



KEWAUNEE COUNTY EXTENSION CONNECTION

Connecting people with the University of Wisconsin

FoodWise Nutrition Education

- Local Families Need Your Helppage 2
- Food Access Mapspage 2
- Building Independence in Algoma ..page 2
- Waldorf Saladpage 2
- 5 Healthy Holiday Eating Tipspage 2

Families, Finances & Wellness

- Fit & Healthy Kids Webinarspage 3
- Strengthen Family Bonds.....page 3
- Strong Couples.....page 3
- Resilient Co-Parenting Classespage 3

In this Issue:

4-H & Youth

- Trees for Tomorrow page 4
- Volunteer Training..... page 4
- Space Camps!..... page 4
- Hilltoppers Paint Night page 5
- Kewaunee Holiday Parade..... page 5
- Fall Forum Attendees..... page 5
- Join Kewaunee County 4-H!..... page 5

Agriculture Education

- Cold stress in dairy calves page 6
- Soil Sampling..... page 6
- Highlight on Weed Issues..... page 6
- 7 Free Apps for Farmers page 6
- Crop Enterprise Budget Tool..... page 6
- Feeding for calf growth..... page 7
- Pesticide Applicator Training page 7

Back Page

- COMET™ page 8

**UW-Madison Division of Extension * Patrick Nehring, Regional Community Development Educator
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HeyGov, Inc., Vente Tours top local pitch contest

A Door County entrepreneur who has developed a software program to aid government and municipal workers placed first in the Lighthouse Launch business pitch contest held Wednesday, Nov. 15, at the Robert Ray Art Gallery in Algoma.

Dustin Overbeck presented his business HeyGov, Inc., a computer platform designed to help cities and other municipalities run more efficiently by cutting down on manual payment processes and other tedious office tasks, such as compilation of meeting minutes.

“I felt like it was going to be tight competition, because there were some really good businesses that presented,” said Overbeck. “I found it advantageous to be part of the Build Up program in Green Bay. It’s an accelerator program that lasts like three months and that was really good preparation for this event, because it’s basically the same thing only to a different audience.”

Placing second in the Lighthouse Launch was Emily Hubbard, who presented her business venture called Vente Tours. Hubbard’s business is designed to provide personalized driving tours with local guides to explore the beauty of Door County and other parts of Wisconsin.

“I’m incredibly grateful to participate in this competition,” said Hubbard. “It’s my first pitch competition, and the best part about it is that it motivated me to continue doing research about my business. It’s very easy to get excited about an idea, but a competition like this helped me clearly define what I want to do.” Overbeck received \$1,000 and Hubbard \$500.

FEED Summit Held in Northeast Wisconsin

UW-Madison Extension held a successful FEED Summit in Northeast Wisconsin in November. The Food Entrepreneurship Ecosystem Development (FEED) Summit was attended by over 100 food entrepreneurs, business assistance professionals, and Extension educators from around Wisconsin. At the Summit, individuals interested in starting or growing a food related business learned about market research, business financing, record keeping, licenses, legal issues, and other elements needed to startup or grow a food business. In addition to keynote presentations from successful startup food businesses, breakout sessions on various business operation topics, and information tables about the many agencies and organizations that work with new businesses, attendees toured the On Broadway district in Green Bay. At the end of the Summit, most participants stayed to learn about how to provide a brief pitch describing their business and shared their pitch with the many other participants they network with during the Summit.



Photo: Patrick Nehring, UW-Madison Extension Community Development Agent teaching food entrepreneurs about the opportunities farmers markets, downtowns, and assistance organizations have to offer as part of the On Broadway tour.



Photo: Extension Farmers Market Coordinator Katie Hassemer and Nehring, teaching about market research at the FEED Summit

Pictured L-R:

- Devin Vandertie, DCEDC Director
- Dustin Overbeck, first place winner
- Ben Nelson, KCEDC Director
- Patrick Nehring, UW-Madison Extension Community Development



Pictured L-R:

- Devin Vandertie, DCEDC Director
- Emily Hubbard, second place winner
- Ben Nelson, KCEDC Director
- Patrick Nehring, UW-Madison Extension Community Development



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EXTENSION CONNECTION ADDRESS CHANGES

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The Extension Connection

University of Wisconsin-Extension
A monthly publication for Kewaunee County residents. These programs are supported by your tax dollars. We look forward to receiving your comments. Please call us at the phone numbers provided in the individual headers.

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Local families need your help.

Kewaunee County Food Pantry director Ken Marquardt stated, "The number of families needing food assistance has been steadily increasing over the course of the year and we currently serve around 140 families each month."

The supply of canned goods and nonperishables right now is adequate, Marquardt said, but people would like to eat healthier, including more fresh vegetables. "Unfortunately, with summer ending we rarely have fresh vegetables donated to the food pantry," Marquardt said.

How can you help?

If you host a fundraiser, consider focusing on vegetables that are easy to collect and drop off: bags of potatoes, onions, squash, and oranges are all are safe without refrigeration.

Carrots, cabbage, celery, tomatoes, and bell peppers are safe without refrigeration for several days. The Kewaunee County Food Pantry does have refrigeration space available for these items and can also accept more perishable items like grapes, lettuce, broccoli, cucumbers, or spinach.

