Louisiana Conservation Update

Everything Old is New Again, Bringing Back the Cajun Prairie

Projects • Successes • Partnerships
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Learn more about how Vernon and Justin Fuselier are improving soil health and reducing inputs for their cattle by restoring a piece of the Cajun Prairie using native plants on pages 4 and 5.
Notes from the State Conservationist

Here we are in the dog days of summer! It is hard to believe we are wrapping up the month of June and now we’re headed into July. As a reminder, our USDA field offices are now open for customers to visit only by appointment. As always, our employees and staff are here to help and work with you.

This month’s Conservation Update highlights the innovative work taking place in soil health and the importance of family, especially honoring the fathers and father figures in our lives.

The feature story this month focuses on the dynamic father and son duo of Vernon and Justin Fuselier. Located in Eunice, the Fuseliers have restored a 30-acre tract of land, known as the Cajun Prairie. This unique ecosystem is not only building soil health it also reduces inputs, like providing standing forage for their cattle in the winter. I would say that’s a win-win! If you are interested in learning more about soil health on your land, don’t hesitate to reach out to one of our 44 offices located across the state.

Also highlighted is the important work of rangeland management specialists and soil scientists across our state. Guest columnist, and Assistant State Soil Scientist, Mitchell Mouton, describes the National Resources Inventory (NRI) and why it’s important to Louisiana landowners. NRI originated from the devastating days of the Dust Bowl in the 1930s. The data collected from NRI provides a wealth of information that assists NRCS soil scientists and field staff working with you, our customers, and producers.

Finally, we spotlight a father and daughter team who happen to both work in leadership positions in Louisiana. Anthony and Andrea Bridgewater (both District Conservationists) are known for their dedication to NRCS and their commitment to provide excellent customer service.

Chad Kacir
State Conservationist

The following vacancies are currently on usajobs.gov and are open to the public!

**Civil/Agricultural Engineer (3 vacancies)**
- Open & Closing Date: 5/17/2021 to 7/15/2021
- Salary: $39,540 to $73,731
- Pay Scale & grade: GS-5 - 9
- Series: GS-0810/0890
- Appointment Type: Permanent
- Work Schedule: Full-Time
- Announcement Number: NRCS-21-11087724-DHA-LA-JB
- Location: Abbeville, Alexandria, Ruston

**Rangeland Management Specialist (1 vacancy)**
- Open & Closing Date: 5/17/2021 to 7/15/2021
- Salary: $35,265 to $69,462
- Pay scale & grade: GS-5/7/9
- Series: GS-0454
- Appointment Type: Permanent
- Work Schedule: Full-Time
- Announcement Number: NRCS-21-11090499-DHA-LA-JB
- Location: Ruston

**Soil Conservationist (10 Vacancies)**
- Open & Closing Date: 6/2/2021 to 7/15/2021
- Salary: $35,265 to $69,462
- Pay Scale & Grade: GS-5/7/9
- Series: GS-0457
- Appointment Type: Full-Time
- Announcement Number: NRCS-21-11090007-DHA-LA-JB
- Locations: Abbeville, Alexandria, Amite, DeRidder, Donaldsonville, Ferriday, Marksville, Monroe, Oak Grove, and Rayville

**Natural Resources Specialist (13 Vacancies)**
- Open & Closing Date: 6/2/2021 to 7/15/2021
- Salary: $35,265 to $69,462
- Pay Scale & Grade: GS 5/7/9
- Series: GS-0401
- Appointment Type: Permanent
- Announcement Number: NRCS-21-11089089-DHA-LA-JB
- Locations: Addis, Amite, Bossier City, Cofax, DeRidder, Franklin, Jonesville, Lafayette, Leesville, Mansfield, Minden, Monroe and Ville Platte

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www.la.nrcs.usda.gov
In southwest Louisiana, there is a unique expanse of land that stretches inland from the coastal marsh, south of the pine savannah region and between the Atchafalaya and Sabine rivers. This land is the epicenter of what is known today as the Cajun Prairie.

In Acadia Parish just south of Eunice is Fuselier Farm, owned and operated by Vernon and Justin Fuselier, the father and son duo who are bringing back the Cajun prairies of days gone by. The journey to restore the Cajun Prairie at the Fuselier’s farm begins about 20 years ago. Justin explains, “We started an upland game hunting preserve for pheasant and quail guided hunts. Originally, we were trying to build a habitat suitable for a bird population and for the aesthetics of the hunts.”

