

Corn silage harvest toolkit: 2023 edition

By Joe Lawrence from CALS / PRO Dairy's Forage Management PD-2023-07-03

Each corn silage harvest season presents its own unique opportunities and challenges. From a statewide perspective, 2023 is quite diverse with areas of excess rainfall to areas of moderate drought. As you consider the growing conditions your farm has experienced to date, the following may help you anticipate opportunities and challenges with this year's corn silage.

You can utilize the [Cornell Climate Smart Farming Growing Degree Day \(GDD\) tracker](#) to understand how this year's heat unit accumulation compares to past years for your specific location. Find your location on the map and select your planting (or silking date, see below) to track crop progress and begin making projections for harvest.

Rainfall and forage quality potential

Overall, lower rainfall generally results in improved corn silage fiber digestibility. Higher fiber digestibility is a good thing. Droughty conditions can also limit yield, potentially resulting in the scenario where cows will be able to consume more corn silage, but there is less total inventory. Consider current inventories and carry over,

acres harvested for silage versus grain, and options to purchase corn silage if these conditions fit your location.

Excess rainfall will reduce fiber digestibility, sometimes resulting in reduced dry matter intake by cows, which can affect the inclusion rate of corn silage in the diet. Work with your nutritionist to plan for the implications of this and what options you have for other feed ingredients to compensate for this.

Regardless of early season conditions, adequate rainfall around pollination and during ear fill can help the crop overcome early season challenges. Unfortunately, excess rain around pollination is associated with reduction in fiber digestibility and while we cannot manage this, understanding the impacts will help you understand what to expect from this year's crop.

Lastly, consider how weather stress may lead to variation in crop maturity and optimum harvest timing.

◇ Pay close attention to **whole plant dry matter (DM)** and kernel maturity for harvest timing decision

- [Record silking/tasseling dates for corn fields](#)
- [Sampling for moisture content in corn silage fields](#)
- [Corn plant dry down: impacts of ear and stover](#)
- [Corn silage harvest timing: Not all growing degree days are created equal](#)

Immature Corn Silage

Regardless of the weather, occurrences of late planting happen for various reasons each season. Late planted

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The **South Central New York Dairy and Field Crops Program** is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in 6 Counties.



Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

We are pleased to provide you with this information as part of the Cooperative Extension Dairy and Field Crops Program serving Broome, Cortland, Chemung, Onondaga, Tioga and Tompkins Counties. **Anytime we may be of assistance to you, please do not hesitate to call.** Visit our website: <http://scnydfc.cce.cornell.edu> and find us on social media! Facebook, YouTube, & Twitter!

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**Building Strong and Vibrant
New York Communities**

After Five Years with the Dairy Team, I am Starting a New Position with PRO-DAIRY

On May 1st of this year, I celebrated my five-year anniversary with the South Central NY Dairy Team. When I came to the team I had little personal experience with dairy, but I brought a strong desire to learn and provide meaningful education and support to farmers. What a time to begin working in this industry! In the past five years, NY's dairy farms have seen financial highs and lows; changes in milk markets, production technologies, and labor regulations; unpredictable milk and input prices; and other dynamic challenges. COVID created its own special set of issues confronting farmers and extension agents. Through it all, I witnessed the creativity, resilience, and tenacity of dairy managers as they responded to challenges and adapted to new conditions.

I am grateful to my extension colleagues and the many patient dairy farmers who have helped me become a confident and competent extension professional. In the world of extension, our research and education efforts are inextricably tied to the every-day problems that farmers face, and the information needed to solve them. We could not do this work without strong relationships with producers that provide insight into their goals and struggles. We measure the impact of our work not by the number of people who read our newsletter or attend workshops, but by the number of farms that change management practices as a result.

It has been my privilege to help dairy farms in our region improve recordkeeping systems, HR management practices, risk management decisions, and financial analysis skills. I have helped farms access funding through various grants and government programs to reinvest in strengthening their businesses. I have pushed dairy managers to implement operational changes that will increase profits, and I have supported them to do strategic planning work to bolster their farms' long-term viability. I have worked closely with Janice and Betsy to build on the success of their top-tier crop and dairy extension programs. While I am proud of these accomplishments, I credit the willingness of dairy producers to collaborate with extension professionals in pursuit of progress.

On August 1st, I will be starting a new full-time position as Farm Business Management specialist with the Cornell PRO-DAIRY program. This career change will allow me to work with more dairy farms across a broader swath of New York State. I will be supporting the Cornell Dairy Farm Business Summary, the most robust and longstanding dairy farm financial analysis and benchmarking program in the country, and using DFBS data to do applied research and extension work. I will also be working to extend PRO-DAIRY's online course offerings to include farm business management topics. I am excited to build on what I have achieved during my time with the Dairy Team, to expand my impact on the dairy industry, and to continue learning from the very best of teachers, New York's dairy farm managers.

