ARKANSAS CONSERVATION NEWS

NATURAL RESOURCES CONSERVATION SERVICE

Fourth Quarter 2016

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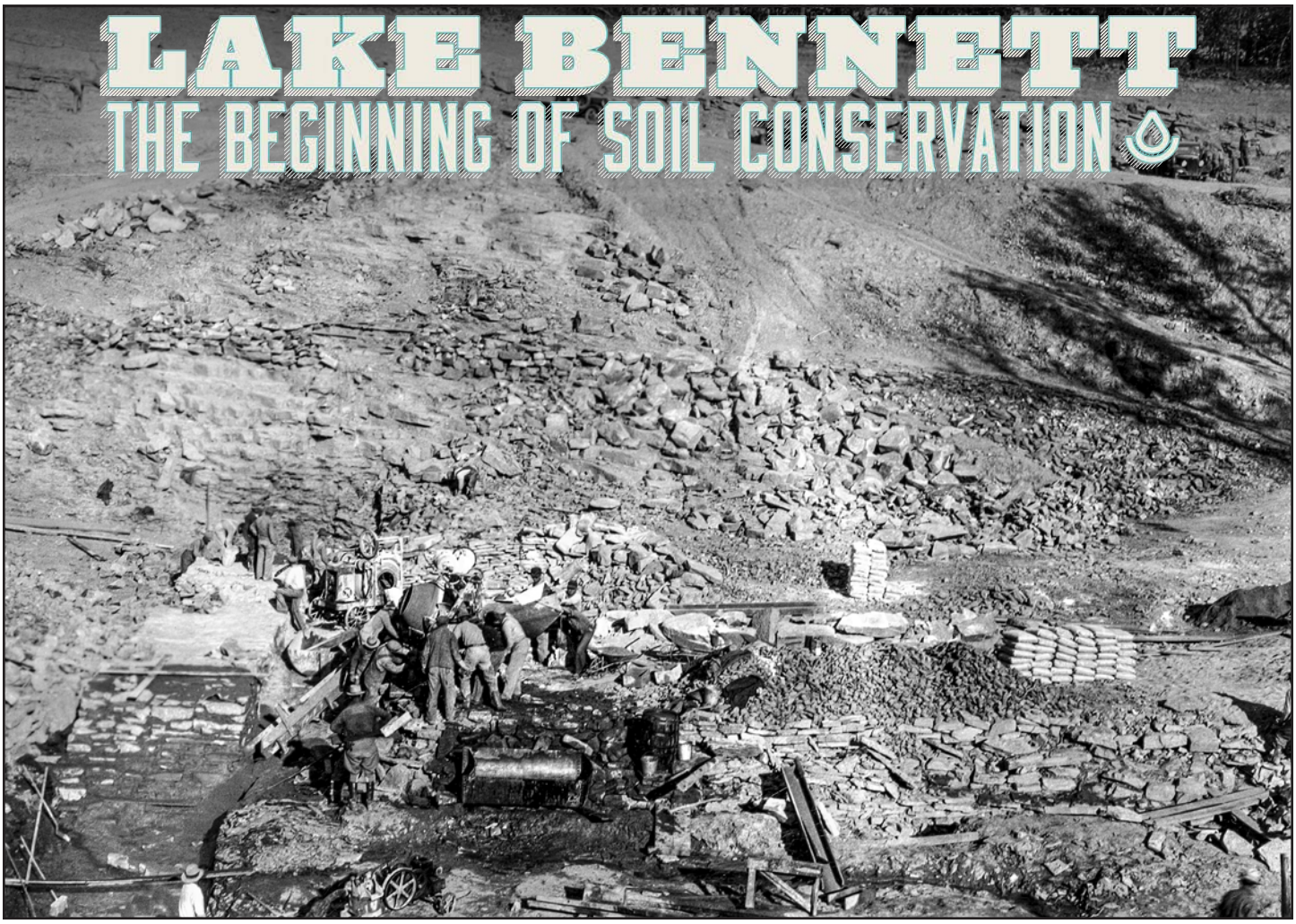

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Helping People Help the Land

From the State Conservationist

As the Natural Resources Conservation Service (NRCS) comes to the close of another fiscal year, I feel blessed to have the opportunity to work alongside great employees, partners, and agricultural producers helping to conserve our natural resources. The collaborative work of conservation districts and NRCS has defined the word "conservation" for more than 80 years. Conservation was critically important when this movement started and it's even more important now.

Our cover story this month talks about Lake Bennett, a 40-acre reservoir inside the Woolly Hollow State Park, named in honor of the first Soil Conservation Service (SCS) Chief, Hugh Hammond Bennett. He had a strong conservation ethic. His message was clear: "take care of the land and the land will take care of you." He also understood the need for both conservation districts and the SCS in order for the conservation movement to proceed. Bennett stated, "I consider the soil conservation district movement one of the most important developments in the whole history of agriculture."

Conservation Districts and NRCS were created for each other. One cannot function completely or effectively without the other. Conservation Districts exist to determine local priorities and develop and implement plans for addressing natural resource concerns. NRCS is required by law to work with districts, to consider local needs and priorities, and provide technical assistance with and through local conservation districts. NRCS is also required to provide resource data for districts to use in developing long range conservation programs and utilize information from local work groups and the State Technical Committee in making decisions about the delivery of technical and financial assistance.

My vision for the future of conservation in Arkansas is a strong conservation partnership working together to get conservation on the ground better and faster than ever before and sharing our successes in a way that others "get it" and want to join us in this movement! I think there is no higher calling than to be a steward of the land working with a conservation district, NRCS or other partner helping producers help the land with sustainable and wise use of our natural resources. Together, we can help leave the land in better condition for our grandchildren so that Arkansas remains a strong agricultural economy with a secure future.

The conservation movement that started back in the 1930s is alive today. It's now our movement, in our hands, with many challenges as we work together to attempt to feed the growing world population and continue to improve the environment. We have a huge task at hand—and yet, NRCS is making a difference, working together—one day at a time, one conservation practice and system at a time, one watershed and special project at a time.

We're up for this challenge and look forward to continuing our strong Arkansas Conservation Partnership leading the conservation movement into the new fiscal year!

