

Southern University
Agricultural Research and Extension Center
Chancellor's report

Bobby R. Phills

Presented to:
BOARD OF SUPERVISORS
Southern University and A&M System



Linking Citizens of Louisiana with Opportunities for Success

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SU Ag Center holds highly successful Pet Wellness Clinic following Historic Flood

More than 300 cats and dogs received free physical exams, as well as, annual and rabies vaccines during the Southern University Ag Center's Free Disaster Relief Wellness Clinic for Dogs and Cats on Sept. 12.

While the majority of the initial relief from the August flood was focused on providing the basic necessities to human flood victims, many of our four legged family members also suffered from the after effects of the disaster.

“When an unfortunate event occurs, such as a disaster, there is an abundance of emotional and physical stress to all involved including animals,” said Renita Marshall, DVM, and associate professor at the SU Ag Center.

Marshall and Tyra Davis Brown, both DVM, an SU Alumnus and Veterinarian, came up with the idea to provide a wellness clinic for pets to fill an often over looked need within the Baton Rouge community and surrounding areas.

“As a veterinarian, you take an oath to use scientific knowledge and skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge. That is exactly what Dr. Brown and I

set out to do with the disaster wellness clinic,” added Marshall.

In addition to the vaccinations and exams, the animals were also provided with heartworm, flea and tick prevention medication, as well as nail-clipping and food samples. Nearly 200 of the animals also received a free microchip implant that will assist owners in locating their pets if they are lost or separated from them during another natural disaster.

Event partaker David Bailey, who brought his dog Achilles, expressed appreciation for the clinic stating that he first heard about it on the news and followed up with a visit to the SU Ag Center website for full details. Another beneficiary from the event was Charles Herndon who reported that the flood had impacted their finances and he was happy to get assistance for his four dogs, which he has rescued over the years.



David Bailey said he heard about the Disaster Relief Wellness Clinic for Dogs and Cats on TV and brought his dog Achilles to the event to be vaccinated and implanted with microchip



SU animal science student Jennifer Brown vaccinates a dog while professor Gary Simon and research scientist Janana Snowden, hold the animal during the SU Ag Center's pet Wellness Clinic

“The SU Ag Center, being a pillar in many communities around Baton Rouge and the surrounding areas, is poised to strategically implement programs and events to assist where and when it is needed the most,” said Marshall.

SU Baton Rouge campus professor Gary Simon, DVM, several animal science students from Southern University's College of Agriculture and several SU Ag Center staff members assisted in the event. Read more on our [blogpost](#).

Photos from the event are available [here](#).

Nearly 300 Students attend SU Ag Center's 4-H National Youth Science Day

Two hundred and ninety-three students from Southern University Laboratory, Scotlandville Pre-Engineering Academy, Park Ridge, J. K. Haynes, Progress and Ryan Elementary, Tallulah Charter, Kentwood High Magnet and St. Helena College & Career Academy schools attended the Southern University Ag Center's 2016 4-H National Youth Science Day (4-H NYSD).

The national event was held in the Cotillion Ballroom of the Smith-Brown Memorial Student Union on Wednesday, Oct. 5 on the Southern University Baton Rouge campus.

This year's experiment, called Drone Discovery, consisted of a hands-on, three part engineering design challenge which allowed students to experiment with fixed and rotary wing designs, explore the concept of remote sensing and dive into the world of coding for real-world drone applications.

The event featured a drone demonstration by Garrett Edgerson, a choral performance by the Scotlandville Pre-Engineering Magnet Academy Choir and several interactive display stations on 4-H, Tobacco Free Living, Community Policing, Biofuel, the United States Department of Agriculture, Apparel Merchandising and Textiles, Animal Science, Healthy Living, Erosion and Gardening.



A drone hovers over the crowd during the SU Ag Center's 4-H National Youth Science Day

Comedian and Max 94.1 FM radio personality, Howard Hall served as host of the event. Southern University Ag Center Chancellor-Dean, Bobby R. Phills; East Baton Rouge Parish School System Deputy Superintendent, Michelle Clayton, and Gulf State Regional Director for the National Center for Appropriate Technology (NCAT), Rockiell Woods spoke to the students on the importance of science, technology, engineering and mathematics (STEM) and pursuing a college education.

4-H NYSD is the world's largest youth-led science experiment, drawing nearly 100,000 participants in 2015. The national day is dedicated to engaging youth with science through a hands-on, interactive learning experience that gets youth excited about STEM.

The 2016 activity was designed by Cornell University Cooperative Extension. The event's national partners are HughesNet®, Lockheed Martin and U.S. Cellular. DJI, the world's largest maker of consumer drones, is the national sponsor.

