



KEWAUNEE COUNTY EXTENSION CONNECTION

Connecting people with the University of Wisconsin

In this Issue:

FoodWise Nutrition Education

Cucumbers are the HOMpage 2
Get Kewaunee County Healthy!page 2

Families, Finances & Wellness

Teens Can Have a Fun Summer.....page 3
And Still Remain Safe
Volunteeringpage 3
Home Alone Informationpage 3
What is Money Matters?page 3

4-H & Youth

Area Animal Science Day..... page 4
YQCA page 4
Fair Information page 4
Club News—Pilsen Skylighters..... page 5
Congratulations Graduates! page 5
Scholarship Opportunities..... page 5

Agriculture Education

Short- and Long-Term Effects page 6
Of Heat Stress in Dairy Cattle
County Fair Livestock Dates/Times . page 6
Heat Hurts Dairy Cows' Feet..... page 7
Majority of Farm Families Worry page 7
About Medical Expenses
Annual Back to School Program page 8

Mapping the Local Food System

This summer UW-Madison Extension will be studying how people in the county obtain food. Extension has hired a UW-Madison student as a Food Access Mapping Intern to assist in mapping out the food access points in the county. This project will provide interactive mapping that will enable people to find locations and resources to obtain food. Examples of the sources to obtain food are farmers markets, community gardens, food pantries, schools, meal sites, grocery stores, and retail stores that accept WIC and EBT cards. EBT cards or Electronic Benefits Transfer cards are used by participants in state and federal assistance programs to obtain food. The resulting maps from this project will be available through Extension and partner websites. They will provide information about local food sites and people will be able to use their computer or phone to walk or drive to local food locations.

In addition, the project will allow Extension to collect and analyze data about the locations that provide food and food assistance resources. This information will be combined with demographic and social economic data about parts of the county to indicate a need or market for food products. In the process, Extension will also begin to understand the food supply chain in the county. The results of this research will be used by Extension and shared with Extension partners to enhance the local food system and increase the availability and visibility of healthy food options.

Nonprofit Assistance Available

UW-Madison Extension and UW-Green Bay continue to work together to provide assistance to nonprofit organizations in the county. These resources can be found at www.uwgb.edu/nonprpfitleadership. Extension is available to provide custom training and support for local nonprofit organizations on topics that may be of interest to them. Contact Patrick Nehring at (920) 764-1915 or (920) 391-4616.

The Excellence in Nonprofit Leadership Certificate will begin at the end of summer with the virtual session for the first course on August 26. This course will be about building a strong fund development program. Participants are asked to complete pre-session work for the course beginning on August 19. The other courses are Developing an Active Board of Directors (Sept 16), Foundations of Financial Management (Oct 7), Human Resource Management (Oct 28), and Marketing & Communication Strategy (Nov 18). Upon successfully completing these courses and a capstone project, participants will receive an exclusive UW-Green Bay credential, a digital badge.

Nonprofit Leader Conversations will resume again this fall on the second and fourth Thursday of the month, beginning on September 8 with a conversation about the communication and acknowledgement employees and volunteers need, want, and benefit most hearing from an organizations leadership. Our guest discussant will be Andre Young founder of You Evolving Now, LLC and author of 4 books focused on enhancing leadership and work/life harmony, including [7 Ways to Lead](#).

Basic Grant Proposal Workshop

UW-Madison Extension will be offering a basic grant proposal workshop on October 18 from 10:00-12:00. This workshop will equip you with the basic skills of grant writing, an increasingly essential method for raising money to fund projects or programs for your organization. Discover the how and where to look for funding to match your organization's needs. Find out about 990 Forms, where to find them, and what can they tell you to help you narrow your search for a grant that would meet your project need. Find out where there are grant libraries and why you would visit them. Learn tips on writing a grant proposals. The workshop will cover the components of a grant proposal. The workshop will look at how a needs assessment, program planning, and evaluation fit into a proposal format. Look at some basic strategies for determining budget requests and working with funding agencies.

Registration and further information will be available at: <https://www.browncountywi.gov/departments/extension-brown-county/general-information/nonprofit-resources/>. In addition, Extension can provide this training and others to a group from your organization, contact Patrick Nehring, patrick.nehring@wisc.edu, (920) 764-1915 or (920) 391-1915.

Grant Programs Currently Accepting Applications:

Meat and Poultry Supply Chain Resiliency Grant Program Open

Wisconsin meat processors will have the ability to apply for grants of up to \$150,000. The application period for the Meat and Poultry Supply Chain Resiliency Grant Program is open through August 19. More information about the Meat and Supply Chain Resiliency Grants, including the application and FAQs, is available here: <https://datcp.wi.gov/Pages/AgDevelopment/MeatPoultrySupplyChainResiliencyGrants.aspx>.

More Funds for Main Street Bounceback Program - Deadline Extended

The deadline to apply for a Main Street Bounceback Grant has been extended to December 31, 2022. Grants will be awarded on a first-come, first-served basis until all the funds are disbursed.

The program is open to new or existing businesses opening a new location or expanding operations in a vacant commercial property where the lease commences, or sales contract closes, on or after January 1, 2021 and on or before December 31, 2022.

Additional information about the Main Street Bounce Back Grants is available here: <https://wedc.org/programs-and-resources/mainstreet-bounceback-grants/>.

Wisconsin Help for Homeowners Program - Applications Open

The program is open to individuals and families who live in Wisconsin with overdue housing-related bills, both with and without a mortgage, who meet income and other eligibility requirements, and have experienced a qualified economic hardship since January 21, 2020.

Applications and additional information is available at: <https://homeownerhelp.wi.gov>



**EXTENSION
CONNECTION
ADDRESS
CHANGES**

Please let us know if your mailing address changes. Since the Extension Connection is mailed 3rd class, it is not forwarded, and UW-Extension must pay for incorrect addresses. Call 388-7141 for address changes or you will be removed from the list.

