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CURRENT DEVELOPMENTS

IOWA NRCS

SPRING 2022

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USDA-NATURAL RESOURCES CONSERVATION SERVICE

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A NOTE FROM THE STATE CONSERVATIONIST

After about two years dealing with ups and downs - basically a roller coaster ride called the COVID-19 pandemic - we are finally getting to the point where our staff can return to 100% staffing levels in our offices beginning Monday, May 2.

Although there are still some signs of the pandemic, it looks like we are getting a handle on the most dangerous COVID variants and safe to be at our offices around other people.

With that said, I believe we need to focus on transitioning into post-pandemic mode. A lot of changes happened with Iowa NRCS over the last two years. For one, we hired a lot of new people. One of the first things we need to do is provide as much in-person training as we can for our newer staff. So, with appropriate approval and safety precautions, I am recommending we conduct as much face-to-face training as we can this year.

Secondly, we need to get back out in the field and conduct good, thorough conservation planning. That starts with getting to know or renewing relationships with local farmers and landowners. The backbone of our agency is relationship building through the conservation planning process. Some of our staff may not be comfortable doing that, but it's a skill you need to be successful in the field. We need to strengthen customer service after some of our office doors were locked for two years.

Remember, conservation programs and practices are only successful if they meet the objectives of the producers who are implementing them and the public who is supporting them.

Lastly, conservation partner relations can be improved after two years with an inconsistent work environment. Some of the issues were out of our control, but soon we will be back to a more normal work schedule with our partners and we need to iron out any issues or hard feelings stemming from the pandemic work environment.

Thank you! I hope everyone has a great spring.

Jon Hubbert, State Conservationist

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Current Developments

Current Developments is a product of USDA's Natural Resources Conservation Service in Des Moines, Iowa, published bimonthly by the Iowa NRCS Public Affairs Staff in cooperation with NRCS and partner agency employees from across the state.

Stories and Photos

Please submit your Current Developments story ideas and photos to State Public Affairs Specialist Jason Johnson at jason.r.johnson@usda.gov. Past issues can be found at https://www.nrcs.usda.gov/wps/portal/nrcs/ia/people/employees/nrcs142p2_008273/.

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OUTREACH REPORT: TANYA MEYER-DIDERIKSEN

VALUABLE TRANSLATION AND INTERPRETATION SERVICE AVAILABLE THROUGH FPAC

Iowa is home to many refugees, immigrants and others whose primary language is not English. For those who are farming or want to farm, it is especially challenging to navigate the process, programs, and assistance available through NRCS and other federal and state agencies.

Customers who are non-English speaking are interested in conservation practices and programs, financial assistance, small loans available through FSA, soil health education and improvement, plus more. It is difficult to understand and figure it all out even if English is a person's first language, and even more so if it isn't.

Federal agencies are required to provide meaningful access for Limited English Proficiency (LEP) customers in federally assisted and conducted programs. LEP customers are those not proficient in speaking, reading, writing, or understanding the English language. FPAC offers translation and interpretation services to assist customers and staff with overcoming language barriers.

Each field office received the FPAC LEP Interpretation Poster in 2021. It indicates the languages that FPAC can provide interpretation and translation service for. Please note that it is also possible to receive these services for languages not included on the poster, with special inquiry.

The ISpeak Card is also available to identify languages available for interpretation and translation. The LEP Request Knowledge Article provides instructions for completing the online intake form. And the following link connects to the actual request form: Limited English Proficiency (LEP) Request - myFPAC Services (servicenowservices.com).

FPAC strives to provide interpretation services on-site and in person, whether this is needed at the service center or another location such as a meeting site. Adequate notice is needed to confirm an on-site interpretation. Otherwise, an interpreter can assist virtually.

Field offices with a translation and/or interpretation request will submit the request through the supervisory chain to the Leadership Team (LT) level. The appropriate LT member will submit the request to Tanya Meyer-Dideriksen, State Outreach Coordinator with a copy to Scott Cagle, ASTC-Partnerships. Tanya will submit the request through Service Now. This process will eliminate duplication of efforts and allow all translated publications to be made available statewide.

All translated products can be found on the Iowa NRCS Outreach web page. The website is intended to provide resources for the public while also serving as a resource for staff. The translated publications are also available to staff on the Partnerships Sharepoint under Outreach Tools & Resources, in the Translated Documents folder, at this link: Translated Documents. More translated publications will be added to these locations as they are available.

8 SELECTED FOR NRCS FUTURE LEADERS PROGRAM

Iowa NRCS leadership selected eight staff members to participate in the tri-state (Iowa, Nebraska, Minnesota) ***Cultivating Future Leaders (CFL)*** Leadership Development Program for 2022-23.

The CFL program helps build potential leaders for NRCS, helping to meet future challenges to conservation by exposing participants to "the big picture" and providing opportunities to observe others who provide direction and exhibit leadership skills. CFL program participants will be required to demonstrate leadership through their projects and activities.

Iowa NRCS staff members selected for the CFL program include:

- Kayla Creek, Resource Conservationist/ Grazing Specialist, Atlantic Area Office
- Keith Feliciano-Cortes, Resource Team Lead, Denison
- Mike Henderson, State Resource Conservationist, State Office (Des Moines)
- Julie McMichael, Soil Scientist/ Compliance, State Office (Des Moines)
- Josiah Olson, District Conservationist, Thompson
- Chandra Shaw, District Conservationist, DeWitt
- Nichole Williams, Resource Conservationist, State Office (Des Moines)
- Earniece Young, Resource Team Lead, Oakland

Program participants will produce quarterly reports, prepare a final report on a specified topic, and a written assessment at the end of the CFL experience that highlights new knowledge or skills gained. The assessment also includes a report on what new skills will be used in their current position and a brief summary of career enhancement goals.

For more information about the CFL program, contact Jaia Fischer at jaia.fischer@usda.gov.

Kayle Creek

Keith Feliciano-Cortes

Mike Henderson

Julie McMichael

Josiah Olson

Chandra Shaw

Nichole Williams

Earniece Young

VIDEO SERIES: CARBON SEQUESTRATION THROUGH SOIL HEALTH

Carbon sequestration and carbon credit marketing are hot topics in Iowa. To help clear up some questions for Iowa NRCS staff, our partners and customers about this topic, Wayne County District Conservationist Webb Flowers organized a large meeting to include experts and a producer panel.

