ARKANSAS CONSERVATION NEWS

NATURAL RESOURCES CONSERVATION SERVICE

Second Quarter 2018

Room 3416, Federal Building, 700 W. Capitol Ave., Little Rock, AR 72201
Phone: (501) 301-3100 • Website: www.ar.nrcs.usda.gov

Second Quarter 2018

Transitioning from military to farming.
Page 10

Wetland Reserve Easements program celebrates 25 years.
Page 3

National Volunteer Week: Highlighting Earth Team volunteers who now work for NRCS.
Page 11

Father/son team conserving "Cache" through MRBI project.
Page 14

Helping People Help the Land

From the State Conservationist

Welcome to the latest edition of our NRCS Arkansas Conservation Newsletter. NRCS works with landowners through conservation planning and assistance designed to benefit the soil, water, air, plants, and animals that result in productive lands and healthy ecosystems. We work with our conservation partners to ensure that everyone is aware of our programs and has the opportunity to participate.

We want to make sure our outreach is broad and effective. Agriculture Secretary Sonny Perdue has given NRCS, along with our Farm Production and Conservation (FPAC) mission area sister agencies Farm Service Agency and Risk Management Agency, the charge to provide the very best customer service experience to our customers.

To that end, Secretary Perdue recently announced the new website www.farmers.gov, a new, interactive one-stop website for producers maintained by the U.S. Department of Agriculture (USDA). Farmers.gov will have multiple features added in future months to allow agricultural producers to make appointments with USDA offices, file forms, and apply for USDA programs. The website gathers together the three FPAC agencies.

As the nation's preeminent private lands conservation agency for over 80 years, we want to continue to provide the very best customer service to our producers and to our conservation partners. Working in conjunction with our FPAC sister agencies, NRCS will continue to ensure we have the information technology, business operations and technical staff to enable us to offer timely, and cost effective solutions to our customers.

Looking ahead, we'll remain focused more and more on providing landowners with a partnership of support and the information they will need to make the best land management decisions.

Farm bill financial and technical assistance have helped make things happen. But it's partnerships that get the work done. Working with partners committed to conservation, we are making a difference in the environment that will benefit everyone and provide an even better customer experience.

We hope this newsletter, our website, and our social media feeds will be another tool to help in our outreach efforts to help make our customers aware of our conservation programs and activities.

Thank you for your interest in our newsletter. We hope that you will find the articles and information useful and enlightening. Feel free to contact us about any program, service, or initiative offered by our agency. Your questions and comments are always important to us.

Mike Sullivan, State Conservationist

ARKANSAS CONSERVATION NEWS
NATURAL RESOURCES CONSERVATION SERVICE

The Arkansas Conservation News is published quarterly by the Arkansas Natural Resources Conservation Service.

Please send submissions to Reginald L. Jackson, State Public Affairs Specialist, or Creston Shrum, Public Affairs Specialist at: Room 3416, Federal Bldg.; 700 W. Capitol Ave.; Little Rock, AR 72201
Phone: (501) 301-3133, Fax: (855) 681-7044

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.

For more information on Arkansas NRCS visit:
Website: www.ar.nrcs.usda.gov
Twitter: twitter.com/arkansasnrcs
YouTube: https://bit.ly/2Hau3QO

Arkansas NRCS Public Affairs Email Addresses:
Reginald.Jackson@ar.usda.gov
Creston.Shrum@ar.usda.gov
Christopher.Willis@ar.usda.gov

NRCS Celebrates 25 years of WRE

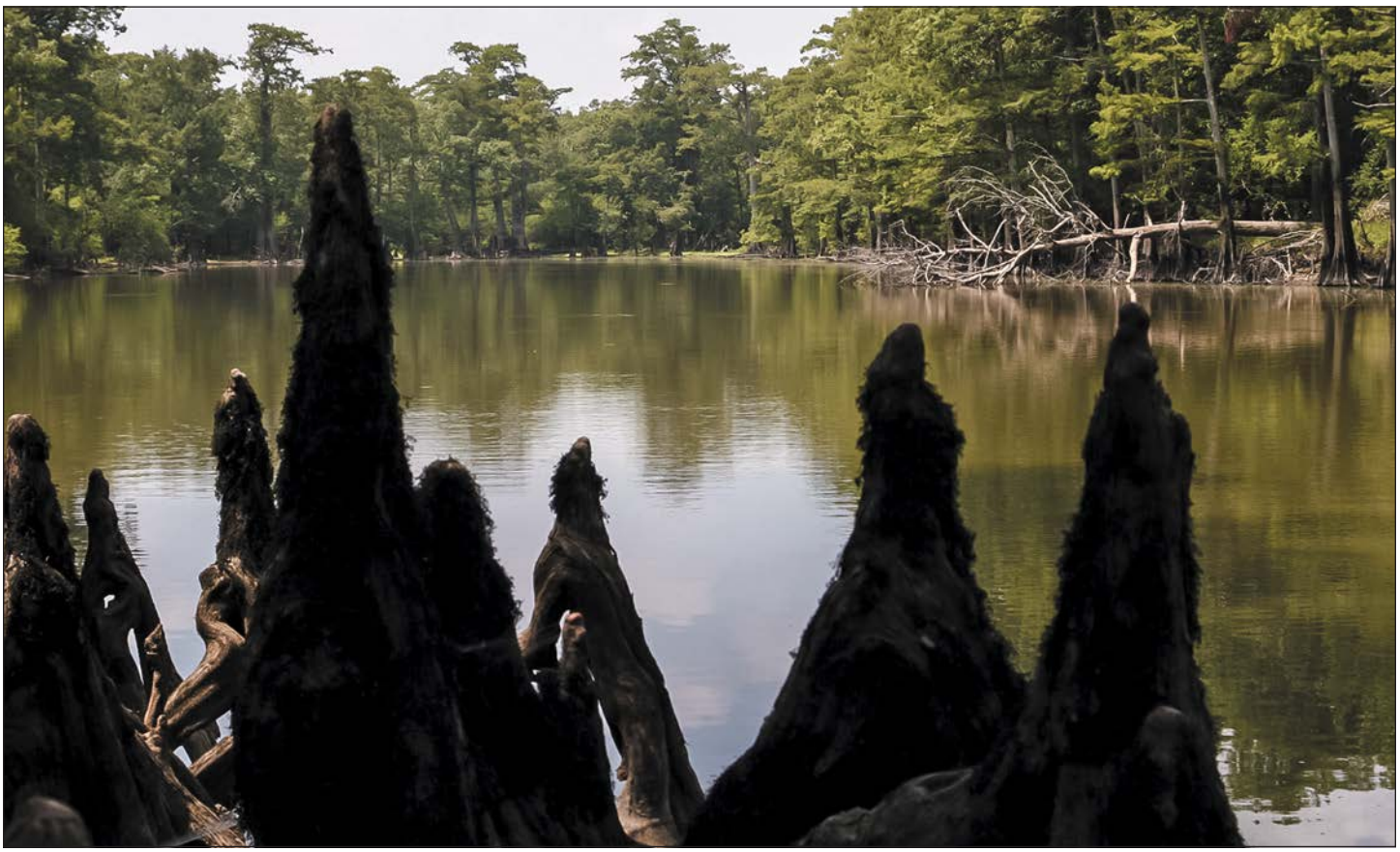
Within the past 25 years more than 700,000 acres have been enrolled in the Wetland Reserve Easement (WRE) program (previously called the Wetlands Reserve Program) in Arkansas, Louisiana and Mississippi. In Arkansas, 242,736 acres of wetlands have been enrolled.