Mike Sullivan
State Conservationist

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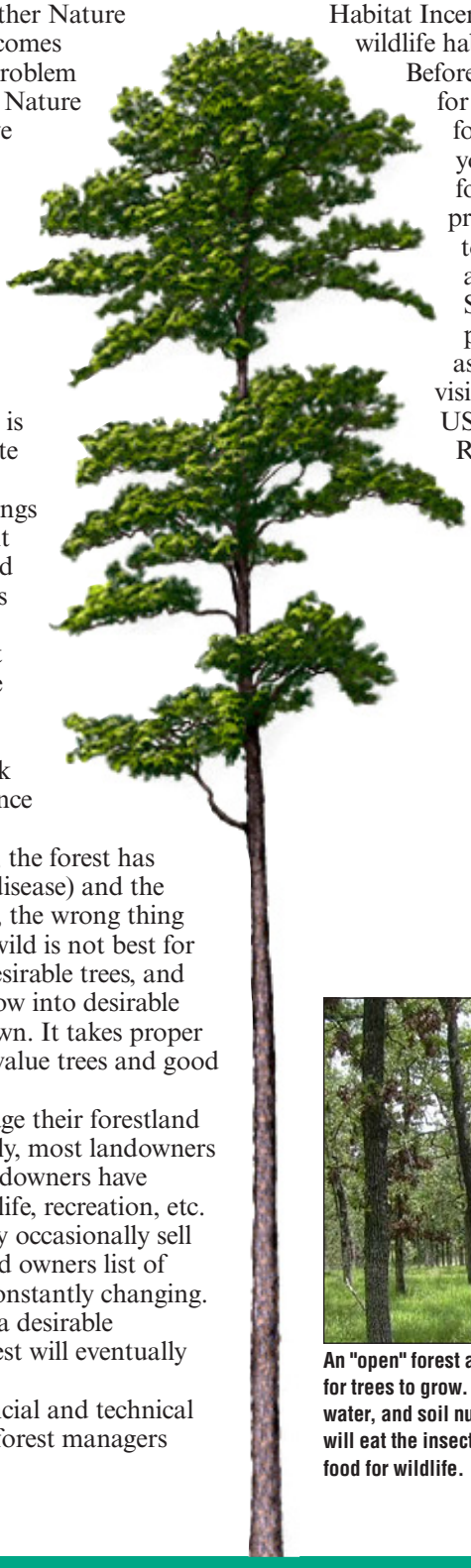
Forest Management Notes

When we manage a forest, we manage the light. All plant species must have light to live and regenerate. Many think Mother Nature knows best and want to have a "hands off" approach to forest management. Mother Nature does know best, and left to do what comes naturally, good things happen. The problem is our society does not allow Mother Nature to do what she wants to do. Before we settled the land, all land had natural disturbances every few years (usually from wild fire). In the "good old days," our forests were open and the plants and animals in the forest evolved with periodic disturbance (periodic fire). Healthy forests and good wildlife habitat go hand in hand and is dependent on periodic disturbance. The only difference now is "Man" and not "Nature" has to create the disturbance.



Sunlight has to touch all living things in some way for them to live. Sunlight has to reach wildlife's food source and the plants they use for cover. Animals can only eat what they can reach. Tree species like pine and oak cannot survive in shade for very long. Where sunlight does not reach the ground, over story trees must die for quail, turkey, deer, young tree seedlings (oak or pine) to survive. Periodic disturbance is necessary.

Without this periodic disturbance, the forest has health issues (low vigor, insects and disease) and the wildlife habitat deteriorates. For sure, the wrong thing to do is nothing. We know land left wild is not best for wildlife. Forests with low grade, undesirable trees, and with poor wildlife habitat will not grow into desirable habitat or high value trees on their own. It takes proper management to have desirable, high value trees and good habitat in the forest.

Landowners should actively manage their forestland to meet their objectives. Unfortunately, most landowners do not manage their forest. Most landowners have objectives like aesthetics, legacy, wildlife, recreation, etc. Timber production (even though they occasionally sell timber) is not high on most forestland owners list of priorities. Forests are dynamic and constantly changing. It takes work to maintain a forest in a desirable condition. Left alone, a desirable forest will eventually grow into an undesirable forest.

The 2014 Farm Bill provides financial and technical assistance for farmers, ranchers and forest managers wanting to put conservation to work on their land through NRCS' Environmental Quality Incentives Program (EQIP). Under the farm bill, EQIP absorbed the former Wildlife Habitat Incentive Program. The WHIP goals of enhancing wildlife habitat are now part of EQIP.

Before applying for financial assistance through EQIP for your forest or woodland, you should develop a forest management plan. To get started, contact your Arkansas Forestry Commission county forester, Arkansas Game and Fish Commission private lands biologist or local USDA service center to find a forester near you. Your State forestry agency may be able to help you develop a Forest Stewardship Plan (a type of forest management plan). To learn about technical and financial assistance available through conservation programs, visit www.nrcs.usda.gov/GetStarted or your local USDA Service Center, or State Forester George Rheinhardt at 501-301-3143.

A crowded forest with a dense canopy does not allow sunlight to reach the forest floor. Trees become stressed when they are too crowded, and have to fight for sunlight, nutrient and water. This stress makes them more susceptible to attack by insects and diseases.

An "open" forest allows sunlight to reach the forest floor and gives plenty of room for trees to grow. Trees are less stressed as they have less competition for light, water, and soil nutrients. Snags and fallen logs provide habitat for predators that will eat the insects attacking trees. A healthy forest floor provides more cover and food for wildlife.

Water Quality Monitoring sediment and nutrient losses in runoff from agricultural fields

The Arkansas Department of Environmental Quality has identified several streams in eastern Arkansas as being impaired from high turbidity levels thought to be attributed to sediment losses in runoff from agricultural fields used to grow row crops. In-stream water quality monitoring and models have been used to identify these issues; however, there has been little monitoring done to quantify losses coming from agricultural fields. Natural Resources Conservation Service (NRCS) and its partners recognized the need for edge-of-field monitoring to determine the impact from agriculture on these issues and NRCS began providing financial assistance to eligible agricultural producers to conduct such monitoring.

In 2011, edge-of-field monitoring began on three agricultural operations in Cross and Arkansas counties with the cooperation of NRCS, partners such as the University of Arkansas, and the producers who managed these row crop operations. Automated water quality monitoring stations were installed to collect runoff samples from five fields with a crop rotation of rice followed by soybeans comparing several irrigation practices along with both conservation and conventional tillage practices. Continuous monitoring and data recording of runoff flow volume, flow velocity, and water depth occurred. During runoff events, water samples were collected for laboratory analysis of soluble phosphorus (P), total P, nitrate-nitrogen (nitrate-N), total N, and total suspended solids.

Results showed relatively small concentrations of all chemical constituents analyzed; soluble P ranged from 0.012 to 0.183 mg/L, total P ranged from 0.126 to 0.554 mg/L, total N ranged from 0.86 to 1.94 mg/L, and nitrate-N ranged from 0.045 to 0.98 mg/L, well below the drinking water standard of 10 mg/L. Additionally, no consistent difference between nutrient levels in runoff from fields with conservation versus conventional tillage were observed.

Edge-of-field monitoring can provide information regarding the impacts of runoff from agricultural operations to the water quality of Arkansas streams. Additionally, we can quantify the impact of both current agricultural practices as well as the impact of applying conservation measures.

For more information about Edge-of-field water quality monitoring contact Water Quality Specialist Teri Nehls at 501-301-3179.

