Service Learning in Peru

Also: Celebrating the 40-Year Career of Geographer C. Gregory Knight
Knight Time (i.e., C. Gregory) and Departmental Recognition: Emeritus and Emeriti

It's Knight Time in the Department of Geography this semester. The department's celebration of Greg's retirement and his marvelous Penn State career took place on campus on Friday, October 21—you can see program information on [www.geog.psu.edu](http://www.geog.psu.edu) and read his retirement article in this newsletter.

We have all been enriched by the prolific and multi-pronged career that Greg has pursued for 40-plus years at Penn State through his roles as teacher, researcher, and administrator.

As many of you know, Greg was the model of a consistently versatile do-everything and go-to member of the geography faculty. Amid his remarkable potpourri of activities and contributions, Greg firmly held to a central commitment to teaching. It's this tidbit I'd like to mention here: in Greg's final teaching semester last spring and thoroughly enjoying a full enrollment in the Geography 430 course (Human Use of the Environment), Greg received an impromptu e-plaque with a moving tribute from the students that thrilled him as a suitably spontaneous display he then posted proudly on his office door.

Greg Knight's retirement underscores the important role of emeriti faculty in the Department of Geography. Indeed, Greg joins a wonderful group of emeriti faculty that includes retired professors Ron Abler, Peirce Lewis, Fred Wernstedt, and Wilbur Zelinsky. The department actively maintains connections to all of them and is indebted to their contributions over the course of their renowned careers here. Wilbur Zelinsky, who regularly attends the weekly Coffee Hour (and has recently published two new books, *Not Yet a Placeless Land: Tracking an Evolving American Geography* and *The Place of Religion in Chicago*, co-authored with Stephen A. Matthews) reminds all of us in the department on a regular basis about the vitality of this special group.

To pick one other example from the many possible, Ron Abler, operating from his home base in Sheboygan, Wisconsin, has remained highly active in various geography circles, perhaps most notably, the International Geographical Union, of which Ron is president. And, as many of you know, this past year has been a time of memorializing the lives and careers of a group of three other department giants among the emeriti faculty, namely Allan Rodgers, Paul Simkins, and Tony Williams.

Faculty emeriti in the department combine their continuous active careers, vital contributions as community members, and the kinds of varied opportunities that arise as a result of well-deserved retirement. I personally value their multiple roles and am most especially appreciative of their connections to us. Emeriti are vast repositories of institutional memory, recalling both “big picture” perspective and details of the departmental past and its lead-up to the present. They add a welcome element and enhance the diversity of viewpoints making up the department. In addition, a member of the emeriti faculty may often play an important role by serving on a departmental advisory board. Mention of the latter is timely since it's being taken into consideration as other departments in the college and elsewhere increasingly make use of such boards.

We are very pleased to welcome aboard Angela Rogers as the department's marketing communications specialist. Angela's duties range widely from website updates and design issues to general publicity, event recording (including the Coffee Hour), and newsletter editing. Angela is a Penn State alumna with a B.A. in Journalism and an M.S. in Workforce Education and Development. Prior to joining the Department of Geography, Angela worked in Outreach for 15 years. Her hobbies including teaching yoga and being an active member of Toastmasters International. One piece of fun trivia about Angela and her Penn State roots: Dr. Frederick P. Weaver, head of the Department of Agricultural Economics and Rural Sociology from 1925 to 1937 for whom Weaver Building is named, was Angela's great, great, great uncle.

In Memoriam

You can re-read the Department’s recognition and information on the memorials of two emeriti faculty who passed away during 2010 and 2011 as they were published on-line at: www.geog.psu.edu, search for “Rodgers” and “Simkins.”
Robert Brooks (right) gives opening Coffee Hour speaker and alumnus Kolson Schlosser (M.S. ’03, Ph.D. ’07) the thank-you mug after his September 9 talk on diamond mining in Canada. Coffee Hour and Coffee Hour To Go (the webcast) continue throughout the semester.

Robert Brooks (right) gives opening Coffee Hour speaker and alumnus Kolson Schlosser (M.S. ’03, Ph.D. ’07) the thank-you mug after his September 9 talk on diamond mining in Canada. Coffee Hour and Coffee Hour To Go (the webcast) continue throughout the semester.

The 2011–12 Penn State Visitors’ Guide is now available from the Gould Center

Contact the Gould Center to place your order.

By phone: 814-863-4562

By e-mail: maps@gouldcenter.psu.edu

Online: http://old.geog.psu.edu/gouldcenter/order.html
When **Kevin Sparks** applied for a NASA internship, he was “20 percent confident” of his chances. Not only did he get the internship, Sparks was one of two interns selected from the program to give a presentation at NASA headquarters in Washington, DC.

“It was an experience that has shaped me into who I am currently, and it’s left a big imprint,” said Sparks, 20, who spent ten weeks at the NASA Langley Research Center in Virginia. “It was a growth experience I won’t forget for some time to come.”