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.

Receive the Extension Connection in your inbox!

Want to have the Extension Connection at your fingertips? Sign up today to receive the Extension Connection directly to your inbox! Be the first to know all the exciting events and opportunities available. Visit <https://kewaunee.extension.wisc.edu/extensionconnection/> to sign up today!



UW-Madison Division of Extension * Laura Apfelbeck, FoodWise Coordinator
920-683-4170 * laura.apfelbeck@wisc.edu



Cucumbers are The Harvest of the Month!

Add cucumbers to your favorite family meals:

- Add cucumbers to pasta salad for a cool crunch.
- Pair with tomatoes and feta cheese for a simple salad.
- Use cucumber slices instead of crackers for dips and spreads.

Make meals and memories together. It's a lesson kids will use for life.

Did you know?

Have you heard the phrase "cool as a cucumber"? The inside of a cucumber is 20 degrees cooler than outside temperatures during the summer. You can cool off with cucumber!



Nutritious, Delicious, Wisconsin!
#WISHarvestOfTheMonth

This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP. The University of Wisconsin-Madison Division of Extension is an EEO/AA institution committed to diversity among its employees and in its programs. Funding for this publication was made possible by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through grant AM2001000000060. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.



Key nutrients in Cucumbers:

Vitamin K – Needed for blood clotting, preventing excessive bleeding.
Potassium – Helps maintain normal blood pressure
Vitamin C - Helps wounds heal, is important for the immune system, and is an antioxidant, which protects cells from damage.

Taste Testing:

Select a variety of cucumbers for kids to try. You may be able to find unique varieties like lemon cucumbers or Mexican sour gherkins at a farmers' market. Encourage Kids to use five senses to observe, smell, feel, listen, and taste cucumbers. Note observations and discuss similarities and differences between varieties. Is there a favorite?

Cool Cucumber Salad

Ingredients:

- 1 Cup grape tomatoes, halved
- 1 Cup cucumber, sliced
- ¼ Cup crumbled feta cheese
- 2 Teaspoons olive oil
- 1 Tablespoon lemon juice
- ¼ teaspoon ground black pepper

Directions:

1. Wash and cut tomatoes, cucumber, and onion. Stir together in bowl.
2. Add cheese, oil, lemon juice, and ground black pepper. Stir.
3. Store tightly covered, in refrigerator for 3-4 hours before serving. Stir well before serving.

Nutrition: 120 calories; 4g protein; 9g carbohydrates; 9g fat; 180mg sodium
 Recipe link: <https://spendsmart.extension.iastate.edu/recipe/cool-cucumber-salad/>



Children's Book: *Cucumber Soup* by Vickie Leigh Krudwig



Harvest of the Month materials are available in Spanish or English:
<https://healthyliving.extension.wisc.edu/welcome-to-harvest-of-the-month/>

Get Kewaunee County Healthy!

The purpose of the Get Kewaunee County workgroup is to help the residents of Kewaunee County stay active. The group consists of 13 members from various organizations around the county, including the Kewaunee County Health Department, Bellin Health, Prevea Health, and UW-Madison Division of Extension FoodWise program nutrition educator, Jace Purdy.

The group is currently working on finishing a Physical Activity Opportunities booklet, creating a Healthy Story Path in Bruemmer Park, and getting walking groups started. The Physical Activity Opportunities booklet is a comprehensive list of ways to keep active in the county. The Healthy Story Path plans to take a local author's work and break it up along a walkable path. This allows the combination of literacy, exercise, and time spent in nature. Jace Purdy attends workgroup meetings to share needs of low-income community members. With this in mind, the Kewaunee Summer Challenge offers a variety of low cost outdoor physical activity opportunities in Kewaunee County.



Photo source: Creative Commons



Kewaunee County Summer Challenge



- Start a squirt gun or water balloon fight.
- Watch for squirrels at Bruemmer County Park, E4280 Co Road F, Kewaunee. Share your Squirrel Report with friends.
- Create 3 scrapbook pages to remember a special event. You could enter your scrapbook in the Kewaunee County Fair!
- Make a scavenger hunt for friends or neighborhood kids.
- Walk the World Trail, 113 N Main St, Luxemburg, around the sports complex. Tell friends you travelled the world.
- On a windy day, go fly a kite.
- Watch the sun come up at Selner Park, Kewaunee.
- Stomp down the Crescent Beach Boardwalk, 1025 Lake St. Algoma. Beware of trolls!
- Pack a picnic lunch & hike the Ahnapee State Trail.
- Design a hopscotch course with chalk. See who can hop it the most times. Or fastest. Or backward. Challenge the neighbors.
- Walk out to the Kewaunee Pierhead Lighthouse. Find one cool rock.
- Stop by Kraynik's Berry farm to pick a quart of strawberries.
- Try Disc Golf at Winter Park, N3751 Ransom Moore Lane, Kewaunee
- Play outside in the dark: Flashlight Tag or Ghosts in the Graveyard.
- Bring a group and try the Gaga Pit at Jones Park in Algoma.
- Read *Scuffy the Tugboat* & go see Tug Ludington in Harbor Park, downtown Kewaunee



UW-Madison Division of Extension * Renee Koenig, Associate Professor, Human Development and Relationships Educator
920-388-7137 * renee.koenig@wisc.edu

Teens can have a fun summer and still remain safe

Summer can be a special time for teens filled with camp, vacations, romance, summer jobs, boredom and lots of free time. For parents, however, summer vacation presents unique concerns that differ from those of the routine school year – how to manage ALL that free time and feel confident your teen is safe, while trying to maintain your own regular work and family responsibilities.

Impulsivity and risk-taking are natural parts of development in adolescence. Portions of the brain are expanding at lightening speed without yet achieving efficiency, leading to seemingly irrational thoughts and unchecked behaviors. Too much unmonitored and unstructured time can allow unhealthy creativity free reign.

