



North Country Ag Advisor

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Photo Credit: T. Langworthy

Cornell Cooperative Extension
North Country Regional Ag Team

CCE North Country Regional Ag Team

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North Country Ag Advisor

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"The North Country Regional Ag Team is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex counties."

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Facebook: <https://www.facebook.com/NorthCountryRegionalAgTeam/>
Blog: <https://blogs.cornell.edu/northcountryregionalagteam>
YouTube: https://www.youtube.com/@CCE_NCRAT

Our Mission

"The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically, and environmentally sustainable management practices, and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry."

Field Crops and Soils

North Country Weather Update through June 30, 2023

By Kitty O'Neil

Our 2023 North Country growing season started out wet, became seriously dry, and not it's wetter, but not for all our farms. Most North Country fields spent a month from mid-May to mid-June in water-deficit stress mode. Rains at the end of June and beginning of July relieved crop stress on most farms, but some have missed much of the precipitation and remain in the seriously dry category – those in the Hammond-

Philadelphia-Cape Vincent area, most notably. Much of NNY remains in the D0 Abnormally Dry category, however, as of the June 27 Drought Monitor assessment, shown below. The Ellenburg area received an additional 5+” of rain in a single storm event on July 2nd and 3rd, beyond the timeframe of the weather summary below.

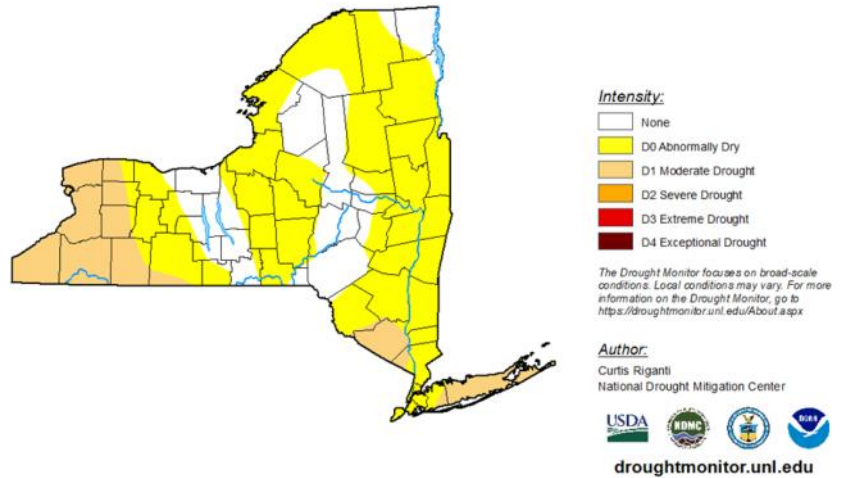
----- Accumulation from April 1 to June 30, 2023 -----							
		--- Precipitation, in ---			- GDD Base 50F -		GDD Base 40F
County	Town/Village	Total	DFN	Days	Total	DFN	Total
Clinton	Champlain	11.40	-1.14	37	730	-1	1469
	Ellenburg Depot	11.74	-0.79	39	622	-19	1320
	Beekmantown	11.75	0.58	39	714	-28	1450
	Peru	10.61	0.44	38	709	-34	1441
Essex	Whallonsburg	11.04	-0.78	36	747	-14	1495
	Ticonderoga	8.53	-3.16	31	781	-14	1546
Franklin	Bombay	10.79	-1.70	32	712	-18	1441
	Malone	12.1	-0.22	36	685	2	1394
	Chateaugay	10.23	-2.95	38	671	-3	1376
Jefferson	Rodman	10.11	-1.63	36	628	-73	1330
	Cape Vincent	9.12	-1.34	36	611	2	1326
	Evans Mills	8.80	-2.74	36	664	-100	1402
	Redwood	7.51	-5.67	35	662	-51	1390
	Antwerp	10.28	-1.39	40	640	-45	1369
Lewis	Talcottville	11.15	-0.69	41	567	-23	1247
	Martinsburg	11.86	1.07	42	667	-14	1388
	Carthage	10.01	-1.25	36	645	-44	1363
St. Lawrence	Gouverneur	9.84	-3.06	36	654	1	1386
	Hammond	8.48	-4.10	38	634	-28	1361
	Ogdensburg	9.78	-2.05	35	706	-5	1449
	Canton	12.55	-0.06	37	649	-72	1378
	Madrid	10.14	-1.52	34	643	-60	1367
	North Lawrence	11.21	-1.03	35	685	-49	1407
	Louisville	8.90	-3.23	32	660	-44	1392
Average		10.33	-1.60	36	670	-31	1395

