CREATIVITY, LEADERSHIP, AND CHANGE

by John Petersen ’88, Chair, Environmental Studies Program

THE COMBINATION OF INTELLECTUAL ANALYSIS and practical action described in these pages renews my appreciation for just how committed and talented our students and my fellow faculty and staff are. While the environmental challenges this generation faces are daunting, the impressive work described in this newsletter inspires hope and, more than that, speaks to the unprecedented opportunities for creative leadership that accompany the search for solutions to these challenges. Between these covers you will learn of important work ranging from efforts to localize the Oberlin food system; analyze the resilience of farmers in rural Zambia to climate change; assess the impact of resource-use feedback technology and competitions on attitudes and behaviors; analyze small-scale solar systems as options for mitigating and adapting to climate change in rural Bangladesh; explore the multidimensional narratives of climate change; and assess opportunities for agriculture and interfaith collaborations that reconcile environmental challenges facing the Appalachian region. Clearly, the commitment to interdisciplinary analysis and thoughtful real-world problem-solving remain hallmarks of Oberlin’s Environmental Studies (ES) Program!

In addition to the creativity and leadership exercised by students, faculty, and staff, a second theme that comes into focus for me as I edit this newsletter is change. This will be the closest of close calls, but we must hope that humankind will emerge someday from what biologist E. O. Wilson calls “the bottleneck” chastened but improved.

From the other side of that bottleneck, the components of a transition strategy, presently hotly disputed, will appear as merely obvious and necessary. The journey to a more resilient and durable future for humanity will require, first, a strategy to overcome the political gridlock that variously afflicts all developed countries and to build an informed, energetic constituency to launch the essential steps during

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MOVING BEYOND THE PERFECT STORM

by David W. Orr, Paul Sears Professor of Environmental Studies and Special Assistant to the President on Sustainability

CLIMATE DESTABILIZATION IS NOT JUST AN ISSUE OF technology and policy, but a symptom of deeper problems rooted in our paradigms, philosophies, and popular delusions. In particular, a great deal of the conventional economic wisdom—including “neoliberalism,” the “Washington consensus,” and the prevailing faith in infinite economic growth—has been proved wrong in many ways and tragically so for the poorest. The “perfect storm” ahead, in short, is caused by the convergence of steadily worsening climate change; spreading ecological disorder (e.g., deforestation, soil loss, water shortages, species loss, ocean acidification); population growth; unfair distribution of costs, risks, and benefits of economic growth; national and ethnic tensions; and political incapacity. We have good reason to believe that this will be the closest of close calls, but we must hope that humankind will emerge someday from what biologist E. O. Wilson calls “the bottleneck” chastened but improved.

From the other side of that bottleneck, the components of a transition strategy, presently hotly disputed, will appear as merely obvious and necessary. The journey to a more resilient and durable future for humanity will require, first, a strategy to overcome the political gridlock that variously afflicts all developed countries and to build an informed, energetic constituency to launch the essential steps during

continued on page 13
One of the great things about teaching at Oberlin is the chance to conduct research with students, both during the school year and during summers in the field. Thanks to funding from the college, the Environmental Studies Program, and my NSF grants, I was able to work with a number of students during the summer of 2011 and will travel to Kenya with three students for a six-week research trip this summer. The process requires student collaborators Marion Rockwood, Rachel McMonagle, Deirdre Molitor, Piper Stull-Lane, and Danny Roserberg to undergo shots, paperwork, applications, long flight hours, and tough living conditions in the field. Here is the story of Marion, who accompanied me in 2011, and Piper, who will work with me in 2012:

MARION ROCKWOOD ’12
In August 2011, Professor Washington-Ottombre, Rachel McMonagle, and I traveled to the Southern Province of Zambia to conduct focus groups with support from the Baron Fund. We spent two weeks talking with about 15 farmers in each of 10 communities, asking questions about levels of rainfall and harvest over the past five years. We also asked about land disputes, food aid, and alternative income-generating activities in the villages.

I had spent the previous six months preparing for the trip by reviewing interviews previously conducted in Kenya and identifying the coping strategies that these farmers used to survive during periods of drought and flooding. I constructed a timeline based on the Kenyan interviews that differentiated between the drought coping strategies.

Sub-Saharan Africa is greatly affected by global environmental change, but residents of this area are not simply passive victims or the losers of a changing climate. Citizens of Zambia and other African countries have many coping strategies that rely on physical, social, and human capital for their communities to survive the floods and droughts that are growing more frequent.

My experiences as a research assistant have allowed me to explore the ways that poverty and social capital contribute to a community’s vulnerability and resilience to climate changes. The experience I had studying communities in rural Kenya deeply informed my thinking about how to approach environmental challenges here in the U.S. While members of our culture often take an individualistic approach, I hope to apply what I have learned to explore community-driven coping strategies in our own country.

PIPER STULL-LANE ’13
One of the best parts about being a student at Oberlin is the strong encouragement from faculty and peers to synthesize and integrate ideas from all classes with extracurricular experiences. In forming opinions, it is understood that we come from different places and have varying levels of knowledge on any topic. My experience in the ES program has led me to make conclusions based on the range of backgrounds and theories I am exposed to. The value placed on interdisciplinary thinking is buttressed by broad opportunity for real-world engagement within and beyond the classroom. For me, hands-on research clarifies abstract concepts and forwards my thinking in ways that reading and simulating simply cannot match.

This summer, I will have the incredible opportunity to travel to Mwea, Kenya, to conduct research with Professor Camille Washington-Ottombre and two other students. In addition to working on a joint project with my professor, I will be conducting research on my own behalf. Because I have interests in both communication and environmental justice, I have brainstormed with multiple ES professors to successfully create a project that satisfies my interests and takes advantage of my unique opportunity abroad. I will be asking how information about water, in the context of climate change and human adaptation, is disseminated by socially influential organizations. Central to this are issues of farmer access and perceptions of this information. I feel fortunate to be part of a program that not only challenges me in class, but provides me with unique opportunities to engage in the real world.
Household solar power is considered to be a clean, greenhouse gas-free solution for remote rural areas that are off the regular electricity distribution grid. This is particularly attractive in less developed countries (LDCs) where the need for household power in remote rural villages is minimal and can be supported by small-scale solar installations. In Bangladesh, a highly populated, low-income country in South Asia, about 70 percent of the population is living off the grid, using biomass for cooking and kerosene lamps and candles for lighting. Small solar panels thus offer a cost-effective solution for the government-controlled power sector to begin delivering electric power to this population through NGOs. This solution also serves as climate change mitigation in LDCs, including Bangladesh, that are most vulnerable to the impact of climate change and currently primarily focused on adaptation programs.

I recently visited some remote rural areas in the coastal regions of Bangladesh that are off-grid and partially powered by small solar panels. These panels were installed under an initiative by the government of Bangladesh with grants from the World Bank, Global Environment Facility, Asian Development Bank, and other donors. About 650,000 solar home systems were installed in off-grid areas between 2003 and 2010 through NGOs with a goal to finance 1 million homes by the end of year 2012. My research involves the first comprehensive field evaluation of the solar home systems, with particular attention to economic, equity, and quality of service analysis. I was accompanied by my collaborator, Enamul Haque of United International University (UIU) in Bangladesh, and several research assistants from the UIU and local colleges near the study area of Khulna and Bagherhat.

During my visit, I was amazed by the innovative ways local people were using solar power. These are very remote communities where people have limited exposure and access to technology. The solar panels mark the second wave of technological intervention in these communities and follow the successful expansion of the cellular phone network throughout Bangladesh. The two technologies are highly complementary in the sense that solar power is providing a way of charging mobile phones and allowing people in off-grid areas to take advantage of the already available cellular network. In general, the technologies are dramatically expanding connectivity of these rural communities. These communities not only have access to phone service, but also the ability to watch television using solar power. People who cannot afford these devices can still access them through pay-per-use cell phone businesses and televisions in the public marketplaces. In my travels I was also surprised to notice that my mobile device had internet connectivity in all of these communities, even though I did not see anyone using computers in these communities. It was, indeed, fascinating to see how coastal villages, highly vulnerable to climate change and the least responsible for greenhouse gas emissions, were adopting technology to survive and develop in a way that enhances their capacity to adapt to and mitigate climate change!

