

Laursen Takes Helm of NOAA Regional Team

A face familiar in the northern Gulf of Mexico is now the region's team coordinator for the National Oceanic and Atmospheric Administration (NOAA). Kristen Laursen, a 2005 Knauss Fellow who earned her Master of Science degree in oceanography and coastal sciences from LSU, started her new NOAA duties earlier this year.

"The Gulf of Mexico Region offers a number of opportunities. The people there are already working together on issues such as water quality, which is personally an important issue to me," said Laursen, who most recently was a member of NOAA Research's Office of Policy, Planning and



Kristen Laursen

Evaluation in Maryland. "I'm looking forward to working closely with the Gulf of Mexico Alliance, the Northern Gulf Institute, Sea

Grant and other NOAA partners to deliver better services and advance stakeholder relations in the Gulf."

Her new base of operations will be St. Petersburg, Florida.

NOAA has eight regional teams – Alaska, Central, Great Lakes, Gulf of Mexico, North Atlantic, Pacific, Southeast and

Caribbean, and Western – that cross traditional political boundaries to address issues such as climate change, drought, marine protected areas, ecosystem assessments and

the impact of natural disasters. The Gulf of Mexico region consists of Texas, Louisiana, Mississippi, Alabama and Florida. Each regional coordinator supports his or her team as they blend the place-based needs of local constituents with NOAA's priorities and responsibilities as a federal agency.

On the issue of water quality, Laursen said she's looking forward to working with NOAA's Central Region, which essentially is the Mississippi River watershed. "What happens upstream can have significant impacts downstream. I'll do the best I can at being a good liaison from the Gulf to the Central Region and work closely with my counterpart and others there."

Laursen can be reached at Kristen.R.Laursen@NOAA.gov. •



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

Kobashi Named Knauss Fellow

Louisiana State University doctoral student Daijiro Kobashi has been selected as a 2009 Knauss Fellow, based on a nomination from the Louisiana Sea Grant College Program.

Kobashi will spend his year-long fellowship in the Climate Program Office of the National Oceanic and Atmospheric Administration (NOAA) in Washington, D.C. He will graduate in Spring 2009 with a Ph.D. in physical oceanography from LSU, where his doctoral research focused on potential impacts of offshore sand mining on the coastal environment. Kobashi, a native of Japan,

earned his Bachelor and Master of Science degrees from Tokai University.

"I'm very interested in science-based environmental policy development," said Kobashi. "How science can be used by decision makers in setting policy is important." After completing his year in Washington, he hopes to continue working for NOAA or a non-governmental organization.

The Knauss Fellowship, sponsored by the National Sea Grant College Program, provides

a unique educational experience to students

who have an interest in ocean and coastal resources and national policy decisions affecting those resources. The program matches graduate students with hosts in legislative or executive branch offices in Washington, D.C., for one year.

Kobashi's fellowship began in February. He is one of 46 Knauss Fellows for 2009. •



Daijiro Kobashi

Guidelines for Baitfish Harvesters, Retailers Available

Spoilage is an issue that every merchant who deals in perishable products must contend with – including baitfish dealers. To aid baitfish harvesters and sellers in keeping their product saleable, Louisiana Sea Grant has developed some easy-to-follow guidelines.

"Dead baitfish mean lost profits," said Greg Lutz, aquaculture professor with the LSU AgCenter and Louisiana Sea Grant. "In today's economy, it makes sense to take the proper steps to get as much living product to market as possible. One of those steps is giving the baitfish a resting period in clean, aerated water before hauling. Fish in poor condition before hauling means poor survival during and after transport."

Transportation, water chemistry, aeration, temperature and disease issues are addressed in a pocket guide Lutz created for harvesters, titled "Proper Water Quality and Minimal Handling Stress Can Make the Difference between Healthy, Active Live Bait and Heavy Mortality." A poster titled "Tips for Keeping Baitfish Alive for Healthy Sale" is geared more for retailers.