The pantry is open every Monday from 8:30am -1:00pm and Wednesday from 9:30am - 1:00pm. If you would like to make a donation outside of those hours, email kcfpantry@gmail.com or call 920-487-5650.

The pantry also distributes personal care items like shampoo & conditioner, liquid soap, toothpaste and cleaning supplies. These items are often in short supply.

Food Access Maps at Kewaunee County Food Pantry

This month at Kewaunee County Food Pantry, FoodWise is advertising the NEW Food Access Map. This interactive map created by Brown Co Extension allows low-income SNAP-eligible people to find the locations within Kewaunee, Door, Brown, and Manitowoc counties that offer food assistance. Locations include community gardens, stores accepting EBT benefits, farmer's markets, food pantries, and more. The map includes key information like address, phone number, eligibility criteria and hours of operation, making it easier for low-income people with FoodShare to find healthy food in their community.

NEW Food Access Map

Scan the QR Code or go to the website to find places to obtain food in Brown, Door, Kewaunee, and Manitowoc Counties.

Instructions on how to use the map can be found on the website.



SCAN ME

Or visit
www.browncountyextension.org
 and click on NEW Food Access Map



Building Independence at Algoma Pathfinder Academy

Algoma's Pathfinder Academy aims to give students the skill set to help them achieve success after high school and to work with community members to gain lifelong connections. Last year FoodWise staff, Laura Apfelbeck and Jace Purdy, met with Algoma Pathfinder Academy teacher Alexis Gauger to discuss ways FoodWise might help students meet those goals.

In 2023, Jace piloted a 6-lesson series using Teen Cuisine, an evidence-based curriculum Teen that offers teens the knowledge and skills required to make informed food and lifestyle choices. Jace's role is to help students increase their confidence to apply these skills at home, which can lead to positive eating patterns and better health.

Student voice and choice is key at Pathfinder Academy. So this year, Alexis Gauger polled students to see if they wished to have Jace lead another series of Teen Cuisine. Fully 90% of students voted yes. The only dissenting votes came from students uninvolved last year and unfamiliar with the lessons. Students reviewed recipe options to select what they would like to make. Choices include breakfast burritos, oven baked chicken nuggets, and apple raisin bran muffins.

Alexis said this series is important at Pathfinder because "Most of the Pathfinder students are going to be adults in the next year or so. Teen Cuisine teaches them the basics of nutrition so that they can start to realize what they are putting in their bodies. It also teaches them how to actually cook these nutritional recipes and shows them that not all healthy food is boring! All this is super important when it comes to these students starting to live on their own."

The Teen Cuisine series is held Wednesdays in November through December. Ten students participate.



Photo: On November 15, Natalie, from Pathfinder Academy participated in a Teen Cuisine class. She and her work group created Waldorf Salad with FoodWise nutrition educator Jace Purdy.


Waldorf Salad

Ingredients:

- 2 apples, chopped
- 1 cup celery, diced
- ½ cup raisins
- ¼ cup walnuts, chopped
- ½ cup low-fat vanilla yogurt
- 1 teaspoon lemon juice
- 1 teaspoon sugar

Directions:

1. Combine apples, celery, raisins, and walnuts in a mixing bowl.
2. In a separate bowl, combine yogurt with lemon juice and sugar.
3. Add the yogurt mixture to the fruit mixture. Mix until coated.
4. Refrigerate until ready to serve.



Nutrition Facts	
4 servings per container	
Serving size	1 serving (174.41g)
% Daily Value*	
Amount per serving	Calories 180
Total Fat 5g	6%
Saturated Fat 0.5g	3%
Trans Fat 0g	0%
Cholesterol 5mg	0%
Sodium 45mg	2%
Total Carbohydrate 34g	12%
Dietary Fiber 4g	14%
Total Sugars 28g	
Includes 1g of Added Sugars 2%	
Protein 4g	
Vitamin D 0mcg	0%
Calcium 84mg	6%
Iron 11mg	4%
Potassium 368mg	8%

*The % Daily Value (DV) tells you how much a nutrient in a serving contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Five Healthy Eating Tips for the Holidays

Celebrate while sticking with your healthy habits this holiday season! Take time to eat well and move your body to help you feel your best. Use these five tips from [Nutrition.gov](http://www.nutrition.gov) to make your holiday with your household a healthy one.

1. Start the day right with a healthy breakfast.
2. Make fruits and vegetables part of your holiday plate.
3. Choose nutritious cooking methods.
4. Add exercise to the calendar.
5. Remember to hydrate.



See the full details and links at usda.gov.

+ WARM UP TO COOL WEATHER WORKOUTS

Make it easy on yourself to Move More in cooler weather with these tips and tricks.

- DRESS FOR COMFORT**
 - Keep your feet cozy with warm socks, weatherproof shoes and supportive insoles.
 - Wear layers of clothing to wick away moisture, insulate and protect.
 - Don't forget hats, gloves and scarves if it's very cold.
- LOOK AT THE BRIGHT SIDE**
 - Being outdoors is a great way to get some Vitamin D.
 - There's no heat or humidity to deal with – just cool, crisp air.
 - Exercise boosts immunity during cold and flu season.
- HAVE FUN WITH COOL WEATHER ACTIVITIES LIKE:**
 - Jogging
 - Hiking
 - Snowshoeing
- TAKE IT INSIDE IF IT GETS TOO COLD FOR COMFORT, TRY:**
 - Indoor circuit workouts
 - Yoga or other fun group classes
 - Active housework like power vacuuming



Healthy For Good™



UW-Madison Division of Extension * Renee Koenig, Human Development and Relationships Educator
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These web-based sessions are for Early Childhood Professionals. The webinars are offered once a month from October to March. Watch live or a recording up to a week after the live session.