Pittsburgh-native Sparks is now a junior in the Department of Geography, with a focus in GIS. He changed his major last year after taking an introductory geography course and is working with noted cartographer, Dr. Cynthia Brewer, redesigning the U.S. national map. His love of spatial analysis and enthusiasm for applying GIS software to real world situations can be traced back to that summer as a NASA intern.

Day one was intimidating, he recalled, as he approached the Langley Research Center and saw the large, heavily guarded gate. Sparks was placed in a group whose goal was to find a better way of monitoring tilling practices. “Tillage,” Sparks explains, “is the agricultural preparation of soil.” He imagines that in the future, a carbon credit system may be used to reward farmers who practice conservation tillage, which emits less carbon into the atmosphere than other methods.

NASA was exploring how to create a system that could “tell them the truth, from space,” Sparks said. His group succeeded.

“It was kind of mind-blowing when we finally took a step back after the work we did and thought to ourselves, ‘wow, no one has ever done this before,’ and as far as we could tell, this was the most effective practical way of doing it,” Sparks said, adding, “When we hit that point, it was euphoria.”

Although they had deadlines and weekly meetings, NASA managers left the interns to their own devices, responsible for negotiating their own solutions.

“The managers said essentially okay, here’s your project, go with it,” Sparks explained. “Starting from scratch, you have to look up, on your own, different scientific journals to find out how to do this. So, it was really invigorating in that sense…they allowed you to be as creative as you wanted to be.”

Sparks says he thrived in this freedom. And with a background in GIS, he was the only group member familiar with remote sensing, a vital component to their research. He quickly gained respect from his peers and ultimately NASA.

Every summer, out of about eight intern projects, two are picked to be presented at NASA headquarters. When Sparks’s team’s tillage system was selected, the seven members of his group, along with his managers, then nominated Sparks to present the findings to the NASA scientific community.

“It’s opened my eyes and given me an improved work ethic,” Sparks noted. “Getting a taste of how the applied research industry actually works, and how much work you need to put into it—it’s calmed me down; it’s given me more confidence.”

With a new approach to learning, he was thrilled to begin a project with Dr. Brewer, who was asked by the U.S. Geological Survey to revamp the national map. Sparks focuses on land cover representations, including vegetation, urban area, and agriculture.

Like his NASA managers, Dr. Brewer nudges him in the right direction, but he says, “She gives me a lot of freedom, keeps me on a loose leash, and allows me to just run with it.”

In the Gould Center office, large maps cover the walls; others are rolled and stuffed into boxes. For preliminary research, he spent hours critiquing these representations from around the world. Now, he runs his ideas through GIS, creating, he says, “tangible, meaningful work.”

This opportunity may have never come along, says Sparks, if it weren’t for the encouragement of graduate student Paulo Raposo, who not only inspired him to major in GIS, but also is working with Dr. Brewer.

“He’s been a mentor to me completely, whether or not he knows that,” said Sparks, who valued Raposo’s patience during office hours last year. His vast knowledge of GIS, Sparks said, kept him going back to learn more.

Following his mentor’s example, Sparks plans on attending graduate school. But for now, he is taking one year at a time.

“I am trying push the envelope a little more; find that next internship that I definitely won’t get,” Sparks smiles, adding, “but hopefully will.”
UNDERGRADUATE STUDENT UPDATES

Carlo Sica is attending graduate school in geography at Syracuse University.

Sarah Layton did research for her honors thesis in the summer in Katima Mulilo, Namibia, a small town on the border with Zambia and Botswana. Layton’s research is centered on better understanding the factors that influence a woman’s decisionmaking as it relates to reducing the risk of HIV/AIDS transmission to her children. By understanding the perspectives and challenges of health workers and local women, it’s hoped that women will have the opportunity to feel heard – something they typically lack – and health workers will have the opportunity to voice their struggles. While there, additional opportunities have arisen to talk with local NGO workers about breastfeeding guidelines, teach an HIV/AIDS abstinence program at an orphanage and give a general information session on HIV/AIDS and healthy living to a home for disabled children. Petra Tschakert is Layton’s honors adviser, and the geography department, including the Balmat donors, contributed a portion of the research funding.

Christine Hardos interned at the Census Bureau where she did a GIS-related project called Highway Review/Cleanup. In the project, she used GIS to look for and locate highways and roads and clean up places in each state where roads should not be on a map or put them where they should be.

Audra Kerschner was awarded the A. Whitney Frankenberry Scholarship in International Programs through the Education Abroad Office for academics while she was studying abroad in New Zealand. As part of the scholarship, she will have the opportunity to be a resource for Penn State students who may want to study abroad in New Zealand.

Charles Ferrer completed an internship with the U.S. Census Bureau in the geography division. He updated and edited road and highway TIGER data in their in-house database.

Andrew Stauffer is attending graduate school at the University of Colorado-Boulder and he’s studying GIS.

Mallory Henig completed an internship at Shaver’s Creek Environmental Center that focused on animal care and making a new camp map. In July, she attended the Esri User Conference in San Diego as a student assistant.