Edge-of-field water quality monitoring station. Monitoring stations enable NRCS to measure the amount of nutrients and sediment in water at the edge of farm field. In FY16, NRCS made available $2 million to interested producers in 206 watersheds in nine states—Alabama, Arkansas, Iowa, Michigan, Missouri, New York, Vermont, and Washington.

Edge-of-field water quality monitoring station on producer Lawerence Conyer's farm in Jefferson County. The station measures the runoff from his soybean field.

Micro-irrigation Helps Producers Save Water, Minimize Weed Growth and Improve Crop Yield

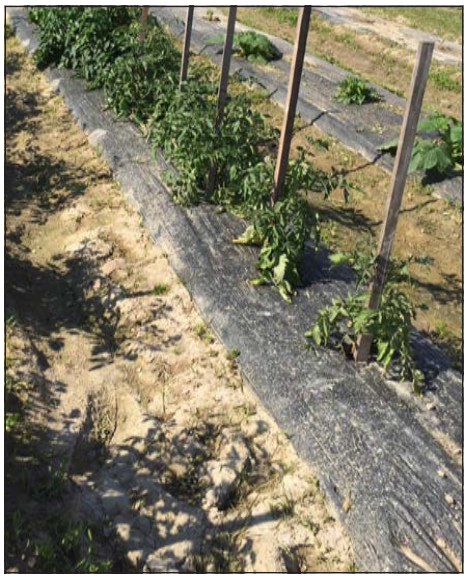
The Natural Resources Conservation Service helps customers with micro-irrigation through the Environmental Quality Incentives Program (EQIP). Micro-irrigation (MI) is the frequent application of a small amount of water on or beneath the soil surface. It contains a number of methods such as drip, sub-surface drip, bubblers, and micro sprayers. Drip irrigation (DI) is defined as a method of MI wherein water is applied at the soil surface as drops or small streams through emitters. Discharge rates are generally less than two gallons per hour for single-outlet emitters and three gallons per hour per 3.3 feet for line source emitters.

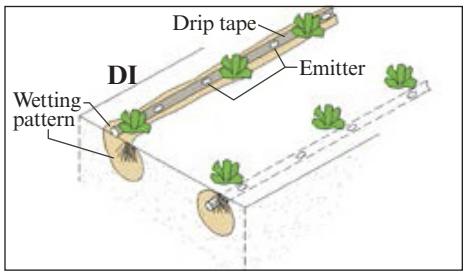
Sub-surface drip irrigation (SDI) is the application of water below the soil surface through emitters, with discharge rates generally in the same range as surface drip. Bubbler irrigation is the application of water to flood the soil surface using a small stream or fountain. The discharge rates for point source bubbler emitters are greater than for drip or subsurface emitters, but generally less than one gallon per minute. A small basin is usually required to contain or control the water. Jet, mist, and spray irrigation are the application of water by a small spray or mist to the soil surface.

There are many advantages to using MI. The greatest advantage is the water savings. Traditional irrigation practices apply water to the entire crop field. MI applies water directly to the root zone therefore minimizing weed growth and their non-beneficial use of water, in turn reducing the uses of herbicides and weed tillage. MI systems will prevent crop-water stress by allowing a continuous application of water even during cultivation and harvest. With row and vegetable crops, the furrows under MI remain relatively dry, thus allowing workers and farm equipment field access. Fertilizers and approved pesticides can be injected in the water and distributed uniformly to the crop, thus avoiding exposure of workers and minimizing labor and farm equipment needed for their application. Greater control over fertilizer placement, pesticide treatment, and accurate timing of application through MI may improve crop performance and chemical application and loss.

Hoop house with micro-irrigation.

Crops grown under MI will typically have a smaller and denser root system that has access to a small, well-aerated, wetted soil volume. To achieve optimum response, crops must be maintained constantly at optimum water and nutrient status. To maximize potential benefits will require monitoring and automation similar to that used in greenhouses. Other benefits are nutrient management, potential yield increase, improved crop quality, and greater control of applied water. When adequately managed, MI will provide soil, water, and nutrient conservation; minimized leaching of soluble salts; and a reduced applied water requirements. These overall results have been shown to improve water use efficiency and economic returns. For more information contact Water Management Engineer Shanon Griffin at 501-301-3130.





Drip tape, at left, is layed out according to crop spacing providing 0.5 gph to watermelon crop. Once in place plastic mulch, center, is placed on top. The plastic mulch acts as weed barrier and also retains moisture by reducing surface evaporation. Above, a typical lateral layout for single row crops. For more information on micro-irrigation, contact your local NRCS field office.

Conservation Stewardship Program to offer additional options to respond to producer needs

In response to customer and partner input, a significant update to the Conservation Stewardship Program (CSP) is coming soon. Beginning with the new enrollment period planned later this year, the updated CSP will leverage redesigned planning and evaluation tools and an expanded array of new enhancements to provide conservation-minded producers with more options to improve conditions on working lands.

Updates to the program will help make CSP more accessible and transparent by helping producers better evaluate their conservation options and the impact to their operations. NRCS has developed new CSP tools that function similarly to other standard NRCS tools, which will better integrate CSP into the suite of NRCS conservation programs. With these new tools, producers will be able to see up front why they are or are not meeting stewardship thresholds, allowing them to pick practices and enhancements that work for their conservation objectives. The new tools also allow producers to see potential payment scenarios for conservation early in the process, allowing them to better evaluate their conservation options.

NRCS has addressed producer and stakeholder input requesting greater flexibility to address local resource concerns. Now, NRCS will more effectively utilize input from farmers, ranchers and partners in State Technical Committees and local work groups to inform and expand conservation strategies under the program. Producers will be better prepared to apply because they will know these local ranking priorities and targeted resource concerns in advance.

CSP will offer nearly double the enhancements and conservation practice opportunities as before, taking advantage of emerging trends and conservation practices to be more responsive to producers' goals and capabilities. For example, CSP will offer producers four new enhancements that utilize gypsum as a soil amendment, which has been shown to improve water quality by reducing dissolved phosphorus and reducing the potential for pathogens to reach ground and surface water from manure. CSP will also offer support in the production of biochar following fuel reduction harvests or wildfires, which an NRCS-funded Conservation Innovation Grant shows can reduce debris while increasing soil organic matter and water-holding capacity. NRCS will also offer enhancements for on-site carbon storage and planting for high carbon sequestration rate, while expanding on investments in monarch habitat improvement by supporting the establishment of habitat in pastures.

CSP is for producers who are already established conservation stewards, helping them to deliver multiple conservation benefits on working lands, including improved water and soil quality and enhanced wildlife habitat.

NRCS will provide more information about the new program, including funding opportunities for the Fiscal Year 2017 enrollment period, later this year. Producers interested in the program can find at more at www.nrcs.usda.gov/csp or visit their local USDA Service Center.