With large gatherings limited earlier this year, due to USDA protocols, Flowers and other organizers shifted the meeting to a series of videos about specific topics related to carbon sequestration and carbon credit marketing.

Carbon Sequestration Presenter Videos:

» **Video 1:** Introduction from Flowers

» **Video 2:** Soil Health Management/Carbon Credit Marketing from Mitchell Hora, Continuum Ag, Founder/CEO

» **Video3:** ROI for Conservation Practices/ Carbon Sequestration and Carbon Credit Marketing from Chad Hart, ISU Extension Specialist

» **Video 4:** Conservation Practices that Help with Carbon Sequestration from Ruth Blomquist, SW Iowa NRCS Soil Health Specialist

» **Video 5:** NRCS Roles, Goals, Mission with Carbon Sequestration from Hillary Olson, Iowa NRCS State Soil Health Specialist

» **Video 6:** Carbon Credit Market and Cattle Raisers from Dr. Henk Mooiweer, CEO for Grassroots Carbon Public Benefit LLC

» **Video 7:** (Two-part video) Part 1 Part 2 Features ranchers from Texas sharing their experiences with conservation practices, carbon sequestration and carbon markets.

» **Video 8:** (Two-part video) Part 1 Part 2 Producer Panel featuring Kelly Garrett (Crawford County), Hora (Washington County), Kyle Schnell (Jasper County)

The meeting and subsequent video series was sponsored by the Soil and Water Conservation Districts (SWCDs) of Appanoose, Clarke, Decatur, Lucas, Monroe, and Wayne Counties; Iowa State University Extension and Outreach; and Rathbun Land and Water Alliance.

COVER CROPS MANAGE PESTS

Cover crops are more effective than insecticides for managing pests, study suggests

Courtesy of Penn State University, Chuck Gill

UNIVERSITY PARK, Pa. — Promoting early season plant cover, primarily through the use of cover crops, can be more effective at reducing pest density and crop damage than insecticide applications, according to a Penn State-led team of researchers.

In a newly published study, the researchers suggest that the best pest management outcomes may occur when growers encourage biological control — in the form of pests' natural enemies — by planting cover crops and avoiding broad-spectrum insecticides as much as possible.

The goal of this study was to investigate how conservation-agriculture practices — cover crops, no-till planting and crop rotations — interact with two pest-management strategies that employ insecticides. These strategies are preventive pest management, in which growers plant seeds treated with systemic insecticide for the control of early-season pests; and integrated pest management, or IPM, an approach that involves scouting for pests and using insecticides only when pest numbers exceed economic thresholds, and then only when non-chemical tactics are ineffective.

"We hypothesized that the increased early-season vegetative cover provided by winter- or spring-sown cover crops would benefit predator populations and increase their biological control potential," said study lead author Elizabeth Rowen, a former doctoral candidate in Tooker's lab who now is an assistant professor of entomology at West Virginia University.

"In contrast, we expected that preventive seed coatings, despite reducing the severity of early-season insect pests, would also reduce predator abundance and release non-insect pests such as slugs from biological control," she said. "In addition, we thought that IPM would be equally effective as preventive seed coatings for managing pests, but with less disruption to the predator community and biological control."

A predatory ground beetle peeks out of its hole in an experimental plot at Penn State's Russell E. Larson Agricultural Research Center. These beetles were responsible for much of the predation observed during the study, but they are mostly nocturnal, the researchers noted. Credit: Elizabeth Rowen.

The researchers set out to examine these scenarios by establishing two experimental no-till fields at Penn State's Russell E. Larson Agricultural Research Center to test the effects of pest management and planting small-grain cover crops over three years in soy-corn-soy and corn-soy-corn rotations. This experiment was part of a larger project investigating the interaction of pest management and cover crops on soil quality, weeds, insecticide movement and pest pressure.

The team divided each field into plots, with six treatments each replicated six times in each field over three years. While the crop species changed annually with the rotation, each plot received the same treatment each year. The scientists looked at three pest management strategies with and without a cover crop: preventive seed coatings, IPM, and no pest management.

For the IPM strategy, researchers scouted the IPM plots for insect pests and compared pest populations to economic thresholds to determine whether insecticide applications were needed. They used an insecticide — a single, in-furrow application of a granular pyrethroid — only in the second year of

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A cover crop planted on a farm near Spring Mills, Pennsylvania, in March 2020. Researchers say their new study demonstrates that cover crops may be more effective in managing pests than applying insecticides. Credit: Michael Houtz, College of Agricultural Sciences.

the study.

The researchers, who recently reported their results in Ecological Applications, found that using any insecticide provided some small reduction to plant damage in soybean, but no yield benefit. The findings suggested that, in corn, vegetative cover early in the season was key for reducing pest density and damage.

An unexpected result, the team said, was that the IPM strategy, which required just one insecticide application, was more disruptive to the predator community than preventive pest management, likely because the applied pyrethroid was more toxic to a wider range of arthropods than neonicotinoid seed coatings.

"With the single use of insecticide in the IPM treatment, non-target effects persisted more than a year after application, without reducing plant damage or density of white grubs, the targeted pest," Rowen said. "This pyrethroid also indirectly decreased soybean yield in IPM plots more than a year later, perhaps because of having fewer predators present to protect plants."

This finding highlights the importance of choosing the most selective insecticide possible when chemical control is justified within an IPM strategy, Tooker explained.

The researchers concluded that planting cover crops and fostering natural-enemy populations protected corn and soy from damage and that promoting early season cover was more effective at reducing pest density and damage than either intervention-based strategy.

"But because cover crops can also leave cash crops vulnerable to some sporadic pest species, growers should be careful to select the best cover crop species for each situation and to scout regularly for early-season pests," Rowen said. "In addition, maximizing the benefits of cover crops for biological control requires sparing use of insecticides, because preventive use of selective insecticides and reactive use of broad-spectrum insecticides both can reduce predator activity without guaranteeing pest control or greater crop yields."

