



A partnership between Cornell University and the CCE Associations in these five counties: Allegany, Cattaraugus, Chautauqua, Erie, and Steuben.

Crops, Cows, and Critters Newsletter

Volume 2 · Issue 7 · August 2021

# 2021 Corn Silage Pre-Harvest Meetings

Two Locations

Wednesday, September 1st, 2021

**10am - 12noon**  
**Blesy Farms, LLC**  
7517 Henrietta Rd  
Springville, NY  
14141

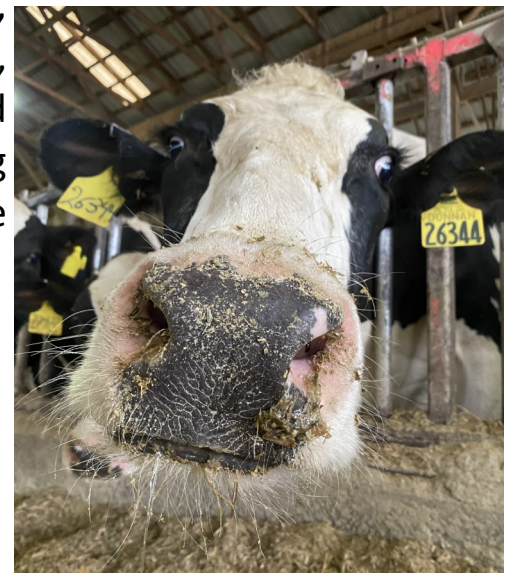
**2pm - 4pm**  
**Lismore Dairy**  
8545 NY-961F  
Arkport, NY 14807

Free to Attend

Registration required by 8/31

to help prepare materials and to contact you in the unlikely event of cancellation or location change.

Join Cornell PRO-DAIRY Forage Specialist, Joe Lawrence, to discuss pre-harvest considerations for corn silage production. Topics that will be covered in this discussion style meeting will include harvest season safety, the importance of whole plant dry matter, chopper set-up for kernel processing and particle size, ensiling considerations and tips for success, molds and toxins, agronomics, and more depending on attendee interest.



Register online by visiting or by calling/texting/ emailing Katelyn Walley-Stoll at 716-640-0522 or kaw249@cornell.edu.

In this issue:

- Welcome Camila ..... 4
- Administering Injections ..... 5
- Dairy Market Watch ..... 6
- Storage Planning ..... 8
- And More!



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.

## Contact Our Specialists



### Katelyn Walley-Stoll

*Team Leader  
Farm Business Management*  
716-640-0522  
kaw249@cornell.edu



### Amy Barkley

*Livestock and Beginning Farms*  
716-640-0844  
amb544@cornell.edu



### Camila Lage

*Dairy Management*  
607-422-6788  
cd546@cornell.edu

We're hiring! Give Katelyn a call to learn more about our Field Crops Management Specialist position and how to apply.

## County Association Executive Directors

#### Allegany County

Laura Hunsberger  
lkh47@cornell.edu  
585-268-7644 ext. 17

#### Cattaraugus County

Dick Rivers  
rer263@cornell.edu  
716-699-2377 ext. 122

#### Chautauqua County

Emily Reynolds  
eck47@cornell.edu  
716-664-9502 ext. 201

#### Erie County

Diane Held  
dbh24@cornell.edu  
716-652-5400

#### Steuben County

Tess McKinley  
tsm223@cornell.edu  
607-664-2301

"Cows, Crops, and Critters Newsletter" by the Southwest New York Dairy, Livestock, and Field Crops Program with Cornell Cooperative Extension in partnership with Cornell University and the five county region of Erie, Chautauqua, Cattaraugus, Allegany, and Steuben and their CCE Associations. To simplify information, brand names of products may be used in this publication. No endorsement is intended, nor is criticism implied of similar products not named. Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Changes occur constantly and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying pesticides. By law and purpose, Cooperative Extension is dedicated to serving the people on a non-discriminatory basis. Newsletter layout and design by Katelyn Walley-Stoll.