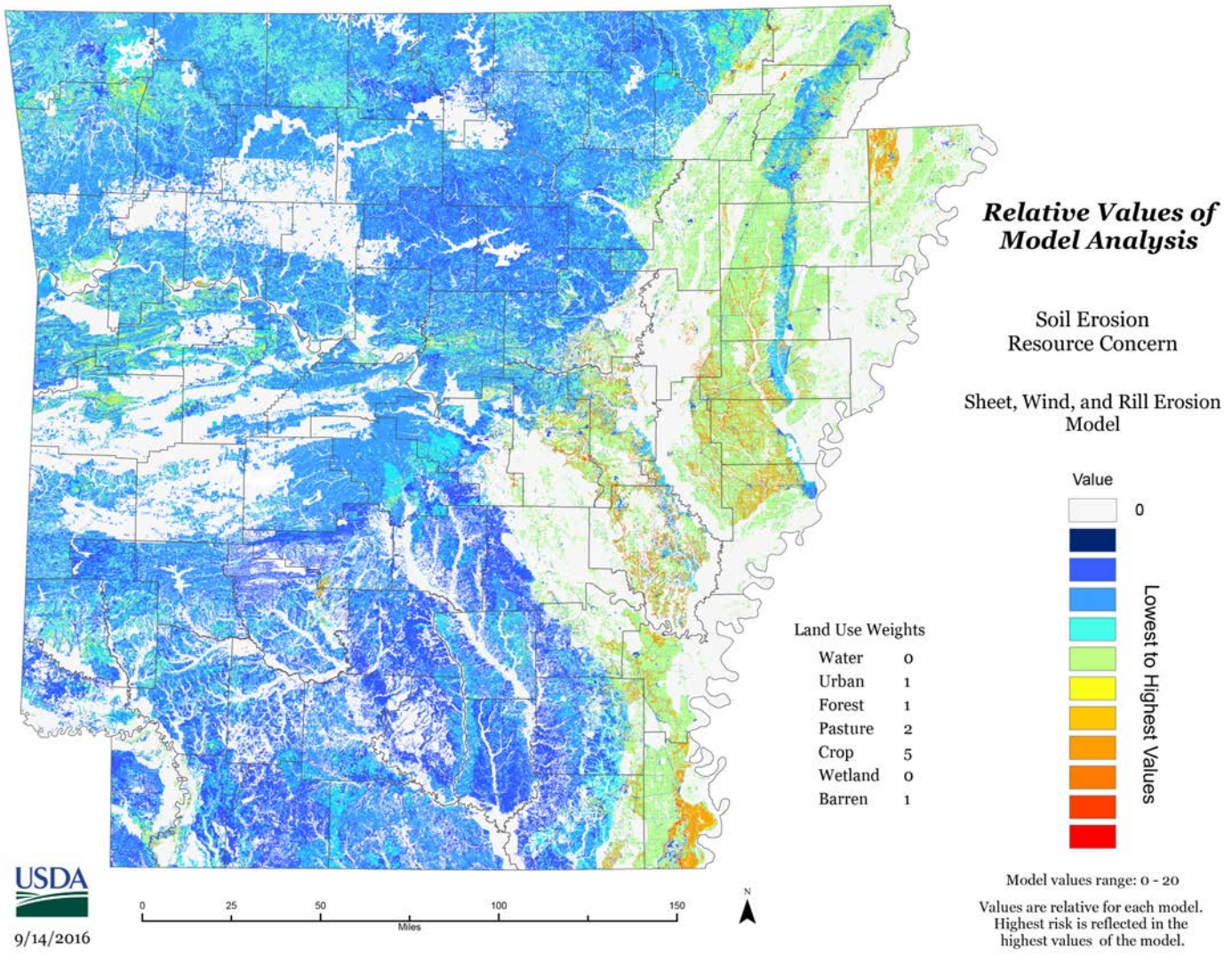
The updated CSP also comes with a national campaign. The above "Faces of CSP" poster is one of many new items that will be promoting the new program.

Update of the GIS based State Resource Assessment

Pam Jannise, Natural Resources Conservation Service (NRCS) State Geographic Information System (GIS) Specialist, worked with conservation partners and NRCS technical staffs to update the 2012 State Resource Assessment (SRA). This GIS based model quantifies the extent and distribution of 27 resource concerns recognized by NRCS that apply to Arkansas. The goal of the Arkansas SRA is to use the best available statewide spatial datasets in conjunction with input from resource experts from local NRCS staff and Conservation partners. The compilation of this statewide inventory of information will be leveraged to help guide and prioritize conservation efforts in Arkansas.

The 2015 Arkansas SRA is the third version of this model and has been updated to reflect the use of current and the elimination of redundancy of data in the models. The draft forms of the model is located at http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ar/technical/dma/?cid=nrcseprd1140008. Comments have been received and incorporated into this draft which will be presented to the State Technical Committee for adoption during their October meeting. Updates to the models will be made periodically as new data is available and/or different resource concerns recognized. Below is an example of data output from the Soil Erosion Resource Concern model.

2015 Arkansas State Resource Assessment



Battling ALS

Faith, family, friends help Devon get most out of life

CRESTON SHRUM

Devon Terrell with Washington County District Conservationist Rhonda Foster.

By CRESTON SHRUM

A lot has changed in Devon Terrell's life in the past two years. He relocated, got married, had a son and built a house for his family.

But, the biggest challenge came when the then 25 year old was diagnosed in 2014 with amyotrophic lateral sclerosis (ALS) commonly referred to as Lou Gehrig's disease. Along with the diagnosis, came the prognosis no one wants to hear — the life expectancy is 3–5 years.

The disease affects the motor neurons in the muscles throughout the body. When the motor neurons die, the ability of the brain to control muscle movement is lost.

Instead of letting the disease get him down, Devon chose to get the most out of life.

At the time, Devon was working as a Natural Resources Conservation Service soil conservationist in DeWitt, Ark.

"When I was diagnosed, I called Amanda Mathis to get advice on continuing my career with NRCS," Devon said. Mathis, who was Devon's supervisor during a college internship with NRCS in Berryville, Ark., discussed the situation with Mike Sullivan, Arkansas state conservationist.

"Mike called me and asked what would be best for me. He offered me three locations to move to that would get me closer to family and better medical care," Devon said. He chose Fayetteville, which is only 30 minutes from his family in Huntsville. Within two weeks headquarters approved the move and two months after his diagnosis he started work in the Washington County NRCS office.

"Devon has been a tremendous asset to our office in contract management, the document management system and assisting customers," said Rhonda Foster, Washington County district conservationist. "He works well with our customer base and landowners enjoy working with him."

In October 2015, Devon had to start using a motorized wheelchair. But, he hasn't let that impact his will to work fulltime.

