



EcoVoice

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Ecology Responds To Gulf Oil Spill



Undergraduate ecology major **Chassidy Mann** helped conduct research in the Gulf of Mexico after the spill.

Photo courtesy of Samantha Joye, gulfblog.uga.edu

Associate Dean **Jim Porter** and Public Relations Coordinator **Beth Gavrilles** helped to organize the University of Georgia-Georgia Sea Grant *Gulf Oil Spill Symposium: Building Bridges in Crisis*, which took place over three days in January 2011. The symposium convened scientists, government officials, industry, the news media, and representatives of sectors affected by the spill to discuss how these groups collaborated in research and response efforts, the coordination of information flow, and opportunities to maximize cooperation following the nation's worst maritime oil spill.

Panel sessions brought leaders together to discuss how they and their organizations responded to the spill and to suggest ways to facilitate information flow among stakeholders. Associate Dean **Laurie Fowler** served as moderator of a panel that included **Ray Jakubczak**, Ph.D. '89, senior consultant for Cardno-Entrix, who was contracted by BP to provide scientific services on coral reefs during the spill response.

Odum School faculty, students, and alumni were also involved in the immediate

response to the Gulf oil spill. Undergraduate ecology major **Chassidy Mann**, an assistant in the laboratory of marine sciences Professor Samantha Joye, participated in Joye's research cruise in the Gulf immediately following the spill. Mann, quoted in an article on the NSF's *Science Nation* online journal, said it was "unparalleled to anything I have ever experienced."

A study of oyster reefs by Associate Professor **Jeb Byers** provided baseline documentation in the event that oil from the spill reached the Georgia coast. He and his colleagues will also assess effects of the spill on the marine food web.

Tom Shannon, Ph.D. '07, a postdoctoral researcher at Tulane University, was interviewed by NBC. A clip of Shannon pointing out the reaction of hermit crabs to the oil was subsequently satirized by Jon Stewart on *The Daily Show*. "He made a parody of it, but in doing that he illuminated the perils facing the wildlife," Shannon said. "And he spent more than just a couple of minutes on it, and a lot of people saw it."

Ecology Small Grants Fund Grad Student Research

Laurie Fowler

Thanks to funding from the William and Eugene Odum Endowment and the IDEA Board (see page 5), the Odum School will provide competitive graduate student research and travel grants totaling \$20,000 this academic year. Students submit applications which faculty review, critique, and rank for funding. Awards were made in fall 2010 to **Athena Anderson**, **Peter Baas**, **Sarah Bowden**, **Katy Bridges**, **Rebecca de Jesús**, **Fern Lehman**, **Cindy Tant**, and **Marcus Zokan**. These students are researching many issues from bumble bees and pollinator conservation to the effects of climate warming on insect herbivory in the tropics to the role of aquatic fungi in breaking down organic matter with high nutrient concentrations.

As just one example, Rebecca de Jesús was awarded funds to travel to Costa Rica to research the effectiveness of the Rainforest Alliance Certification Program in preserving freshwater ecosystems adjacent to coffee farms. She is collecting and assessing stream integrity data (habitat quality, macroinvertebrate assemblages, and water quality) on 30 stream reaches within Rainforest Alliance certified farms and another 30 within noncertified farms. She also expects to assess the specific environmental services provided by riparian buffers on certified farms. Spring grants will be awarded in April.





Notes

from Dean John Gittleman

Whatever one's pursuits, excellence is measured by combined creativity, productivity, and recognition. The Odum School of Ecology is hitting remarkable strides of excellence.

The faculty may have accomplished something found in no other institution in the world: in the past fifteen months, publishing over a half dozen papers in *Science*, *Nature* and the *Proceedings of the National Academy of Sciences*. One or two papers in these journals is amazing; the fact that we have had so many is phenomenal.

As in business or baseball, excellence breeds excellence. We have one of the fastest growing majors at UGA—and, more impressively, the highest percentage (over 35%) of honors students at UGA. The graduate program is known worldwide, and the level of competition for admission is extremely keen. Last year we only accepted about 10% of our applicants, with many winning University-wide fellowships and federal grants such as from the National Science Foundation.

Our service and outreach initiatives bring our expertise beyond the world of academia. The EcoFocus Film Festival raises public awareness of environmental issues and the Environmental Practicum helps communities solve real environmental problems.

Despite a tough economy, we have succeeded in increasing donations to the Odum School, which now are double where they were this time last year. Having hired a new development director, Lee Snelling, we're looking forward to launching new efforts to raise funds for student fellowships, travel awards, and to endow faculty chairs.

As you can tell, we are very excited about where we are, especially only four years into being a new School. The Odum School of Ecology aspires to create a positive ecology for the future: an institution in which there is the highest caliber of scientific activity that reshapes key ecological questions, and a science that explicitly recognizes and incorporates the dominant influence of humans on a sustainable planet.

A final thought—we deeply feel the loss of Thelma Richardson, who died on March 4th. Over the years, Ecology as a science and as an academic unit has gone through many changes. Thelma's passion, dedication, helpfulness, and boundless pursuit to understand was a reassuring constant throughout these changes. We miss Thelma and carry on her love for Ecology.

A World Premiere, U.S. Premiere, and Inspiring Environmental Films from Around the World



The new film, *Chattahoochee: From Water War to Water Vision*, by Rhett Turner and Jonathan Wickham, chronicling the tri-state water dispute, received its world premiere at the third annual EcoFocus Film Festival. The sold-out screening was followed by a discussion with the filmmakers and panelists Sally Bethae of the Chattahoochee Riverkeeper and April Ingle of Georgia River Network, and a gala reception. *Chattahoochee* has since been featured on Georgia Public Broadcasting.

