

New Members Join Sea Grant Team

Louisiana Sea Grant has added two staff members. Lucina Lampila is the program's new seafood technology specialist, and Melissa Trosclair Daigle is the Law and Policy Program's legal coordinator.

Lampila comes to Sea Grant from Prayon Inc. in New Jersey, where she was a food scientist. She earned her doctorate and master's degrees from the University of Nebraska and her bachelor's degree from State University College at Oneonta, N.Y. She also is a registered dietitian. "If you grew up or live along the coast, you learn what good seafood is," Lampila



Lucina Lampila

said. "In some parts of the country, consumers just 50 miles from the coast really don't know what good seafood is and may even be a little intimidated by seafood. There's an opportunity to educate inland consumers as to what is good and why it's good for you, and open up new markets for local producers."

Daigle recently graduated from LSU's Paul M. Herbert Law Center. She earned a bachelor's degree in English from Nicholls State and a master's in English from LSU. She served



Melissa Daigle

as a law clerk at Louisiana Sea Grant for two years before becoming the program's legal coordinator.

"My interests are in offshore aquaculture and freshwater diversions," said Daigle. "I'm aware both are hot-button items. But there could be opportunities for the fishing industry and the state by using existing offshore structures for aquaculture to produce native fish, as well as coral. Although not everyone embraces diversion projects, hopefully there can be continued discussion and education about diversions." •



Louisiana Sea Grant College Program
Sea Grant Building • Baton Rouge, LA 70803-7507

LeBlanc Named Pickren Professor

Brian LeBlanc, an associate professor with the Louisiana Sea Grant College Program and LSU AgCenter, has been named the Roy and Karen Pickren Professor in Extension Water Resources.

LeBlanc conducts programs that focus on coastal water resources and address agricultural water quality. He also has led field demonstration projects dealing with a variety of on-farm water quality treatments and best management practices.

"Brian has made positive contributions in making sure stakeholders receive and adopt research-based best management practices that can contribute to improved water quality," said Paul Coreil, LSU AgCenter vice chancellor.

The professorship was established in 2001 with a donation from Roy and Karen Pickren, and a match from Freeport McMoran. Mr. Pickren was a former Freeport McMoran executive. As part of the

professorship, LeBlanc plans to work on a dairy wastewater treatment project and a rainfall simulator. The simulator will allow researchers to study how pollutants – such as fertilizers – run off turf, as well as show visitors what practices reduce such pollution. •



Brian LeBlanc

LSG Interim Associate Executive Director Retires

Brenda Henning retired Jan. 2, from her position as LSG interim associate director, where her responsibilities included grants and contracts and fiscal, administrative, computing, and facilities management.

She began her career at LSU in 1983, serving as staff assistant to Jack Van Lopik when the Louisiana Sea Grant College Program was one of six departments included in the Center for Wetland Resources. She handled personnel matters for the Center. In 1991, LSG became a college-level department, and in 2004, Henning became the program's assistant executive director.

"Brenda is not only a very knowledgeable and capable administrator, but can be relied upon to accomplish whatever needs to be done to achieve desired results," said Van Lopik, retired LSG director and professor emeritus. "She has also served as a project leader on research/extension efforts in the tourism area and has certainly made major contributions to the success of the Louisiana Sea Grant College Program."

Henning earned her Bachelor of Science degree in business administration from Mississippi State University in 1982. While working full-time, she earned her Master of Arts in humanities from LSU in 1994.

"It's been great working at LSU and Sea Grant, and I'm grateful for the many opportunities I've had here," Henning said. "I've met and worked with so many nice people. I will miss most of all the daily interaction with people and the camaraderie. The folks at Sea Grant have made coming to work fun and interesting. I will also miss the working environment where things are always changing – new ideas, new technology, new paperwork – it was never boring."

The biggest transformation Henning has observed over the last 25 years has been the evolution of technology. She noted, "The ways we communicate with each other and the ways Sea Grant communicates with its audiences have changed." •

As she embarks on the next chapter of her life, Henning looks forward to home improvement projects, gardening, spending more time with her grandchildren and shopping with her best friends. She is a native of Morton, Miss., and is married to Steve Henning, an associate professor of agricultural economics and agribusiness at LSU.