Thankfully, parents who cultivate remote supervision and break up the boredom can increase the likelihood teens stay safe. Here are a few tips to help minimize the stress in your summer and maximize the fun and safety of your teen's summer:

Conduct periodic spot checks of your child's whereabouts or activities

Cell phones have done wonders for parent peace of mind, but they will not always be helpful. Calling your child to check on where he is may be effective or it may provide an opportunity to practice skirting around the edge of the truth. Your child's well-being may depend upon your cleverness and subtlety. Use all available resources. Put the inevitable tattling of siblings to good use. On occasion, casually verify that your child is where they should be by using an excuse to contact another parent or a friend of your teen. Once in a while unexpectedly return home or drop by the location that your child should be. You do not need to go overboard. The random check simply reminds your child that you are paying attention.

Expect Your Child to Do Chores Regularly

Chores have many healthy benefits. They teach responsibility. They demonstrate the importance of contributing to the household. They save you effort. And not unimportantly, *they take up time!* Expect that your teen might complain about your reasonable expectations of labor and think of the complaining as a positive. All the energy he or she spends grousing about you is effort *not* being expended getting into mischief!

Network with other Parents

One parent I knew lived in a neighborhood with many young adolescents and working parents, so they got together and agreed to have the kids rotate between one another's houses on a regular schedule. Parents then rotated supervision on a schedule as well. For some that meant taking an occasional day off, others worked odd shifts, still others paid for an older youth to monitor the group or recruited the assistance of grandparents. Everyone isn't lucky enough to live in such an accommodating neighborhood, but creativity is more likely to blossom if parents collaborate.

Provide and Encourage Boredom Busting Activities

This is easier said than done when talking about teens, especially if you are on a budget that does not allow for camps, enrichment classes or sports programs. A couple of sources are [50 Fun Things to Do in the Summer](#) or [The Big Book of Boy Stuff](#), which contains zany ideas both boys and girls will love, such as cutting into grapes and microwaving them until they create sparks. Friends can make anything more entertaining, so building positive friendships is an important part of any adolescent's summer. Cultivate healthy risk taking opportunities. Allow your young teen to take the bus or ride her bike to a new part of town for lunch. Remember that being bored once in a while *is* part of life. You need to offer a few thoughtful suggestions, but you don't have to become a cruise director.

Article by **Becky Mather, Prevention Education Coordinator, Wisconsin Child Abuse and Neglect Prevention Board**

<https://parenthetical.wisc.edu/2018/05/07/teens-can-have-a-fun-summer-and-still-remain-safe/>



Volunteering

Volunteering is an excellent way for youth to look beyond themselves to the larger world, to develop empathy for their fellow humans, and to give back to their communities. Volunteering is also a way for young teens to have a maturing summer experience as they meet the expectations set forth by the volunteer program. Volunteering can also provide a way to explore potential career interests and could possibly lead to a paid position down the road if positive connections are made.

Finding the right place for your teen to volunteer is essential. As with picking a camp, or applying for a summer job, your teen should take the responsibility for finding a volunteer opportunity; however, your help and input may be necessary, especially for young teens who may need permission or help with transportation. Most teens work best in volunteer situations that are well structured, project oriented, and supervised. Volunteering together may be an excellent opportunity for you to do something with your teen this summer, although be sure your teen has a central role in the project.

Many places of worship have volunteer opportunities specifically for teens, while hospitals, retirement communities and large non-profits also often have such programs.

While volunteering may be more flexible than a paid position, make sure your teen understands the extent of the commitment. As with a job, taking on a volunteer role requires perseverance, even when the work is boring. Volunteering can teach many of the same life lessons as a paid job, as long as your teen understands they are expected to arrive on time, complete the tasks set before them, and fulfill commitment to the organization.

Which types of summer programming activities did you participate as a teen? Which did you find most useful?



IS YOUR CHILD READY TO STAY HOME ALONE

Putting together a schedule of summer activities for your child can be a challenge. Like many parents, you might be trying to decide if it is safe to leave your school-age child home alone during the summer break. Your child might be ready to stay home alone if your child:

- is willing to stay alone
- acts responsibly and follows rules
- knows how to handle emergencies

UW-Madison Extension offers a free online video class called **Home Alone**. The lessons were developed to help you prepare your child for self-care.

Watch the videos together with your child at <https://fyi.extension.wisc.edu/homealone/>

En español
<https://fyi.extension.wisc.edu/homealone-espanol/>

**CONTACT RENEE KOENIG AT
RENEE.KOENIG@WISC.EDU
OR 920-388-7137 FOR MORE
INFORMATION**

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



What is Money Matters?

The University of Wisconsin – Madison Division of Extension's **Money Matters** modules are used as self-study tools spanning eleven different areas of personal finance. Modules are designed to help learners understand their current financial habits and choices, build their knowledge base and provide a tool kit to develop new money management skills and awareness. Each financial topic provides a comprehensive online learning approach offering fact sheets, videos, self-assessments and links to more learning resources.

Money Matters can be used as a self-study program or you can follow up with financial coaching. Several of [our financial educators](#) are available to talk with anyone in Wisconsin.

Visit <https://finances.extension.wisc.edu/2022/03/03/what-do-i-need-to-know-about-financial-institutions/> to learn more.

Banks, Credit Unions



& other Financial Institutions



Extension Kewaunee County
University of Wisconsin-Madison

Upcoming Workshops to Reduce Family Stress:

- Positive Parenting
- Powerful Tools for Caregivers
- Mental Health First Aid
- Money Matters
- Aging Mastery

Call 920-388-7137 or email renee.koenig@wisc.edu for a workshop schedule.



UW-Madison Division of Extension * Mariah Vandertie, 4-H Program Educator
(920) 388-7185 * mlvandertie@wisc.edu

Area Animal Science Day

What a great experience at Area Animal Science Days! I saw some familiar Kewaunee County 4-H faces!