"I have transitioned from field work to handling paperwork in the office. I handle the majority of payments and obligations," Devon said. "The staff scans their documents and sends them to me for final processing."

"Devon's passion for agriculture and conservation were evident immediately during the first summer he worked for NRCS. I was impressed with the level of dedication he showed and how easily he made connections with the producers he worked with," said Amanda, now assistant state conservationist for partnerships. "His positive attitude and desire to learn are characteristics that continue to serve him well."

Erica Westbrook, assistant state conservationist for field operations in Northwest Arkansas, agrees.

"Devon has been a real asset to the northwest area. He has a positive attitude and the farmers and employees adore him. He has a great demeanor and passion for NRCS," said Erica, who recently presented Devon with his 5-years-of-service pin.

"The way I deal with adversity is by forgetting pride and leaning on God. The other stuff tends to fall in place afterwards."

While physically, the neurodegenerative disease has slowed Devon down and confined him to a wheelchair, Devon's outlook has remained positive.

He attributes this to, "God, family and friends—in that order. The way I deal with adversity is by forgetting pride and leaning on God. The other stuff tends to fall in place afterwards," Devon said. "Through this experience, I hope my family can lean on God and become better Christians."

Though a lot has changed for Devon in the past couple of years, his goal remains the same, "To be alive tomorrow … and the next day, so I can be with my wife, Cecily, as we watch our son, Tripp, grow."

CAPTURING WATER

conserves resource, saves money on Century Farm

By CRESTON SHRUM

Four generations of the Chlapecka family have made a living off the rich soils of the Grand Prairie since 1897, when Steve Chlapecka, Jr's. great-grandfather immigrated to the area outside of Hazen from Czechoslovakia.

While the cropland in the area is abundant, many times water could be scarce.

In the 1940s, Chlapecka Jr's. grandfather, saw the need for more water and dug a reservoir. The reservoir is still in use. However, over time Chlapecka, Jr. has seen the water flow out of his fields and off his farm.

Thanks to the Grand Prairie Mississippi River Basin Healthy Watersheds Initiative (MRBI) offered by the USDA Natural Resources Conservation Service (NRCS) in partnership with the White River Irrigation District he is now able to catch the water and reapply it as needed.

Chlapecka, Jr. signed up for a pit reservoir, irrigation pipeline, pipe drops, a tank car and levee work on the existing reservoir to address water quality and quantity on 296 acres.

Through the contract, an irrigation water management plan was developed to ensure water is supplied to the crops when and where needed and to reduce erosion from runoff.

An existing ditch on the farm was expanded for the pit reservoir and a tank car installed to control the water level in the pit. Now water that used to flow off the farm can be captured and stored in the pit reservoir.

The water can then be pumped through irrigation pipelines to pipe drops strategically located across the farm. Run off is designed to return to the pit reservoir.

"We are really proud of our new reservoir and appreciate the assistance from NRCS, said Steve Chlapecka, Sr., who started farming in the 1940s and cut his 67th crop last year on his Century Farm.

While the new reservoir and pipelines haven't completely removed the need to pump from the two wells on his farm, it has drastically decreased the amount of water being removed from the aquifer. Chlapecka, Jr. estimates he has saved 128 acre feet or 41.7 million gallons of water since 2014 using the pit reservoir.

CRESTON SHRUM

MRBI Resource Conservationist Planner Kevin Cochran, left, Prairie County District Conservationist Bryan Jacobs, and producer Steve Chlapecka, Jr.

He is also seeing a savings in his bank account. "Pumping out of the pit costs about $300 a month versus the $200 a day it costs to pump from a well. I have saved about $8,000 since installing the pit."

Another part of the project raised the levees on the existing 30 acre reservoir to extend its lifespan. A new pump draws water from a tail-water recovery pit that can either be pumped back into the reservoir or sent through pipelines across the farm. The project also included adding new pipeline to tie into existing lines giving the reservoir a greater coverage area.

"Projects like this expand on the work NRCS has been doing to conserve water and improve water quality in the Grand Prairie for years," said Kevin Cochran, MRBI lead resource conservationist.

"Since the Grand Prairie MRBI project began in 2012, resource concerns on 32,643.6 acres have been addressed through 97 contracts using conservation practices designed to help the environment, sustain natural resources and increase farm profitability," Cochran said.

"The Grand Prairie MRBI project has been a terrific success," said Dennis Carman, chief engineer and director of the White River Irrigation District. "Programs like MRBI provide a locally led conservation group like us an avenue to meet conservation objectives, ours being addressing water quality and quantity on the Grand Prairie of Arkansas.

"Through a strong partnership with NRCS we are utilizing MRBI, greenhouse gas and climate change initiatives to put conservation on the ground and leave the Grand Prairie a better place for generations to come," Carman said.

The Chlapecka's own 500 acres and lease an additional 700 to grow soybeans and rice in Prairie County.

Strawberry River MRBI Project

Farmers and landowners in Whaley Creek-Strawberry River, Fool Creek-South Big Creek and Hamilton Creek - South Big Creek Watersheds of the Strawberry River in Sharp County have the opportunity to apply for funding through the Middle Strawberry River Mississippi River Basin Healthy Watersheds Initiative (MRBI). The project area covers 54,322 acres.

The Strawberry River is a popular stream for canoeists and fishermen. In addition to smallmouth bass, the river is home to 39 species of freshwater mussels, many of them rare, as well as the Strawberry River orangethroat darter which lives only in this river system.

Tire tanks are a practice to water cattle and keep them out of the river. This allows them to drink fresh water while keeping sediment and nutrients out of the river.

Many farmers cleared land along the river and planted corn or other crops and grazed cattle. In the late twentieth century, the water quality of the Strawberry River began to decline due to poorly managed cattle-grazing in the river's watershed, as well the construction of rural roads releasing sediment into the stream. In response, the Natural Resource Conservation Service (NRCS) has provided extra funding for a few selected watersheds.

The Middle Strawberry River MRBI is a voluntary conservation program that helps producers in a manner that promotes agricultural production and environmental quality. The main focus for the project is to improve water quality. Agricultural producers receive financial and technical assistance to implement structural and management conservation practices that optimize environmental benefits on working agricultural land.

Practices such as ponds, cross fencing, tire, concrete freeze proof water tanks, tree/shrub establishment, waste storage facilities, animal mortality facilities, prescribed grazing, forage and biomass planting, brush control and herbaceous weed control are eligible for financial assistance.

Applications are accepted on a continuous basis, however, NRCS establishes application deadline dates for evaluation, ranking and approval of eligible applications. Producers must submit a complete program application, establish "farm records" and other documentation to support eligibility to be considered for financial assistance through MRBI.

Step by step assistance to apply for funding can be found at http://www.nrcs.usda.gov/getstarted or contact District Conservationist Rebecca Long at the NRCS Office in Ash Flat at 870-994-7335 Ext. 3.

