

Reporter

ST. CHARLES COUNTY

SOIL AND WATER CONSERVATION DISTRICT

FY24 Ends with Good Performance & Great People

The Soil and Water Conservation District has completed their first year in the new office location, 330 Interstate Drive in Wentzville. There have been many changes and challenges, and some new faces, but the staff and board are happy to report the year a success.

The district was able to cooperate with landowners to put conservation practices on farmland in the county, cost-sharing more than \$83,000 for best management practices that address sheet, rill and gully erosion.

The district also has welcomed three new board members. Bruce Siem owns a century farm near Augusta. Bob Feise works the land in the St. Paul area, and Jim Petersen, who has retired from the medical profession, owns and oversees the farming of land in the central part of the county. They join long-time Chairman Adam Bonderer who is growing crops in the bottomlands near Alton and also operates the family feed and grain store. Rounding out the five-member board is Eli Isele, horticulturalist with the University of Missouri Extension who is serving on two soil district boards while administering a number of extension programs in the county.

The staff also has been in flux. After the retirement of Frankie Coleman, Theresa Strunk continued the district's outreach program while taking on the manager position. Charlie Perkins continued to provide technical service to all our landowners, and conducted public outreach as needed.

And finally, staff is pleased to announce — Alexandria (Ally) Hecht joined the team on June 3rd, and will be performing outreach for the district. See her bio, Pg. 3.

Fourth Graders Illustrate the Gifts of Forests

Fourth Graders in St. Charles County were invited to illustrate the gifts of the forest for this year's Soil and Water Stewardship Poster Contest, sponsored by the National Association of Conservation Districts. Students were asked to consider that trees provide food for people and animals, that they absorb carbon and produce oxygen, and they reduce stress and improve mood.

Forty-seven posters were received in the county level of competition. Grand Prize was awarded to Vivienne Ewanio (pictured at right) of St. Charles Borromeo School.

Paityn Harris of Hawthorn Elementary received first place, while Elise Hueling of St. Charles Borromeo was awarded second, and Josie Beck Brand of St. Charles Borromeo took third. There were cash prizes for all the winners. Vivienne's grand prize poster will be entered in the state level contest this fall. See more Pg. 6.



Local Team to Represent Missouri at International Envirothon

The Envirothon team from Rockwood Summit High School in St. Louis County will represent Missouri in this year's International Envirothon Competition to be held in New York at the end of July. The team took first place at the St. Louis Regional Envirothon in April, and has been preparing to compete alongside other US states, and Canadian and Chinese provinces. The international level is sponsored by the National Conservation Foundation.

The Rockwood Summit team consists of (from left) Kari Koerner, Allison Moonier, Rylee Kyle, Sophie Pezzani and Shekinah Annin.

This annual environmental competition is the culmination of an ongoing educational experience that includes regional, state and provincial competitions. The Rockwood team finished first among 14 Missouri



teams who competed in the state event this May in Jefferson City. Teams study and apply conservation-related knowledge to real-life environmental problems. This year's theme is Renewable Energy for a Sustainable Future. See more local teams, Pg. 6.

Climate Quick Reference Guides Are Available

USDA's Climate Hubs and Natural Resources Conservation Service (NRCS) are empowering farmers and landowners by providing easily navigable and user-friendly climate information through the Climate Quick Reference Guides.

The Climate Quick Reference guides provide:

- Simple viewing of historic and projected weather
- Climate change information at the state and county levels

- Fundamental data changes that impact agriculture production in local areas
- Includes max temperatures
- Precipitation amounts by season

The Climate Quick Reference Guides are useful when NRCS conservationists work with farmers, ranchers, and private forest landowners to address natural resource concerns on their land and implement climate-adapted agriculture and forestry activities.

The guide can be found on Farmers.gov or by following this link: Climate Quick Reference Guides or <https://webapps.jornada.nmsu.edu/climate-quick-guides/>.

If You See This



Call 636-922-2833, ext. 3

Did You Know?

Soil in streams is a big problem. Eroded soil that makes it to the stream causes sedimentation which over-time can raise the bed of the stream and cause water to move at a higher velocity, contributing to flooding. In addition, sediment in water disrupts the food chain by destroying the habitat of tiny water creatures that live in the cracks and crevices of the stream bed. Fish depend on those macroinvertebrates for food.

**St. Charles County
Soil & Water Conservation District
330 Interstate Dr.
Wentzville, Mo., 63385
636-922-2833, ext. 3**

The Reporter Newsletter is published by the St. Charles County Soil & Water Conservation District quarterly, in March, June, September and December.