In gratitude,

Mary Kate MacKenzie

corn can present unique challenges in reaching the proper stage of maturity for harvest. Harvesting immature or frosted corn silage requires special management to mitigate the potential negatives. [Corn silage 2019: Two different crops](#) and [Wet corn silage can be an environmental challenge offers some ideas](#) for managing this situation.

Safety

Corn silage harvest is always a stressful time around the farm, review [Safety](#) with your team before harvest season begins.

Storage planning

It is never too late to think about your silage storage resources. Plan ahead to ensure that storage space is adequate for the tonnage that needs to be stored. Improper storage setup and overfilling storages lead to significantly greater shrink losses. It is also important think about separating forages by quality to optimize their use by different animal groups. Review the article [Strategic forage storage planning](#).

Harvest planning

There are a number of competing interests this year in terms of balancing forage inventory needs and potential weather-related yield challenges with high commodity prices and opportunities to offset purchased feed cost with forage quality.

- Work with nutritionist and other key team members



Harvesting corn silage

to determine goals for corn silage.

- Determine forage quantity needs and how many acres are needed to meet this goal.
 - [Forage acreage needs calculator](#)
- Forage quality and commodity prices
 - [Managing forage digestibility to combat high commodity prices](#)
 - [Back of the envelope economics \(Starch contribution from corn silage\)](#) (Miner Institute)

Set-up harvester for optimum performance

The corn harvester plays an integral role in optimizing your corn silage. Careful attention needs to be paid to corn silage processing score and length of cut throughout the harvest season. [See our Kernel processing information series](#) for information from a recent studied completed in NYS with funding from NYFVI.

- Make sure the chopper is properly set up before the season starts
 - Factsheet: [Corn silage kernel processing](#)
- Chopper performance changes as field/crop conditions change. Monitor continuously
 - Factsheet: [Effect of corn plant characteristics on corn silage processing scores](#)
- Set Kernel Processing goals based on green samples. Consider potential improvements during fermentation a bonus
 - Factsheet: [Impacts of fermentation](#)

Preserve every pound of DM you harvest

When there are concerns about adequate feed inventories there is no room for excessive shrink (spoilage losses). Monitor fields and harvest at the correct whole plant DM and make every effort to ensile the crop properly, particularly when using bunks and piles as shrink losses can be the highest in these storage systems.

- **PACK! PACK! PACK!** – work to achieve a high density by properly packing the silage
 - Reduces shrink losses
 - Improves feed quality
 - Increases storage capacity
- Consider the use of scientifically backed bacterial inoculants



Cropping Notes

By Janice Degni, CCE Regional Field Crop Specialist

Here we are approaching the last week of August and corn is in the milk but with few signs of dent. Maturity is moving very slowly considering that pollination started in the third and fourth weeks of July. I participated in pro farmer yield checks August 8 and corn was mostly in early blister. According to the reference I use from Pioneer Hi-Bred International that predicts the average calendar days to maturity, it takes 40 days from silk to ½ milklake. Half milk line is the trigger for starting to assess readiness for harvest by checking whole plant moistures. By the first week in September, 35 days will have passed since widespread silking. There is little dent to be found when I've checked ears. We had some hot humid weather in June, followed by cooler, cloudier and rainy weather, not to mention the interference the smoke from wildfires caused. We will chop no corn before it's time, which means we will have to remain patient. I hope we can dry out a little by then and not be soaked by hurricane-driven rain during harvest.

The constant rain and showers since June have brought great



Example of white mold.

regrowth in hay crops but has made it nearly impossible to get through a harvest rain free. The high humidity and precipitation has also brought on white mold in soybeans. It's just getting started now and will be obvious by harvest if it's in your fields. Infection in corn with grey mold has been spotted. The infections I saw were light and in the lower canopy but with the persistent wetness it's likely to spread and get ugly.

Another problem pest I have found in a couple areas in Cayuga county is waterhemp. Waterhemp is in the pigweed family and is one of the glyphosate resistant weeds. The challenging fact is that these weeds are also resistant to several additional modes of action or herbicide chemistries. Many soybean growers are planting 2,4-D tolerant beans and spraying Enlist® to try and keep waterhemp under control. If you see weeds sticking out above your soybean canopy you should identify them to see if they are escapes of ragweed, lambsquarters or other weeds that

germinated late or escaped control or whether they are one of the three dastardly weeds that are glyphosate resistant. Please get in touch, if you want a second opinion.

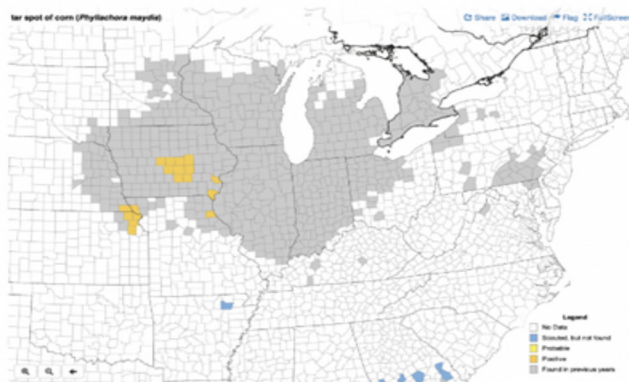
Please be on the watch for Tar Spot in field corn. The map shows the counties where it has been identified across the country. You can see that it has been found in three NYS counties not so far from our region.