"Brenda has been the heart and soul of the Sea Grant family for over 20 years," said LSG Executive Director Chuck

Wilson. "Her calming presence and personal approach to management helped to create an office that is congenial, friendly and a pleasure in which to work. Her knowledge and network of colleagues and friends across campus provides quick solutions for almost any situation.

"We will miss Brenda very much," Wilson added, "but we know where to find her." •



Brenda Henning

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Sea Grant Personnel Receive CSREES Award

A group of Louisiana Sea Grant/LSU AgCenter personnel have been recognized by the Cooperative State Research, Education and Extension Service (CSREES) for their contributions supporting post-disaster programming in the wake of Hurricanes Katrina and Rita.

The "After the Storms Team" – which includes Rex Caffey, Mark Schexnayder, Rusty Gaude, Thomas Hymel, Pat Skinner, Mark Shirley and Kevin Savoie, among others – received the CSREES Partnership Award for Innovative Program Models for their hurricane damage assessment and recovery work. The Partnership Awards recognize exemplary work from a team or individual at a land grant university or other cooperating institution or organization that is supported by CSREES.

The 2005 hurricane season brought unprecedented devastation to the northern Gulf coast, and Hurricanes Katrina and Rita were the most destructive storms in U.S. history. Sea Grant and the AgCenter put their know-how on the front lines almost immediately to



Sea Grant personnel assess Hurricane Katrina damage.

help the recovery and rebuilding process begin. CSREES, an agency within the U.S. Department of Agriculture, was created by Congress in 1994. The Partnership Awards were presented in October. •

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Compound in Oysters Effective in Preventing Cancer

A compound found in oysters is effective in preventing the growth of cancer cells, according to an LSU AgCenter researcher.

Ceramides are a lipid, or fat compound, found in oysters, other animals and plants. Elsewhere in the country they are in clinical trials to speed the healing process in patients undergoing chemotherapy. In a research paper recently presented at the Annual Meeting of the Institute for Food Technology, Jack Losso with LSU's Department of Food Science detailed his use of oyster ceramides to arrest breast cancer cells grown in test tubes and laboratory rats.

"This is incredibly exciting," said Losso, whose research was funded by Louisiana Sea Grant. "When we looked at cancer cells treated with ceramides, their growth had been inhibited and they were dying."

Oyster ceramides attack both hormone-dependent and hormone-independent breast tumor cells in test tubes and kill them within 48 hours. In laboratory rats treated with oyster



Jack Losso, LSU AgCenter, uses oyster ceramides to arrest breast cancer cells.

ceramides, blood vessel growth that simulates cancer cell growth and proliferation was reduced by 57 percent in seven days. No toxicity to the animals was reported.

Although the rats received concentrated ceramide injections, the compound can just as easily be taken orally in pill form, said Losso. Conceivably, an oyster-rich diet could aid in cancer prevention.

"You could eat the oysters raw or cooked," said Losso. "But you can't grill them with those popular counter-top grills that discard the fat. The ceramide is in the oil, which is lost when you use a tilted grill."

Although the cancer-fighting compound is found in a variety of plants and animals, the type of ceramide differs, depending on the species.

Oysters, which are filter feeders, apparently collect ceramides in their bodies as they ingest phytoplankton. •

Bring Your Own Bucket

Can individuals do a better job at restoring the Louisiana coast than the government? Golden Meadow resident Kirk Cheramie thinks so.

While there are coastal planners, elected officials and scientists who might readily disagree, Cheramie remains optimistic that sections of the state's fragile fringe can be rebuilt by private citizens, on private land and without government funding – one bucket of dirt at a time.

"I think the public needs more of a tie-in to coastal restoration beyond their tax dollars and their government representatives," he said. "We have to show that coastal restoration is not hard."