Melissa Peterson participated in the summer version of Semester at Sea. She’s studying community development through service learning. The group’s big project was in Gale’s Point, Belize, where the class is helping to solve issues related to energy, water, jobs, and shelter. The program was 26 days long and made stops in the Bahamas, Trinidad and Tobago, Panama, Costa Rica, Honduras, Guatemala, and Belize.

Joe Bowser completed an internship at the Goddard Space Flight Center in Greenbelt, Md., through the Joint Center for Earth Systems Technology. The project he worked on through the internship is focused on seasonal dynamics in vegetation spectral and biophysical properties associated with climate and carbon dioxide dynamics. He’ll do a presentation, paper and a poster from his work.

Glenn Byers interned with the South Middleton Township, Pa., Planning Department. His main task was completing the official map for South Middleton.

Content redacted in April 2013 by request.

Tillage classifications from the CAI using the linear fit method compared against field data points (collected by Dr. Craig Daughtry of the USDA) computed with the ground-based, line-transect method.” Image credit: NASA DEVELOP program

E.T. scenario analysis induces interesting media reaction and experience for graduate student

Late this summer, Seth Baum (Ph.D. candidate) found himself at the center of a minor international media feeding frenzy surrounding one of his research side projects.

His article “Would contact with extraterrestrials benefit or harm humanity? A scenario analysis” published in Acta Astronautica, vol. 68, no. 11-12 (June-July), pages 2114-2129, was covered in The Guardian, which mistakenly identified it as a NASA report.

That, in turn, rapidly drew attention from journalists and bloggers worldwide, including environmentalists and climate change skeptics. Baum was interviewed on radio and TV, most notably on Fox News's The O'Reilly Factor, broadcast on Tuesday, September 6 at 8:00 p.m.

You can view it online at http://www.foxnews.com/on-air/oreilly.

“Media stories have a life of their own.”

Baum notes, adding, “Media stories have a life of their own. As researchers, we can influence this process, but we must mind today’s rapid online media environment. My colleagues and I got corrections to the original Guardian article within hours, but that wasn’t fast enough to avoid all misconceptions. We turned out to be well prepared, since we already had websites, blogs, and twitter accounts, all of which proved very useful.”

A summary of the media coverage is available here: http://sethbaum.com/ac/2011_ET-Scenarios_media.html

Briefly, the research is a scenario analysis of what would happen if humanity encountered intelligent extraterrestrials. One scenario connects extraterrestrial encounter to greenhouse gas emissions—hence the attention from environmentalists and climate change skeptics. The broader research project is on what life in the universe means for human civilization today, with some emphasis on what it means for environmental sustainability.

The project is conducted with two other people with ties to the College of Earth and Mineral Sciences and the Penn State Astrobiology group. For details, see http://sethbaum.com/research/astrobio/

“Thanks are due to Mark Read (Ph.D. candidate) for helping me with the scenario analysis methodology and to Chongming Wang (M.S. candidate) for helping translate with the Chinese media,” Baum says, adding, “Throughout this process, I have felt very fortunate to be in a department that is so supportive of public scholarship.”

GRADUATE STUDENT UPDATES

Rachel Isaacs (Ph.D. candidate) received a National Park Service Fellowship to conduct dissertation research in the summer of 2011 in Denali, Alaska. For her research, she will examine how rising temperatures and physical and biological factors influence tree establishment at tree line in Denali National Park.

Shaunna Barnhart (Ph.D. candidate) wrote a chapter for the book Forests and People: Property, Governance, and Human Rights (earthscan, July 2011). Barnhart’s chapter, “Advancing Human Rights Through Community Forestry in Nepal,” describes the activities and programs in five community forest users groups in Jhapa, Nepal, that actively seek to fulfill basic human rights needs and raise rights awareness in their communities.
Shaunna Barnhart, Vanessa Massaro, and Laura Spess (Ph.D. candidates) participated in the annual reading and scoring of the College Board’s Advanced Placement Examinations for AP Human Geography.

Mark Read (Ph.D. candidate) attended the 2011 Summer Academy on Social Vulnerability in Munich, Germany, that was sponsored by the U.N. University in July.

Chanda Turner (Ph.D. candidate) participated in the National Security Analysis and Intelligence Summer Seminar in Washington in July. It’s offered through the Office of the Director of National Intelligence and allows participants to study and learn from analysts and senior officials in the intelligence community during a two-week residential seminar. She aspires to work in the area of national security intelligence and/or diplomacy with a focus on science and technology. This ties in with her dissertation research that focuses on Public perceptions to science and technology related global change issues: Exploring linkages between attitudes towards science, science literacy, geographical awareness, level of uncertainty, religious and political affiliations, and socio-economic status among students and parents in the NSF-GK–12 funded CarbonEARTH program.

Kate Driscoll Derickson (Ph.D. candidate) accepted a tenure-track job in the department of geosciences at Georgia State University. She’s an assistant professor and will teach urban geography and community development that’s part of a new initiative on campus called Community Soil Air Water. She also has a research project under way called “Resilience from Below” with cases from Glasgow, U.K., and Atlanta, that bring an international comparative perspective to bear on bottom-up conceptions of urban resilience.

