



## Agriculture



Agriculture plays a significant role in Washington County's economy and landscape. Most farms are family-owned, and the county is known for its strong dairy and livestock production, along with key crops like corn, soybeans, hay, and wheat. Conservation practices such as no-till farming and cover cropping are widely used to promote sustainability and improve water quality. The Extension Agriculture team ensures that feasible, science based practices are accessible to farmers, managers and workers to improve sustainability and profitability of farms.

*Liz Gartman, Regional Crops Educator*

A presentation for the 2026 Thinking Outside the Barn Nutrient Management meeting in collaboration with the Washington County Land Conservation department where I shared results from the 2025 Nitrogen Optimization Pilot Program field trials and discussed how growers can become involved with the program. Through this effort, I brought awareness of the opportunity for farmers to perform on farm trials regarding nitrogen management to better understand the optimal nitrogen rates for their farm.

- Each year the Washington County land conservation department plans a nutrient management focused meeting for local growers. I was asked to provide an update and results from the two Nitrogen Optimization Pilot Program sites in the county.
- I created a presentation with the plot layouts for the two sites, along with the 2025 results and pictures from the work that we completed. I also included the updates to the 2026 NOPP program that provides funding for smaller, more manageable projects that growers can participate in.
- I was able to respond to several questions about the program and what types of nitrogen studies can work within the NOPP framework.

Presentations for attendees of the Midwest Forage Association Symposium where participants learned about fertilizer requirements and guidance for various forage crops, fertilizer economics, and the value of nutrient credits from legumes and manure. Through this effort, producers understand the importance of various crop nutrients as they pertain to forage yield and quality. They also have the knowledge needed to maximize their fertilizer dollars, and will consider strategically managing nutrient credits to lower overall cost of production and improve profitability. (Jordyn Sattler, Liz Gartman)

- Fertilizer is the largest variable expense for most farms, so it is important that growers make the most of their fertilizer dollars. This includes knowing which crop nutrients are the most important, how much of those nutrients are required, impacts on forage quality and yield, and how economics play a role in those decisions and affect profitability of the farm. To remind growers about the importance of fertilizing forages, a combination of presentations were delivered to attendees of the Midwest Forage Association Symposium.
- These presentations detailed the importance of essential crop nutrients, deficiency symptoms that can be observed when crop needs are not met, impacts on yield and quality, how to make fertilizer decisions using unbiased data and economic considerations, and how to strategize the use of nutrient credits from legumes and manure to lower cost of production.
- As a result, growers became more aware of tools and resources that are available to help guide informed decisions regarding fertilizer applications. This will allow farms to save money where they can and improve their financial sustainability.



## Positive Youth Development



4-H empowers youth to reach their full potential working and learning in partnership with caring adults. 4-H involves youth in project-based education. Through project learning, youth can explore their interests (“sparks”) and master new skills. 4-H projects are meant to be hands-on to create a memorable learning experience. Since 4-H started in the early 1900s, youth have learned by doing. This hands-on process allows youth to understand not only how to do something but also why they are doing it. Beyond traditional clubs and projects, Washington County 4-H is expanding opportunities for youth to explore career pathways through immersive career exploration, connections with local industries, and innovative STEM programming. These experiences inspire curiosity, build confidence, and prepare young people for success in school, work, and life.

*Kelly Dione, 4-H Educator & Ron Jakubisin, 4-H Educator*

A monthly STEM Project for 4-H youth in collaboration with community volunteers and local partners. The goal is to engage youth in hands-on exploration of engineering, electricity, coding, and physical science through activities while building problem-solving, teamwork, and critical thinking skills. (Kelly Dione)

- Local youth have limited access to hands-on STEM learning experiences and meaningful exposure to STEM career pathways, particularly in applied fields such as engineering, manufacturing, information technology, and skilled trades. Many young people express interest in science and technology but lack opportunities to connect classroom concepts to real-world careers or to see how their skills translate into future jobs. The 4-H STEM Project was developed to address this gap by providing consistent, experiential learning opportunities that introduce youth to high-demand STEM careers through engaging, project-based activities.
- In response to the need for increased hands-on STEM learning and career exploration opportunities, I developed and facilitated a monthly 4-H STEM Project focused on experiential, career-connected learning. Youth engaged in structured, hands-on activities to explore concepts in engineering, electronics, and computer science. Each session intentionally connected the activity to real-world careers by highlighting required skills, education pathways, and local workforce opportunities.
- The project was also designed to build transferable career-ready skills including teamwork, communication, critical thinking, and problem-solving. Through consistent engagement and guided reflection, youth were able to better understand how their interests and strengths align with future STEM career pathways. Ten youth actively participated in the 4-H STEM Project, gaining exposure to multiple STEM career pathways including engineering, advanced manufacturing, information technology, and skilled trades.

Planning for a STEM Virtual Learning Series for K–5 youth in collaboration with a 4-H adult volunteer and engineer. The goal is to build foundational knowledge and hands-on skills in STEM, so that youth can identify their sparks and continue exploring and developing their interests in science, technology, engineering, and math. (Kelly Dione)

- Based on a Needs Assessment conducted in January–February 2025, STEM programming was identified as a priority in Washington County Schools. Although a county-wide STEM project enrolled 10 youth, participation was limited by scheduling and access barriers that prevented some students from attending in-person meetings.
- In response to the need for increased access to STEM learning opportunities, the 4-H educator partnered with a 4-H adult volunteer who is also an engineer to develop a virtual STEM learning series. Together, the team is planning and developing four hands-on STEM activities scheduled to begin in March. Program development includes curriculum design, purchasing and organizing materials, training on the online delivery platform, and creating marketing and communication materials.



Guidance and support for Leaders' Association adult & youth volunteers within the 4-H program in monthly meetings focused around : Financial, Promotion, Program Support, and Leadership to Clubs/Projects. The Washington County Leaders Association (WCLA) restructured its board in 2025 with each of the 16 clubs inviting one adult/one youth from each of the 16 county clubs to serve as WCLA board members. The goal was to refocus on youth participation/voice, refocus on a positive productive process for all participating, and to streamline committees and processes for all to have a sense of accomplishment as well as seeing their efforts as positive outcomes on all of the clubs in Wash. Co. The educator attends the Executive Officer meeting prior to every monthly board meeting to provide observation and guidance as the new structure of the Leaders Association is implemented. (Ron Jakubisin)

Teen Connect and TWEEN Connect are a series of monthly social and leadership activities for Wash Co 4-H youth. The February 16th event was for the *TWEENs* of Wash Co. (5th - 8th grade) of the 16 countywide clubs in the county. The event offers an opportunity within 4-H to continue peer connection through age appropriate activities, social activities while keeping the mission of 4-H in the forefront. The event also offers pizza and a theme at each event. Youth are asked at the end of each event to give theme ideas for future monthly events. (Ron Jakubisin)

Summer Camp training (2 of 5 sessions) took place on Feb. 16th with the 22 youth leaders and 12 adult volunteers. These trainings are a series of monthly trainings to plan and train to be 'camp counselors' for Washington County's annual overnight 4-H camp experience in June. Sessions include planning camp activities, learning and practicing facilitation skills and understanding emergency/safety policies. (Ron Jakubisin)

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