Fed by a lifelong interest in and passion for the environment, the idea for this version of a "bucket brigade" came to Cheramie 10 years ago while he worked with the Lafourche Coastal Zone Committee. He is motivated by his personal experience of loss. At 52, Cheramie has lived to see the places where he once caught turtles and garfish as a teenager erode to open salt water.

"The coast is so dynamic, and the changes are so rapid, that the time it takes to plan and complete a restoration project is longer than the time for the project area to degrade past saving," he said. "That's the problem."

For his program, Cheramie envisions ordinary people dropping off a sack of oyster shells or private companies donating a truckload of dirt at a time.

He wants people to give at whatever level they can and for donors to see a direct benefit from their actions.

David Bourgeois is a Marine Extension agent with Louisiana Sea Grant and the LSU AgCenter and is a supporter of Cheramie's plan. He was Cheramie's

AmeriCorps supervisor and is providing technical advice on the private restoration endeavor. Bourgeois frequently steps up to the microphone to discuss fisheries and the environment on Cheramie's radio program *Talk on the Bayou* on KLRZ FM and KLEB AM in Larose.

"Kirk is an interesting fellow," Bourgeois said, admiring his longtime friend's diverse interests and talents.

"He is a legislative assistant. He became an AmeriCorp volunteer when he was 50. Kirk has a master's degree in political science. He was a tugboat captain. He owned a restaurant. He makes killer bread pudding."

"I think Kirk's idea can work." However, the plan faces some



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Bring Your Own Bucket . . .

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hurdles. Like any other restoration project, it will require permits. It also requires a donation of land and a group willing to manage it.

"It should not cost any money beyond permitting, and everything would be done through donations. The idea is great, but getting the property owners to commit is difficult," Cheramie explained.

He also has a few rules for his proposed project. It must be on private land that will

remain free of development, with surface rights donated in perpetuity. It must be managed by a non-profit group or agency. It should be in a visible and easily accessible area. Cheramie wants the restoration work to be funded only by donations – primarily of time, money, dirt and land. Finally, all materials used in the project must be clean and environmentally appropriate.

Cheramie is negotiating for two sites, one in Terrebonne Parish and one in Lafourche Parish. Both are near major highways and are what he describes as "critical areas."

"We will do this," Cheramie said with certainty. "If people passing through from Lafayette and Baton Rouge all brought a bucket of dirt or a bag of sand, it would add up. Over a short period of time, I think we could make a significant project out of it." •

On the Web:

KLZR FM *Talk on the Bayou*, Webcast at klzrfm.com



Hazard Workshops

A series of workshops based on the *Louisiana Coastal Hazard Mitigation Guidebook* were held in the fall. Videos of those presentations are available online at www.lsu.edu/slegal/projects/completed.htm along with a downloadable copy of the book. Copies of the book also can be ordered from the Louisiana Sea Grant College Program, 105 Sea Grant Building, LSU, Baton Rouge, 70803. Please include \$5 for shipping and handling. Copies of the book can be picked up for free from the Sea Grant Building. •

LSU to Receive \$300,000 to Teach Teachers

More teachers in Louisiana and Mississippi are expected to get their hands dirty and wet thanks to a \$300,000 grant to Louisiana State University's College of Education from the National Oceanic and Atmospheric Administration (NOAA) as part of the agency's highly competitive Bay Watershed Education and Training Program (B-WET).

LSU's Pamela Blanchard will use the funds to partner with Nancy Rabalais and Murt Conover from the Louisiana Universities Marine Consortium (LUMCON) and with Gary Bachman of the Coastal Research and Extension Center at Mississippi State University to expand the work of two hands-on educational environmental stewardship projects – the LSU Coastal Roots Program and LUMCON's Bayouside Classroom.

Both programs engage students to learn about the environment and to take an active part in its preservation and restoration. Each meets specific state educational standards and includes field work. Teacher recruitment and training are critical to the success and longevity of these novel instructional approaches.

Blanchard developed Coastal Roots in 2000 when she worked as Louisiana Sea Grant's education coordinator, and Sea Grant has

funded the project since its inception. Students involved in Coastal Roots grow native trees and grasses in nurseries at their schools and transplant them to local wetlands to reduce or prevent erosion and to restore habitat. In LUMCON's Bayouside Classroom, participants learn about estuaries, watersheds and water quality while conducting scientific data collection.