* Precipitation in inches, temperature in Fahrenheit, DFN = difference from 15-year average, Days = days with precipitation. Calculated from [ACIS NRCC 2.5-mile gridded datasets](#). **High** and **low** values within each column are highlighted.

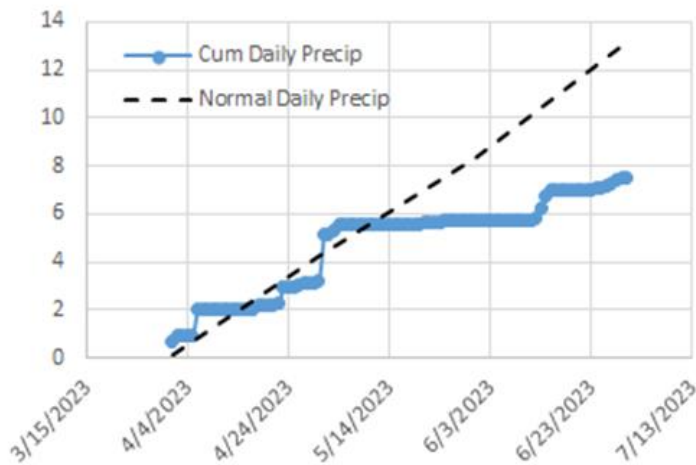
Cumulative daily precipitation totals from April 1 through June 30, 2023 are shown below for a.) Redwood, b.) Canton, c.) Martinsburg, and d.) Ticonderoga, NY. 2023 daily precipitation is shown in blue, compared with 15-year average daily precipitation represented by the dashed line. These 4 locations began the spring with near-normal rates of precipitation, but the Redwood and Ticonderoga areas began drying out in early May and remain 5.67" and 3.16" behind normal precipitation as of June 30. The Canton and Martinsburg areas went a few weeks without rain, but some heavy rains in early May and late June helped return to near normal accumulations. Crops in all 4 areas may well have suffered reduced yield potential, herbicide failures or other stresses during that period of 3-4 weeks with little or no rain.

U.S. Drought Monitor New York

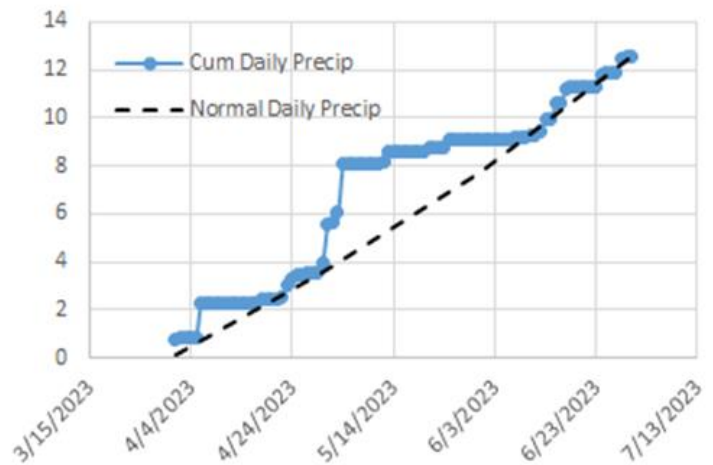
June 27, 2023
(Released Thursday, Jun. 29, 2023)
Valid 8 a.m. EDT