Rui Li (Ph.D. candidate) was an author on the paper “The endpoint hypothesis: Comparing static and dynamic presentations of events” with assistant professor Alexander Klippel. It was accepted by the 32nd Annual Conference of the Cognitive Science Society to provide understanding of cognitive science from a geographic perspective.

Maureen Biermann (Ph.D. candidate) and Katie Dietrich (Ph.D. candidate) received international research travel grants through Earth and Environmental Systems Institute (EESI) in collaboration with the Center for Global Studies (CGS). Maureen will use the funds for attending the UNFCCC COP in Durban, South Africa, and Katie will use it to finish up her dissertation fieldwork in Ghana this summer.

Ken Pelman (MGIS candidate) presented his capstone research project at the 2011 Information Systems for Crisis Response and Management (ISCRAM) conference in Lisbon, Portugal. He completed a software tool called EvacSpace that is designed to support rapid evacuation planning through an interactive, visually enabled interface. Pelman is the first GeoVISTA MGIS affiliate, and his adviser is faculty member and alumnus Anthony Robinson (M.S. ’05, Ph.D. ’08).

Emma Gaalaas Mullaney (Ph.D. candidate) was awarded a 2011 National Security Education Program David L. Boren Graduate Fellowship. It will fund 11 months of Nahuatl language study and dissertation research in the central highlands of Mexico.

Emma Gaalaas Mullaney, Melissa Rock, and James Thatcher (all Ph.D. candidates) attended the Third Antipode Institute for Geographies of Justice in Athens, Georgia.

Several students recently participated in the 2011 College of Earth and Mineral Sciences Graduate Student Poster Session. Elaine Guidero (M.S. candidate) won third place. Joshua Stevens (Ph.D. candidate), Eleanor Andrews (M.S. candidate), and Rui Li (Ph.D. candidate) all received an honorable mention.

New Graduate Students

The Department of Geography welcomes our new fall 2011 residential graduate students.

M.S. candidates:  
Jase Bernhardt  
Qian Di  
Russell Hedberg  
Catherine Jampel  
Paul Shaffner  
Samuel Stehle  
Jinlong Yang

Ph.D. candidates:  
Douglas Baldwin  
Nathan Clay  
Arielle Hesse  
Jennifer Smith  
Joshua Stevens  
Amanda Young  
Kayla Yurco

Geography Family: (left to right) Alumnus Will Vancura (B.S.’92) holding newest geographer-in-training Callie Elizabeth Vancura (born 6/16/11), Robin Weise Vancura with daughter Lily Claire Vancura (7/1/09), Jodi Vender (staff/Ph.D. candidate) with kids Nicholas Vender Searles (10/12/09) and Caroline Vender Vancura (8/8/03), Jay Searles (CPGIS student/former geography lab instructor).
Knight retires after distinguished career of service to Penn State

C. Gregory Knight, a member of the Penn State faculty for forty years, retired as an emeritus professor of geography in the College of Earth and Mineral Sciences effective June 29.

He came to Penn State in 1971 as an assistant professor of geography, having received his graduate degrees in geography from the University of Minnesota (M.A. 1965, Ph.D. 1970) and a short appointment at the University of Kansas.

His research interests were in climate change, water resources, resource management, global environmental change, and sustainable development. He conducted field research extensively in Bulgaria and Africa.

He is best known for his research on the human use of the environment, including books on ecology and change in Tanzania, climate change in Bulgaria and methods for regional assessment of climate change impacts. Knight was head of the geography department from 1982 to 1989. During his service as department head, the GeoGraphics Laboratory was developed. Its successors, the GeoVISTA and Gould Centers, are among the leading GIS/cartography research centers in the country. In addition, the graduate program had been ranked second nationally, moving to first shortly after he moved to Old Main. He also administered when three women were added to an all-male faculty, and served the University as chair of the University Faculty Senate.

One of the highlights of Knight’s 40-year academic career at Penn State was welcoming the first student who joined EMS as a first-year Geography major. He viewed his role as department head as a person helping to plant orchards that colleagues could tend to maturity. He carried this commitment to his editorship of the *AAG Resource Publications in Geography*, providing an opportunity for many scholars to add a book to their vitae.

From 1989 to 1993, Knight held a university-level administrator position as Vice Provost and Dean for Undergraduate Education, returning to EMS to become associate director of the Earth Systems Science Center and head of the Center for Integrated Regional Assessment, an NSF-sponsored center of excellence on climate change impacts.

As Knight reflects on his career at Penn State, he takes pride on the accomplishment of all the junior colleagues he brought to the Department. “No matter how sharp the knife, it cannot carve its own handle,” is one Knight’s favorite Yoruba (Nigeria) proverbs.

A special afternoon dedicated to research on water resources and the celebration of the career of C. Gregory Knight was held on Friday, October 21, 2011.

The panel on water resources research included Knight’s former students. Panelists explained how an interdisciplinary approach was needed to protect and save waterways.

