

We teach, learn, lead, and serve, connecting people with the University of Wisconsin, and engaging with them in transforming lives and communities.

4-H - Positive Youth Development

Holly Luerssen, 4-H Program Educator

- A holiday-themed STEM engagement activity for 4-H families, where participants completed hands-on experiments
 and projects to spark curiosity, foster family connection, and build foundational skills in science and critical thinking.
 Total Reach: 25 Families order the kits which held 12 different activities
 - The 12 Days of Christmas Take & Learn Kits provided a STEM-based, holiday-themed engagement opportunity for 4-H families, fostering curiosity, creativity, and hands-on learning during the holiday season. Families reported increased quality time spent together while exploring STEM concepts through festive, interactive activities. Participants enhanced their problem-solving skills, critical thinking, and scientific understanding, aligning with 4-H's mission to develop lifelong learners. Feedback highlighted the program's ability to make STEM approachable and fun, ensuring participants were inspired to continue exploring science and innovation beyond the holiday season.
- An in-person session where participants discovered how to extend all the 4-H Camp fun beyond just a few days. Whether they were a Camp Rookie or Camp Pro, they learned different ways you can be a camp leader all year long in a variety of traditional 4-H spaces like club or project meetings.
 - Fall Forum is a conference that brings youth and adults together to allow for connection building and for participants to learn ideas and resources they can take back to their counties. The Building Camp Sparks All Year Long leadership team was comprised of three 4-H Educators and three 4-H youth leaders. This session was selected to present lead participants through hands on activities they can utilize in their counties to help them build better, create more engaging environments and make stronger connections with both the young people and adults. 100% of attendees agreed that this session sparked a new idea which they could take back to their local club or project meetings. Youth and adults mentioned that they now know how to and why skits should be incorporated in club meetings. Youth and adults mentioned they like dynamic, active, and hands on presentation style.
- An in-person session where participants learn how to add a spark of excitement to the club meeting by involving youth in planning and choice. The goal for this session was for the participants to add more joy, purpose, and direction in our club meetings! Total Reach: Forty-six participants, both youth and adults, attended this session. 100% agreed that this session sparked a new interest. When asked what something is they would use from this session in the next 6 months, participants mentioned: New ways to run a meeting. How to engage everyone and keep them focused. Different ways to vote and make decisions. New agenda outline.
 - Fall Forum is a conference that brings youth and adults together to allow for connection building and for participants to learn ideas and resources they can take back to their counties. Finding the Spark in Your Club Meeting was selected to present at the 2024 WI 4-H Fall Forum. Through the presentation youth and adults learn various ways to increase youth voice in choice, make meaningful connections, and create a meeting agenda that is more purposeful for the youth in attendance.