Extension Weed Science Professor, Dr. Vipin Kumar with waterhemp



These pictures from the C.O.R.N. newsletter can help with Identification (<https://agcrops.osu.edu/newsletter/corn-newsletter/2020-03/tar-spot-corn>).



US Map of counties where Tar Spot has been confirmed in 2023 as of July 5. Map source: <https://corn.ipmPIPE.org/tar-spot/>.

NY Study Shows True Cost of Organically-Raised Heifer Replacements: Part One

by Fay Benson, Cornell University SCDFC Team

This is the first part of a two-part report on the “Organic Dairy Heifer Replacement Study” The project sought to work with fifteen organic dairies across New York to collect the true cost of raising a dairy heifer replacement for the milking herd on an organic dairy farm. The study also looks at factors influencing the successful rearing of healthy calves. A grant from the Northeast Dairy Business Innovation Center serving 11 states from offices at the Vermont Agency of Agriculture, Food & Markets funded this study. The complete report will be released this fall.

The project used Cornell University’s PRO-DAIRY’s “Dairy Replacement Analysis”. By using this spreadsheet for data collection the results could be compared to the cost of raising conventional dairy heifers. Data for conventional dairies was taken from the Cornell Dairy Replacement Program: Cost & Analysis Report of Summer 2019 costs from that study were adjusted for 3 percent inflation to allow current comparison.

Raising replacement heifers is the second highest cost after forage and feed costs on a dairy. A report presented at California Polytechnic State University indicated that it has been repeatedly shown that on conventional dairy farms the cost of raising replacement heifers takes 15 to 20 percent of total milk production costs. A dairy enterprise such as raising replacements which requires a significant portion of a dairy’s total costs was the reasoning behind the study. I worked with Ashley Pierce to collect data from fifteen organic dairies. The data was collected from the different groups of heifers on the farm so that cost and growth rates could be collected and shown on a per day basis. The data included costs for: feed, labor, bedding, healthcare, manure handling, and others. Weights of the animals were also collected at different stages to see how the growth rates compared to other farms and targeted growth rates for the breeds.

Getting a Good Start is Critical

The study looked at factors that influence the opportunity to raise quality replacement heifers. Calves born on any type of dairy farm need a good start. It doesn’t matter if a calf is born on a conventional or organic dairy, pre-weaned calves are at the highest risk of dying. Getting colostrum from the mother or another fresh cow into newborn calves in the first 24 hours of life is most important to provide antibodies.

Organic production rules allow for the use of vitamins and vaccines as needed. The farms in our study group used an array of oral vaccines to protect against E-coli, rotavirus, and coronavirus; nasal vaccines for IBR (infectious bovine rhinotracheitis) and PI-3 (parainfluenza type 3), and vitamins A, D, E and selenium to prevent deficiencies. A list of alternative treatments used as preventative measures is included in the final project report.

The major difference in management between the two production regimes was the length of time a calf remained on milk until weaned. The conventionally-raised heifer study group weaned calves at six to

eight weeks. The organic farm calves were kept on milk between 12 to 17 weeks; on one grass-fed dairy, calves were with a nurse cow for 24 weeks.

The main reason for the length of time that calves remained on milk was to reduce the chances of scours caused by E. coli, salmonella, or coccidia. The use of ionophores by conventional farms to treat coccidiosis offers a dual advantage in that this type of antibiotic acts as a biocide that prevents coccidiosis and simultaneously alters the rumen to increase growth of the calf. Organic farms have found keeping calves on milk (not milk replacer) longer allows the calf to build natural immunity to coccidia.

The time period when a calf is on milk is the highest cost of a calf’s birth-to-one-year life under both organic and conventional regimes, due to the cost of the milk over feed (forages and grain) and labor associated with the individual handling of the calves compared to weaned calves in group housing. This cost is exacerbated under organic management because the length of time fed is twice or three times as long and the revenue loss of the dam’s organic milk kept out of the milking stream is two to three times more.

Heifer Nutrition Affects Lifetime Production

Studies have shown that 22% of variation in first-lactation milk yield is due to a high pre-weaning growth rate in the first 49 days of age. Animal Science Professor Michael Van Amburgh, Ph.D. and colleagues in the Cornell University Department of Animal Science have shown that early heifer nutrition will affect a cow’s lifetime production. Proper heifer development begins with calf management that feeds adequate amounts of protein. Van Amburgh’s research indicates that maintaining 26 to 28 percent protein fed daily can influence calf growth by 1 to 2 pounds per day. Every pound of average daily gain can mean an approximate addition of 1,500 pounds of milk in her first lactation, and benefits subsequent lactations as well.

