

## **CLIMATE CHANGE AND THE FUTURE OF** HIGHER EDUCATION

If you take the time to follow the latest climate change research or speak with the world-class scientists who are observing the data, you come away profoundly shaken. In essence they are deeply concerned that climate destabilization is happening much more quickly than even their worst scenarios projected.

Recently I attended the annual conference of the National Council for Science and the Environment. This year's topic "Climate Change: Science and Solutions" had well over one thousand participants. I don't think I am exaggerating when I report that there was an overwhelming consensus permeating the proceedings—

climate destabilization is the most profound challenge facing the planet and it's happening as quickly as our worst scenarios projected. Solutions will require a greater sense of urgency, international collaboration, and the mobilization of industry, government, and science. The conference generated hope by virtue of the creative energy of its participants.

If the climate change crisis is as significant as many people think (I am a fervent believer), how do we respond?

Consider a thought experiment. If you could start a college from scratch and you were designing that college to deal with the most urgent environmental challenges facing the planet, what would you do?

## Here are my guiding principles:

- 1) Classes are offered twelve months of the year
- 2) Students help pay their tuition by taking an active role in building a sustainable community (growing food, working compost, retrofitting buildings, and other work chores)
- 3) All freshman take courses in the three most urgent and interrelated environmental challenges facing the planet: climate change, species extinction, and biodiversity
- 4) All students pursue a suite of real world skills that will allow them to apply their knowledge upon graduation
- 5) The college works in partnership with the most innovative environmental businesses in preparing a vital, adaptable, and effective workforce.
- 6) Students understand the basic principles of communicating ideas to a broader public, including the use of art, music, writing, poetry, dance, and graphic design.

We are the future of higher education and we have to respond to the challenge of climate change in all that we do.

Mitchell Thomashow President, Unity College Volume 22, No 1 The Magazine of Unity College 90 Quaker Hill Road Unity, Maine 04988 207-948-3131 (all departments) www.unity.edu

#### Editor

Mark Tardif

#### **Graphic Design**

Pica Design, LLC

#### **Editorial Assistants**

Rob Constantine Kate Grenier

## Cindy Schaub

Photography Jake Harr '09 (Front Cover and Back Cover)

Josh Beuth '10 (Inside Back Cover)

Lisa Martin

Peter Finger

Mark Tardif

Joe Darcangelo Mick Womerslev

Amy Darcangelo

Aimee Phillippi

PDT Architects

Susan Fedoush

### **Board of Trustees**

Mr. Robert Pollis, Chair

Mr. William T. Glidden, Vice Chair

Mr. Kenneth T. Winters, Treasurer

Mr. Peter F. Didisheim, Secretary

Mrs. Joan Amory, Mrs. Sharon Bloome, Ms. Juliet Browne, Mr. Jaymie Durnan, Mr. Donald Foster, Mr. Donald Kleiner,

Mr. Mac McCabe, Mr. Mark Miller, Mrs. Arlene Schaefer.

Ms. Gloria Sosa, Mr. John D. Tewhey, Mr. Robert M. Tonge,

Dr. Paul Wade, Mr. William Zoellick,

Mr. Neil Ward. Alumni Representative

Dr. Michael Womersley, Faculty Representative

Mr. William Hafford, Student Representative

#### **President Emeritus**

Dr. Alan Karstetter

Dr. Edwards Beals, Leonard R. Craig, Ann Dailey, Dr. C. Larry Farnsworth, Rev. George Fowler, Donald F. Mortland, Florence Noonan, David Purdy, Dorothy Quimby

#### **Dean Emeritus**

Donald F. Mortland

Unity magazine is published by Unity College Copyright @ 2008 by Unity College. All rights reserved. No material may be reproduced in whole or in part without written consent. Material is produced for the reader's information and entertainment only

Printed on recycled paper with vegetable-based inks.

## **INSIDE Unity**

volume 22 no. 1

## America's Environmental College



2 Faculty Commentary

5 Alumni Profile

**6 News and Events** 



8 Sustainability, Community, and lots of Nooks and Crannies...it's all just part of the Master Plan

12 Finding a Needle in a Haystack

18 Owner of Majestic Scottish Estate Welcomes Input from Experts at Unity College on Ways to "Re-Wild" Landscape

#### In Our Element

24 Unity Offering Sustainability Degrees

**26** The Faces of Environmentalism

28 New & Noteworthy

**31** Faculty Notes



**Faculty Commentary** 



## What About Sustainability?

By Dr. Mick Womersley Director of Sustainability, Associate Professor

"What is the college doing about sustainability?" is a question someone, usually a student, asks me about once a week. Since I'm theoretically in charge, I have to have a good answer. But as the student and I get into the conversation, we usually find out that he or she doesn't know what we've done or are doing, and so there's a tendency to assume we're doing nothing or not much, when the opposite is exactly the case.

For years now, we've made it a priority. But students change every year, and they don't always do their research before assuming things, and sustainability is a tricky, detailed technical topic, so here's your latest update. All I ask is that you read it before asking me the question! Then ask me the question anyway.

- 1) First off, the college has a major history of student-driven sustainability efforts. Read the Sustainability webpage for an update (www.unity.edu/EnvResources/Sustainability/Sustainability. aspx). By the time I publish this, Associate Director of Publications Susan Fedoush will have published the updated "Sustainability Progress" page, which details much of what we've done. It's a long and courageous record, and students did most of it themselves.
- 2) Second, we made a decision at the beginning of last academic year to regroup and come up with a new Sustainability Policy that made more people responsible for sustainability goals. The President formed a committee, the Sustainability Policy Committee, and made me chair. The policy the committee came up with is to make ALL employees responsible for sustainability, but particularly bosses. Now this is in their job descriptions. This means, for instance, that Sandy Donahue is in charge of sustainability in the dining services department, that Roger Duval is in charge of sustainability in facilities, and so on. Each department has to have a sustainability plan (some have already been written, notably Dining Services and Maintenance), with quantitative goals, and they have to deliver on those goals. So, for instance, Maintenance must reduce our climate emissions from buildings and transportation by five percent per year for the life of each current plan, three to five years. The bosses must be able to report they've met their goal each June, at the end of the fiscal year.
- 3) Third, we made a deliberate decision to invest in "real-time," on-campus climate emissions reductions. This invokes the "offsets" issue. For those of you who are not aware of this, it's now possible

to buy climate emissions' offsets, which essentially means paying someone else to reduce emissions for you, off-site. So, for instance, an offsets scheme might pay Africans or Chinese to reduce emissions for a US college. We at Unity College officially think this is a "crock." And I mean officially. Many of our competitor colleges are buying themselves out of responsibility for owning inefficient buildings and running inefficient vehicle fleets. We decided instead to reduce emissions directly, which will do two good things: one, it will really save emissions in the long run, as many offset markets are flaky with no third party verification, and two, it will cost less money, as we are making the proper investments now, not later. In practice, this means:

- Continuing our policy of buying the best green power we can find. Over two thirds of our electrical power comes from a low impact hydropower dam right here in Maine that wins awards for fish protection, the rest comes from forest waste burned as biomass. I don't think you can get greener power unless you were to buy about ten million dollars worth of solar PV panels.
- Continuing to retrofit old buildings where possible with insulation and new heat plants. You can get the building emissions down by up to 60% if you do both. So far we have super-insulated (R40-60) crawl spaces in East View, West View, both Coops, Koons Hall, along with replacing heat plants in Activities and Wood Hall. We expect to make an overall five to ten percent emissions reduction (for the campus as a whole) on the strength of the heat plant retrofit in Wood Hall alone this year. Say thanks to Roger Duval and the Maintenance staff next time you see them for this. It's a great piece of work.
- Continuing to build new, highly-insulated green buildings on heated, insulated Alaska slabs with tight doors and high quality windows, and natural light in as many rooms as possible. The existing buildings that meet this high standard, which uses about 30% of the average heat fuel use per square foot of the campus as a whole, are all the Cianchettes, the Welcome Center, the Health center, and of course, Maplewood. The next new green building, which will actually exceed even this standard and even make energy for the rest of the campus, is the new President's House, which is going to be LEED silver or gold and a national showcase for green building technology.
- 4) We have decided to make sure the world knows about what we are doing right here on campus. The President has joined the American College and University President's Climate Commitment steering committee. I am on the technical advisory committee. This means that we are heavily involved in advising other colleges and universities on setting standards and on how to do this stuff. I am also on an advisory committee for a national level curriculum study sponsored by the Council of Environmental Dean's and

## **Faculty Commentary**

Directors, looking at what material should be considered required sustainability education for all students and all colleges, and how it should best be taught. Those of you who have taken Human Ecology (or Environmental Sustainability as it is now known) understand that we require all students to study sustainability problems before they graduate from "America's Environmental College." We are trying to spread this particular gospel of required courses elsewhere. Having a required course is one of several "tangible actions" a college can choose to meet the current requirements for the President's Climate Commitment. Here at Unity, we've met this particular requirement since the 2000 – 2001 academic year.

So what does all this mean for the average student? Well, if Unity College charged the tuition charged by some of our neighbors, we'd quickly have the \$10 million or so that would be required to wave that magic wand and make the campus instantly green. Assuming you all could afford to come! Obviously, not the best scheme! We are forced by your pocketbooks to be as sensible and rational about how we go about doing this as we can.

As it is, we can spend a few hundred thousand dollars a year on green projects, and if we do our sums right, we'll save enough money in energy costs with each project to pay for the next one. We should be able to make the campus green, in other words, without raising tuition to pay for it. The President calls this theory "frugal sustainability" and I'm all over it because it's real.

It's easy to buy yourself green, or to buy media people to tell the world how green you are, but, as Kermit said, it's not easy being really green. That kind of work is done by real people, contractors, electricians, technicians, builders, caterers, and farmers, who do real work with their hands, installing insulation and solar power and heat plant and better light bulbs, and growing and making good food. That's what we are doing here, and it's by far the right way to go, intellectually, morally, and fiscally. There's still a long way to go, but we are making progress, and it's real.

