



Research Matters



RESEARCH



Larry Reynolds, left, and Dr. Luke Laborde have a successful duck-hunting trip.

Laborde surveys waterfowl hunters

Assisting the Louisiana Department of Wildlife and Fisheries in obtaining perspectives about potential changes in hunting regulations, Dr. Luke Laborde, LDWF waterfowl study leader, surveyed more than 30,000 Louisiana waterfowl hunters after the 2014-2015 hunting season. The survey covered waterfowl hunting effort, success, satisfaction, attitudes toward proposed regulations and demographics.

Laborde received 7,382 responses, with more than 66 percent by e-mail. Statistical tests identified no significant differences between responses from the random mail and random mixed-mode methods and no significant differences among any of the four survey methods in responses to six attitudinal variables.

Compared to the random mail and mixed-mode survey respondents, e-mail survey respondents were not significantly different in demographic variables, satisfaction or regulatory preferences, but hunted less frequently in both the past and prior seasons. Respondents to the open web survey were more avid, harvested more waterfowl and were less satisfied with season dates.

The cost per usable response for the random mail, random mixed-mode, e-mail and open web surveys were \$85.41, \$70.42, \$0.36 and \$1.18, respectively. Survey results provided input into the framework for the 2015-2016 and 2016-2017 waterfowl hunting seasons and also will provide guidance on appropriate cost saving methodologies for future research. Dr. Laborde presented research findings to the North American Duck Symposium in Annapolis, Maryland in February. In addition to Dr. Laborde, the project team included Mr. Larry Reynolds, LDWF Waterfowl Study Leader, Dr. Michael Kaller, and undergraduate research techs Katy Bowes and Melissa Simon.

Threatened New Zealand fernbird subject of research

The fernbird is a threatened and very secretive marsh bird found in New Zealand. Five known subspecies, several island populations and considerable habitat loss and fragmentation are all factors that suggest considerable potential for genetically distinct populations. Despite the potential for distinct populations, and the importance of identifying unique populations for conservation purposes, there has been no modern genetic analysis of fernbird genetic population structure. In fact, only a handful of studies of any type exist for this bird because resources have been directed at more highly endangered species.

Dr. Sabrina Taylor has begun a genetic study of fernbirds to examine the genetic validity of the five subspecies as well as the effect of wetland loss and isolation on fine-scale population structure in the Te Anau Basin. Females and males duet or sing together, and so both members of the pair can be caught in mist nets by playing their songs. Dr. Taylor has collected blood from one population in the Te Anau Basin as well as from birds on Whenua Hou Island, a reserve and paradise of endemic species including the kakapo, a flightless and nocturnal parrot. She plans to sample additional populations in the coming years and eventually transform the project into a graduate student's thesis research.



Dr. Sabrina Taylor holds a fernbird for blood sampling.



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School of Renewable Natural Resources

DIRECTOR'S COMMENTS



Allen Rutherford

It seems that more often than I like to do, I've had to discuss budget issues in my message. As many of you know, the state and the university is facing yet another financial crisis; however, this one feels different than the prior budget-related issues.

I'm optimistic because I believe that there is little appetite among the legislators or public to subject higher education to yet another deep budget cut. My only fear is that it may be too late. I would certainly encourage each of you to contact your state legislators to help insure that our programs are allowed to grow.

Currently, the looming budget crisis has frozen our ability to fill faculty and administrative staff vacancies. These declining numbers in the face of a growing undergraduate student enrollment means RNR faculty teaching loads have increased, and some areas of expertise have been lost. Budget-related deferred maintenance has left us with a leaky roof and aged heating and cooling systems that sorely need replacing.

While budgets are a seemingly constant concern, good things continue to happen in the School. Over the last year we have undergone an LSU program review and recently completed a Society of American Foresters Accreditation review. Both reviews highlighted program strengths and identified challenges. Here are some of the review committee's comments.

Program Strengths:

- Student and faculty morale is generally high. Undergraduates spoke very highly of faculty accessibility and interest in them. They have a sense of belonging, and comments like, "It's such a great department," and "It's home," still ring in our ears.
- Consolidation of graduate and undergraduate programs: Undergraduates in particular see this change as positive. It is a move that encourages multi- and interdisciplinary education in a broad field of study that increasingly welcomes such interaction.
- Undergrads feel well-prepared for careers. They are very positive about the program, the School, the director and faculty, departmental camaraderie, field trips that bond students and faculty internships that are encouraged.
- Women students do not feel disadvantaged or poorly treated. Faculty advisers/mentors are readily accessible, and undergraduates have interactions with graduate students. The lobby a great plus for mixing and is much appreciated.

- Undergraduates get good training, including oral and written communication, outshining peers at local, regional and national venues.
- Undergrads have a good working relationship with graduate students in the field and in labs.
- Lab jobs prepare students for graduate school or professions.
- Increased engagement in undergraduate education: RNR has developed service-learning, community outreach, honors courses and research participation and internships.
- RNR undergrad curriculum has become increasingly popular. Net growth is about 40 majors per year.
- Half of undergraduate students are women. A pre-professional club has been formed. Overall progress in diversity, retention and graduation is good.
- Graduate students: Overall, grads feel comfortable with their preparation.
- Awards and national recognition of graduate and undergraduate students is good, indicating good mentoring engagement and solid professional interest.

Program Challenges:

- Although student numbers have grown,

faculty numbers have declined. Some positions are lost and not replaced. The current 38:1 ratio of faculty to teaching FTE is very high and much higher than in comparable institutions (~19:1).

- Maintenance and safe storage of vehicles and boats seem to be very inadequate; classrooms need upgrades.
- Facility Services response is generally poor. Also, there are deferred maintenance issues (e.g. roof, HVAC).
- Restricted enrollment in ornithology, mammalogy and herpetology taught in Biological Sciences means limited availability for RNR students.

Although we may have distractions, we are dedicated and focused on why we are here. Our mission is clear, and with your help we will continue to teach, do research and extend knowledge.

We love to hear from you. If you ever have questions, comments, or suggestions, don't hesitate to contact me. This is still your School, and we look forward to your involvement.

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Dr. Jim Chambers announces his retirement

After 40 years of outstanding service to the LSU Agricultural Center, Dr. Jim Chambers retired in January. As a tribute to his professional contributions, Dr. Chambers was awarded an endowed professorship as the Weaver Brothers Distinguished Professor of Forestry. Dr. Chambers came to LSU after earning his bachelor's and master's degrees at Southern Illinois University and his doctorate from the University of Missouri.

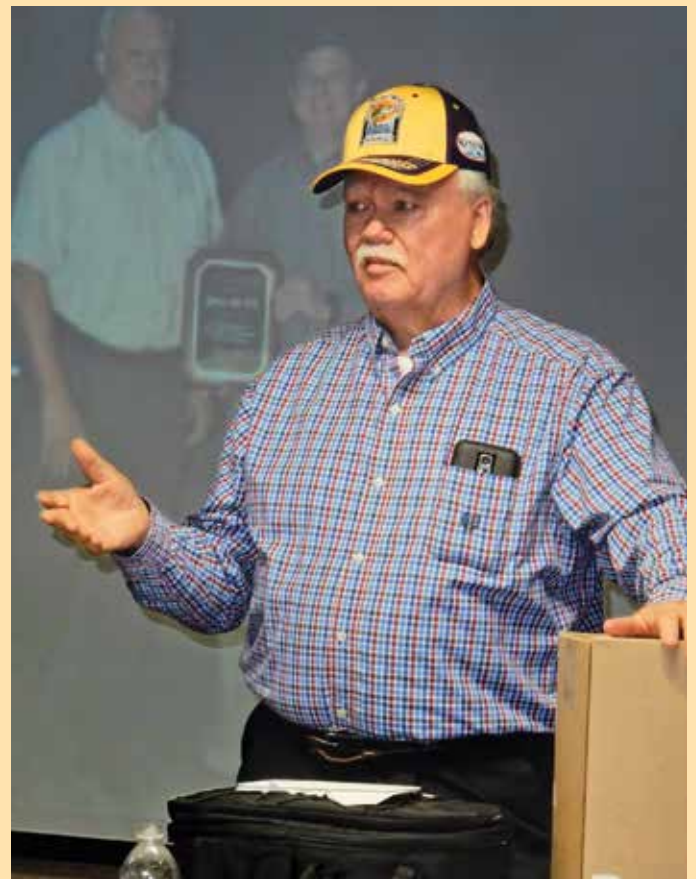
During his career, Dr. Chambers taught numerous courses, including Forest Ecology, Forest Fire Ecology and Management, Forest Eco-Physiology, Research Methodology, Advanced Silviculture, Forestry Seminar, Woody Plant Identification, Trees of the World and Forest Biology. He also taught camp courses in Wildlife Biology and his favorite class, Dendrology.

Chambers found that dendrology challenged undergraduates to learn the identification of trees, shrubs and vines, but believed that sharing plant traits, the ecology of their settings and interactions of plants and environment to be time well spent! He loved seeing students going from hating plant ID and scientific names, to loving to know plants, accepting, if not seeing the importance of scientific names and terminology, and wanting to know more. This was a continuing source of inspiration and energy for Jim.

Dr. Chambers' research and service varied during his time here. His research initially concentrated on understanding individual species responses to individual stresses in natural and managed settings. He conducted much of his work in greenhouses, plant nurseries and controlled-environment labs, where he looked at the effects of drought, flooding and salinity on bottomland hardwood growth and survival. Later, his focus changed to the investigation of the interaction of environmental stresses and cultural practices on larger, more mature trees in their natural settings, which helped to explain the reaction of trees to management and to natural changes in the environment.