EcoFocus also hosted the U.S. premiere of the inspiring film *Vienen por el oro, vienen por todo* (*They come for the gold, they come for it all*), a multiple award-winning documentary that tells the story of the residents of a small town in Patagonia who stood up to an international mining corporation.

EcoFocus Film Festival, directed by Sara Beresford, MS CESD '00, is an initiative of the Odum School of Ecology in cooperation with Ciné. The 2010 festival explored a broad spectrum of environmental topics, covering issues such as energy production and climate change, local food and schools, waste, and biodiversity and species loss.

One locally made film, *Slow Coffee*, had close ties to the School of Ecology. *Slow Coffee* highlights the efforts of local coffee roaster Ben Myers and his colleagues in rainforest conservation at the Maquipucuna Reserve in Ecuador, which is led by Rebeca Justicia, Ph.D. '07 and Rodrigo Ontaneda, Odum School senior visiting fellow.

► ecofocusfilmfest.org



Environmental Practicum law student Becky Gabelman uses a probe to test water temperature and bacterial levels of Calls Creek in Watkinsville. The practicum is assisting the community in identifying and eliminating sources of fecal coliform to the stream.

*Photo by Kelly Wegel
Athens Banner Herald
October 12, 2010*

Odum School Outreach: River Basin Center and the Environmental Practicum

Laurie Fowler

The Odum School of Ecology's outreach programs, including the EcoFocus Film Festival (see page 2), the River Basin Center, and the Environmental Practicum, ensure that our cutting-edge science reaches policy-makers and the general public.

The River Basin Center, directed by **Ron Carroll** and **Laurie Fowler**, works to increase the capacity of communities to manage land use to protect water quality and biodiversity. Much of the RBC's recent work has been focused on the management of human waste. Approximately 40% of Georgians rely on onsite septic systems to treat their waste, yet our septic infrastructure is aging and there is no state program in place to assure that these systems are monitored, pumped, or otherwise maintained. Malfunctioning septic systems are a suspected source of pollutants in many of the state's impaired streams and lakes.

RBC Staff Attorney **Katie Sheehan**, a 2008 graduate of the UGA School of Law, is drafting a guidebook for local governments on post-installation management programs to protect public health and environmentally sensitive resources. The guidebook

features case studies of successful programs from across the country, ranging from homeowner education to the establishment of septic utilities, whereby the homeowner pays a monthly charge for the maintenance (and ultimate replacement) of their onsite system. The guidebook will be completed this summer.

Katie is also about to start work on a guidebook for local government on strategies to protect wetlands. Local government protection is increasingly important in light of U.S. Supreme Court decisions declaring isolated wetlands as beyond the protection of Section 404 of the federal Clean Water Act. The guidebook will describe land acquisition, incentive-based, and regulatory programs.

The Environmental Practicum is an interdisciplinary, graduate-level service

learning course that provides students the opportunity to work on real-world environmental problems. In addition to assisting Katie with the guidebooks mentioned above, students in the spring '11 Environmental Practicum are developing a restoration plan for "Stinky Creek," which runs behind the UGA baseball field and enters the Oconee River near the Ramsey Center on campus. The plan will include strategies for managing stormwater from the Five Points neighborhood and the UGA campus, gasoline from abandoned storage tanks, and high levels of fecal coliform. The goal is to restore the creek so it is worthy of its new moniker, Lily Branch!

We'll have more about other RBC projects and additional Odum School outreach in the next issue.

www.ecology.uga.edu

Visit our website to keep up-to-date with the latest Ecology news and events.

Please send your news, suggestions for stories, or any thoughts about what you'd like to see in the newsletter to EcoVoice editor Beth Gavrilles at **bethgav@uga.edu**

Odum School Lives Up to the Legacy

Dr. Eugene Odum is Celebrated through the School's Green Initiatives

Laurie Fowler



An artistic rendering of the Odum School of Ecology Green Building complete with green walls and roofs, streams, a courtyard, a green house, and photovoltaic cells.

Ecology's Green Building Will Be a Living Laboratory

With generous funding from the R. Howard Dobbs Jr. Foundation, the architectural firm BNIM of Kansas City has helped the Odum School develop conceptual plans for the world's most sustainable "living" academic and lab building. It will bring all of us, now housed in five buildings across campus, together under one roof.

Our understanding of emerging global economic and environmental issues leads us to forge a sustainable building ethic for the world's first college-level ecology program. Our goal is a building that is ecologically resilient, socially just, and economically sound. See our website to learn more about the stunning plans which feature biomimicry—including a biological "eco-machine" to treat wastewater, green roofs and walls, and the latest energy systems. The building and site will serve as a transparent living laboratory available to everyone. We'll talk more about the building in the next issue of *EcoVoice*; in the meantime we're conducting a study to determine the feasibility of raising funds for the building. If you'd like to be part of this effort, please let us know!

► ecology.uga.edu

Ecology Club Leading Campus-Wide Sustainability Activities

One of the most exciting things to happen at the Odum School in recent years is the rebirth of the Ecology Club. The club, made up of the brightest and most enthusiastic undergrads ever, is behind most things green in our building and across campus. They initiated the Gameday Recycling Program that is responsible for collecting and recycling approximately 1.5 tons of waste during each home football game, for example.