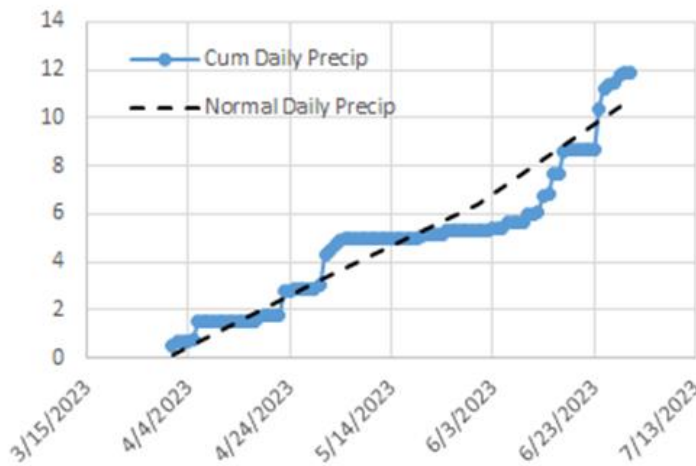
a.) Redwood, NY



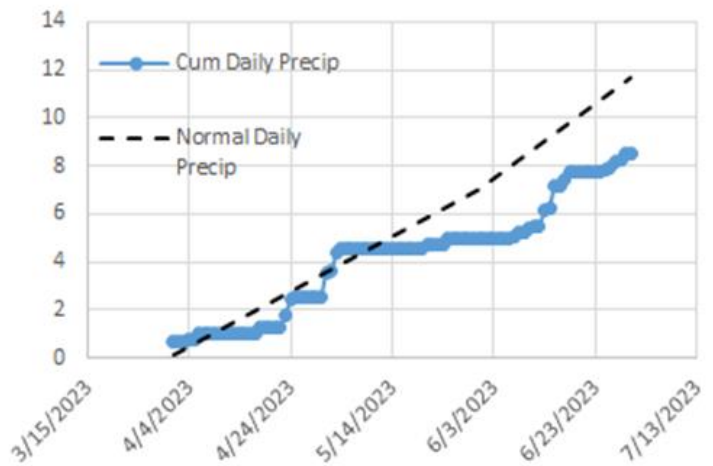
b.) Canton, NY



c.) Martinsburg, NY

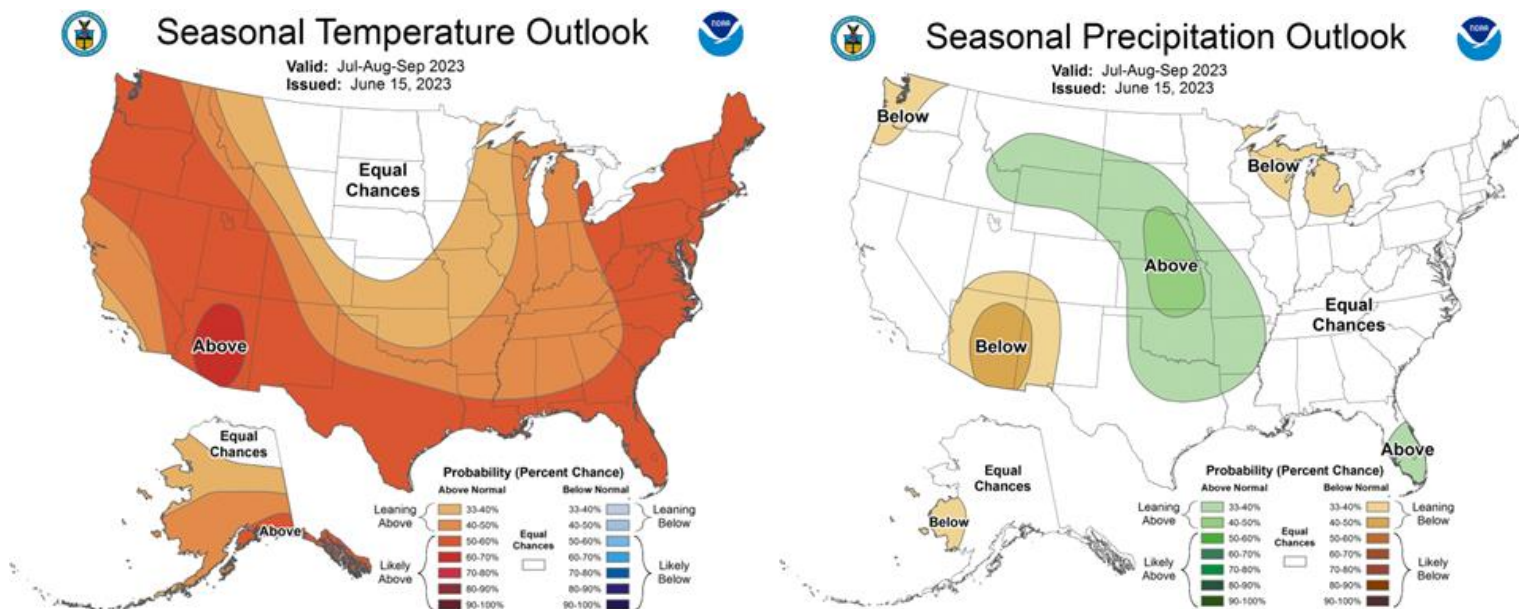


d.) Ticonderoga, NY

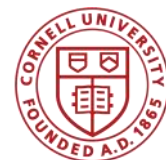


Temperature-wise, we've also recovered to within a couple of warm days from the cool temperatures and slower GDD₅₀ accumulation during May and June. The exceptions to this GDD recovery are the Theresa–Watertown–Rodman and Canton areas. The NOAA Climate Prediction Center is forecasting 50-60% chance of above-average temperatures for NNY in this 3-month window along with equal chances of above and below normal precipitation.

Weather Outlooks for July-August-September 2023



Welcome our new *Dairy Management Specialist* Daniela Gonzalez Carranza



Daniela was born and raised in Mexico City. In 2018 she earned her degree in Veterinary Medicine and enlisted in the Mexican Army as Veterinarian Soldier working with dairy cattle for two years. Subsequently, she worked on a dairy farm as a veterinarian and manager. At the same time, Daniela began as an independent consultant, collaborating with small and medium dairy farms in the community, allowing her to gain experience and interest in extension work.

Daniela earned her Master of Professional Studies degree from Cornell University in Animal Science with a concentration in dairy business management in 2023. In 2023 she joined the CCE North Country Regional Ag Team as a Dairy Management Specialist. The areas she focuses on and enjoys the most are reproduction, herd health, nutrition, and business. Daniela will work from the CCE St. Lawrence County office in Canton, NY.