The U.S. Department of Agriculture's National Institute of Food and Agriculture supported this work.

CENTRAL IOWA COVER CROP SEEDER PROJECT

Seeder Project to Increase Cover Crop Adoption and Water Quality Benefits

Courtesy of Successful Farming, Jan. 27, 2022

The Iowa Department of Agriculture and Land Stewardship (IDALS) has entered into a cooperative agreement with Polk County, the City of Des Moines, and Des Moines Water Works to help increase and expedite the amount of cover crops planted in the Des Moines and Raccoon River watersheds.

"Our public and private partners are critical to the success of every conservation project underway in Iowa," Iowa Secretary of Agriculture Mike Naig says. "We're pleased to continue working alongside our current partners and welcome new ones to help implement more soil health and water quality practices in priority watersheds around the state."

"What happens upstream impacts the safety of our drinking water and the recreation in our rivers and lakes for everyone in Polk County. We know the utilization of cover crops can have a tremendous impact on reducing nutrient load from agricultural operations in our surface water and groundwater, and improve soil health," Angela Connolly, chair of Polk County Board of Supervisors says. "Investing some of Polk County's American Recovery Act Program funds in the Cover Crop Seeder Project to assist farmers in planting cover crops is a critical step in restoring water quality for Polk County and all of Iowa."

"Cover crops are an excellent way to help build healthier soils and a more resilient landscape, and they're an important part of our flood risk reduction toolkit. Sometimes opportunities present themselves that require thinking outside of the box and beyond our city limits. Projects like this require a great partnership to turn an idea to reality, and we are thankful to be able to help with this project," Jonathan Gano, City of Des Moines Public Works director says.

As part of the Central Iowa Cover Crop Seeder Project, Polk County, with support from the City of Des Moines and Des Moines Water Works, will purchase equipment used to seed cover crops into fields.

Cover crops peak through as soybeans are harvested.

The high-clearance equipment will allow cover crop seeds to be applied to fields into standing crops. This gives the cover crops time to emerge before the cash crops are harvested, providing continuous cover for the fields.

IDALS will use funding from the Water Quality Initiative to reimburse the County up to $350,000, based on the number of cover crop acres applied by their equipment.

Ag retailer Heartland Co-op will use the seeder to apply cover crop seed for farmers and landowners in central Iowa. The project is modeled after a similar program in the state of Kansas.

"Improving surface water quality and protecting our natural resources is critical to our mission of providing safe, affordable drinking water to 600,000 customers in urban, suburban, and rural areas of central Iowa," Ted Corrigan, Des Moines Water Works chief executive officer says. "We are happy to support this innovative project and work with these valued partners toward a shared goal."

The goal of this project is to seed up to 40,000 acres of cover crops over the next four years in the Des Moines and Raccoon River watersheds. Iowa farmers and landowners have planted more than 2 million acres of cover crops in recent years.

CSP INSPIRES IOWA FARMER

Correctionville farmer improves soil health through Conservation Stewardship Program (CSP)

By Kalee Olson, Center for Rural Affairs

When Bruce Willems of Correctionville set out to address an erosion problem on the family farm, he didn't realize he was beginning a lifelong conservation journey. What started out as a one-year contract to plant cover crops is now a decade-long commitment to the overall health of his farm through the Conservation Stewardship Program (CSP).

Administered by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), CSP is a working lands conservation program designed to help farmers and ranchers address natural resources concerns through technical and financial support.

CSP does not require producers to take land out of production. It does, however, require a whole-farm approach to conservation. Each contract lasts five years, and producers are eligible to renew for an additional five years by implementing more conservation practices, called enhancements.

During his first contract, Bruce kept his focus on addressing his farm's erosion through no-till and cover crops—an effort that was deemed successful over the course of five years. With past issues in check, he was left with the opportunity to focus on the future of his farm.

No stranger to soil health, Bruce saw his renewal contract as an opportunity to improve the farm's soil, making it more resilient to drought and large rain events. Through his second contract, he selected enhancements, such as a multi-species cover crop mix and grazing, that would improve the soil's ability to retain and recycle nutrients.

"From an economic standpoint, it makes no sense to have that stuff leave your farm," Bruce said, citing the losses farmers face when expensive inputs, such as fertilizer, are lost to runoff. "The first piece (to solving this problem) is to stop inputs from moving. The second piece is to use cover crops and diversification to make sure those nutrients are available to the plant."

Bruce Willems

In addition to building more resilient soils, Bruce has used his second contract to try practices, such as planting pollinator habitat, that he never would have thought to do before his introduction to CSP. Because CSP is a holistic program, it creates an opportunity to implement conservation in unexpected places. For Bruce, this has included land that is challenging to farm and building sites on his property.

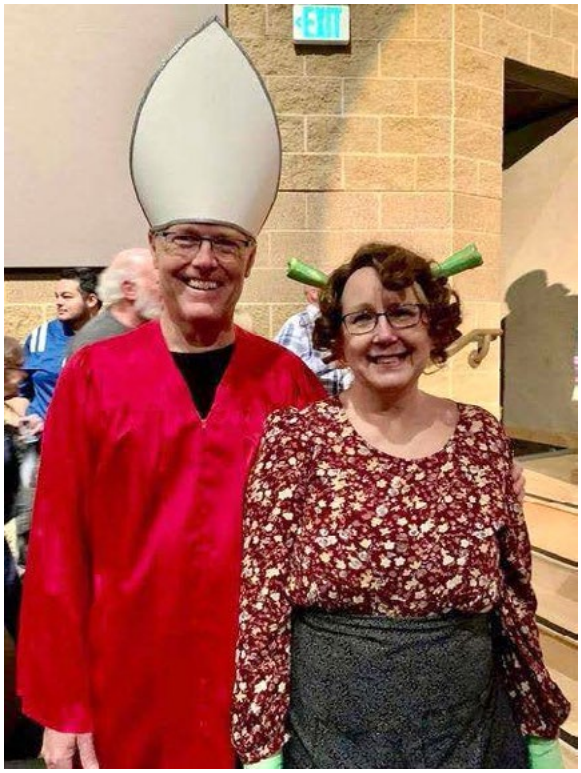
"Long term, we might have some management costs, but from an ROI standpoint it's not hurting my bottom line in the least to be doing these things," he said.