These pictures tell the story of solar innovations in some of the most unlikely and remote inhabited places in the world.
GRADUATING SENIORS REFLECT ON THEIR WORK AT OBERLIN

MARY-CLAIRE ERSKINE
As an environmental activist, I have learned to see Oberlin as a microcosm of the real word. Nearly everyone here recognizes the trouble we are in with environmental injustice, including climate change. People in positions of power are scared to address the environmental challenges and feel pressed to make decisions based on other factors that are more clearly in their job descriptions. This makes progress difficult. Positive change requires immense patience and political pressure, yet it has happened in my time here. Just recently Oberlin announced that its bringing a new 2.27 MW solar array on line next year.

As I graduate, the college is at a critical turning point with the question of how to replace its coal fired central heating facility. Right now we are moving towards a multimillion dollar investment in natural gas infrastructure. A few years ago natural gas seemed like a useful transition fuel because when it burns, it produces less CO\textsubscript{2} per unit of heat delivered then other fossil fuels. But now it seems likely that Oberlin, like the rest of the country, might well be supplied with natural gas by “fracking,” an extraction method that is moving into Ohio and has the potential to poison the nation’s water supply in countless states. A recent peer-reviewed study out of Cornell suggests that the life greenhouse gas emissions footprint of fracked gas—including emissions during extraction as well as burning—could possibly be as high or higher than coal. I understand that choices are challenging. I hope that Oberlin, the beacon of collegiate sustainability, navigates the challenge with the creativity and leadership that represents the best of this institution.

DAVID FISHER
Oberlin has helped me weave together majors in Jewish studies and environmental studies and equipped me to continue integrating these interests as soon as I graduate. Among other coursework, environmental history and Jewish ethics have become a foundation for my understanding of the world and my role in it. Upon graduation, I will begin working full time on Interfaith Appalachia (IA). IA brings people together across differences of faith, politics, and environmental perspective for service, dialogue, and community development in central Appalachia. I had the opportunity to launch IA alongside other Oberlin students during my senior year, and I will spend 2012-13 organizing immersive, interfaith service-learning programs.

ABBY HALPERIN
I love composting because it turns what otherwise would be waste that releases methane gas in a landfill into soil that grows the food we eat, thus completing the cycle of production. I have been lucky to build on the prior student leadership on composting and other conservation issues in my role as a campus dining services recycler. The waste reduction projects that I have worked on in my four years, such as stopping the sale of bottled water on campus or improving lighting efficiency, have been gratifying experiences. However, these projects have not been as complicated or rewarding as compost because they did not involve working with the larger community. When the purchase of a pulper that grinds organic waste from the dining halls did not lead to the perfect cycle we envisioned, I organized a compost summit to bring together the community and college to brainstorm options for citywide composting. Much work remains to be done, but one of the things I take with me (and hopefully also leave behind) is the recognition that sustainable solutions do not arise from a single product, but rather from a community process that develops a collaborative network of ideas.

JOSH LAUFER
Working as a board member of the Green EDGE Fund during all four of my years at Oberlin has been one of the major highlights of my college career. The fund finances continued on page 16
THE LEWIS CENTER GETS TLC ON HVAC
by Sean Hayes, Facilities Manager and Community Outreach Coordinator

Twelve years after its completion, the Adam Joseph Lewis Center (Lewis Center) continues to serve as an icon of green buildings—producing much of the power it consumes, internally recycling most of the water used, and demonstrating sustainable land use practices. But the Lewis Center is also a 12-year-old building that has experienced its share of entropy in mechanical systems, modifications to the original design, and changes in its use and operation. As the new facilities manager and community outreach coordinator, my top priority has been to understand the original design, integrate that design with system modifications, recommend appropriate solutions to problems, and optimize building performance.

As a person who enjoys understanding the multifaceted interactions between complex systems, this process has been quite enjoyable. A biologist could easily argue that the Lewis Center is analogous to an organism. It harnesses sunlight for energy. Its mechanical systems were designed to respond to stimuli and work to maintain homeostasis. Reproduction has occurred in the sense that it has helped to inspire a proliferation of green buildings elsewhere. While some of these can be useful parallels to help explain and approach the operation of the Lewis Center, I don’t want to extend the metaphor too far. Organisms grow and develop in response to stimuli and experiences. The center is designed with monitoring systems to support this intent, but management requires human intelligence and action to maintain and operate its systems. It is, after all, a building.

My work to understand and optimize the performance of the Lewis Center has been made substantially easier by the foresight and hard work of those who designed, built, commissioned, installed, documented, maintained, and developed these systems before my arrival. There certainly was no shortage of information for me to garner. In particular, the building’s data monitoring system has proven an invaluable asset in identifying and rectifying operational issues. In six short months, I’ve only scratched the surface of what this treasure trove of data has to offer. For those unfamiliar with the Lewis Center’s data monitoring system, there are over 150 sensors that have been actively logging minute-resolution data on building system performance, site conditions, and weather conditions for over a decade. Many of these data are available in real-time updates via Building Dashboard—monitoring software developed in the center by Obies (www.oberlin.edu/ajlc); the rest are stored in a database I can access for management purposes.

Thinking systematically, I have been analyzing these data for problems and solutions, prioritizing changes to maximize efficiency gains in the fewest possible steps (I’ve been picking the low-hanging fruit first). The results so far have been exciting. In the Lewis Center, heating ventilation air conditioning (HVAC) typically accounts for ¾ of total energy consumption in the winter months. February 2012 saw a 26 percent reduction in HVAC consumption after correcting for Heating Degree Days (HDD), a standardized measure of accounting for the relative warmth of a time period. Not correcting for HDD, total energy consumption from January through April 2012 was 29,400 kWh (42 percent) lower than the January-April average since 2007.

This is all to say that 2012 is shaping up to be an excellent year for the Lewis Center, and I’m excited to see how many more performance gains remain to be uncovered in the future. Though not without flaw, the center is proving to be an excellent functioning example of sustainable building design and worthy of its iconographic status. It really is a wonderful building to manage, and I’m happy to be a part of its evolving story. •

GROWING OBERLIN’S LOCAL FOODS LEGACY
by Brad Masi, Visiting Instructor of Environmental Studies and Founder of NEOFoodWeb.org

The Oberlin Project is a city-college collaboration to create a model of “full-spectrum” sustainability. One of the key priorities is to promote sustainable local food systems. As part of this work, we have engaged in a comprehensive analysis of where our food comes from and opportunities for further localization. This article reports on our progress.

The Oberlin community spends about $17 million annually on food. A fifth of that annual spending comes from the combined purchasing of the Oberlin Student Cooperative Association (OSCA) and college dining services, operated by Bon Appetit. In 1990, thanks to 20 years of concerted effort by OSCA, and later by Bon Appetit, a third of total campus food spending came from local sources; the current percentage is estimated at less than 10 percent.

David Sokoll, chef at the Oberlin Early Childhood Center, hears from some tough food critics in For the Love of Food.
food purchasing supports local farmers or local food businesses. In addition, two downtown restaurants, the Black River Café and Agave Café, operated by Oberlin alumnus Joseph Waltzer, spend about 1/3 of their food dollars on local food. The combined impact of local food purchasing initiatives circulates more than $1 million annually back into the local economy.

While this spending impact is impressive, it still represents only about 6 percent of the total annual food spending of the community. The Oberlin Project is looking at the innovations that led to current successes around local food systems to determine what investments can propel new local spending and increase community participation in the local food economy.

Adding to the impact of local purchasing, Oberlin has witnessed significant growth in its local food production infrastructure, including development of the George Jones Farm; a new high-school farm collaborative; school gardens at every public school; and expansion of community gardens. Add to that City Fresh, a region-wide effort to make community-supported agriculture accessible to mixed socio-economic neighborhoods. Many of these projects are formal or informal collaborations that bring together members of the college and city.

I recently chronicled this emerging local food web in Oberlin in For the Love of Food, a documentary that premiered May 1 at the Lewis Center. This seemed a fitting venue for the film premiere, since many local food initiatives in Oberlin were incubated through the Environmental Studies Program. Through the film, I practiced what I refer to as “emergent film-making.” Rather than finding stories that matched a predetermined narrative, we allowed the narrative to be revealed through the stories of people at the college and in the community who engaged local food systems in a variety of ways, including childhood education, equitable local food access, local spending, entrepreneurship, and workforce development.

The film includes David Benzing, a retired Oberlin biology professor who directed his botanical acumen to the start-up of a new winery just outside of Oberlin. It covers Dave Sokoll, a recent Oberlin graduate who ran a produce delivery truck for City Fresh after graduating and is now creating healthy, local preschool meals as head chef of the Oberlin Early Childhood Center. As Sokoll notes in the film, “Oberlin has a thriving local food scene and, as a student, there are many pathways to getting involved, from cooking your own food at a co-op to working on a community garden.”