The organization had lain dormant for several years but was reinvigorated under the leadership of **Dale Broder**, BS '08, in 2007. It has expanded to include students from every major across campus as well as ecology undergrads. A biweekly forum raises ecological awareness. **Kelly Robinson** from Cumming and **Georgia Cobb** from Pensacola, Florida, head up the club this year. Undergraduate Advisor **Misha Boyd** is the club's advisor.

► ugaecologyclub.wordpress.com

Odum School Sustainability Initiative

In 2009, the Odum School developed an initiative that incorporates the concept of sustainability into all aspects of the college—teaching, research, service and outreach, and operations and maintenance. Our goal is to become not only a benchmark for the University of Georgia but for institutions of higher learning across the country. The initiative is carried out under the direction of Sustainability Coordinator **Tyra Byers** and a committee of faculty, staff, and students.

At the same time, ecology students were spearheading efforts to institute a \$3 per term "green fee" to fund a UGA Office of Sustainability; the student body voted overwhelmingly to adopt the fee. In announcing the creation of the UGA Office of Sustainability in his 2010 State of the University Address, UGA President **Michael Adams** credited two ecology undergraduates, **Emily Karol** and **Mark Milby** BS '10, for the initiative's success.

In 2010, inspired by an Honors project by undergraduates **Ashlee Nicole Sharer** and **Emily Harris**, we became the first school on campus to install water bottle refilling stations to reduce waste from plastic water bottles. An initial contribution by IDEA Board member **Bertis Downs**, followed by some creative fundraising by the Ecology Club and Ecology faculty and staff—an auction of "only in Ecology" items such as belly-dancing lessons by undergraduate **Rosemary Gay** and an eco-themed murder mystery dinner for eight—raised over \$800. The UGA Physical Plant pitched in with a donation and installed three of the systems over the holiday break. A digital counter that indicates how many disposable bottles have been avoided showed over 4,600 in just over two months of use!

And in January 2011 we became the first college on campus to adopt the UGA Sustainable Office Program, agreeing to practice specific waste-, water-, and energy-reducing measures. This spring we will pilot the University's first bike fleet program, with three bikes (plus locks and helmets) available for check-out, thanks to a generous donation by **Rutherford** and **Laura Seydel**.

Meet the Odum School IDEA Board

How can we ensure that the Odum School is responding to the pressing environmental needs of our own state? How can we stay abreast of the most current means of communicating our work through emerging technologies? How can we find the folks who would likely support our research and outreach if they just knew about us?

To answer these questions and more, the Odum School recruited some of the state's (and nation's) best thinkers to serve on our IDEA Board. IDEA stands for Innovation, Development, Education, and Access. The group meets twice a year; we also call on them individually throughout the year for many kinds of assistance.

To give you an example of how the IDEA Board works, let's look at the issue of sustainability. At their very first meeting the board asked us if the Odum School had a sustainability plan. Well, we sheepishly admitted, we know we should but we don't. They challenged us to develop one and gave us pointers about what we might include and where to go for guidance—INNOVATION and EDUCATION. We recruited a group of interested faculty and students and promptly drafted a plan which included hiring a part-time staff member to develop and coordinate sustainability in our building and maintenance practices, in our labs, and in our course offerings. The IDEA Board generated the funds for that position and for specific projects such as our bike share pilot program—DEVELOPMENT. And finally, the IDEA Board went directly to UGA President Adams to provide input as he was developing his plans to make UGA a more sustainable campus—ACCESS.

Current members of the IDEA Board are: **J. Rutherford Seydel** (chair), **Laurie Fowler**, **Rebecca Bell**, **Bob Berkebile**, **C. Gray Bethea Jr.** (fundraising chair), **Harmon W. Caldwell**, **Bertis Downs**, **Skelly Holmbeck**, **Felton Jenkins III**, **Wayne King**, **Jerry McCollum**, **Chris Sawyer**, **John Sibley**, and **Steve Weber**.

Watch for future editions of *Eco-Voice* for profiles of our IDEA Board members!

1982

■ **Joe Meyers**, Ph.D. '82, is a research wildlife biologist with the U.S.G.S. Patuxent Wildlife Research Center, based in Athens, Georgia.

1985

■ **Robert Buschbacher**, Ph.D. '85, is the coordinator of the Amazon Conservation Leadership Initiative at the University of Florida.

1988

■ **Chris McKenzie**, BS '88, has been selected as the new general counsel of the Wildlife Conservation Society.

1990

■ **Jeff Lovich**, Ph.D. '90, is a research ecologist with the U.S. Geological Survey, Southwest Biological Science Center. In 2008 he received a Fulbright Senior Specialist Award to teach graduate ecology at Cadi Ayyad University, Marrakesh.

1997

■ **Patrick Brian Garrett**, BS '97, is a wildlife coordinator with the South Florida Water Management District. He received his MS in Environmental Sciences from Florida Atlantic University in 2007.

1998

■ **Susan Andrews**, Ph.D. '98, is the national leader for soil ecology at the National Soil Survey Center.

1999

■ **Beth A. Shapiro**, BS '99/MS '99, was the recipient of a MacArthur Foundation "genius" grant in 2009. She received the 2010 UGA Young Alumnus Award for professional and civic contributions as well as her continuing engagement with UGA.

2000

■ **Katherine Dowell Kearns**, Ph.D. '00, is an instructional consultant at the Center for Innovative Teaching and Learning at Indiana University, and the mother of eight-month old Collin.

■ **Doug Parsons**, MS CESD '00, is the climate change coordinator for the Florida Fish and Wildlife Conservation Commission. He and his wife Lindsey have two sons, Max and Jett.

