ARKANSAS CONSERVATION NEWS

NATURAL RESOURCES CONSERVATION SERVICE

Fourth Quarter 2018

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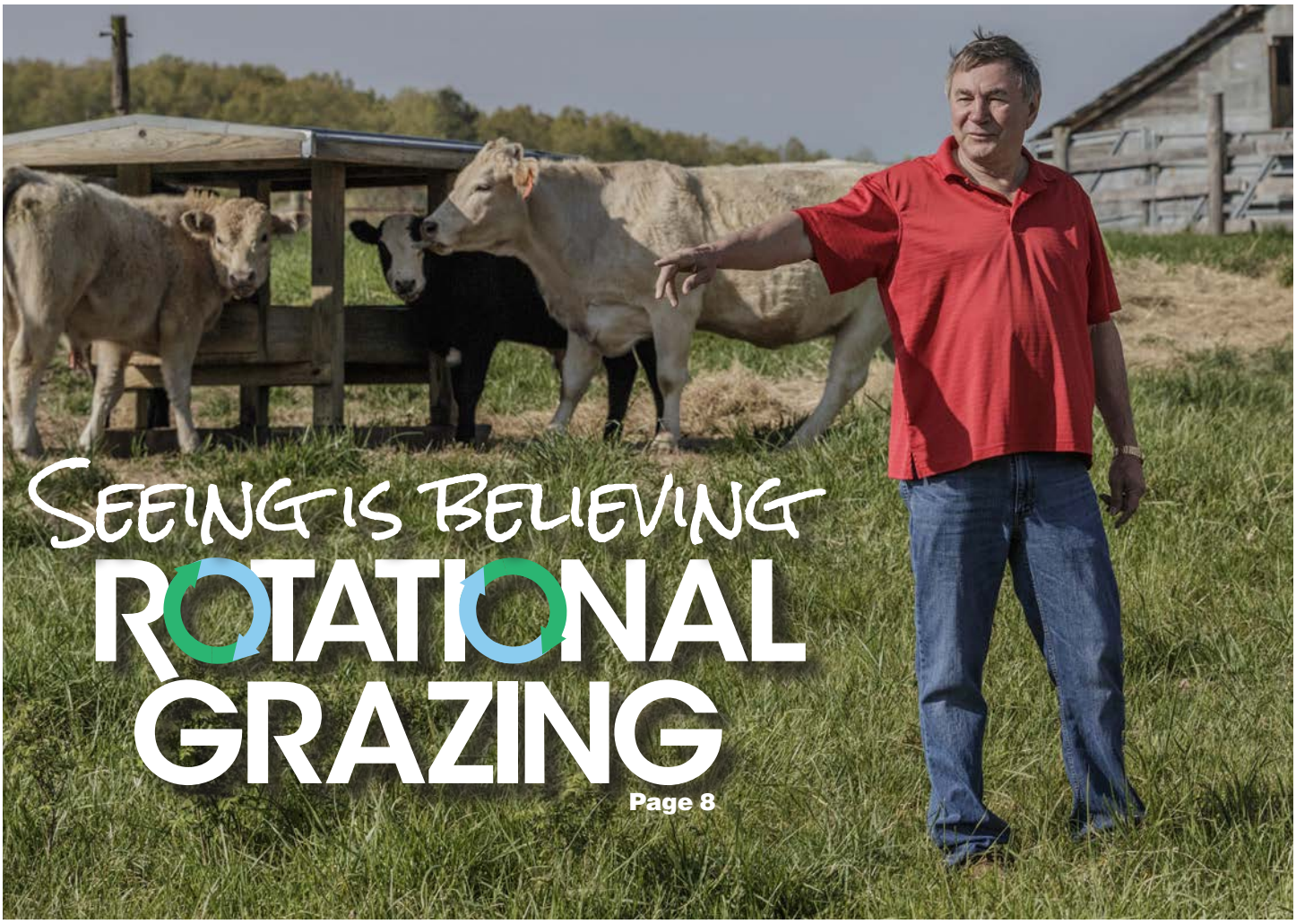

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Helping People Help the Land

From the State Conservationist

I've spent some time the past year reflecting on what legacy I'm leaving for my children and grandchildren. With the passing of my dad, Gene, in September 2017, and my mom, Carrie, in June 2018, along with the arrival of two new grandsons in April 2018, family has been on my mind and a part of my activity each day.