Our annual carbon emissions per student compared with that of twenty or so other places I was able to get data for, shows that we have the least emissions. We've reduced our emissions 20% overall since 2001.

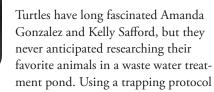
Just one reason to be proud of little Unity College and what it's doing. Read the sustainability progress page for a hundred others.

The sustainability page is on the web at: www.unity.edu/EnvResources/Sustainability/Sustainability.aspx
The sustainability blog is on the web at: www.ucsustainability.blogspot.com



## Scientific Research Creates Rich Learning Experiences for Unity Students

By Assistant Professor Alysa Remsburg and Associate Professor Amy Arnett



that wildlife Professor Dave Knupp helped them establish, Kelly says, "we were overwhelmed and excited to catch 27 turtles in the first day!" The two students are investigating whether female turtles are larger than males for a semester research project in Professor Amy Arnett's general ecology class. During the process of trapping, marking, and recording several size variables, "tons of other questions arose that took us by surprise." Kelly explains, for example, "I had never thought of how all the different abnormalities show up on turtles." Amanda and Kelly proudly shared some of their results with the campus community at the poster session in December of 2007. A poster session is an activity during which students present their class projects for review by the Unity College community.

Amanda also participated in research on the endangered Kemp's Ridley sea turtles during a summer internship with Sea Turtle Inc. in southern Texas. Amanda's experiences with "one of the best planned conservation efforts in the country" reinforced her plans to pursue turtle conservation as a career. "It's really hard to get your foot in the door, so I feel lucky," remarks Amanda.

Students at small colleges are increasingly finding opportunities to participate in novel research. Unlike the old 'cookbook-style' labs, authentic research experiences require students to pursue new hypotheses and practice troubleshooting when unexpected problems arise (Handelsman et al. 2006). Importantly, research opportunities teach students about uncertainty, variability, and the patience required to work on problems without a clear solution (Guterman 2007). College students in any major can benefit from these kinds of experiences.

Education literature (e.g., NRC 2003, Lopatto 2007) and discussions with Unity students all indicate that research experiences enhance the students' understanding and appreciation of course

2 | Unity Spring 2008 Unity Spring 2008

## **Faculty Commentary**

material. Amanda says, "It was great to have the internship tie into my classes." She completed a project on sea turtle population dynamics for a Biometry course and shared some of her stories with a Wildlife Care and Education course. For Jesica Todd-Brown, an Environmental Science major, summer research "made Biology 1 and 2 make a lot more sense; it actually meant something to me



Kelly Safford '08 on site with a turtle

then." Actually doing research is the only way to demonstrate that science is a process, not a collection of facts. As Kelly describes, "I found out that research is not just some old literature, but something we can actually manage to do."

Student participation in science research varies widely at Unity College. On the lower end of the commitment spectrum, introductory biology students formulate and test their own hypotheses about which places on campus harbor the most bacteria. Last summer, sophomore Eric Larson got to spend six weeks researching how nutrient addition affects phosphorus oxidation in Pattee Pond. That excludes the many weeks of preparation and synthesis that took place before and after his field season. "It was good to jump in and get a real taste of geochemistry," he says. "I learned a lot." Eric, who plans to pursue a job in water quality, is closely mentored by Associate Professor Lois Ongley. His research paper, which indicated surprisingly high phosphorus levels at the lake bottom and a major change in the pond's pH since it was last studied, went to the college library and members of the Pattee Pond Association who expressed interest in the research.

"Anyone interested in the sciences should at least try some research," Jesica advises. She admits "I thought I wouldn't like research, but I really had no idea beforehand. ... It was really cool stuff!" Jesica, like thousands of other college students each year, took advantage of the Research Experience for Undergraduates (REU) program sponsored by the National Science Foundation. The program pays students to work on summer research projects at campuses where they are not necessarily enrolled. The opportunity will give Jesica a competitive edge for admission to graduate school, where she'll pursue her own research. Although Kelly has very different career goals than Jesica, she also believes that a research project will play a role in her future. "I'd like to do research with my high school students," she says, "to show them that science is not just stuff in a book." Based on a survey of over 3,000 REU participants two years after their research, 89 % reported that their research experiences were important to their career decisions, regardless of whether or not they intended to pursue graduate school (Russell 2006).

Dr. Mitchell Thomashow, President of Unity College, feels that "understanding the how and why of scientific research is crucial for confronting challenges of environmental change. There is no better career prep for a career addressing environmental problems than a thorough understanding of how scientists approach environmental problems." As faculty and administrators at Unity College continue to emphasize the importance of undergraduate research experiences for our students, Kelly Safford summarizes her personal experience with the turtle project, "When we had the support and interest from at least three teachers at Unity -- it felt really good!"

#### References

Guterman, L. Aug. 17, 2007. What good is undergraduate research anyway? The Chronicle of Higher Education

Handelsman, J., S. Miller, and C. Pfund. 2006. *Scientific Teaching*. New York: W.H. Freeman & Company, in collaboration with Roberts & Company Publishers

Lopatto, D. 2007. Undergraduate research experiences support science career decisions and active learning. CBE Life Science Education 6:297-306

National Resource Council. 2003. BIO 2010: *Transforming Undergraduate Education for Future Research Biologists*. Committee on Undergraduate Biology Education to Prepare Research Scientists for the 21st Century. Board on Life Sciences. Washington, DC: National Academy Press.

Russell, S. 2006. Evaluation of NSF support for undergraduate research opportunities: follow-up survey of undergraduate NSF program participants. Online report by SRI international: www.sri.com/policy/csted/reports/university/documents/URO%20 FollowupSurveyRpt.pdf

## **Alumni Profile**



# The Winding Road Leads Back to Unity for Nicole Collins

As the poet Robert Frost observed, sometimes taking the road less travelled makes all the difference. For Nicole Collins '00,

Park Management, her preferred path to personal and professional development led right back to Unity College.

Collins put the skills she developed at Unity College to good use in her early career. In turn, those skills and experience gained since graduating in 2000 made her an ideal choice to serve as an Assistant Director of Admissions. Her success in that job led her to yet another challenging new role at Unity College as Career Counselor / Internship Coordinator at the Career Resources Center, located on the web at: www.unity.edu/CareerServices/CareerResourceCenter/Staff.aspx.

On a daily basis, Collins works closely with students who are exploring their career options. She is able to draw from a wellspring of first-hand knowledge gained from her time as a student at Unity, and also from her years spent away from the College as a professional in a variety of settings.

Through it all, Collins has felt a strong personal connection to Unity College.

"Unity was the first college that popped up on a college search computer program," Collins said of her initial contact with Unity. A nature lover and avid hiker who knew the woods and trails behind her home like the back of her hand, Collins was intrigued by Unity but thought she wanted something different than what Unity appeared to offer. "I loved it but wanted a large university experience, so I first attended the University of Maine at Orono. After a year, I realized what I wanted was to be a person, part of a community, and attend a college where the average class size is smaller than 150 students."

When Collins speaks about her experience as a student at Unity, there is a joy present that is unmistakable.

"Unity has so many strengths," Collins said. "The faculty, staff, administration and students are engaged and dedicated to giving it their best effort every day. I also think that there is a diversity of outdoor enthusiasts at Unity, along with the fact that the overall community is supportive, nurturing and accepting."

A native of Southbridge, Massachusetts, Collins was an engaged, academically successful student in high school. She graduated with honors in the top 10% of her class.

While some at Unity describe hunting in passionate terms, Collins expresses a similar passion for philosophy and music. At Unity, such interests including as Collins says, wondering about "the mysteries of the universe," place an individual within the segment that President Mitch Thomashow calls The 1969 Club (because they look like I did in 1969). In point of fact she seems more professional than flower child.

"I've always cared about people and been intrigued by the factors that bring them together," said Collins. In high school and college, Collins was involved in a great many extra-curricular activities, including playing varsity soccer, baritone saxophone (jazz and concert bands), participating in Kung-fu and gymnastics.

A favorite professor at Unity was Tom Mullin.

"His classes were truly practical and had noteworthy real life applications," she said. "Steve Guthrie was another favorite of mine because his Program Planning course gave me infinite planning skills. Also, Charles Diviney was excellent." In Diviney, Collins found a kindred spirit who also wondered about the mysteries of the universe.

Though she was a successful student and by no means shy when she arrived to pursue her studies at Unity, in hindsight she realizes the ways in which it had a profound impact on her academically, socially and with respect to her personal development. She got her money's worth and then some.

"I learned that I am capable of far more than I had ever dreamed possible before I came to Unity," said Collins. She also learned that Unity offered many challenges, each of which brought a big payoff.

"Directly helping people is something I learned that I wanted to be part of my life's work," she said. Now, her job at the Career Resource Center is the fulfillment of that realization made while she was a Unity student.

"Whether it's finding a cross country travel route through Denali Wilderness or exploring ways to write an effective cover letter, my job in the Career Resource Center (CRC) gives me the kind of daily, hands-on contact helping people I enjoy," she said.

"I love being part of the Unity community," Collins noted. "It's a lot of fun to work internally with students, faculty and staff, and externally with employers, alumni, and environmentally focused organizations. Most of all, I love helping and inspiring the next generation of dreamers."

Her job in the CRC is also ideal because it brings her into contact with many of her former classmates.

## Alumni Profile/News & Events

When asked to name a few of her classmates with whom she has kept in touch, Collins reels off an amazingly long list of people with whom she communicates regularly by e-mail including Michelle Fisher, Becky and Paul Meinnersman, Alex Delucia, Bob Giollito, Scott Stidsen, Josh Surette, Jeff McCabe, Marky (love) Horan, and Asa Wagner. She adds that every few weeks or so she, her husband, Travis '00, whom she married in 2003, along with Calla (age 5) and Sawyer (age 3), socialize with former classmates including Korah Soll, CJ Walke, Lee and Jackie, Lisa and Jeremy Martin, and a friend she simply calls "bub."