Oberlin has already been one of the early adopters in the field of local food, beginning its efforts in 1988, a good 20 years before Webster Dictionary declared the word “locavore” as the new word of the year in 2009. The recent growth in local food efforts across campus and in the community speaks to the potential to continue to grow the overall percentage of local spending. Such activity can create local jobs, initiate new enterprises, reduce carbon emissions, sequester carbon in soils, and promote the overall health of residents and students.

To learn more about local food efforts in Oberlin and Northeast Ohio, visit www.NEOFoodWeb.org. You can see extended interviews from the Oberlin local food documentary there as well.

HONORS RESEARCH PROJECTS

THREE STUDENTS SUCCESSFULLY COMPLETED honors theses in environmental studies in 2011-12.


JULIETTE RUBIN’s “A Home of its Own: The study of a vulnerable North American reptilian species and the dissemination of information about its conservation to the public,” focuses on understanding some of the difficulties that the box turtle genus (Terrapene) faces as a result of human activities. Her work seeks to determine the extent and efficacy of conservation information that is made available to the public. Roger Laushman served as Juliette’s primary advisor.
AS USUAL, THE ENVIRONMENTAL STUDIES PROGRAM
sponsored or contributed to the organization of a wide
variety of speakers and workshops again this year. A
sampling follows:

- Environmental Studies, SES, Lorain County Bike
  Festival: Moving Lorain, Moving Planet
- Seth Fry, co-op organizer and researcher at Indiana
  University, Why Bother? Institutional Analysis and
  the Varieties of Cooperative Experience
- Bill McKibben, A Conversation on 350.org, the Anti-
  Tar Sands Movement, and the Current State of the
  Environmental Movement in America
- Brad Masi and Members of Natural History of the
  Black River Watershed class, A Public Exploration of
  Oberlin’s Natural History and Resilience to Current
  Environmental Impacts: How Will Oberlin Survive
  Peak Oil?
- Lt. Dan Choi, gay rights and environmental activist,
  Truth and Consequences, One Soldier’s Fight to End
  Don’t Ask, Don’t Tell
- Creative Writing, Studio Art, East Asian studies and
  Environmental Studies, Fukushima: Lessons Learned?
  A Multi-Disciplinary Symposium and Art Exhibit on
  the Global Impact of the Ongoing Nuclear Crisis in
  Japan. Speakers included EdgeSakira Tashiropeaker,
  award winning reporter, Memorial for the Victims
  of the Toboku Disaster; and Kennette Benedict ’69,
  Executive Director of Bulletin of Atomic Scientists,
  Dilemmas of Nuclear Energy
- Dr. Gar Alperovitz, author and distinguished scholar,
  University of Maryland, Is There an America Beyond
  Capitalism?
- New Agrarian Center, LCCC, The Oberlin Project,
  2012 Local Food Summit
- Environmental Studies, Residential Education
  and the Office of Environmental Sustainability,
  “Ecolympics 2012” opening and closing events
- Steven Vogel, author of “Against Nature: The Concept
  of Nature in Critical Theory”, Nature, Alienation and
  the Commons
- Erik Assadourian, Worldwatch Institute, keynote
  speaker for Oberlin’s “2012 Ecolympics”, Degrowth:
  The Emerging Environmental Imperative
- Eban Goodstein, Director of Bard Center for
  Environmental Policy, Campus to Congress, City
  Hall and Corporation (C2C): Leadership Training
  Weekend Workshop
- Michael Shuman, Research Director for the Business
  Alliance for Local Living Economies, Local Dollars,
  Local Sense: How Can We Invest in Sustainable
  Enterprises in Our Own communities?
- Stephanie Foote, Associate Professor of Gender &
  Women’s Studies, University of Illinois, Urbana-
  Champaign, At Home in a Toxic World: Domestic
  Policies & Green Lifestyle Media
- Young Kim ’85 (right in photo above), Community
  organizer and Director of the Fondy Food Center in
  Milwaukee, From Working ON to Working WITH
  Marginalized Communities: A Food Activist’s Journey
  From Mount Stupid. With respondents Vel Scott
  (left in photo), nutrition educator, cookbook writer,
  and founder of Vel’s Purple Oasis in Cleveland, and
  Frank Whitfield (center), founder of EdenVision in
  Elyria and project manager with the Family Garden
  Initiative
- Heather Adelman, The Oberlin Project; Abby
  Halperin, Student CDS Recycling Representative;
  Brad Masi, NEOFoodWeb.org, Compost Summit
  2012: Helping to Complete Oberlin’s Local Food Cycle
  By Planning Our Compost Future
- Brad Masi and Mika Johnson, Filmmakers, World
  premiere of “For the Love of Food—an Exploration of
  Oberlin’s Emerging Local Food Webs”
Intrinsic motivation is quite often the driving force behind the creativity, commitment, and academic rigor that Oberlin students exercise in their efforts to define and address environmental challenges. It is nevertheless gratifying to see our students recognized for the creativity and leadership that they exhibit through their work. What follows is a sampling of awards received this year.

COREY PATRICK HARKINS received the Miroslav Holub Science Poetry Prize for his poem “Standing through rock,” which explored local geologic history of our bioregion.

LISSETTE LORENZ received a number of awards this last year. The Bonner Center for Service and Learning recognized Lisette for her three-year long study of environmental justice in South Elyria, Ohio, which culminated in her honors thesis. Lisette was also awarded a two-year fellowship from Oberlin Shansi to teach English at J.F. Oberlin University in Tokyo. Oberlin Shansi seeks to encourage cross-cultural communication and build bonds between Oberlin and institutions in Asia. As described below, Lisette also received the Gorn Prize for her work within the community.

HILARY NEFF and RACHEL MANNING received a number of awards. They each received a Dalai Lama Fellowship to support a community garden project they have designed in Lynch, Kentucky. The duo also received a Young People for Fellowship Award and a Creativity and Leadership Fund Grant for work related to this project. The Dalai Lama Fellows, a new global educational program, aspires to improve the well-being of the human community by engaging university students and early-career citizen sector professionals in advancing the values that have distinguished the life and teachings of the 14th Dalai Lama: compassion, contemplation, courage, interconnectedness, collaboration, and service.

KESSA TURNBULL received an EPA Greater Research Opportunities (GRO) Fellowship for Undergraduate Environmental Study. This two-year fellowship provides up to $48,900, including a paid summer internship at an EPA facility. Kessa’s application focused on promoting sustainable urban revitalization. The GRO Fellowship criterion is based on potential for success in the proposed course of study, demonstrated commitment to environmental study, and potential for broader societal impacts.

DORIS BARON RESEARCH FELLOWSHIPS
The Doris Baron Student Research Fund was established in 2009 by Doris’ son, Frank Baron ’70, as a way to support student-initiated research projects—particularly those related to international development and the relationships between agricultural communities and the environment. This year the Baron Fund supported the work of five students:

- STEPHANIE BONNER: “Richness of Native Pollinators on Restored Surface Mining Sites in Appalachia” entailed a pollinator survey on four surface mining reclamation sites owned by three coal companies. She also attended the annual conference of the Heartland Apiculture Society to learn about how surface mining fits into the culture of Appalachia and about the identification of native bees.

- THATCHER LADD: “Habitat Connectivity Initiatives at the Nature Conservancy” focused on exploring three of the most effective strategies that the California branch of the Nature Conservancy has developed: green infrastructure, natural community and habitat conservation plans, and wildlife crossing structures.

- RACHEL MCMONAGLE and MARION ROCKWOOD: “Water-saving Strategies and Irrigation Techniques in Response to Climate Variability in Rural Zambia” took the pair to Zambia with Camille Washington-Ottombre, where they explored how rural farmers are adapting to climate change. With the help of the Zambian Agricultural Research Institute, they worked with 10 focus groups of 15 farmers to assess the level of rainfall and harvest over the past five years, land disputes, food aid, and alternative income-generating activities in the villages.

- NOEL MYERS: “Sustainable Development, Green Energy in Northeast Brazil” involved working with a small NGO in Brazil that focused on sustainable development, green energy, and energy efficiency. Noel’s work focused on relationships between water and energy and inspired him to consider green business as a potential career.

SCHAENING MEMORIAL FUND
The Ann Marie Schaening ('89) Memorial Fund, established by the family and friends of Ann Marie Schaening, provides support for students pursuing winter-term projects related to the environment. Three students were granted awards in 2012:

- YAZHOU (CHRIS) LI ’13 explored “Urban Organic Farming,” ANDREW MIXTER ’12 focused on “Residential Water Conservation and Ecological Design,” and DAVID ROSWELL ’13 completed an internship focused on the environmental implications of “Tar Sands at the Natural Resources Defense Council.”