"This is a great accomplishment for the Natural Resources Conservation Service (NRCS), our conservation partners and private landowners. Through voluntary enrollment, producers have made significant impacts on restoring our nations wetlands, restoring critical wildlife habitat, reducing soil erosion and improving water quality and building a legacy of outdoor recreational opportunities for future generations," said Randy Childress, assistant state conservationist for easements in Arkansas.

"WRE is more than just an NRCS program. WRE has changed the landscape of America for the better," he said. "Marginal farm land is taken out of production and converted to its original wetland state. In doing so, incredible benefits are provided to the environment, wildlife, ecosystems, floodwater retention areas, and overall water quality."

WRE is a voluntary conservation program that offers landowners the opportunity to restore, enhance and protect their property through easements. The intent of the WRE program is to take marginal land out of the rotation and concentrate the farming operation on the most productive land.

For more information on WRE, visit your local NRCS office or contact Northeast Area WRE Program Coordinator Nelson Childers at 870-819-4596 or nelson.childers@ar.usda.gov; South Area biologist Chris Carneal at 501-267-4109 or chris.carneal@ar.usda.gov; WRE biologist Rich Johnson at 501-676-0283 or rich.johnson@ar.usda.gov; or Assistant State Conservationist for Easements Randy Childress at randy.childress@ar.usda.gov.



PMC Releases New Indiangrass

Wynia Germplasm Indiangrass [*Sorghastum nutans (L.) Nash*] was released in September 2017 by the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) Booneville Plant Materials Center (PMC) as a selected class release.

A release ceremony was held in October in conjunction with the fall meeting of the Razorback Chapter of the Soil and Water Conservation Society at the PMC. Attendees toured the PMC and USDA Agricultural Research Service (ARS) research farm and were able to see plots of the Wynia Indiangrass as well as ongoing ARS projects concerning water quality and nutrient management.

The release ceremony was especially significant as Mrs. Shirley Wynia and her three daughters were in attendance to honor their late husband and father, Richard Wynia, for whom the Indiangrass was named. Richard "Rich" Wynia was the former assistant manager and agronomist at the Booneville PMC from 1989 to 1991 and was instrumental in conducting plant evaluations and making plant selections for resource conservation and environmental programs for use in the southern Ozarks. Rich left Booneville and became the PMC Manager at the Manhattan PMC in Kansas where he continued his plant research and authored over 75 plant publications including plant fact sheets, plant guides, release brochures, technical notes and major journal articles.

Rich left a rich and diverse group of works that will serve agricultural producers for future decades.

Former Booneville Plant Materials Center manager Randy King presents Shirley Wynia with documentation about the newly developed Wynia Germplasm Indiangrass. Photo by Christopher Willis

At right, Wynia Germplasm Indian in field planting at the Booneville Plant Materials Center. Photo by Booneville Plant Materials Center

Water Quality & Nutrient Management

Water Quality and Edge of Field Monitoring

Arkansas has approximately 82,366 miles of surface water of which 210 miles are designated as wild and scenic. Unfortunately, a significant number of these have impaired sections. Sediment (turbidity) is a major cause of impairment to Arkansas's surface waters. Suspended sediment in water can harm submerged aquatic vegetation and phytoplankton that rely on sunlight for photosynthesis. Nutrients carried by sediment can result in algal blooms that can rapidly deplete dissolved oxygen causing hypoxia in fish and other aquatic plants and animals.

The USDA's Natural Resources Conservation Service (NRCS) works with producers to implement conservation practices to reduce sediment loss from agriculture fields and adjacent ditches. Some of these practices include: reduced tillage, no-till, cover crops, conservation crop rotation, conservation cover, filter strips, buffers, two-stage ditch, as well as irrigation system improvements such as irrigation pipeline, tailwater recovery, irrigation reservoir, and irrigation water management.

NRCS works with monitoring partners to implement edge of field on producers' operations. Edge of field monitoring is the monitoring of surface runoff from agricultural fields to quantify the sediment and nutrient loads from a control field compared to a field where conservation has been implemented. Arkansas currently has 15 active edge of field sites. Early results show that practices such as cover crops and improvements in irrigation systems that incorporate irrigation water management result in less sediment leaving the field compared to the control.

Nutrient Management and Water Quality

One of the primary goals of nutrient management planning is to minimize any detrimental effects that nutrients can have on the environment. The proper management of nutrients in manure is an important issue since managing nutrients can be more challenging compared to commercial fertilizer. Nitrogen in manure can be in different forms but nitrate which is highly soluble is not readily absorbed by soil particles, which makes it highly susceptible to leaching to groundwater. Phosphorus is an essential element for plants and animals. Phosphorus has become an increasing environmental concern because excess amounts in surface water limits biological activity. Very small increases in phosphorus in freshwater can lead to unwanted algae and vegetative growth leading to the acceleration of eutrophication. It is characterized by excessive biological activity that can reduce aquatic wildlife populations and species diversity by lowering the dissolved oxygen and increasing the biological oxygen demand.

A nutrient management plan assists landowners and operators in the proper management and utilization of nutrient sources for maximum fertility and protection of water quality. NRCS has been very proactive in training NRCS staff and partners in nutrient management.

NRCS provides technical and financial assistance to producers to implement nutrient management. Through the Environmental Quality Incentives Program (EQIP), producers can receive financial assistance to have a Comprehensive Nutrient Management Plan (CNMP) completed. A CNMP is an assessment of animal feeding operations which help ensure that both production and natural resource protection goals are achieved. Through EQIP and Conservation Stewardship Program (CSP), producers can receive financial assistance for implementing nutrient management that includes such items as split applications, variable rate applications, additional nutrient tests including pre-side dress nitrogen test, corn stalk nitrogen test, chlorophyll meters, and/or spectral analysis.