Milk from the dam provides the calf about 26% protein. Starter feed may provide as little as 18% protein. Calf managers need to be alert when switching calves to starter feed as a decrease in protein can limit calf growth and impact rumen development.

The study showed that organic dairies had unique challenges and opportunities with their heifers, e.g.,

- the high cost of organic grain tending to suppress the protein levels fed to replacements;
- organic standards forbidding the use of many drugs conventionally used to treat calf hood illness;
- the period of individual care of organically raised calves, rather than in conventional group housing, double or triple that of conventional dairy herds, increasing costs; and, at a year old, the organically-raised replacement animal utilizing grazing was able to

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Prepping for the Change in Season; The “Shoulder Seasons” Challenge

By Betsy Hicks, Area Dairy Management Specialist

In relative terms, Summer and Winter ventilation of calf barns is easy – supply the necessary adequate air exchanges for the weather, and with minor adjustments for the odd days, ventilation takes care of itself. The “Shoulder Seasons” – or Spring and Fall, offer more challenges because of temperature fluctuations, overnight conditions varying with daytime, and added challenge of rain/snow and humidity. When pairing these rapidly changing weather situations with the consistency needed for calf barns, we often see more respiratory distress in the Shoulder Seasons than in other months.

The usage of Positive Pressure Tubes has increased in recent years, and the dairy industry has fine-tuned the design of these tubes for different seasons. Some calf barns that utilize good natural ventilation have found that adding a tube for all seasons that offers basic air exchange at calf level is all they need to keep respiratory distress at bay during the shoulder seasons. Other farms, however, have realized that they have “dead spots” in their barns due to wind shadows, obstructions inside or outside the barn, that minimize air flow at calf level. Farms in this category may benefit from a tube designed for higher air exchanges for the months that require it. Many farms have also opted to do multiple tubes, utilizing the one that is designed for that particular season (ie, all season tube in the winter or a higher air exchange tube for the summer and warmer shoulder seasons).

Not sure if your barn has dead spots, or just wish you heard less coughing in your calf barn during the shoulder seasons? We’ve got

tools to help assess calf health and facility air flow and will gladly come out to help determine if a positive pressure tube might be the best direction for you to take.

To learn more about positive pressure tubes, the University of Wisconsin Dairyland Initiative has a great article on the history, usage and design <https://thedairylandinitiative.vetmed.wisc.edu/home/housing-module/replacement-housing/calf-barn-ventilation/>.



Pasture Management Tips

by Karen Hoffman from the NY Grazing Coalition Gazette - August 2023

This summer has really shown that our climate is really changing – from the big heat dome over the south and southwest, to torrential rains here in the northeast that have caused serious flooding. Part of planning your grazing management is to have contingency plans for things like extreme heat, drought, and flooding. If you’re not sure what that contingency plan should look like, at least in your head if not on paper, there are some good online resources to help you think through what you should do in those cases.

First, there is **On Pasture** – a free online library of tons of great grazing advice! Here’s the link: <https://onpasture.com/> - you’ll find right on the landing page that there are articles about climate and grazing, plus lots of other great articles to read through when you have time on a rainy day.

Secondly, the **Northeast Pasture Consortium** has a collection of research and extension articles here: <https://grazingguide.net/>, which

you can search through to find some really good ideas.

One of our speakers for Grasstravaganza 2023 was going to be Hugh Aljoe from the **Noble Research Foundation** – you can find articles by Hugh and others on how regenerative grazing helps the climate at <https://www.noble.org/>. The website also has lots of articles explaining what regenerative grazing really is.

If you want to feel better about the situation, there is this little nugget about why what you’re doing is helping to mitigate climate change from **USDA’s Northeast Climate Hub**: <https://www.climatehubs.usda.gov/hubs/northeast/topic/managing-grazing-improve-climate-resilience>.

And lastly, if you just want to read some fun personal experiences from a fellow Northeast grazer, there’s **Troy Bishopp’s** website <https://thegrasswhisperer.com/> - enjoy!



Characteristics of the Beef x Dairy Industry in New York State

By Margaret Quaassdorff, Dairy Management Specialist, CCE NWNy Team & Betsy Hicks, Dairy Management Specialist, CCE SCDFCNY Team

The usage of beef sires on dairy farms more than doubled from 2015 to 2019. In recent years, New York sale barns reported that beef x dairy (BxD) calves consistently brought \$50-

\$150 over a standard dairy bull calf. Because of the premium for black-hided calves, many dairy farmers have tried to capitalize on this novel market without fully understanding the

