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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

- The Learning Journeys Washington DC travel experience delegate orientation was held on September 29th at the Marathon County 4-H Extension Office. This two hour orientation shared the goals and expectations for the upcoming trip with the youth and their adults. Total Reach: 32 Youth 2 Adult Advisors: 4-H Educators 2 Adult Advisors: 4-H Volunteers 53 Parents/Guardians
 - The Learning Journeys Washington DC travel experience delegate orientation was held on September 29th at the Marathon County 4-H Extension Office. This two-hour session introduced 32 youths and their parents to the goals and expectations for the upcoming trip. During the orientation, the youth began forming connections with their peers, helping to build relationships and reduce anxiety about the first day of travel. These early bonds will provide a sense of familiarity and support as they embark on their educational adventure to Washington DC. During this face to face meeting the adult advisors present travel information on the following items: travel logistics, packing their bags, dress code, health updates, and more. To prepare youth for the Learning Journeys Washington DC travel experience, a two-hour delegate orientation was held at the Marathon County 4-H Extension Office on September 29th. This effort provided 32 youths and their parents with essential information about trip goals, expectations, and logistics. Through icebreakers and group discussions, the orientation facilitated early peer connections, helping to reduce anxiety and build a supportive environment for the upcoming travel experience. By proactively creating a space for social interaction, the orientation aimed to ease first-day nerves and set a positive tone for the trip.
- The Wausau Area Events Harvest Fest was held on October 5th. This community wide event was held to engage families in fall themed activities while engaging with various youth focused non-profits. Total Reach: Over 400 youth visited the booth and painted rocks during the two hour event.
 - The Wausau Area Events Harvest Fest was held on October 5th, a community-wide event designed to engage families in fall-themed activities while connecting them with various youth-focused non-profits. Over 400 youth visited the 4-H booth, where they created their own unique rock art pieces to take home. This hands-on activity not only fostered creativity but also served as a gateway for youth and families to learn more about 4-H programs and opportunities. The positive response from participants reflects the growing community interest in 4-H and its role in promoting youth development. Youth and families visiting the Marathon County 4-H booth created their own piece of artwork to take home. As youth painted their rocks, I was able to engage with families about our local 4-H programs.



Agriculture

Heather Schlessor, Dairy Agent

Melissa Ohlrich, Regional Crops Educator

- In-person Planning Emergency Livestock Transportation Response (PELTR) hybrid workshops for and in collaboration with area and statewide emergency response personnel. The goal of PELTR is to maintain an effective emergency response that protects producer/livestock owners' and Wisconsin's agricultural economic viability. Total Reach: 5 participants who were enrolled and given class materials representing each county.
 - Livestock transportation is a critical segment of the food supply system and Wisconsin's agricultural industry. It is also a highly visible segment to the public with animals being transported to and from farms, points of sale, and to processing facilities. Safety on roadways is in everyone's best interest and part of that safety is preparedness for responding to emergencies on the roadway. First responders are the front line in that response and many lack experience with livestock handling. First responders, and livestock owners and associations, asked us to provide this training. Held an in-person, hands on workshop where five modules were delivered in person through lectures, interactive discussions, videos, and demonstrations. Short-term outcome: increase emergency responders' preparedness to respond to roadside incidents involving transported livestock. Medium-term: responders share what they learned as they develop their local response plans. Long-term: Wisconsin's emergency responders have plans in place to respond to roadside incidents involving transported livestock.
- Over the last year, Pennsylvania Farm Link has purchased the right to publish three of Heather's articles and blog posts on their website. The articles they purchased are [Sweat Equity and Farming](#), [Transferring Farm Management for a Successful Farm Succession](#), and [Control of Farm Management Decisions](#).
- A webinar, one session part of Badger Dairy Insight, for dairy farmers and dairy industry professionals, where participants learned about research on grazing for the modern dairy and virtual fences.
 - Badger Dairy Insight is a monthly webinar offered to dairy farmers and dairy industry professionals around topics related to reproduction, nutrition, emerging technologies, and animal welfare to increase their knowledge around the latest University research. The nutrition work group provided speakers to talk about research done on grazing heifers and how that fits into the modern dairy concept. We also had a speaker talk about virtual fencing and how they work. Attendees and those watching the recording of the presentations will have knowledge on climate smart technology for raising heifers on pasture and how to incorporate virtual fencing on farms.
- 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.