Editor—Theresa Strunk

Writer—Alexandria Hecht

For advertising information or to submit news, call the district at 636-922-2833, ext. 3.

The district is supervised by a board of supervisors made up of farmers from St. Charles County and a University of Missouri Extension representative:

Board of Supervisors

Adam Bonderer, Chairman
Jim Petersen, Vice-Chairman
Eli Isele, Secretary
Bob Feise, Treasurer
Bruce Siem, Member

SWCD Personnel

Theresa Strunk, Manager
Charlie Perkins, Technician
Alexandria Hecht, Info/Ed Specialist

NRCS Personnel

Vacant, District Conservationist
Brandon Rivera, Soil Conservationist

The mission of the Soil & Water Conservation District is to conserve the soil and water resources of the county; promote the wise use of these resources through education; protect residents from undue hardship caused by erosion, sedimentation and flooding; protect the agricultural soil base to ensure continued productivity; and preserve the quality of water and water courses within the county.

Missouri Cash Rental Rate Survey Data Request

MU Extension values the input of Missouri farmers, ranchers, landowners, and hunters in the 2024 Missouri Cash Rental Rate Survey. This survey, the only publicly available source of rental rate data in Missouri, offers crucial insights into rental rate trends for crop, livestock, and recreational leases.

Your participation in this survey is instrumental in helping all Missourians, from landowners and tenants negotiating

leases to farmers and ranchers evaluating return potential.

The 2024 Missouri Cash Rental Rate Survey is anonymous, fast, and easy to complete at <https://bit.ly/MORentalRates> - participate by July 15 and make your voice heard!

For questions about the survey or to access a paper copy, please contact MU Extension economist Ben Brown at 573-882-6527 or bbbrown@missouri.edu.

St. Charles County Stream Care Guide is Online

The St. Charles County Soil and Water Conservation District (SWCD) worked with City of Wentzville Stormwater staff to produce a new county-wide Stream Care Guide. The guide is sponsored by the SWCD, the City of Wentzville and St. Charles County government.

This guide highlights the watersheds we live in and the activities within our watersheds that can harm water quality. It explains the functions of a stream and the natural and human influences that affect stream ecosystem changes. St. Charles County has made it available online to all residents. You can visit the county website's **Stormwater Management and Watercourse Protection** page to link to the new Stream Care Guide, or click on the QR code at right.



To help the community better understand our impact on waterways, landscaping and stream stabilization tips, St. Charles County—in partnership with the City of Wentzville and the St. Charles County Soil & Water Conservation District—has created a unique and engaging Stream Care Guide. In this guide, residents will find out how they can:

- Prevent or minimize erosion issues.
- Avoid flooding impacts.
- Protect property values.
- Preserve water quality.
- Contribute to the survival of fish and wildlife.

As stewards of the two mightiest rivers on the North American continent, everything we do has the potential to affect our county's tourism, flooding, tax dollars, and the beauty of life's most important natural resource: water.

Scan the QR code with your phone's camera to begin reading the Stream Care Guide to learn more about the county's local waterways and what you can do to protect them and your property.



District Staff and Board Welcome Alexandria (Ally) Hecht

Ally Hecht, our new Information and Education Specialist, has recently joined the St. Charles County Soil and Water Conservation District. In her role, she is not just responsible for developing brochures, publications, and presentations, such as the Reporter (a newsletter for St. Charles County Soil and Water Conservation District), but also a dynamic spokesperson. She visits St. Charles County schools, engaging with students and educating them about soil and water conservation. She also administers the local level of the NACD Soil Stewardship Poster Contest, demonstrating her commitment to natural resources conservation.

Her professional achievements include graduating from the University of Missouri-St. Louis in May of 2024 with a bachelor's in Communications and a focus on strategic communication. While interning at the Humane Society of Missouri in the marketing department during her senior year, she researched and wrote articles and blogs for the HSMO and Animal Medical Center of Mid-America website with a readership of over 10,000. She also maintained and created content for AMCMA social media accounts such as Facebook, Twitter, Instagram, and LinkedIn.

She gained a reputation for working well on a team, receiving an "Employee of the Month" award multiple times. In 2023, she was awarded the Shining Star Award while working at the Animal Medical Center of MidAmerica as a vet assistant, which is only awarded to 2-3 people throughout the company yearly.

Ally loves nature. You can find her walking and biking the Katy Trails and playing at the parks with her daughter. She has always had a passion for conservation, so in her new role as an information and education specialist, she will be able to grow her expertise and new skills and share that information with the public. She is excited to learn more and expand her knowledge so that when it is time, she can help manage and care for her and her husband's family farm.