BLANK FELLOWSHIPS
Established by the Arthur M. Blank Foundation, this grant enables Oberlin students to undertake research and educational opportunities in collaboration with Environmental Studies
Program faculty. Last summer, John Petersen supervised students working on several distinct projects.

- KEVIN SMITH ’11 and REBEKAH BLANK ’12 worked to further develop and enhance the data monitoring and display system for the Lewis Center, the Campus Resource Monitoring system, and the Oberlin Environmental Dashboard. Rebekah, a computer science and art major, focused largely on developing animations of the “energy squirrel” that exhibits distinct behaviors in response to energy use in college dormitories. Kevin, a 3-2 engineering major, completely redesigned and rebuilt the circuitry of Oberlin’s environmental orbs—colored balls housed in the lobby of each dorm that glow different colors depending on current rates of electricity and water use.

- ERIKA BRANDT ’13, served as the Jones Farm wetland restoration research intern. Erika undertook projects that examined how different degrees of plant diversity modulate response to nutrient fertilization, further developed technology for continuously monitoring aquatic primary productivity, and used aerial photography to document changes in spatial configuration of vegetation in the differently treated cells.

- MARY CLAIRE ERSKINE ’12 and CATHERINE WILKINSON ’12 worked on the ecological management of the Lewis Center landscape. Among other major projects, they brought chickens to the landscape, helped replant the wetland, and were involved in the planting of 120 hazelnut seedlings brought to Oberlin by Oberlin alum Philip Rutter ’70. Philip is one of the nation’s foremost experts on nut crop agroforestry and is the founder of the American Chestnut Society.

Md Rumi Shammin, assistant professor of environmental studies, supervised several students involved with research on multiple projects during 2011-12.

- Summer research students AMANDA JACIR and SAVITRI SEDLACEK assisted with research on the opportunities and challenges of climate change mitigation in less developed countries with a focus on Bangladesh.

- In fall 2011, LAURA ROSE BRYLOWSKI ’13 worked with Rumi in researching the value of urban gardens in Cleveland by conducting a literature review, compiling a complete listing of urban gardens in Cleveland, assisting with the development of a field survey, and surveying participants in more than 60 gardens.

- Over winter term, CAROLYN MICHAELS ’13, a student with strong statistics background, coded the surveys and entered data into spreadsheets for statistical analysis.

- In spring 2012, JACK POPPER ’12, an economics major and ES minor, worked on designing and implementing hedonic price analysis of the effect of urban gardens on neighborhood property values.

Janet Fiskio, assistant professor of environmental studies, along with George Jones Memorial Farm manager Evelyn Bryant, supervised two students who worked as interns at the farm.

- VICTORIA COX ’13 and VIVIANA GENTRY ’11 assisted with all operations of the farm, including planting, maintaining, harvesting, preparing, distributing, and selling crops. This included preparing the weekly CSA subscription and produce for the farmer’s market. The students had the opportunity to learn many aspects of operating and managing an organic local farm system, including plant propagation, organic disease, pest and weed control, composting, and soil development methods. In addition, the interns each had their own research projects, with Victoria researching integrated pest management and Viviana focusing on composting.

GORN PRIZE RECIPIENTS

Each year the Environmental Studies Program awards the Joyce Gorn Memorial Prize to one or more graduating seniors for their outstanding work on an extracurricular or off-campus environmental project. This year we are pleased to award nine worthy applicants, each of whom also reflects on their work in separate “senior reflections” within the newsletter.

- MARY-CLAIRE ERSKINE: Mary Claire is recognized for her tireless record of leadership and activism at Oberlin. She has been a key member of Students for Environmental Sustainability (SES) and actively helped organize many campus environmental events, talks, and demonstrations. Her work has highlighted the unsustainable and damaging practices of mountaintop removal for harvesting coal in the Appalachia and the practice of hydraulic fracturing for extracting natural gas.

- DAVID FISHER: David is a founding member of Interfaith Appalachia, an organization focused on creating sustainable opportunities for Appalachian communities through interfaith collaboration and service learning. David’s environmental leadership was also recognized through numerous awards including a Udall Scholarship, a Dalai Lama Fellowship, a Davis Projects for Peace grant, and a Creativity and Leadership grant from Oberlin College.

- ABBY HALPERIN: Abby is recognized for her leadership in student initiatives ranging from co-authoring a sustainability guide for incoming students and successful efforts to ban the sale of bottled water on campus to

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**ENVIRONMENTAL STUDIES: 2011–2012**

Philip Rutter ’70, left, an international expert on nut crop agroforestry, works with Carl McDaniel ’64, middle, and Catie Wilkinson ’12 to plant an experimental hazelnut orchard on the west side of the Lewis Center.

Griff Radulski’s Lewis Center grounds duties now include chicken care.

The “Living Machine” float at Oberlin’s Big Parade 2012

John Peterson, Evan Tincknell, Annika Sullivan, Maggie Heraty, and Elliot Sakach (top row) and Chris Canning, Daniel Rosenberg, Jenny Taylor, Noel Myers, and Sean Hayes (bottom) touring the Bowling Green, Ohio, wind turbines that contribute to green power purchased by Oberlin College.
DALAI LAMA FELLOWS INITIATE COMMUNITY GARDEN IN KENTUCKY

Hilary Neff and Rachel Manning. Oberlin’s 2012-13 Dalai Lama Fellows, will travel to the small Appalachian town of Lynch, Kentucky, this summer to build a community garden. Their project will address food access, poverty, and crime. Food access is a major issue in this and similar areas due to geographic isolation and high poverty rates. There is no public transportation in the area, so many residents have no way to get to the only grocery store, which is five miles away. If and when they do get there, the most cost-efficient choices are typically packaged, processed, unhealthy, and provided through an industrial food system that does little to support local economy or culture. Many community members rely on food stamps, so food options are even more limited. The local ministry aims to alleviate hunger in the area, but the need is much greater than one ministry can support.

The goal of this project is to create a self-sustaining community garden that improves access to local, fresh produce for years to come; related goals include strengthening bonds among members of this religiously diverse community, encouraging active lifestyles, and lessening reliance on the industrial food system. Hilary and Rachel have signed a lease on a plot of land they will rent from the city, and they plan to build 10-12 raised beds during their stay this summer. Whether residents choose to have their own personal garden plots or participate in general garden maintenance, the garden will always provide outdoor activities that involve hands-on work.

By the end of August, the goal is for community members to take on leadership roles so the project can continue. In addition to providing gardening work for all interested residents, Hilary and Rachel hope to integrate the garden into other areas of the Lynch community by creating after-school gardening and cooking classes for kids, working with church youth groups and elderly residents, and partnering with the local community college for future work in sustainable agriculture. This project will be a small but important step toward greater food access, healthier lifestyles, community empowerment, and economic and environmental sustainability.

Student Awards, Fellowships, and Grants, continued

organizing a compost summit this spring that brought college and community together to consider compost as a community asset and opportunity. Abby received a prestigious Udall Scholarship in recognition of her accomplishments and potential to bring about positive environmental change.

- JOSH LAUFER: Josh has served as a member of the board of Ecological Design and General Efficiency (EDGE) Fund since his freshman year. As the longest standing board member, he was a mentor to new board members and helped to implement a wide range of sustainability projects by working with college administrators, facilities operations staff, and Oberlin community members.

- CASEY LEE: During her two years as student representative to the Environmental Studies Program Committee—the governing body of the ES Program—Casey thoughtfully solicited and articulated student views on program business. She has been quick to volunteer for a range of services, including participation in two faculty searches.

- LISSETTE LORENZ: Lissette brought together her passions for environment, theater, and social change in her dedicated work with Save Our Children in Elyria (Ohio). Save Our Children provides education and enrichment programs to youth in South Elyria. Lissette has volunteered for two years with this organization, providing children and youth with the opportunity to explore and understand their environment through theater classes.

- LEAH PALLANT: Leah Pallant is recognized for her exemplary work with the Living Machine, Oberlin’s ecologically engineered wastewater treatment system. During her senior year, Leah deftly led 10 Living Machine operators through a transition of building managers. She provided invaluable on-the-job training for Sean Hayes and served as an expert, tour guide, advocate, and ambassador for this technology. The Living Machine will miss her.

