural and social sciences. Bicentennial Hall's environmentally sensitive features are meant to be a fitting tribute to the study of ecology and related subjects that will take place there.

Early in the building's five-year planning process, College officials identified environmentally sound design as a top priority. Integral to the overall effort to instill environmental excellence into all campus operations—a directive from the College's President John M. McCardell, Jr.—



the design of Bicentennial Hall was meant to serve as a new standard for academic lab facilities.

The trustees of the College instructed the architects, Payette Associates of Boston, to design an environmentally safe and efficient facility. The architectural millwork in public places throughout Bicentennial Hall will be comprised of 125,000 board feet of certified wood. The building will also incorporate other environmental design elements - such as the use of steel manufacturing by-product for insulation, drywall comprised of recyclables, a large amount of plastic

lumber, and a less invasive mining process for the stone.

Subjected to as rigorous a screening process as applicants to the College, certified wood is evaluated against more than 60 criteria to ensure that it comes from forests under environmentally sound management. "It is a type of forestry that is very careful of water quality, site productivity, and biological diversity," according to David Brynn, Addison County Forester and director of Vermont Family Forests (VFF), an alliance of woodlot owners whose forests provided the timber for this project.

Forestry operations are certified as being well-managed by SmartWood, a program of the Rainforest Alliance in New York City. SmartWood is accredited by the international nonprofit organization, the Forest Stewardship Council. The National Wildlife Federation, SmartWood's Northeast regional partner, carried out the VFF certification, making VFF the first source of certified wood in the state of Vermont.

Not only is VFF the first source of certified wood from Vermont, but it is the first group of small landowners in the country to band together for certification. The Middlebury College project allows VFF landowners to use certification and direct marketing of the forest products to obtain a higher price. "Brokers often make more on logs than the land stewards who took years to grow them," says Brynn. "Bypassing brokers allows savings to be passed on to the forest steward." VFF landowners will make 50 to 100 percent more for their trees than what they had historically, according to Brynn. In Middlebury's case, this close relationship has already proven beneficial. With the building scheduled for full use by next fall, the College had to buy the trees directly from the forest instead of waiting to choose the wood in a warehouse. "The woods served as the warehouse," says Brynn. "The trees were being sawed right after they were logged."

While speed of delivery was one concern for the College, another was cost. Middlebury paid Payette Associates a slightly higher than normal fee in order to achieve the goal of an environmentally friendly design but, over time, the

College will benefit from reduced operating costs resulting from certain environmental features, such as energy conservation.

The project also proved that it is possible to use a wide and natural range of species. Originally, the whole building was designed to be red oak. However, sustainably-harvested red oak can be difficult to obtain so instead the planners decided to use several woods, with each

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*Bicentennial Hall is the largest academic structure in the nation to contain green certified wood.*

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variety identifying a corridor. There will be an "oak corridor," a "cherry corridor," a "maple corridor," and so on. Says Bob Schaeffner of Payette Associates, "It sounds corny, yet when you walk into the forest, how many times is the forest just one type of wood? That's why it is called the 'woods.'"

Schaeffner finds that the wood industry, on the whole, is migrating towards adopting environmentally responsible strategies. Whether or not national trends follow its lead, Middlebury College intends to continue to support the certified wood industry. Rumor has it that the expanded library—already in the planning stages—will contain certified wood.

## BEING "GREEN" IMPROVES THE ECONOMY

"Rather than being a colony that ships their products all over the globe," says David Brynn from VFF, "Vermont Family Forests can sell their wood regionally for projects like Bicentennial Hall."

Brynn explains why landowners find this appealing. "All of them were excited about the notion of having a local market where they can actually go to see their trees as a finished product," he says.

Richard Miller of Natural Forest Products, the Burlington, Vermont-based firm that supplied the College with certified wood, says he located VFF coincidentally about the same time as being asked by the College to supply this type of wood.