## County Association Agriculture Educators

**Sharon Bachman** - Erie County  
*Agriculture & Natural Resources Educator*  
sin2@cornell.edu · 716-652-5400 ext. 150

**Jeremy Baier** - Allegany County  
*Community Horticulture Educator*  
jtb273@cornell.edu · 585-268-7466 ext. 14

**Lynn Bliven** - Allegany County  
*Ag & Natural Resources Issue Leader*  
lao3@cornell.edu · 585-268-7466 ext. 18

**Lisa Kempisty** - Chautauqua County  
*Dairy/Livestock Community Educator*  
ljk4@cornell.edu · 716-664-9502 ext. 203

**Ariel Kirk** - Steuben County  
*Agriculture Educator*  
adk39@cornell.edu · 607-664-2574

**Kathleen McCormick** - Erie County  
*Agriculture Educator*  
km864@cornell.edu · 716-652-5400 ext. 146

**Jesse Meeder** - Cattaraugus County  
*Farm to School/Ag in the Classroom Coordinator*  
jpm453@cornell.edu · 716-699-2377

**John Whitney** - Erie County  
*Agriculture Educator*  
jrw44@cornell.edu · 716-652-5400 ext. 146

# swnydlfc.cce.cornell.edu

Stay connected: Follow us on social media, sign up for our newsletter, visit our website.

Individual articles may be used for educational purposes with the permission of the author and proper credit given to the author and our publication.

**CROPS  
COWS &  
CRITTERS**  
newsletter

For accommodations or accessibility concerns, please contact our specialists at least one week prior to the scheduled event. If you need information provided in a different format, call 716-640-0522.

## Cornell Meat Marketing Study Still Seeking Participant Farmers

A team at Cornell University researching direct-to-consumer sales of locally-raised meat seeks farms to participate. The goal of the project is to help meat producers improve sales in their markets and profit per head of livestock marketed. NY farms that sell meat by-the-cut at farmers markets and in their own farm stores can participate. The project team invites farms to participate and receive one-on-one assistance with analyzing sales data and pricing. Participation requires using POS software (preferably Square) to record all customer orders in real time. In return, our team analyzes the data, providing participants with summary reports and specific advice aimed at increasing farm revenue. In addition, the project includes a new Meat Price Calculator tool to assist with price changes. Project participants receive one-on-one consultation and technical assistance with marketing and pricing.

Farms that wish to learn more about the project and/or participate can contact Matt LeRoux, Extension Associate at [mnl28@cornell.edu](mailto:mnl28@cornell.edu)

A recorded presentation about the project can be found at: [https://vod.video.cornell.edu/media/Cornell+Meat+Marketing+Project+Introduction+Presentation+whole/1\\_xznlq94](https://vod.video.cornell.edu/media/Cornell+Meat+Marketing+Project+Introduction+Presentation+whole/1_xznlq94)

## Are Your Beef Cattle Getting Enough Quality Water?

*Amy Barkley, Livestock Specialist*

Look at the diet of your beef cattle. What's the most important component? While some may argue protein, and others TDN, what may slip under the radar is the importance of water. Water is necessary for all metabolic functions ranging from weight gain to immune health. During the summer, it's more important than ever to ensure that your animals have clean, ample sources of water for their welfare, health, and production.

When planning out water sources for beef cattle in summer, there are some rules of thumb which should be followed.

For dry cows which are expected to calve in the fall, 1 gallon/100 lbs of bodyweight is needed. If the cow has calved in spring and is lactating with a calf by her side, she will need 2 gallons/100 lbs of bodyweight (combined of both her and her calf).

The requirements of bulls are the same as cows at 1 gallon/100 lbs of bodyweight.

Growing stock is more variable in regards to their water needs, which depend on weight and diet. If they are

consuming a very dry diet, their requirements will be close to 2 gallons/100 pounds of bodyweight. If those animals are out on lush pasture, the requirements go back down to 1 gallon/100 pounds of bodyweight.

Cattle will consume any water available if they are forced to, regardless of quality, but production and health may suffer. There are steps that producers can take to ensure high quality water is available to reduce risk of disease and allow for the greatest potential for complete hydration.