And, I'm sure for many farm families across the state, family is why they work so hard to conserve natural resources, provide the world's food and make their operation as productive as possible.

Throughout Arkansas, when I talk to agriculture producers, a resounding majority tell me they "hope to leave the land better for their children." I'm proud Arkansas NRCS can assist them in taking care of the land for future generations.

As we wrap up another successful fiscal year, Arkansas NRCS, our partners and landowners have once again been leading the conservation effort to increase water availability, improve soil health, make our water cleaner, and improve wildlife habitat.

We are on track to obligate more than $148 million through the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Regional Conservation Partnership Program (RCPP), and the Agricultural Conservation Easements Program (ACEP), including $79 million for previous year CSP payments. This money will be used to conserve and improve resources on more than 920,000 acres, bringing the total acres under active contract in Arkansas to nearly 4 million.

The impact of our work can be seen from the Ozark Mountains to the Mississippi River delta and beyond. What we do here has an impact not only on Arkansas's resources but neighboring states and the nation.

NRCS has a long legacy, more than 80 years, of helping landowners improve their operations while protecting the environment.

Our staff strives to provide technical and financial assistance to row crop farms, forestland owners, cattle producers, poultry farmers, and specialty crop growers.

As we look forward, it doesn't matter if you farm a few acres or several thousand, we are here to help you help the land, and provide a lasting legacy for generations to come.

Mike Sullivan, State Conservationist

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USDA United States Department of Agriculture

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Please send image submissions to Christopher Willis, Visual Information Specialist. Phone: (501) 301-3167. All submissions are the property of NRCS and may be edited for content or limitations.

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CULTURAL RESOURCES

Law requires clearance before using federal funds for ground disturbing practices

Landowners receiving federal funding through Natural Resources Conservation Service (NRCS) programs to install ground disturbing practices must have a cultural resources clearance prior to beginning work.

NRCS as always been required to comply with Section 106 of the National Historic Preservation Act. Over the last few years, Arkansas NRCS has begun consulting with not only the State Historic Preservation Office (SHPO) but also with over a dozen tribes who have ancestral lands within Arkansas.

In the best of situations, the process takes 45 to 60 days … in the worst it can take 120 to 140 days.

Once the NRCS cultural resources staff (CRS) receives a request they begin the process by logging in your request and preparing a packet. In 2018, more than 2,000 clearance requests have been received from field offices. Approximately 25 percent of those require field visits by the CRS.

Requests are prioritized based on when the ground disturbing practice installation is planned and using a priority list prepared by Area Conservationists and DCs. Those being installed in the current fiscal year receive top priority. Less urgent requests are placed in the general work queue.

Some requests, such as a practice being installed where a cultural resources review has already taken place, can be processed and cleared based on the existing review.

New requests are reviewed and a determination is made if there is "no adverse effect" or if a field visit is required. In either case, the CRS prepares a report with their recommendation and sends it to the SHPO and any Tribal Historic Preservation Officers (THPO) that have ancestral lands where the project is located. SHPO and THPOs have 30 to 45 days to respond to the recommendation.

If SHPO and all THPOs agree that no adverse effects will occur, the project is cleared for implementation the field office is notified. However, if they request NRCS to conduct a field investigation then a site visit will be scheduled.

During the field investigation, the CRS collects data, digs holes and takes pictures for documentation. Field investigations cannot be done on fields with actively growing crops such as rice or mature soybeans. It is important for the CRS to be able to see the ground during the investigation. After the visit, they process the data and prepare a detailed site report. This report is sent back to SHPO and THPOs for concurrence, who once again have 30 to 45 days to respond.

The cultural resources staff frequently gets requests to expedite this process for a landowner ready to start, however, by law, NRCS cannot shorten the time-frame SHPO and THPOs are allowed to review the project.

To help speed up our portion of the review process, Arkansas NRCS is in the process of hiring three additional archaeologists.

For additional information, contact state resource conservationist Helen Denniston at helen.denniston@ar.usda.gov, 501-301-3134, or visit https://www.nrcs.usda.gov/wps/portal/nrcs/ar/technical/ecoscience/cultural/.

Cultural resources include prehistoric and historic artifacts like arrowheads, pottery and glassware; and archaeological sites, buildings and structures like bridges and canals, and other traces of past human activities. Cultural resources also encompass places or properties that are of traditional importance to a group of people, such as the sacred sites of Native American tribes. Field investigations and additional studies may be required for areas with high potential for cultural resources. The local conservationist and the specialist can provide specific details on the requirements and extent of any additional studies required for your project. If you decide at any time you do not want any studies to occur, NRCS must withdraw all assistance from your project. Photos by Creston Shrum

Irrigation Water Management

Irrigation Water Management (IWM) consists of a variety of tools and techniques that answer the questions of how much and when to irrigate. The following lists some of the common techniques.