For additional information about the Southern University Ag Center's 4-H National Youth Science Day or 4-H activities, contact Tiffany W. Franklin, Ph.D., at 225.771.2242.

Read more on this [here](#). Photos from the 2016 4-H National Youth Science Day are available [here](#).

Mentoring College Students is Premier on the new Land-Grant Campus

Southern University Ag Center and College of Agriculture faculty and staff are aligned with the land-grant mission, consistent with the university's tripartite mission of teaching, research, and public service. Faculty and staff are committed to recruiting, teaching and mentoring students in the agricultural and food sciences. The academic arm of the new Land-Grant Campus prepares students for professional careers in food, fiber, natural resources, family and consumer sciences, and agricultural sciences using innovative strategies, state-of-the-art technologies, and



Dr. Janana Snowden, left, and Dr. Christopher Chappell, team up and mentor Urban Forestry senior student Khadijah Neal, right, as she plans for her future

current information. The overarching mission of the Land-Grant Campus is to improve the well-being of individuals, families, and communities through quality teaching and research; scholarly activity that is relevant to the needs of the state's citizenry; and pre-eminent outreach techniques locally, nationally, and globally. The Land-Grant Campus encompasses the Southern University Ag Center and College of Agriculture at Southern University and A&M College.

SU Ag Center staff lends a helping hand in response to historic flood

On August 13, prolonged rainfall in the southern region of Louisiana resulted in catastrophic flooding that submerged thousands of homes and businesses. According to the Baton Rouge Area Chamber of Commerce, roughly 110,000 (31%) homes in East Baton Rouge (EBR) Parish were affected.

SU Ag Center's Families First – Nutrition Education and Wellness System (FF-NEWS) Nutrition Educators Marquette Anderson and Kiyana Kelly, along with Family and Human Development Parent Educator, Jasmine Thomas, went out into the community to assist at local social services sites where they regularly provide educational programming.

On Thursday, August 25, the SU Ag Center staff distributed supplies to over

300 EBR residents at the Martin Luther King, Jr. Community Center. The Convoy of Care from Atlanta, Ga. sent six tractor trailers of supplies to assist the residents affected. The convoy was organized by the National Organization of Black Law Enforcement Executives (N.O.B.L.E). Additionally, on August 26, SU Ag Center staff volunteered at the Jewel J. Newman Community Center and distributed supplies to residents in need.



Nutrition Educator Kiyana Kelly, right, distributes toys and clothing to East Baton Rouge Parish residents at the Martin Luther King, Jr. Community Center



EBR Extension Office Chair Marquette Anderson, left, distributes supplies and clothing to flood victims

Anderson, who is also the Chair of the East Baton Rouge Parish Extension Office, stated "It is important that the EBR community knows that the SU Ag Center's staff is here to serve during this devastating time. Both SU and LSU Ag Centers are committed to assisting our clientele through programmatic efforts." For more, visit us [here](#).

Researcher Snowden receives International Fellowship Award

Dr. Janana Snowden, Research Scientist at the Southern University Ag Center, was a 2016 recipient of the Carl Storm Underrepresented Minority (CSURM)

Fellowship award; making her the only African American selected from 188 participants, internationally.

The award allowed Snowden to attend and present in the annual Gordon Research Conference for Natural Products and Bioactive Compounds. The conference, which focused on exploring the therapeutic potential of natural products and biologically active compounds through emerging chemical and biological technologies, was held July 31- August 5, 2016 at Proctor Academy in Andover, New Hampshire.



Snowden presented on the, “Antimicrobial Efficacy of Roselle Hibiscus Extracts against Escherichia coli.” Roselle (*Hibiscus Sabdariffa L.*) is a niche market crop that has been studied for over a decade at the Southern University Ag Center.

Her research focuses on the medicinal benefits of natural compounds found in plants/crops and their potential to treat various diseases and disorders such as cancer and high blood pressure.

The article was featured in the Sept. 13 *Daily Agri-News Report*. Visit our blog [here](#) to read more.

For more information, contact Dr. Janana Snowden at 225-771-2242 or visit www.suagcenter.com.

Urban Forestry Campus Tree Pruning Techniques Demonstrated to Students

The Southern University Urban Forestry and Natural Resources Department conducted a tree pruning demonstration in collaboration with the LSU Licensed Arborists. SU graduate Kevin Drye, who is now a professional licensed Arborist and Urban Forester, provided up-to-date scientific information about pruning and Arboricultural requirements.

Urban forestry students observed the pruning demonstration to prepare for a two-day hands-on practice scheduled for October.