Register at: <https://fitandhealthykids.unl.edu/one-hour-once-month-webinars>



DECEMBER 4, 2023, 7:00 PM TO 8:00 PM CST

Guidance and Discipline: Mistaken Goals of Misbehavior

Cost: Complimentary

This workshop will look at the causes of children's misbehavior and techniques to respond to their mistaken goals.



JANUARY 8, 2024, 7:00 PM TO 8:00 PM CST

Early Math Skills for Infants and Toddlers

Cost: Complimentary

This program will give ideas, lessons, and resources for child care providers to enrich their environment for infants and toddlers to gain early math skills.



Strengthen Family Bonds Through Traditions


December 21, 2023



Explore how traditions can help your family connect and stay together. Ideal for parents of any age child. [Register for 1PM](#) or [Register for 6PM](#)
 Register at: <https://parenting.extension.wisc.edu/online-parenting-classes/>

Resilient Co-Parenting classes

Dec. 7th: **Forgiveness for Moving Forward**

7:00-8:00 pm over Zoom
1st Thursday of each month
in 2023!

Scan code or use link to register!

go.wisc.edu/d206g4



 Human Development & Relationships Institute
An EEO/AA employer, University of Wisconsin-Madison Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act requirements.

Forgiveness for Moving Forward: Forgiveness is a gift we give ourselves and others. Letting go of resentment and bitterness yields many benefits, including a better co-parenting relationship. Explore what forgiveness is - and isn't - as you learn the steps of the process.



About the Classes

The Resilient Co-Parenting classes are for parents or caregivers who are raising their children together while living apart. These classes are a source of ongoing support for co-parents as they continue their journey. Anyone can join!

Class topics include:

- Having difficult conversations
- Helping children with strong emotions
- Coping with stress during big changes

How Do I Join a Class?

All class are free. Join us the first Thursday of each month at 7 PM. Classes are virtual on Zoom.

Register here: <https://parenting.extension.wisc.edu/co-parenting/>

Strong Couples

Set limits on your outside activities – to protect your couple time

Time is tight and sleep is precious —so many parents feel overwhelmed by what used to be normal social ties and activities.

- Family gatherings or outings with friends may seem to be too frequent and hard to manage. The pressure to attend events may build up so much that you explode and accuse your family and friends of expecting too much.
- On the other hand, you might cut out all social activities.

Both reactions are extreme. It is helpful to recognize when you start feeling pressure and resentment and deal with it. Take a few minutes to step back and think about the benefit you receive from keeping relationships with family and friends strong. The same relationships you considered stressful can also be sources of support. These friends and family may be able to pitch in when you need some help or just want someone to laugh with.

Take some time to talk to your partner and set some reasonable expectations and limits. Start the conversation with these questions.

- Which get-togethers do we attend and which can we skip?
- Should friends or family call us before dropping in?
- Should we set aside a family night and have no distractions from the outside world?
- Which recreational activities are most important to us?
- How often should we have a night out alone?



Aging-Friendly Kewaunee County

We want to hear from you!

Please join us and help make Kewaunee County an Aging-Friendly place to live. Our group meets monthly. We discuss ideas and plan strategies to help our neighbors stay healthy and active in our county.

Contact Renee Koenig at 920-388-7137 or renee.koenig@wisc.edu for details.





**UW-Madison Division of Extension * Vacant
(920) 388-7141 for 4H Information**

Trees for Tomorrow

A group of members from Kewaunee County 4-H participated in the Trees for Tomorrow program. Chaperone Kayla Bosman said they had a blast and everyone wants to go back. The members enjoyed all the activities, even the ones they didn't think they would like.