2001

■ **Sarah Ksiazek**, BS '01, is mammal keeper at the Dallas Zoo.

2002

■ **Jessica Ross**, BS '02, is a fuel assistant with the United Nations.

2003

■ **Neal McIntosh**, BS '03, is pursuing a master's degree at Oregon State University.

2004

■ **Erin Dreelin**, Ph.D. '04, is associate director of the Michigan State University Center for Water Sciences.

2005

■ **Charlene Long Bohanon**, BS '05, received an MS in Water Resource Management at Ben Gurion University of the Negev in Sde Boker, Israel. She is a consultant for Conservation Enterprises Unlimited in North Carolina.

■ **John Schramski**, Ph.D. '05, is assistant professor in the UGA Department of Biological and Agricultural Engineering.

2006

■ **Sarah Gaines Barmeyer**, MS CESD '06, is Great Waters program manager at the National Parks Conservation Association.

■ **Timothy Carter**, Ph.D. '06, is director of the Center for Urban Ecology at Butler University.

2007

■ **Tom Shannon**, Ph.D. '07, postdoctoral researcher at Tulane University, was involved in the response to the Gulf oil spill (see "Ecology Responds to Gulf Oil Spill," p. 1).

2008

■ **Noelle Gunst**, Ph.D. '08, published a paper, "The ontogeny of handling hard-to-process food in wild brown capuchins (*Cebus apella apella*): evidence from foraging on the fruit of *Maximiliana maripa*" in the *American Journal of Primatology* DOI: 10.1002/ajp.20856.

■ **Randy Singer**, BS '08, is assistant collections manager at the Florida Museum of Natural History. He has identified several dozen fish species from deep sea marine vents that had not been previously known to science.

2009

■ **Andrew Durso**, BS '09, is a graduate student at Eastern Illinois University.

■ **Christina Faust**, BS '09/MS '09, is working toward her doctorate at Princeton University. She received her M.Sc. in global health and immunology from the National University of Ireland Maynooth in 2010. She has received a full graduate research fellowship from Princeton, the George J. Mitchell Fellowship in 2009, Harry S. Truman and Morris K. Udall scholarships in 2008, among many other honors.

■ **Nicole Gottdenker**, Ph.D. '09, is an assistant professor in the UGA College of Veterinary Medicine, Department of Pathology.

■ **Mike Strickland**, Ph.D. '09, received the 2010 UGA Graduate Student Excellence in Research Award in the Life Sciences in March.

JOIN US IN PROVIDENCE AND AUSTIN!

North American Benthological Society
Annual Meeting 2011
Providence, Rhode Island
May 22–26, 2011

Join the Odum School of Ecology and the UGA Department of Entomology at a special session and celebratory reception honoring **J. Bruce Wallace**, professor emeritus of ecology, at the 2011 NABS Annual Meeting. **A Bug's Life. Stream Macroinvertebrates as Mediators of Stream Ecosystem Processes: Insights Gained from the Work of J. Bruce Wallace** will explore the impact of Wallace's pioneering work in aquatic ecology through the detailed analysis of life history and functional traits of aquatic macroinvertebrates, coupled with experiments to determine their roles in ecosystem processes.

Besides Wallace, speakers will include **Alex Huryn** (Ph.D. UGA Entomology), University of Alabama; **Jack Webster** (Ph.D. Ecology '75), Virginia Tech; **Susan Eggert** (Ph.D. UGA Entomology), USFS; **Emma Rosi-Marshall** (Ph.D. Ecology '02), Cary Institute for Ecosystem Studies; **Matt Whiles** (Ph.D. UGA Entomology), Southern Illinois University; **Amy Rosemond**, associate professor, UGA Ecology; **John Davis** (Ph.D. Ecology '09), Idaho State University; **Wyatt Cross** (Ph.D. Ecology '04), Montana State University; **Arthur Benke**, (Ph.D. UGA Zoology), University of Alabama; and **Judy Meyer**, professor emerita, UGA Ecology. The session will take place on Tuesday, May 24 from 1:30–5:00 p.m.

The preliminary schedule and other meeting details can be found on the NABS website, www.benthos.org/Annual-Meeting/2011-Providence.aspx. For more information, contact Amy Rosemond at rosemond@uga.edu.

**96th Ecological Society of America
Annual Meeting
Austin, Texas
August 7–12, 2011**

Join us for the
**Odum School of Ecology Alumni Mixer
Wednesday, August 10, 6:30–8 p.m.**

Details will be posted on the ESA website: www.esa.org/austin. For more information, contact Lee Snelling at snelling@uga.edu.

**Be sure to check out these oral sessions by
UGA Ecology faculty and postdocs:**

Infectious Disease Dynamics in Migratory Species, organized by Assistant Research Scientist Richard Hall and postdoc Becky Bartel.

Ecological Applications of Machine Learning, organized by Associate Professor John Drake and postdoc Barbara Han.

Dave Coleman Publishes *Big Ecology: The Emergence of Ecosystem Science*



In his new textbook published by the University of California Press, **David C. Coleman**, distinguished research professor emeritus in the Odum School of Ecology, narrates the development of ecosystem science, from the 1957 International Geophysical Year through the present. The publication describes the major research institutions and programs created along the way, as well as the science's pioneering figures. "Dave's book is an important synthesis for ecology," said Odum School Dean **John Gittleman**. "It summarizes many of the key ideas that were born out of the Institute and now are being expanded in the Odum School."