The Urban Forestry Department faculty and Dr. Fred Fellner, a graduate of SU Urban Forestry and the current Assistant



Tree pruning demonstration in progress



Director of landscape at LSU, coordinated the collaborative effort.

According to the International Society of Arboriculture, "The main reasons for pruning urban trees include safety, health, and aesthetics."

Pruning for *safety* involves removing branches that could fall and cause injury or property damage, trimming branches that interfere with lines of sight on streets or driveways, and removing branches that grow into utility lines. Safety pruning can be largely avoided by carefully choosing species that will not grow beyond the space available to them, and have strength and form characteristics that are suited to the site.

Pruning for *health*, involves removing diseased or insect-infested wood, thinning the crown to increase airflow and reduce some pest problems, and removing crossing and rubbing branches. Pruning can best be used to encourage trees to develop a strong structure and reduce the likelihood of damage during severe weather. Removing broken or damaged limbs encourages wound closure.

Pruning for *aesthetics* involves enhancing the natural form and character of trees or stimulating

flower production. Pruning for form can be especially important for open-grown trees that do very little self-pruning.

For additional information about the SU Urban Forestry and Natural Resources Degree Programs, please contact Dr. Kamran Abdollahi, Department Head at [225-324-8206](tel:225-324-8206), [225-771-3535](tel:225-771-3535) or via the following web sites: www.urbanforestry.subr.edu and www.suagcenter.com

Youth learn about agriculture, livestock animals at Iberville Elementary

On October 6, Dr. Harold Mellieon, Director of Livestock Programs and Assistant Specialist, along with two students from the College of Agriculture, Asia Rubin and Malik Allen, went to visit students at Iberville Elementary in Plaquemine, La. The trio met with more than 100 Pre-K through 6th grade students and shared information on agricultural sciences, while giving them an up close and personal look at livestock animals via a mobile petting zoo. The agricultural

students showed the youth proper handling techniques of animals, and gave them an opportunity to interact with young people pursuing degrees in agriculture. The elementary school students had their questions answered while also being able to touch animals they had only seen on television and read about in books. This exposure of Southern University and the field of agricultural sciences is a strategy to plants seeds in the minds of the youth as they think about the future.



Asia Rubin shows students the proper handling of chicks



L-r: Malik Allen, Dr. Mellieon, and Asia Rubin interact with students petting animals during their visit

SU Ag Center Provides Summer Internship for college students

The Southern University Agricultural Research and Extension Center internship offered undergraduate students an opportunity to explore career opportunities in Cooperative Extension and Outreach. The internship program focus areas were guided by agents and specialists in the following fields: nutrition, youth development, agriculture and natural resources, family and consumer sciences, and community development.

The Center provided a 10-week paid internship from June to August in parishes around the state of Louisiana. Experiential learning is the key component of the internship to allow students to get first-hand experience in the daily workload of extension professionals. It also allows interns to experience helping to better the rural and urban community as well as their professional development.

For the cohort of summer 2016, four students were selected to work across the state in select parishes: Brandi Suel-Ag Economics (East Baton Rouge), Sharnet Nixon-Family and Consumer Science (Lake Charles), Yo'Sha Lain-Family and Consumer Science (Madison), Chelsea Hammond-Youth Development (Orleans). These interns, with the guidance of Dr. Harold Mellieon, Jr., worked with agents and specialists during the past summer while assisting and observing all of the tasks, projects, and activities conducted to bring knowledge and understanding to others.

While their areas were somewhat diverse, they shared a variety of experiences including: program development, program research, attending and conducting meetings, communicating with

stakeholders, and implementation of new programs. The cohort submitted weekly and monthly reports focused on daily activities, weekly challenges and successes, and overall views of the workplace.

From June to August the four interns made great strides in their positions across the state. Each intern worked on a project that not only increased their knowledge but took them out of their comfort zones and made them think outside the box. All the interns indicated that they were more knowledgeable about extension, and many of them became more confident in public speaking to diverse crowds.

“Throughout various communications with the interns during the summer, they all seemed to have memorable experiences that they can lean on as they continue their college careers,” said Dr. Mellieon.

The Southern University
Agricultural Research and

Extension Center summer internship can be viewed as a successful venture that has great potential for growth. This opportunity will allow undergraduates to get experience in the field of extension while also enhancing and expanding the pool of future capable applicants for positions in the agriculture and food industry.

“The success of the 2016 cohort suggests the program must continue to impact the lives and mindsets of young adults as they become productive members of society and the agricultural community,” Mellieon concluded.