Arkansas included in service area for the Missouri Agricultural Wetland Mitigation Bank

As part of the 2014 Farm Bill, the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) was authorized to establish the Wetland Mitigation Banking Program. A competitive process was developed and NRCS funded the development of 10 mitigation banks across the nation. Landowners who purchase "credits" in an NRCS wetland bank that at least equal wetland acreage that is farmed or removed, remain eligible for all USDA programs.

Minton Environmental Consultants (MEC), an entity approved by NRCS to develop and operate a wetland mitigation bank originally serving just Missouri, is now available for Arkansas landowners in counties along the Mississippi River. Through the Missouri Agricultural Wetland Mitigation Bank, farmers have the opportunity to mitigate their existing wetlands, previously converted wetlands, and mitigated wetlands from their present locations to the bank. The mitigation process eliminates the farmers' responsibility for these wetlands and allows them to farm these areas.

"We are very fortunate that Arkansas producers who have wetlands in their fields will have an option to purchase wetland credits in the southeastern Missouri Westland Mitigation Bank," said Arkansas State Conservationist Mike Sullivan. This will give them more flexibility in their farming operations."

Agricultural wetlands that are labeled by NRCS as Farmed Wetland (FW), Farmed Wetland Pasture (FWP), Wetland (W) less than five acres in size that is predominantly bordered by land that has been cropped eight years of the past 10 years, or a Converted Wetland (CW) that was an FW, FWP or W prior to conversion, are eligible to participate.

It is estimated that Arkansas originally had 9.8 million acres of wetlands, representing almost 30% of the total surface area of the state. By the mid 1980s, the number of wetlands had dropped to 2.8 million acres (72% loss) representing only 8% of the surface area. Arkansas has lost more wetland acres than any other inland state in the nation.

"The bank will replace the hydrologic, biogeochemical, plant community, and habitat functions impacted by the wetland conversions within its service area," said Davis Minton, who owns the MEC along with his brother Bradley. "The benefits include flood attenuation, groundwater recharge and discharge, sediment retention, nutrient and contaminant removal, plant community structure and function, and wildlife habitat of critical importance to waterfowl, shorebirds, and many threatened and endangered species".

Helen Denniston, NRCS Arkansas state resource conservationist and Jim Baker, state biologist, were impressed by the Mintons' commitment to wetland restoration.

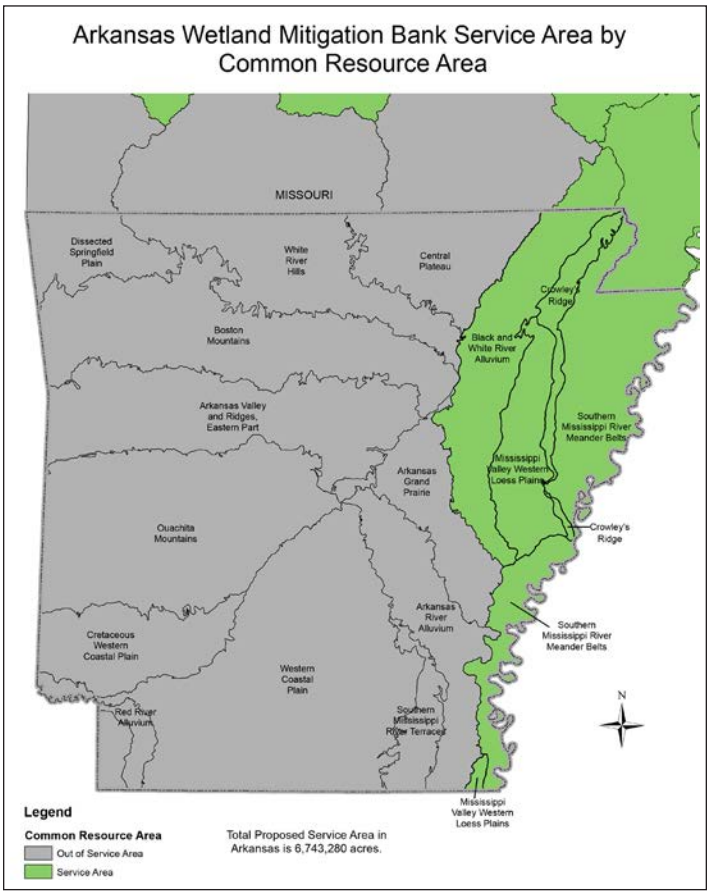
"Their wetland restoration philosophy has led them to develop a mitigation bank wetland that is exceptional in its function and value," said Baker.

"As farmers, we understand the importance of remaining eligible for USDA programs" said Davis Minton.

"The planning and restoration of this wetland has been purely a labor of love for our family," Bradley added.

The MEC wetland mitigation bank is located near Dexter, Missouri, and the Mintons welcome visitors to tour the bank.

For additional information, contact Denniston at helen.denniston@ar.usda.gov, 501-301-3134, or visit https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/.



Arkansas Geographical Information System Tools

Arkansas Natural Resources Conservation Service (NRCS) Engineering staff has developed a new set of computer tools that assist field staff in planning structural conservation practices common only to the mid-south. The tools work inside of the United States Department of Agriculture's standard deployment of its geographical information system (GIS), which also supports the NRCS planning software, Toolkit. The tools also make use of another resource now available to field staff—digital elevation models (DEM). DEM provide a snapshot of the Earth's surface elevations and are handled by a computer in a way similar to overhead imagery, except the data represents elevation rather than colors.

The toolset currently contains four tools for planning earthwork intensive structural features—linear embankment (such as a pond levee), linear excavation (a tailwater pit or recovery ditch), four-sided embankment reservoir, and land-leveling. Tools are also included for obtaining elevations along other types of alignments.

The general usage of the tools is the user draws either a polygon representing the edge of field or a polyline representing the center of an alignment. The tools present several selectable parameters to the user, each with a typical value as a default. The tools swiftly lay out the practice in the GIS 'world' and then extract elevation values along the relevant alignment from the DEM. The earthwork calculations proceed as if the elevations were obtained by traditional survey tools. Upon completion, the tools provide a report of the cuts and fills, earthwork yardage, and other important design data, as well as provide back to the GIS software a mapping-scale representation of the earthwork feature.

The tools benefit NRCS conservation planning in two ways. First, having the practice positioned on a plan map relative to the other features of the farm greatly enhances the cooperator's vision of what the farm can become. The earthwork estimate of course helps the cooperator know how much the improvements will cost. And because the tools run swiftly in the computer, the planner can run a few alternate ideas for comparison. Secondly, for those conservation plans and practices submitted into Environmental Quality Incentives Program (EQIP), and other conservation programs for NRCS financial assistance, the tools provide a better earthwork estimate than previous methods. This allows NRCS to be more conservative with the allocation of funds. NRCS believes that with cooperator's having satisfying conservation plans in-hand at the time of contract signing, along with good cost estimates, NRCS will in the following term see higher proportions of the financial assistance utilized according to the designated purpose, rather than seeing practices or entire contracts canceled.