Coleman, coauthor of *Fundamentals of Soil Ecology* and over 250 other books and peer-reviewed articles, was impelled to write this book for several reasons. "I wanted

to impart some of the excitement of the early years to current students," he said. "I also wanted to show how foundational the efforts of the Institute of Ecology (now the Odum School) were in the development of ecosystem science."

Graduate Student Symposium 2011

Megan Machmuller
Ph.D. Student and GSS Co-coordinator

The OSE annual Graduate Student Symposium is an opportunity to showcase all of the important work done by Ecology students and allows us to receive helpful comments about our research and presentation styles in a professional yet collegial atmosphere. This year's symposium, held January 28–29, included 42 graduate student presentations and 10 undergraduate poster presentations, encompassing a broad spectrum of ecological science.

Our invited alumnus and keynote speaker was **Ned Gardiner**, Ph.D. '02. For his keynote address he related his recent adventures on the Congo River, where he used remote sensing, GIS, and sonar surveys to quantify hydraulic barriers to dispersal among cichlids. This work was featured in a National Geographic Special "Explorer: Monster Fish of the Congo," which was shown during GSS. Ned, now at NOAA in Asheville, North Carolina, has made substantial progress in communicating conservation biology, ecosystem processes, and Earth system science to nonscientists using interactive and high-definition visualizations from scientific data, which he demonstrated to kick off the GSS weekend. Ned was an inspiration and we are thankful to have had him back at OSE.

It is our goal each year to make GSS a sustainable event. This year we worked with **Tyra Byers**, sustainability coordinator, to make GSS as green as possible. Our efforts included buying local food, composting, reusable utensils, minimum paper usage, and recycling.

As many of you know, GSS is not possible without the help of our volunteers. I want to thank the graduate students who work tirelessly on organizing this event. I also want to thank all of the faculty and staff of the Odum School who generously contribute to GSS, and without whom this event would not be possible.

GSS 2011 BEST STUDENT PRESENTATION AWARDS

Ph.D. Research: Julie Rushmore

MS Research: Jessica Sterling

Proposed Research: Alexa Fritzsche

Undergraduate Research: Malavika Rajeev



ALLGEIER



RUSHMORE



STREICKER



SMALL



ZHANG

Student News

■ Ph.D. student **Jake Allgeier** won a three-year U.S. EPA Science to Achieve Results (STAR) graduate fellowship in 2010. Allgeier is the ninth student from Ecology, and the twentieth from UGA, to be awarded a STAR fellowship since the program began in 1995.

■ **John Davis**, Ph.D. '09, was lead author on "Long-term nutrient enrichment decouples predator and prey production," published in *Proceedings of the National Academy of Sciences* in December 2009. Coauthors were Associate Professor **Amy D. Rosemond**; **Susan L. Eggert**, Ph.D. '03; **Wyatt F. Cross**, Ph.D. '04; and professor emeritus **J. Bruce Wallace**.

■ Ph.D. student **Alexa Fritzsche** received a 2010 NSF Graduate Research Fellowship.

■ Ph.D. student **Jessica Joyner** received a 2010 NOAA Dr. Nancy Foster Scholarship.

■ Ph.D. student **Carolyn Keogh** received a 2010 NSF Graduate Research Fellowship.

■ Undergraduate ecology major **Calley Mersmann** won the 2010 Rotaract Student Service Award, sponsored by the Rotary International service organization.

■ **Elizabeth Nixon**, undergraduate ecology and scientific illustration double major, won the Lloyd Logan Award of Excellence and the Joshua Laerm Award of Excellence at the 2010 Science and Medical Illustration Exhibition.

■ Ph.D./DVM student **Julie Rushmore** received a Fulbright Scholarship in 2009. In 2010 she won an ARCS Scholarship and Global Impact Award, and received a two-year training fellowship from the Morris Animal Foundation.

■ Ph.D. student **Virginia Schutte** received a NSF Graduate Research Fellowship, a

three-year NOAA National Estuarine Research Reserve Graduate Research Fellowship, and a NSF East Australia and Pacific Summer Institutes Research Grant.

■ **Chip Small**, Ph.D. '10, and Distinguished Research Professor **Catherine Pringle** organized a workshop, "Carbon cycling in tropical streams," at the Organization for Tropical Studies La Selva Biological Station, Costa Rica in April 2010.

■ **Daniel Streicker**, Ph.D. student, was lead author on "Host phylogeny constrains cross-species emergence and establish-

ment of rabies virus in bats," published in *Science* in August 2010. He received a UGA Graduate School Dissertation Completion Award in 2010.

■ Ph.D. student **Jamie Winternitz** received a Snyder Graduate Research Fellowship from the Rocky Mountain Biological Laboratory and a Young Explorers Grant from the National Geographic Society.

■ **Sheena Zhang**, undergraduate ecology and biology major, was inducted into the UGA chapter of the national Blue Key Honor Society.

ECOLOGY AWARDS 2009-2010



Student a cappella group, the EcoTones, gave a spirited performance following the awards presentation at the Spring Fling Ecotillion in April 2010.