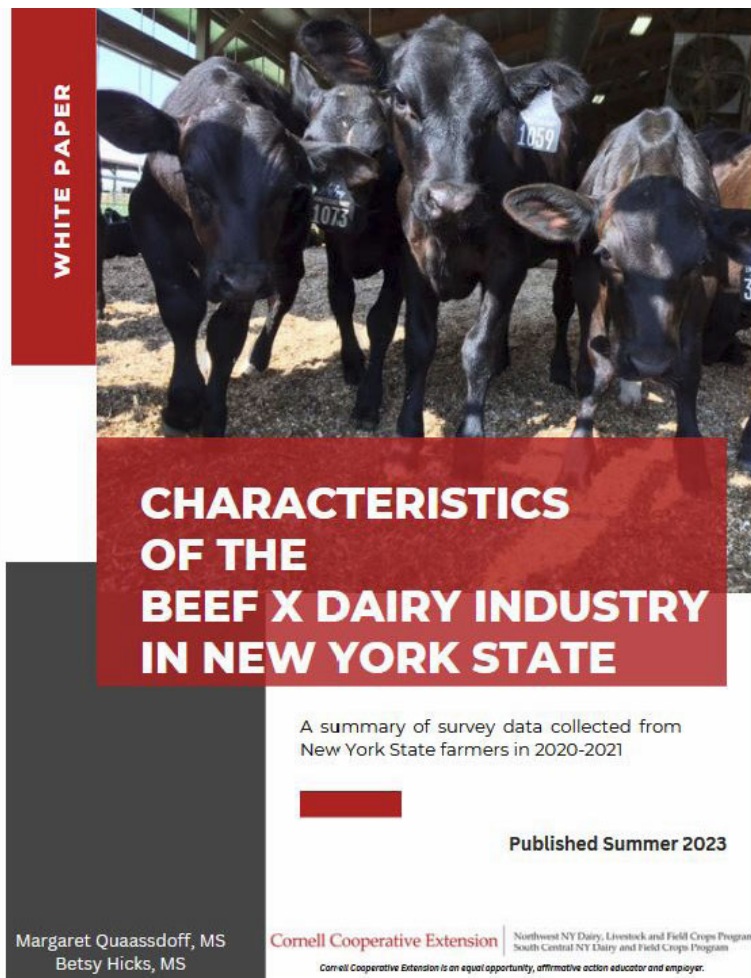
BxD industry and the implications of an inferior calf entering the beef supply chain.

Data presented in the white paper are from a Qualtrics survey conducted online between the months of October 2020 and June 2021. Farmers were surveyed to assess how they utilize beef sires in their dairy herds, their criteria in selecting dairy animals to breed to beef sires, and sire selection criteria. Farmers were also surveyed on their management practices of producing, raising, marketing and selling BxD cattle, as well as information needed by them to further their knowledge.

The majority of BxD calves are leaving dairy farms at less than a week old, however there are still a number of farms raising these cattle to different timepoints across the state implementing a variety of management and feeding strategies. This combined with the scarcity of on-farm scales and actual growth measurement data make it nearly impossible to gauge the “best” way to encourage farmers to incorporate a BxD enterprise into a farm’s business strategy.



Breeding for beef x dairy calves is becoming a common practice on dairy farms regardless of breed. Pictured here is beef cross calf out of a Jersey cow. Photo by M. Quaassdorff.



Results from this survey led to establishing several keys for the viability of the beef x dairy industry in New York State.

1. Proper Sire Selection at the Dairy Level
2. Excellent Newborn Management
3. Proper Nutrition and Efficient Growth Rates
4. Networking, Marketing, and Infrastructure Development
5. Economics and Benchmarking

Click to read: [Characteristics of the Beef x Dairy Industry in NYS-White Paper](#)

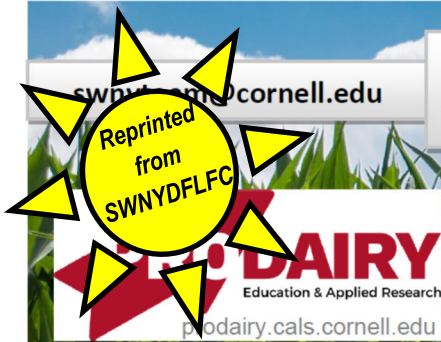
P.S. Exciting news! There has been so much progress in the Beef x Dairy Industry in NYS since 2021, and we are looking to learn what dairy farmers, buyers, and growers are doing now. Stay tuned for our follow-up survey to be launched this summer!



Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

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Dairy Market Watch
Newsletter
July 2023

An educational newsletter to keep producers informed of changing market factors affecting the dairy industry.