Not only are the logs straight from Vermont forests, but most of the profit from this project will stay within the state.

Managing the harvesting, processing, and milling, Natural Forest Products is working with 35 companies, 80 percent of them in Vermont. At least 85 percent of the kiln-drying and 50 percent of the sawing is taking place in Vermont, and all the loggers and truckers are Vermont residents. Milling is the only operation that must take place outside of Vermont, because there are few facilities with appropriate certification in the state.

By keeping most operations local, "The end-user is much more directly in touch with the source," according to Miller.

The Bicentennial Hall project has been a teaching experience for all involved - including the College itself. Environmental design elements will now be considered for future building projects at the College.

*Editor's note: This article is adapted from "Certified Wood Reaches Campus" by Amy Self from In Business, Vol.21, No.1, p.31-33.*



## ALUMNI NEWS

# RALLYING AROUND LAND CONSERVATION

It was an unlikely place to bump into Middlebury alums - on an isthmus in Wisconsin - until they discovered a shared passion. At this past October's National Land Trust Rally in Madison, Wisconsin, eight Middlebury alumni found that, perhaps not coincidentally, they were all committed to land protection.

Hans Neuhauser '64 directs the Georgia Land Trust Service Center and manages the Georgia Wetlands Trust Fund. He serves on the Land Trust Alliance's National Land Trust Council and is treasurer of the Oconee River Land Trust in Georgia. Hans formerly chaired the board of the Land Trust Alliance. At the Rally, he presented on strategic wetlands acquisition and mitigation.

Stefan Nagel '69 is counsel with the Law Office of Stephen J. Small, Esq. in Boston. Stefan previously was associate general counsel for the National Trust for Historic Preservation and national staff attorney for The Nature Conservancy. At the Rally, he presented on legal considerations in managing a nonprofit land trust. He also motivated many of us to start thinking about a gathering of Middlebury alumni at the next Land Trust Rally.

Katharine Roser '70 is the Executive Director of La Plata Open Space Conservancy in Colorado.

Michael Schoenfeld '73 is Dean of Enrollment Planning at Middlebury

College and has more than 10 years experience in capital campaigns and planned giving. He also has served as a planned giving consultant to a variety of organizations and is on the board of the Vermont Land Trust. At the Rally, his workshop gave participants techniques to build endowments and conserve land through planned giving techniques.

Tom Howe '79 has worked with hundreds of landowners during his 14 years in land conservation. He has served as the executive director of a young land trust in New Hampshire and is now senior land protection specialist at the Society for the Protection of New Hampshire Forests. At the Rally, he presented sessions on basic landowner negotiations and drafting conservation easements.

Andrew C. Dana '81 practices real estate law and open space land conservation law in Bozeman, Montana, and provides legal assistance to several land trusts. He is renowned for his expertise in conservation law in the western states. At the Rally, he presented a workshop titled "Conservation Easements on Trial."

Richard Cochran '91 is executive director of Chagrin River Land Conservancy in Ohio. Rich serves as a trustee of several other land conservation entities. At the Rally he presented "The Small Land Trust's Common Sense Guide to Building and Maintaining Membership."

Alison Volbracht '96 is currently working

in the Northwest regional office of the National Land Trust Alliance in Seattle, Washington.

Middlebury's Director of Environmental Affairs and Planning, Nan Jenks-Jay, was also a presenter at the Rally, sharing her thoughts on the importance of place. Nan was founding director of the Williamstown Rural Lands Foundation (MA). She currently serves on the board of The Vermont Nature Conservancy.

If our suspicions are correct, than there must be more of you land protection specialists out there who hail from Middlebury College as your alma mater. Please, join us on October 14-17, 1999 at next year's National Land Trust Rally in Snowmass Village, Colorado, for an informal alumni gathering. Let Nan Jenks-Jay know if you or other Middlebury alums will be attending the '99 Rally so we can begin to plan a get together in Colorado. Nan can be reached at 802-443-5090 or at [nan.jenks-jay@middlebury.edu](mailto:nan.jenks-jay@middlebury.edu). For more information on the Rally, contact the Land Trust Alliance at 202-638-4725 or [www.lta.org](http://www.lta.org).