When she graduated in 2000, Collins worked for the National Park Service. She enjoyed her position but found its seasonal nature to be less than ideal.

Thinking about Unity's future as a college, she feels it is at an important point in its history.

"Unity is at an incredible place and time," Collins said. "I feel it is on the brink of emerging from its adolescence. The increasing awareness of environmental, the unique academic niche Unity serves, and its highly motivated and visionary community combine perfectly. Unity is taking off and doing a great job preparing the next generation of environmental leaders."

"This is an exciting time to be at Unity."

## New Lead Custodian Greens Up Unity's Clean-Up

By Holli Cederholm '07, Sustainability Coordinator

When lead custodian Keith Giles joined Unity College's maintenance department this past summer, he was surprised to find that "America's Environmental College" did not use recycled paper towels, and that only one green-certified cleaning product competed for shelf space with standard cleaning chemicals, like bleach and comet. And, he saw no reason why we couldn't be more conscious of the environment in our cleaning habits.

Formerly the Supervisor with Environmental Services at Mercy Hospital in Oklahoma City, Oklahoma, Giles was used to considering cleaning services in terms of quality of life—for the surrounding people, and the greater environment. "It's a balancing act: the first thing you look for when you clean is the health and safety of the people, then you think about how green you can be," said Giles.

From his previous experience and through a little bit of research Giles has found that considerations for the health of Unity's community do not have to be sacrificed in making greener cleaning decisions. In fact, some of these eco-friendly cleaning products work better than more traditional products. For example, microfiber technology, chosen for Unity's cleaning cloths and mop heads, is more effective with less detergent. This material, comprised of tiny fibers a tenth of the size of a human hair, can pick up 94% of present germs all by itself. Most of the time, the maintenance staff doesn't even have to add any solution to clean the floors, said Giles.

As this technology is reducing the use of detergents, it is also reducing the use of paper towels used in cleaning. Each one of these microfiber towels has a long life—it can be washed up to 2,000 times without losing effectiveness. Giles estimates that each microfiber towel saves 19 cases of paper towels.

To further reduce extraneous use of cleaning solutions, Giles shifted the type of cleaning products used on campus, from the one certified green cleaning product and the handful of household standards, to 3 multi-purpose certified green cleaning products. "In using these products, there is no over use, no over waste," said Giles. Each one is mixed with water via a dilution system, ensuring the necessary minimum of cleaner is used. One jug, about 1.25 gallons, holds enough cleaner to do all the bathrooms on campus for a month, said Giles.

Aside from these more discreet changes to Unity's cleaning system, Giles has implemented some changes that are more obvious—take the new automated paper towel dispensers installed in all campus bathrooms as an example. Battery-powered paper towel dispensers may seem like a contradiction to the environmental code that guides decision-making at Unity, but Giles assures us that they actually save paper, and lots of it.

For those unfamiliar with the old paper towels used by the college, Giles keeps a sample, for comparison, in his office: they are thick to the touch and bleach white, at least in contrast to the new towels, which are thinner, dirt brown, and about 2 inches shorter in length. The shift to these new towels, which are made of 100% recycled material, was made possible by the automated dispensers; due to their thickness (or, perhaps more appropriately, their thinness), the recycled towels would not have worked in the older manual dispensers. Even though the change required electricity, Giles feels he made the right decision. "We use all rechargeable batteries," said Giles, "and each one has 1,000 charges, and 11,000 waves before it needs to be charged."

He also noted how much paper the college was saving as a result—roughly 10 cases of paper towels a month. "Those trees aren't coming down because of us," said Giles.

Another thing the college is saving as a result of Giles' cleaning

## **News & Events**

transformations, to the surprise of the lead custodian, is money. "It is far more cost effective," said Giles, offering the example of the floor mat system. Previously, the college rented finish mats—a type of floor mat designed for feet wiping, but not for absorbing dirt and water—from a company in Bangor. Giles investigated an alternative mat system—including scrapers and water hogs which would absorb the dirt and water—that would reduce the amount of dirt entering the buildings on campus, and therefore ultimately reducing the necessary cleaning. "For the same price of renting mats for the year, I can buy the whole system." So, he did.

"It all goes together, its like a machine," said Giles. He takes pride in the importance of janitorial systems, and is constantly thinking of different ways to improve the quality of cleaning at Unity, from backpack vacuums with hepafilters to zinc free floor wax. "We have an effect on every student, faculty, and staff on campus."

## **Lapping Lecture Series**

Reptile enthusiast Meg Anderson '09 of Howell, Michigan, was happy to handle a friendly python during a Lapping Lecture Series presentation on Tuesday, April 1, at the Unity Centre for the Performing Arts. Anderson was helping out during an interactive presentation on reptiles by Jamie Pastika, a zookeeper, wildlife photographer, former Disney World interpreter, and current Executive Director of Minnesota's The Reptile and Amphibian Zoo.



## **Student Government Association Reaches 100% Participation**

On Thursday, April 3, members of the Student Government Association (SGA) presented Vice President for College Advancement Rob Constantine with a donation that marked a milestone. William Hafford '08, SGA President, read a letter signed by members of the SGA:

#### Dear Mr. Constantine -

Please find enclosed a donation on behalf of all members of the Student Government Association (2007-2008) to Unity College. As student leaders, our donation is modest, yet our intentions are huge.

We hope that this donation will help Advancement to further the interests of the institution and serve as an inspiration to encourage others in giving to the college as well. Thank you for your efforts on behalf of the college and all students here at Unity.

Sincerely

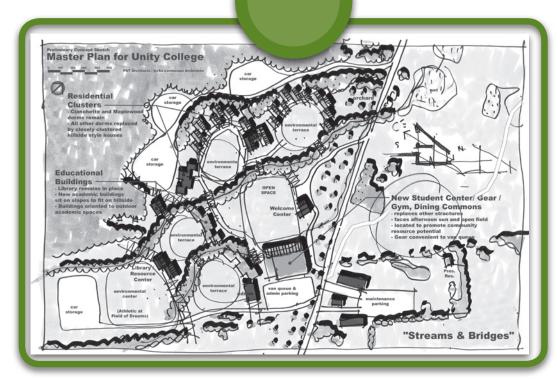
Signed by members of the Student Government Association





# Sustainability, Community, and lots of Nooks and Crannies...





A PDT Architects drawing of streams and bridges on or near the Unity campus

# it's all just part of the Master Plan

By John Zavodny, Associate Professor of Philosophy and Humanities and Chair of the Department of Instruction and Advising Services

"Wow, look at the tremendous brain power in this room!"

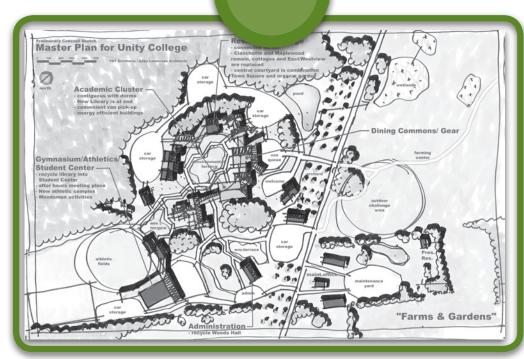
With these words sophomore Unity College president Mitchell Thomashow christened the college's master planning process. For two days during the weekend of September 28, 2007, over sixty members of the extended Unity College community gathered at the college's Unity Centre for the Performing Arts to ponder, dream, and advocate their way to re-imagine the landscape of Unity College. Always thinking ahead, Thomashow urged the group to "enter this process with legacy mind." Thomashow prophesied, "The decisions we make will affect the future of this college."

"Organic...earthy...casual." These are some of the words that rang out as Sarah Coffin Marshall, Senior Associate and Landscape Architect of Terrence J. DeWan & Associates, presided over a Friday night brainstorming session. Marshall solicited spontaneous audience reaction to a series of images from other campuses and communities—some good, some not so good. "The buildings are

too fancy, too modern, not Unity at all!" called out one participant from the dark of the auditorium. "The paths shouldn't be so straight," said someone else, "we need benches and bushes and trees and meadows! Nooks and crannies!"

Sufficiently inspired, staff, faculty, students, board and community members worked into the evening, then got up early and worked until late the next afternoon with one thing in mind. "Everyone here wants to see this college, this community and these students flourish. That's what this weekend is about," said Beth Arnold, second year faculty member in Adventure Education and one of several weekend facilitators. "It's an exciting time to be at Unity College."

Arnold worked with college community members and representatives from PDT Architects and Terrence DeWan & Associates Landscape Architects & Planners to get all the ideas on paper literally. By the end of the two-day process the Unity Centre lobby



A PDT Architects drawing of farms and gardens on the Unity campus

would be covered in visions of a future Unity College. But, as is often the case in college, it all began with some homework. Marshall gave everyone at the Friday session a stack of sticky notes and an assignment: bring back the notes filled with ideas, dreams, values, and designs.

> "Think big," Marshall, would encourage the group of budding planners. "No one has the whole answer, but we all have a part of it." The group did its homework well. Big ideas included expanded farm and garden operations, sustainability and environmental education outreach centers, more formal and inform gathering spaces, a pedestrian-friendly campus, and a vision of the Unity College campus as a demonstration farm and garden. "The homework was essential—thoughtful and insightful," said David Webster of PDT Architects, Marshall's partner in planning for the weekend.

As might be predictable, the Unity College students seemed especially successful with their homework and group work. "I'm really impressed with the students," said Marshall, "they've obviously made an enlightened choice to come to Unity in the first place, but they've also shown real leadership in the [planning] groups." Marshall associated student success with the atmosphere of partnership between, town, school and students, "This is clearly a community of equals where the students aren't overwhelmed; they clearly perform well in this atmosphere."