Milk Component Prices			Milk Class Prices				Statistical Uniform Price & PPD				
Month	Butterfat	Protein	I (Boston)	II	III	IV	Jamestown, NY		Albany, NY		Albany \$/gal. to farmer
July 22	\$3.36	\$2.91	\$29.12	\$26.66	\$22.52	\$25.79	\$25.21	\$2.69	\$25.81	\$3.29	\$2.23
Aug 22	\$3.40	\$2.14	\$28.38	\$26.91	\$20.10	\$24.81	\$24.27	\$4.17	\$24.87	\$4.77	\$2.14
Sep 22	\$3.56	\$1.88	\$26.87	\$26.51	\$19.82	\$24.63	\$23.67	\$3.85	\$24.27	\$4.45	\$2.09
Oct 22	\$3.65	\$2.45	\$25.96	\$25.73	\$21.81	\$24.96	\$23.62	\$1.81	\$24.22	\$2.41	\$2.09
Nov 22	\$3.37	\$2.53	\$27.34	\$24.67	\$21.01	\$23.30	\$23.12	\$2.11	\$23.72	\$2.71	\$2.04
Dec 22	\$3.15	\$2.65	\$25.83	\$23.11	\$20.50	\$22.12	\$21.91	\$1.41	\$22.51	\$2.01	\$1.94
Jan 23	\$2.77	\$2.80	\$25.66	\$21.61	\$19.43	\$20.01	\$20.71	\$1.28	\$21.31	\$1.88	\$1.84
Feb 23	\$2.71	\$2.36	\$24.03	\$20.83	\$17.78	\$18.86	\$19.60	\$1.82	\$20.20	\$2.42	\$1.74
Mar 23	\$2.73	\$2.41	\$22.24	\$19.52	\$18.10	\$18.38	\$18.78	\$0.68	\$19.38	\$1.28	\$1.67
Apr 23	\$2.70	\$2.56	\$22.10	\$19.20	\$18.52	\$17.95	\$18.62	\$0.10	\$19.22	\$0.70	\$1.66
May 23	\$2.75	\$1.80	\$22.82	\$19.11	\$16.11	\$18.10	\$18.31	\$2.20	\$18.91	\$2.80	\$1.63
Jun 23	\$2.76	\$1.51	\$21.26	\$18.83	\$14.91	\$18.26	\$17.46	\$2.55	\$18.06	\$3.15	\$1.56
June Utilization (Northeast): Class I = 27.1%; Class II = 25.1%; Class III = 30.5%; Class IV = 17.3%. Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.											

Dairy Commodity Markets (Excerpt from USDA Dairy Market News – Volume 90, Report 30, July 28th, 2023)

Dry Products: Low/medium heat nonfat dry milk (NDM) prices moved higher. Export demand is trending upward with increased interest from purchasers in Mexico. High heat NDM prices also moved higher. High heat NDM inventories are tighter as some manufacturers indicate a Q4 start for further high heat NDM drying schedules. Prices for dry buttermilk moved lower in the West, while Central and East dry buttermilk prices held steady. Some off-spec loads are selling into feed channels below the reported prices. Bottom end dry whole milk prices moved lower. Stakeholders relay most dry whole milk production is to meet contractual obligations.

Cheese: Cheesemakers in the Northeast say production has plateaued, as milk output is declining in the region. In the East and Midwest, contacts report strong cheese demand. Export sales of cheese are mixed in the West, as contacts report steady interest from purchasers in Mexico but note some hesitation in Asian markets. Cold storage space has become more available in the Northeast in recent weeks.

Butter: In the East and Central regions cream availability is tightening. East region butter makers are running active production schedules, while some butter makers in the Central region report scheduled down time at plants this week. In the East, increased market activity is starting to chip away at butter stocks, but contacts note inventories remain ample. Demand for butter is steady from retail and food service customers in the East. Export demand for butter is light in the West, while retail sales are steady, and food service demand is strong.

Fluid Milk: Milk production is seasonally declining week to week. Some areas of the East and Midwest are experiencing abnormally dry conditions. Drought monitors indicate pockets of moderate to severe drought. Heavy rainfall and flooding have caused crop damage concerns in portions of the East.

Friday CME Cash Prices					
Dates	6/30	7/7	7/14	7/21	7/28
Butter	\$2.44	\$2.48	\$2.55	\$2.58	\$2.68
Cheese (40# Blocks)	\$1.33	\$1.39	\$1.48	\$1.78	\$1.90

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Weekly Average CME Cash Price - 2019 to Present



Dairy Situation and Outlook - July 20, 2023 by Bob Cropp, Professor Emeritus, University of Wisconsin-Madison

Originally published here: <https://fyi.extension.wisc.edu/kewauneeag/files/2023/07-Dairy-Situation-and-Outlook-July-2023.pdf>

After record high milk prices in 2022 milk prices continue to fall reaching prices not seen since 2020 and 2021. Class III was in the \$13's from October of 2020 to February of 2021. The January Class III price was \$19.53. The July Class III could be as low as \$13.80, \$5.63 below January and \$11.99 below \$25.79 a year ago. Milk prices are now well below profitable levels for dairy producers.

These milk prices show that milk prices are subject to rather small changes in milk supply, milk demand or a combination of changes in supply and demand. Last year milk production was just 0.1% higher than the year before. This year milk production from January to June has been 0.7% higher than a year ago but the increase is slowing. June milk production was unchanged from a year earlier. But increased domestic demand and/or dairy exports are required to take up this increased production to prevent falling milk prices. Record high milk prices last year resulted in higher retail prices of dairy products which may have dampened domestic demand some. With lower milk prices retail dairy product prices are starting to decline some but not nearly to the extent of lower milk prices.