We celebrate that Middlebury alumni are among the dedicated individuals who have helped to protect more than 4.7 million acres of land in the nation and have contributed to the exponential growth of the land conservation movement.





Jennifer Sahn, a '92 Middlebury alumna, has taken her undergraduate interests in nature writing and environmental education afield, to Orion Afield. This magazine, published by the Orion Society, profiles inspirational stories of grass-roots environmental activism. Sahn serves as the Managing Editor for the publication, which recently won "Best New Title" from the Utne Reader Alternative Press Awards.

"I feel really proud to be doing what I'm doing," says Sahn. "What we're publishing has been really useful to our readers...we began Orion Afield because we saw a lot of 'bad news' environmental journalism and not enough about solutions."

Quickly rising to the top of her profession, Sahn began working for the Orion Society only seven years ago as an intern right out of Middlebury's Environmental Studies Program. She credits Professor John Elder, who sits on the Society's Board of Directors, with originally connecting her to the organization. As a Middlebury student, Sahn worked with Elder on her senior essay and on a student-led J-term class on nature writing. Directly after her internship, Sahn

## ALUMNI PROFILE

# PUBLICATION WINS "BEST NEW TITLE"

became an Assistant Editor for Orion magazine, another of the Orion Society's publications which showcases classic nature writing, poetry, art, and photography. Now, she runs the show with the Society's newest publication. Orion Afield is only two years old with seven issues under its belt. She is also the Assistant Director for the Orion Society, Contributing Editor to Orion magazine, and Series Editor of the Nature Literacy Series, a collection of environmental education books and monographs. Obviously, Sahn is or has at some point been involved with just about everything at the Orion Society.

In whatever little free time she has, the editor hikes around the Berkshire Hills in Western Massachusetts with her dog and dabbles in her own nature writing. Her essays have been published in *Wild Earth* and *The Trumpeter*.

While Environmental Studies majors at Middlebury are characterized by an interest in making a positive difference in the world, not all graduates may be fortunate enough to see the results of their actions so soon after graduating. Sahn is one of the lucky ones.

"I hear from people about the difference Orion Afield is making," says the alumna. "This fellow in Washington State wrote about a stand of Old Growth cedar trees owned by an insurance company

and about his efforts to try and preserve the trees. The Nature Conservancy saw the article in Orion Afield and decided they would try to help," she explains excitedly. "The author called last month and said 'It's happening, the trees are going to be protected!'"



For more information on the Orion Society or Orion Afield, go to <http://www.orionsociety.org>.

Alumni of Environmental Studies and other majors at Middlebury College...What have you been up to lately? Your friends and colleagues from your days at Middlebury want to know!

We want to profile the environmentally related activities of alumni in future newsletters. Please send us a note about your endeavors that involve the environment.

Send any news to: [aseif@middlebury.edu](mailto:aseif@middlebury.edu) or to Editor, Environmental News, Farrell House, Middlebury College, Middlebury VT 05753.

*Middlebury College's*

## ENVIRONMENTAL NEWS

*Environmental Newsletter*

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### Mission

*The Program in Environmental Studies at Middlebury College provides students with an interdisciplinary, liberal arts education. It focuses on diverse facets of the relationship between humans and the environment through study in breadth and depth.*

### Administration

Stephen Trombulak,  
Director of Environmental Studies  
Nan Jenks-Jay, Director of  
Environmental Affairs and Planning

### ES Steering Committee

Bob Churchill, *Geography*  
John Elder, *English and ES*  
Nan Jenks-Jay, *ES*  
Kathryn Morse, *History*  
David Stoll, *Sociology/Anthro*  
Steve Trombulak, *Biology and ES*

### Newsletter

Amy Seif, *Editor*  
Janet Wiseman, *Assistant*  
The ES Colloquium Series began its

second semester with a lunchtime talk by Norm Cushman of Facilities Management about the College's state of the art waste management program.