Irrigation Water Management

Arkansas ranks third among states in the amount of irrigated acres with the primary source of water being groundwater from the Mississippi River Alluvial Aquifer. The aquifer is being depleted faster than the rate of recharge in the primary agricultural area for cultivated crops. Through technical and financial assistance, the Natural Resources Conservation Service (NRCS) is helping producers develop Irrigation Water Management Plans that address their needs and benefit resource concerns. These plans focus on converting from groundwater use to surface water utilizing the state's abundant annual rainfall and managing existing water supplies more efficiently.

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 list some of the common techniques.

Scheduling—irrigating only when needed can save more water than any other single technique. Making adjustments on the timing of irrigation events based on the soil moisture levels can eliminate multiple irrigations each summer. Some of the tools for determining when to irrigate are soil moisture sensors, weather stations, and atmometers.

Soil Moisture Sensors—mimic what roots are experiencing under the soil profile. They answer the question when to irrigate or when to hold off water.

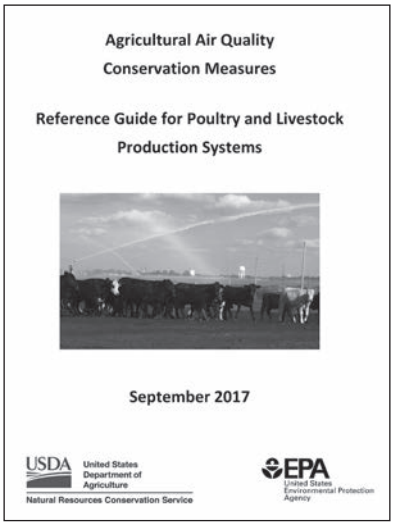
Weather Stations—are IWM tools which answer the question of when to irrigate using an on-site weather station to calculate real time evapotranspiration and forecast future weather. Evapotranspiration data is used along with the irrigation checkbook method to manage irrigations. Record keeping is such that a daily water balance is calculated and future irrigation are forecast.

Atmometer—or evaporimeter is a scientific instrument used for measuring the rate of water evaporation from a wet surface to the atmosphere. Atmometers are mainly used by farmers and growers to measure evapotranspiration rates of crops at any field location. They help with irrigation scheduling because if evapotranspiration rates or know then they can be subtracted from irrigation inputs.

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/.

Agricultural Air Quality Conservation Measures Guide for Poultry and Livestock Production Systems

The United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) and the Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards (OAQPS) released the publication ***Agricultural Air Quality Conservation Measures: Reference Guide for Poultry and Livestock Production Systems***. This NRCS/EPA collaborative guide provides a broad set of conservation practices for poultry and livestock operations that may address air resource concerns with a focus on NRCS conservation standards and other demonstrated practices.



As a follow-up to the 2012 guide, ***Agricultural Air Quality Conservation Measures: Reference Guide for Cropping Systems and General Land Management***, this new guide highlights a variety of tools and standards for addressing air quality resource concerns in the agricultural industry. Developed as a technical tool, the guide describes different conservation measures that have been successfully demonstrated to reduce emissions of various air pollutants on farms. In addition, it offers general comments on the applicability of the measures to different types of farms and ranges of potential emission reductions.

The guide suggests a broad set of protection practices for poultry and livestock operations that may address air resource concerns. While emphasizing NRCS conservation standards, it does include other demonstrated practices and provides a menu of options that can be tailored to a specific area based on needs, goals, and other site-specific factors.

Developed as a non-regulatory technical tool, the guide is a best practices model that may be useful for seeking options for emission reductions. It includes a variety of approved NRCS practices to address air emissions from livestock and poultry operations in areas where those operations have been demonstrated to contribute to air quality issues.

The guide is available at https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/air/quality/.

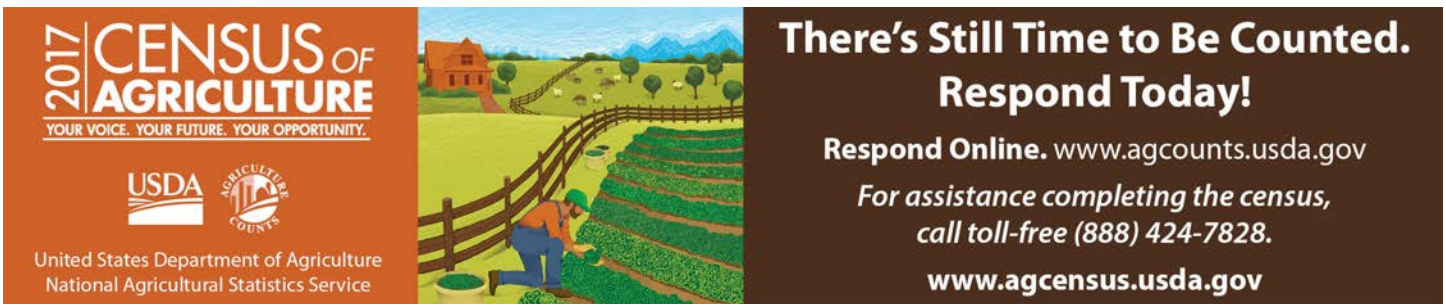
Still Time to be Counted in the 2017 Census of Agriculture

Arkansas farmers and ranchers still have time to be counted in the 2017 Census of Agriculture, according to the USDA's National Agricultural Statistics Service (NASS). Although the first deadline has just passed, NASS will continue to accept Census information through the spring to get a complete and accurate picture of American agriculture that represents all farmers and ranchers.

"We thank everyone who has completed their Census to date. Arkansas currently has a return rate of approximately 45 percent of slightly over 64,000 Census questionnaires mailed last fall," said Eugene Young, director of the Delta Regional Office. "A lot is at stake if producers are not represented in this data. Census data have and will continue to influence important decisions for American agriculture. The data will affect every operation and every farming community at some point, whether it be through farm policy, disaster relief, insurance or loan programs, infrastructure improvements, or agribusiness setup."

Federal law mandates that everyone who received the 2017 Census of Agriculture questionnaire complete and return it even if not currently farming. NASS will continue to follow-up with producers through the spring with mailings, phone calls, and personal visits. To avoid these additional contacts, farmers and ranchers are encouraged to complete their Census either online at www.agcounts.usda.gov or by mail as soon as possible. Responding online saves time by skipping sections that do not apply and automatically calculating totals. The online questionnaire is accessible on desktops, laptops, and mobile devices.

For more information about the 2017 Census of Agriculture, visit www.agcensus.usda.gov. For questions or assistance filling out the Census, call toll-free (888) 424-7828.