David Webster of PDT Architects has seen plenty of planning retreats, but never town/gown relations like those between the town of Unity and its academic namesake. "The relationship between the town and the college is unique. I've never seen it before—the town created the college!" Webster, ever the architect, drew up a design that would capture the essence of the Unity landscape: a hopeful community and committed students. "Unity by its very nature is a place of idealism and commitment to the future; the students studying this curriculum are by nature hopeful."

"Well done...I've got to believe that everyone is exhausted," cajoled Webster. By late Saturday afternoon, when the planning retreat was all but over, The Unity Centre for the Performing Arts was filled with tired but optimistic participants and ideas everywhere. Exhausted participants unveiled the product of two days of hard work—visions of the future of Unity College that ranged from the simple modesty of wind chimes to the bold leadership of wind farms. Alternative energy shuttles and pedestrian pathways, ice-skating rinks and swimming pools, green roofs and hidden parking—these are just some of the ideas that emerged from "the tremendous brain power" of the Unity College community.

"If the plan is bold, we'll find a way to make it happen," Webster promised. Having seen master planning processes at Unity come and go before, Doug Fox, longtime Unity College Landscape Horticulture faculty member took a measured approach "the process has been very thorough and has resulted in some very realistic planning." Thomashow demonstrated his usual enthusiasm and optimism, "I can't think of a better collaborative learning process for a college than this."

"Everyone's tired, but I think we all felt it was time well spent," President Thomashow summed up feelings as he thanked the group for their hard work and congratulated their creativity. Mark Miller, member of the Unity College Board of Trustees planning committee addressed the group, "This is exactly what [the board] wanted to have—we are very excited about this."

Fast forward four months, to February 6, 2008 when Thomashow opened a series of Master Planning sessions to continue the good work begun in the fall. "Unity 2020, think ahead 12 years," Thomashow instructed a new crowd gathered in the banquet hall at the Unity Centre for the Performing Arts. "Now is when we begin our four Wednesday's in February." Thomashow was referring to the four intensive evening planning sessions scheduled for consecutive Wednesday nights that would take the architect's master plan prototypes from dreamy concept to dramatic commitment.

Architects at PDT and Terrence J. DeWan and Associates had been busy over the intervening months between that early fall weekend retreat and the serious business of a Maine February. Webster, Coffin-Marshall, and associates had spent the months translating the boisterous vision of an inspired Unity College community into three bold, yet realizable master plans. Over the month of February, the master planning contingent who met weekly in the UCPA banquet hall (minus a snow day) sampled, critiqued, digested, altered, adapted and adopted from draft master plans with names that reflected the community vision for the future of the college. "Farm and Gardens," "Streams and Bridges," and "Woods and Wetlands" the names for the alternative master plans were purposely suggestive—purposely evocative. Eventually, "Streams and Bridges," a plan that emphasizes the natural landscape, ecology, and hydrology of the college site, found favor with the crowd, but

that doesn't mean that participants were shy about taking the best from all plans.

"I hear several things," said Alan Kuniholm of PDT Architects, when asked what he took away from the planning sessions. "I hear consensus around what buildings get built first, I hear consensus around the relationship between pedestrians and vehicles, and I hear consensus around building sites." The process ended as it began, with congratulations and optimism from Thomashow. "What I feel best about is the collaboration that has happened here. This process has been so positive, so powerful. I am confident that as we move forward we will have a vision of Unity College that is bold yet realistic."

The master planning retreat, and the four nights in February may be over, but the work at Unity College is just beginning. A final master plan for Unity College is expected by early summer. Thomashow expects the first changes to the campus to start taking place soon after. In addition to more minor improvements that could happen as soon as summer of 2008, Thomashow and Vice President for College Advancement Rob Constantine are hopeful that within a couple of years the college landscape can start seeing clear signs of change. "I feel very optimistic about the next several years for the college;" said Constantine, "now we have a positive vision for the college. Now we know what we're working towards. Now we just have to make it happen." As the saying goes, "well begun is half done."

For more information on the planning process and additional visuals, visit the PDT Architects web page online at: www.pdtarchs.com/index\_wip3.html.





A PDT Architects drawing of woods and wetland relationship to the Unity campus

Finding a Needle in a Haystack

The Arts Scene at Unity is Vibrant ...

If You Know Where to Look

## By Sara Trunzo '08

Woodlands, farm fields, and streams surround Unity College. The College is a half-hour drive from the nearest movie theater, bus station, or Thai food restaurant. However, do not mistake Unity as sleepy, remote, or uncultured. Just below the surface of our down-to-earth exterior lies a rich resource of local talent.

Visual artists on Unity's campus, from faculty to first year students, are simultaneously striving to refine their artwork and live their environmentalism.

Ben Potter, Associate Professor of Art, was attracted to Maine by both the landscape and art community.

"It is imperative to stay connected with other artists," said Potter of his profession. "And this state has so many artists across the spectrum. Maine summering is a tradition in the art establishment," he said, noting the Skowhegan School of Painting and Sculpture and its associated artist colony.

Potter hopes to utilize this resource of local talent to enrich his teaching and cater to the interests of his students. "I would love to have more of my students work independently with local artists of their choosing," said Potter.

Beyond the walls of the classroom, students and community members have been exposed to Potter's excitement for Maine artists. As curator of the Leonard R. Craig Gallery on campus, Potter has hosted several openings and artist's talks, which have featured Maine artists.

As a multi-media artist, Potter seeks to "represent the landscape, and elaborate on our purist notions about being in tune with nature."

"I'm interested in how people make sense of the natural world."

"I'm interested in how people make sense of the natural world," said Potter. In his work, the human relationship with nature is not romanticized, but integrates both "everyday work and our aspirations."

"Teenagers hanging out in the woods throwing rocks are experiencing nature just as authentically as ornithologists," he said.

Potter uses plastic shopping bags, the kind that are often "snagged in trees", to create many of his images. He calls the recycled plastic an "unromantic material, reworked."

Ben Potter exhibits artwork nationally.



## Isabel Streichhahn-Demers

is a multi-media artist who envisions a holistic approach to art, wellness, and the environment. She works primarily with paint, sculpture, photography, and installation and enjoys mixing media to create hybrid images.

Although her works are visually organic, modern, and refreshing, she acknowledges, "art can be unsustainable."

With sustainability and economy in mind, Streichhahn-Demers' latest exhibition featured artwork created largely from "lost materials."

"For example, I used parts of an old rabbit cage I found in the woods near my house," said Streichhahn-Demers.

"I was influenced by place," said the German-born artist of her time in Unity.

As she grew interested in making a "smaller environmental footprint" she also experimented with handcrafting vegetable-based paints.

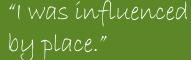
Looking to plants for inspiration was nothing new to this life long student of herbal medicine. Her interest in holistic healthcare has lead her to

create artwork that is now displayed in the College's new Health and Wellness Center, as well as to become a hospice volunteer.

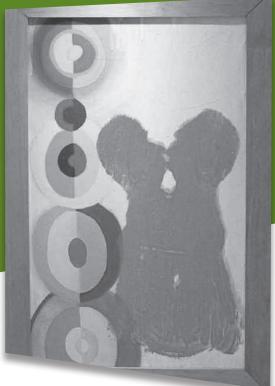
In order to continue her synthesis of creativity, wellness, and living lightly on the Earth, Streichhahn-Demers aspires to attend acupuncture school.

Isabel Streichhahn-Demers will graduate in May 2008 with a degree in Environmental Humanities.

"I was influenced







Lacie Scheuer, a new face at Unity College, always saw her drawing as a "doodling habit" and a "de-stresser."

"When I got to Unity, I hadn't taken an art class for years," said Scheuer. Despite her lack of formal training, her talent has been noticed.

"My high school issued me a 'graffiti license' in order to add visual appeal to bathroom stalls and prevent vandalism," said Scheuer. She has also been commissioned to design tattoos for several friends and acquaintances.

Since arriving at Unity to study wildlife, Scheuer has been blossoming as an artist. "I am learning to fine tune my observation skills," said the freshman of her latest work. In addition, she is beginning to experiment with mixed media by incorporating sculptural elements, such as wire, to her work on canvas and cloth.

> Scheuer, whose family raises goats in New Hampshire, said that she immediately felt at home on campus. "I saw a collection of independent individuals from all edges of environmentalism," said Scheuer of her first visit. "And tents! Students sleeping out in the field in tents."

> Scheuer said that she increasingly sees her artwork as a "productive" hobby.""I hope to incorporate my love of art and wildlife into something educational."

Lacie Scheuer will graduate in May 2011 with a degree in Wildlife Biology.



"My high school issued me a 'graffiti lícense' in order to add visual appeal to bathroom stalls and prevent vandalism."





**Unity** Spring 2008 | **15 14** | **Unity** Spring 2008

## Lisa B. Martin

Despite high-speed technology, "the still analogue photograph remains a viable medium in terms of visual culture," said Lisa B. Martin, artist, alumna, and instructor.



"Humans move too fast to be captured in solid form in a photograph where the exposure is longer than a fraction of a second, whereas a tree, or rock can" said Martin. Her latest work seeks to shed light on the relationship between human perceptions of time and the timeframe of the earth's cycles: "geologic timeframe, earthworm timeframe."

In an effort to understand the transformations of nature over time, Martin continually returns to a small pool in the woods near her home where she takes a photograph each week. Together, the images tell the story of place and patience. "We are just a blip," said Martin. "Most of the trees will outlive us."

Martin, who has also featured small organic farmers as subjects, said she is fascinated by the "perceived boundaries between people and nature" and hopes that her work can demonstrate how humanity is a part of the larger ecosystem "as a way to remind the viewer of humanity's place in the grander scheme of things."