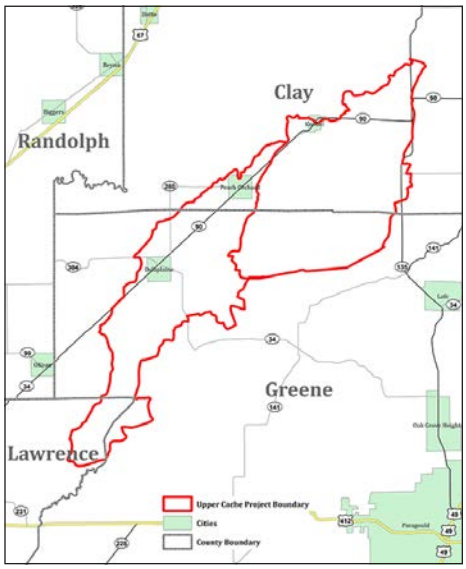
Upper Cache River MRBI Project

In 2015, portions of the Cache River watershed in Clay, Greene, and Lawrence counties were approved for a new Mississippi River Basin Healthy Watersheds Initiative (MRBI) Project. In a coordinated effort between NRCS and multiple partners, the proposal was submitted and approved for $3.4 million to be awarded in Environmental Quality Incentives Program (EQIP) financial assistance from 2015–2018. For the first time in Arkansas, an MRBI project was also awarded Conservation Stewardship Program (CSP) funds. CSP funds were in the amount of $1.5 million from 2016–2018.

The Upper Cache River Watershed MRBI project is a voluntary program that provides financial and technical assistance to agricultural producers in the Petersburg Ditch-Cache River and Big Gum Lateral-Cache River watersheds in portions of Clay, Greene and Lawrence counties. The project area covers 54,025 acres. This project is primarily focused on improving water quality and water quantity. The practices eligible for funding were carefully selected to have positive effects on these two priority resource concerns.

"There has been significant interest in this project," said Adam Eades, NRCS district conservationist in Greene county. "The partners have gone above and beyond in providing assistance. The local conservation districts have been especially instrumental in the successful outreach for this project and in helping meet the increased workload that the project has created," he added. Future outreach meetings and a continuous sign-up are in place to continue to identify the areas in these watersheds that will provide the biggest environmental benefit, if treated.

Project partners include: Clay, Greene, and Lawrence County conservation districts; Arkansas Natural Resource Commission; Arkansas Game and Fish Commission; Arkansas Forestry Commission; Arkansas State University; University of Arkansas Cooperative Extension Service; Baker Implement Company; Delaplaine Seed Company; Farm Service Incorporated; Legacy Agricultural Equipment Company; local drainage districts; and The Nature Conservancy.



"Keeping It in the Family Project" to assist African American Forest Landowners

The University of Arkansas at Pine Bluff (UAPB) was awarded the Keeping It in the Family (KIITF) project by the U.S. Endowment for Forestry and Communities, USDA's Natural Resources Conservation Service (NRCS) and USDA's Forest Service, to assist African American forest landowners with forest management. KIITF is a three year project designed to provide assistance to African American forest landowners by helping them install woodland management practices leading to economically productive and sustainable forestlands. The project will introduce new forestry technologies, create trusted, comprehensive and replicable systems of landowner outreach and support, and develop income steams by connecting forest owners to traditional and emerging forest products markets.

The KIITF project will offer one-on-one assistance to African American forest landowners to enhance the productivity of forest lands through the development of forest management plans, heir property resolution assistance, application guidance to USDA technical and financial assistance programs, identification of forest produce markets and a Revolving Loan contract management program.

The counties the project will be offered in are: Columbia, Hempstead, Howard, Little River, Nevada, Ouachita and Union.

"This project will enhance the assistance NRCS is providing African American foresters in the seven county project area," said Mike Sullivan, NRCS state conservationist in Arkansas. "The health of our forests and our rural communities very often go hand in hand. NRCS works with thousands of private landowners through a range of conservation programs and partnerships to increase economic and other opportunities for the families and businesses that make their homes near woodlands, decrease the threat of wildfire and restore forest habitat."

UAPB will work with a broad network of resource providers and partners including: Arkansas Association of Conservation Districts, Arkansas Forestry Commission, Arkansas Land and Community Development Corporation, Center for Arkansas Legal Services, Silas H. Hunt Community Development Corporation and University of Arkansas at Little Rock Bowen School of Law, to assist forest landowners with specific needs.

"The KIITF project is an innovative approach supported by the USDA StrikeForce Initiative that seeks to eliminate barriers that restrain historically underserved and limited resource landowners from receiving USDA program assistance," said Arkansas USDA StrikeForce Coordinator Charlie Williams.

The KIITF team will conduct a series of outreach meetings in the focus area and will invite landowners to seek assistance to make properties a valuable resource now and for generations to come.

"What I really like about this program is that in the past, when a producer wanted to sign up for the Environmental Quality Incentives Program and other USDA programs, they had to have heir property problems resolved first," said Dr. Henry English, head of the Small Farm Program at the University of Arkansas at Pine Bluff (UAPB). "With this program, attorneys can work with farmers who have heir property problems and they can help them resolve those problems."

Forest landowners can apply for financial assistance through NRCS for voluntary installation of forestland conservation practices to help restore, maintain, and enhance more open woodland.

"As with all NRCS programs, participation is completely voluntary," Sullivan said. "This project will incorporate the same practices that landowners have been voluntarily implementing for years, boosting soil and air quality, cleaning and conserving water and enhancing wildlife habitat."

For an interactive look at USDA's work in conservation and forestry, visit http://medium.com/usda-results.

For additional information on the Keeping It in the Family project, contact UAPB professor Dr. Henry English at 870-575-7246 or englishh@uapb.edu, or Charlie Williams at 870-633-3055 or charlie.williams@ar.usda.gov.

To learn about technical and financial assistance available through conservation programs, please visit www.nrcs.usda.gov/GetStarted or your local USDA Service Center.

Charlie Williams USDA StrikeForce Coordinator

"Soil and water are inseparable; they are the foundation for all other conservation programs. Productive land is our greatest resource, without it we are nothing. If it is to feed, house and provide a place for both underground and surface water storage, and a habitat for wildlife, and a place for recreational facilities, then each acre of it must be managed within its capabilities and treated according to its needs."
—Hugh Hammond Bennett, first Chief of the Soil Conservation Service (now NRCS)


Hugh Hammond Bennett

The Lake Bennett Watershed project, in northeast Faulkner County, was the first project in the United States built to scientifically study the effects of water runoff, silt and erosion control from a specific watershed.

The experiment included building a lake and erosion control structures within the watershed to test if erosion could be controlled.

As a result of these studies, a new philosophy of land management was born. Principles tested at Lake Bennett laid the foundation for soil conservation practices considered common today. Strip cropping, terracing, crop rotation and planting soil-retaining vegetation are now soil protection methods used nationwide.