Contact Information: dg647@cornell.edu; 315-749-3486

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North Country Regional Ag Team

<https://cals.cornell.edu/news/2023/05/daniela-carranza-mps-23-advancing-dairy-business-management-extension>

NNY Soybean Herbicide Plot Tour

July 18, 2023

Sign in begins 9:00 a.m.
9:30 a.m. – 10:30 a.m.

Markham Farm

3226 State Route 26, Constableville, NY
Soybean field adjacent to grain bins on NYS Route 26

Join us for a discussion of soybean weed control, including management of multiple resistant marestail. Attendees will have an opportunity to see several different soybean herbicide treatments that evaluate the control of marestail.

NNY Corn Herbicide Plot Tour

July 17, 2023

Sign in begins 9:00 a.m.
9:30 a.m. – 10:30 a.m.

Noah Reiff Farm

447 Gallop Rd, North Bangor, NY
1st corn field on Gallop Rd from US Rte 11

July 19, 2023

Sign in begins 9:00 a.m.
9:30 a.m. – 10:30 a.m.

Reed Haven Farm

17410 Cady Rd, Adams Center, NY
1st corn field on Cady Rd from N. Harbor Rd

Join us for a discussion of the proposed atrazine label changes and other field crop weed control challenges that growers face. Attendees will have an opportunity to see 16 different corn herbicide treatments that evaluate corn herbicide programs with and without atrazine.