Computerized Hole Selection (CHS) for Furrow Irrigation—This irrigation enhancement consists of calculating hole sizes for polypipe tubing using computer software such as Phaucet or Pipe Planner to determine the optimal size hole per furrow in order to improve irrigation efficiency and decrease the quantity of irrigation water needed per season. This is done by applying the water at an optimal rate per furrow based on the length of the furrow and the soil characteristics. The water should reach the end of all the furrows at the same time ensuring even irrigation and allowing the pump to be turned off before water runs out of the field. CHS for furrow irrigation uses 25% less water.

Steve Stevens, Desha County, uses polypipe with holes sized to evenly distribute the water on every acre of his 3000+ acres of row crops. This computerized hole selection results in 25% less water used and tens of thousands of dollars saved in pumping cost every year. He has used EQIP funding to monitor the success of computerized hole selection as well as other conservation practices.

CHS for Multiple Inlet Rice Irrigation (MIRI)—utilizes polypipe tubing installed through the rice paddies down the middle or side of a field from the water source. Adjustable gates are installed for water outlets for each paddy. The CHS software determines the number and size of openings for the gates. The holes or gates are adjusted so that each levee floods up at about the same time. The water level is kept 1"-2" below the levee gates or spills to catch rainfall during the irrigation season. MIRI has the additional benefits of a quicker flood for improved fertilizer and herbicide efficiency, reduced irrigation pumping time and cost, reduction of stretching of rice, and reduction of the chance of over-topping the levees. CHS with MIRI reduces water usage by 25-40 percent.

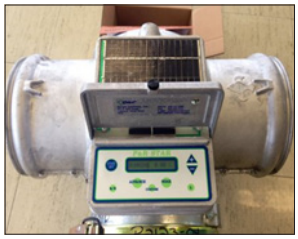
Computerized hole selection for multiple inlet rice irrigation. Photo by Creston Shrum

Intermittent Flooding of Rice Fields—also known as Alternative Wetting and Drying (AWD) is an advanced form of MIRI. Mark Isbell, of Isbell Family Farms, uses alternative wetting and drying for growing his rice. This practice allows the rice paddies water level to draw down to less than 1" deep before pumping the water back on the field. This allows the fields to harvest any rain that falls during the summer months. This savings can be 25-40% of the normal water used depending on the summer rains. In addition to water savings and reduced pumping costs, this also reduces green-house gas emissions from the rice fields.

Pumping Plant Automation—is a system for monitoring and controlling irrigation events. It can be as simple as a timer for the pump. Or it can be very complex and integrate water level gauges, pumping plant timers, soil moisture sensors, flow meters, and weather stations in order to automatically control pumping plant operation or give the user notification of when to turn off the pump. Irrigation can be extremely efficient but water will continue to be wasted unless the pump is turned off when enough water is supplied.

Flow Meters—do not actually save water. However, they answer the question how much water is being applied. Measuring irrigation flow contributes to better management and scheduling irrigation events. Measurements are needed to evaluate the performance of an irrigation pumping plant. Flow meters are essential to quantifying irrigation water use and evaluating the effects of management changes or conservation measures.

Surge Irrigation—is the intermittent application of water in furrow irrigation for the purpose of improving distribution uniformity along a furrow. The use of a programmed automated valve is used with polypipe that has been planned with set sizes. Surge irrigation can improved application efficiency up to 50 percent compared to conventional systems.



Micro-irrigation—can play a key role in irrigation water management by delivering water directly to the plant roots where it can be readily used. Typically this is accomplished through drip tape installed in the soil near the plant's roots. Though this is generally used on smaller farms, the principles are transferable to a large scale operation.

For additional information, contact Walt Delp, state conservation engineer, at walter.delp@ar.usda.gov, or call at 501-301-3141. For more info on irrigation, visit https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/manage/irrigation/.

USDA Extends Its Landmark Water Quality Initiatives Through 2023

The U.S. Department of Agriculture (USDA) is extending two of its landmark water quality initiatives for five years. The Mississippi River Basin Healthy Watersheds Initiative (MRBI) and the National Water Quality Initiative (NWQI) have played a pivotal role in accelerating conservation in water quality by providing targeted funding and technical resources to agricultural producers in the areas that need it most.