This event supported youth in the beef, dairy, horse, sheep, and swine projects. They took part in youth evaluations to increase their decision-making skills and knowledge of animals through judging and grading experiences. Events include evaluation of dairy cattle, horses, and meat animals; dairy showmanship contests; and oral reasons workshops.

Thank you to the UW Department of Animal Sciences and our wonderful 4-H members, leaders and volunteers

More info here <https://4h.extension.wisc.edu/.../area-animal-science-days/>



UW-MADISON EXTENSION



The new YQCA platform is live and ready for use. As a reminder, the Kewaunee County Fair Board requires all youth exhibiting junior beef, dairy, hogs, sheep, poultry, and rabbits to take the program to show at the fair. You will also need it for the Northeast Youth Livestock Show, State Fair, and other fall shows outside the state. ***New this year, you will need a copy of your completion certificate for each species you show.*** That means if you show hogs, rabbits, and beef, you need to bring *three* copies of your certificate to the fair on entry day. Each superintendent will collect one copy per specie.

Kewaunee County will not offer face-to-face training, so youth will need to take it online, or attend an in-person session in another county. A list of Extension events can be found here: <https://extension.wisc.edu/events/>

The course will again be \$12 per youth participant. Financial assistance is available for those who request it. If you have a hardship request, please contact Aerica Bjurstrom at aerica.bjurstrom@wisc.edu or call 920-388-7138. Your requests will be kept confidential.

To visit the new platform, please visit: <https://yqcaprogram.org/>

Directions for signing in to the new platform are below:
https://www.dropbox.com/s/rowg7hm5py87bwh/YQCA_HelpDoc_SubmittingCurrentYQACertification.pdf?dl=0



UW-MADISON EXTENSION
KEWAUNEE COUNTY

Kewaunee County Fair information

We are getting excited for the 105th annual Kewaunee County Fair. Our community partners at the fair board have been working hard to be prepared for this year's event.

Dates: Early judging day (Exhibit hall projects), Tuesday, July 5th
Animals Check-in day, Wednesday, July 6th
Fair opens: July 7th – 10th

More information will be coming from the fair as soon as it is available on safety procedures, specific times, and other pertinent information.

County Fair Theme: Super Heroes

For more information about the Kewaunee County Fair, including the premium book and online entry: <https://www.kewauneecountyfair.com/>



Cloverbud Corner

Looking for Cloverbud Project Ideas? Are you looking for Cloverbud activities you can do at home or with other members in your club? Wisconsin 4-H has some great lesson plans that are all set for easy and fun hands-on activities! Check out <https://4h.extension.wisc.edu/opportunities/projects/cloverbuds/> for more info!



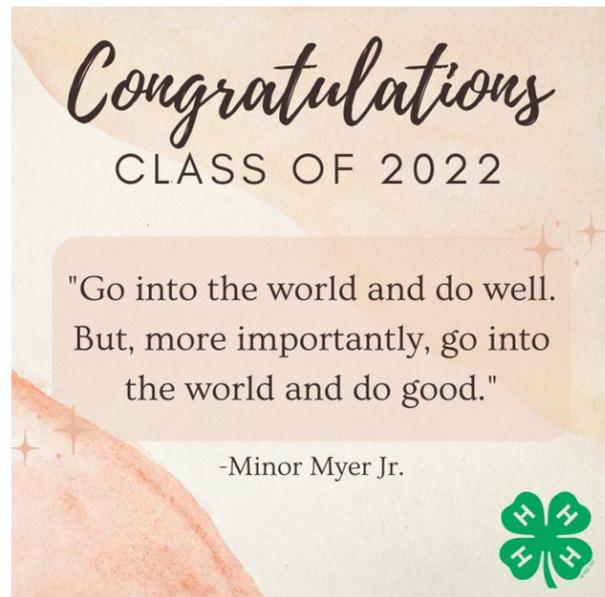
UW-Madison Division of Extension * Mariah Vandertie, 4-H Program Educator
(920) 388-7185 * mlvandertie@wisc.edu



Club News

Pilsen Skylighters

The Pilsen Skylighters Cloverbuds had a wonderful time making projects together. Thank you to Gina M. for organizing and hosting. Thank you also to all the volunteers (youth and adults) who helped. It was a fun morning!



Congratulations to our Kewaunee County 4-H 2022 graduates!

We are so proud of all of our 4-H members that are graduating from high school.

Congratulations: Desiree Ahrens, Grant Augustian, Rebecca Barnica, Alex Bunyard, Justin Bunyard, Abi Dequaine, Megan Dequaine, Rylee Fenendael, Aaron Funk, Kiley Gaedtke, Tiffany Granius, Mercedes Kroll, Rebecca Kroll, Kristen Ledvina, Rosanna LeGrave, Lisa Reinke, Megan Salentine, Logan Steinhorst, Taylor Thiry, Tristan Thiry, Luke Van Donsel

Kewaunee County 4-H Scholarship Opportunities

Are you in grades 12 or 13, a current or past Kewaunee County 4-H member, and are looking for financial help with post-secondary education? Then check out these scholarship opportunities on the website at: <https://fyi.extension.wisc.edu/kewaunee4h/scholarships/>

4-H Leaders Association Scholarship, Teen Association Scholarship, or the Jack Bancroft Poultry and Rabbit Member Scholarship: You can apply for all three of these awards with this one form. Please make sure to check all of the scholarships that you would like to be considered for.

- Kewaunee County Leaders Association and Kewaunee County Teen Leaders Association:** All current Kewaunee County 4-H members in grades 12 and 13 can apply for these \$500.00 scholarships. You can only receive each of these scholarships once. The deadline to turn in this scholarship application is August 5, 2022.
- Jack Bancroft Memorial Scholarship (Poultry and Rabbit members):** Kewaunee County 4-H members that are in grades 12-13 and were involved in the poultry or rabbit project are eligible to apply for this \$150.00 scholarship. The deadline to turn in this scholarship application is August 5, 2022.