L-r: Ms. Gloria London, Intern Brandi Suel, and Mr. Eual Hall



Intern Chelsea Hammond, standing left, hosts a meeting along side Ms. Krystal Stewart

Climate Change and Urban Forest Ecosystem Research and Education on a Global Platform

The Urban Forestry and Natural Resources program at the SU Ag Center has been conducting two projects on climate change, urban forest ecosystem research and education on a global platform. The projects are funded by the National Science Foundation's International Research Experiences for Students (NSF IRES) and USDA's International Science and Education (ISE).

The projects which are directed by Dr. Zhu Ning, Professor and Project Director, have a collaborative partnership with Chinese Academy of Sciences (CAS). The projects' research focus reflects on the U.S./China team's complementary strengths and mutual interests in the areas of Impacts of climate change on natural resources, urban ecosystem responses, and coping strategies; Climate change mitigation through urban forestry, and GIS and remote sensing technology. The project team members have been working on four research topics: Modeling Approach on Interactions among Global Warming-Urbanization-Ecosystem Dynamics; Combined Effects of Elevated CO₂ and Elevated O₃ on Urban Forests; Carbon Storage and Sequestration by Urban Forests -The Role of Urban Forests in Mitigating the Impacts of Climate Change; and Urban Soil Carbon Dynamics.

The projects respond to the nation's international science and education goals and demands by providing opportunities for student training and professional development through: Study in China pre-departure research, cultural, and workplace protocol training; On-site in China research involvement; and Post China trip research and result dissemination training. From 2011 to 2016, the

projects have provided 36 students with excellent study abroad opportunities at the following institutions: CAS Institute of Applied Ecology, CAS Northeast Research Institute of Geography and Agro-Ecology, CAS China Forest Biodiversity Monitoring Network, Beijing Forestry University, Northwest Agriculture and Forestry University, and Shenyang Academy of Landscaping and Urban Forestry.



The projects have achieved high quality products, including 22 publications and 23 presentations. Through experiential learning and research participation, students have acquired the fundamental methodologies and hands-on experiences of executing a research agenda; and learned technologies in terrestrial ecosystems responses, climate change mitigation, and natural resource conservation. The broader impacts include: Enhanced student international experience and research skills that translate into application of learned knowledge and skills in their career; Ensured that students work beyond the United States and bring lessons learned back home to their peers, stakeholders, and companies in hope of enhancing their competitiveness in the global market; Strengthened international research partnerships and professional networks; Enhanced application of foreign technologies in the United States; and Strengthened the role that SU plays in enhancing the research competitiveness and workplace preparedness of the students from underrepresented groups.

For more information, contact Dr. Zhu H. Ning at zhu_ning@subr.edu.

URBAN FORESTRY AND NATURAL RESOURCES DEPARTMENT RECEIVES \$200,000 GRANT FROM THE US FOREST SERVICE

The SU Urban Forestry and Natural Resources Department has received grant funding worth \$200,000 from the US Forest Service to conduct regional workshops on sustaining healthy southern forest ecosystem in changing climate.

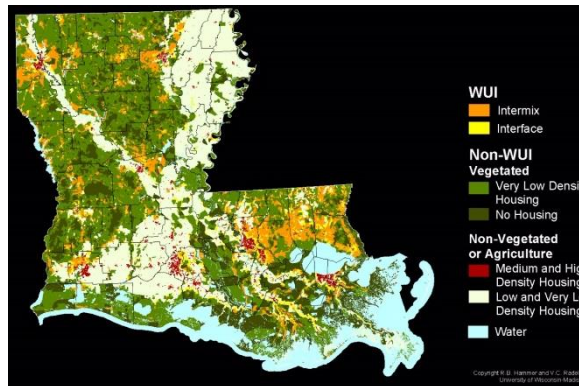
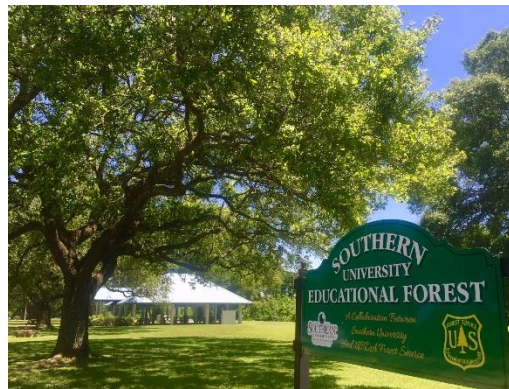
The Wildland-Urban Interface (WUI) - the area where urban lands meet and interact with rural lands impacted by climate change presents many challenges and concerns for natural resource managers as well as its residents. Sustaining forests in this rapidly changing landscape is one of the main and most complex challenges, involving an array of issues ranging from managing growth to managing - forest health under stress by climate change impact.