According to Professor Chris McGrory Klyza, one of the founders, the Colloquium aims to build community among ES students and faculty. Klyza identifies the physically scattered nature of the ES Program to be the main impetus for needing to further develop such a community.

The series began last semester with an impressive array of speakers that included John DeVillars, the New England Regional Director of the Environmental Protection Agency, and Karen Sheldon of Vermont Law School. ES faculty spoke about their research, and students ended the semester with Senior Thesis presentations.

Gretchen Hund, a class of '79 geology major now a Senior Research Scientist at Battelle Environmental Policy Management in Seattle, spoke in the spring. While on campus, Gretchen also gave a lecture to an Environmental Geology class and met with students to give career advice.

This year's Colloquium Coordinator and Geography Professor Dan Bedford, with the assistance of the ES Program Academic Coordinator Janet Wiseman, hopes to attract more townspeople to the Colloquium, which is open to anyone. "I think it's really important to build a sense of community. I would really like to open our doors as much as possible to people from the town," says Bedford.

Both Klyza and Bedford are confident that the new series is already a success. Klyza notes a better connection between faculty. Remarks Bedford, "The impression I get is that faculty are certainly very happy to attend to feel more a part of the ES Program, and the students are excited also."

The ES Colloquium Series takes place every Thursday at lunchtime except during J-term and the summer. All are welcome.

A complete list of speakers is posted on the Internet at <http://www.middlebury.edu/~es/colloquium.html>.

By Steve Trombulak

## MACCRACKEN

The 1999 Scott Margolin Annual  
Environmental Affairs Lecturer

Michael MacCracken, the Executive  
Director of the National Assessment



Coordination  
Office of the US  
Global Change  
Research Program  
(USCCP), was the  
Scott Margolin  
Annual

Environmental Affairs Lecturer. He spoke on "Global Warming: The Increasing Effects of Human Activities on Climate" at Middlebury College. The USGCRP is studying the consequences of climate change for the nation and examining possible coping mechanisms.

For more information on USGCRP or the Coordination Office see <http://www.nacc.usgcrp.gov/>.

*More than Just*

## NEWS OF THE HOMEFRONT

## ES PROGRAM CONTINUES TO EVOLVE

As is always true, there has been a great deal of development of the environmental curriculum at Middlebury recently. The most apparent ES course we have added this year is a new junior-level environmental science practicum course (ES 360). Currently being taught by Mary Gaudette, the ES Program's Assistant-in-Instruction, ES 360 is intended to provide students an experience in participating in a group research project on an interdisciplinary question in the environmental sciences. Alumni from the late 1980s and early 1990s might recognize this as one of the goals of the earliest incarnations of ES 401, which remains our senior capstone seminar. However, the tremendous growth in the ES major during the 1990s made it impossible to maintain the in-depth group research experience in ES 401 as class size doubled and tripled each year. As ES 401 has evolved to meet changing demands, ES 360 was created to retain the interdisciplinary environmental science research opportunity.

This year, Mary Gaudette's class is investigating the impact on Otter Creek from the Town of Middlebury's recent separation of their storm water system from the septic sewage system. Since 1995, storm water from the "urban" part of town has been piped untreated directly into Otter Creek, on the theory that run-off from city streets and houses will not adversely affect water quality. Through systematic analysis of the composition of the run-off, the students in ES 360 are testing this

assumption.

Other new or significantly revised courses with environmental themes are Environmental Geochemistry (CH/GL 283), Plant Ecology Seminar (BI 490), and Religion, Ethics, and the Environment (RE 395).