Bruce, like many other farmers, is not only a conservationist but a good businessman, and the financial health of his farm is something he hopes to secure through CSP and use of conservation practices into the future. He hopes the practices he's currently implementing will make his ground more productive, so the farmers that come after him don't have to worry about adding acres to the operation to break even.

"We're making some choices today that are going to improve the profitability of the next generation," he said.

WHERE ARE THEY NOW?

Marty Adkins



Marty and his wife Carol pose for a picture following a performance of "Shrek: The Musical." Marty directed the show and played the Bishop in the wedding scene. Carol played the part of Shrek's mother.

Since retiring in August 2019, Marty Adkins still lives in Knoxville with his wife, Carol, and son, Drew.

Adkins has focused much of his discretionary time on job coaching his son, Drew. "We have done volunteer projects for NRCS Earth Team, the Army Corps of Engineers at Lake Red Rock, the Knoxville Chamber of Commerce and our church," said Marty.

"My wife Carol and I have also been very involved with our community theatre group," he continued. "We serve on its Board and have produced and directed a couple of musicals, 'Shrek: The Musical' and 'Mary Poppins'."

Marty says he is preparing to direct a middle school theatre project and the play "Harvey" this spring. "In the meantime, we have remodeled much of our home and yard," he says. "Once we were vaccinated we've also taken trips to see our kids and grandkids."

Marty served in many capacities with NRCS including: RC&D Coordinator, Assistant State Conservationist for Water Resources, State Resource Conservationist, and Assistant State Conservationist for Partnerships.

Last November, Marty took a trip to visit his daughter, son-in-law and granddaughters in Texas. "We like to take our bikes and trail ride when we can," he said.

A historic photo from Lake Red Rock's construction. "It is one of over 2,600 of them that our son Drew digitized for the Corps of Engineers as a volunteer," said Marty. "I am Drew's job coach for his volunteer projects."

DAVIS COUNTY PRODUCES A 'WEB OF CONSERVATIONISTS'

By Karen Spurgeon, Bloomfield Democrat

Davis County may have several claims to fame, but perhaps one of the most significant is the impact three of its natives — **Robert Lawson, Lori Altheide, and Aaron Musselman** — are making on soil conservation practices in the Midwest.

Lawson became the State Conservationist for Nebraska after previously serving as Acting State Conservationist in a temporary detail for South Dakota.

He grew up on a farm south of West Grove where his family implemented conservation practices. He was a typical farm boy involved in 4-H, FFA and showing livestock at the Davis County Fair. He showed sheep, including a grand champion lamb one year, and had a passion for land conservation.

Lawson graduated from Davis County High School in 1997 and in 2002 graduated from Iowa State University with a Bachelor of Science in Public Service and Administration in Agriculture. While in college, he was given the Outstanding Leadership and Service Award in April of 2002.

In the summer of 1999, Lawson worked at the NRCS Office in Wapello County with Lori Altheide, a 1982 DCHS graduate.

"That summer with Lori opened my eyes and I learned that you can work with a government agency and help people with conservation practices," Lawson said.

Lawson started his full-time NRCS career in 2003, serving as a soil conservationist in two Iowa field offices. He was then promoted to district conservationist in Harlan in 2008. While serving as a soil conservationist in Story County, Lawson reported to District Conservationist Aaron Musselman, a 1996 Davis County graduate who received his degree from ISU in 2000.

In 2012, Lawson moved to Decatur, Ill. where he served as district conservationist covering Macon and Piatt Counties. In 2015, he joined the Indiana NRCS Leadership Team as an area conservationist covering northwest Indiana.

Since 2018, he served as assistant state conservationist for management and strategy in Madison, Wis. and would have gone back to that job after completing the temporary assignment in South Dakota had he not been offered the position in Nebraska.

Lawson has participated in various professional organizations throughout his career including the Soil and Water Conservation Society (SWCS) and Equality USDA. He assisted with several agency-wide efforts, which include serving on two NRCS Hiring Strategy Task Force subcommittees to increase agency recruitment and hiring efforts, and the NRCS of the Future Competency Project Team focusing on agency-wide innovations to foster employee development and overall customer experience.

Lawson was awarded the Wisconsin NRCS 2020 Leadership Impact Award and 2021 Chief's Conservation Stewardship Innovation & Process Improvement Team Award.

Lawson thinks of Altheide, Musselman, and himself as a "web of conservationists" whose

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Lori Altheide

Rob Lawson

Aaron Musselman

'WEB OF CONSERVATIONISTS' CONT...

careers intertwined with one another while working for the NRCS. He finds it especially ironic that all graduated from Davis County High School.

After working at the Wapello County NRCS office, Altheide became an Assistant State Conservationist for Field Operations out of Atlantic in 2017.

There are four assistant state conservationists for field operations in Iowa, each covering one of the state's quadrants. Altheide is responsible for 24 counties in southwest Iowa. She oversees six teams, which serve four counties each.

Altheide said as assistant conservationist for field operations, she supervises and manages the field offices by helping them coordinate conservation programs.

Commenting on Davis County's soil conservation program, Altheide said it is recognized by the state as having a strong board and leadership. "The Fox River is one of the longest watersheds in the state," she said.

"There is a strong conservation program in Davis County because of the farmers and their strong commitment to soil conservation."

Altheide's family members have been strong advocates of soil conservation for many years. Her grandfather, Edwin Cossel, worked for the Soil Conservation District; her father, Loren Cossel, was a strong conservation farmer, and she received "strong inspiration" from her mother, JoElla Cossel.

Musselman has worked for the NRCS since the summer of 1999 when he was still a student at ISU. Since then, he has worked in seven NRCS offices in three of the state's quadrants. He has served as district conservationist and is now an area resource conservationist for the 24 counties in the southeast quadrant of the state.

Musselman said in his position he provides a lot of training and support as well as quality control.

"Fred Hainline got me interested in this job," Musselman said. "He liked the variety of indoor and outdoor activities.