Natural resource professionals are directly involved with land conservation and management, and with additional knowledge, skills, and tools they can also be active players and leaders in policy-making, land-use planning, and developing partnerships with varied stakeholders in order to more effectively sustain our forests.

The main purpose of the Workshop and Training Series by Southern University Urban Forestry and Natural Resources Department (SUFOR) in partnership with the USDA-Forest Service is to provide current information and tools to enhance natural resource management, planning, and policy-

making at the WUI impacted by climate change in the Southern United States.

The workshop participation will be student-focused to include invitations across 1890 HBCU institutions.



The workshops will be enhanced through the utilization of the existing SU Educational Forest and SU Educational Forest Curriculum, field trips to the LSU Fire Education & Training Labs in

Partnerships will include FS Fire Professionals who are on the National Fire Diversity Team to incorporate training, demonstrations and career development priorities. In addition, FS National Forests Fire professionals, USDA-FS, 1890 Land Grant institutions (Alcorn State, FAMU, Alabama A&M, Tuskegee, etc.), LA Department of Agriculture & Forestry (LAD&F), SU and LSU Ag Centers, Gulf Coast Ecosystem Studies Unit (GC-CESU), LA Department of Natural Resources, LA.

For additional information, please contact Dr. Kamran Abdollahi, Department Head, Urban Forestry and Natural Resources at 225-324-8206 or 225-772-3535 or Email:

Kamran_abdollahi@suagcenter.com or kamrana664@cs.com

Nutrition Education goes to local farmers market in Tallulah

Sarah Sims, Extension Aide, Family and Consumer Science in Madison Parish, holds gardening workshops at the farmers' market every Saturday to bring awareness to the importance of gardening for healthy eating and exercise. Mrs. Sims provides educational information and demonstration at the market, coordinates and assists the growers with marketing their produce. Currently, there are 10 participants who sell vegetables, jelly, jams, canned vegetables/fruits,



Ms. Sims sets up for workshop at farmers' market

cakes, pies, cookies, arts and crafts, and jewelry. Since the season opened, participation has increased with the vendors doing very well and community support is improving. Seniors with produce vouchers from the Senior Nutrition Program have been using their vouchers to purchase fresh produce. The market is located at 404 North Cedar Street, Tallulah, La. This season will continue through November 2016.

For more information, contact Sarah Sims at (318) 574-2465.

Publication:



Dr. Fatemeh Malekian, professor, Nutrition and Food Science has co-authored an article in the *Journal of Human Hypertension*.

In the current issue of the *Journal of Human Hypertension* 30, 627–632 (1 October 2016)
|doi:10.1038/jhh.2016.34,

Malekian et al published an article on using red beet juice to treat hypertension. The article was published online in the June issue of the journal.

S Asgary; M R Afshani; A Sahebkar; M Keshvari; M Taheri; E Jahanian; M Rafieian-Kopaei; **F. Malekian**; and N Sarrafzadegan.

Hypertension is a major risk factor for cardiovascular disease and is prevalent among approximately one billion people worldwide.

It has been shown that adherence to a diet rich in fruits and vegetables helps in decreasing blood pressure (BP).

The article entitled, “Improvement of hypertension, endothelial function and systemic inflammation following short-term supplementation with red beet (*Beta vulgaris* L.) juice: a randomized crossover pilot study” compared the effectiveness of raw beet juice with cooked beet juice for four weeks using 24 hypertensive subjects aged 25-68 years old. The result showed raw beet juice to be more effective than cooked beet juice in treating hypertension.

The full abstract is available online at <http://www.nature.com/jhh/journal/v30/n10/pubmed/jhh201634a.html>

UPCOMING EVENT:

Nov. 4: 10th Annual “Pink Party With a Purpose...Pink Bike Ride” to be held at the Southern University Field House from 4:30 p.m.-9 p.m. for additional information, contact Nicolett e Gordon at 225-222-4136.

Nov. 8: The USDA-Office of Advocacy and Outreach will host its next Quarterly Partners Teleconference at **1:00 pm** to honor Veterans and share USDA resources available to potential and existing veteran farmers and ranchers, beginning farmers, and minority farmers and ranchers. Send any questions or comments you may have to kenya.Nicholas@osec.usda.gov. You will also have an opportunity to ask questions and communicate directly with USDA personnel. To participate, please use the following call-in instructions:
Telephone: (800) 857-5150
Access Code: 2919376