Annual Soils Data Refresh

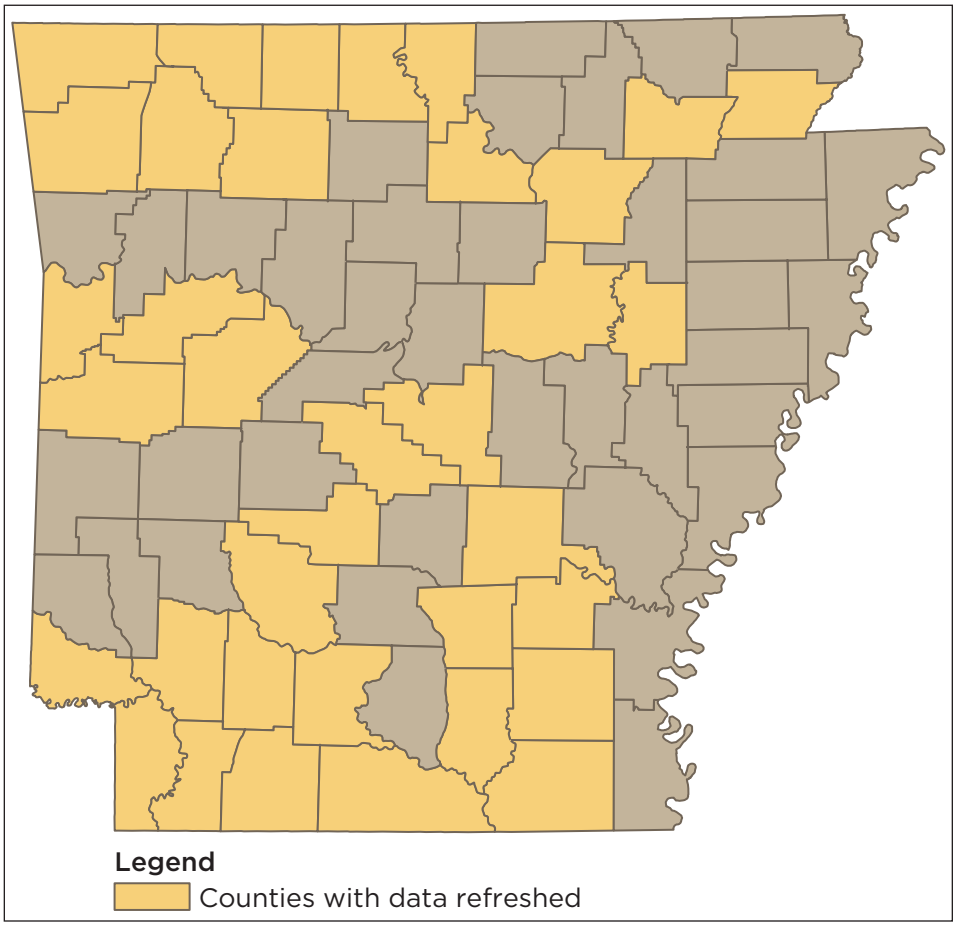
By Edgar Mersiovsky

The annual Natural Resources Conservation Service's (NRCS) soils data refresh is available on the Web Soil Survey (WSS). Each year projects completed by the Major Land Resource Area (MLRA) Soil Survey Offices are uploaded to the WSS to reflect updates in soils information. Those counties with data that was updated are shown in the map at right.

Along with data that was refreshed, the boundaries of several northwestern counties were updated. The Arkansas Counties of Baxter, Benton, Boone, Carroll, Independence, Lawrence, Madison, Marion, Newton, Stone, and Washington, were updated to legislated changes due to rivers, lakes and emergency response needs. These boundaries are now the same as the official county boundaries maintained by the Arkansas Department of Transportation.

This refresh also added four new national soil interpretations. They are:

- Farm and Garden Composting Facility—Surface, which is the site location for placement of a composting facility without the use of a liner or placement on concrete pad. The composting facility is to process raw organic by-products into biologically stable organic material as outlined in the NRCS conservation practice standard "Composting Facility" (code 317).
- Fragile Soil Index indicates those soils that are most vulnerable to degradation. Fragile soils are easily degraded (have low resistance) and are highly susceptible to erosion with low resilience. They are characterized as having low organic matter contents, low water-stable aggregates and low soil structure. Fragile soils are generally located on sloping ground, have sparse plant cover, and tend to be in arid and semiarid regions in the western U.S.
- NCCPI—National Commodity Crop Productivity Index (Ver. 3.0). This NCCPI is designed to predict the relative productivity of soils for growing major commodity crops. Factors rated are soil chemical properties, soil physical properties, landscape characteristics, and climate.
- Soil Susceptibility to Compaction. Soil compaction is the process in which soil particles are pressed together more closely than in the original state. Typically, the soil must be moist to be compacted because the mineral grains must slide together. Compaction reduces the abundance mostly of large pores in the soil by damaging the structure of the soil. This produces several effects that are unwanted in agricultural soils since large pores are most effective at transmitting water and air through the soil. Compaction also increases the soil strength which can limit root penetration and growth. The ability of soil to hold water is adversely affected by compaction since the large pores hold water. The degree of compaction of a soil is measured by its bulk density, which is the mass per volume, generally expressed in grams per cubic centimeter.



For more information, contact Edgar Mersiovsky, state soil scientist, at edgar.mersiovsky@ar.usda.gov.

FROM CORPS TO CROPS

Military experiences help Marine transition to farming

By CRESTON SHRUM
PUBLIC AFFAIRS SPECIALIST

Sgt. Travis Appel

One Northwest Arkansas farmer credits his work ethic and experiences gained through eight years in the U.S. Marine Corps as the catalyst for his new career.

Travis Appel's military career included two deployments—one to Iraq and then with a Marine Expeditionary Unit with the U.S. Navy. His first four years of service were spent in artillery and he finished his career in reconnaissance.

"Farming is a nonstop endeavor just like the military," Appel said. "After getting out of the military, I went to the University of Arkansas pursuing a horticulture degree. My goal was to be a greens keeper at a golf course."

However, after an internship with a local farmer, who also worked at the university's farm, he fell in love with farming.

He already had land outside of Springdale, Ark., where he began growing strawberries. His operation now includes pumpkins, tomatoes, peppers, zucchini, squash, okra, watermelons, cantaloupe and sweet onions.

The endeavor eventually led him to the USDA Natural Resources Conservation Service (NRCS) office in Washington County where he applied for financial assistance as a veteran farmer for two seasonal high tunnels. The first contract was signed in 2015 with another the following year.

"I grow strawberries through winter and tomatoes in the summer in the high tunnels," the Marine sergeant said. "The first year I was able to grow strawberries all winter. We were picking strawberries from December to June. Without the high tunnel, the season is April and May."

He sells produce at the Springdale and Rodgers farmers markets, offers "pick-your-own" strawberries in the spring and a pumpkin patch in the fall. Other produce can also be purchased at the farm.