- MARION ROCKWOOD: Marion is recognized for her tireless work with the Ecological Design and General Efficiency (EDGE) Fund. During the last five semesters, she provided integral leadership to the EDGE Fund board and helped guide many environmentally beneficial projects—from the installation of LED exit signs to community gardens—through to fruition both on and off campus. Her work in helping publicize the organization’s efforts has been particularly valuable.

- ANNIIKA SULLIVAN: Annika’s impressive resume of leadership and activism at Oberlin includes founding OSWAMP, the Oberlin Stormwater Management Project. Annika applied for and received over $20,000 in grant funding for workshops and projects advancing responsible water use. Rainwater gardens at Johnson House and within the larger Oberlin community are products of this work. Annika was also a central organizer for Oberlin’s Ecolympics events and for OGROW, an on-campus gardening project.
changing world around us demands that Oberlin’s ES program continually reconsider what it means to be an environmentally literate citizen and actor. Looming over all other change is the reality that we live on a planet that is biophysically distinct from the one we inherited and will change more rapidly in the years to come. This year the “new normal” in northeast Ohio included a spring (as measured by the first bud break of trees) that arrived one full month earlier than expected, with parallel record-breaking weather events across the country.

The pleasant surprise of early spring weather notwithstanding, the complete disconnect between the urgency of climate change and lack of meaningful debate (much less action) on the national level is deeply troubling. The certainty of science, and the reality that each of us is now directly experiencing what Amory Lovins terms “global weirding,” occur in parallel with a culture of denial, a politics of intransigence and inaction, and an economic obsession with growth based on ever more sophisticated methods of extracting and burning fossil fuel regardless of the costs to land, water, and atmosphere. As the white queen in Alice in Wonderland proclaimed, “Why, sometimes I’ve believed as many as six impossible things before breakfast.” Yet social psychology suggests there are limits to the human capacity for “cognitive dissonance”—the extent to which our minds can embrace ideas that are in fundamental conflict with each other. Fortunately, dissonance has always been alive and motivational here at Oberlin.

One particularly encouraging reaction to intransigence on the national level has been the reemergence of bottom-up leadership. Whether planned or unplanned, the trajectory of environmental initiatives at Oberlin College during the last decade suggests the value of models of change that emphasize expanding scales of transformation. As an example, when I arrived at Oberlin in 2000, the college was putting the final touches on the Adam Joseph Lewis Center for Environmental Studies. For 12 years now, this facility has served as a national model and icon that has helped inspire rapid expansion in environmentally responsible construction across the country. Leadership on green buildings was followed in the early 2000s by Oberlin’s work to create one of the first and most comprehensive institutional environmental policies. In 2007, Oberlin was the first of its peer institutions to commit to the goal of climate neutrality (later we set a date of 2025). Today, the Oberlin Project, a collective city-college effort to create a model of “full-spectrum sustainability,” appears as a logical next step in expanding the scales at which Oberlin engages with the larger world. The Oberlin Project emphasizes the fundamental linkages between green jobs, local foods, sustainable agriculture, renewable energy, environmental and social justice and education. Several generations of students have now had the chance to play leadership roles in these environmental initiatives at Oberlin and many have gone on to occupy significant positions at local regional and national levels. While action at national and international levels remains essential but is stalled, it may be that the momentum that eventually enables change at this larger level is catalyzed through the type of bottom-up approaches modeled by Oberlin.

It is clear that positioning students to constructively respond to a rapidly changing world demands changes in the ways we educate; cultivating new ways of thinking and knowing is necessary to empower students to identify problems, solutions, and effective modes of action. It is exciting to be part of Oberlin’s ES program during a period when we have fundamentally revised the curriculum and expanded the faculty. While many of our peer institutions continue to separate ES into natural and social sciences, it is gratifying that at Oberlin we have continued to value a cross-disciplinary emphasis. We have recognized the importance of perspectives from humanities by adding a tenure track position in humanities (occupied by Janet Fiskio) to our core faculty. This last year it has been a great pleasure to welcome visiting professor Michael Maniates—with expertise in the role of consumption—and Facilities Manager and Community Outreach Coordinator Sean Hayes—with expertise in sustainable technology—to our team. Both have done much to expand and enrich the experiences available to our students.

Changes in Oberlin’s ES curriculum over the last several years include full implementation of “curricular pathways.” A curricular pathway is a course of study that emphasizes either a topical area or the application of particular disciplinary approaches to understanding and addressing environmental issues. The pathway program was developed in recognition of the reality that many of the most pressing issues can be most successfully understood through a course of study that works across rather than within traditional disciplines. The transformations in biophysical, social, and economic systems necessary to bring about a more sustainable relationship between humans and the rest of the natural world are predicated on finding new ways of understanding, thinking, and action. Our principal job as educators must be to create a context in which students develop a depth of knowledge, analytical skills, and experiences that allow them to navigate, adapt, and innovate in a rapidly changing world. Our principal job as educators must be to create a context in which students develop a depth of knowledge, analytical skills, and experiences that allow them to navigate, adapt, and innovate in a rapidly changing world.

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Ten years ago, the Oberlin Alumni Council’s executive board approved EnviroAlums as an Alumni Association affiliate group. At that time, the Lewis Center was gaining national attention as the “greenest” classroom building in the U.S. Now the Oberlin Project (TOP) is in the national news and was the lead article in the Fall 2011 Oberlin Alumni Magazine. EnviroAlums has supported and facilitated over the past 10 years myriad activities and initiatives fostering environmental education in the Oberlin community.

In September 2011, Lewis Gilbert ’80 began a three-year term on the Alumni Council executive board representing EnviroAlums and bringing to the council an environmental perspective as TOP moves Oberlin College and city toward what David Orr calls “full spectrum sustainability.”

At its fall steering committee meeting, EnviroAlums unanimously decided to allocate funding to support its alumni career-speaker program, community sustainability projects with major student involvement, and student activism that has substantial educational value. EnviroAlums also became a Founding Friend of TOP. Friends of TOP emerged from EnviroAlums activities in 2009 and provides Obies and others concerned with creating a sustainable future an opportunity to provide “time, treasury, and talent” to TOP. Please consider becoming a Friend of TOP.

EnviroAlums organized a presentation on TOP for the Alumni Council Executive Board at its March meeting and a similar presentation for alumni, graduates, and guests during the 2012 Commencement/Reunion Weekend.

EnviroAlums has had an ever challenging adventure over the past 10 years in encouraging and providing environmental education within the Oberlin community. We welcome all Obies with a concern for Oberlin’s and the world’s future to join EnviroAlums, and to do all you can in your life and community to make a difference for a more durable world.

Moving Beyond the Perfect Storm, continued

the transition. Early warnings about climate change began in the 1960s, but neither the international community nor any developed country has yet adopted policies adequate to the situation.

As a result, in the United States and elsewhere, grassroots organizations are mobilizing communities around transition strategies that address energy, food, and economic issues without assistance from central governments. Similarly, mayors, cities, regional organizations, and states are engaging with the public, colleges and universities, corporations, and faith communities in a broad effort to lower carbon emissions and build economic and social resilience. The Oberlin Project, which was described in our previous newsletter, proposes to build a reproducible model of “full-spectrum sustainability” that coordinates issues of food, energy, finance, education, economic development, building, and resource flows so that each part reinforces the others and hence the prosperity and resilience of the entire community.

The National Sustainable Communities Coalition is attempting to coordinate a movement based on similar examples across the country. These efforts coincide with a growing recognition that security, in the full sense of the word, must be broadened to include access to food, clean water, energy, employment, health, shelter, safety, ecological health, and climate stability.

Grassroots organizing, as well as urban and regional coalitions, are necessary to mobilize the public and build the infrastructure for local resilience, but they will be insufficient without a larger strategy that eventually generates a constituency for policy changes and shared sacrifice at a scale appropriate to the global emergency. Efforts at local and regional levels must be linked with a larger strategic vision that harnesses the big economic drivers in the economy. The combination of bottom-up organizing with a larger grand strategy suggests the possibility for new political coalitions that cross worn-out national, political, ethnic, and class divisions and for new opportunities to create an engaged and ecologically competent citizenry networked across the planet.