Much of Jim's later research involved investigation of tree responses to both flooding and salinity in the cypress-tupelo forests of south Louisiana. This work led to his appointment as chair of the Governor's Coastal Wetland Forest Conservation and Use Science Working Group (SWG). This group, composed mostly of coastal-science researchers, advised the governor's office about issues associated with the degradation and reduction of Louisiana's coastal wetland forests. Dr. Chambers continues to work on coastal forest issues by serving on various advisory boards for state agencies.

In the classroom and through his research and service, Jim has mentored a countless number of students and colleagues. Through his leadership and commitment he has made innumerable contributions to our School, to Louisiana, and has touched many of our lives.



Jim Chambers

School of Renewable Natural Resources

Research Matters - Spring 2016

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Study compares strengths of longleaf and loblolly pines

Master's degree student Cory Garms has been studying mechanical properties of pine trees in southeastern Louisiana under Dr. Thomas Dean since 2014. His thesis research project aims to shed light on factors that allow one native southern pine species, longleaf pine, to survive intense windstorms better than loblolly pine, the most commercially valuable species in the region. Using a technique called static winching, Garms quantified the mechanical strength of more than 40 living tree stems by pulling them down with a hand-powered winch connected to a force gauge (dynamometer). Prior to pulling, battery-powered tilt sensors were secured along the length of the stem to track the curvature of the



Cory Garms stands next to one of his fallen sample trees at Lee Memorial Forest near Pine, La. At the Society of American Foresters Annual Convention in November, Cory was awarded second place outstanding student presentation for his submission, *Relative Resistance to Overturning of Pinus palustris and Pinus taeda L.: A Static Winching Experiment*. The SAF forest science and technology board only recognizes the top three presentations in the entire meeting.



From left, graduate students Cory Garms and Shannon Kidombo along with RNR Research Associates Joe Nehlig and Don Bluhm following a static winching test at Lee Memorial Forest.

trees as force was applied. Data from the force gauge and tilt sensors were used to compare the bending force the trees could resist before the stems broke.

Results of Garms' research are preliminary, but they hint at some interesting findings. For one, the study did not find a significant difference in the force required to break longleaf and loblolly stems. This result is contrary to the common observation that longleaf pine is stronger than loblolly pine in resisting wind damage. Consequently, results suggest that other factors such as crown dimensions and branch flexibility may be the basis for the apparent stability of longleaf pine subjected to strong winds. The study creates an opportunity to look into the way wind affects other species in the region like baldcypress, which is also well known for its ability to withstand hurricane-force winds.

Cellulose nanofibers used for batteries

Fiber material from agriculture and trees is environmentally friendly because it is biodegradable and renewable with sustainable practices. Such fibers are traditional sources of raw materials for pulp and paper, plywood and other traditionally low value-added products.

Producing these products, however, requires large amounts of energy and releases various pollutants into the environment. Emergence of nano-scale science and technology has the potential to add more value to the raw material than is created with traditional fiber-based products without the large environmental footprint. Nearly pure cellulose nanofibers (CNFs) can now be extracted from agriculture and forest fibers. The properties of these CNFs may be quite useful in the development of batteries because of their high crystallinity, large aspect ratio, high specific surface area, ease of chemical modification and ability to self-assemble into membranes.

Battery efficiency depends on the quality of material used to separate the positive and negative sides of the battery. Work from Dr. Quinlin Wu's lab shows that CNFs form more stable membranes even at high temperatures than materials currently in use. Furthermore, the interlaced CNF membrane structure has a high specific surface area and good flexibility, meaning that it has a high amount of surface exposed for a given amount of the material. This allows many carbon nanotubes to bridge the positive and negative sides of the battery to improve battery capacity and efficiency of energy storage.

Dr. Quinlin Wu's lab is working to improve the understanding of the fundamental interaction between networks of CNFs and newly available electrode materials to produce batteries with even higher energy capacity and higher power densities.

Master plan includes wetland restoration

Louisiana's Master Plan for a Sustainable Coast calls for a variety of wetland restoration techniques. One technique, the Sediment Diversions, uses the river to build and sustain new wetlands. State-of-the-art computer simulation models are being used to select the optimal location and size of sediment diversions, but criteria to decide when to open diversion structures and how long to keep them open each year have not yet been developed.

The Environmental Defense Fund (EDF), in coordination with the Mississippi River Delta (MRD) Restoration campaign, invited two RNR faculty to help tackle this complex topic. Drs. Andy Nyman and Megan La Peyre will make recommendations to Louisiana's Coastal Protection and Restoration Authority regarding how, when and why the diversion structure will be opened and closed, what factors will be considered, what monitoring is required, what governance will be used to oversee these decisions and what role stakeholders will play in the decision-making process. Nyman is a member of the Working Group that meets monthly and La Peyre has contributed to the meeting regarding effects of diversions on wildlife and fisheries.



Scott Harlamert, a master's student with Dr. Andy Nyman, throws a fish trap at a marsh creation site near Bayou Dupont in Plaquemines Parish. These wetlands were created by pumping sediment from the Mississippi River into shallow open water areas that had been emergent wetlands until the mid-1900s. He and Nyman compare fish abundance among unrestored sites (shallow open water), created with dredge material and natural marshes. Scott collects fish seasonally from this and three other sites in southeastern Louisiana that also have unrestored areas, created marshes and natural marshes.



Continuing education arborist program trains hundreds

Dr. Hallie Dozier conducted arborist training for 624 tree-care professionals during 2015. Of those, 174 participated in First Aid and CPR classes and received certification. Other program topics included cabling and bracing trees, basic pruning techniques and an update on state and federal regulations affecting them. Dr. Dozier also helped spread the word about the benefits of trees during the 2015 Stihl Tour des Trees held during the last week of October in Florida.

Covering more than 600 miles with 84 other bicyclists, Dr. Dozier raised approximately \$4,000 for the TREE Fund. Other activities with TREE Fund included overseeing two application review cycles for grant awards and scholarships and helping hire Mr. Eric Smith, the new President and CEO for the TREE Fund. Dr. Dozier worked with Louisiana Master Gardeners in southeastern parishes to help familiarize them with issues related to non-native plant and animal introductions, and she coordinated a self-defense class for women students, faculty and staff in RNR during fall 2015 semester.

20 earn burn certification

A total of 20 prescribed burners were certified at a three-day workshop held at the LSU Lee Memorial Forest in October. The attendees were a mix of landowners, industrial foresters, wildland firefighters and government agency managers.

Tanger wins award for forestry blog

By Tobie Blanchard

LSU AgCenter forestry economist Shaun Tanger received a Southern Regional Extension Forest Resources Award for Excellence. Awards were announced at the Southern Region Extension Forestry and Natural Resources Coordinators meeting held January 20-21 in Athens, Georgia. Tanger's award was for his forestry market blog, Stumpage Speak, which details price reports, market trend analysis and the economic outlook for the forestry industry.

"Many landowners, foresters and forestry groups use it to get market information," Tanger said of his blog. Tanger has been writing his blog for nearly two years, saying that landowners often use it as a benchmark for negotiating prices. The Southern Region Extension Forestry and Natural Resources Coordinators gave out 18 awards to 68 individuals from seven states. Innovation, ability to show impact, and ability to be replicated are among the criteria for these awards.

Additional Burn Certification workshops are scheduled for May 5-7, 2016, in Hodges Garden State Park (contact Keith Hawkins KHawkins@agcenter.lsu.edu) and December 14-16, 2016, in East Feliciana Parish (contact Brian Chandler, BChandler@agcenter.lsu.edu).



A burn workshop was conducted by Dr. Niels de Hoop, far left, and Lee Forest managers Joe Nehlig, front row, 5th from left, and Don Bluhm, front row, 3rd from right. Instructors also represented the Louisiana Agriculture and Forestry department; the Louisiana Wildlife and Fisheries department; the U.S. Fish & Wildlife Service; and The Nature Conservancy.



RNR faculty provide leadership in FPS

The Forest Products Society is the premier organization through which wood products scientists share their ideas and research results in the Forest Products Journal and many other globally distributed journals and books. Drs. Rich Vlosky (Director), Qinglin Wu, Niels de Hoop and former faculty member Todd Shupe in the RNR Louisiana Forest Products Development Center were recognized at the International Convention of the Forest Products Society held June 10-12, 2015, in Atlanta, Georgia.

Dr. Vlosky is currently serving as president-elect of the Forest Products Society, and Dr. Wu is Faculty Adviser to the LSU Student Chapter. Dr. de Hoop now serves as past president, having led the organization during a time of major management transition. Through this leadership, the LSU AgCenter has emerged as one of the foremost organizations serving society in the responsible use and management of forest resources across the world.

Dr. Vlosky also spent two weeks at Mendel University in Brno, Czech Republic as a visiting scholar, hosted by Professor Miroslav Kafka, associate dean of the faculty of forestry. He lectured to graduate students and faculty members on wood-based bioenergy/fuels and competitiveness in the wood products industry.



Dr. Niels de Hoop, right, served the past year as President of the Forest Products Society and is being presented a Gavel of Appreciation by FPS Executive Director Craig McKinney.



Dr. Rich Vlosky, right, is now president-elect of the Forest Products Society. He was presented a plaque by outgoing President Dr. Niels de Hoop at the International Convention of the Forest Products Society.



RNR faculty conduct wetland training for Zambian biologists

In July 2015, several RNR faculty members taught a group of seven Zambian biologists the principles of wetlands ecology and avian monitoring. The biologists work in remote Zambian parks in close cooperation with the International Crane Foundation, which sponsored their travel.