Appel has incorporated drip irrigation into his high tunnel system since he believes "it's better for the plants and puts water where it is needed." This controls erosion, helps with fertilizer application and saves him money on his water bill.

"We want to make sure veterans have something to come back to when they get out of the military," said Rhonda Foster, Washington County district conservationist with NRCS. "We have a lot of people getting out of farming. It's good to help beginning farmers install practices that benefit their operation.

"Mr. Appel is a beginning farmer and wants to do what is right with the farm," she said. "He has inquired about soil health and micro-irrigation. He wants to make sure everything is done right so he can have this farm for generations to come," she said.

"I highly encourage any veteran that is a farmer to visit NRCS. When I have questions about the high tunnel or erosion problem, I can contact NRCS for assistance," Appel said.

The 2014 Farm Bill gave veterans of the U.S. Armed Service preference for NRCS conservation programs. Preference is given to eligible veteran farmers or ranchers applying for several types of conservation financial assistance through the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP).

For more information about NRCS programs for veterans, visit https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmbill/?cid=stelprdb1256753 or visit your local county conservation district office. View the Travis Appel success story at https://youtu.be/sQZrmYYdd4M.

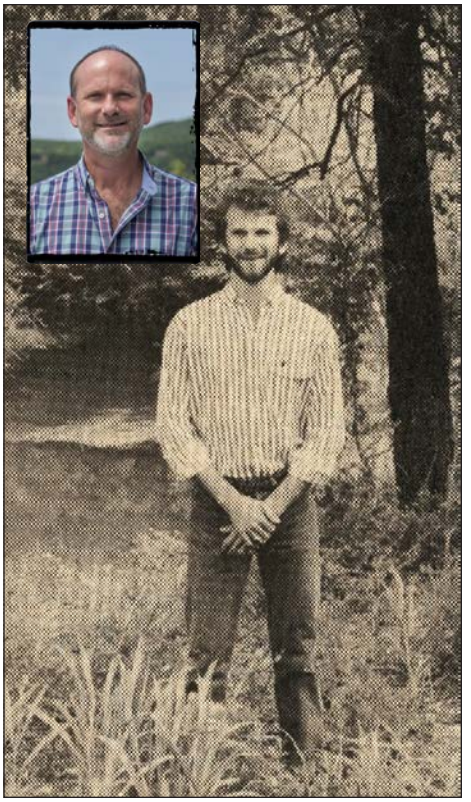
Above, Rhonda Foster, Washington County district conservationist inspects tomatoes in Travis Appel's high tunnel. Mr. Appel received his first high tunnel in 2015. At left, Travis Appel, pictured with his son Griffin, at his farm located in Springdale, Ark.
Photos by Christopher Willis

Earth Team Volunteers Develop Job Skills Leading to Future NRCS Employment

By HOLLY ANDERSON

Volunteering with Earth Team is a way for young people to get real-world experience and add important line items to their resumes. But it may also transition into a full-time career with the Natural Resources Conservation Service (NRCS). Depending on their abilities and interests, Earth Team volunteers can become fully immersed in NRCS field and office activities and projects. This gives them the opportunity to learn what NRCS is all about. It also gives NRCS employees the opportunity to get to know these young people and encourage them to further their involvement in conservation. For this newsletter, we'd like to highlight several volunteers who have become NRCS employees.

Jody Rodgers, Soil Conservation Technician, Conway Field Service Center



Jody Rodgers worked as a volunteer from 1985 to 1989 in Pope County, helping survey ponds, developing animal waste systems, and completing land leveling projects, as well as entering data in NRCS computer systems. During that time, Jody was appointed as the Pope County Conservation Junior Board sponsor. The Junior Board was made up of Pope County high school students interested in conservation activities. Jody's job was to teach the members about conservation resource concerns and conduct the monthly meetings. He also worked in outreach, producing radio spots, preparing slide shows and developing public service presentation. Jody switched to paid employment in 1989, and worked for conservation districts until 2001. He joined the NRCS in August 2001 as a Soil Conservation Technician at the Conway Field Service Center. Jody says, "My dad always asked me why I was doing all that volunteering, but as it ended up I have had a great career since 1989. I love my job and wouldn't change a thing!"

Allison Greb, Soil Conservationist, Hazen Field Service Center

In the summer of 2011, Allison Greb worked as an Earth Team volunteer at the Paris Field Service Center. She learned to survey ponds, lay-out fencing using GPS, and pull soil samples using proper techniques. She also attended the Arkansas Association of Conservation Districts (AACD) Youth Conservation Camp that summer which she says furthered her interest in conservation work. The following summer, Logan County Conservation District hired Allison as a Student Trainee to assist the District with nutrient management planning. She also worked with NRCS employees. Allison said she quickly learned the Toolkit system and mastered using the GPS unit. "I was able to help NRCS significantly to certify existing practices and prepare maps for applications. In the summer of 2013, I gained employment with NRCS as a Pathways Intern where I worked for three summers and continued to work for the District part-time during the fall and spring semesters of college." Allison was hired by NRCS as a permanent employee in March 2017 and works as a Soil Conservationist at the Hazen Field Service Center.

Allison inspects a water tank as an Earth Team Volunteer in Logan county.
Photo submitted by Allison Greb

Earth Team

David Hargis, Resource Soil Scientist, Jonesboro Technical Service Center

David Hargis began as an Earth Team volunteer during the summer of 2001 at the Livingston Field Service Center (FSC) in Overton County, Tenn. David assisted with certifying Environmental Quality Incentives Program (EQIP) practices and also helped with practice survey, design, stakeout, and checkout. David was able to help the Livingston FSC with ranking EQIP applications and he also had the opportunity to work directly with landowners, informing them of eligibility criteria and enrollment procedures for NRCS programs. David says, "I was fortunate enough to be volunteering in an area that had an active soil survey going on. I soon realized from volunteering some time with the soil survey staff that I wanted to pursue a career as a soil scientist." In August of 2001, some county funds became available and he was hired to assist on the Overton County Soil Survey as a part-time county employee. In May 2002, he was selected as an NRCS summer intern. David continued to work part-time with NRCS until he graduated from college in June 2003. At that point, he started his full-time career as an NRCS soil scientist.