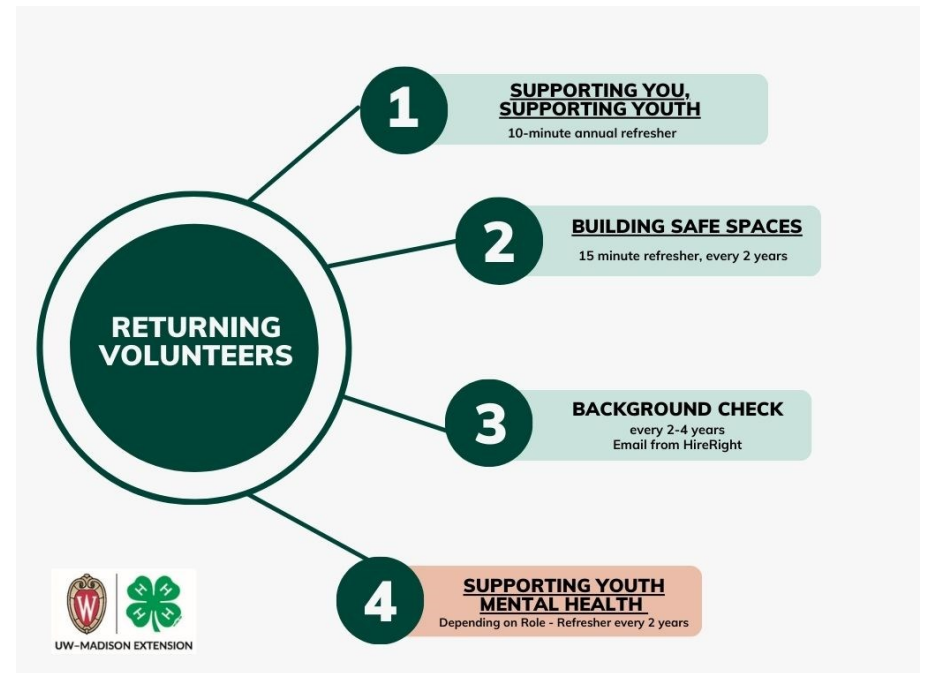
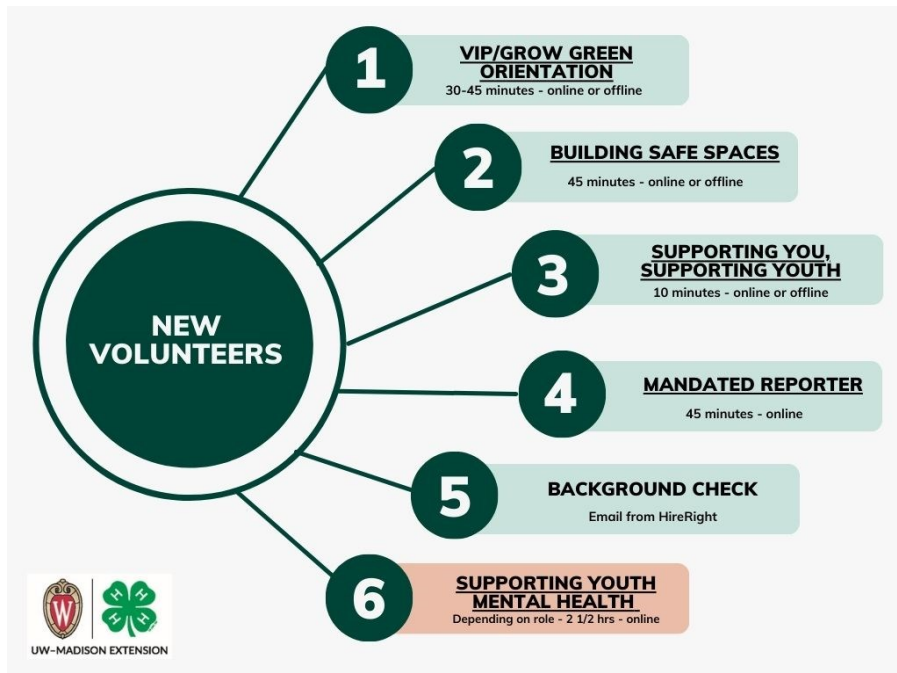
Participating members include Rachel G., Madi B., Morgan S., Ben V., Will V., Gavin K., Wyatt C., Colten Z., and Wiley V.
Photos courtesy of Kayla Bosman.



Volunteer Training

Our state 4H training office has made these handy flowcharts to help our wonderful volunteers ensure they have all the necessary trainings to be an active volunteer in Kewaunee County 4-H. You can see what trainings you need by accessing your 4-H Online account.

If you have signed up to volunteer, please check your 4H Online account to see if you need to complete trainings. Descriptions for each training can be found here: <https://4h.extension.wisc.edu/resources/volunteer-resources/training-for-volunteers/>



SPACE CAMP

GRADES 6-8
APRIL 18-22, 2024
U.S. SPACE & ROCKET CENTER, HUNTSVILLE, AL
 Registration opens in 4HOnline November 15, 2023.



Learn about and experience the different aspects of life as an astronaut, working for NASA, and exploring places beyond Earth! Youth get the opportunity to venture away from home to meet new friends, develop leadership and teamwork skills, and learn all about space.

Experience the Pathfinder Program! A 3-day experience with activities including:

- a simulated space mission
- a variety of space simulators
- building and launching your own model rocket
- on-site meals and sleeping habitats simulating a real space training experience
- learning about space exploration and astronaut life in guided museum tours
- a team quiz bowl at the end of camp

Visit go.wisc.edu/SpaceCamp to learn more!

ADVANCED SPACE ACADEMY

GRADES 10-12
JANUARY 2025
U.S. SPACE AND ROCKET CENTER, HUNTSVILLE, AL



Advanced Space Academy explores college and career preparation through an immersive experience in science, technology, engineering, and math. Trainees undergo a variety of astronaut training exercises, engineering challenges, and team-building activities, all culminating in an extended duration simulated space mission.

Experiences Include:

- High/Low Ropes Course
- NASA Simulators
- Russian Language Lessons
- Scuba Diving
- Fighter Jet Simulators
- International Space Workshops
- Advanced Rocketry
- Meeting NASA Engineers
- Land, Air, and Sea Robotics Training
- STEM Challenges
- Simulated Space Mission

Visit go.wisc.edu/AdvancedSpace for more information!