"Those are still the two things that draw me to this job. This is a good career for me," he said.

FABULOUS FIELD PHOTOS!

Field Photos

Highlighted by a moose sighting, here are some Iowa pictures by our staff from the past year.

1. A female moose made Woodbury County home for a few months earlier this year, even enjoying a cover crops field on Feb. 12. *(Lee Gravel, Sergeant Bluff)*
2. The Turkey River in Clayton County on July 17, 2021. *(Lissa Tschirgi, Mason City)*
3. Following the 2020 Derecho, Trees Forever received a grant to plant 97 trees around the city of Tipton. NRCS Staff, including Mark Schutt, Teresa Wendt, Leigh Calloway, and Lydia Whitman assisted in the tree planting efforts on Oct. 12, 2021. *(Tipton Chamber of Commerce)*

Thank you to those who submitted photos. For the next Current Developments, submit images at: https://usdagcc.sharepoint.com/:f:/r/sites/nrcs_iowa/PA/Shared%20Documents/Photo%20Submission?csf=1&web=1&e=aKVs9q.

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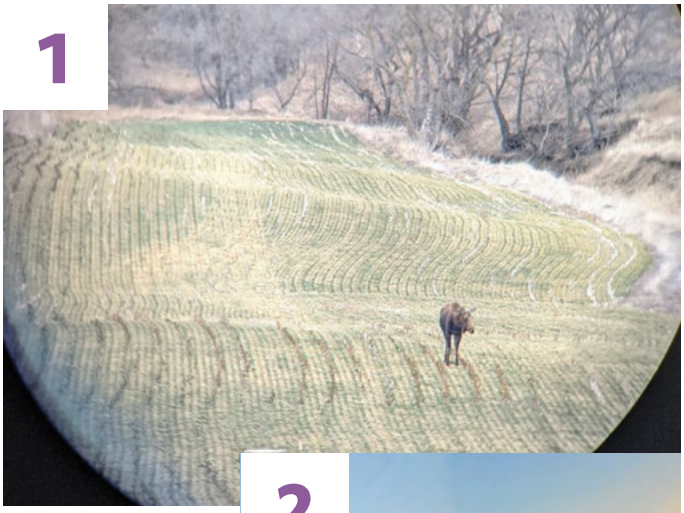

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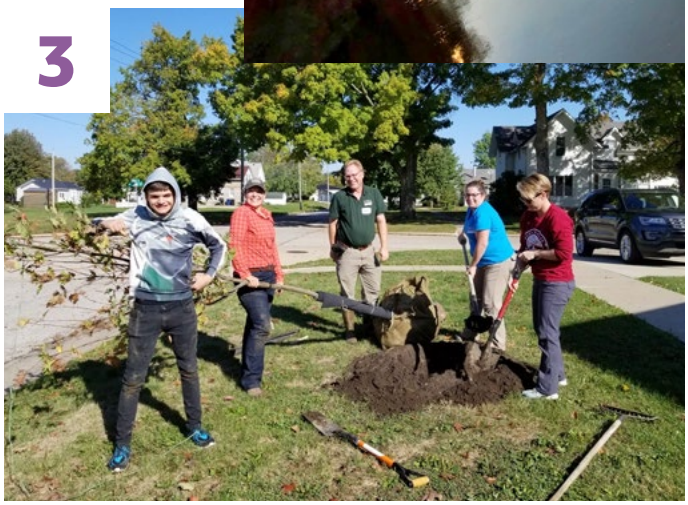
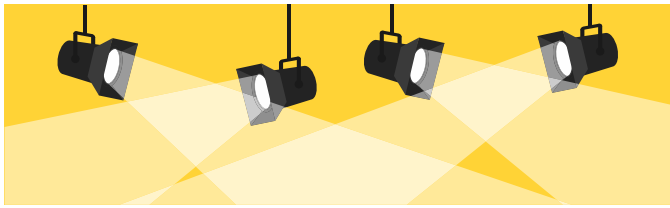


NORTHEAST AREA SPOTLIGHT EMPLOYEE



LISSA TSCHIRGI

Title: District Conservationist

Location: Mason City

College:
B.S. Iowa State University (Agronomy)
A.S. Ellsworth Community College

Where did you grow up?
I grew up on a 260-acre farm outside of Elkader, Iowa.

What is your career background? I started with the agency in the early 90s under WAE funding, eventually getting on permanently in Buchanan County as a Soil Conservation Technician. I have served most of my career as an SCT, but I also have had experience in Canon City, CO for 2 ½ years as a Soil Conservationist and the last almost 2 years as a Soil Conservationist for Fayette County. I just currently accepted a position for Cerro Gordo County in Mason City as the District Conservationist and very excited to be there. Working in different locations and positions has really broadened my horizons. It has really opened opportunities for me to develop new skills, including a wide diversity of new experiences.

Why did you get into soil and water conservation?
I fell into this really, I think mostly because of my agricultural background. Growing up, I was the first to join a boy's 4-H club (however I talked another girlfriend into joining with me) including Vo-Ag classes in high school. As soon as I was introduced to this agency I knew that this is what I wanted to do the rest of my life. I couldn't believe I could have a job that allows me to work outdoors as well as indoors doing something I really enjoy!

What do you like most about your job?
I enjoy what I do so much that I don't even think of it as a job most days. It is more like a part of me, who I am and what I do. There is so much diversity working outdoors and/or at the desk, educational events and with so many programs and different partners. The work-life balance and benefits really makes this a great place to work.

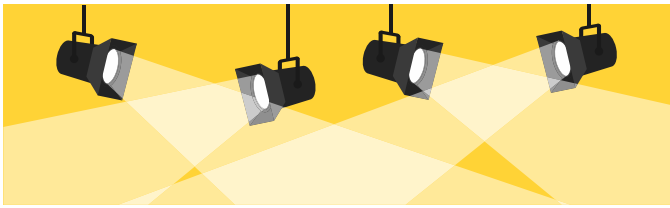
What do you enjoy doing in your free time?
I just love the outdoors, preferring the sunshine. I have spent a lifetime kayaking, tubing, swimming in general and love to fish as well. I am also hoping to be able to travel more in the future.

