



Extension

UNIVERSITY OF WISCONSIN-MADISON
MARATHON COUNTY

November 2024 Report

*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

We are excited to welcome Erin Sabo back to Marathon County 4-H, this time in her new role as the 4-H Associate Educator beginning October 14th. Erin, who has been a previous AmeriCorps/4-H Program Assistant, will now be taking on the 4-H Associate Educator part-time position where she will focus on traditional 4-H youth development as well as leading community outreach programs in Marathon County. Her expertise and passion for 4-H will play a vital role in continuing to engage and empower local youth, providing them with meaningful learning experiences. We look forward to the positive impact Erin will bring to the program through her leadership and dedication to fostering a supportive environment for growth and development. Welcome Erin!



- A 90-minute workshop for new and recently new community club families was held at the beginning of January to clarify membership expectations and opportunities. Youth and parents split into two tracks to engage in age-appropriate learning activities.
 - 100% of families reported they learned the impacts 4-H has on area youth. Families were able to ask their questions about enrollment, participation, upcoming programs, and fair. Youth were able to be hands on with 3 different types of 4-H programs: art, STEM, and decorating.

Agriculture

Heather Schlessler, Dairy Agent

Melissa Ohlrich, Regional Crops Educator

- 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
 - In 2012, artificial insemination (AI) companies in Wisconsin stopped offering farmers artificial insemination training. During this time, these companies also concentrated on 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.
 - 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 of 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.
 - 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 non-retained 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



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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 industry will increase awareness of heat abatement strategies and important sustainability, economic, and animal care implications.

FoodWise

Mallory McGivern, FoodWise Administrator

Michelle Van Krey, Healthy Communities Coordinator

Julia Perock, FoodWise 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.
- A nutrition education series in partnership with WIC for families participating in WIC programming. These classes are taught at The Neighbors' Place community room and feature foods provided through the WIC nutrition program and foods typically found in The Market at The Neighbors' Place.
- A 5-week nutrition education series for 3rd grade classrooms at Lincoln Elementary School, where students will learn about MyPlate, the five food groups, and try new fruits and vegetables. The goal of the series is for students to learn about being physically active and help them make healthy choices in school and 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.





Horticulture

Janell Wehr, Horticulture Educator

- A program for the general public, where participants learned how to conserve beneficial insects in their landscapes. 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.
- A workshop for the general public, where participants learned how to plant and chill bulbs for forcing. 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: 2
 - Participants potted up a tulip to take home and force in January. As a result of the program, 100% of participants stated that they both understood how to pot up bulbs for forcing and that they understood the chilling process to prepare for forcing.
- A workshop for adults over 55, where participants learned how to plant and chill bulbs for forcing. 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: 15
 - Participants potted up a tulip to take home and force in January. As a result of the program, 93% of participants stated that they both understood how to pot up bulbs for forcing and that they understood the chilling process to prepare for forcing.
- A program for the general public, 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: 5
- An online webinar for consumer horticulture audiences where participants learned how to successfully grow citrus indoors. The goal of this effort is to increase awareness and knowledge of environmentally-sound gardening practices that simultaneously provide physical, social and emotional benefits of gardening. Total Reach: 152 attendees
- 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.
 - Wisconsin faces environmental challenges including pollinator decline (DATCP, n.d.(a) and environmental contamination & pollution due to overuse of horticulture chemicals (Walsh et al. 2012, Meftaul et al. 2020,. Proper pest management techniques can lead to less fertilizer and pesticide use leading to reduced likelihood for environmental contamination and pollution (UW-Madison, n.d.). Marathon & Wood County residents have come to rely on their local Extension office to answer



horticulture related diagnostic questions with research based answers in a timely manner. Questions come into the office either directly through phone calls to the offices, direct emails to Janell Wehr, horticulture educator (janell.wehr@wisc.edu), or the UW-Madison Horticulture Program website. Inquiries also are processed through the Marathon & Wood County Master Gardeners, either directly via email or at one of the many events they attend (farmers markets, plant sales, and fairs). Support for the Master Gardeners includes identification and selection of volunteers, training and orientation to diagnostics, as well as providing continuous support to the volunteers. By providing research based answers to gardening questions, residents see reduction in time and money spent on efforts either have no impact, or worse, negative impacts in their lawns and gardens and the larger environment. If the Extension Horticulture Program builds trusting relationships with identified audience members, it will likely lead to Extension providing educational opportunities meaningful to them, while concurrently addressing the identified issues we are working to address. This process is grounded in extension educator experience, outreach best practices and the body of technical literature. We know that when our audiences gain knowledge, understanding, or experience a change in attitude, that a proportion (not all) of them will implement that knowledge or understanding or attitude change into new behaviors or practices. Further we know that people who seek expert advice from a trusted source will take action following a Judge-Advisor System framework (Snieszek & Van Swol, 2001).