In Arkansas, MRBI and NWQI have focused conservation in more than 200 sub-watersheds since 2010.

"NRCS targeted water quality efforts have steadily demonstrated tremendous benefits in Arkansas and across America's landscape and water bodies," said Mike Sullivan, state conservationist for USDA's Natural Resources Conservation Service (NRCS). "By focusing resources where we can have the best impacts, we're improving the quality of rivers and streams across the country while also giving producers the tools they need to make good investments on their working lands."

NRCS works with producers in targeted watersheds to implement conservation practices that prevent runoff of sediment and nutrients, which can degrade water quality.

These initiatives currently help producers improve water quality in more than 350 watersheds across the country. To date, at least 10 water bodies have been removed or scheduled for removal from the nation's list of impaired streams. Arkansas streams segments removed include:

- **Cache River** — High lead levels in sediment running off from row crop areas impaired Arkansas' Cache River. As a result, the Arkansas Department of Environmental Quality (ADEQ) added two segments of the stream (47.6 miles total) to the state's 2004 Clean Water Act (CWA) section 303(d) list of impaired waters and three segments (47.9 miles total) to the state's 2006 CWA section 303(d) list for lead impairment. Watershed partners initiated watershed assessments and implemented best management practices (BMPs) to abate sediment runoff from row crops in the watershed. Along with sediment reductions from the BMPs, lead levels in the Cache River also declined and fell below the water quality standard (WQS). Although the stream remains impaired for turbidity, ADEQ removed five segments from the 2016 CWA section 303(d) list for lead impairment.
- **St. Francis River** — Erosion from row crop fields led to high turbidity levels in Arkansas' St. Francis River. As a result, the Arkansas Department of Environmental Quality (ADEQ) added a 55.9-mile section and a 17.1-mile section of the St. Francis River to the state's 2006 Clean Water Act (CWA) section 303(d) list of impaired waters for turbidity. Watershed stakeholders implemented best management practices (BMPs) to reduce erosion of sediment from row crop fields. Turbidity levels on these two stream reaches declined, prompting ADEQ to remove them from the 2014 CWA section 303(d) list for turbidity impairment.

NRCS will continue to update and expand their approach to both initiatives based on recommendations from conservation partners and staff. Some notable updates include:

- Providing greater technical assistance for watershed assessment in MRBI to help ensure critical source areas are identified;
- Establishing watershed goals and interim metrics; and
- Ensuring that an outreach strategy is in place.

NRCS will also provide greater certainty for NWQI financial assistance by using multi-year budgets, not to exceed five years, for priority watersheds. The initiative will also expand the focus from only water bodies impaired under the Clean Water Act to a broader group of water bodies, particularly those that provide drinking water.

Improved water quality is due, in large part, to the agency's targeted small watershed approach, which focuses resources on the most critical areas to maximize conservation impact and allow producers to be natural resource stewards.

Through USDA's Conservation Effects Assessment Project, cropland models demonstrate that conservation on cropland throughout the entire Mississippi River basin has reduced nitrogen and sediment loading to the Gulf of Mexico by 28 percent and 45 percent, respectively, over what would be lost without conservation systems in place.

Agricultural producers interested in learning more are encouraged to contact their local USDA service center or visit the NRCS national website at www.nrcs.usda.gov.

Dr. Langston Assists NRCS with Soils Work

Dr. Henry Langston was recently recognized by the National Cooperative Soil Survey for his assistance with NRCS in the Soil Survey Program. Dr. Langston is recently retired from the Arkansas Department of Transportation where he was an environmental specialist and worked on highway department projects for potential impacts on wetlands and streams (Section 404 of the Clean Water Act).

In addition to his highway duties, Dr. Langston has worked closely with NRCS soil scientists over the years. He attributes his close working relationship with the NRCS due to the cooperation he has had with the different state soil scientists: current Arkansas State Soil Scientist Edgar Mersiovsky and former State Soil Scientist Luis Hernandez, Louisiana State Soil Scientist Mike Lindsey and former state soil scientist Jerry Diagle and Delany Johnson, State Soil Scientist of Mississippi.