Any family information you want to share?
I am a single mother with four older children (and where the majority of my spare time goes:)

- Jared (31) Graduated from Wartburg College and currently resides in Gilbert, AZ working for Microsoft as Premier Lead.
- Macy (21) Currently continues her college education at Hawkeye in Nursing School and will be transferring to the University of Iowa where she will finish her studies to become a Physician Assistant. She also recently joined the National Guard as a Combat Medic and certified as EMT.
- Wyatt (16) Sophomore in High School wanting to attend college at University of Iowa to become an engineer, possibly for NRCS!
- Amelia (14) Middle school and hoping to become a veterinarian someday.

Wyatt & Amelia have had the privilege in the past to experience "Shadowing Days" with me in the workplace to better understand exactly how our agency operates and what we do as well.

NORTHWEST AREA SPOTLIGHT EMPLOYEE



LARRETTE KOLBE

Title: District Conservationist

Location: Storm Lake/Buena Vista County

College: Bachelor's Degree, Iowa State University, 1988, Major in Ag Business and Minor in Agronomy

Where did you grow up?
I grew up on a livestock farm in Southeast Iowa near Ainsworth in Washington County. I am the oldest of 4 kids. We are all still involved in agriculture with our jobs and or still living on farms. My family raised continuous corn, hay, purebred Shorthorn cattle, farrow to finish hogs and sheep. Our parents made sure we were active in church, school and 4-H. Fun fact-at one time I held the 2 mile run record in track for my school.

What is your career background?

- 1988: Sold broadleaf herbicides to dairy farmers in SW Wisconsin for a chemical company
- July 1989: I started as an SCS Earth Team Volunteer in Washington County.
- September 1989: I went to Creston as a Soil Conservationist
- September 1990: Soil Conservationist in Sac City
- October 1994: Soil conservationist in Pocahontas
- November 2000: Soil Conservation in Buena Vista and Clay Counties
- July 2003: District Conservationist in Pocahontas County
- May 2012 I became a shared county DC for Pocahontas and Buena Vista Counties
- 2019 I experienced my second NRCS reorganization and I became a one county DC for Buena Vista County

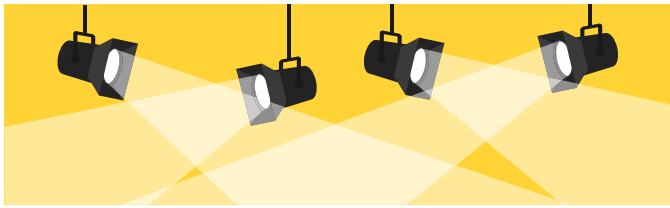
What do you enjoy most about your job?
Working directly with the farmers and building relationships with them.

What do you do in your free time?
When I am not at work, I like to help out with the cattle chores. Two years ago we rented a pasture and I have been cutting cedar trees on my days off. When the weather is not fit to be outside I like to sew, woodwork and crochet. I help out with 4-H, Sac County Cattlemen's and church.

Any family you want to share about? Doug and I have been married for 30 years. We raise corn, soybeans, hay and fat cattle. A friend rented Doug his pasture so Doug went to the sale barn and bought a commercial cow/calf herd.

We also raised 2 kids. Ben is getting his Master's at Iowa State University and is studying the soybean gall midge. Allison is graduating from South Dakota State University this spring in food science and will start at Wells Blue Bunny as a food scientist.

SOUTHWEST AREA SPOTLIGHT EMPLOYEE



BRIAN HOLMES

Title: Civil Engineer

Location: Red Oak

College: Iowa State University, Agricultural Engineering, 1992

Where did you grow up?
I grew up on the family farm outside Shenandoah. I currently live, manage and operate this farm today.

What is your career background?
I started my career as a WAE (When Actually Employed) with SCS (Soil Conservation Service) in high school, performing soil compaction tests and assisting the CETs (Civil Engineering Technicians) with concrete testing on construction of watershed dams in western Iowa. I assisted in many site surveys with 'old school' transits taking cross sections across the gully every 50ft or 100ft. While in college, I applied to the student trainee program (similar to the now Pathways program). I continued working summers and winter school breaks until I accepted a full time engineering position after graduation. I worked in many offices before settling in at the Red Oak USDA Service Center. I worked in the Shenandoah Field Office (FO) and Area Office (AO), Sidney FO, Council Bluffs AO and EO (Engineering Office), Atlantic AO and EO, Centerville EO and Red Oak Field office.

How did you get interested in conservation?
My career was formed at an early age. I remember my dad and uncle staking and constructing terraces. I helped my dad checkout those parallel bench terraces that I farm today.

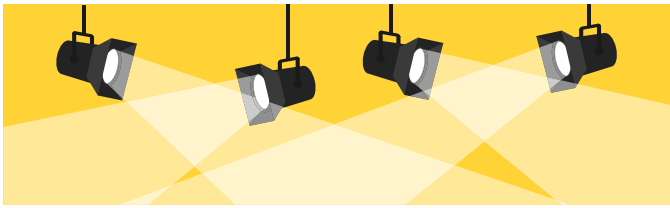
What do you enjoy most about your job?
Being outdoors and working with producers who want to improve their land and save our natural resources for the next generation. It is very rewarding to see a practice get put on the ground.

What do you do in your free time?
My free time has been spent chasing kids to ball games and numerous school activities. I had very little interest in high school sports growing up. I tried golf in high school. My coach said if my practice score is correct, you will be starting on the golf team! I quit the following day – I found it way too slow and boring. Between 3 kids, my wife and I have attended nearly every sport offered (at the time – bowling and soccer are now offered). During high school, I had never been to a baseball or softball game, a volleyball game or girls basketball game. I had never been to a track meet or cross country meet. Other than tennis, my wife and I have attended nearly every sport during the kids' high school years.

Farming after 'work' is considered my current hobby. I look forward to getting a few more tasks completed on the farm since all the kids are out of the house. BK (before kids) I enjoyed restoring farm toys and restoring antique tractors.