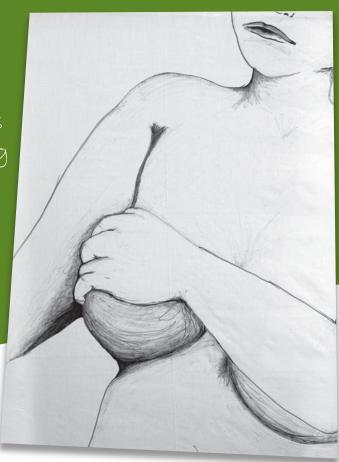
"I'm compelled to effect change," she said. "This is my way of doing that. I learned that at Unity."

She is currently an adjunct instructor who has taught Gender in the Workplace, The Unity Experience, and Art History and is currently teaching Black and White Photography.

Lisa B. Martin graduated from Unity College in 2000 and is currently working towards her MFA in Visual Art from Vermont College.



"I'm compelled to effect change...This is my way of doing that. I learned that at unity."



10 Re Harr, at age six, he received his first camera from his father. "During the winter I would spend whole days developing film in my bathroom and printing images in my basement where I set up a darkroom."

Although he has always photographed landscapes and typical natural subjects like flowers, some of his latest work aims at highlighting the human impact on the landscape.

"I strive to portray—in a beautiful way—the items and places people have forgotten, neglected, and damaged," said Harr. Some of his images challenge viewers to "question their daily practices."

Harr has also experimented with photographing at night in order to take advantage of "subtle, less intense color and light." He often uses a headlamp or flashlight or even car headlights to "paint" light onto the images he intends to capture.

This technical approach to his artwork is no surprise; Harr is an experienced electrician, plumber, carpenter, and mechanic. His passion for mechanical work and environmental concerns are embodied in his 1978 Mercedes, which he fit with a custom-designed vegetable oil fuel system.

> As a part of his academic requirements, Harr is currently a photojournalism intern at WoodenBoat Magazine, where he is helping to document the traditional trade of boat building throughout the state of Maine and the rest of the country.

> After completing his studies, Harr, who recently received a US Coastguard Captain's License, looks forward to "traveling by road and water."

Jake Harr will graduate in May 2009 with a degree in Environmental Writing.





"I strive to portray—in a beautiful way—the items and places people have forgotten, neglected, and damaged."



# Owner of Majestic Scottish Estate Welcomes Input from Experts at Unity College on Ways to "Re-Wild" Landscape



Alladale is an imposing structure



For some time now, professionals at Unity College have maintained that its reach is significant. Several members of the faculty with European and African roots have brought an international flare to the community. They are joined by a small but consistent number of international students.

There is one effort unfolding, however, that highlights the far ranging professional reach of the College.

Associate Professor and Director of Sustainability Mick Womersley, a native of the United Kingdom, learned of an effort at Alladale estate in Scotland to "re-wild" the landscape by re-introducing predator species and pursuing a variety of sustainability efforts. He contacted the estate owner, Paul Lister, to weigh in on the efforts. A dialogue between the two led to an invitation and trip to Alladale in February.

A four-person Unity contingent including Womersley visited Alladale, a 24,000 acre estate in the Scottish highland, to consider its special challenges and offer their insights. The Alladale project has the potential to eventually create sustainability and / or wildlife internships for Unity students.

Alladale (located on the web at www.alladale.com) is a traditional country seat dating back to the Victorian era.

Lister proposes to re-wild the Scottish highlands, regenerating the ancient Caledonian forest, re-equipping the highland ecological community with the predators that would police the forest, keeping herbivores in check. It is believed by supporters of this effort that such an approach would be a more profitable land use than what is currently in place.

Womersley says re-wilding is quite a "tall order," but one that is not impossible, given the various regulations on wildlife and land use in the United Kingdom. He notes that the blueprint for the Alladale project is a combination of older ideas from various sources. In the highlands, the proposition that regenerating the native forest would prove more economically sound than other forms of land use dates back to the 1980's.

## Alladale: Imagining A Reinvigorated Wild Setting

By Joseph Domenic Darcangelo '07

**Editor's Note:** In February of 2008, a contingent from Unity College journeyed to the Scottish highlands in the United Kingdom to begin what is hoped will be an ongoing relationship with an estate owner who wishes to "re-wild" the landscape, eventually returning it to a time when predators like wolves were common. Darcangelo was part of the four person contingent from Unity College to visit

Alladale in February. Also visiting were Darcangelo's wife, Associate Professor Amy Darcangelo, Assistant Professor Aimee Phillippi and Associate Professor Mick Womersley. Here Darcangelo offers his reflective environmental perspective on the trip. A full account of the trip is available on the Unity College sustainability blog online at: www.ucsustainability.blogspot.com

Eyes wide open, an emersion of senses and witnessing the ongoing transformation of one man's passion into practice. These impressions describe a visit to Alladale Wilderness Lodge and Reserve (AWLR)—a hidden gem sparkling deep within the glens of the Scottish highland mountains. Paul Lister, the visionary for AWLR and estate owner, has initiated a process of ecological restoration in his own 24,000 acre backyard. He is also connecting visitors to the rich traditions of these Highlanders while helping them to explore the ecological identity of the region.

As one travels to Alladale Wilderness Lodge and Reserve from the quaint town of Ardgay, settled next to Dornock Firth, a sense of history begins to unfold as paved roads narrow, roll and bend along the rugged landscape. The road through this majestic, wild setting encourages visitors to embark upon a path of ecological reflection.

Visitors commonly ask questions like: why does this environment look the way it does? How can understanding the ecological and economic value of this land guide its future restoration? What does this land mean to individuals, and

how do they identify with its value? And how does one formulate the correct questions to ask when seeking solutions for the long-term viability of this region in a world plagued by global warming, overpopulation and related environmental challenges?

Some answers to introspective ecological questions relating to this untamed countryside become obvious while quietly gazing out over the green hill sides. Hundreds of white sheep dot the landscape. They graze contentedly, at harmony with their environment. But to the environmentally attuned observer, there are gaps present.

## Where are the predators?

Finding the answer to what the appropriate population of red deer in this wilderness should be is a quandary. Without an appropriate balance of predators to cull their ranks, the red deer is a species so dominant here that it has actually shaped the landscape. The lack of predators has taken its toll. Gone are the dense forests of ages past.

Economic issues are a part of the mix. The red deer generates wealth for estate and sporting establishment owners, who







Joe Darcangelo

in return provide good jobs for their community residents. Such economic activity relating to the red deer comes with an ecological cost—the Red deer, along with sheep, over graze poor nutrient soils while leaving little to no space and time for future flora to be replanted, grow and flourish. The question then becomes a matter of how to balance the ecological issues with economic realities so that future generations will have the opportunity to live in partnership with this environment.

During the ascent to Alladale's Lodge the forested landscape gives way. There are only a few trees that dot the immediate land around the lodge. Although this upland habitat provides a measure of shock and awe value of altitude with wide open terrain, exceeding over a 1000 feet in some areas, it is a landscape in peril.

The lodge is extraordinarily comfortable with rustic yet tasteful décor. The guest service provides a high level of satisfaction. Some visitors are drawn to the wildlife and wild places, while others seem to enjoy the luxury of the lodge more than anything. No matter what the intended interest may be at

Alladale Wilderness Lodge and Reserve, it can be assured that ecological experiences and hospitality share a close partnership.

With the help of businesses, academic institutions, animal management professionals, scientists, community members and leaders from other interested parties, Lister has marshaled a small Army to re-wild this landscape. They are working together, asking the right questions, and hopefully finding the correct solutions. It seems that each new step forward brings forth new challenges, so one must assume that the re-wilding of Alladale will be ongoing for some time.

Perhaps Alladale is a place of restoration in a broader sense. It is most assuredly a place that affords visitors the ideal place for ecological and personal reflection. Might the re-wilding currently underway at Alladale offer a template for other regions of the world to follow, addressing the needs of future generations by essentially turning the ecological clock back to an earlier time?

These and many other questions are being asked each day at Alladale. The gates are open and path to the lodge clear.

"With the help of businesses, academic institutions, animal management professionals, scientists, community members and leaders from other interested parties, Lister has marshaled a small Army to "re-wild" this landscape."

# From Abraham to Alladale By Mick Womersley, Associate Professor and Director of Sustainability

I am standing in a light snowstorm, in a grey dawn, on a gravel road several hundred feet above an open canopied forest through which runs a rushing salmon river in the Scottish Highlands. Below me is a fenced enclosure containing two honest-to-goodness moose, albeit from Sweden, not Maine. Beyond that enclosure is another containing a dozen or more wild boar.

To explain why properly, we should go back to the ice. Thirteen or twelve thousand years ago, the ice finally retreated from the land in this part of the European continental shelf. The British Isles were neither. Britons had not yet been invented. And you could happily walk across the channel to what would later be Europe.

Fast forward a few thousand years, to say 4,000 BCE, and you have here a thick boreal forest at higher altitudes, a deciduous temperate forest at lower ones. All our Maine mammalian species, the typical holarctic fauna or their European relatives, and their associated forests, are present. They walked across that land bridge, much as they walked across the Bering Strait to Maine. Moose, elk, roe deer, brown bear,

grey wolf, reindeer (caribou), various mustelids, in the river various salmonids, both anadromous and not. (These did not walk here, of course.) You also have people, the Mesolithic folks of what we call Britain. From these folk most of us who call ourselves British, and many Americans too, are in part descended. They have been here already for several thousand years, living in hillside villages around the Dornoch Firth to the east, and penetrating the glen to hunt moose, deer, and caribou. They are native, like the deer and moose.

Fast forward again. In 1845, the Irish potato famine is in full swing. Added to the Irish immigrants are some Scottish, including the inhabitants of these glens. Eighteen families are evicted this year, from Glencalvie to the south. As they await, destitute, in the Croick churchyard, they scratch plaintive messages in the church windows, which can be read to this day. In the late 1800s the central and eastern Highlands will be almost entirely depopulated by aristocratic landlords to make way for sheep ranches, which are more profitable than native peasants. Soon, however, refrigerated shipping brings sheep meat from New Zealand and Australia, and even the sheep ranches go under, to be replaced by deer hunting



A lone tree stands sentinel

estates for the pleasure of rich Victorian businessmen, who buy and sell the land in a way the remaining natives cannot comprehend. The sheep and deer, together with logging and charcoal burning, almost but not quite destroy the Highland forests. Native remnants persist, like the one below me. They are incredibly precious.