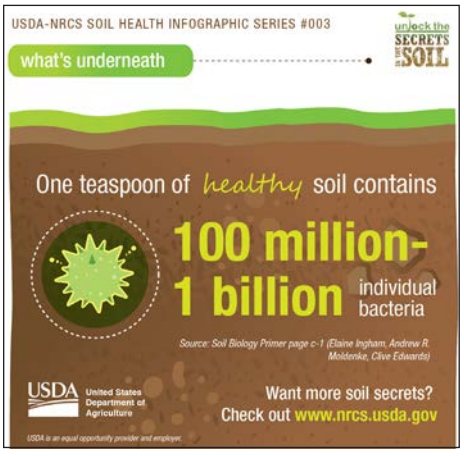
In addition to Arkansas, Dr. Langston has volunteered in Louisiana, Mississippi, and Tennessee to participate in the sampling and describing of numerous soil series during his career.

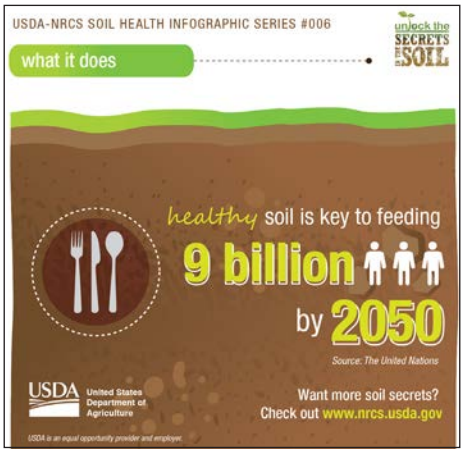
Recently he has been working with NRCS's ecologists Barry Hart, Milan, Tenn. and Charles Stemmans, Opelousas, La. and NRCS soil scientist Rachel Stout Evans, Greenwood, Miss. and others on various ecological descriptions. Areas that have been worked on include the Yazoo basin in Mississippi, Tensas basin in Louisiana, Macon Ridge in Arkansas and Louisiana, Western lowlands in Arkansas, and deep loess back slopes on Crowley's Ridge in Arkansas and Missouri. The next area to be sampled is the St. Francis basin in eastern Arkansas.

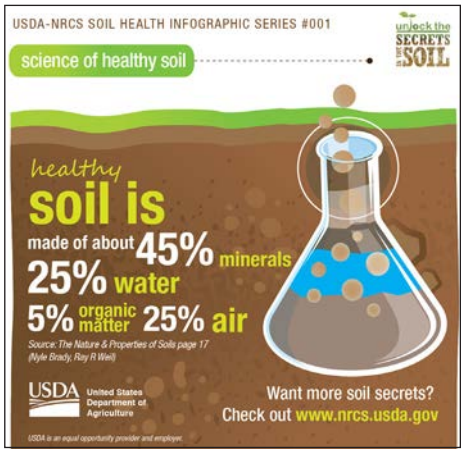
He assisted in data collection for the NRCS's Rapid Soil Carbon Assessment initiated in 2010. In 2015 he worked with soil scientist from Arkansas, Mississippi, and Louisiana in the digging and description of soil pits for the National Collegiate Soil Judging Contest.

During 2017 Dr. Langston made several trips to Mississippi to work with soil scientists on a Level-1 soil mapping project of the NRCS's James Whitten Plant Material Center at Coffeeville. In addition to working in the field with NRCS soil scientists, he has had the opportunity to attend several NRCS training classes: hydric soils, advanced hydric soils, wetland delineation, soil correlation, and the soil geomorphic institute.

Dr. Henry Langston







Skeptical Izard County Farmer Amazed When Conservation Practices Work On His Operation

By CRESTON SHRUM
PUBLIC AFFAIRS SPECIALIST

When Bucksey Harmon first heard of rotational grazing he was skeptical it would work on his cattle farm.

"My neighbor started a rotational grazing program several years ago and was telling me the benefits and how much more pasture he now had," Harmon said. "When driving by his farm, I could see how much more grass he had. I'd seen enough but was still skeptical, that even though it worked for him it might not work for me."

Although apprehensive, the Izard County cattleman, visited the USDA Natural Resources Conservation Service (NRCS) Office in Melbourne, Ark., to see if rotational grazing would work on his farm.

"The staff helped me understand some of the things that didn't make sense to me," Harmon said. After the visit, he applied for funding consideration through the Strawberry River Watershed Mississippi River Basin Healthy Watersheds Initiative (MRBI).

"I've seen my cows laying by the pond and get up to come to the tanks to get a drink instead of drinking out of the pond," Harmon said.