Kewaunee County 4-H Auction Committee Scholarship: This scholarship opportunity is open to Kewaunee County 4-H members in grades 12 or 13 and that have sold at the Kewaunee County 4-H Fair auction for a minimum of two years. The deadline to turn in this scholarship application is August 5, 2022

Kewaunee County 4-H Dairy Committee Scholarship: This scholarship opportunity is open to all Kewaunee County 4-H Dairy Project members in grades 12 and 13. The deadline to turn in this application is August 5, 2022.

Kewaunee County 4-H Horse Project Scholarship: Kewaunee County 4-H members that are in grades 12-13 and have a minimum of four consecutive years in the Kewaunee County 4-H Horse & Pony Project (regular member or horseless horse members are eligible) are eligible to apply for this \$250.00 scholarship. The deadline to turn in this scholarship application is August 5, 2022.



What's happening in your club or project?

We would love to see pictures and hear about what is happening in your clubs and projects to share with our 4-H community. We have seen some awesome virtual activities, speakers, and projects. Send your pictures and short descriptions to Erin at dahle.erin@kewauneecc.org and they will be shared in our monthly Extension Connection Newsletter.



UW-Madison Division of Extension * Aerica Bjurstrom, Regional Dairy Educator
920-388-7138 * aerica.bjurstrom@wisc.edu



Short- and Long-term Effects of Heat Stress in Dairy Cattle

There is no doubt that dairy cattle become heat stressed at point during the summer months in the Mid-Atlantic region. The temperature humidity index (THI) is a tool used to assess the risk for heat stress in livestock. The THI threshold for high producing dairy cows is 68; when values are greater than 68, lactating cows are at risk for heat stress. With relative humidity levels ranging between 50 and 80% and average monthly highs of 87°F, 85°F, and 78°F during the months of July, August, and September, respectively, most cows in Maryland easily experience several days where the THI is above 68 during these months.

Signs of heat stress in dairy cattle include panting, excessive drooling/foaming from the mouth, and open-mouth breathing. Heat stress also induces behavioral changes such as increased standing time, bunching, and reduced feed intake, which have direct effects on production.

Temperature (°F)	Relative humidity (%)										
	20	30	40	50	60	70	80	90			
50	54	53	53	52	52	51	51	50		<68	Not Stressed
55	56	56	56	56	56	55	55	55		68-71	Stress Threshold
60	59	59	59	59	60	60	60	60		72-79	Mild Stress
65	62	62	63	63	63	64	64	65		80-89	Moderate Stress
70	65	65	66	67	67	68	69	69		>89	Severe Stress
75	68	68	69	70	71	72	73	74			
80	70	72	73	74	75	76	78	79			
85	73	75	76	78	79	81	82	84			
90	76	78	79	81	83	85	86	88			
95	79	81	83	85	87	89	91	93			
100	82	84	86	88	91	93	95	98			
105	84	87	89	92	95	97	100	102			
110	87	90	93	96	99	101	104	107			

Figure 1. Temperature Humidity Index (THI) for Cattle. Lactating dairy cows are at greater risk for heat stress when the THI exceeds 68.

Short-term Effects of Heat Stress

The most obvious effect of heat stress is reduced milk production. Heat stress is also detrimental to fertility because it reduces display of estrus (heat) behavior and negatively affects oocyte quality and embryo viability. In Maryland, if minimal heat stress abatement strategies for lactating cows were implemented, the predicted result would be a reduction of annual milk production by 950 lb per cow and an increase in the average number of days open by 18 days.

Most producers will attest that bulk tank somatic cell count and the number of mastitis cases usually increase during the summer months. Not only are pathogens more prevalent during the summer months due to conditions more conducive to their growth and proliferation, but high temperatures also depress the immune system by reducing immune cell function, making cows more susceptible to disease. Lameness also often increases during the summer

months, which is likely related to increased standing behavior under periods of heat stress. Because feed intake is reduced and rumination activity is depressed when body temperature rises, risk for sub-acute ruminal acidosis also increases, which further exacerbates immune dysfunctions brought about by heat stress.

Often overlooked when it comes to providing heat stress abatement, replacement heifers and calves are also affected by heat stress. There is evidence suggesting that heat stress negatively affects the growth and immune status of replacement dairy heifers. Furthermore, a recent study from the University of Florida showed that cooling calves under heat stress conditions from birth to weaning reduced total number health events requiring treatment and increased milk and starter grain intake.

Long-term Effects of Heat Stress

In addition to the more obvious, short-term effects, heat stress also has long-term effects that may not be fully realized until months (or even years!) later. While the historical focus of heat stress has been on its effects on lactating cows, recent attention has been given to its effects on dry cows. Heat stress negatively affects mammary cell proliferation and development during the dry period and prolonged heat stress during this time can reduce milk production during the subsequent lactation by as much as 8 to 11 lb/d.

There is also mounting evidence that heat stress during late gestation transcends the dry period and can have effects on the growth and milk production of the calf in utero and her offspring (2 generations). A recent study analyzed production records obtained from 10 years of heat stress research in Florida and showed that calves whose dams were cooled under heat stress conditions during late pregnancy produced an average of 8 lb/d more milk during their first three lactations than calves whose dams were not cooled. Effects on production were also observed in the second generation, where calves whose grand dams were cooled during the dry period produced 2.8 lb/d more milk during their first lactation. Thus, the long-term effects of heat stress during the dry period on milk production may not be fully evident for 3.5 to 4 years!

Combating Heat Stress

As highlighted above, management of heat stress is important for current and future animal productivity, health, and reproduction. When looking at your heat stress mitigation strategies, there are a few key areas you should focus on.