The course consisted classroom instruction and several intensive days in the field at various wetlands, including the Atchafalaya Basin, Rockefeller Refuge, Lacassine National Wildlife Refuge and Pass-a-Loutre Wildlife Management Area. Drs. Sammy King and Luke Laborde were with the students for most of their stay, but Drs. Andrew Nyman and Bret Collier and Scott Allen (Ph.D. student) also played key roles in the training session. LDWF staff at Rockefeller Refuge and Pass-a-Loutre WMA and The Nature Conservancy were instrumental in making the training a resounding success. Although students learned a lot about wetlands, faculty and other hosts benefitted from incredible stories of crocodiles, lions and snakes, as well as the exuberance of our new Zambian friends.



Drs. Sammy King, Luke Laborde and Andy Nyman assisted in wetland training of a group of Zambian biologists in July. The biologists toured numerous wetlands across the state including the Mississippi River delta, where this photo was taken.

Faculty examine crane and wetland management in China



Dr. Sammy King (4th from right) and John Vrandenburg (3rd from right) visited Momoge and Xianghi National Nature Reserves with representatives of the Chinese Academy of Sciences and the International Crane Foundation to provide technical advice on wetland ma

In November, Dr. Sammy King visited northeast China to evaluate wetlands and provide technical advice on their restoration and management to benefit the endangered Siberian Crane and other waterbirds. The wetlands visited were vast (several 100,000 acres) despite their arid setting and have been affected by altered timing and the explosive amount of flooding and agricultural development in the region.

Dr. King's trip was sponsored by the International Crane Foundation and he was joined by Mr. John Vrandenburg, a U.S. Fish and Wildlife Service biologist from Oregon. Vrandenburg is a wetlands expert and has worked with Dr. King and his students while at Bosque del Apache National Wildlife Refuge in New Mexico. The group toured Momoge and Xianghi National Nature Reserves over a two-week period, taught the staff basic principles of wetlands ecology and discussed various ideas to minimize the effects associated with agricultural irrigation practices. As part of the ongoing educational process, a group of biologists and administrators from the refuges flew to Oregon in March, 2015 to train with John. Tentative plans are in progress for a wetland training workshop in China during the summer of 2017.



Dr. Sammy King and John Vrandenburg evaluate soils and tuber production at a reed-dominated wetland at Xianghi National Nature Reserve in northeast China. The two taught refuge staff at Momoge and Xianghi National Nature Reserves about wetland ecology and management.



Southeast RNR hosts Silviculture Instructor's Tour of southeastern Louisiana

RNR hosted the annual Silviculture Instructor's Tour last November. A total of 44 people participated in the tour of silviculture practices and issues of the predominant forest cover types in southeastern Louisiana. The tour lasted two and a half days and was held in conjunction with the Society of American Foresters National Convention. The Silviculture Instructors group is a recognized subgroup of SAF's Silviculture Working group. The purpose of the tour is to help instructors across the North America to witness silvicultural practices of various regions.

Another purpose of the tour is to inform instructors of the particular ecological problems and policy issues constraining silviculturists. On the first day of the tour, participants learned the unique place of southeastern Louisiana and the Great Southern Lumber Company in developing regeneration techniques that created the South's second forest. Participants then were shown the production forestry practices Weyerhaeuser Company uses to grow loblolly pine in the upland area of southeastern Louisiana.

The second day of the tour focused on bottomland hardwood silviculture in the Lower Mississippi Alluvial Valley. The morning reviewed wildlife-forestry practices of the Louisiana Department of Wildlife and Forestry, while the afternoon covered the commercial potential of these hardwood types. The third day examined the problem of subsidence and the survival of cypress-tupelo forest as flood duration increases and a look at the benefits of short-duration flooding that brings new sediment to a site.



Participants of the Silviculture Instructor's Tour listen to Weyerhaeuser Co. foresters describe the silviculture practices they follow when growing loblolly pine in an industrial setting.



Dr. Wu at Shizuoka University, Japan

Dr. Qinglin Wu visited Shizuoka University in Shizuoka, Japan

Dr. Qinglin Wu visited Shizuoka University in Shizuoka, Japan in January 2016, discussing collaborative research on wood plastic composites and nanocellulose with Professor S. Suzuki and his associates at Shizuoka University. Dr. Wu also presented his research on nanocellulose to the faculty and students at the university.

Keim conducts international wetlands course

In July 2015, Dr. Richard Keim traveled to Myanmar to teach hydrology as part of an international wetlands course for young researchers and professionals from Vietnam, Thailand, Cambodia, Laos, Myanmar, China, Japan and Malaysia. The course was the 12th Regional Training on Wetland Ecology and Management in the Lower Mekong Basin, which is the most recent in a series of courses that rotate annually among universities in the region of the Mekong River.

The course, hosted by Yezin Agricultural University, was a three-week program that included classroom instruction, field instruction, hands-on field experience, data analysis and synthesis of the ecological, physical and sociological dimensions of wetland management. The field component of the class was based at Inle Lake, Myanmar, which is a UNESCO World Heritage Site, an area where local cultures have developed in close connection with the lake and its surrounding wetlands, including floating gardens and fisheries based on endemic fish species.



Students sample water quality as water buffalo arrive.



Students navigate the agricultural wetlands of Inle Lake with a local guide.

Annual Society of Wetland Scientists (SWS) meeting planned

Andy Nyman is helping to organize the 2016 meeting of the Society of Wetland Scientists at the end of May in Corpus Christi, Texas. He and Julia Cherry at the University of Alabama are selecting plenary speakers, symposia, oral presentations and poster presentations. Dr. Nyman also secured the help of RNR's Dr. Bret Collier, who will offer attendees a full day of training on how to use R software to statistically analyze data and graph results. Dr. Nyman is most excited about a new fellowship that he helped initiate to bring environmental journalists to SWS meetings and immerse them in wetland science.



RNR 7017 heads to Florida panhandle

Drs. Sammy King and Andy Nyman led their RNR 7017 “Restoration and Management of Wetland Functions” class to the Florida panhandle in October. The class first visited The Nature Conservancy’s Splinter Hill Bog Preserve near Mobile, Alabama. The preserve supports the white-topped pitcher plant among several other species of pitcher plants. Students learned about the role of fire in restoring and managing pitcher plant bogs as well as many other southeastern plant communities. In addition, students learned about hydrologic processes on the site.

Blackwater River State Park was the next stop, where Atlantic White Cedar was a common member of the overstory. After camping overnight, the class visited the Apalachicola National Estuarine Research Reserve, where participants discussed the effects of sea level rise on coastal communities. They also visited a Surface Elevation Table, a device used to measure subsidence and accretion of coastal areas. The class moved on to St. Mark’s National Wildlife Refuge where students learned about challenges in wetland management. The class also visited the Tate’s Hell Dwarf Cypress Preserve – an absolutely fascinating system. The pond cypress trees are anywhere from 5 to 10 feet tall and less than 6 inches in diameter. Many are over 250 years old! The cypress trees are growing on a very thin organic layer that overlays nearly pure sand.

Much of the preserve and surrounding area was drained with an extensive network of ditches by the former owner for intensive pine production, but since then, large-scale hydrologic restoration efforts have been implemented. Finally, the class visited Wakulla Springs State Park, where students learned about karst topography and the vast spring networks in the region. Thanks goes to Brent Shaver of the Alabama chapter of The Nature

Conservancy, David Morse of the Florida Forest Service, Rebecca Bernard of the Apalachicola National Estuarine Research Reserve and Terry Peacock and Joe Reinman of the Apalachicola National Wildlife Refuge for their gracious hospitality!



Students in the RNR 7017 class at the Tate's Hell Dwarf Cypress Preserve.

Nyman now teaching class with storied past

The first class devoted to Wetland Plants at LSU came into existence in 1972, listed in the General Catalog as WILD 123 (Taxonomy and Ecology of Aquatic Plants). At that time, RNR was known as the School of Forestry. The university shortly changed from 3-digit course numbers to 4-digit course number in 1974, making the class listed as WILD 4020 (Taxonomy and Ecology of Aquatic Plants). In 1975, the Botany Department assumed responsibility for teaching the class, but the School of Forestry continued teaching the class. Thus, the class was listed at BOTY/WILD 4020 (Taxonomy and Ecology of Aquatic Plants).

In 1988, the class was not only cross-listed, but added to a third curriculum, becoming FISH 4020. That arrangement continued for decades, as either Drs. Lowell Urbatch (Botany/Biology) or Robert Chabreck (Forestry/Renewable Natural Resource) taught it in most years. Meanwhile,

the Botany Department was absorbed by the Biology Department, and the School of Forestry was renamed the School of Forestry, Wildlife and Fisheries and later given its current name, the School of Renewable Natural Resources.

Upon that last renaming, all FOR, WILD and FISH classes became RNR classes. Dr. Chabreck retired in 2000, and Dr. Urbatch continued teaching BIOL/RNR 4020. By that time, the course name had been changed from “aquatic plants” to “wetland plants.” As enrollment increased in RNR, so did demand for BIOL/RNR 4020, and in 2009 Dr. Nyman began teaching a wetland plant class every other summer at the Louisiana Universities Marine Consortium (LUMCON) in Cocodrie, La. Initially, this class showed up on student transcripts as a special topics class (RNR 4060), but in later years Dr. Nyman offered it as BIOL/RNR 4020, which

reduced some paperwork for students whose area of concentration required BIOL/4020.

Dr. Urbatch retired several years ago, but for a few years the Biology Department was able to continue offering BIOL/RNR 4020 taught by Chris Reid, one of Dr. Urbatch’s last Ph.D. students. That arrangement has come to end, but demand for the class is at an all-time high. Thus, Dr. Nyman stopped teaching wetland plants at LUMCON during summer and this spring began teaching wetland plants on campus.