Ally was born and raised in Winfield, Missouri. As she became an adult and married her husband of eight years, they



Ally Hecht, Information/Education Specialist for the District is seen with her family: husband, Stephen, and daughter, Charlie.

moved to Florida due to his active military orders. They ended up having a daughter, who is currently five and decided to move back to Missouri to be closer to family. She currently resides in St. Charles. Her hobbies include walking and playing pickleball with her husband, caring for her house full of animals, traveling, and learning new skills. She looks forward to meeting new people and teaching the younger generations the importance of soil and water conservation so they can make a difference!

Aftermath of the Recent Cicada Emergence Seen Around County

The loud concert that the cicadas hold every night is ending, but there are lasting effects of all of their partying. According to the University of Missouri Extension, homeowners report extensive tree damage.

It's been 13 years since adult periodical cicadas from Brood XIX surfaced underground and started to mate. According to Tamra Reall, MU Extension horticulture specialist, "Females mate and lay their eggs in a series of slits in small twigs in the trees above." A female cicada can lay 400-600 eggs in total, and it only takes 6-10 weeks until the eggs hatch. The new nymphs drop from the branches and burrow themselves underground to feed and rest until the subsequent emergence in 13 years.

The Damage

According to Hank Stelzer, a MU Extension forestry state specialist, cicadas use a variety of woody plants as their hosts, but they prefer birch, willow, linden, and elm trees. Damage happens when the female cicadas lay their eggs in small



openings on twigs. Heavily damaged twigs may become limp, which could block water and nutrients from reaching the leaves past the point where the limb is limp, resulting in yellowing or browning of the leaves. If the areas of the trees or shrubs are left unmanaged, the areas will die and break off during a storm or winter snow.

In some cases, the openings left by the female cicadas could serve as entryways for diseases and problems that might affect tree health and lead to future tree and

shrub destruction. According to MU forestry specialists, it's unnecessary to prune the damage done by cicadas on more giant trees. Still, for younger, smaller trees showing signs of damage from cicadas, it would be beneficial to contact your local arborist to help determine the best tree plan.

Benefits From Cicadas

Despite the loud noises and gross appearance, the aftermath from the cicadas also leaves lasting environmental benefits for trees and plants:

- The dead cicadas serve as a natural fertilizer as they decay.
- The exoskeletons serve as a food supply for wildlife, specifically birds.
- The cicadas act as a natural soil aeration as they emerge and burrow underground.
- For larger, older trees, cicadas benefit the trees by naturally pruning outer branches, which could lead to more flowers and fruit in the coming years.

Protect Water Resources With Smart Farm Management

Nutrient additions to crop fields through the use of chemicals and animal manure are necessary and often costly inputs on the farm. The nitrogen and phosphorus inputs greatly increase the odds that plants will flourish and produce the food needed for people and livestock.

However, excessive or improperly applied inputs can be washed from farm fields and into waterways during rain events. High levels of nitrogen and phosphorus can cause eutrophication of water bodies which can lead to hypoxia (dead zones), causing fish kills and a decrease in aquatic life. The water also becomes unsafe for human recreation, and for accessing as a source of drinking water. On a large scale, nutrients in water is detrimental to aquatic life, animals, people and the economy.

Farmers strive to have healthy soil, and participate in agricultural conservation programs, in order to reduce the needs for some of these inputs, especially because nutrient inputs are expensive and can greatly affect the bottom line. Some of the ways that farmers reduce nutrient losses from their operations include:

- **Conservation Drainage:** Subsurface tile drainage is used to manage water movement on and through soils. Water draining off fields can carry soluble forms of nitrogen and phosphorus, so reducing water runoff is good for both streams and crop production. Conservation drainage practices may include a modified drainage system design, woodchip bioreactors, saturated buffers, and modified

Aquatic Hypoxia—oxygen deficiency in water.
Eutrophication—excessive richness of nutrients in a body of water which causes a dense growth of plant life (algae) and the death of aquatic creatures from lack of oxygen.
“Dead Zone” - Hypoxic water where few organisms can survive.