The MRBI project is a voluntary program that provides financial and technical assistance to agricultural producers for addressing water quality concerns in the Little Strawberry River and Philadelphia Creek-Piney Fork watersheds in portions of Fulton and Izard counties. The project area covers 43,821 acres.

Harmon was selected for funding and enrolled 120 acres in an Environmental Quality Incentives Program contract for fencing, watering facilities, pipelines and other conservation practices to improve his pasture and water quality.

"Practices such as rotational grazing, watering facilities and spraying weeds allows more grass to grow," said Monica Paskewitz, NRCS district conservation in Izard County. "The taller the grass the more filtration of runoff it provides."

Harmon has noticed a difference. "I can tell after a rain my pasture is soaking up more water and less is running off … when the grass is short it just runs off," he said. "I also don't feed near as much which saves me money."

The first year of rational grazing, Harmon said he was amazed at how much more pasture he had in the fall. His conservation plan called for six paddocks averaging about 20 acres each. "Once you get the cattle used to the system, every six days they'll be standing there ready to go from field to field."

Three watering tanks installed in the middle of the cross fencing keeps the cattle out of the ponds, helping the banks stay covered and decreasing sedimentation. With cattle only in the paddocks 4–6 days, they can't eat all the forage and cause an erosion or overgrazing problem, according to Paskewitz. It also gives the land time to heal.

The watering tanks use city water and with their placement make the cattle graze more evenly across his pasture.

"I've seen my cows laying by the pond and get up to come to the tanks to get a drink instead of drinking out of the pond," Harmon said. "By fencing the creek off, water quality in the creek has improved."

One area of his farm was full of horse nettle and the forage quality was poor because of the weeds. But, thanks to spraying, he now has grass where he never had it before. "The spraying impressed me. It made such a believer of me I bought a 500-gallon sprayer," he said. "If we don't take care of our land and let it grow up in weeds and bushes, it doesn't do us any good."

Harmon said with these practices his cattle and land are in better shape. And, because of this, he's looking forward to installing more NRCS conservation practices.

"As soon as I can, I'm going to do some practices on the other side of the road," he said referring to the additional 250-acres he owns. "I've got so much more grass over here than there because of these practices."

To learn more about NRCS programs, contact your local field office or visit https://go.usa.gov/xPCVY to find your local field office.

Bucksey Harmon, left, shows Izard County District Conservationist Monica Paskewitz the progress of his rotational grazing pasture. Photos by Christopher Willis

NRCS Helps Turn Stone County Forestland Into Wildlife Sanctuary

By CRESTON SHRUM
PUBLIC AFFAIRS SPECIALIST

While sitting on their screened in porch, it's not uncommon for Ronald and Sandy Moore to see 10–15 deer grazing each evening. Woodpeckers, song birds and squirrels are also in abundance. And, occasionally a flock of turkeys or a bear will wander through their 246-acres of forestland.

Ronald, who grew up on the property in Stone County, says it's great to be able to move back to Arkansas. The Moore's retired from careers in Iowa and returned to Ronald's family land four years ago.

A well is the only remaining remnants of his great grandfather's homestead. Now, where the house stood are trees and grassland.

"While in Iowa, I'd take my summer vacations and any other time off and come here and work on the property. I'd see an area I thought needed thinned and start cutting trees and clearing underbrush to create openings," Ronald said.

About seven years ago, a neighboring landowner told Ronald the USDA Natural Resources Conservation Service (NRCS) had technical and financial assistance to help him.

"I had heard of NRCS while working in Iowa, but had never applied for any programs," Ronald said. "Getting this assistance has really helped me do the type of things I want to accomplish on this land."

"Ronald initially came in to learn about the quail initiative in this area," said Wendy Hendrix, NRCS district conservationist in Mt. View. "He was really interested in attracting quail. But, since there was a limited amount of funding in the initiative I discussed other options with him.

"He didn't want to thin his whole forest, just open up areas. We developed a forest improvement plan to meet his needs and got him enrolled in general EQIP," Hendrix said.

Through two Environmental Quality Incentives Program (EQIP) contracts, the Moores have planted 35.6 acres of native grasses including switchgrass, indiangrass and big and little bluestem, nine acres of pollinator habitat that will bloom from early spring to late fall, and 1,000 trees and shrubs for wildlife food and cover. In addition, they've completed forest stand improvement to thin trees and create openings on 35.2 acres, installed more than 12,500 feet of firebreaks and reduced underbrush on 261 acres using prescribed burns.