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Kewaunee Hilltoppers Paint Night

The Kewaunee Hilltoppers 4-H welcomed local artist Mary Wesolowski to our November meeting. She taught our club about acrylic painting. She explained the rule of 3rds when painting. She also taught us different techniques, and tips on how to draw for a painting. Mary has canvas paintings, and glass paintings for sale at various locations in the county. She also teaches acrylic painting classes. The club members were able to paint on clay pots, and planted a houseplant to take home.

Photos courtesy of Michelle Steinhorst-Kinstetter.



Kewaunee Holiday Parade

Many thanks to the Kewaunee County 4-H Dairy project members and parents who helped hand out cheese at the Kewaunee Holiday Parade. The cheese was sponsored by Kewaunee County Dairy Promotion.

Photos courtesy of Jenny Salentine.



Fall Forum

Fall Forum is a 4-H state wide conference where both youth and 4-H leaders are able to work and grow together. The weekend was filled with many fun activities and workshops for everyone to participate in. Some sessions are as a whole large group and others you get to sign up for the specific class that you would like to partake in. Everyone gets to learn new things to bring back to their clubs and communities while getting to meet new people. The weekend was full of growth, learning, and friendships!

Photos courtesy of Kayla Bosman.



Join Kewaunee County 4-H!

When you join 4-H, you're a part of something big! 4-H is the [nation's largest youth development organization](#), with more than six million members and over 90,000 clubs.

The [four H's are head, heart, hands, and health](#). That means we are committed to providing opportunities for youth to learn life skills like decision-making, problem solving, caring for others, generosity, making healthy choices, and more.

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.

Most 4-H youth and the adults who care about them get their start with a [4-H club](#). Clubs can meet in a variety of settings so we can support youth where they are in the community, in schools, after school, and in military settings. 4-H youth can take part in camps, educational travel experiences, workshops, and much more, as they explore their sparks.

In all of these settings, youth have the chance to become leaders. Youth make decisions. Youth can make their voices heard. The most important part of 4-H is YOUth.

Join today! Visit our website to start your Kewaunee County 4-H adventure!
<https://fyi.extension.wisc.edu/kewaunee4h/joining-4-h/4-h-enrollment/>





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Cold stress in dairy calves

Raising calves is a huge expense on any dairy farm and getting them off to a great start is important in cold weather as much as warm weather. Cold stress can increase the risk of disease in pre-weaned calves. Additionally, growth rates can plummet during the cold months unless we provide energy through a higher plane of nutrition or preserve energy by improving the calf's environment. The thermoneutral zone is the temperature range where calves use no additional energy to maintain their core body temperature. A calf is born with only two to four percent of body weight as fat. If forced to burn fat to maintain body temperature, calves will typically have lower growth rates or compromised immune status. If not managed well, death rates in calves are higher during cold weather.

Temperature

Older calves can tolerate colder temperatures than calves less than one month old. The lower critical temperature in a calf less than one month of age is 48°F versus 32°F for an older calf. When temperatures drop below the lower critical temperature, calves will begin to use more energy to maintain their core body temperature and less to support growth and the immune system. Younger calves have more surface area and weigh less than the older calves, causing them to lose body heat quicker.

Age in Days	Temperature in degrees Fahrenheit
1	56
5	54
10	51
15	49
20	47
25	45
30	43

Critical temperature for the calf for the first 30 days. Adapted from Davis and Drackley (1998)

Newborns

Wet calves are susceptible to frost bite, so we need to get them dried off quickly after birth during the winter months. Once they are dry, we need to get calves warm quickly. Blankets or warming boxes can be great to help warm a newborn. Ensure the calf area is draft free and has a deep bedding pack, such as straw, which can help ensure they don't lose too much body heat once warmed.

Bedding

When the temperature drops, we want to ensure calves have sufficient deep, clean, and dry bedding to allow for nesting behavior. Calves should have a nesting score of 3, which means their legs are completely covered by the bedding and not visually seen. Bedding provides a cushion from the ground, separating the calf from the cold ground and any moisture (urine, water, milk, etc.) that has seeped through the bedding.

Soil Sampling

Are you soil sampling this fall? What does dry soil mean to your soil test results? What if you get significant rain after you already sampled your fields?

Note: While you see much less variability in the soil-test results when you have moist soil conditions, there is no need to stop collecting samples unless the soil samples cannot be collected to the correct and recommended depth.

After rainfall potassium levels could vary by as much as 25 ppm when a sample was taken before rain leached out the nutrient from crop residue.

pH?

The time of year a soil test is taken can also have an impact on pH levels, soil pH can vary by plus or minus 0.5 pH units throughout the year, with lower soil pH usually found in dry summer and post-harvest fall conditions. Greater pH values are usually found in winter and the early spring month. (Depends on your location) See more in the full article here:

<https://www.agfax.com/2022/10/19/soil-nutrient-test-results-can-vary-when-soil-is-very-dry-study-shows/>

Have a soil testing question? Contact Chris Clark Crops & Soils Educator clark3@wisc.edu

7 Free apps for farmers

7 Free apps for farmers that can provide your operations with an additional boost, right at your fingertips. Made by UW-Wisconsin staff for Wisconsin farmers. For either iPhone or android users. Check out details and follow links to download the apps here: <https://ipcm.wisc.edu/apps/>

FREE APPS FOR AGRICULTURE, FOR IPHONE & ANDROID



Tarpotter: The purpose of Tarpotter is to assist farmers in making management decisions for tar spot of corn. Farmers can easily input site-specific information about their corn field into this app, which combines this information with research-based models to predict the best timing for tar spot treatment.