And then the story comes full circle in a sense. The land is purchased once more, again by a rich businessman. He decides to reintroduce the extirpated species, and to regenerate the forest, allow it to spread. Species and forest go together, he decides. And for his daring, he is reported in the newspaper, which I read, and so I decide to go visit, to see what is happening, because I too am native to these isles.

Which is basically why I come to be standing with some wonder on a dirt road above what seems to be the first moose in the Scottish Highlands in over a thousand years. What am I supposed to do about this?

Given the sweep of land and history involved, all I can do for now is marvel.



he majestic Scottish countryside



"I am standing in a light snowstorm, in a grey dawn, on a gravel road several hundred feet above an open canopied forest through which runs a rushing salmon river in the Scottish Highlands."

**22** | **Unity** Spring 2008

# Unity Offering

# **Sustainability Degrees**

By Craig Crosby, Staff Writer, Morning Sentinel

UNITY -- Search for the term "sustainability" and Google will spit out 16 million web references, all presumably revolving around practices that can be continued indefinitely without adversely impacting the environment.

Fortune 500 companies looking to save energy, homeowners hoping to curb their carbon footprints and presidential candidates on both sides of the political spectrum all have started preaching and practicing sustainability.

Unity College is on top of that trend. Beginning in the fall, the school will begin offering two four-year degrees in sustainability. Students graduating with a bachelor of science degree in either of the new programs -- Sustainable Design and Technology or Agriculture, Food and Sustainability -- will be uniquely trained to satisfy government and industry needs at every level, college president Mitchell Thomashow says.

"This is really a national movement. It's very exciting," Thomashow said. "Unity is taking the lead and making a statement. We want to play our role in making this movement really work."

The courses of study for the new majors were developed over two years of research and consultation with those in the business government and non-profit sectors, said

Mick Womersley, professor and director of sustainability at the college. The curricula were approved by the faculty last month.

"We consulted with a lot of people before we designed this degree," Womersley said. "We put in the economic analysis skills, policy knowledge and business skills. This is not just engineering. Engineers can fix engineering problems but they can't fix societal and business problems. You need business management and communication skills as well as the engineering and economics."

Students who complete the sustainable design and technology program will be able to do everything from helping communities and businesses cut energy costs to lobbying for public policy changes.

"Corporations are competing with one another these days for green-ness," Womersley said. "They all want to be the greenest, but somebody's got to do the work. It's a hot industry and very competitive."

The market will get even hotter once there is a national climate bill, which Womersley sees as an inevitability.

"It's a matter of time," Womersley said. "I go to trade shows and national conferences and I see people trying to get positions and be in the right place when we get (a climate bill). These corporations want to be on the

right side of technology."

College officials also expect demand to grow for those with a sustainable foods and agriculture degree. The emphasis on selling, buying and consuming locally-grown foods is a national trend, as evidenced by the local foods program implemented in the congressional cafeteria.

"There are a lot of agriculture majors, but this is a food systems and agriculture major," Womersley said. "Graduates of this program will know how to work with food systems from production ... to distribution to the end user. They will be just as effective as farmers, marketing managers, food cooperative managers or high school local foods program managers."

Andrew Marshall, educational programs director for the Unity-based Maine Organic Farmers and Gardeners Association, spent nearly a year helping design the agriculture and foods degree. The program dovetails with MOFGA's emphasis on training the next generation of farmers, service providers and policy makers.

"Who we're targeting is people who may want to farm, but they may not," Marshall said. "We're going to give them a really strong grounding in theory and understanding food systems that agricultural schools may not get into. It's a much more



The white birches beside Koons Hall offer an inviting springtime spot for relaxation. Photo by Jake Harr '09

multidisciplinary approach than the average agricultural school would give you."

If the programs will produce marketable students, the degrees themselves are already proving marketable for the college. Kay Fiedler, director of admissions for Unity College, said she received 40 inquiries from prospective students about the new majors even before they were officially approved.

"I find that very encouraging, since this is brand-new," Fiedler said. "I think it addresses the fact that nationally there is a need for these types of programs."

And the need is only growing, said Julie Churchill of the office of innovation at the Maine Department of Environmental Protection. News of a possibly pending recession and soaring energy costs means there will be increasing needs for sustainability programs that affect economics and the environment.

"Even now there is competition among large companies implementing green practices," Churchill said.

"Any college that is considering a program that touches on those concepts is really forward-thinking," she said. "We need more of our young people educated on these projects and troubleshooting and helping these companies reach sustainable goals."

Unity College in particular, which tends to attract students who enjoy hands-on learning, is primed to help fill the gap, said Stephen Cole, director of Natural Resources and Sustainable Communities at Coastal Enterprises, which promotes environmentally friendly practices.

"They like to do as well as to learn," Cole said. "It's an appropriate school for these kinds of programs."

Unity College has always taught and emphasized environmental practices, but the new majors represent a focus that was not there before, Thomashow said.

"It's a way for a student body and faculty to say we're organizing around these concepts," he said. "This is a way to say sustainability is my profession, not only the way I live my life."

**24** | **Unity** Spring 2008

## The Faces of

# **Environmentalism**

Unity College Community Debates Green Issues and Seeks Hands-On Involvement, Finding Common Ground to Achieve Progress an Important Goal

By Mark Tardif

Though the 2008 race for President continues to offer surprises, perhaps one of the biggest of them all has been how voters age 18 to 29 have so far shaped the primary races. They may decide the election.

While Unity College is not stressing a particular dialogue about the Presidential campaign or political issues, whether local or statewide, as a general concept the College encourages students to consider widely and do the legwork necessary to have informed opinions.

Senior Vice President for Academic Affairs Amy Knisley notes that on any given day, a wide range of dialogue is occurring in classes. During the Plumb Creek development debates of 2007, one Unity class for first year students that stresses civic engagement became very involved, staging a debate for the campus community, attending a legislative hearing in Augusta, and inviting guests from both sides of the issue to present their views directly to students.



#### What "Green" Issues?

Environmental policy major Aaron Witham '09 of Fairfield, Maine, is indicative of the motivated, engaged young demographic that is proving to be the wild card of the 2008 Presidential race. He wonders why Americans aren't demanding more substance from their

political candidates and media.

A strong supporter of Senator Barack Obama's bid for the Democratic Presidential nomination, Witham participated in his local Democratic caucus. A member of the Editorial Staff at the Center for Environmental Education (ceeonline.org) at Unity College with a Bachelor of Fine Arts in Creative Writing from the University of Maine at Farmington, Witham is educated, savvy and follows wide ranging news coverage and opinion, from CNN to right-wing talk radio.

Witham feels his political beliefs are within the mainstream of Unity College, which might trend slightly to the left of center, though there is a vocal segment of students who describe themselves as conservative and Republican.



Unity College Vice President for College Advancement Rob Constantine sees green issues in expansive terms, relating to economics, issues of war and peace, jobs, entrepreneurship, higher education and technological innovation.

"Most of the Presidential candidates are focused on the economy, but I'd be very impressed by a candidate who recognized the tie between our economic and environmental issues," said Constantine. He points to the two new sustainability majors -- Sustainable Design and Technology and Agriculture, Food and Sustainability -- at Unity College as evidence of how green issues are so clearly bread-and-butter economic issues as well. Graduates of those programs will help school districts to buy locally grown and harvested foods.

## Considering Oil, War, Political Ads and Prosperity

For John Zavodny, Chair of the Department of Instruction and Advising Services and Associate Professor of Philosophy and Humanities at Unity, campaign finance, social justice and economic issues are intricately connected. Following the money is key.

"Campaign finance reform is of great importance to me because it is necessary for real change to be achieved," Zavodny explained. "It's at the heart of what's wrong with democracy in America right now. We've got people in office who have more to gain and lose by pleasing or displeasing corporations than by serving the people who elected them. The influence of corporate money on our democracy affects everything, including the cost and availability of health care." Environmentalism is also a public health issue, Zavodny adds.



Zovodny (center)

## **Texas - Home of Big Oil and Wind Farming**

Clayton Kern '08, an Environmental Biology major from York, Pennsylvania, is both a conservative and Republican. He is politically active and feels that conservative principles have much to offer America as it seeks to address significant problems, including effective approaches to economic stimulus, free enterprise, energy needs, the regulatory structure at state and federal levels, and green issues. He leans Republican but does not believe in any brand of rigid political dogma.

On Saturday, February 23, the New York Times ran an article on the front page about how Texas in general, hardly a hot spot for environmentalism nationally, and the town of Sweetwater, in particular, is becoming a leader in wind farming. Surprisingly, former or current oil men are taking the initiative.



In some parts of Texas, the horizon features both oil wells and wind turbines, some 20 stories high. Unlike some areas of the nation that have held up wind farm projects due to a variety of reasons, from enormously complex energy regulations to esthetic concerns, entrepreneurs in Texas saw an opportunity to make money and went for it. The state of Texas itself put up few roadblocks to the building of wind farms.

Kern, who read the article, was impressed but not surprised.

"It's really amazing, in my lifetime I have seen the amount of revenue generated by green businesses go from practically non-existent to businesses making billions of dollars a year on green technologies," Kern said. "The economic possibilities are practically endless in this field."

"I remember the first time I saw a field full of colossally sized wind turbines along the Pennsylvania turnpike when I was about 14-years-old, they were the most incredible things I had ever seen," Kern offered. "They gave me a small spark of hope that our world might actually be changing."



## **Occupying the Middle Ground**

Victoria Arnold '08 is an Ecology major from Martinez, California. She is also a Staff Assistant at the Center for Environmental Education at Unity College.