The Fuseliers knew of the Cajun prairie restoration efforts taking place in Eunice under the direction of Dr. Charles Allen and Dr. Malcolm Vidrine, both resident experts on all things Cajun Prairie. Dr. Vidrine also happens to be a neighbor of the Fuseliers.

Vernon remembers the beginning of the restoration process, with a twinkle in his eyes. “I met a professor, Dr. Malcolm Vidrine, he is also a neighbor of ours and we became friends.” Vernon smiled, “One day, Malcolm came by to visit and told me that all the grasses and the landscape that we were looking at on our place was not at all what was here generations ago.” Vernon’s curiosity piqued, “What did the Cajun Prairie look like when our ancestors settled here 275 years ago?” That curiosity was the beginning of the journey to restore this 30-acre tract of Cajun prairie.

Vernon started reading articles about regenerating the land and learning from his friend and neighbor, Dr. Vidrine. Vernon also started collecting seeds by hand and planting bit by bit on the Fuselier Farm. Every year, growing his prairie acreage and planting more of the native grass seeds. Little by little, the Fuseliers converted pasture to a robust and thriving prairie.

Justin adds to his father’s story, “As time progressed and our cattle operation grew, we were interested in grazing in the prairie.” He continues, “We learned more about adapted management techniques for pulse grazing, a holistic approach to management.” That is when everything really came together for Justin and Vernon. They began to understand the importance of soil health, diversity of plant species and allowing large grazing animals to move through the landscape. They also learned that grazing spurs the growth cycle of the grasses.

Justin explains, “It was an evolution of learning and restoring the native landscape. When you start to use native grasses, they take care of themselves and you eliminate inputs.” Reducing inputs was a major factor for the Fuseliers in their approach to restoration and grazing on their prairie. “We use what nature has provided us to provide for our animals,” explained Justin. The nutrient dense native grasses and forbes provide a smorgasbord for the grazing cattle. In fact, this is the second winter in a row the Fuseliers have not had to supplement the cattle’s diet with hay. They use stockpile forage for their core cow herd. “It’s very rewarding, knowing that we are not doing anything that is in violation of the environment or an unsustainable practice that will leave the soil depleted for the next generation,” said Justin, as a third generation farmer.
Chris Ebel, NRCS State Rangeland Management Specialist, agrees with Justin wholeheartedly. “When NRCS started working with Vernon he was well on his way with establishing native grasses and when appropriate, adding prescribed burning to his land.” The next logical step was to implement a rotational grazing system. Chris explains, “There are two important forces to maintain a healthy prairie: prescribed burning and rotational grazing.” He continues, “Vernon was already burning so we worked with him to slowly, overtime, begin a rotation grazing pattern.” Allowing cows to come through and take a large portion of forage off, then providing the grassland with a rest period. Plants can regrow, and come back and have enough leaf area to photosynthesize. It’s a critical step in the process. Animal grazing and herbage removal is like a pulse of energy to the entire system.

Chris continues, “Vernon did a great job with restoration of this prairie. He has tall prairie grasses and forbes, a good mix of plant species that were here thousands of years ago. There is a whole lot of biology going on underground in the soil.”

Justin explains that they no longer manage for weeds on their prairie. “When you look out at our land many people would say they see weeds.” However, part of this living system is the need for plant species diversity that in turn impacts soil health for the better. The greater the plant diversity, the greater the soil health and the greater the health of the prairie and what it can supply to the grazing cows,” exuded Justin.

Michael Lindsey, NRCS State Soil Scientist, agrees with Justin on the importance of plant diversity and the positive impact it has on soil health. Michael explains, “Typically, in this part of the state, the soil’s organic matter would be about two percent and most soils that have had agricultural production have about a half a percent. We recently dug a soil pit here on the prairie, at Justin’s request, and we pulled soil samples from a six-foot-deep pit.” The results? Some of the roots made it almost to the six-foot mark with organic matter at about five percent. Michael goes on, “The more diversity of plants, the more diversity of species over time brings back biological diversity.” That means there is always something growing on the Fuselier Farm prairie for cattle to graze.

“The Fuselier prairie has a dynamic above ground environment, but what is happening below ground is just as dynamic,” explains Michael. “The more resilient the system is the better the water infiltration, nutrient storing capacity, the resistance to soil and plant pests. The benefits are numerous. Long story short, this is diversity on steroids!”