Many colleagues, friends, and former students joined in the celebration to offer anecdotes and thanks for how Knight influenced their careers. Rodney Erickson, executive vice president and provost of the University, credited Knight with persuading him to come to Penn State. A former student remarked, “You saw the human behind the scholar.”

The traditional Friday Coffee Hour speaker was also selected especially for the day’s theme. Author and conservationist Tim Palmer took the audience on a tour of America by river, richly narrating the slides of his journey from Maine to Florida to Alaska. At the conclusion of the talk, Palmer was awarded a SAFE Sustainability Leadership Award by the Knight-Staneva Foundation. The day concluded with a special reception in the EMS Museum and Art Gallery Lobby.

“*If it weren’t for Greg ...*”

Colleagues and students recall how Dr. Knight inspired them
James McCarthy has taken a faculty position in the geography department at Clark University.

David DiBiase accepted a position at ESRI in Redlands, Calif.

Jodi Vender participated as a table leader in the annual reading and scoring of the College Board’s Advanced Placement Examinations for AP Human Geography.

Marieta Staneva retired from Penn State Altoona. She earned a Ph.D, from Sofia University, Bulgaria. She served as EMS liaison, for several terms on University Faculty Senate and as a committee chair, active in climate change research and collaboration on Eastern Europe, and IHDP for Bulgaria. She created the geography course on sustainability with a field session in Bulgaria.

Karl Zimmerer gave the Ellen Churchill Semple Honorary Lecture at the University of Kentucky’s department of geography on April 21. The title of his talk was “Rethinking Environmental Change and Nature-Society Geographies: Past, Present, and Future.” Ellen Churchill Semple was an early 20th century geography at Kentucky and was the first female president of the Association of American Geographers.

Post-doctoral scholar Jen Shaffer has accepted a tenure track position in the Department of Anthropology at the University of Maryland-College Park effective January 2012. She’ll be an assistant professor of anthropology and teach “Anthropology and Climate Change.” Her research will continue to focus on human-environment interactions in southern Mozambique.

Douglas Miller and John Tooker, assistant professor of entomology in the College of Agricultural Sciences, developed a web-based mapping tool for monitoring the brown marmorated stinkbug. View the site: http://stinkbug-info.org/

Jennifer Balch has accepted the position in Earth Systems Ecology and will join the Geography Department next summer (2012) once she has completed her commitment to the National Center for Ecological Analysis and Synthesis. Thanks are owed to ESI, PSIEE, and the College of Earth and Mineral Sciences for their support.

Two geography faculty members have received promotions. Petra Tschakert was granted tenure. Melissa Wright has been promoted to professor. Read about them on the department web site, www.geog.psu.edu.

John Kelmelis contributed an article “Arctic Warming Ripples through Eurasia” in Eurasian Geography and Economics.

Brent Yarnal contributed to a New York Times Room for Debate opinion feature on August 29, 2011, focusing on “What did we learn from Irene?” In Room for Debate, The Times invites knowledgeable outside contributors to discuss news events and other timely issues. Along with other experts, Yarnal shared his three big-picture lessons from Hurricane Irene. Among them, the concern that increasing coastal development puts more people in harm’s way and “policy should strive to keep the coastlines clear.” To read the entire discussion, visit: http://www.nytimes.com/roomfordebate/2011/08/29/what-did-we-learn-from-irene/hurricane-irenes-hidden-costs-still-piling-up

In August, Deryck Holdsworth attended the Teaching Fellows program dinner held by the Alumni Association and was interviewed for AlumnInsider about his experiences as a 2008 Teaching Fellow. Read the full story “Teaching Fellows, Sharing Inspiration” here: www.imakenews.com/psaanews

Angela Rogers joined the Department of Geography as a marketing communications specialist on September 1, 2011.

Ola Ahlqvist was appointed to be director for the Ohio State University Service Learning Initiative and promoted to associate professor effective October 1, 2011. In his new role Ola will coordinate and promote community-based scholarship across the curricula of the university.
Maury Hendler (B.S. ’61) was inducted into the Penn State Pioneers alumni group in June. The group is composed of alumni who have marked 50 years since graduating. He’s the treasurer of the Penn State Alumni Association’s Long Island Chapter.

Joe Scarpaci (M.S. ’78) has joined the faculty of the West College of Business at West Liberty University in Wheeling, W.Va. as an associate professor of marketing.

Wayne Brew (B.S. ’81) is the new executive director of Pioneer America Society: Association for the Preservation of Artifacts and Landscapes. The organization brings together academics, professionals, and laypeople in the fields of geography, historic preservation, history, and landscape architecture.

Brew is also an assistant professor of geography at Montgomery County Community College in Blue Bell, Pa.

Sheryl Kron Rhodes (B.S. ’85) graduated from the State University of New York at Buffalo with a master’s degree in library and information studies. She’s looking for work as an academic reference/instructional librarian.

John Harner (B.S. ’86) has been promoted to full professor in the Department of Geography and Environmental Studies at the University of Colorado at Colorado Springs.