Receive 1.0 NYS DEC pesticide recertification credit (categories 21, 1A, 10)

Bring your pesticide applicator license with you to the field day.

These will be held rain or shine in the field.

For more information contact Mike Hunter, CCE NCRAT at 315-788-8450 or meh27@cornell.edu or by mail
203 North Hamilton Street, Watertown, NY 13601.

Twilight Pasture Walk

Monday, July 24th: 6-8PM

Valley Trail Ranch

3220 Fuller Road, Carthage, NY 13619

Join CCE and New York Beef Producers Association Region 7 for a pasture walk lead by Kitty O'Neil, CCE NCRAT Field Crops & Soils Specialist.

Discussion topics to include: soil health, weed ID, fall seeding, pasture management, rotational grazing, etc.

**Please RSVP to Mellissa Spence
at 315-376-5270**

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Heat Stress is a Hot Topic for Dairies

By Lindsay Ferlito

Now that summer is in full swing, it's a good time to quickly review just how costly heat stress can be to your dairy and highlight a few important things to do to reduce the negative impacts. Over the years, it has become clearer just how much cows are impacted by heat stress. Previously, it was thought that a temperature humidity index (THI) of 70 was the magic number, and that has since been reduced to a THI of 68, and, according to Dr. Cassandra Tucker (UC Davis) at the Cornell Herd Health and Nutrition Conference this April, that number is probably even lower.

Similar to other factors on dairies, heat stress can have a negative impact on many things, making it hard to determine exactly what it is costing you. The more obvious effects are reduced milk production, reduced components, compromised reproduction, and therefore increased risk of culling. Research has now shed light on the generational impact that heat stress can have. When pregnant dams are heat stressed before calving, her future calf is negatively impacted and may produce less milk for at least 3 years, and that calf's calf (the dam's grandcalf) can also have reduced production for up to 3 years (Figure 1).

With this in mind, it's not surprising that it pays to invest in heat abatement in every state in the continental US (calculated by Dr. De Vries, U of FL, by looking at reduced milk of the dam compared to the cost of purchasing and operating fans and sprinklers). Therefore, every farm in New York should have fans in every pen of the barn to reduce the negative impacts of heat stress, including reducing financial loss.

While a lot of farms are now providing fans (and possibly sprinklers) for all adult cow pens, calves and heifers are still sometimes forgotten about when focusing on heat stress and abatement. Make sure all animals (including pre-weaned calves and heifers)

have access to fresh water starting on day 1 (or at least by day 3 to meet the FARM Animal Care Program requirements). Additionally, you could consider feeding calves electrolytes in times of greater heat stress (but remember, to prevent dehydration, electrolytes should be fed with water and not just added to milk or milk replacer). Watch calves closely for signs of dehydration and act fast.

In times of heat stress, ventilation is key. For calves and heifers, provide shade and a source of cooling from fans if possible. Reduce stocking density to provide animals with more space to spread out and increase the air available for each animal. Provide clean and dry bedding to prevent the bedding from adding additional heat and increasing fly pressure. Additionally, try to feed and complete stressful activities (like disbudding, moving groups, etc.) during cooler parts of the day (early morning and evening).

In summary, heat stress may be happening even earlier than we think. To limit the negative impacts, ensure you are providing all age classes of animals with shade, ventilation (fresh air), cooling with fans (and maybe also sprinklers), drinking water, and a little extra attention. Also, don't forget the people! Make sure all farm workers have access to the above as well to ensure everybody stays safe this summer.