- An event for farm owners and workers, where they learned about proper shot placement, restraint of calves for jugular blood draw, and how to use a refractometer to decrease injection site lesions resulting in lost meat, and to increase calf care practices which result in decreased incidence of sickness.
 - Animal welfare and wellbeing is a topic that is very important to consumers. Over recent years consumers have become increasingly concerned with where their food comes from and how the animals are treated. Healthy animals don't just happen; they take time and care. One step to keeping animals healthy involves vaccinating them to protect against disease. Proper vaccine handling is important to accomplish good protection against disease. The training of farm personnel has positive impacts on animal welfare and performance, thus increasing the overall farm profitability. To support dairy farms and their employees, the "Veterinary Care: Safe IM-SQ-IV Techniques" hands-on program was developed. This program aims to teach producers and their employees how to properly administer injections in cattle, their proper placement, and how to restrain calves for jugular blood draw and how to read a refractometer to determine the successful transfer of passive immunity. Class participants were asked to rate their change in knowledge utilizing a self-reported pre/post evaluation. Participants indicated a 0.67-point change in knowledge on a 5-point Likert scale. Participants were also asked to report their level of comfort giving Intravenous, Intramuscular, and sub-Q injections as a result of attending this workshop. Participants indicated an overall change in comfort of 0.34 on a 5 - 5-point Lickert scale, with the greatest change (0.43) in Intravenous injections.
- Planning to coordinate Extension educators statewide to ensure uniform data collection related to corn silage harvest management. The goal is to share whole plant moisture with forage growers in each region and aggregate additional silage data including planting date, relative maturity, corn hybrid, fungicide use, grain stage and previous crop. This data would be utilized to inform future corn silage harvest recommendations.
 - Corn silage dry down events are held across the state as means to determine when optimum corn silage harvest should occur due to whole plant moisture measurements. As we are already gathering some data regarding the samples collected, we determined there is additional information that would be beneficial to better understand the factors affecting when corn silage should be harvested. This prompted the forage team in the crops and soils program to look further to determine what data might be beneficial to informing harvest management decisions. A number of resources were prepared for educators and partners to utilize when gathering data at local corn silage dry down events. Partners will be provided a worksheet for producers to fill out and return with their stalk samples. Additionally, an Excel document is available to collect that data as well. Data will be collected and used to inform future management recommendations. Ongoing
- 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, FoodWise Administrator

Michelle Van Krey, Healthy Communities Coordinator

Julia Perock, FoodWise Educator

- FoodWise team members provided the Wausau Farmers Market with signage indicating the acceptance of EBT as a form of payment. The purpose of this sign is to encourage the redemption of SNAP benefits at the farmers market, supporting low-income families and the local economy.
- A demonstration booth at the Veterans Affairs “Fall into Wellness” fair, where veterans and their families prepared a snack based on the MyPlate food groups. FoodWise staff also discussed the purpose of MyPlate and provided shopping guides, recipes, and helpful hints to cut down on fat, sugar and sodium when cooking 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 adults over 55, 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 demonstration booth at the VA "Fall into Wellness" fair, where veterans and their families prepared a tulip bulb for forcing while learning about the beneficial effects of gardening on individual indicators of wellbeing. 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: 21
- A program for the general public where participants learned how to plant bulbs for forcing as well as the chilling process. 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: 5
 - Participants potted up a tulip to take home and force in January. 100% of participants shared that as a result of the program, they understood how to plant bulbs for forcing and how to apply chilling requirements.
- A demonstration booth for Wisconsin Rapids area families at Science by the River (STEM infused festival), where participants were introduced to pH indicators. The goal of this effort was to spark STEM curiosity in youth. Total Reach: 125
- A program for the general public, where participants learned specific fall gardening techniques to reduce disease and insect pests while also reducing impacts to pollinators. 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 program for the general public where participants learned how to apply the concepts of diversity and randomness to wildlife damage management. The goal of this effort was to increase awareness and knowledge of resources to decrease environmental contamination and pollution due to overuse of horticulture chemicals in urban and suburban environments. Total Reach: 10
 - 100% of participants shared that as a result of the program, they could both apply the concepts of randomness and diversity to wildlife pest management and understood that wildlife laws protect many types of wildlife and must be followed when managing wildlife. 90% of participants shared that as a result of the program, they could identify examples of wildlife management techniques using the IPM framework.



- 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 a 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 (Sniezek & 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 of 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

- An informational presentation for residents of Marathon County who had their water sampled as part of the Marathon County-Water Quality Testing Program, where attendees will learn about groundwater basics and water quality testing results from across the County. Attendees will also have the opportunity to discuss their results and ask questions one-on one. Total Reach: 20 meeting attendees
 - In 2024 Marathon County decided to pursue a County-Wide private well water quality testing program to better understand the current status of water quality across the County. Results from this well water testing project are intended to present a view of water quality across the entire county using identical water quality sampling procedures and analysis and will be used to inform the update to the Marathon County Groundwater Management plan. Residents who participate in the sampling project often have questions, not only about their individual test results but also about the findings of the project as a whole. Public informational presentations are an effective way to share the results as well as background information on groundwater, allowing participants to have a better understanding of what was sampled for and why. Participants also often have questions regarding their individual test results and what they mean. A public informational meeting will be held at the Mosinee Town Hall for project participants and any interested public members to attend. The purpose of this informational meeting will be to share information about the well water quality testing project as a whole, share water quality testing results from across the County, and provide background information on groundwater basics. Additional presenters will share information about how this data will be incorporated into the Marathon County Groundwater Management Plan, current groundwater related conservation work that is being done in Marathon County, lab testing services that Marathon County provides, and additional information on septic systems, which are attendees often have questions about. After the formal presentation, time will be set aside for a