Any family you want to share about? I have been married to Lisa for 26 yrs. I have 3 kids. My oldest daughter Brianna graduated from Northwest Missouri State with a chemistry degree and works at Lloyd Inc. in Shenandoah in the creation of animal pharmaceuticals. My middle daughter Adrianna will graduate from NWMSU with an Education degree in History and Social Sciences and has recently accepted her first job at South Calhoun County at Lake City. My youngest boy, Evan, will graduate high school and is planning to attend NWMSU in Ag Sciences. He plans to come back and help farm making him the 4th generation.

SOUTHEAST AREA SPOTLIGHT EMPLOYEE



KRISTEN FENDERSON

Title: Resource Conservationist

Location: Wapello Resource Team/ Muscatine

College: B.A. in Wildlife, University of Missouri

Where did you grow up? Springfield, MO

What is your career background?
My first experience working in a USDA Service Center was in 2008 as a District Employee in Wapello, IA. In 2010, I began my career with the NRCS as a Soil Conservationist working in Wapello and then Williamsburg, IA. In 2015, I started as a Resource Conservationist working in Muscatine, Clinton, Cedar, and Scott Counties. Currently, I am on the Wapello Resource Team working in Muscatine, Louisa, Des Moines, and Washington Counties.

Why did you get into soil and water conservation?
My interest in soil & water conservation stems from the time I spent on my grandparent's farm in Southwest Missouri as a kid. I have fond memories of helping my granddad with chores and exploring the creeks with my cousins.

What do you like most about your job?
Going to the field.

What do you like to do in your free time?
I love to read, cook, hike, garden, and spend as much time as possible outdoors in every season! My new favorite thing to plant in the garden is Milpa, thanks to a soil health training I attended!

Tell us about your family.
My husband Chris Fenderson and I live in rural Muscatine County with our cat and 3 dogs.

NRCS staff conduct archaeological shovel tests in Washington County during the planning stages of a water and sediment control basin.

CULTURAL RESOURCES AND YOUR CONSERVATION PLAN

By Megan Messerole, State Archaeologist

It's easy to look at a farmstead and notice and appreciate a beautiful historic barn or hear the creaking of a 100-year-old windmill. It's much more difficult to look around the landscape and see a 6,000-year-old Native American village archaeological site buried deep below the surface. However, both cultural resources represent significant pieces of our human past, worthy of protection.

Cultural Resources are tangible remains of past human activity. These could include:

- Historic or prehistoric objects
- Buildings
- Structures
- Historic districts
- Archaeological sites
- Statues or sculptures
- Rock art or carvings
- Earthworks, such as ditches, canals, or landscapes

These nonrenewable resources may yield unique information about past societies and environments and provide answers to modern day social and conservation problems. In Iowa, there are about 30,000 recorded archaeological sites and about 2,000 properties listed on the National Register of Historic places. Despite the large numbers, there are likely thousands more forgotten, unreported, or undiscovered cultural resources in Iowa.

NRCS seeks to identify, evaluate, and avoid the destruction of cultural resources. Projects utilizing NRCS funding to implement an activity in a conservation plan must follow several Federal, State, and local laws enacted to preserve cultural resources. The most important of these is the National Historic Preservation Act (NHPA) of 1966. The NHPA requires Federal agencies to consider significant cultural resources during project planning.

NRCS considers cultural resources in its conservation planning for the same reason it protects natural resources — the soil, water, air, plants and animals — on your property. Keeping natural resources in balance helps provide the basis for a healthy and profitable farm environment. Protecting cultural resources provide the basis for understanding our human past. Once archaeological sites and historic structures are destroyed, they are gone forever. The stewardship of these nonrenewable resources is an important link in the conservation ethic that underlies the NRCS mission.

‘LIGHT BULB MOMENT’

How Todd Duncan Learned to be Comfortable with Being Uncomfortable

By Alex Romano, Land Stewardship Project

Todd Duncan recently announced he will be retiring from NRCS on May 13 after nearly 34 years of service.

Nearly seven years ago, northeastern Iowa farmer and NRCS district conservationist, Todd Duncan, along with a group of local producers, started looking for tangible solutions to the erosion problems they were seeing on their farms. These farmers had already been implementing NRCS’s best management practices when it came to conservation, but they were still having problems; in some cases, they were even going backwards.

“Never before in the history of farming have we managed the land with continuous annual row crops.” Duncan told me. “This system with tillage is degrading the soil and its ability to function. The first step is to disturb the soil as little as possible and build soil aggregate.”

Through his experience as a farmer and work as a conservationist, Todd got introduced to the principles of soil health, which he described as a “light bulb” moment in his life. He talked to the producer group about how principles such as armoring the soil, minimizing soil disturbance, and keeping living roots in the ground year-round could help them manage the erosion problems they were experiencing. Together, they took it upon themselves to do their own self-development with the goal of figuring out how to make soil health work on their farms.

The first two-to-three years were focused on keeping the soil in place, which meant reducing tillage and getting the water cycling again. During that time, Duncan observed the soil mellowing and allowing water to infiltrate better. Once he had developed a consistent no-till system on his operation, he introduced cover crops into his rotation by planting rye in the fall and allowing it to overwinter. Not until years four and five did Duncan start seeing the soil regenerate by way of better nutrient cycling. He could tell the biology was working by the way residue broke down quicker and the higher nutrient credits he was seeing in his soil tests.

One scenario he describes for getting started on making soil-friendly changes is to pick a field to start the conversion on and sticking with that field for multiple years in order to receive the full benefits of healthier soil. Looking back, he feels strongly that starting with a solid entry point, such as seeding rye into the harvested corn residue, is the way to get your feet wet. Ideally, a producer would use an early season variety of corn so they can get that fall rye cover crop seeded in plenty of time for it to get established before freeze-up.

The following spring, soybeans can be seeded into the overwintered rye, which is later terminated with herbicide. Now, at this point, Duncan stressed the importance of not panicking when planting “green” into standing rye. Rye is a grass and soybeans are a legume, making for a complementary match. In fact, he said many farmers used to plant — and some still do —a similar mix involving oats under-seeded with alfalfa.