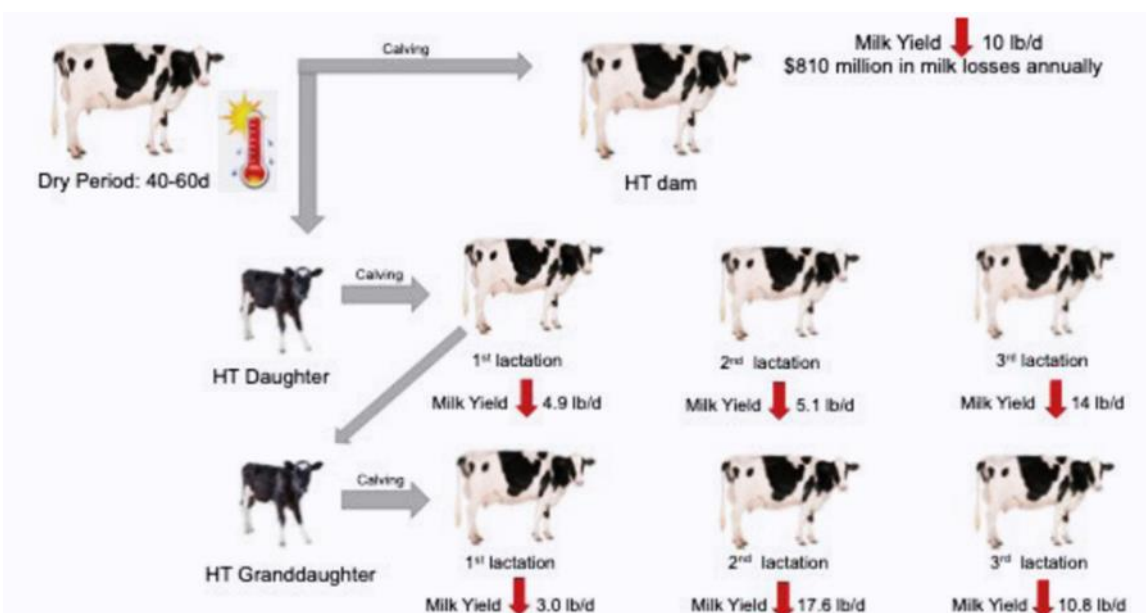


Figure 1. Diagram showing the generational effect of heat stress during the dry period and the impact on the dam, daughter, and granddaughter for up to 3 lactations (Casarotto et al., 2021; Adapted from Laporta et al., 2020).

Bovine Reproduction and A.I. Training Course

English and Spanish



Attend this 2-day training course to become trained in dairy or beef reproduction and artificial insemination breeding techniques. There will be classroom sessions in the morning, followed by hands-on practice on farm in the afternoon. Participants must attend both days. After this class you will be trained to artificially inseminate dairy or beef cattle. The program is offered in English and Spanish.

July 18 and 19, 2023

9:30am - 3:00pm

Town of Plattsburgh (151 Banker Rd, Plattsburgh, NY) (morning)

Adirondack Farms (34 Pardy Rd, Plattsburgh, NY) (afternoon)

Topics Covered:

- ♦ Bovine anatomy and reproductive physiology
- ♦ Heat detection
- ♦ Artificial insemination technique
- ♦ Proper thawing of semen
- ♦ Loading A.I. guns
- ♦ Practice breeding cows (hands-on)

Speaker:

Dr. Javier Cheang, Genex

Registration is required:

<https://ncrat.cce.cornell.edu/event.php?id=2163>

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Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

\$225 per person

- ♦ Offered in English and Spanish.
- ♦ Includes materials and lunch both days.
- ♦ Class capped at 10 participants.
- ♦ Must attend both days.



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For information:
Lindsay Ferlito
607-592-0290
Lc636@cornell.edu

Euthanasia: A Difficult Task for Dairy Employees

By Dr. Kaitlyn Lutz, CCE Northwest NY Dairy, Livestock and Field Crops Team

**Previously published in the Summer 2023 edition of CCE NWNYS "The Dairy Culture Coach"*

Euthanasia is no one's favorite topic, but it is a really important topic to talk about openly. The American Association of Bovine Practitioners (AABP) updated their [Guidelines for the Humane Euthanasia of Cattle](#) in March 2023. They also released a podcast episode, featuring members of the AABP Animal Welfare committee, explaining the guidelines: [Have you Herd? Euthanasia Episode](#).