Kody Meaux, Resource Conservationist for the Crowley Field Office reflects on the relationship between the Fuseliers and NRCS. “We’ve worked with the Fuseliers since 2014 assisting them with their cattle operation including technical assistance and cost share programs that have helped them install water lines, troughs, heavy use pads and rotation grazing.” Throughout the years, NRCS has partnered with them on multiple projects that have allowed them to take their operation to the next level with conservation.

Want to learn more about building soil health? Michael offers an invitation, “No matter what land type you have, NRCS is happy to work with you. We will do a soil health assessment on your property, establish a base line and make suggestions on how to improve your soil health over time.” Reach out to your local USDA field office to learn more.
“All About Bats” was the title of the Trailblazer RC&D sponsored workshop that took place recently at the LSU AgCenter in West Monroe, Louisiana. The USDA Natural Resources Conservation Service’ partner, Trailblazer RC&D, has been sponsoring numerous outreach events covering a diversity of topics. The “All About Bats” workshop was a first.

Opening comments at the workshop were made by Jamie Shivers, NRCS Resource Conservationist in the Monroe Field Office and Trailblazer’s CEO, Ellzey Simmons.

For centuries, bats have been called creepy and frightening because of their piercing eyes and razor-sharp fangs. But after hearing the presentation from Maxwell Cox, NRCS Resource Conservationist in the Rayville Field Office, I gained a greater appreciation for bats and how they fit into nature’s web of life.

According to Max’s presentation, there are over 1,200 species of bats worldwide. Bats locate their food using sound. The term that is used to describe the bat’s sound process is echolocation. Only bats use echolocation. Bat echolocation is a vocal system where ultrasonic sounds (up to 130 dec) are emitted specifically to produce echoes. This allows bats to detect, localize and classify their prey in complete darkness. Some bats such as the whispering bats can hear using ridges on their ears. They can hear the wing beats of moths or the rustling of insects on the ground. The Sanguivores family of bats which includes the common vampire bats bite their prey and lick the flowing blood

Also according to Max’s presentation, 2/3 of all bat species are insectivorous, 1/3 feed on nectar or fruit, 1% consume frogs, fish & small mammals, and 3 species drink blood (not suck). The Insectivores bats can eat 1/3 of their body weight each night which equates to several hundred insects in a few hours. A group of 1,000 bats could eat an estimated 4 tons of insects each year which equates to more than $3.7 billion worth of pest control each year in the U.S. There are 14 species of bats found in Louisiana

The Nectivores family of bats have long muzzles and long, extensible tongues and they hop pollinate over 100 species of plants. To encourage or enhance the bat habitat, NRCS has some conservation practices such as Forest Stand Improvement, Riparian Forest Buffers, Structures for Wildlife, and Summer Roosting Habitat for Native Forest-Dwelling Bats. Bats can be beneficial to the agricultural industry because when bats are around to eat insects, there are fewer insect pests causing damage to crops and farmers don’t have to invest as much in pesticides.

Max closed his presentation with some tips on what individuals can do help the bat population such as installing bat houses, conscious caving, bat conservation, do not handle bats, and do no harm.
National Resources Inventory in Louisiana
Submitted by: Mitchell Mouton, Assistant State Soil Scientist

The NRCS began collecting on-site data on pastureland and rangeland in the western portion of the nation in 2003. Louisiana began collecting rangeland data in 2005 and pastureland data in 2010. This grazing land study is part of the National Resources Inventory (NRI), a federally mandated inventory that originated from the devastating days of the Dust Bowl in the 1930s. These surveys first occurred as inventories of conservation need and was conducted every decade beginning in 1945. NRI eventually evolved into an annual survey that collects and produces scientifically credible information on the status, condition, and trends of our natural resources on U.S. non-federal lands. The data collected from NRI also helps drive inventorying and monitoring technology, advances innovation in ecological site descriptions, and rangeland hydrology and erosion models.

Nationwide, about 2,500 grazing land study sites are selected each year. Of those, approximately 20 to 22 study sites are randomly chosen each year in Louisiana. Data collection is during the months of May through September and is conducted by NRCS rangeland management specialist, ecological site specialist, wildlife biologist and soil scientist. Data collected at these study sites include land cover, land use, vegetation (plant census, plant composition and patterns, biomass/production, cover, density, and height) pastureland and rangeland health, resource concerns, disturbance indicators, soils, and landscape information. The sites in Louisiana, along with all the other sites nationwide represent much larger acreages of grazing land. Expansion factors applied to each site allows NRCS to estimate conditions on pastureland and rangeland across the U.S. and Louisiana.