The Moore's hard work has led to a Conservation Stewardship Program (CSP) contract to enhance the improvements they've already made.

"Through CSP, the Moore's have planted 3.5 additional acres of pollinator habitat and four acres of trees and shrubs. They've also completed 58 acres of sequential patch burns, with more planned each year through 2021," Hendrix said.

The Moores have hand planted more than 2,800 trees and shrubs into the rocky Ozark soil. "There would be times after you got the rocks out of the furrows you'd wonder where you were going to get soil to plant the tree," Sandy said.

Stone County District Conservationist Wendy Hendrix, left, holds a sapling with landowners Ronald and Sandy Moore. "I've noticed a big difference in my woods. Once you let the sunlight through, native grasses and plants start emerging. And, the wildlife starts showing up," Ronald said.

While to some, the thinning and planting may seem like a lot of work, for Ronald it's relaxing and productive.

"I've noticed a big difference in my woods. Once you let the sunlight through, native grasses and plants start emerging. And, the wildlife starts showing up," Ronald said.

One day, Ronald hopes it will be common to hear the bobwhite whistle of quail echoing across his forestland as he relaxes on the screened in porch looking out over the land he and Sandy have worked so hard to improve.

To learn more about NRCS programs contact your local field office or visit https://go.usa.gov/xPCVY to find your local field office.

On the left, a stand that was thinned. The right side, what it was before. The Moores have completed forest stand improvement to thin trees and create openings on 35.2 acres, installed more than 12,500 feet of firebreaks and reduced underbrush on 261 acres using prescribed burns.
Photos by Creston Shrum

High Tunnels Help Community-Supported Agriculture

By CRESTON SHRUM
PUBLIC AFFAIRS SPECIALIST

Brandon and Cat Gordon, owners of Five Acre Farms near Pleasant Plains, Ark., are proof it doesn't require a lot of land to be a successful farmer.

In fact, just over an acre of their five acres is in crop production. But, by using three seasonal high tunnels they've obtained through USDA Natural Resources Conservation Service (NRCS) programs they are making the most of their space.

"I'll have four cropping seasons in my high tunnels this year," said Brandon, who signed up for three Environmental Quality Incentives Program (EQIP) contracts as a beginning farmer. "So far this year, I've grown lettuce, tomatoes, cucumbers, peppers and squash in my houses. In the fall, I'll plant cool season vegetables like cabbage and beets."

Brandon, who has been farming for about seven years, began selling his produce at the farmer's market. That is where he first heard about assistance through NRCS.

Soon after, he visited the White County Field Service Center in Searcy to learn about NRCS assistance.

White County District Conservationist Reginald Cunningham, left, and producer Brandon Gordon talk about the produce in the high tunnel.

Photos by Creston Shrum

"We have been working with Brandon since 2013," said Reginald Cunningham, White County district conservationist in Searcy. "Last year, he installed his third high tunnel, 200 feet of irrigation pipeline and a micro-irrigation system. His contract also calls for irrigation water management through 2020."

"The plants seem much healthier in the high tunnels. Being able to control when and where they receive water makes a big difference compared to the crops I grow outside of the houses. There are some issues you encounter using high tunnels such as plant diseases you wouldn't otherwise see. But, by using disease resistant plants that can be controlled," Brandon said.

"There is a bit of a learning curve when you start growing in high tunnels," he said. "I'd suggest people wanting to get a high tunnel, talk to someone who has been growing produce in them."

Brandon has recently began selling his certified naturally grown produce through a Community-Supported Agriculture co-op in Little Rock.

The co-op allows people to subscribe to receive a box of fresh, locally grown produce weekly from around the state during the growing season. The boxes include things like arugula, beets, broccoli, cabbage, tomatoes, kohlrabi, squash and salad mixes. His produce is also used at local restaurants.

"We don't have a lot of high tunnels in White County, but it is something small farmers and alternative crop producers could benefit from," said Cunningham. "In the future, I hope to work with farmers like Brandon to have a field day so people interested can learn about using high tunnels and the assistance NRCS can provide."

Streambank Work Reduces Soil Loss

By CRESTON SHRUM
PUBLIC AFFAIRS SPECIALIST

Gary Harral was losing a foot of pasture a year along a 2,400 section of the Anderson Branch of the Little Osage Creek in Northwest Arkansas.

Estimated soil loss from the streambank erosion was 800 tons, the equivalent of 1,600 pickup truck loads. That sediment eventually reaches the Illinois River downstream of his farm.