What is euthanasia?

The word originates from the Greek words "eu" and "thanatos" literally meaning "good death". When it comes to our animals, the American Veterinary Medical Association defines euthanasia as "ending the life of an individual animal in a way that minimizes or eliminates pain and distress" (AVMA 2020).

If it's such a noble cause, why is it so hard?

Those of us who work in agriculture understand the bond that occurs when you work with the same animals every day. It is similar when we are saying goodbye to a family member—we don't want them to suffer, but we don't want to say goodbye. Unlike with humans, we are given the great responsibility with animals to determine when to end their suffering.

A study was done at Colorado State University looking at dairy caretaker perspectives on performing euthanasia. It involved interviews and focus groups with 38 dairy caretakers including workers, supervisors, owners, and a staff-veterinarian across 5 farms. 32 of the 36 participants were Spanish-speakers. Here are some quotes regarding the difficulty of euthanasia: "There are some cows that are friends and you arrive and they greet you. When they cease to exist, they are missed." Another participant says about perception of their job by their social group, "So again, if I kill a cow, they say 'poor thing, why did you kill it?' It's that they don't know that she was suffering." (Román-Muñiz, 2021).

Euthanasia Training

Another finding from the study above was a disconnect between owners and workers on the sufficiency of training related to euthanasia. Workers expressed that even if they were not directly performing euthanasia, they wanted training on the process to understand why the decision is made. When evaluating your farm's training program, consider extending euthanasia training to all employees, not just the few performing the task.

How should we make the decision?

First of all, form a euthanasia team. Large decisions are generally easier to make with support of other knowledgeable and trusted colleagues. Who would be on your team? When choosing a team, trust and experience are key.

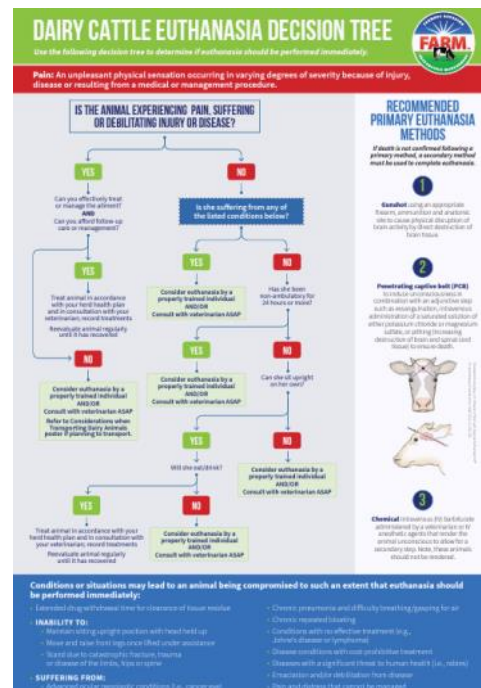
Second, focus on the data. Euthanasia is emotional for many reasons including the human-animal bond, fear of making the wrong decision, economic losses, and disposal concerns. What we do have on most dairy animals is a lot of data. Start with these questions: Can we control pain and distress? What is the likelihood of recovery? Clear examples of "no" would be a broken leg or gangrenous mastitis. Examples of cases with more gray area are: toxic mastitis or a down animal with unknown musculoskeletal injury. This is when involving your euthanasia team and your herd veterinarian is helpful.

How soon after a decision is made should we euthanize?

As soon as possible. It is easy to procrastinate things we do not like doing. An industry recommendation currently is within 4 hours. Riverview dairy in Minnesota strives for 15 minutes from the decision to euthanize to euthanasia.