A free printed copy of the pocket guide can be ordered by e-mailing jsche15@lsu.edu, or mailing a

request to Louisiana Sea Grant, 105 Sea Grant Building, LSU, Baton Rouge, LA 70803. The card also can be down-loaded from www.seagrants.lsu.edu/pdfs/Baitfish.pdf, and the poster is available for download from www.seagrants.lsu.edu/pdfs/Tips_Keeping_Bait_Alive.pdf.

Lutz can be reached at glutz@agcenter.lsu.edu. •



Healthy bait fish help keep a healthy bottom line for harvesters and retailers.

COASTAL CLIPS

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No Barriers to Learning

PHOTO BY JOHN SCHEXNAYDER



LSG Education graduate assistant Catherine Sutura teaches youngsters about Louisiana's barrier islands during the Audubon Zoo's 2009 Earth Fest. The zoo logged nearly 21,000 visitors to the annual two-day festival in March. LSG Communications and Education staff participated in two other Earth Day observances in April – Baton Rouge Earth Day (BRED) and the Harry Hurst Wetland Celebration. LSG Education Coordinator Dianne Lindstedt once again organized the festival's Wetlands Tent for the BRED festival. •

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Chandealeur Lighthouse Remembered

The Chandealeur Island chain has a colorful history both geologically and in terms of human use.

Arching below coastal Louisiana and Mississippi, the barrier islands' shifting sands buffer the mainland from hurricane winds and storm surge. It was the site of a yellow fever

quarantine station in the 1800s. President Theodore Roosevelt established Breton National Wildlife Refuge on the islands in 1904 to protect egrets and other shorebirds slaughtered for their plumage. It is the United States' second oldest refuge and is reportedly the only one Roosevelt actually visited. A destination for sportfish as well as birds, the Chandealeurs remain a beloved attraction for nature lovers, charter boats and offshore fishermen.

Sadly, a significant part of the islands was lost on Aug. 29, 2005. After weathering numerous hurricanes, the 102-year-old steel lighthouse at the northern tip of the chain succumbed to Hurricane Katrina. The land at Hewes Point where the structure stood had been eroding for years, leaving the screw-pile lighthouse alone in open water. Katrina's violent winds and waves scoured away the last bit of terra firma at the light's feet and sank it to newfound depths in Chandealeur Sound.

To keep the history of this isolated locale alive, Louisiana Sea Grant has collected images and recorded recollections of its

past in *Reflections on Chandealeur*, a Web site (www.laseagrant.org/lighthouse) featuring brief movies, photographs, oral histories and information on the islands.

"The light marked the most remote and pristine area of the Louisiana coast," explained Rex Caffey, professor of resource economics with the LSU AgCenter and Louisiana Sea Grant. "It was more than just a structure. It was a sentinel for coastal change, an icon of maritime history – kind of like our version of the Statue of Liberty."

"I felt that something should be done to document the loss, but at the time, the human toll from Katrina was far more important. It would be nearly two years until the time was right to initiate a project."