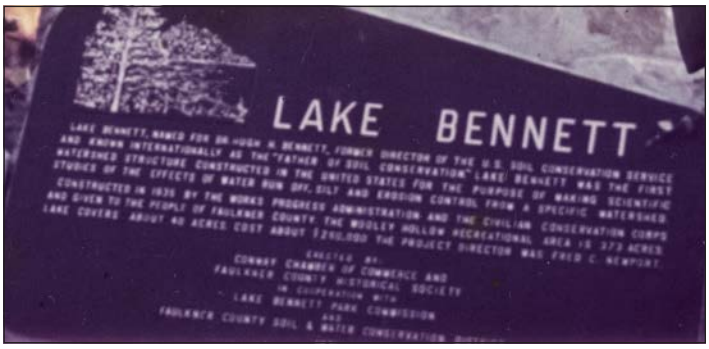
After four years of construction, Lake Bennett opened in 1939. The narrow valley was ideal for a small earthen dam and is at the base of the 35,000 acre watershed.

Small erosion control structures were designed to slow the runoff and allow soil to filter out and stay on the hillsides, leaving clear water to flow into the 40-acre lake. The dam was designed to catch the water and stop it from pouring into the valley and washing away the topsoil.

The lake was named after Dr. Hugh Hammond Bennett, the first chief of the Soil Conservation Service (now NRCS). Bennett began his career in agriculture in 1903. Eventually he saw how soil erosion was taking a destructive toll on American farmland and, he believed, if left unchecked, would impair the nation's ability to produce food.

Lake Bennett is located in Woolly Hollow State Park located off Highway 285 north of Greenbrier.


People fishing in the newly filled Lake Bennett.



The inscription reads "Lake Bennett, named for Hugh H. Bennett, former director of the U.S. Soil Conservation Service and known internationally as the "Father of Soil Conservation" Lake Bennett was the first watershed structure constructed in the United States for the purpose of making scientific studies of the effects of water run off, silt and erosion control from a specific watershed. Constructed in 1935 by the Works Progress Administration and the Civilian Conservation Corps and given to the people of Faulkner County the Woolly Hollow Recreational Area is 373 acres, lake covers about 40 acres. Cost about $250,000. The project director was Fred C. Newport. Erected by Conway Chamber of Commerce and Faulkner County Historical Society. In conjunction with Lake Bennett Park Commission and Faulkner County Soil & Water Conservation District.

The Future of Agriculture

SUBMITTED BY MARY HARRIS

Jaylon Rucker (center), Kilam Anderson (at right), and NRCS District Conservationist Clyde Williams prepare to survey the land. Kilam Anderson is from Little Rock and Jaylon Rucker from Cotton Plant.

By ARKANSAS LAND AND COMMUNITY DEVELOPMENT

Arkansas Land and Community Development Corporation (ALCDC) in Fargo, Ark., recently partnered with Natural Resources Conservation Service (NRCS) to provide internship positions for eligible second, third and fourth year Youth Enterprise and Careers in Agriculture and Entrepreneurship members.

The internship opportunities granted young men and women office and field experience they need when entering the workforce, particularly in the agricultural field.

Recipients of the internships were Kilam Anderson, Jaylon Rucker and Aldrick King.

King interned at the Monroe County NRCS office in Clarendon under the supervision of former YECAE member and NRCS District Conservationist Derinda Smith.

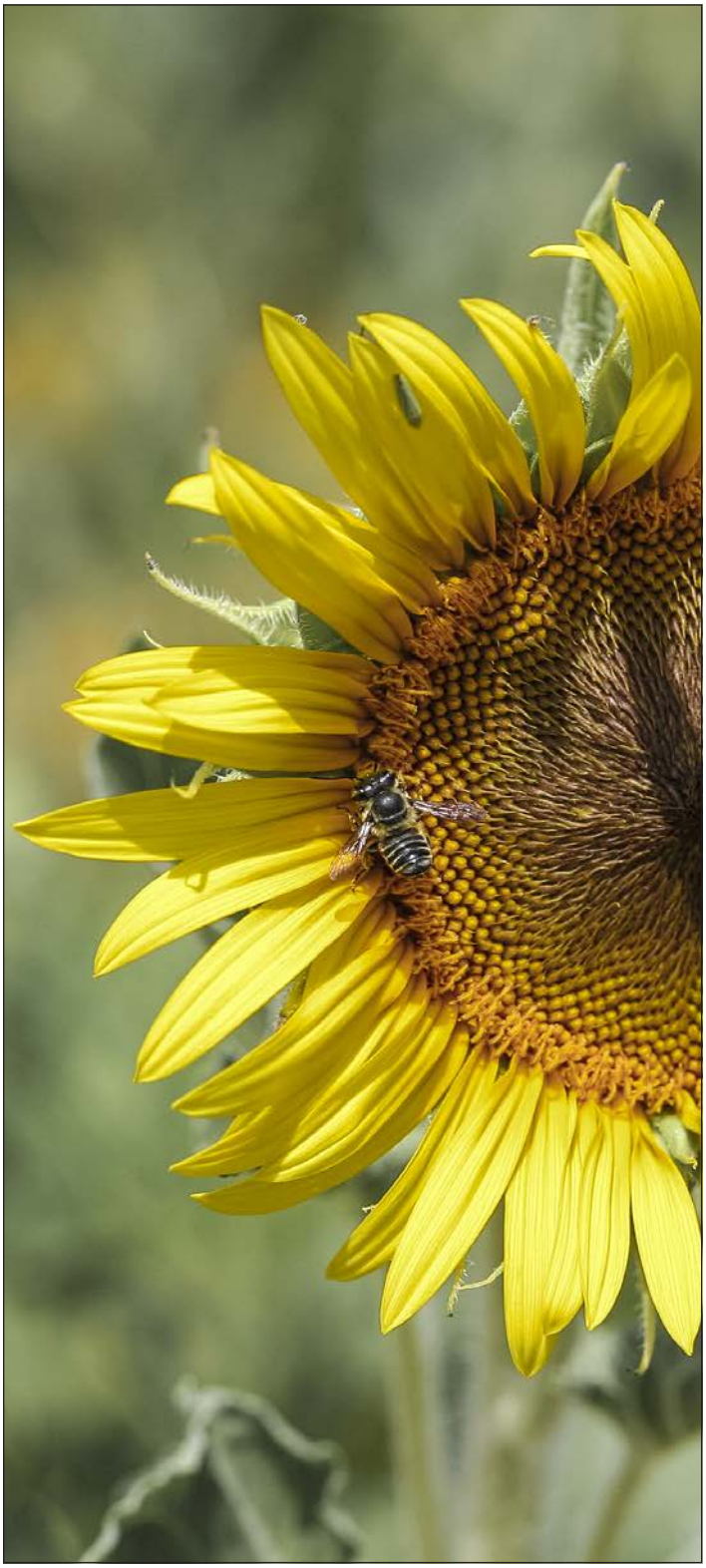
Rucker and Anderson interned at the Woodruff County NRCS office in Augusta under the supervision of NRCS District Conservationist Clyde Williams.