"Politically I'm fairly neutral except when it comes to environmental and education issues," said Arnold. "I don't necessarily agree with most of what is going on in politics or messages being conveyed. I believe the system needs to be re-evaluated but I guess it works for now."

She defines herself politically as an independent.

"They (politicians) only talk about what they believe people want to hear," said Arnold. She considers green issues and how they play out in the political arena to be important.

For now, Arnold isn't taking sides in the Presidential election.

## **Confusing Times, Hopeful Signs**

Zavodny is from the more liberal side of the Unity community. He is more vocal about politics than Arnold.

"Folks at Unity are definitely engaged politically," Zavodny said. "Lunch is a good example – everyday at lunch a number of smart, engaged folks sit together and talk. The talk is mostly about the primaries and upcoming elections these days. Who is more electable? Who would bring about more social progress, a black man or a woman? Who matches up well against whom? What role does fundamentalism play in American politics in the year 2008?"

Kern believes in limited government that regulates to a small degree, most assuredly not to the point where regulation stifles the economy. He is a conservative who believes in going green.

"Green technology and sustainable methods don't just make sense environmentally, they also make sense economically," Kern said, taking a page from the Rob Constantine playbook.

Kern disagrees with Kermit the Frog, who said it's not easy to be green. Going green is the easiest thing imaginable with a new mind-set and willingness to following the money from there, says Kern.

The full text of this article is available online at: www.unity.edu/NewsEvents/News/Grnissues08.aspx.

**26** | **Unity** Spring 2008

# New & Noteworthy



## **Unity Students Learn Home Cooking**

During the spring 2008 semester Unity College dining services employee Cheryl "Mom" Montana (center holding tray), a popular figure among students, is teaching a one credit cooking course. The course meets once-a-week at the restaurant quality kitchen in the basement of the Unity Centre for the Performing Arts. Montana says that some students did not learn valuable cooking skills at home. She is teaching students money saving and healthy approaches to home cooking.

## Unity Foundation and UNITEL Offer Generous Support for Student Scholarship at Unity College

In March when the Unity Foundation and UniTel Incorporated hosted a reception of thanks for Unity College faculty and staff at the Unity Centre for the Performing Arts, guests were delighted to simply enjoy the warm sense of community at the event. The reception took an unexpected but most welcome turn for the extraordinary when a special surprise unfolded.

Larry Sterrs, Unity Foundation Chairman and CEO and Laurie Osgood, President and Chief Executive Officer of UniTel, both located in Unity, stood side-by-side at the front of the centre auditorium. They spoke of the close connection between Unity College and their organizations, citing the common connection they shared through the work and vision of the late Bert Clifford. It was Clifford who helped to found Unity College in 1965, serving also as President of UniTel and founding the Unity Foundation.



Larry Sterrs (left) and Rob Constantine

The crowd was both surprised and delighted when Sterrs and Osgood called Unity College President Mitchell Thomashow to the front of the auditorium. Osgood presented Thomashow with a check for \$10,000, while Sterrs offered a check for \$70,000. The donations will fund the Bert & Coral Clifford Founders Scholarship at Unity College.

"We could not be more thankful to the Unity Foundation and UniTel," stated Thomashow. "There is a strong sense of community present in Unity. This generosity is deeply appreciated by the entire Unity College community, and it will help young men and women who wish to pursue careers in service to the natural world to attain their dreams."

Thomashow stressed his hope that in the future, the strong bonds between Unity College, the Unity Foundation and UniTel would become even stronger.



Mitch Thomashow and Laurie Osgood

"We hope to visit your organizations and learn more about you," said Thomashow. "We also invite you to visit our campus and see how we are striving to become one of the best known and most well respected among all small environmental colleges in the United States. Our goal to be a champion for sustainability and attain a national voice concerning environmental issues is attainable."

Thomashow also spoke of his personal friendship with Sterrs, calling the Unity Foundation leader a mentor.

"Our relationship with Unity College has been a long and fruitful one. We have many exciting opportunities ahead of us and having UniTel as a corporate sponsor will only enhance the possibilities," said Sterrs.

"As Unity College's telecommunications services provider, UniTel is pleased to assist the college to meet its long term goals. Our commitment to them has been central to UniTel's commitment to the community," said Osgood.

The Unity Foundation donated books from its library to Quimby Library at Unity College, which also serves several area communities.

"Quimby Library's unique role as combined academic and public library reflects the close, mutually supportive ties between the College and the town," said Melora Norman, Librarian at Quimby Library. "We are delighted to receive this donation of books from the Unity Foundation as evidence of that continued relationship, which benefits all library users.

## **Unity College Wins Praise for Carbon Cutting Efforts**

On Monday, March 17, Associate Professor and Director of Sustainability Mick Womersley and Vice President for College Advancement represented Unity College as it was honored by Governor John Baldacci for excellence in the Governor's Carbon Challenge. Twenty awards were given to participating businesses and organizations that met or exceeded the goal of reducing carbon emissions by 10% since 2001, when the governors of the New England states joined their counterparts in eastern Canada in committing to reduce emissions of greenhouse gases by 10 percent from 1990 levels by decade's end. In addition to Unity, the College of the Atlantic and Bowdoin College were among the three colleges to be recognized. The College of the Atlantic reduced their carbon output by 18 percent since 2005, while Unity achieved a 20 percent reduction in carbon emissions - the equivalent of 269 tons – since 2001. Unity has built new "green" buildings on campus, buys 100 percent of its electricity from renewable sources in Maine, and has retrofitted older buildings with new insulation and heat plants.

## **Training - Search and Rescue Style**

During the academic year, the Search and Rescue Team (SAR) participate in a variety of hands-on rescue training scenarios. During the fall 2007 semester Associate Professor Mick Womersley (right), the faculty advisor to the team, led team members in



high altitude training in Camden, Maine. Womersley is a former Corporal in the Royal Air Force (RAF) and Rescue Party Leader for the RAF Mountain Rescue Service.

# Unity College Sends Relief Team to Tornado Ravaged Tennessee (Humani-Ram-Itarians)

Often when individuals think about college spring break activities, they think sun, sand and surf. A group of civic minded faculty, staff and students at Unity College have a different vision.

The group takes its name from the college mascot, a Ram, and throws in a bit of community spirit, hard work and good cheer. Mix it up and you get the Humani-Ram-Itarians.

In keeping with the core value of civic engagement that has led Unity College to repeatedly send its Humani-Ram-Itarians to hurricane devastated New Orleans, over spring break in March the College relief group assisted in recovery efforts for areas of tornado ravaged Tennessee.

A relief team of 13 students, one faculty and a staff member journeyed to middle Tennessee on Saturday, March 8, for two weeks of service. They will also filmed a documentary that they hope to submit to the Maine International Film Festival.

They worked on two relief projects.

"Our first project was working with a sustainable farmer named Bonnie in Liberty, Tennessee," said John Zavodny, Chair of the Department of Instruction and Advising Services and Associate Professor. "Bonnie's home was hit hard by the tornados that came through her county south of Nashville. She has been working to close in her roof and so was behind on her planting. We will spent time effectively getting her organic crop in the ground."

Zavodny noted that Bonnie credited the volunteers from Unity College with saving her entire growing season.

After assisting at the organic farm, the group travelled to Centerville, Tennessee, to work with the Centerville Church of Christ.

"Many, many homes have been damaged by tornados in the immediate (Centerville) area," said Zavodny. "In the town of Brushy, there were four homes that were all but demolished."

Initially, the Unity College volunteers focused their relief efforts on helping the four families that have been displaced.

"It was clear that our trip inspired hope in the people of Brushy and surrounding areas," said Zavodny. "We started by identifying work with one family, but news traveled fast."

The Humani-Ram-Itarians, founded by Anna McGalliard, Director of Student Health Services, is keeping its eye on the future by including a mix of both older and younger students.

"The students who have already done relief work wanted to make sure to involve what they see as the next generation of Humani-Ram-Itarians," noted McGalliard. "The New Orleans trip was very powerful for all of us and our students wanted to share that kind of experience with the younger generation of Unity College student leaders, who will in turn continue this legacy of Unity College service."

# New & Noteworthy

## Unity College Helps Unity Elementary School to Host Earth Day Celebration

A full slate of activities to celebrate Earth Day took place on April 18 at the Unity Elementary School. Activities were coordinated by Unity College students in the Unity IdeaL class, a course for student leadership development course.



Sara Trunzo '08, at the Unity College hoop house near Koons Hall in April

The events began at 9:30 a.m. with planting blueberries in the garden at the school; planting vegetables in the hoop house (a plastic greenhouse that is used to extend the growing season); students will be planting flowers in pots made of recycled material; planting pumpkins; planting apple trees; enjoying games and team building activities; and learning about soil fertility. Events concluded at 3 p.m.

Throughout the year, Sara Trunzo '08 was a leader among volunteers, helping students

to learn about organic growing and guiding them through several projects. She hopes to continue her work to encourage organic agriculture education in the local school district after she graduates in May.

"This is the continuation of a larger project that Unity College is partnering with Unity Elementary School to complete," said Jennifer Olin, Community Service Learning Coordinator with Unity College and the Unity Barn Raisers. "Unity College students helped design the habitat garden last spring, and Unity Barn Raisers helped purchase the hoop house."

The elementary school is growing vegetables for the school lunch program and will donate a significant portion of their harvests to the Unity Area Food Pantry.

"A number of other community groups have also supported this project," Olin added. "These groups include the Maine Organic Farmers and Gardeners Association, Unity Garden Club, and area residents."

## Unity College Holds Women's Environmental Leadership Program Awards at Unity Centre for the Performing Arts on April 15

The Women's Environmental Leadership Program (WE LEAD) and Lapping Lecture Series at Unity College hosted the annual women's environmental leadership program on April 15 at the Unity Centre for the Performing Arts.