Agriculture

Heather Schlesser, Dairy Agent Melissa Ohlrich, Regional Crops Educator

- A series of in person and virtual crops and soils update meetings for crop and forage growers, consultants,
 agronomists, students and agency staff where participants were provided relevant research updates from Extension
 specialists regarding soil and water management, forage and grain production, pest management considerations and
 economics of crop production. Through this program, attendees can make more informed decisions related to these
 topics to improve productivity and economic viability for their farms and their client's farms. Total Reach: 201
 individuals registered for the event; many of the attendees were consultants which could result in further reach
 - o Crop production is very dependent on the management decisions that growers make throughout the growing season. Each season comes with its own set of challenges based on weather conditions, pest pressures and economic conditions. Extension outreach specialists are engaging in work to assist with the management of these challenging issues and this program was planned to make the connection between those specialists and the stakeholders that stand to benefit from that research. The Badger Crop Update planning team identified key sites to host in-person events and planned one virtual event to accommodate those who could not travel to the in-person options. The group reached out to Extension specialists to determine what key agenda items were necessary and scheduled a format that allowed attendees to learn from the specialists but also engage with them to get their specific questions answered. The agenda included a series of short talks grouped into topic areas, with a follow up "question and answer" time that allowed a deeper dive into each specific topic to ensure we met the need of those attending the updates. Specialists were encouraged to address key issues that arose during the 2024 growing season to provide tools to help growers navigate those issues more fluidly in the future.
- Planning for a dairy heifer reproduction data collection and survey project in collaboration with UW-Madison
 Department of Animal and Dairy Science faculty and graduate students. The goal is to assess current management
 practices and identify areas for improvement. Raising replacement dairy heifers is a significant and rising cost to dairy
 farms, and poor reproductive performance only adds to rearing costs.
- An artificial insemination course for dairy and beef producers, where they learned how to breed their own cattle. Through this program, producers will be able to save money and increase reproductive rates by breeding their own cattle in a timely fashion. Total Reach: 14 participants over 4 sessions = 56 (Heather Schlesser, Sandy Stuttgen)
 - In 2012, artificial insemination (AI) companies in Wisconsin stopped offering farmers artificial insemination training. During this time, these companies also concentrated their services to areas with more significant concentrations of dairy cattle. These changes in business practices created voids in artificial insemination services. As a result of this void and the need for continual improvement, this educator and Sandy Stuttgen developed an AI program for beef and dairy producers. As a result of this work, 14 people were trained to inseminate their cattle artificially. Participants were asked to complete a pre/post style evaluation to measure their change in knowledge relating to the various topics covered. Participants indicated an overall change in knowledge of 1.32 on a 4-point Likert scale. The most significant change in knowledge occurred on the topics of AI Technique and Reproductive Tract and Semen Handling. Participants were also asked to rank the various topics taught, and they indicated that AI practice in cows was their most valued topic, with AI Technique and Reproductive Tracts and Semen Handling coming in second.



- A heifer meeting for dairy producers, where they learned about heifer transportation, colostrum feeding, enrichment tools, and cold care. Through this program, producers will be able to increase heifer health and save money due to decreased sickness. Total Reach: We reached 12 people with this meeting. However, three of the participants worked in the Agricultural industry and therefore have a multiplier effect.
 - O Colostrum feeding guidelines were established over 20 years ago. Since that time the quality of colostrum has changed and thus the feeding guidelines should change as well. This program aims to inform producers on the latest feeding guidelines. As a result of this need for additional information, this educator and Sandy Stuttgen developed and taught a class on heifer management. Addressing the latest topics in heifer rearing. As a result of this work, 12 people attended the Heifers the Next Generation Meeting. Participants were asked to complete a pre/post style evaluation to measure their change in knowledge relating to the various topics covered. Participants indicated an overall change in knowledge of 0.96 on a 5-point Likert scale. The most significant change in knowledge occurred with the topic of Heifer Enrichment Tools. Participants were also asked to indicate what practices they would change as a result of attending this meeting. Participants indicated they would start measuring colostrum quality, add brushes to heifer barns, and try pair housing.
- Planning for a workshop for dairy producers. The goal is to educate farmers on the results of UW-Extension's colostrum management research project so they can implement changes to their colostrum management program and increase calf health.
 - o Many dairy farms in the state are currently breeding animals to beef semen. These beef x dairy crossbred animals are often sold within 7 days of age. The colostrum management practices for these animals were largely unknown. The true effectiveness of heifer colostrum management protocols was also unknown, as many farms do not measure the failure of passive transfer rates in their animals. Due to the lack of knowledge surrounding the success of colostrum management practices in calves we sought to measure the rate of passive transfer on animals that are retained on the farm and those that are not retained. To date we have finished collecting blood samples on 1500 heifers and 1500 nonretained animals. We will now begin analyzing the data to determine the results of passive transfer on farms throughout the state.
- Planning for an update to Topic Hub article heat abatement resources in dairy cattle, as well as creating new
 informative videos to showcase dairy farmer success stories about heat abatement strategies on-farm. The goal is to
 increase awareness and highlight successful implementation of heat abatement strategies for dairy cattle. These
 resources will address a critical topic related to climate change and sustainability, as well as methods to ensure high
 quality animal care and economic viability for the dairy industry.
 - Heat stress presents both an animal welfare and sustainability challenge for the dairy industry. Dairy cattle of all ages are susceptible to thermal discomfort and may experience poor animal welfare as a result (Van Os et al., 2024). In lactating cows, milk production and reproductive losses have been documented to occur during heat stress, which, along with a greater risk for mortality, threaten the economic viability, efficiency, and environmental sustainability of dairy production. Some limited evidence also suggests heat stress and mitigation strategies impact public perception of dairy farming (Cardoso et al., 2018). Many Wisconsin dairy farmers have expressed interest in learning more about cost-effective and energy-efficient housing and management practices to mitigate heat stress in dairy cattle. Previous heat abatement resources on the Topic Hub will be updated and new resources will be added to address economic impact. In addition, brief, informative videos to highlight various types of successful heat abatement strategies implemented by dairy producers on-farm will be created. Our goal is to serve as a reliable source for research-based information on effective and efficient heat abatement strategies in continental or temperate climates, across dairy herd sizes and facility types. Dairy producers and the industry will increase awareness of heat abatement strategies and important sustainability, economic, and animal care implications.