- Ensure ample access to fresh, clean water.** Water is required for all animals to maintain body temperature and, under normal conditions, a high producing cow will drink up to 50 gallons of water per day. Hot weather will increase water consumption by 50 to 100%. To accommodate times of increased water demand, there should be at least 3 inches of accessible water-trough space per cow and flow-rate should be sufficient so that troughs do not run dry during periods of high demand. If possible, provide waterer access near the milking parlor exit.
- Provide shade.** This is most basic component of heat abatement and should be provided for all animals during high temperatures. This is often in the form of a barn or shed for confined animals or in the form of natural shade or shade cloth for animals on pasture. Don't forget about your dry cows, heifers, and calves when it comes to this basic component of heat stress abatement. Calves in hutches can also benefit from supplemental shade by installing a shade cloth or other covered structure over the hutch area.
- Ensure adequate ventilation.** Poor ventilation is often an issue inside barns or other manmade structures. These facilities should be opened up as much as possible to promote natural airflow by raising side curtains, opening/removing glass windows, etc. Fans should also be installed in key areas, such as the feed bunk, over the free-stalls or bedded pack, and holding pen to promote airflow. Additional ventilation can be achieved with calf hutches by propping up the backside of the hutch using 4x4 blocks of wood.
- Consider cooling with water only after there is shade and adequate ventilation.** To be effective, this heat stress abatement strategy must be paired with sufficient airflow or fans to promote evaporative cooling. Simply soaking animals without adequate airflow will only succeed in creating a more humid environment around them. Sprinklers/misters can be strategically placed at the feed bunk and the holding pen for optimal cooling.

Written by Sarah Potts, University of Maryland Extension
<https://extension.umd.edu/resource/short-and-long-term-effects-heat-stress-dairy-cattle>

2022 Kewaunee County Fair Livestock Dates and Times



Tuesday, July 5
 5:30-7:00 PM Hog Weigh-In

Wednesday, July 6
 Entry Day for All Animals
 9:30-10:30 AM Steer & Lamb Weigh-In
 12:30 PM Poultry Weigh-In

Thursday, July 7
 8:30 AM Sheep Show, Open & Jr.
 12:00 PM Beef Show, Open then Jr.
 6:00 PM Hog Show

Friday, July 8
 8:00 AM Dairy Show, Jr. & Open

Saturday, July 9
 1:00 PM Jr. Fair Livestock Auction
 7:00 PM Dairy Futurity

Sunday, July 10
 2:00 PM Kiddie Showmanship



UW-Madison Division of Extension * Aerica Bjurstrom, Regional Dairy Educator
920-388-7138 * aerica.bjurstrom@wisc.edu

Heat Hurts Dairy Cows' Feet

Help Your Cows Avoid Lameness and Other Ailments if Summer Weather Puts Them Off Feed

When summer heat takes the edge off your dairy herd's appetite, some of them could wind up limping next fall. Making sure your cows eat right when the thermometer tops 20 degrees Celsius can help them ward off subacute ruminal acidosis [SARA], which can lead to other health issues such as lameness.

Cows are much more comfortable at temperatures below 20 degrees than above compared to people. Heat stress starts to set in above that temperature and nutritionists usually see symptoms that can include reduced dry matter intake, lower butterfat percentage and more selective eating patterns in both component-fed and total mixed ration herds. It's been estimated that summer's hottest, most humid days can increase the maintenance energy requirement of dairy cows by as much as 25 per cent.

In addition to the challenges of nutritional management in hot weather, it's also possible that reduced dry matter intake and slug feeding can make SARA worse. It sometimes shows up as lameness in the autumn after a hot summer.

SARA is a disorder of ruminal fermentation characterized by extended periods of depressed ruminal pH below 5.6 to 5.8. Ruminal pH measures the acidity or alkalinity of ruminal fluid. A lower pH means higher acidity. For optimum ruminal fermentation and fibre digestion, ruminal pH should lie between 6.0 and 6.4, although, even in healthy cows, ruminal pH will drop below this level for short periods during the day.

This fluctuation in ruminal pH results from the breakdown of dietary carbohydrates such as starch, particularly from cereal grains like corn, wheat and barley. Grains are high in readily fermentable carbohydrates that are rapidly broken down by ruminal bacteria, leading to production of volatile fatty acids and lactic acid. Under normal feeding conditions, volatile fatty acids are readily absorbed by papillae—small finger-like projections—on the rumen wall. Once absorbed, volatile fatty acids enter the cow's bloodstream and can be used for milk production.

SARA results from excessive volatile fatty acid production that exceeds the ability of the ruminal papillae to absorb them. Volatile fatty acids therefore accumulate in the rumen causing ruminal pH to drop.

In many cases, SARA symptoms are invisible. But daily occurrences of ruminal pH below 6.0 for prolonged periods can eventually lead to lameness. Low ruminal pH also affects the linings on the walls of the rumen and the small intestine. Reduced feed consumption may intensify the effect of total acid load in the rumen and decrease the ruminal pH further.

A recent University of Guelph study that looked at the effects of heat stress and a high-carbohydrate diet in sheep showed typical responses seen in dairy cattle. The project used a dietary approach developed for dairy cattle that involved feeding a grain supplement at predetermined levels to induce SARA in sheep.

Cattle pant in hot weather and the researchers observed the same reaction in sheep subjected to heat stress. Shallow rapid breathing, or panting, helps dissipate heat by evaporative water loss. Increased respiration rate is also an effective way to exhale carbon dioxide, another mechanism used to adjust the animal's overall pH.

The sheep study results also showed that ruminant animals, such as dairy cattle, try to adjust to conditions of both heat stress and acidosis. They start to use protective mechanisms to remain healthy and comfortable. Countering heat stress includes reducing voluntary activities like walking. They eat less since consuming less feed minimizes heat created by rumen fermentation, digestion, absorption of nutrients and metabolism. The Guelph study also suggested that the animal's panting may also have caused them to consume less feed.