We have also made some changes in the major. Perhaps most notably has been the addition of a new focus in the Creative Arts. This focus, developed by Andrea Olsen (Dance) and Kit Wilson (Studio Art) is designed to serve students who are interested in the ways in which the creative arts inform and express our understanding of the relationship between humans and the environment. One of the most essential elements of the focus is the requirement of three studio courses in one discipline, followed by an independent study in that same field. The focus is written so as to allow students to pursue the focus in disciplines for which current faculty are affiliated with the ES Program (currently dance and studio art) but can be expanded easily to take advantage of developing faculty interest in other areas (hopefully to eventually include theater, film/video, and music).

We have also significantly modified what had been called the "environmental ethics" focus. Under the supervision of Rebecca Gould (Religion) and Heidi Grasswick (Philosophy), two new members of the college's faculty and the ES Program, the focus has been renamed

"Religious and Philosophical Perspectives," and allows students to go into depth in one or both of these disciplines. The redesign reflects our growing awareness that both religious and philosophical perspectives on our relationship with the earth transcend more than just the domain of ethics, and include such important fields as theology and the philosophy of science and technology.

## MICHAEL

ENVIRONMENTAL FOCUS  
INTERNSHIPS:  
EXPLORING NEW WORLDS

During Winter Term 1999, thirteen Middlebury students participated in the environmental focus internship program. These students are Emily Billo, Chase Budell, Janeen Hetzler, Caitrin Higgins, Yuki Iwatani, Rebecca Kaufman, Thomas Knauer, Mike Koehler, Karen Moore, Daniel Rosenfeld, Elise Snider, Tracy Vermatt, and Elana Wilson.

They conducted their internships, respectively, at Forest Watch (Montpelier), McLean Open Space Alliance (Belmont, MA), USDA Forest Service (Middlebury), Forest Watch (Montpelier), Ripley's Aquarium (Myrtle Beach, SC), Greater Yellowstone Coalition (Bozeman, MT), City of Burlington Dept of Parks (Burlington), Northern Cartographic (South Burlington), Students of Human Ecology (Middlebury), Massachusetts Environmental Collaborative (Boston, MA), Hi-Desert Nature Museum (Yucca Valley, CA), Environmental Learning Center (West Granby, CT), and the Great Lakes Chapter Sierra Club (Madison, WI).

## STUDENT NEWS

# SENIOR STUDENT PROJECTS

## *Making the Grades*

Christos Astaras assessed genetic diversity in the creek chub, a small minnow found widely throughout the northeast, and analyzed his results with respect to the ease of dispersal of individuals from one watershed to another.

Abby Bradbury grew cold-tolerant salad greens in an unheated greenhouse using the College's compost. Her greens were served in the Crest Room salad bar. She has proposed to the college to build a larger greenhouse for salad green production for dining and catering.

Nina Gawne developed a proposal for the creation of a wetland complex to be associated with the new Bicentennial Hall. The wetland would serve both educational and water-quality improvement goals.

From the Abtao Sector of the Great Island of Chiloe off the coast of southern Chile, David Grass studied nutrient uptake and release in the tree-dwelling vegetation of an old-growth temperate rain forest. He presented his results at the Institute for Ecosystem Studies. David will return to Chile on a Fulbright scholarship.

Using information on the known avifauna of each state in the continental U.S. as well as GIS-derived information on distributions of ecoregions in each state, Buffy Hastings looked at the influence of both

area and habitat diversity in species accumulation curves in the U.S.

Kate LaRiche conducted a biotic inventory of lands on the Breadloaf Campus originally part of the grant of lands to the college by Joseph Battell. Kate's work will be influential in helping to establish curricular opportunities in the area.

Using a GIS analysis, John-Alex Mason developed an alternative management plan for the Northern Unit of the Green Mountain National Forest (GMNF) that is based on watershed units. John-Alex hopes to have his alternative considered during the upcoming discussions on the revision of the GMNF Management Plan.