- “Can you dig it?” newsletter for the general public, where subscribers can read timely articles specifically related to horticulture issues facing central Wisconsin. The goal of this effort is designed to increase awareness and knowledge of resources to decrease environmental contamination. Total Reach: February: 533 open, 87 click throughs March: 659 open, 92 click throughs April: 815 open, 119 click throughs May: 700 open, 82 click throughs June: 628 open, 74 click through July: 641 open, 100 click through August: 585 open, 95 click through October: 624 open, 90 click through
 - Wisconsin faces environmental challenges including pollinator decline and environmental contamination & pollution due to overuse of horticulture chemicals. Proper pest management techniques can lead to less fertilizer and pesticide use leading to reduced likelihood for environmental contamination and pollution. Can you dig it? newsletter shares timely gardening articles from trusted evidence based resources from UW-Madison and other university resources in the upper Midwest. The newsletter also highlights podcasts, citizen science opportunities, UW resources, and upcoming Extension programming. Subscribers are directed to the Horticulture Program topic hub, diagnostic labs, and other resources. If the Extension Horticulture Program builds trusting relationships with identified audience members, it will likely lead to Extension providing educational opportunities meaningful to them, while concurrently addressing the identified issues we are working to address. This process is grounded in extension educator experience, outreach best practices and the body of technical literature. We know that when our audiences gain knowledge, understanding, or experience a change in attitude, that a proportion (not all) of them will implement that knowledge or understanding or attitude change into new behaviors or practices. Further we know that people who seek expert advice from a trusted source will take action following a Judge-Advisor System framework (Snieszek & Van Swol, 2001).



Natural Resources

Kris Tiles, NRI Program Manager

Anna James, Regional Natural Resources Educator

Jen McNelly, Regional Natural Resources Groundwater Educator

- A planning effort for Marathon County where local decisions makers and stakeholders are working to update the County's Groundwater Management plan. Total Reach: The planning team of 9 individuals
 - In 1988 Marathon County first developed their County Groundwater Management Plan in order to bring attention to groundwater protection and propose recommendations for that County departments could implement to safeguard the resource. The plan was updated in 2001 to continue these efforts. In 2023 Marathon County identified the need to update their groundwater management plan with new data and information and identify new recommendations. This work is alignment with objective 6.3 of the Marathon County Strategic Plan to "protect and enhance the quantity and quality of potable groundwater and potable surface water supplies," with a stated outcome of updating the Marathon County Groundwater Plan by the end of 2024. Marathon County developed a groundwater management planning team of County professionals, agency representatives, UW-Extension, and County Board Supervisors to begin the process of updating the Marathon County Groundwater Management Plan. This planning team is currently working on assembling resources and identifying areas of needed information for the plan. The outcome of the planning effort will be an updated Marathon County Groundwater Management Plan that will identify new management recommendations for County Departments that protect and conserve the groundwater resources of Marathon County.
- 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: 28 Cooperating Foresters have joined the project to write Forest Stewardship Plan. 86 Woodland Owners have been connected with Forester to get a plan. 52 Forest Stewardship Plans completed, 2141 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 the culmination of this effort will increase forest health across the state.

Additional Extension Outreach Programming Occurring in Marathon County

- A field event for Freedom high school agriculture and natural resources students where participants viewed a soil pit, learned about water infiltration, compaction and soil health. Total Reach: 12 students and one high school instructor.
 - High school vocational agriculture programs and natural resources/environmental sciences classes have limited opportunities to view a soil profile in a soil pit. Experiencing a soil pit, doing hand texturing of soil, and viewing compaction in the field reinforce classroom concepts. With each of the soil health events CPTP held this fall, we reached out to local high school agriculture programs, inviting them to use the field day site for their classes. We also make available both NRCS and Extension staff who are on site for the farmer/crop consultant field day and flex our schedule to accommodate the students.
- A field event for Horicon high school agriculture and natural resources students where participants viewed a soil pit, learned about water infiltration, compaction and soil health. Total Reach: 34 high school students.
 - High school vocational agriculture programs and natural resources/environmental sciences classes have limited opportunities to view a soil profile in a soil pit. Experiencing a soil pit, doing hand texturing of soil, and viewing compaction in the field reinforce classroom concepts. With each of the soil health events CPTP held this fall, we reached out to local high school agriculture programs, inviting them to use the field day site for their classes. We also make available both NRCS and Extension staff who are on site for the farmer/crop consultant field day and flex our schedule to accommodate the students. Horicon high school brought 34 students to the site (an ag class and a natural resources/environmental science class) to view the soil pit and interact with Extension and NRCS instructors. We discussed soil structure, compaction, soil health, and hand texturing of soils. Students were able to view the soil profile and work in a soil pit.



- A facilitated public deliberation for Wood County residents, where Wood County health departments learned from local residents about strategies and topics that will be important to address as they develop their Community Health Improvement Plan. Total Reach: Wood County health department staff (4 present), participating residents (approximately 15), and the ripple effect impact -- once the CHIP is developed and implemented -- will reach Wood County residents as a whole.
- Shared leadership in the Eat Right Be Fit coalition in Clark County, where emphasis is placed on the health and safety of Clark County families through increased food access, education and shared resources. The coalition's goal is to develop new projects and partnerships that will advance health equity in Clark County.
- Shared leadership in the Giving Gardens committee of HPPP (Hunger & Poverty Prevention Partnership), where emphasis is placed on promoting and supporting efforts to maintain community gardens, improve food security, and provide educational programming in Portage County.
- A nutrition education series for justice-involved individuals in Portage County, where the participants engage in conversation and interactive activities that build a healthy connection to food, self, and community.

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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Heather Schlessler <i>Dairy Agent</i>	Mallory McGivern <i>FoodWise Administrator</i>	Melissa Ohlrich <i>Regional Crops Educator</i>
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Erin Sabo <i>4-H Program Assistant</i>	Michelle Van Krey <i>Healthy Community Coordinator</i>	