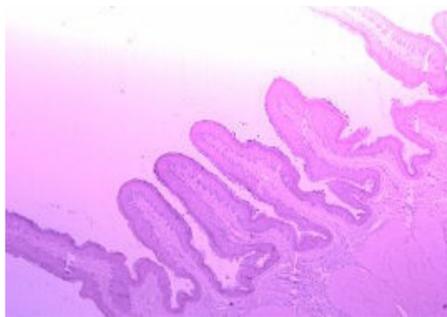
It's been shown that money spent on effective methods to keep a dairy herd's environment cool is almost always a good investment. It can pay off in improved dry matter intake and butterfat percentage along with better overall herd health.

Photos of the ruminal papillae of sheep from the heat stress and subacute ruminal acidosis study at Guelph illustrate the differences in papillae number and length when grain was supplemented, compared with the control diet.

Grain Challenge



Control



The Guelph sheep experiment was the first report on the form and structure of the rumen wall for animals faced with a high-carbohydrate diet under heat-stress conditions. The rumen wall lining not only protects the animal from the rumen's contents but also serves important functions. These include absorption and transportation of nutrients to the bloodstream and some metabolism of volatile fatty acids.

The rumen wall is lined with millions of microscopic, finger-like projections—known as papillae—that do its job. These papillae change shape according to rumen conditions, including pH.

Higher concentrate diets cause these papillae to become longer and there was a trend towards that in the Guelph study. As well, the number of papillae per millimetre of rumen wall was less, as shown in the photos. The differences in length of the papillae and their number did not change the total surface area but the researchers noted that there is a need to better understand the impacts of these changes.

Key points for proper nutritional herd management in hot weather:

- Ensure unlimited access to water. Consumption can increase 25 to 30 percent in hot weather
- Feed more frequently to stimulate feed intake
- Be alert for moldy feed and clean up feed leftovers daily

- Ensure minerals are balanced, particularly sodium, potassium and magnesium. Low ruminal pH can affect magnesium reabsorption.
- Be prepared to increase ration density to offset reduced dry matter intake
- Use rumen additives to promote easier digestion
- Feed more palatable, high-quality forages
- Monitor ration particle size and do not exceed 40 to 42 per cent non-structural carbohydrates in the diet during hot weather

Full article and references can be found here: <http://www.omafra.gov.on.ca/english/livestock/dairy/facts/heathurts.htm>

Majority of farm families worry about major medical expenses, and it could threaten their farm business

Agricultural systems face challenges from weather and markets that can threaten their resilience to shocks and stresses. Researchers in the agriculture sector tend to focus on these big crises, like storms or drops in commodity prices. Yet the “little things” that can impact any farm at any time, such as a barn fire, are seldom studied even though they may also shock and stress farm families.



Then, too, there are personal crises, such as illness, divorce or a loss of an off-farm job, which could affect anyone and certainly would have an effect on the resilience of the farm business.

An important example of these micro, household-level worries is medical debts due to medical expenses associated with a major illness or injury, which is examined in a recently published study in the peer reviewed *Agriculture and Human Values*, a leading journal on food and agriculture research.

An analysis of more than 900 surveys of farm households from 10 U.S. states found “a top worry for farm families is the impact a major illness or injury that leads to medical debt would have on the farm enterprise,” according to authors and rural sociologists Dr. Florence Becot and Dr. Shoshannah Inwood.

Becot is an associate scientist at the National Farm Medicine Center, Marshfield Clinic Research Institute, Marshfield, Wis., and Inwood is an associate professor in the School of Environmental and Natural Resources at The Ohio State University.

These concerns around medical debt are called “medical economic vulnerability.” While one in five (20%) surveyed farm households had a medical debt of at least \$1,000 in 2016, more than half (55%) were not confident that they could pay the cost of a major illness or injury such as a heart attack, cancer or loss of limb without going into debt.

This level of debt and respondent worries about having to take on more medical debt was observed even though more than 90 percent of farmers in this study had health insurance. Another important finding is connected to quality of health insurance. In addition to having health insurance coverage, what seems to matter as much is the level of deductibles and out-of-pocket expenses that people have to pay. These “underlying challenges or worries that people have are connected to the problem of underinsurance,” Becot said, which is particularly problematic considering that agriculture is hard on the body and dangerous.

“We’ve had farmers tell us they wait until 65 and are on Medicare to go take care of long-standing problems,” she said, which may affect their quality of life as well. We often hear that farmers are a “tough crowd” who don’t want to go the doctor, Becot said, when really, health care is expensive and inaccessible for many people.

The Affordable Care Act, or ACA, helped make medical coverage available to more Americans and benefitted farmers. A provision of the ACA uses income and not assets to determine Medicaid and Marketplace subsidy eligibility, which decouples the family from the assets of the enterprise and addresses the “land rich, cash poor” conundrum farmers often face. This provision allowed farm families a wider array of health insurance choices via public health insurance and marketplace options.

However, choices in the insurance marketplace can be limited, and health insurance plans are often confusing. So-called “skinny” plans – those with lower premiums but very high deductibles and out-of-pocket expenses – offer a weak safety net as people might avoid going to the doctor to limit costs, and a major illness or injury can result in medical debt.

Many farmers rely on off-farm employment for income but also as their source of health insurance, Inwood said. However, choices are limited by what the employer provides and may not be the best fit for a farm family. In rural areas it also can be hard to find jobs with good benefits.

The problem of medical economic vulnerability in the agricultural sector isn’t a new problem – but this study indicates like all Americans, farmers need affordable quality health insurance plans that ensure farm families are able to cover medical costs whether preventive or for major illnesses or injuries.