Dairy exports were a record last year with record cheese exports. But on a volume milk solids equivalent basis May exports were 13% lower than a year ago with cheese exports 18% lower and dry whey product exports down 29%. May was the third consecutive month dairy exports were lower than the previous year. Weaker demand from key export markets such as China and increased competition from New Zealand have dampened exports. Lower dairy exports mean more milk is needed to clear the domestic market without lowering milk prices.

The July Class III price should be the bottom for the year with the price trending upward for the remainder of the year. Milk cow numbers fell by 16,000 from May to June. June cow

numbers were finally below a year ago, down 5,000. There was no increase in milk per cow. As a result, June milk production was unchanged from a year ago.

Milk production is likely to run below a year ago for the remainder of the year. With the existing widespread drought this year's final crop production is uncertain. The drought has already reduced alfalfa hay production. Feed prices will remain at relatively levels. Higher feed prices and lower milk prices will make margins tight for dairy producers. Dairy producers are likely to reduce cow numbers in response.

Domestic demand may improve as retail prices soften some. Dairy exports could improve some by the third quarter of the year. Except for butter the price of cheese, dry whey and nonfat dry milk/skim milk powder are very competitive on the world market. Some export markets may take advantage of these lower prices and start to increase purchases.

Milk prices will trend higher for the remainder of the year. Milk production will be in its seasonal low August through September. Schools will begin to open at the end of August and early September which will help beverage milk sales. By October butter and cheese stocks will start to build to meet the higher season sales of cheese and butter Thanksgiving through Christmas. Class III futures show a continued improvement in the Class III price with it in the \$15's by August, the \$16's by September and the \$17's for the remainder of the year. But the latest USDA forecast is not as optimistic. USDA has Class III averaging just \$14.30 for the third quarter and \$15.05 for the fourth quarter with the average for the year \$16.05 compared to \$21.96 last year. With the sensitivity to small changes in milk supply and/or demand I think the probability is high for third quarter and fourth quarter prices to be higher than USDA's forecast. But time will tell. •

Euthanasia: A Difficult Task for Dairy Employees

By Kaitlyn Lutz , Area Dairy Specialist from CCE North West NY Reg. Ag Team

Euthanasia is no one's favorite topic, but it is an 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).

See the list of mental health resources available in English and Spanish, below, and please share with your employees.

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, 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.

Bilingual Mental Health Resources

Factsheets/info:

National Center for Farmworker Health: http://www.ncfh.org/mental_health_hub.html

NCFH mental health handouts: http://www.ncfh.org/health_education_resources.html

Idaho Dairywomen's Association: https://idahodairywomens.org/uploads/Salud-Mental-y-Bienestar_Manager-copy_2022-03-15-034314_bqbz.pdf

Phone numbers:

988 mental health crisis line: <https://omh.ny.gov/omhweb/crisis/988.html>

Call For Health info & referral hotline: <http://www.ncfh.org/callforhealth.html>

Farm Aid’s toll-free hotline: 1-800-FARM AID (1-800-327-6243)

SAMHASA national helpline: 1-800-662-HELP (4357)

Local community health clinics:

Finger Lakes Community Health (315) 781-8448



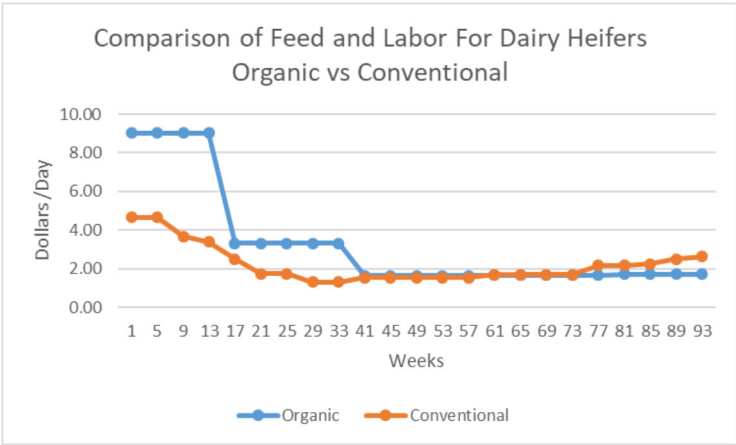
A non-ambulatory cow in need of euthanasia. Photo: K.Lutz



(NY Study Shows True Cost, Continued from page 5)

reduce labor and feed cost below that of the conventionally raised heifers.

The Chart shows the difference in cost for feed and labor between conventionally raised heifers vs organically raised heifers during their two years of growth.



Part two of this report will look at the specific costs and the development of benchmarks for other farms to compare their costs. An alternative healthcare manual will be also made available in the second part of the report. It was developed, in part, by the farmers in this study and will give treatments to assist organic dairy farmers in dealing with a number of medical ailments in their heifers and other animals on the farm.