John Krygier (Ph.D. ’95) received promotion to full professor at Ohio Wesleyan University, where he teaches in the Department of Geology and Geography and researches cartography, GIS, and environmental geography.

Brad Stratton (B.A. ’00) won the prize for innovation in the Esri conservation mapping competition. He’s a GIS analyst and conservation data manager at The Nature Conservancy in Albany, N.Y. His map shows the projection history of The Nature Conservancy in New York from 1954 to 2009. See his map online at http://www.conservationgis.org/scgis/2011contest.html.

Kelly Vanderbrink (B.S.’04, M.S. ’08) works for SAIC’s geospatial and information division and was promoted to a project manager position for the project he’s worked on for the Army Corps of Engineers. The project is developing technology to integrate aerial, terrestrial lidar and spherical video and tools to disseminate these data. He also started work on a Ph.D. in earth systems and geoinformation science at George Mason University.

Jennifer Fluri (Ph.D. ’05) received tenure and was promoted to associate professor at Dartmouth College, where she teaches in the department of Geography and the Women’s and Gender Studies Program and researches the Geopolitics and Gender Politics of international intervention in Afghanistan.

Trieste Lockwood (B.S. ’08) is the director of Virginia Interfaith Power and Light. She organizes and mobilizes faith communities around environmental issues in Virginia, focusing on energy efficiency, renewable energy, and keeping the ban on uranium mining in the state. As an undergraduate, she worked at the National Geographic Society to develop environmental resources. She launched and managed multiple, successful environmental campaigns with the non-profit organization Green Corps prior to working at Virginia Interfaith Power and Light.

Michael Hermann (B.S. ’95) has published Raystown Lake Trail Map, which covers all of Raystown Lake from Huntingdon to Saxton, Pa. It includes a detailed map of the Allegrippis Trail System and Trough Creek State Park. Hermann recently began selling a 24-ounce aluminum water bottle that features the Penn State campus map. It’s available for sale online at purplelizard.com.
“Geography is at the center,” explains Alumnus **Dr. G. Donald Richardson** during his visit with students on September 23, 2011. Dr. Richardson works at the Institute for Defense Analyses (IDA), where his training as a geographer has taken him to the airspace above the former Yugoslavia on missions to conduct research that saves the lives of military personnel. His career advice for students: play up your quantitative and analytical skills.

**Matt Popek** (B.S. ’09) graduated in May with a Master of Science in community and regional planning from Temple University.

**O’Shannon Burns** (B.S. ’09) recently started a new position at National Geographic. She’s working in the research, conservation and exploration department as the program officer for two grant programs.

**Brent Newman** (B.S. 2010) is working as a GIS analyst at HRI Bridge Co. in State College, Pa.

Send your alumni news to geography@psu.edu

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**GEMS recognized by Penn State Alumni Association**

The Graduates of Earth and Mineral Sciences Society (GEMS) has been selected to receive a Penn State Alumni Association award for its participation in TOTEMS, the undergraduate orientation and move-in program. The award is in the student interaction category of the 2011 Volunteer Awards Program for the Penn State Alumni Association. Alumna **Anne Messner** (B.S. ’89) chairs the GEMS student involvement committee.
Service Learning in Peru
by Mike Dawson

For four geography undergrads, spring break 2011 wasn’t about a week off from class work. Arguably, it was the busiest week of their semester as they set up still cameras to photography wildlife in Peru’s rain forest, toured the ruins of Machu Picchu, and met the Peruvian minister of the environment.

The activities were part of a service-learning field trip to various sites in the South American country as part of the semester-long GEOG 493, “Environmental Issues across the Americas.” The course, led by geography senior scientist Denice Wardrop and research associate Joe Bishop, consisted of classroom instruction before and after the trip with the goal of publishing a scholarly paper based on the students’ research findings.

“This class is a great example to show how place matters,” said Bishop, who’s been taking Penn State students to Peru with Wardrop for five years. “You have to understand the geography of where you are in order to address an environmental issue.”

The geography students were seniors Kyle Martin and Andy Stauffer, junior Mallory Henig, and sophomore Jackie Dougherty. Three students from Penn State’s Altoona campus also were enrolled in the class, which was in Peru from March 3 to 13.

The itinerary had the group visiting the Peruvian rain forest in the Tambopata National Reserve near Puerto Maldonado for the first half of the trip. For the second half, they visited Cuzco and Machu Picchu in the Andes Mountains.

“The rain forest was more about data collection and experiencing nature,” Stauffer said. “Machu Picchu and the highlands segment were more about experiencing the local cultures.”

They did fieldwork on two research projects they developed in class during the weeks leading up to the trip. The projects focused on ecotourism and local, small-scale gold mining.

“It was a real privilege being able to perform fieldwork for a professional project of our own design,” Martin said. “Bridging the gap between the classroom and real life application was a great experience for all of us. It was hard, but it felt good to do field work for our own project.”

