CICR hosts *Future of Food Workshop*

On October 1st 2012, the “Food, Agriculture, and the Future” research node in the Center for Integrative Conservation Research – with support from several other campus sources – hosted its inaugural workshop. The workshop, titled “The Future of Food”, brought together scholars from across campus with practitioners in agriculture and community food activists. In keeping with the broader mission of CICR, the main purpose of the workshop was to stimulate discussion and understanding across boundaries. The full day event opened with panels on food production, policy, and food systems research. In the afternoon, attendees broke into small groups for facilitated discussion of themes as varied as “food and technology,” “reciprocity and mutual aid,” and “urban food systems”.

The day closed with a provocative keynote presentation by K. Rashid Nuri, co-founder of an organic urban farm in Atlanta and president of the board of Georgia Organics.

The workshop clearly illustrated the potential of integrative research. There were exciting moments of synergy and important efforts to communicate across boundaries. Most importantly, the workshop brought together people from a wide array of backgrounds who nonetheless share common interests in pressing global problems. Workshop conveners are excited to build on the success of this inaugural workshop in the coming year and are planning another workshop this year. This workshop will build on the themes identified in 2012 – for example, concern over what scale is the most appropriate for addressing problems of food production – and feature a more focused grouping of issues, while retaining the diversity of interests involved.

-Levi Van Sant and Lowery Parker

The Future of Food Workshop was co-sponsored by the UGA Graduate School, College of Agricultural and Environmental Sciences, Franklin College of Arts and Sciences, Department of Geography, and Odum School of Ecology.

Greetings from the CICR Director

It’s been a very productive year for CICR and the ICON program, with a number of positive developments. Last August, with the support of Franklin College and OVPR, CICR was able to bring our new Administrative Associate, Talley Vodicka, on board. Talley has brought energy, creativity and an eye for detail to the position and we owe a great deal to her efforts. One of the things we are focused on is improving our communication with faculty affiliates and others interested in CICR and the ICON program, an updated website and this newsletter are evidence of that, and we continue to seek ways to improve our outreach.

CICR continues to develop its research program, with research projects on social and cultural dimensions of climate change adaptation and on the social acceptability of biofuels in Georgia underway (See Pg. 2); other proposals are in development and under review. This year Nate Nibbelink and I have collaborated on an analysis of the historical occupation of the Borneo rainforest by Penan hunter-gatherers in conjunction with our continuing expert witness testimony in a land rights case in Sarawak, Malaysia (See Pg. 3).

With the support of OVPR, CICR is in the process of organizing a couple of events to increase awareness of NSF funding priorities in Sustainability Science, and we have initiated a new Integrative Conservation Brown Bag series. In June, CICR will be moving to the third floor of the Holmes-Hunter Building, directly adjacent to the Arch. We are looking forward to moving into what will finally be our permanent home.

(continued on page 3)
ICON 8002 Travels to the Georgia Coast

This spring, students taking ICON 8002 have developed a research project to address some of the social and ecological effects associated with sea level rise. Dr.'s Lizzie King and Meredith Welch-Devine designed the course so that ICON students could pursue an in-depth examination of how this international issue is affecting local Georgia coastlines and communities. Students have made several field trips to the coast, which have provided them with “on-the-ground” exposure to the scientific, economic, and political scope of the problems evident in sea level rise.

The pedagogical goals of this course push students to operate outside of their academic comfort zones in interdisciplinary teams that embody integrative conservation as a process, not just as a product. However, students will also produce a concrete set of deliverables to partner communities, which are being developed in collaboration with Dr. Jason Evans of UGA’s Carl Vinson Institute of Government. Dr. Evans is currently working with communities on the Georgia coast to create environmental management plans that will help them to better predict and prepare for the impacts of future sea level rise.

Overall, ICON 8002 offers its students the chance to develop the interdisciplinary breadth that is the hallmark of the ICON program’s overarching goals. In the course of engaging with local communities, students gain practical exposure to real world politics and issues. By applying an integrative approach to the problem of coastal sea level rise, students should find that at the end of the course their own training as interdisciplinary scholars has been greatly enriched. Through this process, students will also be able to offer new insights and make meaningful contributions to coastal Georgia communities that will likely be impacted by the global phenomenon of rising sea levels. - Alana Shaw

Biofuels Study kicks-off in Soperton, GA

In the U.S. South, a wide range of bioenergy technologies are now in various stages of development, and a comprehensive and dynamic understanding of the social acceptability of bioenergy is critical as the bioenergy industry expands in this region. Because of the multiple values and perspectives at play across the Southern landscape, bioenergy development must be analyzed broadly, taking into account diverse values, governance processes, and equity concerns.