The reality is that we live amid the ruins of failed systems—communism, socialism, and capitalism—and urgently need a new vision of the human prospect and potentials grounded in science, philosophy, and inclusive spirituality, not wishful thinking, greed, fear, and illusion. This new vision must begin with the hard fact that climate destabilization and its collateral effects will cause great suffering and trauma and exact an increasing psychological toll on all of us. Such prospects make it all the more urgent to develop plausible alternative visions grounded in emerging realities, but with hope on a further horizon. Any worthy vision must hold out solid hope of the millennial kind. It must include rights for future generations. It must create a more inclusive framework for justice, fairness, decency, sustainability, and human rights. It must preserve a stock of irreplaceable knowledge while protecting and extending the hard-won gains of civilization, but over time spans and conditions that we can barely fathom.
Since 2005, Oberlin has held an annual Dorm Resource Reduction Competition that challenges students living in campus residence halls to reduce their electricity and water use. This year, the competition was part of a more comprehensive initiative, the Ecolympics, that aimed to also promote environmental activism and education during the course of the competition period, April 3-23. To this end, a team of students, faculty, and staff from the Office of Environmental Sustainability, the Environmental Studies Program, and the Office of Residential Education collaborated to host 29 sustainability related events. As was the case last year, this year’s competition was also part of the Campus Conservation Nationals, a nationwide resource reduction competition involving 150 colleges and universities.

Beginning with a talk by the World Watch Institute’s Erik Assadourian, “Degrowth: A Looming Environmental Imperative,” and ending with an Earth Day celebration in the Lewis Center, the Ecolympics gave the month of April at Oberlin a green hue. Other events included film screenings, invasive plant removal along Plum Creek, and a volunteer day at the ReStore in Elyria. A primary goal was to connect students to existing environmental student organizations. Representatives from Students for Environmental Sustainability, Slow Food Oberlin, the Recycled Products Coop, and Oberlin Anti-Frack were present at each of the events.

Tying these events together was Oberlin’s pioneering resource reduction competition. Earlier in the spring, a baseline of electricity and water use was calculated for each dormitory. During the Ecolympics, the dorms competed to reduce their resource consumption. In the end, Baldwin Cottage won in the electricity category with a 33 percent reduction. Given that fact that only about half of a building’s electricity consumption is discretionary, this was a remarkable reduction. Johnson House took first place in the water category with a 21 percent reduction. In the dining co-op competition, Third World Co-op claimed victory with an impressive 33 percent reduction in electricity use. In total, 13,000 kWh of electricity and 25,000 gallons of water were saved in Oberlin’s dormitories.

The resource monitoring technology that students used to track their electricity and water consumption (at oberlin.edu/dormenergy) was developed by the Lucid Design Group, a software company founded by Oberlin alumni Michael Murray ’04, Vladi Shunturov ’05, Gavin Platt ’06, and John Petersen ’88. Their technology is what made possible the nationwide Campus Conservation Nationals, an event now sponsored by the U.S. Green Building Council, the National Wildlife Federation, and the Alliance to Save Energy.

The national goal this year was a 1 gigawatt-hour reduction of electricity consumption among participating colleges and universities. But by the end of the competition, schools had conserved a combined 1.74 gigawatt-hours of electricity and 1.6 million gallons of water. This amounts to 2,600,000 lbs. of averted CO₂ emissions and 10,000 shower-hours worth of water saved.

Don’t Miss Out!

In an effort to curb print, postage, and environmental costs college-wide, Oberlin is moving several of its print publications online. Please make sure we have your email address, so that you don’t miss out on newsletters, invitations to alumni regional events, and more. You can update your email address (and other information) via OBIEWeb at new.oberlin.edu/office/alumni. Go to the MyOBIEweb box and click on “register to access the community” (it’s free).

Please direct questions to alumni@oberlin.edu or call the Alumni Association at (440) 775-8692.
STUDENTS PRESENT AT GREENING OF THE CAMPUS CONFERENCE AT BALL STATE UNIVERSITY

In the fall of 2011, students in John Petersen’s Practicum in Ecological Communications class submitted proposals that were subsequently accepted for two organized sessions at Greening of the Campus IX, the oldest national conference focused on research and promotion of campus sustainability. 

Chris Canning, Danny Rosenberg, Jenny Taylor, Evan Tincknell, Noel Myers, Annika Sullivan, Maggie Heraty, and Elliot Sakach presented in separate talks within the sessions, 1) From “Building Dashboards” to Campus Conservation Nationals to Environmental Orbs: Using real-time feedback in the built environment to engage, educate, motivate, and empower college students to conserve resources and 2) The development, implementation, and early assessment of the “Bioregional Dashboard”: Using real-time feedback on whole-city electricity and water flows as a mechanism for building a culture of environmental stewardship.

According to Tinknell, “We had a great turnout for both our sessions and received a lot of positive feedback and thoughtful comments.” ENVS program director John Petersen, who was a coauthor on the talks, reflects that “these students showed extraordinary discipline in preparing and delivering presentations on their work. I was particularly proud of the way they deftly handled questions during the enthusiastic audience discussion that followed.”

Reflecting on the value of participating in the event as a whole, Tincknell writes, “During the three days we spent at the conference at Ball State University, I found myself engaging in some of the most interesting and informative discussions I’ve ever had regarding issues of sustainability and environmentalism. We met professors and students from schools around the country and were able to network and discuss the work they were doing on their respective campuses. The weekend was an all-around phenomenal experience that really defines the kind of intrinsically motivated, interactive education that we aspire to experiencing at Oberlin.”

SUPPORTING ENVIRONMENTAL EDUCATION AT OBERLIN COLLEGE

There are a variety of ways that alumni, family, and friends of the ES program can support environmental initiatives at Oberlin College. For those of you who are engaged in cutting-edge work on the environment, EnviroAlums maintains a speakers bureau; contact carl.mcdaniel@oberlin.edu if you wish to be included or join. The majority of students majoring in environmental studies receive financial aid, so we strongly encourage you to consider a donation to Oberlin College’s general fund; most of these funds go toward supporting the direct costs of education. If you wish, you can also choose to designate donations to the Environmental Studies Program, to EnviroAlums, or to the Oberlin Project. Funds designated for use by the ES program are used to support our speaker series, workshops at Oberlin, student travel to conferences, and for research and special projects to enhance the educational value of the Lewis Center facility. For giving options, please visit http://www.oberlin.edu/giving/how.html.
innovative projects that demonstrate environmental leadership and economic benefit. The goal is to reduce harmful environmental impacts, save the college money, and educate and empower students. Every year, we handpick a dedicated, effective, and amiable group of students to work on promoting sustainability on campus and in the community. It is difficult to sum up my personal role on the board because of the board’s unusually high degree of internal flexibility and lack of assigned positions. At some point, every member performed every task and fulfilled every role needed to implement projects. A core tenet of the fund is the teamwork and collaboration required and executed in every task we worked on. We played to our personal strengths and challenged ourselves to overcome our weaknesses. And when projects were completed, all of us, myself included, knew we had brought concrete and positive change to our campus and community. Projects I am particularly proud of include a lighting retro-fit project in the Oberlin Early Childhood Center and the Johnson House Garden project. The former not only improved the efficiency and reduced the environmental impact associated with the old lighting systems, but also eliminated the exposure to children of toxins leaking out of the old ballasts. The latter is exemplary of a student-driven initiative that we helped establish, and has become wildly successful and popular.

CASEY LEE

Majoring in environmental studies has given me an environmental literacy that informs the conservation science to which I am called; I have been invited to think carefully about the causes of and solutions for environmental issues, ethical questions surrounding the relationship between humans and the natural world, and the persistent philosophical question “what is nature?” My engagement with others—particularly those whose ideas differ from mine—has helped me to understand different opinions and articulate my own. I am indebted to the students, faculty, and staff within the ES community, whose passion and creativity help to keep me hopeful; I am reminded that times of unspeakable ecological failure are also, in some ways, an opportunity for unprecedented success.

I have also served three semesters as a student representative for the Environmental Studies Program, a role I’ve enjoyed immensely. This has prompted me to think deeply about the design of the program and how to optimize it and given me insights into the way decisions are made and why. I’ve even had the privilege of serving on two hiring committees and have been consistently impressed with the degree to which student opinion is valued. This quality helps to set the ES program apart, and I hope future students recognize and utilize it.

LISSETTE LORENZ

Three years ago I began researching the ways in which community-based theater could serve as an effective tool for exploring and communicating environmental justice issues. My focus has been on South Elyria, Ohio. The idea for this project stemmed from different aspects of my Oberlin life. As a Bonner Scholar committed to engaging in community service, I began volunteering at Save Our Children (SOC), an after-school educational enrichment program in South Elyria, during my sophomore year. That same year I received the Mellon Mays Undergraduate Research Fellowship, which allowed me to develop a two-year research project in collaboration with third- and fourth-grade students and staff at SOC. I held a series of community-based theater workshops that explored environmental injustices as they pertained to the students’ own lived experiences. The students proposed imaginative solutions for dismantling those injustices through an original play they created. By engaging with theater, the students identified barriers to access to good employment, health care, recreational facilities, and housing. Working with them profoundly shaped the way I understand environmental issues. My students helped me realize that environmental justice issues are entrenched in the social, political, and economic systems from which they stem.