Allowing NRCS staff access to property for NRI Grazing Land Data Collection is voluntary. In most cases the landowners are not USDA program participants and are unfamiliar with NRCS. Chris Ebel, State Rangeland Management Specialist explains, “It’s typically a great opportunity to promote NRCS as the leading Federal agency in private lands conservation. Their cooperation helps to tell the story of what’s out there on the land. The data collected provides decision makers with information vital in shaping conservation and the technical and programmatic assistance that makes it successful.”

Mitchell Mouton, Assistant State Soil Scientist comments, “One of the added benefits of NRI On-site data collection is that it allows technical specialists to work together and have the opportunity to interact with local field office staff and newer employees on plant and soil identification, pasture and rangeland management, conservation planning, and have discussions on Ecological Site concepts.”

Typically, data collection takes about two hours to complete, but if it is a diverse site it can take three to four hours. There are sites that only have four to five different plant species and then on the opposite spectrum you might have a site with forty to fifty plant species. Some of the most diverse sites the team has come across are along the coastal marsh and coastal prairie transitional areas.
Upcoming Events

July 6, 2021
Pollinators with Sabrina Claey from Quail Forever

Trailblazer RC&D is hosting a Pollinators Workshop on July 6, 2021, from 6:00 PM to 7:30 PM at the Lincoln Parish Library located at 910 North Trenton Street in Ruston, Louisiana.

July 15, 2021
Row Rice Field Day

The LSU AgCenter will be hosting the Row Rice Field Day at the Northeast Research Station located at 4589 Highway 605 in St. Joseph, Louisiana on July 15, 2021, beginning at 5:00 PM. For more information contact Dennis Burns at 318-766-2769.

July 15, 2021
Soil Health Forum for Crops and Livestock

The LSU AgCenter is hosting and Soil Health Forum for Crops and Livestock Workshop on July 15, 2021, at the Scott Civic Center, False River Park located at 1200 Major Parkway in New Roads, Louisiana. There is no coast to attend and lunch will be provided. Registration begins at 8:30 am. This workshop qualifies for Louisiana Master Farmer Phase 2 & CEC Credits as well as Certified Crop Advisor CEUs. For more information, please contact Donna Gentry at 318-613-9278 or by e-mail at dgentry@agcenter.lsu.edu.

July 21, 2021
38th Annual Sugarcane Field Day

The LSU AgCenter is hosting the 38th Annual Sugarcane Field Day on July 21, 2021, from 8:00 AM to 1:00 PM at the LSU AgCenter’s Sugar Research Station located at 5755 LSU Ag Road in St. Gabriel, Louisiana. For more information, contact Jeffrey Hoy at JHoy@agcenter.lsu.edu or by phone at 225-578-1392.

Employee Profiles

A Conversation with Father-Daughter NRCS Duo, Anthony and Andrea Bridgewater, District Conservationists in Louisiana

How long have each of you worked for NRCS?

Anthony: 41 years
Andrea: 8 years

Andrea, growing up, what interested you about your dad’s job with NRCS?

There were two things that interested me the most about his job. It was his work attire and the flexibility of the job. He had the ability to work in the office some days and/or complete field work on other days. I always said that I wanted a job with good benefits that wouldn’t have me couped in an office all day. Because of 4-H, I knew I wanted to pursue a career in agriculture, but I hadn’t decided on a concentration. Dad suggested that I volunteer as an Earth Team volunteer to get a more hands on experience. I was finally able to go out and observe him in action from the office to the field then back to the office. Seeing the gratefulness of the producers inspired me to work for NRCS.

What is it like for you both to be in leadership positions for NRCS in the same state?

Anthony: As a father, it is an honor to see my daughter find success in the same agency as I. I’ve seen many changes throughout my career but to see her excelling and hearing positive feedback from our fellow colleagues just pumps up my chest even more.

Andrea: It is an honor for me as well. My dad and I both enjoy the respect from our peers and customers. They know that wherever either of those Bridgewaters go they represent the agency well. Our former supervisor even gave us the title as “Best in the East” and “Best in the West”.

What is the best thing about working in the same agency as your dad/daughter?

Andrea: I am a daddy’s girl, Although most of my career training came from many specialists and employees in South Louisiana, I didn’t have to go far or make any long distance phone calls because my greatest mentor, my dad, was only a call away.

Anthony: The agency is constantly evolving, and with change, often time new obstacles form. For me, it was relinquishing my old school methods to adjust to the new software that came along in the agency. Andrea always says daddy, “I’m glad that technology is the new big thing because it allows me to provide training to you for once!”