<https://dyson.cornell.edu/wp-content/uploads/sites/5/2020/09/Dairy-Replacement-Costs-Writeup-Final1-VD.pdf>



Last Alfalfa Cutting and The Fall Rest Period

Reprinted from Agronomic Crops Network from Ohio State University Extension | C.O.R.N. Newsletter

The next two weeks are the best time to take the last alfalfa cutting of the year while maintaining stand productivity. We recommend the last harvest to be taken by September 7 in northern Ohio and September 15 in southern Ohio. This will allow a fall rest period for alfalfa, which is probably more important than usual this year due to the stressful growing conditions we’ve had.

Cutting schedules of alfalfa have been greatly disrupted in Ohio this year to the extended wet weather the first half of the summer followed by dry conditions in many areas. Consequently, many fields are too short for economic harvesting within the next two weeks. This is a tough situation to be sure, because cutting later (September 15 to October 30) will add significant additional stress to fields that are already in poor condition from the earlier wet weather.

The fall period is when alfalfa and other tall legumes like red clover undergo many physiological responses to the cooling temperatures that prepare the plants to survive the winter. Carbohydrate and protein reserves are accumulated in the crowns and roots during the fall. Cold-hardening processes also occur that increase plant resistant to cold temperatures. Interrupting those processes by cutting could result in the plants having inadequate cold hardiness along with lower energy and protein reserves for good survival through the winter and for initiating vigorous regrowth next spring.

Fall cutting is a stress to the plant, and its effects will be more severe in fields that are currently not in a vigorous condition. A number of factors affect the level of risk incurred with cutting during the critical fall period. These include overall stand health, variety disease resistance, insect pest stress during the summer, age of stand, cutting management, fertility, and soil drainage.

A vigorous, healthy stand is more tolerant of fall cutting than a stressed and weakened stand. The most significant factor this year affecting alfalfa was excessive soil moisture. Alfalfa fields that were stressed by wet soil conditions, along with leafhopper feeding, are in a compromised condition. The fall rest period will be very important to their recovery and future productivity.

Alfalfa varieties with high disease resistance and good levels of winter hardiness will be more tolerant to the negative effects of a fall cutting because there is less total stress on the plant. Adequate fertility, especially soil potassium levels, will improve plant health and may increase tolerance to fall cutting effects. A high soil pH of 6.8 to 7.0 will also reduce the risk of fall cutting. Stands under 3 years of age are more tolerant of fall cuttings as compared with older stands where root and crown diseases are setting in.

Alfalfa that has been cut three or more times before a fall harvest has a higher risk factor for injury from fall harvesting than does a stand cut only twice so far this year. In other words, the cutting frequency during the growing season can affect the energy status of the plant going into the fall. Frequent cutting (30 day intervals or less) results in the plant never reaching full energy reserve status during the growing season. This makes the critical fall rest period more necessary for plants to accumulate adequate reserves before winter.

A final factor is soil drainage. Alfalfa stands on well-drained soils tolerate later fall cuttings better than alfalfa on moderately or poorly drained soils. Low plant cover going into the winter from late cutting increases the risk of winter heaving on many Ohio soils. We observed significant heaving the past two winters in NE Ohio, and many of those stands had been harvested the previous fall.

Cutting alfalfa during the critical fall period is tempting due to the need for high quality forage and the disrupted cutting schedules we experienced this year. But before deciding to cut alfalfa after September 15, carefully consider the condition of the stand and the risk factors discussed above. If the stand suffered excessive soil wetness this year and is lacking vigor, consider the risk from fall cutting to be greater this year than is usual. Do you need the forage this fall more than the need to maintain the vigor of the stand for next year? Can you risk losing productivity of the stand come next spring? If you chose to accept the risk of mid-fall cutting, then leave some uncut strips in different areas of the field so you can compare the regrowth next spring in cut and uncut areas. That will provide a comparison that will inform your future fall cutting decisions.



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Thank you for your understanding. Your South Central Dairy & Field Crops Team

Upcoming Events Calendar

August 23 10 am—3 pm	4-R Field Day DuMond Farms— 5083 White Rd, Union Springs, NY 13160 Sponsored by the NYS Agribusiness Association and partners
Aug 23 –Sept 4	New York State Fair, Syracuse, New York FMI: https://nysfair.ny.gov/ All tickets are purchased electronically.
Sept 11-13	Grassfed Exchange, Hershey, PA FMI: https://grassfedexchange.com/
September 6 11 am – 1pm	Newark Valley Burndown & Corn variety plot tour with Ward & Van Scoy; Bring stalks. Lunch provided.
September 14 8 am - 4pm	2023 Cornell Grain & Fiber Hemp Field Day FMI: https://hemp.cals.cornell.edu/
September 23 10 am - 2pm	Chemung County Beef Quality Assurance, Chemung Co. Fairgrounds
November 14	Equipment Safety & Maintenance School, English & Spanish Location TBD

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