LEAH PALLANT

Learning every aspect of the functionality and maintenance of the Living Machine, the Lewis Center’s very own ecological wastewater treatment system, has been a four-year process that has allowed me to truly enact the principles of learning and labor upon which Oberlin was founded. The many hours I devoted to the daily maintenance and laboratory analysis associated with this wonderful little system have been deeply gratifying and matched by the strong sense of community. The annual “Poop Campaign” that I coordinated has raised awareness about water use and wastewater treatment across campus. As the senior student operator, I’ve had the pleasure of
leading the staff of exceptional students that keep the Living Machine happy and healthy. My commitment to the ecological system has balanced out my academic career at Oberlin by giving me the opportunity to learn outside the classroom. As I graduate, I look forward to finding a new endeavor that can similarly combine my desire to address environmental problems and my attachment to enacting that change with my own two hands.

MARION ROCKWOOD
Serving as a Green EDGE Fund board member has helped me appreciate how open the college administrators are to students’ ideas and their willingness to help make them a reality. Most students contribute $20 each semester to the EDGE Fund; it’s up to the small group of student board members to decide how to spend that money to benefit the environment and the community. Many staff and faculty members are excited about these ideas and are willing to help us anticipate and address any obstacles. The EDGE Fund works well as a model for instituting small- and medium-scale infrastructural changes on campus. In contrast to other important kinds of activism on campus, it provides students with monetary support to propose and execute sustainability projects. In many cases, we have funded projects that have allowed Oberlin to realize financial and environmental resource savings. This is satisfying. It has been particularly gratifying to see the EDGE Fund help other student groups effectively address environmental problems in the Oberlin community.

ANNIKA SULLIVAN
Although I majored in biochemistry, environmental activism has been key to my personal development at Oberlin. One reason I chose to study at Oberlin was that the faculty and staff encourage community-based learning through service. I found my niche through creating OSWAMP—the Oberlin Stormwater Management Project—a grassroots organization committed to restoring Plum Creek through community outreach, rain gardens, rain barrels, and invasive plant removals. Since spring 2011, I have worked to engage members of the college and city through educational projects, including rain gardens on Oberlin’s campus. I have grown to appreciate activism as a challenging but rewarding endeavor. Not everyone shares the same vision, and this can lead to challenges in engaging college administrators and local government officials and finding volunteers. Balancing the interests of stakeholders when implementing projects is an art as well as a challenge. For this, OSWAMP has been lucky in garnering much attention and support. I have come to view successful activism not as the completion of one-time projects, but rather as a sustaining enterprise and vision for life.

STUDENT SNAPSHOTs
Miranda Fisher ’12, Sarah Sawtelle ’12, and Janet Fiskio
Abby Halperin ’12 and Xander Tartter ’12
Walta Yoseph ’13 holds soil samples processed for analysis of organic carbon in the Systems Ecology lab.
Janet Fiskio

It’s hard to believe that I am reaching the end of my third year and will soon be on research leave. Perhaps the most exciting thing for me to reflect on is the way my teaching and research continue to coevolve in two distinct areas: climate change and food justice. My classes for this year include ENVS 219: Climate Change: Ethics, Equity, Narratives and ENVS 302: American Agricultures.

I have two articles forthcoming this spring: “Apocalypse and Ecotopia” in Race, Gender, and Class, which examines narratives of climate change and the importance of speculative fiction for imagining new possibilities, and “Unsettling Ecocriticism” in American Literature, which questions the concept of citizenship in agrarian thought and argues for the ethical agency of migrant communities. I’m especially excited about a new research project with colleague Rumi Shammin focused on values and meaning in community gardens in Cleveland.

I continue to find my classes and students to be sources of inspiration for new areas of inquiry. My current book project, Poetics of Climate Change: Mourning, Protest, Hospitality, explores the affective dimensions of climate change through literature, art, and protest. Teaching the Climate Change class has encouraged me to seek out literature and art that involves the public in a dialogue about climate change, but the focus on protest is directly inspired by student activism with organizations like Occupy, 350.org, and Ohio Fracktion.

I have several conferences planned for the summer, but traveling to the Association of Literature and Environment Conference in June will be a high point. Students Sophia Bamert, Lucia Anne Kalinowsky, and Erin Swenson-Klatt will present versions of papers they wrote for my American Agricultures class in a panel titled “Toward a Wider Vision of Food Justice.” We’ll be meeting in Bellingham, Washington, to board the Alaska Marine Ferry, where we will spend three days on deck traveling to Juneau for the conference. I’ll also be presenting a paper at the conference on an installation called “The Library of Water by Roni Horne.” Housed in the former public library in Stykkishólmur, Iceland, The Library of Water holds 24 glass columns with water from Iceland’s glaciers. I argue that by making climate destabilization visible, The Library of Water reveals what Ron Nixon calls the “slow violence” of climate change. A close reading of this exhibit will open my monograph on climate change, offering new ways of thinking about mourning and ethics. I’ll be visiting Iceland to study this installation with the support of a Powers travel grant in August.

Sean Hayes

Originally from Albion, Indiana, I studied psychology at Wabash College. After a few years of work in publishing and the nonprofit world, I ended up in North Carolina by means of what, at the time, I believed to be a one-way ticket named Katie (my lovely wife). I attended Appalachian State University and graduated with an MS in technology and a graduate certificate in GIS. In my time at Appalachian, I studied renewable energy systems and sustainable building design, worked as part of the Biofuels Research Group and the Office of Sustainability, researched the effects of methane on microalgal growth, modeled the rooftop solar potential of a city’s existing rooftops using LIDAR data, rebuilt an old Mercedes, and did a fair bit of guitar picking.

My first six months as the Lewis Center’s facilities manager and community outreach coordinator have been just as varied, intense, and rewarding as I first imagined when I read the multipage job description. While I have spent a significant portion of my time thus far working to improve the performance of the Lewis Center’s mechanical systems, I relish the fact that each day presents interesting new challenges and opportunities. I was excited to give a talk titled “Oberlin College’s Lewis Center for Environmental Studies: Lessons Learned From a Decade of Monitoring and Managing an Iconographic Green Building” at the Greening of the Campus IX conference this March. The biggest treat, however, has been working with the environmental studies faculty, staff, and students. As expected, they have been thoughtful, engaging, and brilliant and are driven to shape positive change in the world.

I extend the same compliments to both Oberlin College and the town. It is rare to find a community that successfully mixes the benefits of small-town values and charm with the diversity, culture, and consciousness prevalent in Oberlin. As you might guess, Katie and I are glad to call Oberlin home.
Michael Maniates

I thank everyone in the ES program for making my first of two years at Oberlin so rewarding. It has been a special privilege to work with students and faculty on the curriculum, especially on the ENVS 101: Environment and Society and ENVS 208: Environmental Policy courses. I’m planning on devoting much of my summer to retooling both of these courses and test-driving the new-and-improved versions in the fall. It was also a real delight to work closely with the 14 students in my Confronting Consumption seminar. We moved through a great deal of material with insight and grace, in ways that underscore why Oberlin students enjoy such a wonderful international reputation.

Although this past year has been largely a time of getting acquainted and testing the Oberlin waters, I’ve also been able to push my own research and writing agenda forward. In addition to authoring three chapters for a college textbook on global crisis and change, I published a review piece on consumption in the MIT Press journal *Global Environmental Politics*, and I’ve finished a draft of my next book (tentatively titled *It’s the Maze Not the Mouse*). I’m now at work on two book chapters for *State of the World 2013*, one on educating college students for tumultuous times, the other on editing consumer choice for sustainability. Based on their work in the class, students worked with me to propose two organized sessions that were subsequently accepted for the Greening of the Campus IX conference (see separate article) and to develop two grant proposals.

Overall, this has been busy year for me with conference presentations. I was invited to speak at MIT’s Annual Energy Conference, where I participated with representatives from industry and government in a discussion of novel mechanisms for encouraging demand-side electricity conservation—interesting to be sharing a stage with a vice president of Duke Energy—him talking about changes in grid infrastructure, me talking about squirrel and fish characters that animate patterns of resource consumption. I have particularly enjoyed the opportunity to coauthor, travel, and present with faculty and former students. At the Association for the Advancement of Sustainability in Higher Education meeting, I shared the podium with Andrew deCoriolis ’07. I traveled with Cindy Frantz to present talks at the Behavior Energy and Climate Change meeting. Cindy, David Orr, and alumnus Anders Fajersson ’75 all presented together on the Oberlin Project at the Garrison Institute’s Climate Mind and Behavior conference.