BEST STUDENT PAPER AWARD:

John Davis, Ph.D. '09, for "Long-term nutrient enrichment decouples predator and prey production"

DEAN'S AWARD:

Mark Milby, BS '10, for his leadership in successfully promoting campus-wide sustainability at UGA

DISTINGUISHED GRADUATE STUDENT TEACHING AWARD:

Amy Trice, MS CESD student

ROBERT A. SHELDON MEMORIAL AWARD:

Tom Barnum, Ph.D. student

SOLITARY GLOVE SERVICE AWARD:

Nathan Pratt, MS '10

INSTRUCTOR OF THE YEAR AWARD:

Jim Richardson, undergraduate coordinator and faculty instructor

JOSH LAERM MEMORIAL OUTSTANDING ECOLOGY UNDERGRADUATE AWARD:

Sarah E. Bowden

RICHARDSON-GOLLEY UNDERGRADUATE CITIZENSHIP AWARD:

Rebecca R. Risser, **Calley A. Mersmann**, and **Alexander D. Wright**

PURPLE HEART AWARD:

Brian Perkins, principal systems administrator

EMPLOYEE OF THE YEAR AWARD:

Beth Gavrilles, public relations coordinator

Post-Doc News

■ **Becky Bartel** was the lead author on a paper, "Monarch butterfly migration and parasite transmission in eastern North America," published in the journal *Ecology* in February 2011, with associate professor **Sonia Altizer** and others.

■ **John Kominoski**, Ph.D. '08, coauthored "Reclaiming freshwater sustainability in

the Cadillac Desert," published in the *Proceedings of the National Academy of Sciences* in December 2010, and coauthored an op-ed in the *Atlanta Journal-Constitution*, "Entire Southeast needs a new strategy for conserving water."

■ **Andrew Kramer** and Associate Professor **John Drake** published a paper, "Ex-

perimental demonstration of population extinction due to a predator-driven Allee effect" in the *Journal of Animal Ecology* in January 2010. In December, they published a paper on the North American gypsy moth invasion, "Critical patch size generated by Allee effect in gypsy moth, *Lymantria dispar* (L.)," in the journal *Ecology Letters*.

Faculty News

■ Associate Professor **Sonia Altizer** received a \$580,000 grant from the National Science Foundation for a three-year study of rabies in vampire bats in Peru. In January 2011, Altizer and postdoctoral associates **Becky Bartel** and **Barbara Han** published a paper, "Long-distance migration may help reduce infectious disease risks for many animal species," in the journal *Science*.

■ Associate Professor **Jeb Byers** was appointed to the National Research Council's Committee on Assessing Numeric Limits for Living Organisms in Ballast Water. The committee will conduct a study to inform the U.S. EPA and the U.S. Coast Guard how to establish environmentally protective ballast water discharge limits in the next Vessel General Permit, which regulates discharges incidental to the normal operation of vessels.

■ Associate Professor **John Drake** published a paper, "Early warning signals of extinction in deteriorating environments," in the journal *Nature* in September 2010. It describes the first experimental demonstration of critical slowing down in a biological system.

■ Dean **John Gittleman**, with Postdoctoral Associate **Patrick Stephens**, coauthored "The evolution of maximum body size of terrestrial mammals," published in the journal *Science* in November 2010.

■ Assistant research scientist **Richard Hall** received a 2010 Short Term Visiting Scholar Award from the National Institute for Mathematical and Biological Synthesis. The award funded a two-week stay at NIMBioS in Knoxville, Tennessee, where Hall worked with an interdisciplinary group of researchers modeling the effects of habitat fragmentation and biotic resistance on invasive species.

■ Professor Emeritus **Gene Helfman** delivered the 2010 JLB Smith Memorial Lecture at the South African Institute for Aquatic Biodiversity (SAIAB) in August 2010.

■ Distinguished Research Professor Emerita **Judy Meyer** was awarded the 2010 Naumann-Thienemann Medal from the International Society of Limnology at the organization's triennial international congress in Capetown, South Africa in August 2010. In April 2010 she delivered the Abel Wolman Distinguished Lecture at the National Academy of Sciences in Washington, DC.

■ Associate Professor **Andrew Park** published "Quantifying the impact of immune escape on transmission dynamics of influenza" in the journal *Science* in October 2009.



HALL



HELFMAN



MEYER



Associate Dean **Laurie Fowler** received the Ogden Doremus Award for Excellence in Environmental Law from the nonprofit public interest legal group GreenLaw in October 2010. She is pictured at right with Justine Thompson, executive director of GreenLaw.



Associate Dean and Josiah Meigs Distinguished Teaching Professor of Ecology **Jim Porter** received a five-year, \$2 million Ecology of Infectious Diseases grant from the NSF and NIH to study the first known case of a “reverse zoonosis” that involves the transmission of a human pathogen to a marine invertebrate, elkhorn coral. **Erin Lipp**, associate professor of environmental health science in the College of Public Health, Assistant Professor **Andrew Park** of the Odum School and the College of Veterinary Medicine, and **John Wares**, assistant professor of genetics in the Franklin College of Arts and Sciences, are co-investigators.

■ **David Scott**, Savannah River Ecology Lab research assistant, and Professor Emeritus **Whit Gibbons**, coauthored “Climate change correlates with rapid delays and advancements in reproductive timing in an amphibian community,” published in the *Proceedings of the Royal Society B* in December 2010.



■ **Rebecca Sharitz**, researcher at the Savannah River Ecology Lab, received the 2010 National Wetlands Award for Science Research for her expertise on southeastern floodplain forests and Carolina bays and substantial contributions to wetland science.

Ecology Welcomes New Faculty

Assistant Professor **Vanessa Ezenwa** joined the Odum School of Ecology with a joint appointment in the College of Veterinary Medicine Department of Infectious Diseases in fall 2010. She teaches an undergraduate course in behavioral ecology and an interdisciplinary disease-related graduate-level course.