Natsu Morioka, a double major in ES and Japanese, is designing and building a traditional Japanese garden on campus.

Nic Tuff recently produced a video called "A Prayer for the Wild," about the fight to save the northern Rockies. Nic has been awarded the Morris K. Udall \$5000 scholarship, which encourages outstanding students to pursue careers related to environmental public policy and to foster excellence in the field.

Using surveyors' records from the late 1700s, Paul Woodworth used a GIS analysis to match the geographic characteristics of the locations of specific trees in the pre-colonial forest of northern Vermont. This work will be used by the Vermont Biodiversity Project for deter-

mining targets for future ecosystem protection and restoration.



## ES SENIOR IDENTIFIES AN UNEXPLORED BRANCH OF FOREST RESEARCH

While the observations and concerns of non-scientists can often be overlooked in academic inquiries, John Mauro, a senior ES major, finds the connection between scientists and community members necessary for good science. "I see science and the public as necessary partners. Science is for everybody, and making observations is something that everybody does, not just scientists," says Mauro.

Last summer, with support from the Ronald H. Brown Class of '62 Program, Mauro spent two weeks in isolated Alaskan villages which surround research sites. He asked the villagers, mostly Iñupiat Eskimos, about their interest in the nearby climate change research being conducted by Middlebury researchers. He also developed and presented a multi-media slide show on the research to four community schools and gave presentations for the National Park Service.

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According to Andi Lloyd, a Biology professor affiliated with the Environmental

## FACULTY PROFILE

## CLIMATE CHANGE RESEARCH TAKES FACULTY AND STUDENTS TO THE ARCTIC



Studies Program, “the most important thing to learn as a student of science is how to think like a scientist.” Andi’s students get first-hand experience on how to “think like a scientist,” whether they are flying over the forests of Alaska in a Cessna plane or examining soil samples in a Vermont swamp. Being a scientist seems to come naturally to Andi, who explains with rapid fervor the details of her research methods. However, it is her interest in teaching science that brought her to Middlebury College in the Fall of 1996.

“In graduate school, I was in a track to be a professor at a big research university, but I really love to teach. I find teach-

ing most rewarding, gaining instant feedback and great energy,” explains Andi.

It is easy to see how someone in Andi’s shoes might choose to abandon teaching in order to dedicate themselves to the thrills of high profile research. Last year, Andi received a three-year National Science Foundation (NSF) grant from their Office of Polar Programs to research the effects climate change will have on Arctic ecosystems. She is part of a multi-investigator project titled “Arctic Transitions in the Land-Atmosphere System (ATLAS)” and is the only researcher from Middlebury on the project. Although Andi loves being an educator, her enthusiasm in being a scientist is apparent.

“Both teaching and research are really central. I think my teaching would suffer if I wasn’t researching,” says Andi, who understands that students are the key to the synthesis between these two, often separate, pursuits.

Last summer, four Middlebury students and one student from the University of Wyoming accompanied Andi and her co-investigator Chris Fastie on their adventures in the boreal forests of the Seward Peninsula and Alaska Range of Alaska. Over a seven-week period, the students spent a series of three to 10 day camping trips coring trees and collecting soil samples. This summer, only three students will travel to Alaska because of passenger limitations in the tiny Cessna plane that will carry them into remote areas of the Peninsula.

The students are helping Andi look for evidence of changes in the boreal forest over the last 100 years and how those changes correspond to both natural and human-caused climate variations. The boreal forest, explains Andi, covers most of northern North America, Eurasia and Siberia, is dominated by conifers, and is the last forest before tundra. Andi’s thesis is that climate change can affect the process of invasion of forest into tundra areas; the boundary between forest and tundra is largely determined by temperature and therefore higher temperatures may push the tree line upward in eleva-

tion and to more northern latitudes.

While ATLAS investigators study the entire ecosystem for climate affects, Andi's part is to examine how future warming will affect the boreal forest, in particular. Unable to directly observe future changes, because, as Andi good-naturally explains, "the trees will last longer than I do," she is researching changes over the last 100 years and extrapolating what might happen in the future.