After six continuous years as ES program director, I’m pleased to be taking a hiatus next year; the very able Roger Laushman has kindly agreed to direct the program while I take a leave to (mostly) focus on research (and gardening).

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John Petersen

Research collaborations with faculty are one of the most gratifying aspects of my work at Oberlin. Cindy Frantz and Rumi Shammin and I are now entering our fourth year of a research project funded by the Great Lakes Protection Fund that has involved expanding what we have learned about real-time displays of resource use into the city of Oberlin. Lots of work this last year seeking and applying for more grant funds to keep this going.

In the fall of 2012 I developed the Practicum in Environmental Communication as a means of more systematically engaging students in the full creative process of community-based research. Over the course of the fall and then spring semesters, students worked in groups to develop and assess a variety of novel approaches to using “Environmental Dashboards” to communicate information designed to engage, educate, motivate, and empower the community of Oberlin to identify more strongly as environmental citizens and to conserve resources. Based on their work in the class, students worked with me to propose two organized sessions that were subsequently accepted for the Greening of the Campus IX conference (see separate article) and to develop two grant proposals.

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After six continuous years as ES program director, I’m pleased to be taking a hiatus next year; the very able Roger Laushman has kindly agreed to direct the program while I take a leave to (mostly) focus on research (and gardening).
Md Rumi Shammin

I have been on mid-probationary leave during the 2011-12 academic year. While I miss many aspects of being on campus, especially my regular interaction with students, it has been a welcome change for me to have the opportunity to focus more exclusively on my research and writing. In the past year, I have been writing papers and thus bringing some sort of closure to several ongoing research projects. I also dedicated some time toward more comprehensive reflection and revision of my courses. In addition, I have been engaged in a long-term research project, along with professors John Petersen in environmental studies and Cindy Frantz in psychology, on motivating behavior change using real-time monitoring and feedback technology funded by the Great Lakes Protection Fund. I have also spent time on my least favorite task: looking for new grant money to fund upcoming research endeavors!

However, I have been directing most of my energy toward three new research projects. First, with funding from the Great Lakes Protection Fund, I am working with collaborators at the Cleveland Botanical Garden to conduct an analysis of triple-bottom-line values (economic, social, and ecological) of urban agriculture in the Cleveland area using methods of ecological economics. Second, with funding from the H. H. POWERS Travel Grant, I am conducting a research project in Bangladesh, in collaboration with colleagues at United International University, exploring the opportunities and challenges of climate change mitigation and conducting an analysis of the economics and equity of off-grid solar home systems in remote rural areas. Finally, with funding from the Schmidt/11th Hour grant and in collaboration with the Oberlin Project, I am compiling baseline data and developing metrics for measuring and tracking sustainability with respect to transformations in the physical systems in Oberlin. The Bangladesh project has been particularly rewarding as, despite being a Bangladeshi, I had a chance to visit extremely remote places and interact with communities that I had never before encountered. It was a remarkable experience to study communities that are most vulnerable to climate change and the least resource-rich to do anything about it yet are embracing technology in innovative ways to be productive and resilient.

Jordan Suter

Over the past year, much of my attention has been focused on teaching and research activities. My classes, Environmental Economics and Natural Resource Economics and Policy, address the interactions between the environment and the economy and the powerful role that incentives play in both generating environmental problems and the policies designed to improve environmental quality and sustainability.

Much of my research in the past year has focused on understanding the economic incentives surrounding the use of groundwater resources. This research is funded by the National Science Foundation and has been conducted alongside researchers in hydrology and economics at the University of Delaware. The research centers on utilizing laboratory economics experiments in which undergraduate subjects make a series of groundwater-use decisions given realistic economic incentives and a spatially explicit groundwater model that dictates the resource dynamics. I presented the results from the first phase of this research at the International Water Resource Economics Consortium Meetings in Banff, Alberta, in June and at the American Agricultural and Applied Economics Annual Meetings in Pittsburgh. The first paper from this project has recently been accepted for publication in the American Journal of Agricultural Economics. I am currently working with my colleagues at the University of Delaware on two new sets of experiments that build on these results.

In addition to publishing research related to human behavior and groundwater dynamics, I also published an article titled “Wildlife Corridors as a Connected Subgraph Problem” in the Journal of Environmental Economics and Management in January, along with coauthors in applied economics and computer science at Cornell University. In this paper we highlight the computational complexities associated with the optimal design of wildlife corridors, using corridors for grizzly bears in the U.S. Northern Rockies as a case study.

I also continue to work on several ongoing projects related to environmental policy. The first is a paper that explores the use of dynamic pollution taxes as a way to reduce pollution both in situations where individual polluters can be detected and in cases where pollution regulations must occur at the group level. I am also continuing to work on a paper with colleagues at the University of Massachusetts, Amherst, and Cornell University that explores the use of water quality trading markets as a way to reduce water pollution. I presented a paper related to this research at the Association of Environmental and Resource Economics Meetings in Seattle last June.
Camille Washington-Ottombre

As the end of my second year at Oberlin approaches, I am both fulfilled by the very dense and exciting past semesters and looking forward to a more relaxed third year. Indeed, this year has been marked by major new orientations both in my teaching and in my research.

I taught three new courses this year: Vulnerability and Resilience, Governing the Commons: A Seminar in Water Resources, and Nature, Culture, and Interpretation. In Vulnerability and Resilience, the students and I productively struggled with the definition of losers and winners in a context of climate change. I think I will remember for a long time how a group of students applied the “adaptive cycle” to the movie *Mean Girls* as part of a class exercise! As the course progresses, I look forward to integrating more labs and hands-on activities based on my research in Africa.

I deeply enjoyed teaching Governing the Commons: A Seminar in Water Resources, a course in which students analyze water systems and propose alternative management schemes. A number of student projects were so good that they could have been implemented right away! For Nature, Culture, and Interpretation, the students and I stepped outside our comfort zone, questioned our attitudes and values towards nature and explored other cultures in order to rethink relationships between humans and non-humans. Wow! What a journey!

Fortunately, students and research assistants Kelsey Atkinson, Rachel McMonagle, Deirdre Molitor, Marion Rockwood, and Piper Stull-Lane were there to help me.

My research also took a new and exciting direction. Last summer, I started a new research project in Zambia to study the spatial resilience of farmers to hopefully design systems to distribute food aid in the area. Rachel McMonagle, Marion Rockwood, and I travelled to Zambia last August to conduct focus groups with farmers to collect preliminary data. This summer we will conduct a survey to deepen our understanding of the farmers’ coping strategies. I will also spend over a month in Kenya this summer to work on a newly funded project in the Mt. Kenya area and study how agricultural systems that depend on snowmelt water for irrigation will adapt to climate change. Deirdre Molitor, Danny Rosenberg-Daneri, and Piper Stull-Lane will help me conduct over 600 surveys and interviews of Kenyan farmers. We will also go to the Embu and Mbeere, districts where I did my PhD work, to present the results of my research to the farmers and give them a document prepared by Marion Rockwood.
CONGRATULATIONS NEW GRADUATES!

Graduating ES majors and minors*

Benjamin Agsten
Kelsey Atkinson
Sarah Bolinger*
Stephanie Bonner*
Kiri Brenner
Charles Burroughs
Elizabeth Campbell
Christopher Canning
Adam Darer
Melissa Elie*
Mary Claire Erskine
David Fisher
Miranda Fisher
Laura Geller
Jeremy Goldie
Abby Halperin
Corey Harkins
Amanda Harmon
Jennifer Helfand
Nicole Heyman*
Michelle Jahnke
Jason James
Paul Krysik*
Joshua Laufer
Casey Lee
Samantha Link*
Lissette Lorenz
Lauren McCrystal
Andrew Mixter
Peter Morrow
Joshua Morse*
Jacqueline Mostow
Julia Munson
Alison O’Connor
Karmi Oxman*
Leah Pallant
Jack Popper*
David Riddell
Marion Rockwood
Juliette Rubin
Flora Samis
Sarah Sawtelle
Robinson Schelhas*
Saviti Sedlacek*
Annika Sullivan*
Alexander Tartter
Jenny Taylor
Arielle Usher
Kelsey Watts-FitzGerald
Loke Jin Wong
Robert Young

* Denotes minors in the program.