Class field trips this year included a trip to St. Francisville in a futile search for plant species that rarely occur in wetlands, as well as trips around the Baton Rouge lakes, to Bayou Conway Wetland Mitigation Bank and to Big Branch National Wildlife Refuge. Students are required to complete a plant collection that includes obligate wetland plants as well as obligate upland plants.



On a recent field trip, the BIOL/RNR 4020 students traversed the slopes at the Mary Ann Brown Preserve near St. Francisville, observing scattered wetland species in the ravines and upland species on the ridges.



Service learning continues with BREC

In spring 2016, Dr. Phil Stouffer's Louisiana Wildlife (RNR 3018) class will continue to be taught as a service-learning class through a unique partnership between RNR and the Baton Rouge Recreation and Park Commission (BREC). Students will gain hands-on field experience with amphibians, reptiles, birds and mammals through concentrated work at BREC's Forest Community Park. Through their inventory of the tetrapods at the park, students also will be challenged to consider the multiple roles of the park and how their work for the class can contribute to BREC's mission. This will be the fourth BREC park where Stouffer's students have worked for the class.



RNR 3018 students learn how to sample small mammals with Sherman traps. Photo by Vitek Jirinec.

Online resources enhance understanding of ecology

Drs. Hallie Dozier and Reagan Ererra are taking advantage of online textbook resources with RNR 2101 – Ecology of Renewable Natural Resources. Using McGraw-Hill Connect, students have access to their text book for Ecology electronically, and access to a large database of practice questions, interpretive exercises and immediate study and performance feedback. They believe this will help accelerate student learning, comprehension, application and retention of fundamental theories, applications and principals of ecology.



First African Wildlife Ecology students at Savannah Research Center in Mbuluzi, Swaziland in 2015.

African wildlife ecology course – a first for RNR

Last August, Dr. Bret Collier conducted RNR's first African Wildlife Ecology course. Bret and 10 enthusiastic students spent two weeks in Swaziland and South Africa. The students worked on a wide variety

of ecological research projects focused on how land use and agrarian communities affect small mammal and avian populations in the low veld of Swaziland.

Students learn plant anatomy in Boston

Last summer, Shannon Kidombo, a Ph.D. student working with Dr. Thomas Dean, was awarded a grant to attend a plant anatomy course at the Arnold Arboretum of Harvard University in Boston, Mass. The grant provided air fare, room, board and tuition to attend the Plant Anatomy: Development, Function, and Evolution course. The grant was sponsored by the Arnold Arboretum of Harvard University and microMORPH (Microevolutionary Molecular and Organismic Research in Plant History), a National Science Foundation (NSF) sponsored Research Coordination Network.

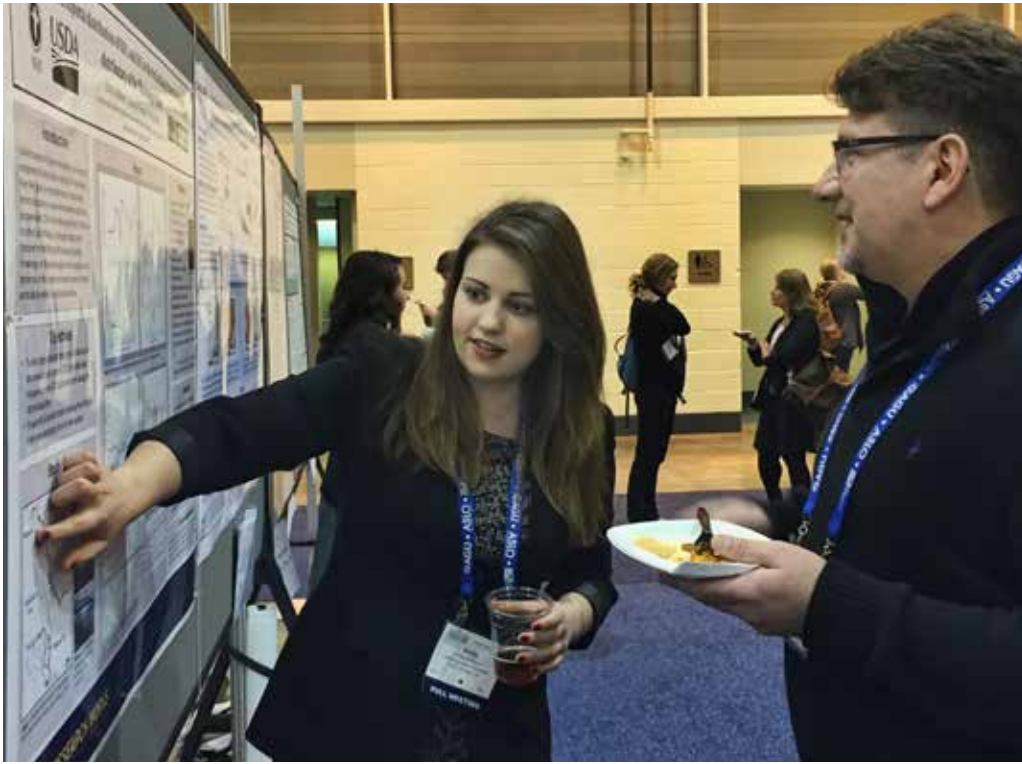
This intensive short course brought together a diverse group of 11 students of seven nationalities and from different academic and research fields such as paleobotany, evolutionary developmental biology (evo-devo), dendrochronology, physics and forestry. It was an exciting experience for Mr. Kidombo because he was taught by plant and wood anatomy experts across the globe in interactive sessions that involved lectures, laboratory practicals and experiences with living collections at the arboretum. Instructors included William Friedman (Harvard University), Pamela Diggle (University of Connecticut) Pieter Baas (Leiden University, Netherlands), Peter Gasson (Royal Botanic Gardens, Kew) and Elisabeth Wheeler (North Carolina State University).



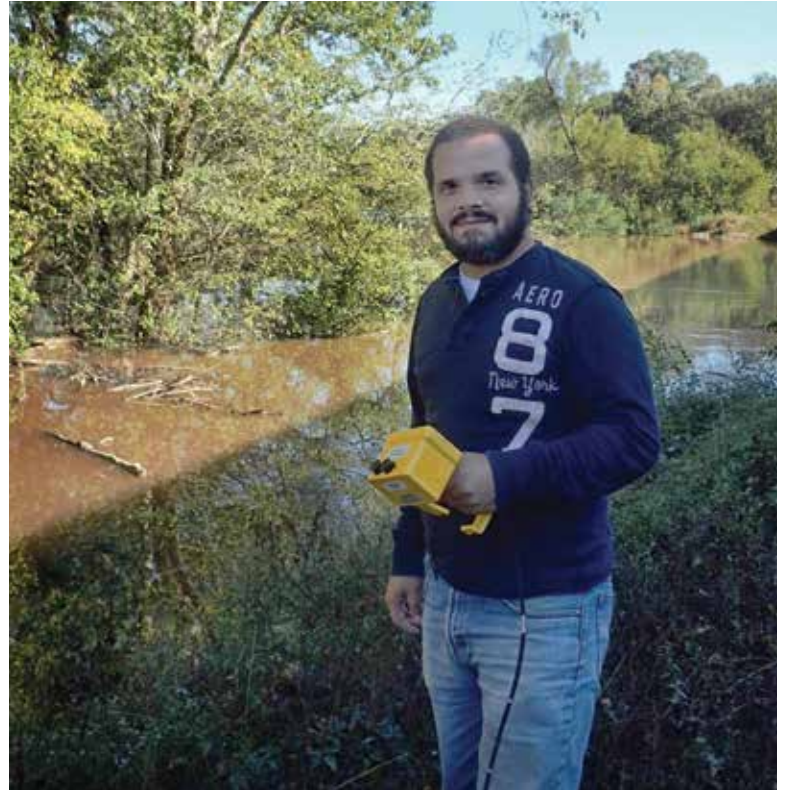
Shannon Kidombo, second to last row on the left, joins international students and instructors in the course, Plant Anatomy: Development, Function and Evolution, conducted at the Arnold Arboretum in Boston, Massachusetts.



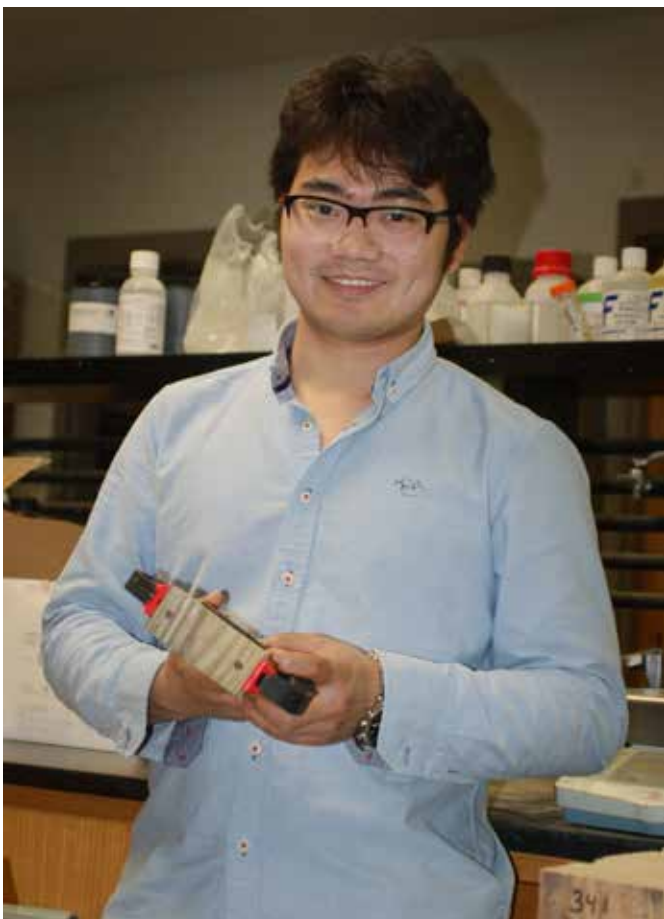
GRADUATE STUDENTS



Emily DeDuco (MS; Dr. Jun Xu) is studying water quality in the lower-most Mississippi River and its largest distributary basin, the Atchafalaya River Basin.