question and answer panel where attendees can ask questions of the presenters. This will be followed by an additional period of time where attendees can ask one-on-one questions of the professionals present. This will include the ability for project participants to bring in their individual test results and ask questions about what they mean and potential next steps. The information presented at these meetings allows attendees to have a more thorough background knowledge of groundwater basics and of the water quality testing results from across the County. This knowledge can help participants to have a better understanding of their own water testing results and the reason that specific testing was conducted. The meeting also offers participants the opportunity to actively ask for additional information regarding their own results which can result in specific treatment or additional testing that may be beneficial to the participant. By hosting these opportunities to learn about groundwater based on Marathon County specific facts and in a neutral setting, it creates more community understanding about groundwater issues which have the potential to be controversial. The informational meetings also increased awareness of ongoing groundwater work being done in the County and can lead to increased participation and community buy-in in that work.

- 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 40 Woodland Owners have been connected with Forester to get a plan 1 Forest Stewardship Plan completed
 - 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

- A study in collaboration with the City of Abbotsford, Abbotsford School District, WisDNR, and the Wisconsin Rural Water Association to understand how land use impacts groundwater quality near municipal supply wells. By including local partners we hope to encourage stewardship of the resource and awareness of the effort required to find and distribute clean water to under resourced community. Total Reach: We hope to engage over 100 students from different age groups in various stages of the project.
- Farmers, crop consultants and agency staff who own, manage, or consult with landowners in and around the ManCal Lake/Spring Creek Watershed received hands on training in soil health practices, and received a toolkit to use on land they manage/consult on to assess infiltration, compaction, and general soil health. Total Reach: 13 farmers, agency staff and crop consultants
- Farmers, crop consultants and agency staff who own, manage, or consult with landowners in and around the Lake Sinnissippi/Wildcat Creek Watershed received hands on training in soil health practices, and received a toolkit to use on land they manage/consult on to assess infiltration, compaction, and general soil health. Total Reach: 22 farmers, crop consultants and agency staff
- A 1.15 hour workshop for older adults focused on social isolation and loneliness, where participants learned strategies to mitigate the negative impacts. Through this effort, older adults are better equipped to improve their social well-being and mental health. Total Reach: 60 Wisconsin Association for Home and Community Club Members
- 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.
- 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.
- A 12-week series of strength training sessions (StrongBodies) in partnership with Portage County ADRC, where older adults also receive nutrition and health education. Participants engage in regular strength training exercises to improve muscle strength, balance, and flexibility so they can stay healthy and socially connected.
- Planning for a Fall workshop focused on Entrepreneurship and Placemaking efforts in Marathon, Portage, and Wood Counties. The goal, under the Strategic Doing framework, is to bring together stakeholders from



across the region in order to establish action-based work groups to support, enhance, and grow efforts towards placemaking and an entrepreneurial ecosystem within the region.

- Planning for a training and field day for dairy heifer grazing technical service providers in collaboration with USDA-NRCS, SARE, Grassland 2.0, Tilth Agronomy, Glacierland Resource Conservation and Development, WI Land + Water, Wisconsin DNR, and WAPAC, so that technical service providers can expand their knowledge of dairy heifer grazing for economic and ecological outcomes.
- A one-day workshop for farmers, agronomists, and crop consultants, where participants learned about the latest research in optimizing weed management through the use of improved technology, precision agriculture, and conservation practices. The purpose of this effort is to help increase the resiliency of cropping systems in Wisconsin and manage weeds effectively while minimizing resistance and increasing profitability and sustainability in agriculture. Total Reach: 89 participants who affect 220,200 acres
- A mini field day (afternoon event) for farm owners and farm workers to learn about the options of many scales (from hand tools to two wheel tractors to tractor mounted tools) of weed control and the principles behind successful weed control including weed biology to increase growers knowledge of weed control on their farm through more efficient weed control requiring less time and labor and thus increasing profitability. Total Reach: 20 farm owners, farm workers, and technical assistance providers
- An in-person BQA workshop at Equity Livestock in Stratford, WI for beef producers to meet their need for obtaining their BQA certification that maintains their economic viability. Total Reach: 26 beef producers who earned or renewed their BQA Certification.
- A newspaper article for residents of the Pittsville area, where readers learned about an emerging cosmetic foliar disease that affects lilacs. The goal of this effort was to decrease environmental contamination and pollution due to overuse of horticulture chemicals.

Upcoming Programs

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



Extension

UNIVERSITY OF WISCONSIN-MADISON
MARATHON COUNTY

October 2024 Report

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