For the ecotourism project, the group’s research looked at human impact on the wildlife presence around two eco-lodges, the Tambopata Research Center (TRC) inside the national reserve, and Posada Amazonas, which is outside the reserve. In all, the group spent two days at each lodge, where tourists stay to see a variety of animals like macaws, monkeys, giant river otters, caimans, among others.

To research potential human impact on wildlife, the group installed two infrared, motion-sensitive cameras along two trails near each lodge to take pictures of wildlife. In both locations, one trail is highly used and the other is less frequently used.

The overarching research question asks if there is a relationship between the trail use and wildlife sightings, and if so, if the relationship is similar when comparing the two lodges.

So far, the cameras have snapped photos of wildlife including a puma, a jaguar, a tapir, a peccary, an agouti, a guan and a red brocket deer. The cameras will keep taking photos until the end of the semester, when the cameras will be donated to the lodges.

“Work from the eco-tourism research project is two-fold,” Stauffer said. “It was an experience for us undergraduates to have a research experience and write a paper on it. More than that, it’s a service-learning project. The lodges can use what we collect from the
In addition to the fieldwork, the group took a six-hour boat ride on the Tambopata River. Among their stops were an agro-forest that supported the local communities. They also went to an oxbow lake to see wildlife.

“We went out on a raft to view the wildlife and were lucky enough to see birds, including a hoatzin, and a black caiman, as well as the resident family of otters,” Dougherty said. “After the otters retreated we fished for piranhas using raw beef as bait. You could feel the fish tug as they all attacked the meat.”

For the gold mining research, the group interviewed locals who were familiar with the legal and illegal gold mining activities in the area of Puerto Maldonado.

“I liked the gold-mining project because I was interested in more of the human and social impacts,” Henig said. “There are also many environmental impacts effecting the rain forest and Amazon River from gold mining and it was great learning about it firsthand.”

The resulting project will be a question-and-answer article on how the students’ perspectives have changed on the issue of small-scale gold mining after interviewing locals knowledgeable on the topic.

“My perception originally was that the government was forcing them to work without resources,” Henig said of the miners. “The miners aren’t getting resources because they’re not paying taxes. They’re not helping the town where they’re working.”

The miners had been protesting a crackdown on their activities and regulations by federal officials, namely Antonio Brack Egg, the minister of the environment.

“The complexity of the gold mining issue fascinated me,” Martin said. “There are many sides and differing opinions about gold mining, and trying to get to the bottom of the issue is interesting.”

For the second part of the trip, the group went to the Peruvian highlands. Their excursions included tours of Machu Picchu and Cuzco.

Dougherty said she was impressed by the knowledge of their tour guide at Machu Picchu, the terraced 15th-century Inca site about 8,000 feet above sea level.

“Every building had a role in their society, whether it was a temple or house or meeting area,” she said. “Despite the years, the structures were all still intact, and it was amazing to walk through such a historical sight.”

In Cuzco on the last day, the group stumbled upon a lesson in human geography as they learned how the locals defined poverty. Dougherty said she was told that to be considered middle class, a family would lack two of the following: housing, education, adequate salary, electricity, and plumbing.

“Initially, this seemed so drastic. These things that we take for granted every day are not necessarily guaranteed to people here,” Dougherty says. “But it really opened my eyes as to how people in other countries live their lives and how fortunate we really are.”

From Cuzco, they left for Lima to fly home. But before they left the country, they had dinner with the environmental minister, Antonio Brack, with whom they were already familiar because of the gold miners protesting his attempts to regulate their activities.

Henig said Dr. Brack was very upfront about the mining issue during the hour her group had with him. She said the face-to-face time with him was an important learning experience.

“I realized you definitely have to hear both sides of the story,” she said. “He was definitely trying to do a good thing.”

Once back at Penn State, Stauffer, Martin, Henig and Dougherty continued to analyze the data the cameras are capturing, and they’ll start to draw conclusions. Their goal is to write a scholarly paper on their findings.

Looking back, though, the trip was more than an educational experience for them.

For Stauffer, who’s going to graduate school to study GIS after he graduates in May, the Peru trip was valuable because he learned how to start doing research and how he can function as a researcher.

“It prepared me to take leadership roles on some parts of the project and be a workhorse on other parts,” he said. “It helped me identify my individual strengths and weaknesses.”

For Henig, who will be a senior in 2011-2012, the experience inspired her.

“The service trip to Peru will always be one of my favorite memories from my undergraduate career,” she said. “I think that this trip definitely made me realize that I want to continue doing similar research in the future and travel to more countries to help out with other environmental and social issues.”
Faculty, staff, students, and alumni participate in NACIS Conference

The Penn State Department of Geography showed up in strong numbers at the North American Cartographic Information Society (NACIS) Conference held the second week of October 2011 in Madison, Wisconsin. “It has an attendance of about 350, so 34 Penn Staters are a large proportion,” noted Cindy Brewer, who spoke on representing terrain. The theme for this year’s conference was “How does design make a difference?”