Policies to support the agricultural sector tend to focus on the farm business, yet this study points to the importance of ensuring that farm families facing personal medical crises wouldn’t be left with long-term medical debt. “The reality, too, is if health insurance was to be addressed, it would not only help farmers, it would help everybody,” Becot said.

“There has been a lot of discussions recently about the importance of agricultural programs and policies to support the resilience of farm families, yet this research indicates that one important way to bolster farm families and support their resilience is by ensuring access to affordable health insurance,” Inwood said.

View this press release online at <https://marshfieldresearch.org/nfmc-news/majority-of-farm-families-worry-about-major-medical-expenses-and-it-could-threaten-their-farm-business>



UNIVERSITY OF WISCONSIN-MADISON

KEWAUNEE COUNTY EXTENSION CONNECTION

Connecting people with the University of Wisconsin

July
2022



ANNUAL BACK TO SCHOOL PROGRAM

This Program aims to provide some of the required school supplies for children of families in need that live in Kewaunee County. (Families with children that are receiving free lunches, are on WIC or Foodshare, etc., or are in an emergency situation of need all qualify.)

BACK TO SCHOOL STORE WILL BE HELD ON AUGUST 10, 2022 FROM 12:30-5:00 PM AT LAKEHAVEN HALL 96 ELLIS STREET, KEWAUNEE

If you feel that your family qualifies and your children are in 4K thru High School, please fill out the Registration Form and mail by Monday, August 1, 2022. No phone registrations are allowed.

Times will be assigned to those who are registered. Registered participants will be notified of their time via postcard about one (1) week before the event.

Those not registered may arrive between 4:30 and 5:00 pm on August 10, 2022

We request that children be present to shop at the Program. Please direct questions to Cindy or Deanne - Call 920-388-7160

Please return the Registration by Monday, August 1, 2022

Registration Form

Please send the completed form to
Kewaunee County Public Health Department Attn: Deanne Schultz, 810 Lincoln Street,
Kewaunee, WI 54216 by Monday, August 1, 2022

Please print all information

Parent/Guardian: Last Name First Name

Address: _____

City/Zip Code: _____

Phone Number: _____

School District: _____

Child/Children Information:

Last Name	First Name	Grade Entering	Male or Female

I, _____ hereby authorize representatives of the Back to School Program to check any records or information about my financial situation, household composition, or any other necessary information to determine eligibility for the Back to School Program supplies.

Parent/Guardian Signature _____ Date _____

EL PROGRAMA ANUAL DE REGRESO A LA ESCUELA

Este programa tiene como objetivo proporcionar algunos de los requeridos suministros escolares para niños de familias de necesidad que viven en el Condado de Kewaunee. (Familias que califican son los con niños que reciben almuerzos gratis, son de WIC o Food Share, etc. o si están en una situación de emergencia o necesidad).

LA TIENDA DE REGRESO A LA ESCUELA SE CELEBRARÁ 10 DE AGOSTO, 2022 ENTRE LAS HORAS 12:30 – 5:00 PM LAKEHAVEN HALL 96 ELLIS STREET, KEWAUNEE

Si usted siente que su familia califica y tiene hijos en **4K a través de la High School**, por favor llene el formulario de registro y enviarlo por correo por el lunes, 1 de agosto, 2022. *Registros de teléfono NO son permitidos.*

Asignaremos tiempos a aquellos que están registrados. Participantes registrados serán notificados de su tiempo a través de una tarjeta postal aproximadamente una semana antes del evento. **Los participantes no registrados pueden llegar entre 4:30 y 5:00 en el 10 de agosto.**

Los niños deben estar presentes para comprar en la tienda
Con preguntas póngase en contacto a Cindy o Deanne - llamar a 920-388-7160

(Por favor devolver este parte inferior)

Formulario para inscribirse

Por favor enviar el formulario completo a:
Kewaunee County Public Health Dept., Attn: Deanne Schultz,
810 Lincoln St., Kewaunee, WI 54216 por el lunes, 1 de agosto
Imprime toda la información

Padre/tutor: Apellido: _____ Primer Nombre: _____

Dirección: _____

Ciudad / código postal: _____

Número de teléfono: _____ **Distrito escolar:** _____

Información de niño/nios:

Apellido	Primer nombre	Grado en Septiembre	Masculino o Femenina

(Utilice el lado al revés si más niños necesitan inscribirse)

Yo, _____, autorizo a los representantes del programa de la Tienda de Regresar a la Escuela comprobar los registros o información acerca de mi situación financiera, composición familiar o cualquier otra información necesaria para determinar la elegibilidad para los suministros del programa de Regresar a la Escuela

Firma del padre/tutor

Fecha

Non-Profit Org.,
U.S. Postage
PAID
Berlin, WI
Permit No. 27

EXTENSION KEWAUNEE COUNTY
Kewaunee Co. Admin. Ctr.
810 Lincoln St.
Kewaunee WI 54216-1140

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.

Como empleador que brinda igualdad de oportunidades en el empleo y acción afirmativa (EEO/AA, por sus siglas en inglés), la University of Wisconsin-Madison Division of Extension, proporciona igualdad de oportunidades en el empleo y en sus programas, incluyendo los requisitos del Título VI, Título IX, y de la ley federal para personas con discapacidades en los Estados Unidos (ADA, por sus siglas en inglés) y los requisitos de la Sección 504 del Rehabilitation Act.

Tus Tswv Hauj Lwm Ntawm (EEO/AA), ntawm lub Tsev Kawm Ntawv Qib Siab (University of Wisconsin-Madison Division of Extension) pab rau kev neaj nees txog kev hauj lwm thiab kev pab cuam, xws li nyob rau hauv Title VI, Title IX, thiab ntawm tsab cai Americans with Disabilities Act (ADA) yuav tsum kom muaj thiab Feem 504 ntawm the Txoj Cai Kev Pab Rov Tsim Kho Uas Tau Tsev Tseg.