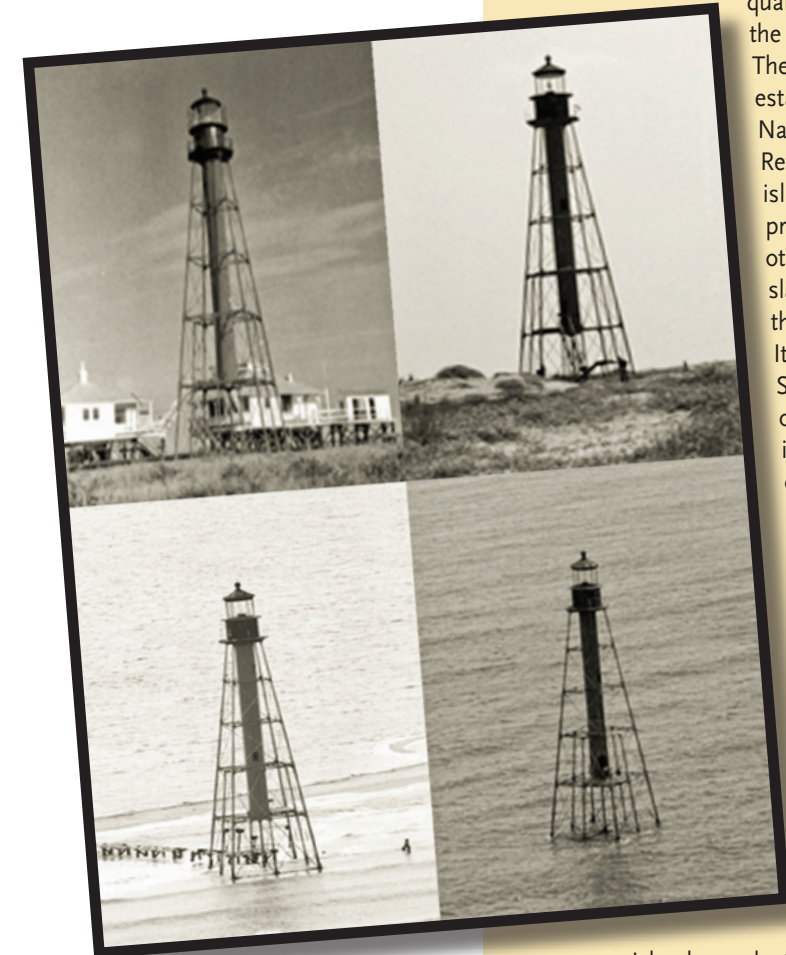
Intending to document the erstwhile lighthouse, Caffey put out a call to coastal fishermen, boaters and residents in Louisiana and Mississippi requesting photographs. "The response was incredible," he said. "People were generous with their pictures, and each picture has a story."

Caffey collaborated with LSG editor Paula Ouder and Web coordinator Melissa Castleberry to make these images accessible to the public. Ouder and Castleberry had already used digital photography and audio to archive the cultural history of Louisiana's shrimp industry. The trio agreed that a similar approach could work for the Chandealeur light.

After collecting historic and more recent photos, they interviewed several coastal experts, fishermen and residents from Louisiana and Mississippi to prepare an oral history of the islands and to record what the lighthouse meant to the people who encountered it. *Reflections on Chandealeur*, features interviews with photographer and naturalist CC Lockwood and the late, renowned coastal scientist Shea Penland.

"Clearly, there were many coastal residents also moved by this loss," Caffey said. "As we developed the outline, the project evolved and became more about the landscape and the plight of our barrier islands system. Our objective is to use this as a gateway site for anyone wanting to learn

(continued on page 2)



Land at Hewes Point eroded over time, leaving the Chandealeur Island lighthouse in open water. Photos courtesy of Bob and Sandra Shanklin, The Lighthouse People.

Chandeleur Lighthouse

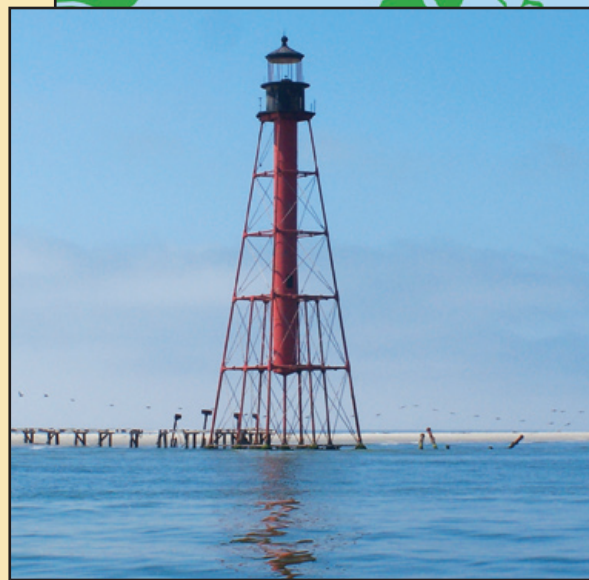
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more about our unique coastal ecology, geology and history.”