David Hargis inspects a soil judging pit after a rainstorm before the Regional High School Land Judging Contest at Arkansas State University in Jonesboro.
Photo submitted by David Hargis

Thom Dodd, District Conservationist, Huntsville Field Service Center

Thom Dodd contacted Rhonda Foster at the Fayetteville Field Service Center in the spring of 2006 regarding possible volunteer work opportunities. Rhonda brought Thom on as an Earth Team volunteer and had him run soils reports for EQIP contracts on his first day in the office. But Thom knew he really wanted to work with plants and animals and he wanted to focus as much as possible on wetlands field work and quail habitat projects. He had a full-time job in the private sector that sometimes required working the night shift. According to Thom, "Any time I found out that I had a night shift coming up, I would notify Ms. Foster that I was available, and then I would volunteer as many hours during the day as I thought I could stay awake!" When Thom started with Earth Team, he really had no intention of working full-time for NRCS. But as time went by, he found he had a passion for sharing conservation with others and started looking seriously at NRCS careers. He was hired as a soil technician in Huntsville in 2010, was promoted to soil conservationist in Fayetteville and then to Area 1 resource conservationist before becoming the district conservationist in Huntsville. Thom says he has found a very satisfying career with NRCS and says, "The opportunity to be an Earth Team volunteer was quite simply a key to a door that I otherwise would have never opened."

(left to right) Randy Riley, Madison County Water Facilities Board president; Thom Dodd, Madison County district conservationist; Todd Stringer, Northwest Area project engineer; and Alan McGhee, area civil engineering technician, observe flood damage threatening county utilities along Wharton Creek.
Photo by Creston Shrum

We all know the Earth Team volunteer program certainly helps NRCS leverage federal funds and get conservation on the ground efficiently and effectively. And it's certainly a great opportunity for folks of all ages to give back to their communities. But it's so interesting and inspiring to hear in real-life examples how Earth Team experiences helped these young people discover their passion for conservation and led them into their current jobs with NRCS. Who knows, they may find themselves being the person who gives the next passionate, hard-working Earth Team volunteer that all-important opportunity. Find out more about the Earth Team at https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/people/volunteers/.

Arkansas NRCS Conservation Volunteers Honored During National Volunteer Week

USDA's Natural Resources Conservation Service (NRCS) is celebrating National Volunteer Week April 15–21 by thanking and honoring its Earth Team volunteers for their service to conservation. This year's theme, "Volunteers Improve Today for Tomorrow," uses the week to show gratitude to Earth Team volunteers for their superb service to conservation.

The Earth Team is the agency's volunteer workforce and nationally, in fiscal year 2017, more than 34,309 people across the country donated 325,601 hours of service to NRCS worth approximately $7.1 million. During the same period, Arkansas NRCS had 721 Earth Team volunteers who worked a total of 9,658 hours to assist NRCS conservation specialists in promoting conservation programs and activities throughout the state.

"Our volunteers work closely with our staff and play a very important role in our agency's mission of putting conservation on the ground," said Arkansas State Conservationist Mike Sullivan. "We are truly honored and appreciate all the hard work and efforts of our dedicated staff and Earth Team volunteers throughout the state.

We are also grateful for our volunteers help and are seeking additional volunteers in each county in Arkansas to join our Earth Team. We recognize much more conservation work needs to be done and our Earth Team volunteers help us fulfill that need," Sullivan added.

Earth Team is a program that partners volunteers with NRCS employees. It was created in 1985 and offers many opportunities to individuals 14 years and older who are interested in volunteering to improve the nation's natural resources. Earth Team volunteers help NRCS conservationists provide private landowners and others a range of services from conservation technical assistance to teaching and generating awareness about conservation through community projects.

Earth Team volunteers are invaluable as they expand NRCS' efforts to help protect and conserve the nation's natural resources. Earth Team Volunteers allow NRCS to stretch available resources and help put additional conservation practices on the ground. Volunteer efforts help improve land and wildlife habitat and contribute to cleaner water and air for everyone.

NRCS' mission to "Help the People Help the Land" is strengthened by the passion Earth Team volunteers bring to the important conservation work they do every day. Learn more about the Earth Team Volunteer Program online at: http://www.nrcs.usda.gov/earthteam or by calling (toll-free) 888-526-3227. For more information on NRCS visit www.nrcs.usda.gov.

*Note: The Value of Volunteer Time to the Agency is $24.14/hour as established by the Independent Sector and utilized by the Federal Interagency Team for Volunteerism.

At left, Pam Billingsley, Ouachita county district conservationist, and Earth Team volunteer Ruby Beaver looking at an urban gardening area. Ruby Beaver is an Earth Team volunteer in Ouachita County. She loves to volunteer and loves Natural Resources Conservation Service programs. She has helped District Conservationist Pam Billingsley by volunteering at local fairs, answering the phones at the office, helping set up information booths, and assisting producers when they come in the office for information. She is currently attending the University of Central Arkansas in Conway where she is studying to attain a Master's degree in Nutrition. Her hobbies include gardening with her mother in their raised beds, helping her brother with food plots for wildlife, and donating portions of the family garden's produce to local food banks. Photo submitted

Father/Son Duo continue the Family Farm Conservation Tradition in the Upper Cache

Greene County producer Rickie Hendrix began farming on his own in 1977, but he has been in the family farming business since he was a youngster assisting his father and grandfather. His grandfather was a farmer in Mount Ida, Ark., before he migrated to the Arkansas Delta in 1939 to raise cattle, soybeans and rice.

"I was told, when I was still in diapers, I would ride in the wagon while they were sowing rice in the fields," Hendrix said.

Rickie now owns Hendrix Farms, a 1200-acre spread in Greene County where he grows rice and soybeans with his son, Levi.

A conservationist at heart, he was aware of the USDA's Natural Resources Conservation Service (NRCS) and about programs like the Environmental Quality Incentives Program, but found out about the Upper Cache River Mississippi River Basin Healthy Watersheds Initiative (MRBI) project from another farmer who had been to an outreach meeting in 2015. He had been wanting to address water quality and water quantity resource concerns on his farm for years and decided to inquire about the initiative with Greene County District Conservationist Adam Eades.

Through MRBI, NRCS helps producers with voluntary conservation practices to avoid, control and trap nutrient runoff, prevent erosion and provide essential wildlife habitat. These practices benefit the natural resources of the Mississippi Basin and enhance agricultural profitability through reduced input and enhanced soil health, which results in higher soil organic matter, increased infiltration and water-holding capacity and nutrient cycling.

"Conversion of surface water was one of the biggest priorities once we began putting together a conservation plan for Mr. Hendrix's farms," said Eades. "Britt Morrison (who now works as the district conservationist in Mississippi County) was an integral part of putting together a conservation plan on the farm. Britt and our civil engineering technician team from Jonesboro did surveys on the Hendrix farm and saw we could bring more than 800 acres from ground water into surface water. We then looked at supporting practices we could do from a water quality standpoint including nutrient management, flooding for waterfowl, irrigation water management, pumping plant, irrigation pipeline, land leveling, and structures for water control. We also put together a resource management system plan for his rice and soybean rotation."

"The technical assistance we received from NRCS has made a tremendous impact on our farm," said Hendrix. "For instance, we've eliminated using up to six wells on two of our pipelines. That has saved us money on fuel used because we've eliminated running up to six power units on the wells."