FoodWIse

Mallory McGivern, FoodWlse Administrator Michelle Van Krey, Healthy Communities Coordinator Julia Perock, FoodWlse Educator

- A quarterly nutrition education series in Portage & Marathon County for adults with young children as part of the Children's Wisconsin LEAP (Learning Essentials about Parenting) program where they learn about incorporating healthy eating habits into the family routine, including family meals and eating more fruits and vegetables. The goal of this effort is to encourage healthy eating behaviors at home.
- Shared leadership in the Marathon County Hunger Coalition, where emphasis is placed on expanding healthy food access and developing new projects and partnerships that will empower Marathon County families through education and shared resources. The coalition's goal is to increase access to healthy foods in order to achieve health equity for all county residents.
 - 9% of Marathon County residents use SNAP benefits to purchase food, and many more would benefit from increased access to fresh fruits and vegetables. FoodWIse provides leadership to the MCHC, which gleans at the Wausau Farmers Market, purchases and procures local produce for food pantries, and operates a monthly mobile pantry that travels throughout the county. The MCHC purchases thousands of dollars of produce and local food from farmers in the community to be distributed through food pantries. This program supports the local economy by keeping money in the community and provides healthy food to those that need it most.

Horticulture

Janell Wehr, Horticulture Educator

- Two workshops for the general public, where participants planted microgreens for harvest. The goal of this effort was to increase awareness and knowledge of environmentally-sound gardening practices that simultaneously provide physical, social and emotional benefits of gardening. Total Reach: 11
- A workshop for the general public, where participants planted microgreens for harvest. The goal of this effort was to
 increase awareness and knowledge of environmentally-sound gardening practices that simultaneously provide
 physical, social and emotional benefits of gardening. Total Reach: 12
- A program for adults over 55, where participants learned about the gardening resources available to Wisconsin residents, including various diagnostic labs and virtual tools. The goal of this effort is to increase awareness and knowledge of resources to increase pollinator habitat while also decreasing environmental contamination and pollution due to overuse of horticulture chemicals in urban and suburban environments. Total Reach: 9
- An in person 12 session horticulture course where Marathon County residents and potential Master Gardener
 Trainees learn the fundamental principles of IPM based gardening. The goal of this effort is to increase awareness and
 knowledge of resources to address environmental contamination and pollution due to overuse of horticulture
 chemicals in urban and suburban environments. Total Reach: 15
- A diagnostic service for the general public, where Marathon and Wood County residents' horticultural inquiries are answered through evidence-based resources. This effort is designed to reduce pollution through horticultural product (pesticides and fertilizers) misuse.



Natural Resources

Kris Tiles, NRI Program Manager Anna James, Regional Natural Resources Educator Jen McNelly, Regional Natural Resources Groundwater Educator