“We wanted to create a project that is personal and informative, so it’s great to be able to share people’s stories of the islands and the lighthouse,” Ouder said. “Barrier islands shift and change by nature, but during these interviews, I came to understand that something precious and irreplaceable was lost when the lighthouse finally fell. People truly have a sentimental attachment to the Chandeleurs.”

Not the least of whom is Caffey, who admits to becoming a bit teary eyed when he watched the Web films for the first time.

“I visited the Chandeleur Islands several times over the years, but in August 2005, I took my 10-year-old son out there for a three-day camping trip,” he said. “I encouraged him to keep a journal, and he wrote about fishing, seashell collecting, bird watching – and he got to see and fish around the Chandeleur light. Just a few weeks later, the light was gone, along with 50 percent of the landmass of the Chandeleurs. Coastal Louisiana is in trouble, and we need to find a physical way



The Chandeleur Lighthouse was at the northern end of the island chain.

to preserve what’s left. In the meantime, we want to make sure a bit of that history is not lost along with the land.” •

Boat Transitions from Shrimping to Scientific Study

Finding the right boat for offshore research can be a challenge. While several universities and rental companies have vessels available, longer, farther trips require bigger watercraft that can safely navigate open water and transport specialized equipment. Fisheries scientists and oceanographers now have a new tool at their disposal called the Jambon Researcher, a retired shrimp boat that has been retrofitted with a host of research-friendly features.

Built in 1978, the Researcher has overnight accommodations for 10 people and can travel more than 10 days without resupplying. The 85-foot vessel is owned and operated by Jambon Boat Rentals of Golden Meadow. Ardent LSU supporters at the company developed a cooperative agreement with the university to equip the Researcher and make it available for lease. They even painted the boat purple and gold.

“Both Josh Jambon (an owner) and Thomas Tunstall (engineer/manager of vessel operations) have been behind this 100 percent and have gone out of their way to get this done,” said James Cowan, a professor with LSU’s Department of Oceanography and Coastal Sciences and a leading red snapper researcher. “They decided they would refit this

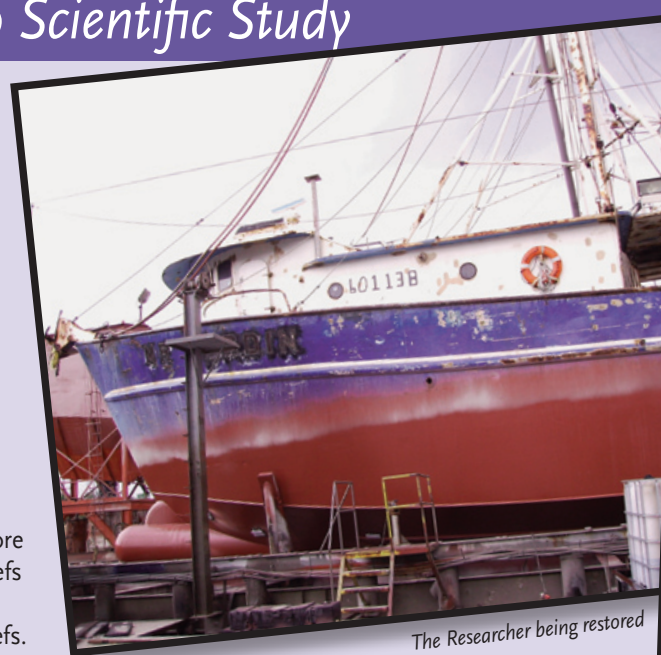
boat as part of their fleet and give us priority access, which has been a great resource. It gives LSU the use of a quality vessel without the responsibility of ownership.”