Manure Tracker: The Manure Tracker app allows you to record manure applications on a field-by-field basis. By creating a list of FIELD names specific to your farm, each manure application is saved to your smartphone and can be sent as a .csv file to an email address for further record management and safe keeping.



Sporecaster: The purpose of Sporecaster is to assist farmers in making management decisions for white mold in soybean. Farmers can easily input site-specific information about their soybean field into this app, which combines this information with research-based models to predict the best timing for white mold treatment.



Soybean Replant Calculator: will calculate plant stand (population) within a soybean field at the VC, VI or V2 growth stage. The app will use that estimated stand count to calculate expected yield percent at harvest with and without spring replanting. You can then use the calculated values and the economics of your own farming operation to determine if spring replanting is a viable option.



Sporebuster: When a fungicide application is needed to control white mold in soybeans, **Sporebuster** can help determine a profitable program. You enter your expected soybean price, expected yield, and treatment cost. **Sporebuster** instantly compares ten different treatment plans at once to determine average net gain and breakeven probability of each. You can mark, save and share by email, the best plans for your farming operation.



Manure & Legume Credit Calculator: Farmers can save money and protect the environment by taking credit for the fertilizer value of manure and legume crops. The value of these credits are subtracted from the base (unadjusted) fertilizer recommendations for a field. This app includes three calculators that do the NPK credits math for you.



Crop Calculators: an app that lets corn growers calculate corn grain yields, corn maturity dates in relation to predicted frost, and corn silage price adjustments in relation to moisture content using their smartphones. You can also send your reports out using email.

Using bedding such as straw is recommended during the winter months as it helps reduce heat loss by conduction that would occur with sand bedding. Utilizing calf jackets can be a great tool for helping with cold weather. However, we must ensure the jackets are dry and cleaned between uses. In warm stretches of weather, monitor calves for sweating under the jacket. Jackets might need to be removed during the day and put back on at night. Adjustments might need to be made to jackets as the calf grows. Ensure the jacket isn't rubbing against the skin and causing raw spots. A general rule of thumb is to use a calf jacket when the ground is frozen, and the calf is less than 21 days old.

Feeding

Just like in the summer, we need to provide calves with water. During the winter months make sure the water is warm, near the calf's body temperature so the calf doesn't need to burn energy to warm the water to body temperature, and that water sources do not freeze. Additional milk and calf starter may be needed when temperatures fall below the calf's thermoneutral zone. Calves less than three weeks of age typically don't eat much starter. Therefore, considerations should be made to increase calories through increased volume of milk at each feeding or through an additional feeding during the day, increased milk replace powder based on manufacturing recommendations as not to cause gastrointestinal issues due to too much concentration of solids, or addition of supplemental fat.



Ventilation

If using indoor housing, ensure it provides some ventilation and is draft-free. Temperatures shouldn't fluctuate more than five degrees in a temperature-controlled building. Often respiratory issues increase during the winter months if indoor housing doesn't allow adequate air exchange. If using hutches outdoors, make sure they are in a well-drained area and the wind isn't blowing directly into the front of the hutches. A windbreak can be used to reduce the wind chill on calves if the wind direction is frequently an issue.

Cold temperatures should not cause a calf or producer additional stress. Being proactive in your management strategies during cold weather will help keep your calves warm and comfortable. Using the guidelines featured in this article can help a calf thrive during colder temperatures.

Written by Jackie McCarville, Green County Agriculture educator

Highlight on Weed Issues

Harvest cleaning is more important than spring cleaning on the farm as a combine can contain up to 150 pounds of biomaterial and this material often contains weed seeds. Herbicide resistant weeds are a concern that continues to grow in the crop production landscape. Limiting the spread of weed seed between fields is a key part of an integrated pest management system. Read more <https://cropsandsoils.extension.wisc.edu/articles/harvest-season-clean-out/>

Are you worried about waterhemp? Do you have waterhemp? Learn from others who have combatted this tough weed. Full info at <https://storymaps.arcgis.com/stories/9ae6d1c164e24c7987432dbe1cf67d0e>

A really good resource is the The 6 R's of Waterhemp will help you keep this weed under control from our UW weed expert Rodrigo Werle. <https://wiscweeds.info/images/2023ResearchReport/SixRsOfWaterhempManagement.pdf>



Extension's UW Crop Enterprise Budget Tool

As harvest wraps up, its time for planning. Do you know your costs to produce an acre, bushel, or ton of your crop? As market price moves, is there an opportunity to capture a profit or is the price still too low? Do you know? Estimating, or even better knowing, your cost of production on a per bushel or per ton basis helps to determine marketing or purchasing strategies. Extension's UW Crop Enterprise Budget Tool can be used to help estimate the cost of production. <https://cropsandsoils.extension.wisc.edu/articles/estimating-cost-of-production/>