Jean Carlos Mena (MS; Dr. Jun Xu) is working on spatial analysis and modeling of coastal watersheds.



Xingyan Huang (PhD; Dr. de Hoop and Adjunct Prof. Chung Hse US Forest Service) is working with on polyurethane foam insulation that is partially formulated from liquefied wood. Xingyan comes from Sichuan Agricultural University, China.



Anna Perez-Umphrey (PhD; Drs. Stouffer & Taylor) will examine how the Deepwater Horizon oil spill affected marsh rice rat genetic variation and hanta virus infection.



Amie Settlecowski (MS; Dr. Taylor) will compare genetic variation between historic and contemporary DNA in Bachman's Sparrow to evaluate the effect of landscape-scale habitat modification and a range expansion at the turn of the century.



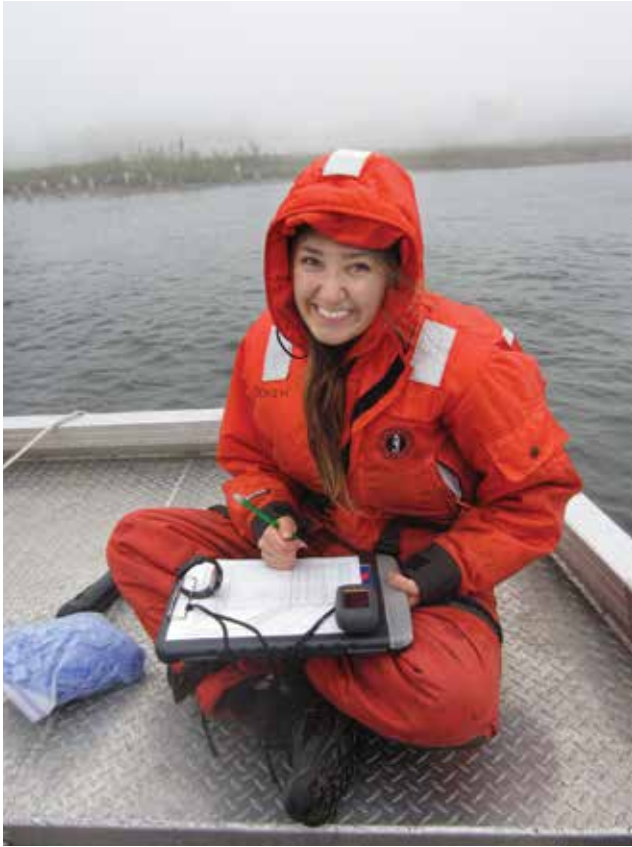
Vitek Jirinec (PhD; Dr. Stouffer) will examine population and community dynamics of birds in the central Amazon.



Cassie Skaggs (MS; Dr. Ringelman) is studying the effects of oil and gas development on waterfowl nesting ecology in the Bakken formation of North Dakota.



GRADUATE STUDENTS



Allison Snider (MS; Drs. Stouffer & Taylor) will study how the Deepwater Horizon oil spill affected diet in Seaside Sparrows by extracting DNA from fecal and gut contents from birds on oiled and unoled sites.



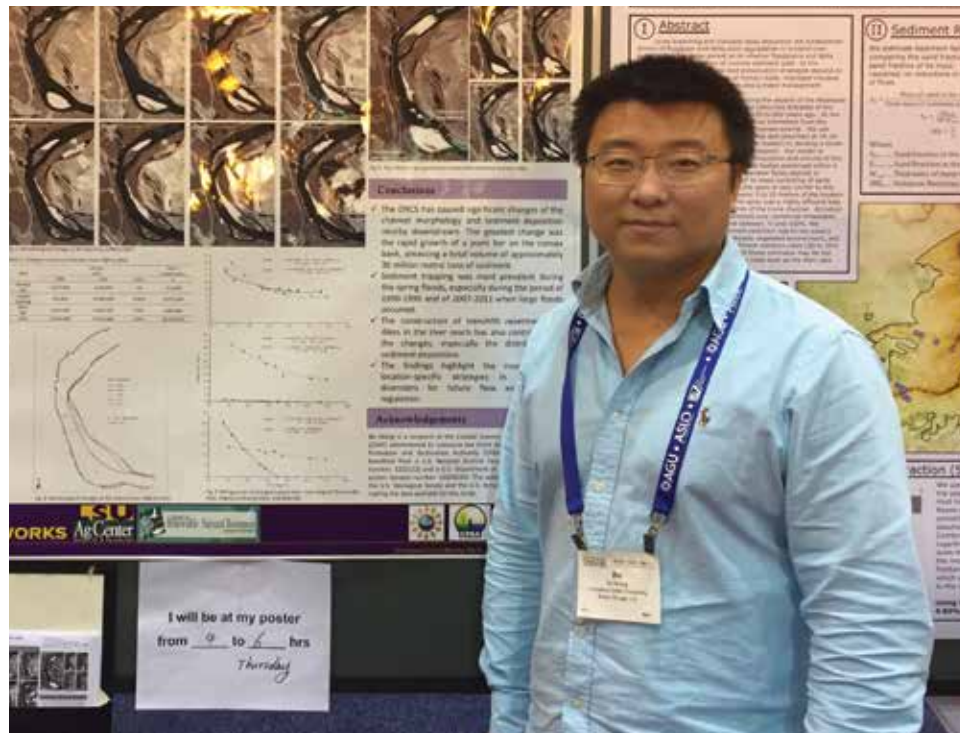
Clay Stroud (MS; Dr. Ringelman) is investigating how Lesser Scaup (*Aythya affinis*) diet impacts wintering abundance on Lake Pontchartrain.



Andrea Yammine (MS; Dr. Green) is developing a non-lethal alternative to detect endocrine disruption and testing whether crude oil exposure alters fitness in Gulf killifish.



Kamela Stamey (PhD; Drs. Kelso & Rutherford) will examine energy flow through periphyton communities in the Atchafalaya River Basin and the behavioral and physiological effects that herbicide mixtures can have on fish and aquatic invertebrates.



Bo Wang (MS; Dr. Jun Xu) is assessing sediment availability for the lowermost Mississippi River.



STUDENT NEWS

Society of American Foresters

The Society of American Foresters (SAF) student chapter at LSU sold Christmas trees again. Of course, a beautiful Leland cypress was selected to garnish the RNR lobby and was decorated by the staff. Recently the chapter competed in the Southern Forestry Conclave. A popular addition to the activities has been the crawfish boil that LSU brings to the event.

The 2015 crawfish boil at Mississippi State was hosted by Ashley Tunstall, Virginia Spencer,

James Donovan, Devin Albin, Hayden Carter, Christian Rossi, Christian Flucke and Kevin Kohl. In 2016, the conclave will be hosted by Clemson University, with nine LSU students competing.

In November, Baton Rouge hosted the SAF national convention with the LSU student chapter hosting the Student Quiz Bowl. Pictured is one of the sessions, with Christian Rossi (behind projector) and Christian Flucke (to his left). The three judges can be seen at the same

table. Iowa State's team is at left, competing against Alabama A&M's team (off picture to right). Rush Maxwell was out in the hall, coordinating three concurrent quiz bowl rooms, and faculty adviser Dr. Niels de Hoop (behind camera) helped organize. The four-person team from Michigan State won the Quiz Bowl, with Iowa State earning second place. More than 600 people watched and listened as 30 teams competed.



2015 SAF crawfish boil.



2015 SAF Student Quiz Bowl



STUDENT NEWS

COA surveys undergrad satisfaction

Melissa Simon, a senior in RNR, conducted a survey distributed to all undergraduates of the LSU College of Agriculture (COA) to evaluate overall satisfaction with academic development, extracurricular activities, financial support, employment preparation experiences and demographics. The primary objectives of this research project were to identify the key components of a satisfying COA undergraduate experience and to identify opportunities for enhancement of the LSU COA undergraduate experience.



Melissa Simon, co-author of the Undergraduate Experience Survey.