But, thanks to a USDA Natural Resources Conservation Service project started in 2010, he was able to get help to address the erosion issue on his 141-acre Benton County farm.

The Illinois River Sub-Basin and Eucha-Spavinaw Lake Watershed Initiative Project (IRWI) is a voluntary program that provides financial and technical assistance to agricultural producers for addressing water quality concerns in northwestern Arkansas and northeastern Oklahoma.

"Gary's project consisted of bank shaping and protection by pulling the creek bank back on a 2:1 slope, installing a rip-rap toe in the streambed and placing geotextile and rock rip-rap on the shaped banks up to the normal bank," said Josh Fortenberry, NRCS soil conservationist at the Bentonville Field Service Center.

In addition to the streambank work, he fenced off both sides of the stream to keep his livestock out of the creek and installed cross fencing. Harral also added armored livestock crossings.

"Thanks to this project I'm able to rotate cattle better and produce more grass because of the cross fencing. I've also reduced the amount of erosion washing into the Illinois River Watershed," said Harral, who was born and raised on the farm, and runs spring calving cows and produces hay.

The project is designed to improve water quality by reducing sediment loss caused by excessive bank erosion. The stabilization will also reduce the amount of pasture loss. Limiting the livestock access to the stream will improve water quality by reducing the amount of nutrients entering the water in the form of manure and urine.

The goal of IRWI is to improve water quality in the watershed (which includes Lake Tenkiller, Lake Eucha and Lake Spavinaw in Oklahoma) while maintaining the food and fiber production in the area.

The project is in portions of Benton and Washington counties in Arkansas and parts of Adair, Cherokee, Delaware, Mayes and Sequoyah counties in Oklahoma.

Above, erosion along the Anderson Branch of the Little Osage Creek. Below, streambank stabilization project decreases soil loss and sediment entering the Illinois River watershed.
Photos by Creston Shrum

Employee Spotlight

Jena Moore named Assistant State Conservationist for Programs

Jena Moore

Jena Moore was recently named Assistant State Conservationist (Programs) for the USDA's Natural Resources Conservation Service in Little Rock.

She began her career in 2003 as an intern at the Lonoke Field Service Center (FSC), and has worked at the field, state, and national levels of NRCS. She has served the public in four counties in various capacities, including Soil Conservationist in Pulaski, Jefferson, and Monroe Counties, and District Conservationist in Clark County prior to becoming a Resource Conservationist on the Programs Staff in Little Rock.

An Arkansas native, Moore grew up helping on her grandparents' farm. She earned her Bachelor of Science degree in Regulatory Science with an emphasis in Agriculture from the University of Arkansas at Pine Bluff.

Razorback Chapter awarded Outstanding Chapter

Brent Clark, Adam Eades, Pam Billingsley, and Burthel Thomas accept the 2018 Outstanding Chapter Award at the Annual Soil and Water Conservation Society Conference in Albuquerque, NM.

The Razorback Chapter of the Soil and Water Conservation Society (SWCS) in Arkansas was recently recognized as an outstanding chapter for carrying out a successful year. The chapter's fall meeting and tour was a professional development opportunity that offered continuing education units. The chapter increased their membership by over 10 percent. The chapter also conducted outreach to multiple soil and water education events throughout the year.

The annual SWCS conference was held in Albuquerque, NM.

If you have an interest in joining the Society or becoming more involved please don't hesitate to contact one of the current executive committee members for assistance, visit SWCS.org, or visit one of their newly formed social media outlets and take a look around. Mark your calendars for Monday, September 24th for the fall meeting in West Little Rock.

Razorback Chapter executive committee members:
Adam Eades, adam.eades@ar.usda.gov; Brent Clark, brent.clark@ar.usda.gov; Gary Childress, gary.childress@ar.usda.gov; Kaitlyn Maloch, kaitlyn.maloch@ar.usda.gov; Mary Clayton, mary.clayton@ar.usda.gov; Pam Billingsley, pam.billingsley@ar.usda.gov; Dillon Carr, dillon.car@ar.usda.gov

The Joint Soil Health In-Service Training held on Lonoke producer and Arkansas Soil Health Alliance President Robby Bevis' farm. The event included presentations by VF Corporation, University of Arkansas Division of Agriculture, Arkansas Agriculture Department, and NRCS. Topics covered soil health, planning and implementation, and a field visit to soil health in action.
Photo by Christopher Willis

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