The 2-year research project, entitled “Social Acceptability of Bioenergy in the U.S. South,” is funded by the USDA Agriculture and Food Research Initiative (AFRI), and co-project directors J. Peter Brosius (CICR), John Schelhas (USDA Forest Service), and Sarah Hitchner (CICR) will examine the social acceptability of bioenergy development in the U.S. South using an integrative analytical framework designed to illuminate different perspectives and trade-offs.

The researchers have conducted ethnographic research in three communities where bioenergy facilities have been, will be, and are currently operating in Georgia and Mississippi and will visit additional sites in Georgia, Alabama, North Carolina, Florida, and Louisiana. Ethnographic fieldwork is currently underway in the first of the three main field sites, Soperton, GA. The researchers hope that this research, which aims to elucidate public perceptions of bioenergy development, as well as the socioeconomic dynamics of the communities in which bioenergy facilities are located, will help guide managers and policy makers by showing the beliefs and values that underlie public opinion, clarifying trade-offs and synergies, and suggesting ways to negotiate this social complexity.

-Sarah Hitchner and John Schelhas
Research Roundup

**UGA DEVELOP** — The Department of Geography at UGA is collaborating with NASA on DEVELOP, an internship program aiming to train the next generation of earth scientists. The first UGA DEVELOP cohort will begin the program this summer. CICR faculty participating in DEVELOP include Dr. Thomas Mote, Dr. Marguerite Madden, Dr. Marshall Shepherd, Dr. Deepak Mishra, all from the Department of Geography, and Dr. Nathan Nibbelink, Warnell School of Forestry. Steve Padgett-Vasquez, first year student in the Integrative Conservation and Geography program, will act as UGA’s Center Lead for DEVELOP, working with students, faculty, and the DEVELOP Program. Initial UGA projects include ecological forecasting of marshes of Coastal Georgia, studying the correlation between public health and prescribed burning in Washington County, GA, examining the effects of ozone on the hemlock in the Smoky Mountains and measuring forest connectivity in Costa Rica. Most research will involve geographical information systems (GIS) and remote sensing, but project suggestions from all departments and faculty are welcomed. DEVELOP is open to high school, undergraduate, and graduate students. For more information, contact Steve Padgett-Vasquez at spv@uga.edu.

-Steve Padgett-Vasquez

**Penan Data Analysis** — Dr. Pete Brosius has researched Penan hunter-gatherers of Sarawak, Malaysia for nearly 30 years, collecting data on migration histories, genealogies, and more. Recently Penan lands on the Usun Apau Plateau were cleared for oil palm. The Penan have taken the plantation company to court to assert their customary rights to the land, and they invited Dr. Brosius to testify as an expert witness in October 2012. Subsequently Dr. Brosius and Dr. Nate Nibbelink teamed up to organize this rich store of data and to provide a geospatial analysis for presentation in court. In February 2013 they travelled to Sarawak to work with Penan plaintiffs and lawyers to prepare the case and present additional testimony. They are planning to return to Sarawak for further testimony when the case resumes this summer, and they are developing several peer-reviewed publications based on the Penan data analysis. For more information, contact Dr. Pete Brosius at CICRDirector@uga.edu.

- Pete Brosius

**Social and Cultural Dimensions of Climate Change Adaptation: Anthropological and Sociological Approaches to Social Vulnerability and Biofuels in the U.S. South**

A collaboration involving Dr. John Schelhas and Cassandra Johnson (U.S. Forest Service), Pete Brosius, Sarah Hitchner, Kate Dunbar, and Dave Himmelfarb (CICR, UGA), the Social Vulnerability project is now in its third year. Ethnographic fieldwork is ongoing in several communities within and surrounding Atlanta, GA considered vulnerable due to both social and environmental factors. The main goal of this project is to understand how members of socially vulnerable communities perceive climate change and its potential impact on their lives. To date, this research has resulted in two papers and a book chapter (“Social Vulnerability and Environmental Change along Urban-Rural Interfaces” by Schelhas, Johnson, and Hitchner in: Urban–Rural Interfaces: Linking People and Nature, David N. Laband, B. Graeme Lockaby, and Wayne Zipperer, editors Copyright © 2012.) For more information, contact John Schelhas jschelhas@fs.fed.us