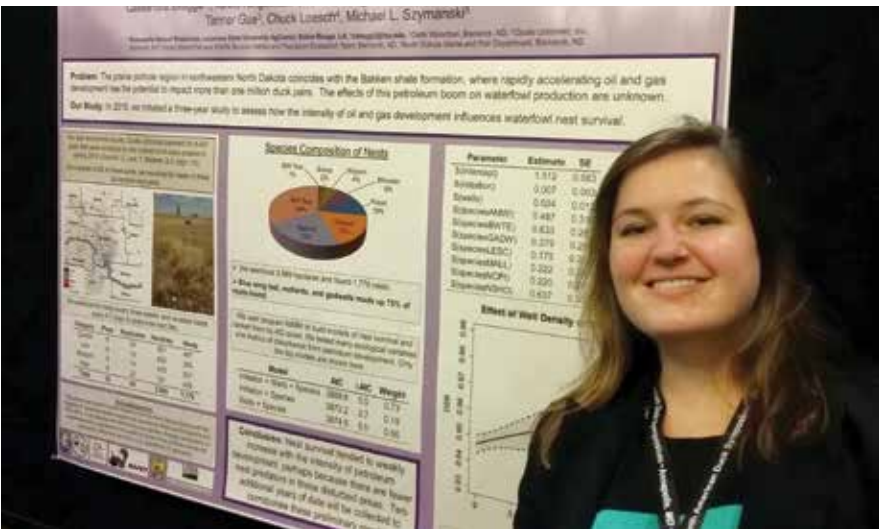
Ms. Simon used a focus group to identify student priorities and test survey questions. The survey was distributed through the dean's office via e-mail to all 1,384 undergraduate students. It received 356 responses, an overall response rate of 26 percent. We achieved good participation across all four undergraduate class levels and from all seven COA undergraduate departments, with a majority of responses coming from Animal Sciences and Renewable Natural Resources, the college's two largest departments. While statistical analyses are still in progress, preliminary results show that 79 percent of undergraduates are "very satisfied" or "satisfied" with the overall quality of personal academic development in the COA. The survey identified gaps in performance versus expectations for opportunities to participate in undergraduate research and field experiences. The project was conducted under the direction of Dr. Luke Laborde.

Duck students migrate north

In February 2016, students in Dr. Kevin Ringelman's lab traveled to Annapolis, Maryland for the 7th North American Duck Symposium, held every three years. Cassandra Skaggs (1st year M.S.) won a student poster award, and fellow student Clay Stroud (1st year M.S.) took the opportunity to discuss his project on Lesser Scaup with other diving duck researchers. Recent RNR graduate Jacqueline Satter made valuable connections with potential graduate school advisers around the country.



From left, Clay Stroud, Cassandra Skaggs, Jacqueline Satter and Dr. Kevin Ringelman at the 7th North American Duck Symposium in Annapolis, Md.



Cassandra Skaggs (1st year M.S.) won a student poster award for her research project in North Dakota examining the effect of the fracking boom on waterfowl nesting ecology.

2015-16 RNR Scholarships

- Pauline Bateman Stanley Scholarship Katie Bowes
- Paul Y. Burns Scholarship Jamie Amato
- Hunter Barrilleaux Memorial Scholarship Colleen Walsh
- Hopkins Memorial Scholarship Rene Saucier
- F. O. Bateman Memorial Scholarship Joseph Danigole
- Mark Dupuy Jr. Wildlife Conservation Scholarship Carver Montgomery
- William A. Knight Forestry Scholarship Ashley Pomes
- William A. Knight Forestry Scholarship Maggie McGreal
- William A. Knight Forestry Scholarship Sarah Hayes
- William A. Knight Forestry Scholarship Alexander Haun
- William A. Knight Forestry Scholarship Jasmine Chavez
- William A. Knight Forestry Scholarship Natalie Welch
- William A. Knight Forestry Scholarship Caroline Sukkar
- William A. Knight Forestry Scholarship Samuel Moore
- William A. Knight Forestry Scholarship Lena Kelly
- William A. Knight Forestry Scholarship Kailyn Avery
- William A. Knight Forestry Scholarship Bailey Jones
- William A. Knight Forestry Scholarship Mayzie Miller
- William A. Knight Forestry Scholarship Elizabeth Patterson
- William A. Knight Forestry Scholarship Asia Quentin
- William A. Knight Forestry Scholarship Olivia Geels
- William A. Knight Forestry Scholarship Sarah Buckley
- Thomas Plein Scholarship Clint Pace
- Billy W. Weaver Scholarship Lesley Twiner
- Lehmann Scholarship-FWF Alumni Association Elizabeth Weltman
- Forestry, Wildlife, and Fisheries Alumni Association Kayla South
- Forestry, Wildlife, and Fisheries Alumni Association Brandon Thibodaux
- Forestry, Wildlife, and Fisheries Alumni Association Madelyn Smith
- Barbara M. Edison Graduate Scholarship Scott Allen & Catherine Murphy
- Ben and Pauline Stanley Excellence Award for Outstanding M.S. Student ElizaBeth L. Clowes
- Clark M. Hoffpauer Scholarship for RNR Graduate Students Jean P. Elbers

College of Agriculture Scholarships

- COA Alumni Scholarship Olivia Geels
- COA Alumni Scholarship Bailey Hutchison
- BASF Scholarship Jazmyn Bernard
- David B. Means Memorial Endowed Scholarship Anna West
- Dean's Council Scholarship Brandon Stafford
- Horace Davis Scholarship Lena Kelly
- Jules P. Bordelon Scholarship Joseph Danigole
- Lee Berwick Scholarship Bailey Jones
- Lee Berwick Scholarship Brandon Thibodaux
- Tiger Athletic Foundation Scholarship Alexander Haun
- Tiger Athletic Foundation Scholarship Madison Sharp
- Louisiana Forestry Foundation Scholarships
- Robert H. Crosby, Jr. Scholarship Hayden Carter
- Joe D. Burns Scholarship Brennon Ibert
- Thomas Hansbrough Scholarship Christian Rossi
- Roy O. Martin Scholarship Eric Boone
- Louisiana Chapter of the Society of American Foresters
- Outstanding Student Christian Rossi

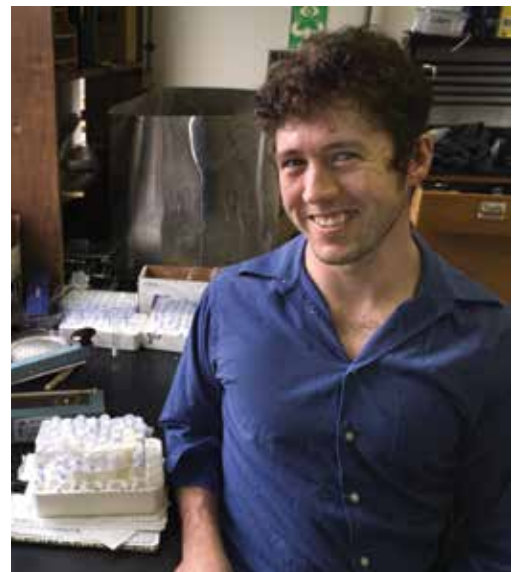
Les Voyageur

Les Voyageurs is a carefully selected group of 16 students from the College of Agriculture who represent the college and LSU in recruitment, alumni and development activities.

RNR's current Les Voyageur: Andrea Howells

Allen wins outstanding paper award

Ph.D. candidate Scott Allen won an Outstanding Student Paper Award at the fall meeting of the American Geophysical Union in San Francisco. The AGU fall meeting is the largest earth and space science meeting in the world, with nearly 24,000 attendees. Outstanding Student Paper awards are earned by fewer than 5 percent of student presenters. Scott's presentation, "Stable Isotopes Indicate Within-Canopy Processes During Interception of Rainfall," was invited by session organizers. Coauthors were Richard Keim (LSU RNR), Holly Barnard (University of Colorado), Renee Brooks (EPA, Corvallis, Oregon) and Jeff McDonnell (University of Saskatchewan).



Scott Allen



Hydrology students present at Ocean Sciences conference

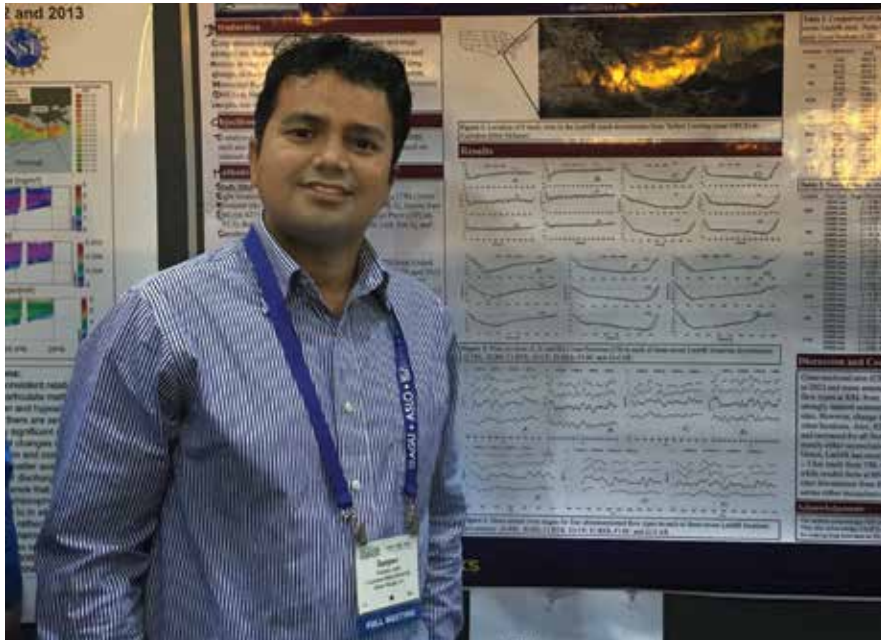
Four RNR graduate students from Dr. Jun Xu's hydrology research group recently presented their studies at the 2016 Ocean Sciences meeting in New Orleans. The meeting is the world's largest conference on coastal and ocean research, jointly organized every two years by the American Geophysical Unions and American Society of Limnology and Oceanography. This year's meeting was attended by more than 5,000 researchers around the world. The presenters and their topics were:

Bo Wang (M.S.) Long-term Sediment Accumulation in Mid-channel Bars of the Upper Reach of the Lower Mississippi River.