‘LIGHT BULB MOMENT’

After the soybeans are harvested in the fall, Duncan suggests planting winter terminated or winter hardy species as a cover (oats would be an example of a winter-terminated cover crop and cereal rye would be a winter hardy species). By the time that the next corn planting takes place the following spring, two cover crops and the no-tilled plantings of soybeans have conditioned and readied the soil. Implementing a rotation like this one means the first two out of three years of the soil health system are soybeans, which Duncan notes helps get the water and nutrients cycling.

Residue breaking down between the rows of Duncan’s soybeans as a result of good nutrient cycling in healthy soil.

In six years of implementing these practices on his farm, Todd has measured his soil organic matter (SOM) levels going up by 1 – 2/10ths per year, which has resulted in a 1% overall increase in SOM. The other farmers in his producer group have seen similar increases in organic matter and have continued to increase the number of acres managed under no-till and cover crops.

Increasing organic matter by 1% increases available water capacity by about 3,400 gallons per acre for medium-textured soil, according to Anna Cates, the University of Minnesota’s state soil health specialist. “That’s 3,400 gallons in the soil, instead of lost as runoff,” writes Cates. “That water prevents drought stress and holds soluble nutrients, like nitrate, that plants will be able to access.”

The nutrients found in each 1% increase in SOM can amount to, on a per-acre basis, 1,000 pounds of nitrogen, as well as 100 pounds of phosphorus, potassium, and sulfur, respectively, according to Ohio State University.

Today, Duncan’s farm is 100% no-till and cover-cropped and he says he’s now at the point that if N-P-K prices were to sky-rocket tomorrow, he could probably afford to eliminate them as a source of fertility and not take much of a yield hit. The nutrient cycling takes time, he stressed to me, and he’s working on it.

When it comes to next steps in Duncan’s soil health journey, well, he continues to work on building diversity and more living roots year-round with the interseeding of cover crops into corn. He’s also introducing pollinator species and has even managed to squeeze in time for a book club at his local NRCS office where they read and discuss well-known titles like Dirt to Soil and The Dorito Effect. “I am learning to be okay with uncomfortable because that’s where I learn and grow,” he said.

IOWA NRCS PERSONNEL CHANGES

Name	Title	Nature of Action	Effective Date	Location
Waltz, MacKenzie	Soil Conservationist	Appointment	1/16/2022	Mt. Pleasant RT
Shipley, Connor	Student Trainee - Engineering	Resignation	1/20/2022	Mt. Pleasant
Galles, Aubra	Soil Conservationist	Resignation	2/11/2022	Ft. Dodge RT
Hulstein, Ashilyn	Student Trainee - Soil Conservationist	Resignation	2/11/2022	Clarinda
Feliciano-Cortes, Keith	Resource Team Lead	Promotion	2/13/2022	Denison RT
Heims, Joshua	District Conservationist	Promotion	2/13/2022	Charles City
Lapham, Kevin	District Conservationist	Promotion	2/13/2022	Osage
Midden, Tyler	District Conservationist	Promotion	2/13/2022	Waverly
Reichter, Jeffrey	District Conservationist	Promotion	2/13/2022	Estherville
Rogers, Clay	District Conservationist	Promotion	2/13/2022	Winterset
Sande, Aaron	District Conservationist	Promotion	2/13/2022	Newton
Sieren, Kelsi	District Conservationist	Promotion	2/13/2022	Humboldt
Downey, Jessica	District Conservationist	Reassignment	2/13/2022	Webster City
Rague, Dylan	District Conservationist	Reassignment	2/13/2022	Spirit Lake
Rahe, Nathan	District Conservationist	Reassignment	2/13/2022	Knoxville
Tschirgi, Lissa	District Conservationist	Promotion	2/13/2022	Mason City
Eggert, Aaron	District Conservationist	Reassignment	2/13/2022	Adel
Lee, Collin	Soil Conservation Technician	Resignation	2/18/2022	Sgt. Bluff RT
Norland, Betsy	Wetland Specialist	Retirement	2/26/2022	Spencer RT
Angus, Warren	Soil Conservation Technician	Retirement	2/26/2022	Creston RT
Heim, Roger	Soil Conservation Technician	Retirement	2/26/2022	Chariton RT
Webster, Michael	Wetland Specialist	Retirement	2/26/2022	West Union Area Office
Adams, Sam	Asst. State Conservationist for Programs	Promotion	2/27/2022	Des Moines
Henderson, Michael	State Resource Conservationist	Promotion	2/27/2022	Des Moines
Jensen, Brian	Soil Conservationist	Resignation	3/4/2022	Elkader
Thompson, Jacob	Engineering Technician	Resignation	3/11/2022	Des Moines
Stouffer, Kaitlin	Soil Conservationist	Name Change	3/21/2022	Sgt. Bluff RT
Blodgett, Kelsey	Resource Team Lead	Promotion	3/27/2022	Creston RT
Schmidt, Mark	Soil Conservation Technician	Retirement	3/28/2022	Epworth RT

IDALS-DSCWQ PERSONNEL CHANGES

IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

Name	Title	Nature of Action	Effective Date	Location
Vogel, Katie	State Conservation Technician	New Hire	1/10/2022	Jefferson SWCD
Shelton, Brett	State Conservation Technician	New Hire	1/27/2022	Madison/Warren SWCDs
Kittle, Ashley	Conservation Assistant	Resignation	2/3/2022	Butler SWCD
Cline, Tasha	Environmental Specialist (Mines & Minerals)	New Hire	2/18/2022	Des Moines
Rockwell, Brittany	Conservation Assistant	New Hire	2/22/2022	Mills SWCD
Davis, Rob	Program Planner	Resignation	3/3/2022	Des Moines
Lewis, Lori	Administrative Assistant II	Retirement	3/31/2022	Des Moines
Lockwood, Becky	Conservation Assistant	Retirement	3/31/2022	East Pottawattamie SWCD
Wenger, Gary	State Conservation Technician	Retirement	3/31/2022	Washington SWCD
Huntsman, Lindsey	State Conservation Technician	New Hire	4/1/2022	Montgomery SWCD
Puls, Tanner	Environmental Specialist (Water Resources)	New Hire	4/1/2022	Des Moines

Field Office Address Updates

Story SWCD
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Nevada, IA 50201