WE LEAD is a woman-centered leadership program that educates female students, faculty and staff to become socially conscious environmental stewards and proactive members of the community, offering courses, speakers, mentors, and activities that enrich the Unity College experience.

The awards categories included: Women's Environmental Award: Honors



Award recipient Martha Dolbin

a professional woman who is an outstanding leader in an environmental field and is a model for future generations of women environmental leaders. Author Martha Dolbin received this award. In addition to writing books about spiritual strength, she began a women's college in Uganda to inspire conservation at the grassroots level, empowering women in the country to engage in sustainable agriculture and conservation efforts. She also supports primary and secondary schools for girls in Uganda.

College Leader Award: Honors a Unity College female student who has demonstrated Leadership skills in a science or environmental field and has a positive impact on the college community. Unity College student and WE LEAD member Hannah Brzycki '08 of Lynchburg, Virginia, will receive this award.

High School Leader Award: Honors a young woman who shows a serious commitment to better the environment, as well as demonstrate an interest and involvement in activities that foster environmental stewardship and who shows the promise of being a future leader in the environmental field. The recipients of this award will be:

## Winner:

Kristine Gutierrez Blacksburg, VA Blacksburg High School Nominated by Patricia Colatosti, AP environmental science teacher

### **Honorable Mentions:**

Megan McClelland
 Portland, OR
 Madison High School
 Nominated by Suzanne Setterholm, teacher

2) Katrina KarlsenNorth Andover, MANorth Andover High SchoolNominated by Merry Beninato, teacher

"These awards symbolize the strides that women have taken in the environmental field," explained WE LEAD member Amanda Walker '09. "So many women are deeply passionate about the environment and playing a significant role in protecting the natural world for future generations. These awards recognize both the aspirations and achievements of women in the environmental field."

# Sportsmen's Conference, Wild Game and Local Foods Dinner a Success

The annual Sportsmen's Conference and Organic Wild Game / Local Foods Dinner held at the Unity Centre for the Performing Arts on April 14 was a great success,

raising money to benefit two charities. The event was organized by the Archery Club and the Conservation Law Enforcement Club, with special leadership provided by Assistant Professor Tim Peabody, Associate Director of Admissions Joe Saltalamachia, Julius Koenig '08, Chris McGrath '08, Chris Hayward '09, Matt Weller '09, (chef Becky Traylor '01 and (chef) Mac Morningstar.

## Faculty Notes

## Associate Professor Diana Murphy Will Present Paper at Conference

Associate Professor Diana Murphy has been invited to present a paper to the 8th Annual Teaching Medieval Literature Conference, which will take place in May in Vogogna, Italy. The presentation will focus on interdisciplinary approaches to teaching history, literature and cultural studies in the context of a full semester study abroad program. Drawing on experiences from the successful Unity College pilot project conducted in Ascoli Piceno during fall 2006, she will share information about ways in which a "living history" course can enhance learning. The initial part of the paper covers planning, outcomes and assessment of the study abroad program as a whole. It then goes on to explain how learning outcomes for the capstone course in the Unity College General Education core curriculum were applied to a course that was specifically designed to use an Italian city as a "lab". As students reported in their self-evaluation essays, this was an optimal way to achieve the goal of acquiring knowledge about patterns of cultural change. In this sense, experiential education reinforced the more standard methods of pedagogy delivered through lectures and readings.

# Two Papers by Associate Professor Lois Ongley Accepted for Publication

Two papers by Associate Professor Lois Ongley have been accepted for publication. The first, to be published in 2008 in the Journal of Chemical Education, was jointly authored by student Clayton Kern and Professor of mathematics Barry Woods. The paper is entitled "A Non-mercury Thermometer Alternative for Use in Older Melting Point Apparatuses." The second paper Ongley wrote with co-authors Mary Anne Holmes, Suzanne O'Connell, and Connie Frey and has been published in Nature Geoscience, volume 1, as a feature article titled "Gender imbalance in US geoscience academia." Also during the 2007-2008 academic year, Ongley was nominated by President Mitchell Thomashow for the "Donald Harward Faculty Award for Service-Learning Excellence" for work she and her students did on Pattee Pond in Winslow, Maine. She expects to present this work at the Maine Water conference in March.

# Professor Don Lynch Accepts ETS Invitation, To Present on Adventure Therapy

Professor Don Lynch has again accepted an invitation from the Educational Testing Service (ETS) to travel to Kansas City, Missouri to be a reader for the national Advanced Placement examinations in Psychology. He will be among a group of over 440 psychology faculty members from across the United States and several foreign countries. Lynch has also been invited to present a training workshop this spring on using adventure therapy as a treatment for individuals with disruptive behavior disorders. The session will be a part of this year's Maine Counseling Association's annual conference in Rockland, Maine.

# Faculty Notes

## **Professor Barry Woods to Present Sabbatical Work**

Professor Barry Woods will offer a presentation on his sabbatical work at the regional New England Mathematics Association Conference to be held April 11 - 12, 2008 at Springfield Technical College in Springfield, Massachusetts. The title of hi presentation is "One Sample Inferential Statistics Using Excel."

## **Assistant Professor Amy Darcangelo Assists** with Scotland Effort

During the spring 2008 semester, Assistant Professor Amy Darcangelo and her spouse Joe Darcangelo '07 joined Aimee Phillippi and Mick Womersley on a research and networking trip to the 24,000 acre Alladale Wilderness Reserve in the Scottish Highlands. They conferred with reserve managers, the reserve owner Paul Lister, and research faculty from Oxford University's famous Wildlife Conservation unit "WildCru." The discussions included ways that Unity students may become involved in captive and field wildlife programs at the reserve, working with reserve staff and Oxford University academics.

## **Professor Chris Beach Joins Board**

Professor Chris Beach has joined the board of the Maine Appalachian Trail Land Trust, focusing his work on land conservation and community outreach in the High Peaks area of Franklin County, Maine.

## **Associate Professor Ben Potter Displays Work**

Associate Professor Ben Potter displayed hi drawings through the month of February at the June Fitzpatrick Gallery in Portland, Maine, as part of a group show titled "Linear Perspectives." He was also one of 89 artists chosen from over 700 that submitted work for the 2008 Biennial exhibition at the

Center for Maine Contemporary Art in Rockport, Maine. This exhibition will take place August 9th-October 4th. Potter will also exhibit in a solo show that will open at the NavtaSchulz Gallery in Chicago, Illinois, in May. As part of the Maine Curators Group, Potter brings quality art for exhibition at the Leonard Craig Gallery, Unity College. He also forges connections with the public and the art community throughout Maine.

## **Associate Professor Mick Womersley Helps Re-Imagine Scottish Landscape**

Associate Professor Mick Womersley, in addition to researching and organizing the Scottish Highlands trip mentioned above, will during the spring 2008 semester host a visit by former RAF Mountain Rescue Team Leader W.O. David "Heavy" Whalley, BEM, MBE, who was the senior team leader at the Lockerbie Air Disaster in the U.K. and a member of the successful 2006 RAFMRS Everest expedition. The event is part of the spring 2008 Lapping Lecture Series at the Unity Centre for the Performing Arts in Unity, Maine. Whalley is the most decorated RAFMRS member. Whalley will offer a lecture with slides at the Lapping series, at the MASAR spring training and the national Mountain Rescue Association AGM in Stowe Vermont, among other engagements during his spring visit to the United States.

## **Associate Professor Kate Miles Teaches at MLA Convention**

During the spring 2008 semester, Associate Professor Kate Miles presented her essay, "Get Up, Stand Up: Teaching Social Protest and Civil Disobedience in the Literature Classroom" at the international MLA convention in Chicago. A juried panel of the Publication of the Modern Language Association (or PMLA) selected this essay

for inclusion in an upcoming issue. Miles serves as editor of ASLE News, the official publication of the Association for the Study of Literature and the Environment, and just returned from the organization's biannual executive council retreat. She has also been continuing her work as a scholar in residence for the Maine Humanities Council and the Audubon Society's Fields Pond Nature Center.

## **Quimby Library Joins Minerva**

Quimby Library Director Melora Norman has arranged for Quimby Library to join Minerva, the statewide library consortium. This will allow library borrowers to make materials requests and manage their accounts online.

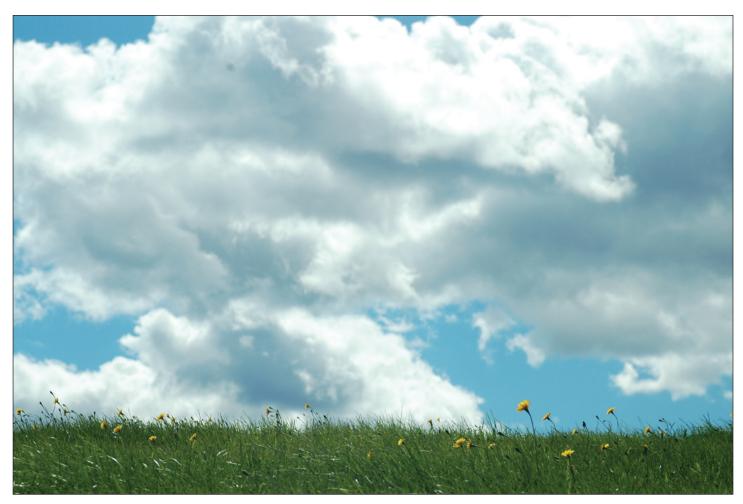
## An article by Professor Don Lynch was featured in the March 2008 edition of the Nor'Easter:

Newsletter of the Northeast Region of the Association of Experiential Education. The article by Lynch was featured in the Research Corner section and entitled "An Examination of the Scope and Variety of Adventure Therapy Services Within the State of Maine." It is available online at: www.northeast.aee.org/files/en/user-ne/ cms/16-1.pdf.





90 Quaker Hill Road Unity, Maine 04988 www.unity.edu



Flowers against a blue sky present a joyful setting to completely forget the harsh Maine winters. (Photo by Jake Harr '09)