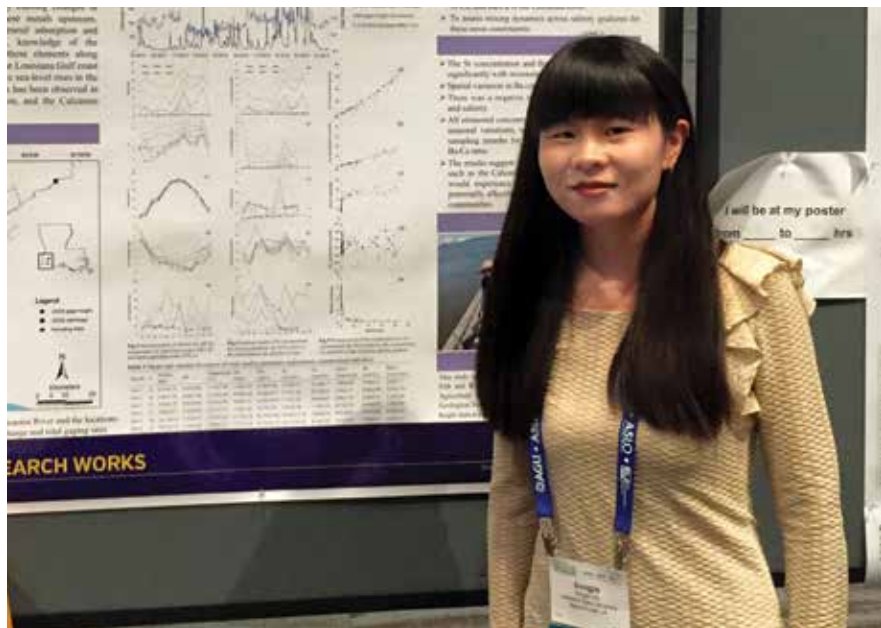
Emily DeDuco (M.S.) – Spatiotemporal Distribution of DOC and DIC in the Atchafalaya River, the Largest Tributary of the Mississippi River.

Sanjeev Joshi (Ph.D.) – Assessment of Long-Term Changes in River Stage of the Lowermost Mississippi River.

Songjie He (Ph.D.) – Dissolved Strontium and Barium in Fresh and Saltwater: a 2-year Study in the Calcasieu River to the Gulf of Mexico.



Sanjeev Joshi



Songjie He

Aquaculture and Fisheries Club

The Aquaculture and Fisheries Club was involved in many different activities in 2015. We held a fishing clinic hosted by an LDWF aquatic educator in which club members helped teach kids about boating/fishing safety, knot tying, how to cast a rod and about different types of fishing lures for different fish species. We even had some fish specimens on hand for the kids to identify and showed them the internal anatomy of one fish. We had our annual spring crawfish boil with the RNR Alumni Association. The end of the spring semester was highlighted by the Louisiana American Fisheries Society conference held in Baton Rouge where the club hosted our annual raffle at the event social.

The fall semester saw the return of the Crab Trap Rodeo in which club members go out and collect derelict crab traps and clean up the coast. We also helped out at the annual Ocean Commotion event held at the PMAC. We had a life-size crab trap for the kids to crawl through along with other fisheries related equipment to show off. Our fall pig roast was replaced this year by a shrimp boil, which was a great success. We also held a pumpkin carving event before Halloween. We capped off the year with a two-day club fishing trip down to Grand Isle where we enjoyed the bounty of the sea. AFC had a great 2015.

Kristin Brzeski completed her Ph.D. with Dr. Sabrina Taylor on inbreeding and mate choice in red wolves. She won a National Science Foundation Postdoctoral Fellowship in Biology, which she is taking up in the Ecology and Evolutionary Biology Department at Princeton University. She will study "Adaptive evolution and the immunological consequence of coyote range expansion." We will miss her here in RNR and wish her the best for the future!

Wildlife Society

The Wildlife Society represents and serves the professional community of scientists, managers, educators, technicians, planners and others who work actively to study, manage and conserve wildlife and its habitats worldwide. The LSU student chapter of TWS aims to extend this mission and promote education through the exploration of Louisiana's resources.

This year, 20 members competed in the Southeastern Wildlife Conclave at Eastern Kentucky University, March 17-20. The conference gave the opportunity for students to test their knowledge and skills in wildlife and fisheries against other schools in the southeast. Students also gained exposure to wildlife resources and the environment, networked with professionals and interacted with other wildlife students across the nation. In addition, they showcased RNR programs with the amazing prospects LSU has to offer.



LSU Wildlife Society members camped last semester in Bogue Chitto State Park. Aly Clark and Melissa Simon enjoyed the scenery while kayaking around the lake.

Xi Sigma Pi

Xi Sigma Pi is a national forestry honor society. All RNR students with an interest in forestry and a minimum 3.0 GPA are eligible for membership. In 2015, five graduate students and two undergraduate students were initiated into Xi Sigma Pi.

The current officers of Chapter Nu of Xi Sigma Pi are Kasie Dugas (Forester), Fan Zhang (Ranger) and Shannon Kidombo (Fiscal Agent). Dr. Quang Cao is the faculty adviser.

Two well-attended Apple Pie seminars were given by professors Blake Hudson of the LSU Law Center (Fall 2015) and Loretta Battaglia of Southern Illinois University Carbondale (Spring 2016).

Congratulations to James Donovan for winning the second place (\$500) Xi Sigma Pi scholarship for the West Central Region in April 2015. LSU has been winning almost half of the awards in the last 15 years in a region that comprises eight universities:

- | | |
|----------------------|---------------------------------|
| 2002: Benjamin Hogue | 2010: Lauren Smith |
| 2004: Angela Secott | 2014: Kasie Dugas |
| 2006: Matthew Reed | 2015: James Donovan (2nd place) |
| 2009: Ian Stone | |



David Bernasconi (B.S. NREM Wildlife Ecology '14)

"Since graduating I've done my best to stay as busy as possible. In the summer field season of 2014 I worked for several months as part of an ornithological research project in the cloud rainforests of Borneo with LSU's Museum of Natural Sciences. The goal of the project was to survey mountain avifauna diversity and diet across multiple elevations. For the most part I collected data in the form of mist netting and audio recordings, but I was also in charge of purchasing supplies, hiring local workers and planning excursions. To reach field sites we would often take 8- to 12-hour hikes on mountain trails and build temporary campsites in the jungle. Despite a wheezy start, I was proud to say that I ended up leading a few of the excursions by the end of the season. Later that fall, I worked as a volunteer field technician at Cardiff University's Danau Girang Field Center in northern Borneo. I had a blast helping the graduate students and staff with their ongoing projects. Some of the more memorable projects included tracking and trapping clouded leopards, surveying troupes of proboscis monkeys and helping to catch tarsiers in the middle of the night.

In January of 2015 I worked for six months as an eagle technician for the North Carolina Wildlife Resources Commission to monitor the activity of every known bald eagle nest on North Carolina's Coastal Plain. It was an exhilarating race to reach every nest before the end of the nesting season. Although I spent most of my time with my boots on the ground, I got to do some surveys from small aircrafts and kayaks. On occasion, I also had to interact and calm down heavily armed property owners who were afraid that having an eagle nest on their property meant the Feds were coming to get them.

Currently I'm living in Atlanta where I've taken some time to apply to graduate programs and have fun hiking around north Georgia with my girlfriend and new pup, Gus. However, with the spring and summer field seasons gearing up I am once again on lookout seasonal work opportunities."



David Bernasconi

Joe Bischoff (B.S. Forest Resources Management and a minor in Wildlife Ecology, '11)

In 2012, I started my career as a forester with RoyOMartin®. My primary responsibility involves the management of approximately 140,000 acres of company-owned bottomland hardwood forests, which includes facilitating and monitoring timber harvest operations, land and timber sales and acquisitions, cruising and marking timber, boundary line maintenance, etc. I really like my work! My wife, Kelli, and I are both from Eunice, La., where we currently reside. I still enjoy the same good things, spending time with family and friends, hunting, fishing, music and, of course, LSU sports...Geaux Tigers!

Leah Delahoussaye (B.S. NREM Conservation Biology '15)

"I'm now living in Avon Park, Fla. working at the Archbold Biological Station. I'm a seasonal research assistant working mainly with the red-cockaded woodpecker population on the Avon Park Air Force Range. That's all that is new with me! I hope everyone in Baton Rouge is doing well!"

Brian Garand (B.S. NREM '15)

"I moved to Washington, D.C. in August after graduating in May 2015 to intern with Senator Bill Cassidy (R-LA) on Capitol Hill. I interned with Senator Cassidy during the fall and was recently promoted to Staff Assistant in his Washington, D.C. office. I assist Senator Cassidy and his staff with a number of projects, but focus on his work with the Senate Energy and Natural Resources Committee. I hope to continue working with Senator Cassidy on his energy and natural resources committee work and to further my knowledge of natural resources on both the state and national scale."

John Gross (B.S. NREM '11)

"I received my B.S. in Natural Resource Ecology and Management with a minor in Forestry from LSU in December, 2011. Immediately upon graduation I started working on my M.S. degree under Dr. Mike Chamberlain (Formerly with LSU RNR) with the University of Georgia and the Louisiana Department of Wildlife and Fisheries. I currently work for Providence Engineering and Environmental in Austin, Texas as an Environmental Consultant for a range of clients, including major oil and gas companies and local governments. Attending the LSU school of RNR helped me establish a strong network of like-minded professionals and provided me the skills and knowledge to succeed in the diverse field of Environmental Consulting."