Through MRBI, NRCS and our partners use a targeted approach to curb soil erosion, improve the quality of water coming off of fields and enhance irrigation efficiency.

Greene County Conservation District Irrigation Specialist Josh Barnhill and NRCS worked on pipe planner designs on the Hendrix farm.

At left, Josh Barnhill, Levi Hendrix, Rickie Hendrix, Greene County District Conservationist Adam Eades, and Robert Counts discuss irrigation water management. Photo by Reginald Jackson

"After all the structural improvements were done, we flowed every riser on the farm off the re-lift and the well to figure out the best way to go about irrigating Mr. Hendrix's farm," Barnhill said. "We put pipe planner on the soybeans and side inlet designs on every rice field to flood up each rice paddy at the same time, reduce surface runoff, and catch more rain water. If we can catch as much water as we can, reduce runoff, trap nutrients and sediments, and reduce costs as much as possible, that's a homerun."

Hendrix now participates in the EQIP program as well as the Conservation Stewardship Program with NRCS.

"They all are real good people to work with" Hendrix said of working with NRCS staff in Greene County. "They've bent over backwards to assist us. I like the fact that we're not pumping water that we don't need. That's saving money and helping us help save the watershed."

The Upper Cache River MRBI Project is a voluntary program that provides financial and technical assistance to agricultural producers for addressing water quality concerns in the Petersburg Ditch-Cache River and Big Gum Lateral-Cache River watersheds in portions of Clay, Greene and Lawrence counties. The conservation partners involved with the project are Clay County Conservation District; Greene County Conservation District; Lawrence County Conservation District; Arkansas Natural Resource Commission; Arkansas Game and Fish Commission; Arkansas Forestry Commission; Arkansas State University; University of Arkansas Cooperative Extension Service; Legacy Agricultural Equipment; Local Drainage Districts; and The Nature Conservancy.

NRCS is committed to working cooperatively with agricultural producers, partner organizations and state and local agencies to improve water quality and the quality of life for the tens of millions of people who live in and rely on the Mississippi River Basin. For more information, contact Diane Schlenker, Initiatives Coordinator at 501-301-3152 or email at Dianne.shclender@ar.usda.gov or visit https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ar/programs/landscape/?cid=nrcseprd1312684

Secretary Perdue Statement on Confirmation of Bill Northey for Key USDA Post

Bill Northey

U.S. Secretary of Agriculture Sonny Perdue recently applauded the Senate's confirmation of Bill Northey to the U.S. Department of Agriculture (USDA). Northey will serve as Under Secretary for Farm and Foreign Agricultural Service (FFAS)*.

Secretary Perdue issued the following statement:

"I applaud Bill Northey's patience over these many months, which demonstrates what a strong leader he will be at USDA. We thank everyone who worked on his confirmation. Bill will come aboard at a crucial time, as his knowledge and expertise will be immediately put to use as the new Farm Bill is formulated to address the needs of American farmers. In addition, his leadership will be key in the newly-constituted mission area, where the Farm Service Agency, the Natural Resources Conservation Service, and the Risk Management Agency will be providing an even better customer experience. I am excited to finally have Bill on board."

*NOTE: As part of a reorganization of USDA, Secretary Perdue has created, the President appointed, and the Senate confirmed a new Under Secretary for Trade and Foreign Agricultural Affairs, as directed by the 2014 Farm Bill. The creation of the new mission area prompted the realignment of several agencies under a newly-named Under Secretary for Farm Production and Conservation (FPAC), the position for which Northey is intended. FPAC will encompass the USDA's domestic-facing agencies: the Farm Service Agency, the Natural Resources Conservation Service, and the Risk Management Agency.

Arkansas Women in Agriculture Conference Great Success

The 13th Annual Arkansas Women in Agriculture conference was held at the Wyndham Riverfront Hotel in North Little Rock March 13–14. This years theme was "Cultivating Our Future". Over 130 women came together to network and expand their knowledge on agricultural topics, resources for their farm and operation, issues in production agriculture and today's family concerns. "This year we're excited to add a new track directed towards college students with workshops on careers in agriculture and how to get your resume job-ready!" said Monica Paskewitz, Arkansas Women in Agriculture President and Izard county Natural Resources Conservation Service district conservationist. The conference featured special guest speaker Krista Cupp, Vice President at The Herald Group, and 12 breakout sessions/workshops.

To learn more about Arkansas Women in Agriculture or joining the organization visit www.arwomeninag.org or email membership@arwomeninag.org

NRCS Soil conservationist and Arkansas Federal Women's Program Manager, Jennifer Griffin talks EQIP to a producer at the 2018 Arkansas Women in Ag Conference in North Little Rock. Photo by Christopher Willis

62nd Annual Rural Life Conference Dedicated to Retired Assistant State Conservationist Kenneth Lee

University of Arkansas at Pine Bluff Chancellor Laurence B. Alexander presents dedication award to Kenneth Lee.
Photo by Reginald Jackson

The University of Arkansas at Pine Bluff (UAPB) School of Agriculture, Fisheries and Human Sciences (SAFHS) recently hosted the 62nd Annual Rural Life Conference at the Pine Bluff Convention Center. The theme was, Innovations for Farms, Families and Communities in Changing Times. The conference was dedicated to Kenneth J. Lee, Sr., who recently retired from the United States Department of Agriculture's Natural Resources Conservation Service (NRCS) in January. Lee was chosen for this honor because of his contributions to UAPB's SAFHS and rural development, for improving the quality of life for people in the community and for positive contributions to the Rural Life Conference.

Lee graduated from UAPB in 1984 with a degree in agronomy. He went on to a 36-year career with NRCS culminating as the assistant state conservationist for programs in Arkansas. He was the first African-American to serve in that position. He managed all the financial assistance programs in Arkansas including the Conservation Stewardship Program and the Environmental Quality Incentives Program. He also worked closely with many community-based organizations, universities, conservation districts, and other conservation partners to outreach to underserved customers and communities.

Lee and his wife Lekita have been married for 34 years and have two children and three grandchildren.

2017 CENSUS OF AGRICULTURE

YOUR VOICE. YOUR FUTURE. YOUR OPPORTUNITY.

Federal law mandates that everyone who received the 2017 Census of Agriculture questionnaire complete it and return it even if not currently farming. Farmers and ranchers are encouraged to complete their Census either online at **www.agcounts.usda.gov** or by mail as soon as possible. **Responding online saves time by skipping sections that do not apply and automatically calculating totals. The online questionnaire is accessible on desktops, laptops, and mobile devices.**

For more information or to try the improved online questionnaire, vist **www.agcensus.usda.gov**

USDA

AGRICULTURE COUNTS