-Talley Vodicka

---

**Greetings from the Director, continued from page 1**

As for the **Integrative Conservation (ICON) Ph.D. program**, we just completed the process of reviewing and admitting our third cohort. Applications were up from last year and the quality of the applicant pool was very high. Of the 13 applicants we offered admission to, 11 have accepted and we are looking forward to welcoming them to UGA in the fall. Due to the federal sequestration we have yet to hear from NSF about our IGERT proposal, though we may be notified any day now. Though CICR will continue to coordinate the ICON program, the program’s administration is now officially under the Graduate School. This is a very positive development as it gives the program a clearer line of reporting and budget allocation. Over the summer we will be working with the Graduate School to develop a comprehensive recruitment strategy so that we can continue to attract top applicants. Current ICON students have been very active this year, organizing the Future of Food workshop in October and establishing an ICON student organization, known by the rather whimsical acronym “OINC.” OINC recently organized a campus visit by Dr. Paul Hirsch (SUNY ESF), one of the architects of the integrative approach that underlies the ICON program. We look forward to working with the UGA community and other collaborators to continue to develop our research program over the next year and to foster the training of ICON students to address next generation conservation and sustainability challenges. — Pete Brosius

Photo credit: Pete Brosius

Nate Nibbelink with Tugang Sugun (foreground) and Matu Tugang (middle), plaintiffs in the Penan land rights case. 

—Talley Vodicka
Meet the ICON PhD Students

Here is a snapshot of the varied and exciting research pursuits of the Integrative Conservation Ph.D. students…

First cohort


Shannon Bonney (Ecology): Stakeholder interests, facilitated by transboundary institutions during the management of watersheds, in the Apalachicola-Chattahoochee-Flint Basin.

Brian Crawford (Forestry and Natural Resources): Conservation management of human-induced threats to declining species of wildlife; effects of roads on diamondback terrapins on the Georgia Coast.

Rebeca De Jesús-Crespo (Ecology): Role of shade-trees in protecting watersheds draining agroforestry landscapes; development of stream auditing tools.

Jennifer DeMoss (Anthropology): Promotion of environmental literacy, engagement with nature, and conservation behavior through social and experiential educational programs.

Dean Hardy (Geography): Integrative perspectives of vulnerability, resiliency, and adaptation to sea-level rise on the Georgia coast; merging qualitative ethnography and quantitative modeling.

Sara Heisel (Ecology): Physiological measurements of stress in free-living animals in response to environmental disturbances.

Lowery Parker (Geography): Sovereignty in the creation of national biosafety regulation in African states.

Rocio Rodriguez-Granados (Anthropology): Climate change, land use and ethnecology, particularly related to conservation issues in developing countries.

Alana Shaw (Geography): Native Subsistence, Indigenous Knowledge, and Resource Colonialism in the Alaskan Arctic.

Levi Van Sant (Geography): Relationship between foodways and agricultural landscapes and livelihoods in the South Carolina Lowcountry.

Richard Vercoe (Geography): Conservation of Agricultural Heritage Systems in Northern Patagonia, Chile.

Second Cohort

Rachel Bormann (Forestry and Natural Resources): Spatial modeling of habitat for the endangered gopher tortoise and analysis of the motivations for private landowners to voluntarily participate in endangered species programs on their land.

Adam Clause (Forestry and Natural Resources): Distributional ecology and conservation of tree dragons (Abronia spp.), and human dimensions of montane forest resource use in Mexico.

Walker DePuy (Anthropology): Theory and methods of political ecology to promote more effective, just, and sustainable conservation practice in East Africa.

Joy Ganguly (Geography): The changing agro-forestry practices in the Ranchanjanga region of Eastern Himalayas.

Rachel Guy (Forestry and Natural Resources): Impact of sea level rise on coastal fish and crustaceans, particularly those species that use the Georgia salt marshes as nursery habitat that have human interest.

Jon Hallemeier (Anthropology): Influence of power dynamics on the success or failure of participatory conservation and development initiatives.

Emily Horton (Anthropology): Socioecological dimensions of water and aquatic biodiversity management in Brazilian fishing communities where livelihood, food security, and conservation interests intersect.


Steve Padgett-Vasquez (Geography): Prioritizing conservation efforts in the Bell Bird Biological Corridor of Costa Rica through the use of satellite remote sensing.

Ryan Unks (Forestry and Natural Resources): Current and historical patterns of land use in relation to social dynamics in semi-arid range-lands in Central Kenya.

ICON Student Group Established

The graduate students of the Integrative Conservation Ph.D. program (ICON) are happy to announce the formation of the Organized ICON Network and Cooperative (OINC) in September 2012.