Brett A. Miller (M.S Fisheries & Aquaculture '13)

Brett is finishing his final semester at Texas A&M University School of Law in Fort Worth, Texas, where he serves as an articles editor on the Texas A&M Law Review. He received a 2015-16 ConocoPhillips Fellowship with the Texas A&M Energy Institute, where his research focuses on the intersection of energy, water and environmental law, as well as capital markets and corporate law. Brett also won the Hartrick Scholar Writing Competition, an award given by the Institute for Energy Law, for an article discussing the regulatory implications associated with renewable energy's dependence on nonrenewable copper (implications that also affect salmon, so it all comes back around to RNR). He has also published articles in the

U.C.L.A. Journal of Environmental Law & Policy and the University of Denver Water Law Review.

With valuable help and guidance from Dr. Mike Kaller and Dr. Bill Kelso, and after surviving the peer-review process, they published a sunfish research article in the Transactions of the American Fisheries Society. After interning at a nonprofit environmental NGO in Austin during his first summer, Brett then interned with XTO Energy, a Subsidiary of ExxonMobil headquartered in downtown Fort Worth. For the past year, Brett has worked at TPG Global, LLC, where he negotiates with financial institutions and assists with day-to-day entity management for the private equity investment firm.

Brett and his golden retriever, Rio, enjoy shooting lots of ducks, as well as catching the occasional sunfish and bass on the fly rod. They are also excited to cheer for the Bayou Bengals in their annual gridiron beat down of the Aggies. If any current RNR students would like to know more about navigating the law school realm with a science background, feel free to contact him and he will be happy to answer any questions (512-818-1329; brettmiller@tamu.edu).

Jocelyn Miller (B.S. NREM '14)

"Right after graduating, I enrolled in the Homes Program and earned a MAT degree. I am now teaching 7th grade Life Sciences at Woodlawn Middle School in East Baton Rouge Parish. I love it because I never knew where my limits were. Now I definitely do!"

Christina Perez (B.S. NREM '10; M.S. Forest Resources, University of Georgia '13).

"Having a real job lets me do cool stuff. I just got back from fishing in New Zealand! Since RNR, I earned my Master's degree studying female wild turkey ecology in longleaf pine habitat in Southwestern Georgia. I'm now working at CK Associates in Baton Rouge as an environmental consultant conducting wetland delineations, threatened and endangered species surveys, oil spill response, litigation support and mitigation assessments throughout the country."



Christina Perez

Courtney (Staudermann) Tolbert (B.S.NREM '11)

"Since graduation I am now married with 1½ year old twins! I work at CK Associates in the Aquatic Toxicology Laboratory as a laboratory technician. We determine the aggregate effects of all toxicants in an effluent on the receiving stream. Life is good!"



ALUMNI NEWS

Kale Wetekamm (B.S. NREM '12)

"I attended the University of Georgia, earning an M.S. in Forest Resources in 2014. My thesis investigated the influence of wintering habitat conditions on mallard recruitment in the Mississippi Alluvial Valley. After graduating, I was hired at CK Associates in Baton Rouge as an environmental consultant. My work specializes in wetland delineations, permitting, threatened and endangered species, oil spill response and recovery monitoring."



Kale Wetekamm

IN MEMORIAM

John Barry Crain (B.S.F. '68, M.S. Game Management '70) a resident of Deville, La. passed away on May 27, 2015. Barry, 69, was a native and former resident of Franklinton where he graduated from Franklinton High School in 1964. He worked for more than 40 years in wildlife and forestry management in various locations including South Carolina, Alabama and later in central Louisiana. Barry's favorite pastimes were hunting, fishing, playing golf and watching and listening to LSU sports. He also enjoyed spending time with his family and visiting with his many friends. Barry will be sadly missed by all those that knew him.

Reed Huckabay (B.S.F. '98) died April 2015 after a courageous battle with Lou Gehrig's disease. Reed was known for his passion for forestry and the outdoors. He grew up on a farm in Armistead developing a work ethic that served him well in his career. He formed many lasting relationships with those in the timber industry and became an expert on oil and gas exploration in the area. Reed was a forester for RoyOMartin®, working in the Campti district for more than 15 years. He was 41 years old when he passed away.



Reed Huckabay

A new forestry scholarship in honor of Reed has been endowed to the Louisiana Forestry Foundation by friends, family and colleagues. Applications for the scholarship will be available to students majoring in forestry at either Louisiana State University or Louisiana Tech University through those departments on campus. The application period begins in spring 2016 for the following fall semester.

Wendell Joseph Lorio (M.S. Fisheries '64)

Dr. Wendell Lorio, Extension professor, passed away on Friday, November 6, 2015 at the age of 75. Dr. Lorio ran the Salvinia Weevil Project at the Bob R. Jones-Idlewild Research Station since June 1, 2011. Dr. Lorio previously worked as a specialist for the AgCenter from February 1991 through June 1995. He is survived by his wife Juanita Bozeman Lorio of 51 years. Wendell will be greatly missed by all who had the pleasure of knowing him.

Lewis Carroll Peters (B.S. Forestry '50)



Lewis Peters

passed away on February 22, 2016. Born in Baton Rouge in 1929, he graduated from Baton Rouge High School, earned a B.S. degree in Forestry from LSU in 1950 and an M.S. in Forestry in 1951 from Yale University. Lewis was commissioned as a 2nd lieutenant in the U.S. Air Force in 1950, and in 1952, during the Korean conflict, was called to active duty. He remained on active duty until August 1954 and served in the Air Force Reserve until 1958 with an honorable discharge as a captain. He was a retired forester, spending most of his career as a consulting

forester and a co-owner of the forestry consulting firm Bennett & Peters, Inc. until 1997. After retirement, he worked part-time with his son Warren at Peters Forest Resources Inc. He was very much loved and admired by all of his family, friends and nearly everyone he came to know. A true southern gentleman, he never met a soul that he could not find something in common with and treated everyone he encountered with the same respect and courtesy as the next.

Lauren Smith (B.S. NREM '14)

passed away as a result of a serious car accident which caused massive internal injuries. She was beautiful, smart, creative and athletic. She made many friends everywhere she went. She lived life to the fullest in her short time with us and enjoyed many different activities but loved her family, her boyfriend, John, friends, Ultimate Frisbee, painting, nature and animals – her dog, Roux, and cat, Rocket, the most. Lauren was a member of the Sigma Phi Lambda Christian Sorority; the LSU Mixed and Women's Ultimate team of which she was a charter member and co-captain and treasurer for two years; and an intern at Lake Ray Roberts State Park during the summer of 2011. Lauren graduated from LSU in May 2014 with a bachelor's in Renewable Natural Resources with an emphasis on Wildlife Biology. On Oct 1, 2014, she became an operations park ranger in training at Lake Ray Roberts State Park. She worked part-time at the Denton Chipotle, which had always been her favorite restaurant. Below is a recent posting from an RNR Facebook page.



Lauren Smith

I think we can all agree that Lauren was a girl who lived life to its fullest. She had a compassion for the environment and devoted her life to its preservation. When reminiscing, one of our fondest memories of Lauren is the time she started to tell us about her tattoo. She was so excited to get the beautiful wildflowers of Texas on her arm. Like the flowers, her beauty and love of life shined daily.

As her RNR family, we lived, laughed and learned alongside her. To honor her memory we would like to donate to the Lady Bird Johnson Wildflower Center, which, like Lauren, is "dedicated to creating a more sustainable earth." If you would like to donate in her memory along with many RNR 2014 graduates, please email kdugas9@lsu.edu for more information.

James "Alan" Vaughn (B.S. '75, M.S. Wildlife '77)

passed away on May 31, 2015. Alan retired on May 1, 2015 from his position as a county agent for Plaquemines Parish. He graduated from LSU with a B.S. in forestry in 1975 and an M.S. in Wildlife Biology in 1977. Alan dedicated 37 years of his life to the AgCenter starting in August 1978 as an assistant county agent for Jefferson Parish. In addition to his horticultural work, Alan worked with the 4-H and adult services programs and served as parish chair of Plaquemine Parish over the years. He co-authored many papers on the control of invasive insect populations in southeast Louisiana. A memorial service was held on June 4, 2015 in Pasadena, Texas.

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School of Renewable Natural Resources
Louisiana State University Agricultural Center
110 LSU Union Square
Baton Rouge, LA 70803

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School of Renewable Natural Resources

With student enrollment over 300, the School of Renewable Natural Resources is now the second largest department in the LSU College of Agriculture! We need alumni and donors more than ever to help maintain high academic and professional standards, and to prepare our graduates with real work experiences.

You can help. We need guest speakers, field trip and research sites, internship opportunities, and jobs for our students. We also need your financial support, large or small, to support scholarships for our students. This support is particularly important in light of tuition increases resulting from dramatic cuts in state funding for higher education. Endowed chairs and fellowships help us recruit and retain faculty to accommodate increased enrollment and expand our course and research offerings.

2016 Facility Renovation Initiative: The School of Renewable Natural Resources building was constructed in 1985 and is largely unmodified since. We will kick-off a campaign to fund renovation and expansion of our facilities. We have just completed renovation on one classroom. We hope to include two more classrooms in the near future!

Join: The Forestry, Wildlife and Fisheries Alumni Association and the College of Agriculture Alumni Association. Information on both organizations are available on our website, www.rnr.lsu.edu.

Prospective students: The LSU School of Renewable Natural Resources offers a bachelor's degree in natural resource ecology and management with nine areas of concentration:

Conservation biology
Fisheries and aquaculture
Wildlife habitat conservation
and management
Wetland science

Wildlife ecology
Pre-Vet wildlife/wildlife and fisheries
Ecological restoration
Forest management
Forest enterprise

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Interested in being part of the School of Renewable Natural Resources? visit our website:
www.rnr.lsu.edu/academics/welcome.htm