“I very highly recommend that any student with an interest in cartography attend,” said Paulo Raposo, adding “NACIS has consistently been a group of excited, friendly, and highly-knowledgeable people who present really excellent work of both practical and academic importance, and I’m happy to say that remains true now. I really like this conference! And the poster session has gone really well, with great constructive feedback from the audience.”

Congratulations to Alexander Klippel and his wife Melina Czymoniewicz-Klippel on the birth of their first child, a son. Yuri William Dietrich was born September 25, 2011 at 11:54 p.m. at Mount Nittany Medical Center.

The Human Factors in GIScience Lab welcomes four new members: Jan Oliver Wallgrun, Sam Stehle, Jennifer Smith, and Jinlong Yang. For more information visit us at: www.cognitiveGIScience.psu.edu.

Jan Oliver Wallgrun will join the Department in November as a Postdoctoral Research and Teaching Scholar in the GIScience area. He will be teaching advanced GIS and programming courses. Jan received his diploma from the University of Hamburg, Germany, and his Ph.D. from the University of Bremen, Germany; both in Informatics. His research interests focus on GIScience, Spatial and Temporal Modeling and Reasoning, Artificial Intelligence, and Spatial Cognition.

In May, Andrew Carleton gave an invited talk on “Jet Contrails and their Impacts on Climate” to the Climate Change Institute of the University of Maine.
Penn Staters on the program

Posters

Rick Fourroux, (undergraduate) “Natural Sky Illumination”

Paulo Raposo, (Ph.D. candidate) “Scale-specific Automated Map Line Simplification by Vertex Clustering on a Hexagonal Tessellation”

Michael Hermann, (B.S. ’95) “Penn State Campus Maps: More than just Visitor Maps”

Sessions

Empirical Findings
Session Chair: Anthony Robinson (research associate)

“Comparing Cartographic Point Symbol Design with Card Sorting Methods”
Raechel Blanchetti (Ph.D. candidate)
Jinlong Yang (M.S. candidate)
Rui Li (Ph.D. candidate)
Justine Blanford (research associate)
Frank Hardisty (research associate)
Alexander Klippel (assistant professor)
Alan MacEachren (professor)

“Placement of You-Are-Here Maps: An Empirical Study using Multiple Approaches”
Chelsea Gilliam (undergraduate)
Rui Li
Brian Chorman (undergraduate)
Alexander Klippel
Jinlong Yang

“Using Web-Based Tools to Share Symbology: A Case Study with Mapmakers from the California Department of Water Resources”
Sarah Troedson (MGIS candidate)
Anthony Robinson

Representing Terrain
“NACIS Presentations on Terrain Inspire Penn State ‘Applied Cartographic Design’ Course”
Cindy Brewer (professor)
Jason McGiloway (undergraduate)
Stephen J. Butzler (B.S. ’11)

“Multiscale Terrain Representation for The National Map”
Andy Stauffer (B.S. ’11)
Cindy Brewer

Additional Penn State Geography Alumni Presenters

Mamata Akella (M.S. ’08)
Rob Edsall (Ph.D. ’05)
Carolyn Fish (B.S. ’08)
Kirk Goldsberry (B.S. ’99)
John Krygier (Ph.D. ’95)
Brian Moran (B.S. ’98)
Ian Muehlenhaus (M.S. ’02)
Rob Roth (Ph.D. ’11)
Erik Steiner (M.S. ’01)
Jim Thatcher (Ph.D. candidate)

Penn State Geography Attendees

Students:
Elaine Guidero (M.S. candidate)
Chris Lowe (MGIS candidate)
Alex Savelyev (Ph.D. candidate)
John Wolf (MGIS candidate)

Alumni:
Jess Acosta (M.S. ’07)
David Barnes (M.S. ’97)
Rosemary Daley (B.S. ’06)
Amy Griffin (Ph.D. ’04)
Chelsea Hanchett (M.S. ’10)
Dan Haug (M.S. ’98)
Eric Janota (B.S. ’89)
Fritz Kessler (M.S. ’91)
Trudy Suchan (Ph.D. ’98)
Peter Weir

Note: Names in gray contributed to the program but did not attend the conference.

“I would DEFINITELY recommend the trip to all GIS/cartographically inclined students,” said Rick Fourroux. “It was amazing to see and meet so many people whose work is part of many GIS assigned readings. This trip has been a spectacular opportunity to network with future employers as well.”

“My poster didn’t do as well as I had hoped, but the two individuals that inspired my work talked with me about my method for 30 minutes during the poster reception. That was a very reassuring experience in-and-of-itself,” Fourroux said.

Fourroux also noted, the ability of NACIS to give an aspiring cartographer some additional input (outside of the student’s professor/advisor) in a constructive and conversational way has been most beneficial.
We extend our deepest gratitude to all alumni and friends who have given financial support to the Department of Geography during past six decades. Without these generous contributions, many scholarships, research experiences, and awards would not be available to our students and faculty.

We especially wish to recognize those who contributed to the department between July 1, 2010, and July 1, 2011. Their names are listed below.

If you would like to donate to the department, please e-mail jvender@psu.edu or development@ems.psu.edu.

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