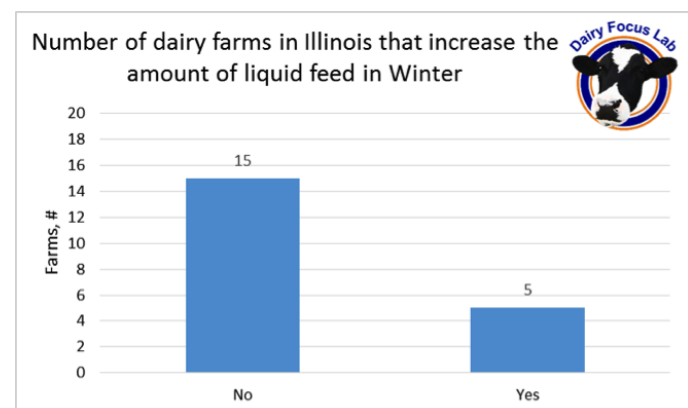


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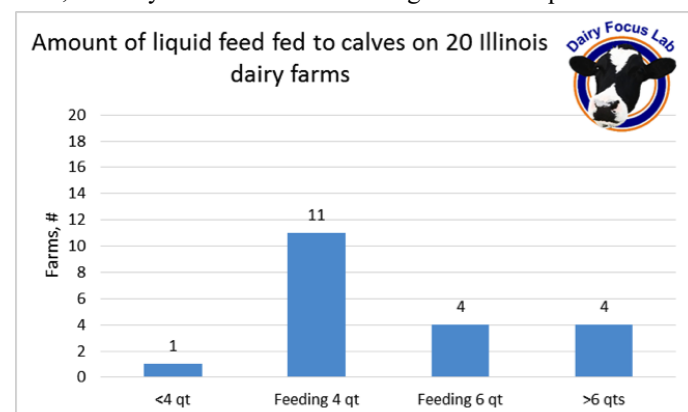
Feeding for calf growth, even in the winter

Winter sure seems to be creeping up fast around here! I am sure I am preaching to the choir, but as the seasons change, it is time to think about all the changes happening back on the farm and what we need to do in order to be prepared for the weather ahead. While we know what might be best practices, sometimes we get stuck in our normal routine and do not make those critical changes when they are needed. For example, it is important to be aware of the thermoneutral zone of calves and what we can do to avoid cold stress and keep our future producers growing throughout the coming cold weather. A calf's thermoneutral zone is between 59 – 77°F, which means that the heat produced by the calf is equal to the amount of heat lost. The lower critical temperature (below 59°F) is influenced by wind, humidity, hair coat (dry vs. wet), sunlight, bedding, rumination, age and size. At temperatures colder than 59°F calves need extra energy in order to maintain body temperature or else they will use their limited body reserves to meet maintenance requirements. Calves require energy and protein to support maintenance and growth. Maintenance includes basic functions of thermal regulation in hot and cold conditions, immune responses, and stress responses. A rule of thumb for energy needs is that for every 1° decrease from 50°F, a 1% increase in energy is required. Consequently, as the temperature decreases we need to provide enough energy to support calves' greater demand for maintenance, and then enough to ensure that they continue to grow.

This past summer the Dairy Focus Team visited 20 farms across Illinois and did a survey and evaluation of all aspects of the farms. We were not really focused on the colder temperature during our visits (the opposite, in fact!) but in our survey we asked if those farms increased the amount of milk or milk replacer that they fed in the winter. In the figure below, you can see the result of our survey. We found that 15 of the 20 farms said they did not change the amount of milk or milk replacer that they fed in the winter.



We also asked how much milk or milk replacer they fed to their calves. The results can be seen in the figure below. For simplicity of the figure, I only included the lowest amount that each farm said that they fed per day. There were three farms that fed four quarts to begin with and increased to either six or eight quarts as the calves got older, but they were included in the figure as four quarts.




Twelve of the farms that we visited fed four quarts of milk or milk replacer per day, and the majority of these farms do not increase the amount they fed during the winter months. As the temperature at these farms decreases the maintenance energy for the calves will increase. The table below shows the number of quarts of whole milk (WM) or milk replacer (MR; 20% CP, 20% fat) required to meet the maintenance requirements of different sized calves as the temperature decreases below the lower critical temperature. For the farms that only feed four quarts a day, the green cells indicate that the number of quarts fed meet the maintenance requirements for that calf at that temperature. If the cells are red, that indicates that the farms that feed only four quarts of milk are failing to meet the maintenance requirements.

Temp °F	59			50			41			32			23			14			5		
	Meal/d	WM	MR	Meal/d	WM	MR	Meal/d	WM	MR	Meal/d	WM	MR	Meal/d	WM	MR	Meal/d	WM	MR	Meal/d	WM	MR
BW, lbs	# qt req. for maintenance																				
66	1.3	1.74	2.17	1.7	2.33	2.90	1.9	2.62	3.26	2.2	2.91	3.62	2.3	3.10	3.86	2.6	3.49	4.34	2.8	3.75	4.67
88	1.7	2.23	2.78	2.0	2.74	3.42	2.3	3.04	3.78	2.5	3.33	4.14	2.7	3.62	4.50	2.9	3.91	4.87	3.1	4.17	5.19
110	1.9	2.55	3.18	2.3	3.13	3.90	2.5	3.42	4.26	2.8	3.71	4.63	3.0	4.00	4.99	3.2	4.29	5.35	3.4	4.59	5.71
132	2.2	2.94	3.66	2.6	3.49	4.34	2.8	3.78	4.71	3.0	4.07	5.07	3.22	4.36	5.43	3.4	4.65	5.79	3.7	4.94	6.15
154	2.4	3.29	4.10	2.9	3.88	4.83	3.1	4.13	5.15	3.3	4.42	5.51	3.5	4.71	5.87	3.7	5.01	6.23	3.9	5.30	6.60

Remember, the table above only addresses the amount of liquid feed in the diet that is required to meet maintenance. It does not address the amount of energy required to support additional growth over the calf's maintenance requirement.