EZENWA

Ezenwa’s research interests include the ecology and evolution of infectious diseases, behavioral ecology, and links between biodiversity loss and infectious disease. She has ongoing research projects in Montana and sub-Saharan Africa ex-

ploring these issues. In 2009 she received a five-year National Science Foundation CAREER Award, the NSF’s most prestigious award for early-career scientists.

It was UGA’s growing reputation for strength in disease ecology and for interdisciplinary collaboration that drew Ezenwa to Athens. “There’s such a high concentration of people working in the area I’m interested in at UGA,” she said. “And there’s lots of cross-campus work going on here. Having the opportunity to be part of that is really exciting.”

Associate Professor **Sonia Altizer** has worked with Ezenwa in the past and is delighted to have her on board. “Vanessa brings crucial expertise in behavioral ecology,” said Altizer. “Her work scales up from looking at how processes within individuals, like immunity and stress, interact with components of their environ-

ment. Vanessa’s research straddles multiple fields in veterinary/health sciences and ecology, and likewise, her joint appointment builds ties between departments.”

For Assistant Professor **Nina Wurzburger**, joining the faculty of the Odum School was a homecoming of sorts. Wurzburger received her Ph.D. from the Warnell School of Forestry and Natural Resources in 2007, and always felt a part of the greater community of ecologists here at UGA. Ecology Professor Emeritus **Dave Coleman** served on her Ph.D. committee. “Nina will be a great asset to the Odum School,” he said. “She is so knowledgeable, and has a great ability to synthesize information from across disciplines.”



WURZBURGER

Wurzburger did her postdoctoral research with Lars Hedin at Princeton University and at the Smithsonian Tropical Research Institute in Panama. She jumped at the chance to return to UGA. “I was thrilled when a position opened up at the Odum School,” she said. “There is such a depth of expertise here, and there are so many opportunities for collaboration with complementary departments.”

As a student, Wurzburger conducted research at the Coweeta LTER, and looks forward to continuing to work with her collaborators there. “I’m eager to build a research program that combines both a tropical and temperate perspective to the study of ecosystems,” she said.

Wurzburger received the 2009 John L. Harper Young Investigator’s Prize from the British Ecological Society for her paper “Plant litter chemistry and mycorrhizal roots promote a nitrogen feedback in a temperate forest.” The prize recognizes the best paper published in the *Journal of Ecology* each year.

Her research interests include terrestrial ecosystem ecology and biogeochemistry; plant - soil relationships; and the ecology of plant root symbioses. Wurzburger is teaching undergraduate and graduate-level courses in ecosystem ecology.

Thelma Richardson: A Life of Dedication



On Friday, March 4, 2011, we lost a dear colleague and friend when Thelma Richardson died after suffering a massive stroke. A celebration of Thelma's life will be held on April 23 from 2–5 p.m. at the Odum School of Ecology.

It is hardly an exaggeration to say that everyone who passed through the Institute and later the Odum School of Ecology, whether student, faculty, or staff, knew and treasured Thelma Richardson. Thelma had the distinction of having the longest staff tenure in Ecology, guiding us through the evolution of information technology from the days of punch cards to the era of iPads, with grace, knowledge, kindness, and humor. She offered invaluable assistance and advice to countless faculty, students, and staff, never turning down a request for help; no job was too large or too small for Thelma.

Thelma Hansen was born on April 23, 1943 in Teaneck, New Jersey. She attended Juniata College in Huntingdon, Pennsylvania, where she majored in mathematics, and where she met her husband-to-be Jim Richardson. They graduated in 1965, were married in 1966, and came to the University of Georgia that fall. Jim started

graduate studies with Eugene Odum and Thelma began her career as a computer programmer in UGA's computer center, first located in Lumpkin House—at that time also the home of the newly-formed Institute of Ecology—and later in the basement of Boyd Hall.

It was not long before Thelma was hired away from the computer center and began working for the Institute as statistician and computer technologist, a position she held for more than forty years. She proved to be an invaluable resource, helping ecology researchers assemble, sort, and analyze their data. Her work was so crucial that she was listed as a coauthor on dozens of scholarly papers and publications.

Everyone at Ecology came to depend heavily upon Thelma's intelligence, reliability, and resourcefulness. In the early 1970s, when Bernie Patten led a workshop in ecosystem modeling on a coral atoll in the Caribbean, he asked Thelma for assistance. She accompanied him and helped develop and conduct the groundbreaking two-week workshop on Glover's Reef, without benefit of computers. They developed methods, still followed today, for organizing and capturing participants' ideas, and her accurate recordkeeping

was crucial to the project's success. She played a similar role later for a summer-long workshop at Lake Texoma, Oklahoma, with the added duties of computer management. Thelma had arranged to use off-site computers in New York and Pennsylvania to conduct the group's computations. Since the data had to be sent over phone lines, she often worked all night, taking advantage of the only time those lines were open. Such selfless devotion to her colleagues and their work—as well as the late-night hours—continued throughout her career.

Thelma was a pioneer in many ways, not only as one of the first people at UGA working with computers. When Thelma and Jim began their family, Thelma chose to continue working at the job she loved. She simply brought her children along, setting a precedent that has been happily followed by a number of faculty and graduate students since. In recent years, Thelma had the great joy of introducing her two young granddaughters to her Ecology family.

The other defining interest of Thelma's life was her work with sea turtles. She played a critical role in international sea turtle research and conservation, bringing her computer and statistical analysis skills to bear. Thelma was a founder of the Georgia Sea Turtle Cooperative, and for many years a driving force behind the annual Sea Turtle Symposium, an international gathering for sea turtle researchers.