"These are very powerful, positive classroom activities for students to enrich their educational experience," Blanchard said. "These projects give the



Pam Blanchard, left, guides students during a planting in the early days of the LSU Coastal Roots Program.

children a real-world way to give back to the community while studying content they have to learn anyway. The teachers who work with these programs are determined to make a difference."

The three-year B-WET grant will fund teacher training and help bring more schools into the respective programs. Organizers also plan to cross-train some instructors in Coastal Roots and Bayouside Classroom.

"Both projects have been going on for a number of years," said Blanchard. "We know how to do the programmatic part. The next step is to



Coastal Roots students free young trees from their nursery containers in preparation for planting them in the wild.

focus on professional development training and resources for the teachers."

Blanchard is the principal investigator on the winning grant application titled "Integrated Professional Development and Resources to Enhance Educational Goals of Two Environmental Stewardship Programs in Louisiana and Mississippi." She is an assistant professor in the Department of Educational Theory, Policy and Practice in LSU's College of Education. Her project is one of five on the Gulf Coast to receive a share of \$1.3 million in B-WET funding in 2008.

This is the first year that NOAA has offered B-WET grants in the Gulf of Mexico, New England and Pacific Northwest. Successful programs previously were funded in Chesapeake Bay, California and Hawaii. •

LSU Coastal Roots Leaders Recognized

Ed Bush and Linda Messina, both instrumental figures in the LSU Coastal Roots Program, have been honored for their work.

Messina, a science teacher at St. Joseph's Academy in Baton Rouge, was selected as a 2008 American Star of Teaching. The program is a component of the U.S. Department of Education's (DOE) Teacher-to-Teacher Initiative, designed to honor the nation's most effective educators who have successfully incorporated the "No Child Left Behind Act" into their classrooms.



Ed Bush, left, puts down roots to help preserve the coastline.

It recognizes individuals dedicated to "improving student achievement, increasing opportunities for students and using innovative strategies to make a difference in the lives of their students," according to the DOE.

The selection committee is comprised of former K-12 teachers employed by the DOE, and it chooses only one teacher from each of the 50 states and District of Columbia for the honor each year. Messina was selected from among 5,000 nominations and was one of only five



Linda Messina, right, discusses education at Ocean Commotion 2008 at LSU.

private school teachers receiving the award for 2008.

St. Joseph's Academy was a pilot school in the LSU Coastal Roots Program, and Messina's input was influential in the coastal stewardship project's development. Additionally, Messina's science students are heavily involved in outreach, and their peer teaching is a welcome addition to Louisiana Sea Grant's annual Ocean Commotion event and area Earth Day observations.

Ed Bush, an LSU associate professor of horticulture, has been recognized as the Grand Prize winner in the 2008 Garden Crusader Awards, specifically for his

ongoing leadership in the LSU Coastal Roots Program. He was chosen from over 500 nominees. The award was developed by Gardner's Supply Company to recognize people who improve the world through gardening.

Bush worked with Pam Blanchard, LSU College of Education, in the early days of Coastal Roots to design a working nursery yard that would help schools raise their seedlings. He continues to help new Coastal Roots schools install their plant nurseries where students grow native trees – like bald cypress, mangroves, wax myrtles and grasses like *Spartina alterniflora* – for restoration planting in parks and degraded wetlands. Bush co-directs the Coastal Roots Program and works on community outreach to promote the program. •

On the Web:

American Stars of Teaching
<http://www.ed.gov/teachers/how/tools/initiative/index.html>

Garden Crusaders

http://www.gardeners.com/Garden-Crusader-Awards/5549_default.pg.html

Offshore Aquaculture Discussed

Offshore aquaculture is a hot topic in Louisiana – so much so that the 2008 Legislature passed a concurrent resolution asking Congress to oppose the authorization of mariculture in the Gulf of Mexico.