- A facilitated meeting with producer-led watershed groups in the North Central Region, where producers and collaborators learned about an opportunity for farmer leadership training and planned an in-person regional gathering. Through this meeting, producers and collaborators learned about an opportunity for their group members to participate in training to help strengthen farmer-to-farmer programs by offering learning opportunities to increase producers' skills in leadership, communication, and relational organization. Producers and collaborators also discussed the value and benefit of participating in an in-person regional gathering to introduce new groups to the area and discuss the future plans and goals of each group. Total Reach: 5 producers and 5 collaborators from Land & Water Conservation departments
- A project for Wisconsin woodland owners where they will work with a forester to get a Forest Stewardship Plan. Through this program, woodland owners will receive a plan that will allow them to identify goals for their property, plan for the future of their land, and implement management activities. Total Reach: 30 Cooperating Foresters have joined the project to write Forest Stewardship Plan 93 Woodland Owners have been connected with Forester to get a plan 76 Forest Stewardship Plans completed 2814 New Forested Acres in a Forest Stewardship Plan
 - Wisconsin has made great strides in private forest landowner engagement, more than 21,000 new landowners have received a property visit from a professional forester since 2018. These landowners have received personalized information about their property and are poised to act in their woods. The cost of getting a Forest Stewardship Plan can be prohibitive for some woodland owners, but those same plans are commonly required to participate in cost-share programs that help pay for woodland management activities. We created the Wisconsin Stewardship Plan Project (WSPP) to help Wisconsin landowners take the next step by making it possible for them to get a Forest Stewardship plan for their woodlands. WSPP created a network of private foresters that will write plans across the state. The Wisconsin DNR received a grant so that the project could pay the private foresters for the plans they write. When an eligible woodland owner signs up, the project will connect them with a private forester that can write a Stewardship Plan in their area. The woodland owner works with the private forester to identify goals for their woodlands and strategies to reach goals, and the process ends with the landowner having a Forest Stewardship Plan. Targeted outreach to woodland owners that have done a walkthrough with their DNR forester, but do not have a management plan, is planned for the future to help the project continue to grow. Outreach will include emailing information about the program and/or a mailing. We will also connect with partner organizations to help us proliferate information about the project in their network. The Wisconsin Stewardship Plan Project will increase the number of landowners who have a Forest Stewardship Plan for their property. Further this will increase the number of woodland owners that have the required management plan to apply for cost share programs that can financially help with management activities. Our project removes the financial barrier of getting a Forest Stewardship Plan for some landowner's by using grant funding to pay for the plans. UW Extension Forestry will continue to engage and provide resources for woodland owners after they get a Forest Stewardship Plan so participants feel better prepared to implement their plan. The project is also employing private foresters across the state by providing plan writing opportunities. The hope is that culmination of this effort will increase forest health across the state.



Additional Extension Outreach Programming Occurring in Marathon County

- Planning for a series of three statewide meetings (Appleton, Eau Claire, & Beaver Dam) for farmers and agricultural professionals in collaboration with Byron Seeds. The goal is to increase the knowledge and understanding of nitrogen management principles surrounding the use of cover crops, winter cereal forages, and alternative forage crops and then have attendees adopt or implement the concepts and best management practices in their farms or the farms they serve, so that we can lower or mitigate the risk of nitrate contamination in our groundwater due to unneeded or unnecessary nitrogen (N) applications to fields utilizing these crops. Total Reach: 83 participants attended the events across the three locations of Appleton, Eau Claire, and Beaver Dam
- Naming & Framing an Issue Guide on Childcare in Marathon County as part of the Let's Talk Marathon County Project, that will be used in a deliberative inquiry where the audience is community members. The goal being to give a voice to those whose thoughts and ideas have been overshadowed by dominant and polarizing narratives. By bringing together individuals from different backgrounds and viewpoints, this program seeks to create an inclusive space where all voices are heard, valued, and respected. Total Reach: 7 people serve on the naming & framing team, adults. The issue guide will be used for 40 contacts with community members.
- A food preservation and safety efforts for community members, where participants learned safe canning techniques
 and proper pressure canner testing. Through this program, community members can safely preserve food, reducing
 waste, and ensuring safe and healthy foods. Total Reach: 31 families with 46 pressure canning equipment being
 tested
- A series of strength training sessions (StrongBodies) for adults in the community, where participants engage in regular, progressive strength training and health education to improve their physical and mental health, and enhance social connectedness. Total Reach: 23 registered participants and 10 consistently attending

Upcoming Programs

- 4-H Programming Information at marathon.extension.wisc.edu/projects/programs/
- Horticultural Programs Information at https://marathon.extension.wisc.edu/horticulture/programs/



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