There are several management strategies related to nutrition and housing that can minimize the effect of cold stress on calves. From a nutritional standpoint, calves' maintenance requirements will increase as the temperature decreases beneath the lower critical temperature, so it is important to provide more energy to calves when it gets colder. There are three main nutritional strategies that can be implemented on farm to ensure calves have energy over maintenance so that they continue growing in cold weather. The first is to feed higher amounts of milk or milk replacer. This may require a third feeding in order to successfully feed the higher volume. While this adds extra




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January 8	February 12	March 11	April 8
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labor and more time spent with the calves, it will provide the extra energy that the calves need to grow. Another option is to change to a different milk replacer with a higher energy density. Many companies sell "Winter Blends" and these may be a good option for the youngest calves. These younger calves will only be on milk replacer and have no other source of energy. Additionally, younger calves have lower intake than the older calves so it might be an easier management strategy to give them a more energy dense formula instead of feeding a larger volume in order to feed over their maintenance requirements. The third option is to increase starter intake. While this will not work for your youngest calves, it has been shown that calves that were cold stressed ate more starter than calves that were not because their maintenance requirements were greater. If you are trying to increase starter intake, it is important to ensure that the calves have access to fresh water. In colder weather this becomes more challenging, but offering warm water (63 – 82°F) two to three times a day will help promote starter intake for your older calves and help stimulate them to eat over their maintenance requirements.

In addition to the nutritional management of young calves, good housing management practices are especially important in cold weather. Wind (drafts), humidity, hair coat (dry vs. wet), sunlight, and bedding will all influence the thermoneutral zone of a calf. If farms can minimize the effects of these factors, they will be able to reduce maintenance requirements so that the calves can direct energy towards growth. Bedding for calves is very important because they lie down for more than 18 hours a day! Bedding needs to be deep, clean and dry. Straw is the gold standard for calves. It allows them to nest and create stable air pockets free from drafts. If the bedding is deep enough, the calf's feet should not be able to be seen when they are lying down. Additionally, the bedding material should be free of soil, mold, and pathogens to avoid respiratory problems. Bedding should be dry – wet bedding results in a 60% greater heat loss than dry bedding. Clean, dry blankets can help insulate calves under 3 weeks of age. Finally, ventilation is all about moving polluted air outside and evenly distributing fresh air without creating drafts on the calves. Hutches must allow for steady air movement and solar heating while providing protection from winds and drafts.

Overall, there are two main things that should be addressed when preventing cold stress in dairy calves: 1) make sure the calves have adequate nutrition to support their maintenance needs and still be able to grow; and 2) make sure their housing conditions are not increasing their maintenance needs with drafts and wet bedding. Of the farms that the Dairy Focus Team visited this past summer, only about a quarter of them (25%) increase the amount of milk that they feed to their calves in the winter. If more of these farms would be willing and able to feed more milk or milk replacer to their calves in the winter, then they will have better grown calves that will become more productive members of the herd. Many research studies have shown that for every pound of increased average daily gain in the preweaning period, there is an increase of 1,550 lb of milk in the first lactation. Keep your calves growing and healthy! Stay warm!

Written by Sarah Morrison and Phil Cardoso, December, 2014

<https://dairyfocus.illinois.edu/newsletter-issues/feeding-for-calf-growth-even-in-the-winter/>

COMET™ - Changing Our Mental and Emotional Trajectory

SATURDAY, JANUARY 20, 2024, 10AM – 12PM

COMET™ is a short, two-hour program offered by UW – Madison Division of Extension educators for the agricultural and rural communities in Wisconsin. The program can be offered in-person as a standalone workshop, attached to a larger conference, or on a virtual platform. The maximum number of participants for any of these formats is 30. The program is a gentle introduction to supporting friends and neighbors in a vulnerable space to help them shift their mental health trajectory back to a place of wellness and away from the path of a mental health crisis. This program was developed by the High Plains Research Network Community Advisory Council specifically for rural communities.

Observation is a skill that many farmers may not realize they have. It is ingrained in their daily work lives. From noticing a sick animal before it has a fever to an early sign of insects on a crop, these early observations can lead to early treatment and better outcomes. Farmers can use this same skill to notice when their friends, family, neighbors, or employees are not themselves.

COMET™ helps people take the next step after noticing someone might be struggling. It empowers friends and neighbors to be more prepared to support others' mental health needs – especially before a crisis. This training empowers people to feel comfortable initiating a supportive but potentially emotional conversation using a conversational seven-question guide. It provides an easy way to start a conversation, teaches you how to exit the conversation in a supportive way, and offers resources to share with others if they need more than a listening ear.

Location: Live virtual training

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