2016 Pathways Interns

CHRISTOPHER WILLIS

Student interns who spent the summer working in NRCS field office service centers. Kneeling L-R: Brandon Vaverka, Nic Fowler; Standing Second Row: Clint Moore, Bria Harris, Morgan Burns, Allison Greb, and Lucas Head; Standing Third Row: Jaylan Haskins, Jacob Brown, Mike Sullivan (NRCS State Conservationist), Ilianna Rodriguez, Chandler Riley, Seth Boles, and James Marlar.

Backyard Pollination



Pollinators are essential in our backyards, farms, forests and ranches. They are necessary for a majority of crop production and flower regeneration, not to mention honey production and its vast benefits. Many plants cannot reproduce without pollen carried to them by foraging pollinators. Pollinators include birds, bees, butterflies, moths, beetles, bats and some other mammals.

In the United States, the pollinators we depend on for the majority of our pollination are over 4,000 species of native bees. They account for nearly $15 billion in crop value each year.

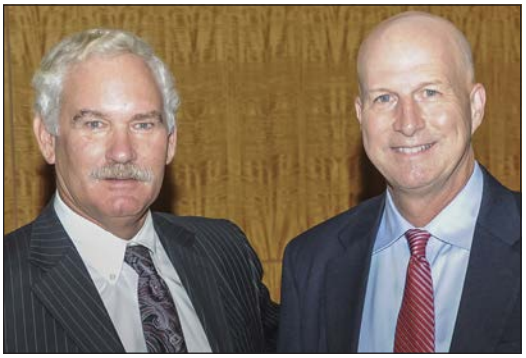
Evidence of population declines of bees has prompted scientists to encourage changes to how we manage our public and private spaces. Habitat loss, disease, parasites, and environmental contaminants have all contributed to the decline of many species of pollinators. Pollinators do not recognize boundary lines between homes, businesses, schools, and farms. They make use of food and habitat anywhere it is found. It is important to try to protect and enhance these important creatures.

Here are Seven Ways to make your backyard a haven for native pollinators:

1. Use pollinator-friendly plants in your landscape. Shrubs and trees such as dogwood, blueberry, cherry, plum, willow, and poplar provide pollen or nectar, or both, early in spring when food is scarce.
2. Choose a mixture of plants for spring, summer, and fall. Different flower colors, shapes, and scents will attract a wide variety of pollinators. If you have limited space, you can plant flowers in containers on a patio, balcony, and window boxes.
3. Reduce or eliminate pesticide use in your landscape, or incorporate plants that attract beneficial insects for pest control.
4. Accept some plant damage on plants meant to provide habitat for butterfly and moth larvae.
5. Provide clean water for pollinators with a shallow dish, bowl, or birdbath with half submerged stones for perches.
6. Leave dead tree trunks in your landscape for wood nesting bees and beetles.
7. Support land conservation in your community by helping to create and maintain community gardens and green spaces to ensure that pollinators have appropriate habitat.

Pollinators are a crucial part of healthy agricultural and natural landscapes. See more at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/pollinate/ or contact your local USDA Service Center to find out how to attract pollinators to your farm, ranch or home.

USDA Held Regional Fall Forum at U of A to Discuss Beginning Farmers and Land Tenure



Acting Deputy Secretary of Agriculture Michael Scuse was the keynote speaker at the US Department of Agriculture's (USDA) Regional Fall Forum: Beginning Farmers and Land Tenure on August 29 in Fayetteville. The forum was hosted by the University of Arkansas (U of A) Dale Bumpers College of Agricultural, Food & Life Sciences and School of Law.

USDA is hosting a series of forums with high-ranking USDA officials to highlight the progress made on the top issues facing the future of agriculture and set the stage for the next Administration to continue to support a strong future for American agriculture. The series of USDA Fall Forums will be hosted in partnership with leading universities across the country.

Acting Deputy Secretary Scuse led the forum at the U of A to facilitate discussions with regional stakeholders about high priority issues and to lay the groundwork for the next Administration to build on the progress USDA has made over the past seven years. Panel discussions included "Challenges and Opportunities Facing New and Beginning Farmers" and "The Issues of Land Access and Land Transition."

Other forums around the country will focus on a pressing agricultural issue, including land tenure and the next generation of agriculture, climate change, export markets, local and regional food systems, and groundbreaking agricultural research.

More information on USDA's assistance for beginning farmers and ranchers can be found at www.usda.gov/NewFarmers.

Tony Kramer visits Arkansas

CHRISTOPHER WILLIS

District Conservationist Joe Tapp, Deputy Chief for Programs Tony Kramer, Jim Tapley, and State Conservationist Mike Sullivan at the Tapley Farm in Greenbrier. Kramer paid a visit to the Natural State August 22–25. During his visit, he met with many NRCS staff and producers. He was impressed by the dedicated employees who are working very hard helping producers get the TA/FA they need.

Cover Crops, Soil Health, and Water Management Conference to be held in Jonesboro

Farmers across Arkansas and from across the country are invited to the Southern Agricultural Cover Crops, Soil Health and Water Management Conference December 13–14 being held at the Arkansas State University Convocation Center in Jonesboro. The conference, co-sponsored by the USDA's Natural Resources Conservation Service (NRCS) and the Arkansas Association of Conservation Districts (AACD), is designed to assist farmers learn how to successfully adopt a cover crop management system, improve soil health and water management on their operations.

The conference provides a forum for farmers to exchange information, discuss opportunities for collaboration, and learn about new and successful practices related to cover crops, soil and water management. Case study presentations will identify and discuss strengths and pitfalls of real applications.

Certified crop advisors can earn continuing education units for attending the conference.

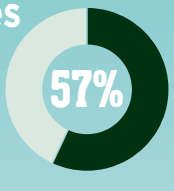
For more information contact John Lee, state agronomist, at (501) 301-3173 or email at john.lee@ar.usda.gov.

FORESTRY provides more than **27,500 jobs** and contributes in excess of **3 billion** to the Arkansas economy.

1,200+ conservation practices covering more than **40,000 acres** were managed in 2015.

69 percent of forestlands in Arkansas are privately owned.

Arkansas has **19 million acres** of forestland representing approximately **57 percent** of the total land base.



FOREST LANDOWNERS IN ARKANSAS PLANT MORE THAN 68 MILLION SEEDLINGS EACH YEAR

Sources: USDA Pro Tracks, Arkansas Forestry Association, Forest Inventory and Analysis Data, Arkansas Forestry Commission