"I am doing tree coring to show how old trees are and how fast the trees have been growing and from those data am reconstructing what the forest looked like and where the tree line was," explains the ecologist, who is also collecting evidence of past disturbances, such as fire, in order to identify the separate effects of disturbance from climate change.

This study, the first big research project since her dissertation, neatly follows in the vein of Andi's Ph.D. research at the University of Arizona, which focused on how climate variation affects the forests of the Sierra Nevada.

Andi's choice of research location also does not happen by chance. Having formed a deep appreciation for Arctic environments and a sense of place when working on her Master's degree at the University of Alaska, she is particularly interested in Alaska. "Alaska is an amazing place, a landscape that I absolutely adore that is near and dear to my heart," explains Andi.

It is not surprising that for someone who has been so personally affected by her

previous academic experiences, teaching holds such high importance. For Andi, it is as if one of the most important goals of her research is to improve her teaching.

In the Senior Seminar in Paleocology, which she taught for the first time this spring, students participated first-hand in the kind of research that is taking place in Alaska. They continued a study of forest history started by a colleague of Andi's in the Battell Research Forest, an uncut hemlock forest in Vermont owned by Middlebury College. Because she is new to Vermont ecology, Andi learns alongside her students how to conduct paleoecological research in Vermont's ecoregion.

Andi's style of teaching aims to be as experiential as possible, which echoes her belief that the only way to learn about science is to learn how to think like a scientist. According to the professor, "the only way to do this is to go out on your own, scratch your head, and ask 'how can I do this?'"

Andi regularly teaches Introduction to Ecology (BIO190) and Plant Ecology (BIO323). In these classes, students also get an introduction to thinking like a scientist by carrying out both group and independent field research projects. Apparent in the way Andi teaches her students, scientific research holds her utmost respect.

She, however, has no regrets about choosing a small liberal-arts college over a big research university, where her work in Alaska might have taken precedence over teaching. "The two are really integrated activities in my own mind," she

says with determination.

## FACULTY



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## ES SENIOR IDENTIFIES BRANCH OF RESEARCH

*Continued from Page 8*

Mauro's thesis project, which he says has become an "obsession," grows from his work with communities in Alaska.

Enabling continuous dialogue between researchers and community members, Mauro is developing an interactive web page <http://www.middlebury.edu/~mauro>. The purpose of the site is to involve scientists and communities of western Alaska in a meaningful dialogue regarding current climate change issues.

Fueled by his own inquisitiveness, Mauro has identified a valuable source of information for climate change research.

"I became really interested in the idea that scientists, the public, and decision-makers are part of an on-going dialogue," explains Mauro. "More than us coming in and telling them what science is, it is more a dialogue and a sharing, with all of us learning from each other."

Mauro is also a recent recipient of the newly established Scott A. Margolin Environmental Studies Award and the Thomas J. Watson \$19,000 Fellowship, for focused independent study and travel abroad.



# AND STAFF NEWS

## Conferences and Other News

In June, John Elder, Professor of English, will be speaking at the Association for the Study of Literature and the Environment's meeting in Kalamazoo, Michigan, which will focus on responses to nature in long-settled areas. He will also be speaking at "Fire and Grit," a meeting sponsored by the Orion Society, that will be held at the Fish and Wildlife Service's new center in West Virginia. It will focus on efforts by community organizers and watershed activists from around the country.

At the New England Board of Higher Education Conference on the Future of Environmental Higher Education, Nan Jenks-Jay presented "The Connection Between Environmental Studies and Today's Market Place." She also presented at Tufts University's Fletcher School on "Climate Change and Civil Society" and at the Harvard University Graduate School of Education Research Conference plenary panel "Towards an Ecology of Education: Building Communities Across Disciplines."