Everything Thelma did, she did with complete dedication. It was clear to all of us how deeply committed she was to Ecology, to her colleagues, and especially to the students. She received the Institute's Employee of the Year award twice, and in 1997 the Ecology graduate students thanked her by presenting her the Purple Heart Award "for service above and beyond the call of duty." In 2008 Thelma established the Richardson-Golley Undergraduate Support Fund as yet another way to help Ecology students succeed.

Thelma is survived by her husband, Undergraduate Coordinator and faculty Instructor of Ecology Jim Richardson; their daughter Nikki and her husband John Paul Preston; son Jamie and his wife Sarah Richardson; granddaughters Eileen Preston and Emma Grace Richardson; and brothers Frederick and Ronald Hansen.

We Remember...

Early on in my days working as a research scientist at SREL (1965-71), I consulted with Dr. John McGinnis, who was our resident statistician and also assistant professor of botany at UGA. From the outset, I worked with Thelma Richardson, an attractive young technician and statistician who was supervised by Dr. McGinnis. She was very helpful in assembling data sets, entering data onto IBM cards, and generally keeping track of what was going on. As with others from SREL, we had a number of extensive field experiments under way, and the principal means of analyzing results was via various statistical programs such as analyses of variance and regressions.

Throughout all these analyses, Thelma was the person who handled data inputs and outputs, and helped to keep Dr. McGinnis and me "on track" as we pondered the results. The data, once entered on IBM cards, were then taken across campus to the Computer Center, with its fancy IBM 7094 computer in the basement of the Graduate Studies Building. Thelma impressed us always with her cheerful manner and no-nonsense way of double-checking data, no mean feat in those days of many hundreds of IBM cards, with one datum per card!

Dave Coleman, Distinguished Research Professor Emeritus

What a blessing she was to us. How many times did she help me out—countless. And getting that paper put in the printers the right way! Thank you Thelma for your selfless and committed devotion to the Institute. In my mind you will always be there, smiling, helpful, and committed to the Institute.

Mike Paul, Ph.D. '99

One learned not to ask Thelma to help fix something late in the afternoon because you knew she would come back to work on it in the evening. Or, if it were late on a Friday, Thelma would be in over the weekend to take care of the problem. Thelma was selfless, always putting the needs of others above hers.

Ron Carroll, Professor

When I think of Thelma, I think of the day of my oral exams when I was standing outside the room waiting on my committee. Thelma walked by, saw me standing there anxiously and stopped to talk with me until it was time to go into the room. I felt so much better after talking with her. There wasn't any computer problem to fix or any IT issue, she was just being her usual kind, calm and reassuring self and helping out a stressing grad student in any way she could. She'll be greatly missed.

Erin Dreelin, Ph.D. '04

Thelma was a holist. She had a way of engaging people with multi-disciplinary expertise. She was always there—a quiet, pervasive presence to whom people would gravitate when they needed something done.

Bernie Patten, Regent's Professor

Thelma always showed tremendous dedication to both her family and the Odum School of Ecology. I always admired her focus. The five years I worked alongside her helped me learn many valuable lessons as I began my career. I will always be grateful for her generosity and patience. One of the most valuable lessons she exemplified was putting others before one's self.

Jeremy Sanderlin, former Systems Administrator

Thelma did so many things so well, so quietly, without recognition. She was the ideal team member—careful, thorough, dedicated. She found many critical things to do, that only she had the patience and dedication to follow up on. She was truly a great teacher.

Alan Covich, Professor

Thelma constantly put her own work aside to help others. This often involved dealing with people who were panic-stricken and stressed because of some type of technical difficulty, but she had a great deal of patience, gave her full attention to the issue, and managed to fix the problem. She was always there when you needed her, and now it feels strange to not be able to go to her, or to simply get that friendly reminder in the evening to "lock up the computer lab when you're done". Thelma will be missed, and I'm glad to have known her.

Andrew Mehring, Ph.D. Student

Thelma's unselfish dedication to the Ecology family greatly enriched many lives. She simply gave of herself and got us through many moments that we will remember forever. A simple moment of her time left a permanent impression on us through achieved deadlines, successful defenses, offered alongside a pleasant and patient smile over her glasses. I met Thelma when I was eighteen and she has been there for me every time I needed her for the past fourteen years, whether it was for something small like fixing a jammed printer, or needing a hug and an Athens Mom. She was a light-hearted and dedicated friend who would lend an ear for anything at any time. Her smiles and patience will always be treasured warm thoughts. Thelma also had far-reaching impacts on the sea turtle world through the initial organization of the international sea turtle meetings and in dedicating hours and her meticulous ways to data management with the Little Cumberland Island and Antigua projects. There are a lot of us who would have lost our minds time and time again if we didn't have a touch of Thelma in our lives.

Kimberly Andrews, Ph.D. '10



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Dear Alumni and Friends,



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All of us here at the Odum School of Ecology appreciate everything our alumni and friends do to support our talented students, faculty, and staff. This past year has been another exciting year for the school. Much of this is possible because of your passion for ecology and your generous support.

I invite you to renew and extend your ties with the Odum School of Ecology, whether you live in Georgia or further away. You can do this by attending an event, visiting our website, or making an online gift at www.ecology.uga.edu.

Alumni—stay connected with your school and fellow alums; send us your class notes and updates regarding career moves, memories, and other updates. We especially like to receive email addresses! In the near future we are looking to go paperless for our newsletter. Having email addresses will help make this possible. You can send these to snelling@uga.edu.

When you visit Athens the next time, please stop by and say hello.