Cowan has sailed several times aboard the Researcher, using it for extended trips each time. He and his team are comparing three red snapper habitats – offshore oil platforms, artificial reefs created from retired oil platforms and natural reefs.

Cowan said red snapper stocks in the Gulf of Mexico are overfished and slow to recover. He explained that they face nearly equal pressure from commercial and recreational harvesting and that proper fishery management requires more information. Cowan said the Jambon Researcher accommodates his equipment and his staff and makes his work easier.

“We have several projects looking at artificial and natural reefs on the Louisiana

continental shelf, from the Louisiana artificial reef planning zones and offshore on Louisiana’s shelf-edge banks,” Cowan explained. “We had several studies funded at one time and realized it would be more efficient to spend several days at sea. None of the vessels we had used before would work. Jambon basically built the vessel to our specifications.”



The Researcher being restored



Some of those specifications include specialized electronics, winches used in sampling and a large swing arm on the side of the boat that deploys large hydroacoustic transducers. Perhaps the most impressive addition is a large kort nozzle – a metal collar placed around the propeller to prevent it from generating bubbles and noise, which interfere with sonar equipment.

“I personally have been overwhelmed by the willingness of Jambon Boat Rentals to meet our needs, and almost dumbstruck by their support of LSU research and our good fortune,” Cowan said. •

On the Web:

Cowan Lab:
<http://www.cfi.lsu.edu/faculty%20bios/Cowan%20site/>

Jambon Boat Rentals:
www.jambonboats.com

Red Snapper FAQ:
www.seagrantfish.lsu.edu/faqs/index.html

The completed vessel



“Levee School” Coursework Available Online

The Flood Protection and Ecosystem Restoration Conference – also known as Levee School – was held in January, but the full two-day program is available at www.laseagrant.org/floodprotection/index.html.

Along with copies of presentations, video of every talk and panel discussion is available for online viewing. “The live Webcast of the conference drew almost as many viewers as there were audience members in the auditorium,” said Roy Kron, Louisiana Sea Grant Communications director. “But the truly significant point is that while the event was being Webcast it also was being recorded. Anyone with an Internet connection can experience Levee School because of this.”

Topics covered include:

- Comprehensive Master Planning for Restoring Ecosystems and Protecting Communities
- Planning Resources
- Coastal Hazards and Inland Flood Risks
- Non-structural Flood Controls
- Coastal Hazards Modeling
- Hydrology and Inland Flooding Issues
- Structural Flood Controls: Why Is It So Difficult to Design and Build Levees on the Gulf Coast?
- Planning, Maintaining and Enhancing Flood Protection Systems
- Communicating Risk Associated with Coastal and Inland Flooding

The flood conference was presented by the Louisiana Department of Natural Resources, Louisiana Department of Transportation & Development, Louisiana Coastal Protection and Restoration Authority, LSU, LSU AgCenter and the Louisiana Sea Grant College Program. The Flood Protection and Ecosystem Restoration Conference is an ongoing professional development program to assist public agencies, including levee boards and levee districts, in achieving their statutory responsibilities in flood protection and ecosystem restoration. •



Jerome Zeringue, with the Coastal Protection and Restoration Authority, moderated a panel on lessons learned from the 2008 storm season during the second day of the flood protection conference.

Business Incubator Offers Start-Ups Opportunities

A new tool is available to entrepreneurs wanting to turn maw-maw’s seafood gumbo or cousin Boudreaux’s spice blend into the next grocery store best-seller. Edible Enterprises, a commercial kitchen and production incubator for food products, is scheduled to open this spring in Norco.

The “food incubator” houses two fully equipped kitchens, a packaging and distribution area, storage facilities and business offices, all in compliance with federal, state and local regulations for commercial kitchens. “Mom-and-pop businesses along the German Coast have needed a business incubator like this for years,” said Louisiana Sea Grant and LSU AgCenter Extension agent Mark Schexnayder, who has been involved in the center’s development. “This creates a real opportunity to start or expand a food business.”