** The National Dairy FARM Animal Care Program also has helpful euthanasia resources, including a Dairy Cattle Euthanasia Decision Tree that can be used to help create a euthanasia protocol and help make the final decision on when to euthanize.*

<https://nationaldairyfarm.com/resource-library/?search=euthanasia>

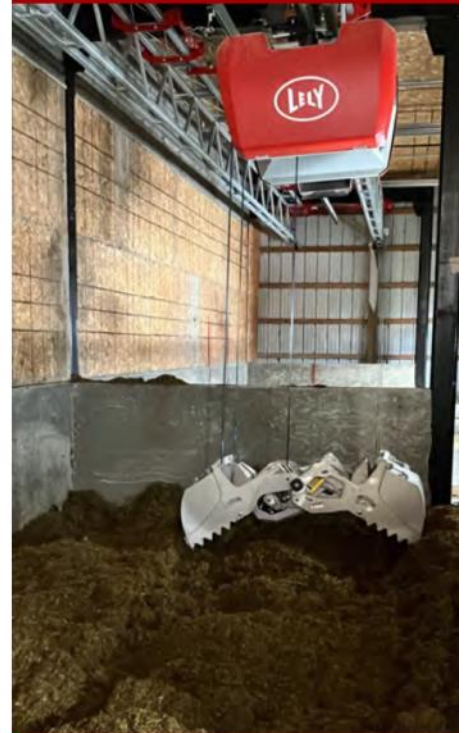


Robotic Feeding and Milking System Farm Tour



July 27, 2023
12:00pm - 2:00pm

Klock Family Farm
22370 Buttermilk
Flats Rd
La Fargeville, NY



Contact Info:
Lindsay Ferlito
Lc636@cornell.edu
607-592-0290

This program is applicable to any dairy farmers who are interested in learning more about robotic milking and feeding systems. Klock Family Farm has one of the only fully automated dairies in NYS, with a Lely robotic milking system and a Lely Vector robotic feeding system.

The program will include lunch, a tour of the robotic feeding and milking systems, and an open discussion between attendees, the facilitators, and the host farm.

Facilitators:

Lindsay Ferlito, CCE North Country Regional Ag Team

Abbey Jantzi, CCE Jefferson County

Finger Lakes Dairy Services



Lunch will be provided.
This program is FREE thanks to
the generous sponsorship of
Finger Lakes Dairy Services.

Whitney Davis
315-745-9014
wdavis@flds1.com

Registration: This program is free, but pre-registration is preferred.

https://reg.cce.cornell.edu/RoboticFeeding_222

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Sexual Harassment Prevention Training Reminder

By Lindsay Ferlito

As a reminder, each year you should be reviewing your sexual harassment prevention policy and making sure all employees have been trained. Effective Oct 9, 2018, all New York employers regardless of size (including farms and agricultural businesses) are required to have a sexual harassment prevention policy in place and they must provide annual training for all employees. The policy must be available in English and the primary language of the employees. The training can include watching a video (see the link below), but it must be interactive by having trainees answer a question or submit a feedback form. After the training, make sure to document the employee names, date, and training completed, and have each employee sign the documentation. Make sure that new hires are provided with a copy of the policy and go through the training on their first day of employment.

The Cornell Agricultural Workforce Development program has a lot of resources on this topic on their webpage: <https://agworkforce.cals.cornell.edu/regulations/sexual-harassment-prevention/>.

You can also visit the New York State webpage for more information on this requirement: <https://www.ny.gov/programs/combating-sexual-harassment-workplace>.

Cornell Cooperative Extension also created more “farm focused” training resources and videos that are available in English and Spanish for farms to use with their employees. These videos and resources can be found at <https://agworkforce.cals.cornell.edu/regulations/sexual-harassment-prevention/>, about halfway down the page.

If you have any questions, please reach out to the CCE North Country Regional Ag Team or your local CCE county office.



Sexual Harassment



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- Beginning Farmer Programs
- Crop Insurance



CCE North Country Regional Ag Team
203 North Hamilton Street
Watertown, New York 13601

What's Happening in the Ag Community

Pesticide Trial Field Days, with NYSDEC pesticide credits, see page 6 for more information.

Twilight Pasture Walk, see page 7 for more information.

Bovine AI Reproduction Training Program, see page 9 for more information.

Robotic Feeding and Milking System Farm Tour, see page 11 for more information.

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