David Rosenberg, Professor of Political Science, is on leave this year, doing research in the Department of Political & Social Change in the Research School of Pacific and Asian Studies at The Australian National University in Canberra.

Chris McGrory Klyza welcomed his second daughter, Caroline, to the world in

October.

Steve Trombulak, Program Director, was invited to make a presentation at the Governor's Conference on Green Space last October. His talk focused on the relationship of ecological reserves to the overall intent of plans that seek to balance many competing social demands on land use.

## Faculty Publications

Reading the Mountains of Home, a new book by John Elder, connects a reading of Robert Frost's poem "Directive" with the environmental history of the Green Mountains. The book is organized as a series of hikes and narratives from Ripton, where Frost had a home, to Bristol where John Elder lives with his family.

Nan Jenks-Jay contributed a chapter entitled "Learning Through the Community: The Southern California Experience" to the American Association of Higher Education Monograph Series on Service Learning.

Chris McGrory Klyza and Steve Trombulak co-authored a new book, *The Story of Vermont: A Natural and Cultural History*, published by the University Press of New England. Chris also wrote a book chapter titled "Bioregional Possibilities in Vermont" in *Bioregionalism*, published by Routledge Press. His book reviews appeared in the *Journal of Policy History and Wild Earth*. An annotated chronology titled "Land Protection in the United States, 1864-1997" by Chris was also published in *Wild Earth*.

David Rosenberg's "Environmental Pollution around the South China Sea: Developing a Regional Response to a Regional Problem," is published through the Resource Management in Asia-Pacific Working Paper Series, 1999/02. The Series is published by the Australian National University of Canberra. The article is available online at <http://coombs.anu.edu.au/Depts/RSPAS/RMAP/rosenberg.html>. David also published "ASEAN's Response to Environmental Pollution around the South China Sea" in the April 1999 *Journal of Contemporary Southeast Asia*.

Steve Trombulak and Chris Frissell wrote "The Ecological Impacts of Roads on Terrestrial and Aquatic Ecosystems: A Review," published in *Conservation Biology*.

~~Janet Wiseman celebrates her first year~~—as the Environmental Studies Academic Program Coordinator this July. Janet brings to the program a variety of former experiences in the environmental field, which include working on an organic farm and participating in a sustainable forestry organization. Janet's responsibilities touch all aspects of the ES Program, from doing the legwork for the Colloquium to working one-on-one with students. She says, "What I like best is seeing the enthusiasm and dedication that the students have towards the environment. They have a very different attitude than the students did when I went to college in the mid-eighties."



# ENVIRONMENTAL NEWS

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### NEWS FROM THE MIDDLEBURY COLLEGE

## ENVIRONMENTAL COUNCIL

Middlebury College and the National Wildlife Federation partnered this April to present a unique clinic on the role that campus purchasing can play in protecting the environment. "Consuming with Conscience: Sustainable Procurement on Campuses" kicked off with a keynote address given by Gary Hirshberg, President/CEO of Stoneyfield Farm Yogurt and a nationally recognized leader of social and environmental corporate responsibility.

Other highlights of the 2-day clinic included workshops focusing on ways to institutionalize green purchasing, a vendor display of green products, and a tour

of environmental projects on campus. For more information, contact James Sharp of the National Wildlife Federation's Campus Ecology at 802-229-0650 or at [nemid@nwf.org](mailto:nemid@nwf.org).

Participants included faculty, staff, students and administrators from a variety of colleges and universities in the north-east. Among the clinic participants was Peter Christianson, a '79 Middlebury alum and Director of Environmental Programs at Tuft University's new Institute on the Environment. Peter was formally with the Living on Earth National Public Radio program.



## ALUMNI! SEND ENVIRONMENTAL NEWS YOUR NEWS!

Please include your name, any nickname used while in college, your graduating year, your current profession and involvement in the environment. Send any information you wish to have published in ENVIRONMENTAL NEWS to:

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