Edible Enterprises’ clients rent the commercial kitchen space by the hour to create their culinary delights. “Everything they need is here, including some equipment they might not otherwise be able to afford,” said Charlie D’Agostino, director of the Louisiana Business & Technology Center at LSU, another driver of the incubator. “The incubator allows these small businesses to produce their products in a kitchen that meets all health

code regulations and without a huge capital investment,” he added.

Through agreements with the St. Charles Parish Satellite School’s culinary and media programs, students have an opportunity



Edible Enterprises site in Norco

to intern with incubator businesses – helping create products and product packaging. “The goal is to empower new and existing businesses, while supporting efforts to upgrade workforce skills and provide entry employment into the food industry,” said D’Agostino.

“As companies graduate from the incubator, we fully anticipate them establishing their own facilities nearby and employing workers trained at Edible Enterprises in food production technology.”

Edible Enterprises, located in the old Norco Co-Op building off Third Street, was spearheaded by the River Parishes Community Development Corp., which received a \$350,000 state grant during the

2007 legislative session and an additional \$50,000 grant from the Louisiana Department of Economic Development for the project. Other partners and support organizations include the Norco Community Economic Development Corp., Goodwill Industries, Greater New Orleans Inc., Shell Norco, St. Charles Parish

and many more.

Aside from the obvious advantages the business incubator offers, D’Agostino noted that it also provides a marketing/network advantage to its clients. “If you approach



a grocery store with one new, stand-alone product for their shelves, it can sometimes be a hard sell. But if we can go in and show we’ve got a dozen or more quality, local products you get more attention,” he said.

For more information, visit www.edibleenterprises.org. •



New Vibrio Detection Technique Set for Testing

LSU food scientist Beilei Ge may be setting a new standard for identifying *Vibrio vulnificus* in oysters, making the state’s prized shellfish safer and more marketable. The Louisiana Sea Grant researcher will field test a new *Vibrio* detection technique this summer with LSU AgCenter food scientist Marlene Janes and Sea Grant and AgCenter seafood technology specialist Lucina Lampila.

Between 1988 and 2006, the Centers for Disease Control received reports of more than 900 *V. vulnificus* infections from Gulf Coast states. *Vibrio* – a bacterium in the same family as those that cause cholera – is more prominent during warm, summer months. And persons with compromised immune systems, especially those with chronic liver disease,



Beilei Ge

are at risk for *Vibrio* infection when they eat raw seafood – particularly oysters.

“We’re still in the laboratory stage and developing an optimized assay,” said Ge. “We’ve also just received some key equipment. But we should be dockside in late May or June analyzing natural oysters.”

The current standard in the United States for detecting

Vibrio in oysters uses microbiological culturing and confirmation by polymerase chain reaction (PCR), where oyster DNA is amplified by *in vitro* enzymatic replication. PCR is accurate, but it takes three to four hours to process samples and requires extensive technological resources. Ge’s technique uses loop-mediated isothermal amplification (LAMP), which can be completed in about an hour and not only detects the presence, but also levels of, *Vibrio*. LAMP also isn’t as technology hoggish and is extremely portable.

“This type of assay was first developed in Japan,” said Ge. “Very few labs in the United States – maybe two or three – use the equipment we’re using, although it is fairly common in Japan.”

Ge sees the LAMP assay as more beneficial to regulatory agencies because of its speed and portability. She also believes that a similar assay could be developed for other pathogens, such as *V. parahaemolyticus* found in Pacific oysters.

“A reliable, rapid detection technique is critical for the Louisiana seafood industry,” said Lampila. “Beginning in the summer of 2010, only processed oysters (pasteurized, pressure treated or frozen) will be available for sale during summer months, and right now there’s only capacity to process about 11 percent of the harvest. That’s going to impact oystermen.

“Hopefully, an assay like this will address public health issues so there can be continued sales of fresh product during the summer,” Lampila said. •