- drainage ditches with stable outlets.
- **Year-Round Ground Cover:** Keeping a living plant and roots in the field year-round greatly reduces soil and nutrient loss. Cover crops and plant residues prevent periods of bare soil which is highly susceptible to erosion and loss into waterways.
- **No-Till and Conservation Tillage:** There are so many benefits to reducing tillage on the farm. This one practice improves soil health, reduces soil loss, reduces water loss to runoff, reduces soil compaction AND protects local waters from nutrient runoff.
- **Field Buffers and Riparian Corridors:** Planting trees, shrubs and grasses along the edges of fields and water bodies can help prevent nutrient loss from fields by absorbing or filtering out nutrients before they reach a water body.
- **Manage Livestock Access to Streams:** Livestock in streams directly deposits nutrients where they don't belong. Agricultural cost-share

programs include grazing systems that fence livestock out of streams while providing alternate watering sources.

- **Nutrient Management:** Nutrient and pest management programs are available to farmers to aid them in applying nutrients in the right amount, at the right time of year, with the right method and with the right placement.
- **Watershed Participation:** It takes all citizens of the watershed to reduce nutrient pollution and protect water. Farmers can get involved in watershed planning committees, state government efforts, farm organizations, conservation groups, and community groups focused on watershed health.

Crop Acreage Reports are Due

Agricultural producers should make an appointment with the Farm Service Agency (FSA) to complete crop reports by July 15.

“Many USDA programs require producers to file an accurate crop acreage report by the applicable deadline in order to receive program benefits,” said SED Joe Aull, State Executive Director in Missouri. “Once planting is complete, call your FSA office to make an appointment to report your acreage. We also encourage you to take care of any other FSA-related business during your appointment.”

Call the local Farm Service Agency at 636-922-2833 to report acreage.

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Four Practices That Maintain Healthy, Productive Soils

It's no surprise that soil is essential to our everyday lives. It provides food, improves water quality, and is the source of our everyday comforts, such as the clothes we wear. Therefore, keeping our soil healthy and productive is a top priority.

Healthy and productive soils produce higher yields, reduce rainwater runoff and show fewer signs of erosion.

The Golden Question

How do we keep our soil healthy and productive? Farmers and growers can do many things to maintain soil health, including crop rotation, cover crops, no-till, and nutrient management.

Crop rotation is a planned sequence of crops grown on the same ground over time. Crop rotation benefits the soils in many ways and increases nutrient cycling by holding soil moisture. Consistently rotating the cycle of crops helps with managing plant pests such as weeds, insects, and plant diseases, and can help with wind erosion, sheets, and rills. It is recommended that crops be rotated every 3 to 4 years. In doing so, it adds diversity to the soil so that microbes in the soil can thrive.

Cover crops are another source of help for soil health. Cover crops are grasses, legumes, and forbs planted for seasonal vegetative cover. Some popular choices of cover crops in Missouri are Crimson Clover, cereal rye, oats, radishes, and turnips. The use of cover crops increases soil organic matter and helps maintain soil moisture, while preventing soil loss. Cover crops also provide soil with increased nutrients and help provide nitrogen for plant use, which



Corn field with Cover Crop

helps manage residual nutrient loss. They also suppress weeds and reduce soil impaction.

Growers popularly use **no-till**. It limits soil disturbance to manage the amount, orientation, and distribution of crop and plant residue on the soil surface year-round. No-till improves soils' water-holding capacity, and increases organic matter, while reducing soil erosion and decreasing compaction.

Nutrient management is important to

maintaining healthy and productive soils. Managing the rate, source, placement, and timing of nutrients in the soil allows an increase in plant nutrient uptake, which ultimately improves the soil's physical, chemical, and biological properties.

All four of these practices improve water quality and conserve water and improve plant and crop production. Crop rotation and cover crops decrease pesticide use, improving the efficiency of nutrient use. The principle of no-till and nutrient management also enhances good air quality.

Whether you are working on a family farm that has been around for generation after generation or are new to the farming industry, we are here to help you build the health of your soils and add strength to your operation. Visit your local USDA service center or call 636-922-2833, ext. 3, where we can help you develop a plan to support you and your goals for your land.

Healthy soil is the foundation for sustainable life. Managing soil health allows growers to work with the land, not against it, to reduce erosion, maximize water usage and quality, improve nutrient cycling, and ultimately improve the resiliency of the land.