Recognizing there are potential positives and negatives to offshore aquaculture, Louisiana Sea Grant recently brought together stakeholders on both sides of the issue – as well as several undecided players – to discuss the topic and see if it needs further examination.

"Senate Concurrent Resolution 36 took a number of people by surprise," said Charles "Chuck" Wilson, Louisiana Sea Grant executive director. "Sea Grant saw an opportunity to bring the parties together in one room to voice their concerns and hopes, and determine if things should be left where they stand or if the issue needs to be revisited."

Representatives from the Coastal Conservation Association, Louisiana Wildlife Federation, Louisiana Shrimp Association, Charter Boat Association, Louisiana Restaurant Association, Seafood Promotion and Marketing Board, Gulf Restoration Network, and departments of Natural Resources and Wildlife and Fisheries agreed that several mariculture questions still need to be answered. And depending on those answers, offshore aquaculture could be more palatable.

"Will Louisiana be left behind if the state opposes offshore aquaculture but it develops elsewhere in the Gulf?" asked Mike Voisin with Motivait Seafoods. Other questions

focused on possible pollution from mariculture operations, maintaining commercial fishing waterfront access, permitting and regulatory jurisdiction issues, and responsibility and liability if a fish farm causes damage. Workshop participants also agreed that offshore aquaculture operations could provide year-round access to native Gulf of Mexico finfish, and fish farming could help meet increased seafood demand, as well as reduce pressure on wild fish stocks.

"This is just the beginning of what could be several workshops with stakeholders," said Jerald Horst, a retired Sea Grant fisheries specialist who moderated the meeting. Representatives of the workshop group may visit Maine fish farms in the spring or summer. The goal of the visit will be to see how operations there address concerns and questions, how they get along with commercial fishing and residential interests, and to view the size and scale of the businesses.

During the meeting, participants viewed presentations on pending federal mariculture legislation, the status of fisheries management plans for aquaculture, fish disease transmission, fecal waste management and biochemical oxygen demand from the



Participants in the Gulf of Mexico mariculture workshop posted their concerns on the meeting room wall. Above, Jerald Horst (right) talks with Harlon Pearce of the Seafood Promotion Board and Cynthia Sarthou of the Gulf Restoration Network about issues of importance to them.

salmon industry, and genetic interactions between cultured and wild fish stocks.

The presentations can be viewed at www.seagrantfish.lsu.edu/aquaculture/forum.htm.

If offshore aquaculture were to take place in the Gulf of Mexico according to rules being considered by the GOM Fishery Management Council, it would most likely happen in federal waters miles from the coast and be limited to the farming of native species. •

Grad Student Measures LSU's Greenhouse Gas Footprint

Louisiana State University's Baton Rouge campus has had an impact on the city, parish and the state. But what kind of footprint – carbon footprint – is it making on the world? Graduate student Matt Moerschbaeher plans to answer that question in the next few months.

Moerschbaeher, who is working on his doctorate in the Department of Oceanography and Coastal Sciences at LSU, is conducting a greenhouse gas inventory as part of an assistantship funded by the Louisiana Sea Grant College Program. He will look at the whole of LSU's greenhouse gas output – from building energy use; faculty, staff and student commuter traffic; state vehicle usage; and methane from cattle grazing on campus pastures – and take into account carbon sequestering by the university's lush oaks.

"Ivy League schools and a number of universities on the West Coast have conducted carbon footprint studies for their

campuses, but not many schools in the South have," said Moerschbaeher. "LSU will be one of the first in the Southeastern Conference conducting such a study."

Moerschbaeher collected data to use in a footprint formula during the fall 2008 semester, and he expects to complete mapping of the university's greenhouse gas impact no later than the start of the 2009-10 school year.

"Getting data on faculty and staff air travel is a challenge at the moment, but I'm working with the university's travel agent on that. I do have event parking permit numbers along with recycling and solid waste data, so I will be able to create an accurate footprint for football game days," he noted. "This will enhance the model and add to our knowledge of one of the university's most celebrated traditions."

Moerschbaeher can be contacted at mmoers1@lsu.edu. •



Matt Moerschbaeher