The OINC mission is: “to develop and promote learning, research, dialogue, and active engagement in the area of Integrative Conservation. This organization shall be based at University of Georgia, but seeks to increase communication and discussion with the greater academic and professional sectors involved in the research, application, or communication of conservation and sustainability science.”

OINC was formed by a group of motivated students from the first ICON cohort who felt that existence of OINC would benefit current and future students of the ICON program in many ways. First, official recognition by the University as a student organization will improve access to funding sources and event space for hosting invited speakers and holding conferences. Second, as the number of students in the program continues to grow each year, communicating across cohorts will be made easier by the presence of a central organization through which to encourage inter-cohort dialogue. Third, OINC will also provide an avenue for efficiently conveying the needs, desires, or concerns of ICON students to the CICR Executive Committee.

OINC officers serving during the 2012-2013 academic year included: Chair (Dean Hardy), Secretary (Richard Vercoe), Treasurer (Rachel Bormann), Outreach Coordinator (Shannon Bonney), and two Executive Committee Liaisons (Lowery Parker & Jon Hallemeier). - Dean Hardy

January 2013 OINC meeting. Photo credit: Dean Hardy
Through her research, Karen Allen examines the viability of market-based mechanisms for conservation in promoting sustainable development in Costa Rica. Karen’s research builds on her experience living in Costa Rica, where she witnessed the “boom and bust” cycle of the tourism industry in the early 2000’s. While working in environmental education at The Cloud Forest School in Monteverde, Costa Rica, she became interested in the relationship between the publicized sustainable development objectives of the nature tourism industry, as promoted by the national tourism institute, and the land use decisions undertaken in this growing community that had begun to experience the stresses of migration, land development, and water contamination.

Since enrolling at UGA in the fall of 2010, Karen has refined her research interests to examining the influence of the tourism industry and Costa Rica’s Payments for Environmental Services program on private land use decisions in the Bellbird Biological Corridor of Costa Rica (Corredor Biológico Pájaro Campa- na; www.cbpc.org), an area that includes the international nature tourism destination of Monteverde Cloud Forest Reserve.

The guiding question of her research is: how do the values informing private land use decisions vary across the corridor, and how do the resulting decisions determine sustainability? In her research methods, Karen plans to combine the insights of ethnography with a spatial approach to nonmarket valuation techniques to arrive at a holistic understanding of the relationship between values and land use decisions.

With a background in natural sciences, Karen attempts to balance quantitative and qualitative conceptualizations of the world through her research. At UGA she has had the opportunity to work on the Coweeta Long Term Ecological Re- search (LTER) site (http://coweeta.uga.edu/) where she has been working with Dr. Rebecca Moore, conducting a nonmarket valuation survey designed to estimate resident values for stream ecosystem services in North Carolina. Her experience working on the Coweeta LTER project has served as excellent training in integrative research, and she hopes to translate this experience to her fieldwork in Costa Rica beginning in July of 2013. - Karen Allen

For more information about Karen’s research, visit http://cicr.ovpr.uga.edu/ featured-researcher-spotlight/karen-allen/
The goal of the Center for Integrative Conservation Research (CICR) is to engage in research and teaching on conservation and sustainability. We promote an integrative approach that utilizes insights and methodologies from across the social and ecological sciences. Through our research, teaching, and support of the Integrative Conservation Ph.D. Program (ICON), we seek to emphasize the social and ecological trade-offs that are associated with managing complex systems and responding to contemporary environmental challenges, and to engage with policy and practitioner communities to support effective and equitable solutions to these trade-offs.

CICR Research Opportunities

We thank the CICR Faculty Affiliates that provided feedback to us via the affiliate survey (originally sent out in December 2012). Based on that feedback and on continued discussions, we’ve decided to focus our efforts on facilitating affiliate interaction and research collaboration.

Beginning this summer, CICR will facilitate “research conversations” around specific Requests for Proposals – these informal meetings will be designed to provide interested affiliates an opportunity to network and discuss ideas about an upcoming research opportunity. We hope to hold at least two of these events each semester.

CICR will also coordinate affiliate workshop meetings – the goal of these (again, informal) meetings is to provide affiliates time and space to identify integrative research teams. In terms of format, we envision affiliates presenting their research ideas in 5-10 minute intervals, followed by group discussion.

Through these interactions, we hope to support integrative and collaborative research projects. In addition to organizing these events, CICR can offer institutional and intellectual support (such as administrative support, meeting space, linkage to the ICON program, and connections across campus) to affiliates working on integrative research.

We’ll send out more details about these events soon; in the meantime please contact Jennifer Rice (jlrice@uga.edu) for more information.

Have a great summer!