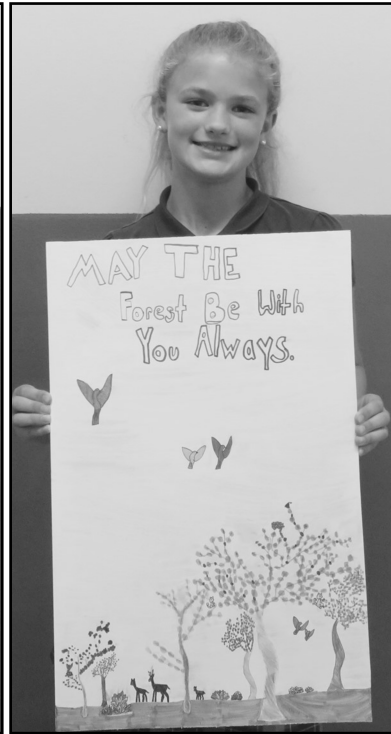
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Local Students End the Year with Big Wins in Conservation Contests

The St. Charles County Soil and Water Conservation District sponsors youth involvement in activities and contests related to conservation and the environment. This year, the St. Charles County Poster Contest and the St. Louis Regional Envirothon had more than 100 local youth participating.

Pictured on this page are the 1st, 2nd and 3rd place Fourth Grade Poster Contest winners. The grand prize winner is featured on the front page of this issue.

Also pictured below are the local high school teams taking top positions in the Missouri Envirothon, the state-level of competition for an international program that brings teams of students from across the U.S., Canada, and China to participate in a natural-resources based, hands-on environmental competition. The St. Louis Region sent three teams to the state competition this year, and all three of the local teams placed in the top three positions at the Missouri contest. Pictured below are the teams placing 2nd and 3rd. The local team placing 1st, from Rockwood Summit High School, is featured on page one of this issue.



Poster Contest Winners from left:

First Place—
Paityn Harris from Hawthorn Elementary School.

Second Place—
Elise Hueling from St. Charles Borromeo School.

Third Place—
Josie Beck Brand, St. Charles Borromeo School.



Parkway North High School Team—2nd Place at MO Envirothon



Lindbergh High School Team—3rd Place at Mo Envirothon

The soil and water conservation district does not endorse nor recommend any of the vendors/contractors advertised in this newsletter; furthermore, any contractor/vendor that wishes to be added to the district's contractor/vendor list can be added upon request. For information, call 636-922-2833, ext. 3

Public Invited to July Meeting of Federal Advisory Committee for Urban Agriculture and Innovative Production

The Urban Agriculture and Innovative Production Advisory Committee (UAIPAC) is one of many ways that USDA is extending support to urban agriculture, including issues of equity, climate resilience and nutrition access.

Summary

The Natural Resources Conservation Service (NRCS) will hold a public meeting of the Urban Agriculture and Innovative Production Advisory Committee (UAIPAC). UAIPAC will meet to discuss proposed recommendations for the Secretary of Agriculture on the development of policies and outreach relating to urban, indoor, and other emerging agriculture production practices. UAIPAC is authorized under the Agriculture Improvement Act of 2018 (2018 Farm Bill) and operates in compliance with the Federal Advisory Committee Act (FACA), as amended.

Dates

Meeting: The UAIPAC meeting will be held on Thursday, July 11, 2024, from 12 p.m. to 5 p.m. Eastern Daylight Time (EDT).

Written Comments: Written comments will be accepted until Thursday, July 25, 2024 at 11:59 p.m. (EDT).

Oral Comments: Registration to provide oral comments during the meeting will be open until Monday, July 8, 2024 at 11:59 p.m. (EDT).

Addresses

Meeting Location: The meeting will be held virtually via Zoom webinar. Pre-registration is required to attend the UAIPAC meeting and access information will be provided to registered individuals via email.

Registration details can be found at: <https://www.usda.gov/partnerships/federal-advisory-committee-urban-ag>.

Written Comments: Send comments in response to this notice via email to UrbanAgricultureFederalAdvisoryCommittee@usda.gov.

Oral Comments: Only pre-registered individuals will be permitted to provide oral comments.

Instructions to register and participate in the meeting can be found at: <https://www.usda.gov/partnerships/federal-advisory-committee-urban-ag>.

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Wentzville, MO 63385

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Reporter

Support Pollinators and Biodiversity - Grow Native Plants

Native plants do amazing things in your landscape. Not only are they hard-wired to grow here (and do relatively well), they also are beautiful to look at and are beneficial to the environment. Native plants are more resistant to disease and offer diverse food choices to pollinators and other creatures. Planting a native plant rain garden will help slow down water and allow it to soak into the ground, replenishing ground water. An added benefit, there is no need to mow native forbs. Their winter seeds and residue provide food and shelter all year long. Visit grownative.org to learn more.



Bees, butterflies, fireflies and other beetles visit these two plants in significant numbers. Above and left is the Purple-headed Coneflower, At right is Butterfly Weed.