When providing water in a trough, the focus of water testing should include levels of dissolved solids, nitrates, and minerals. Dissolved solids are commonly found in costal region wells, but can be present in SWNY wells, too. Dissolved solids levels below 3,000 ppm (parts per million) should be strived for. Nitrates are more commonly found than dissolved solids. Nitrate levels of greater than 100 - 300 ppm can result in chronic toxicity and death, especially if the pasture or feed provided is also high in nitrates. To help reduce this risk, providing water from a source that has been properly buffered (200' distance) when manure is applied is helpful. Minerals such as sulfur, iron, and manganese can be in water at high levels, causing foul odors and flavors, which decrease consumption. Water filters may need to be installed to address this problem if a significant adverse odor or flavor is noted.

Providing drinking water in ponds is acceptable, but measures should be taken to help ensure that water is of good quality. If possible, the pond should be located at the top of a field or at the bottom of a field which has had a 200' buffer when manure nutrients are applied to help reduce nitrate levels. Second, keeping cows fenced out of a pond is helpful to reduce fecal contamination and algal growth. Bluegreen algae is commonly seen in ponds with excess nutrients, and it has the potential to produce toxins which can kill cattle. It should be noted that clean water provided in a trough is better consumed (9% higher) than that from a pond because of improved water quality factors.

In conclusion, having ample, clean water is one way to ensure the success of your cattle through the summer and beyond.

This article was adapted from information originating in the fact sheet published by Ted G. Dyer of the University of Georgia Extension titled, "Water Requirements and Quality Issues for Cattle".



Want to participate in the Meat Marketing study, but unfamiliar with POS software? Contact Matt LeRoux - his team will be more than happy to help you get started.

**CROPS  
COWS &  
CRITTERS**  
newsletter

For assistance with designing water systems using natural water sources, contact your local Soil and Water Conservation District office.

## Welcome Camila!

### Camila Lage Joins SWNY Dairy, Livestock, and Field Crops Program as Dairy Management Specialist

Cornell Cooperative Extension's Southwest New York Dairy, Livestock & Field Crops Program (SWNYDLFC) is excited to welcome Camila Lage as their program's Dairy Management Specialist. Camila will be working on research and outreach related to dairy herd health and management, calf and heifer rearing, milk quality, nutrition, and improving efficiency and environmental sustainability of dairies. You can reach Camila by emailing [cd546@cornell.edu](mailto:cd546@cornell.edu) or by calling 607-422-6788.

Camila grew up in the largest milk producing state of Brazil. She graduated as a Veterinarian from the Federal University of Minas Gerais - Brazil, where she also got her MSc. and Ph.D. in Animal Science with a focus on calf rearing. Camila spent 2 years of her Ph.D. program at Penn State as a visiting scholar, working with Dairy Nutrition, especially related to protein nutrition. Camila then worked as a Postdoc at the University of California-Davis, where she worked with the economic opportunities of implementing automatic milking technologies in dairy farms. She is looking forward to working with producers in the area and connecting the agricultural industry to Cornell resources.

"Camila brings such a wide range of experiences to our program," said Katelyn Walley-Stoll, SWNYDLFC Team Leader and Farm Business Management Specialist. "We've been visiting farms and welcoming her to the region, she's already got some great ideas about programming and is looking to learn more about the specific needs of our region's 680+ dairy producers."



The Southwest New York Dairy, Livestock, and Field Crops Program is the newest Cornell Cooperative Extension regional program and covers Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Counties. Southwest New York Dairy, Livestock, and Field Crops regional specialists work with Cornell faculty and Extension educators to address the issues that influence the agricultural industry in New York by offering educational programming and research based information to agricultural producers, growers, and agribusinesses in the Southwestern New York Region. Camila Lage joins Katelyn Walley-Stoll, Business Management Specialist, and Amy Barkley, Livestock Specialist. The team is also recruiting a Field Crops Specialist.

Camila Lage, SWNYDLFC Dairy Management Specialist, can be reached at 607-422-6788 or [cd546@cornell.edu](mailto:cd546@cornell.edu).

## Chautauqua County Soil Health Field Day Wednesday, August 25th, 9:15am—12:30am

Lesch Farms LLC  
4893 West Main Road (Tent in Field)  
Fredonia, NY

All are invited to take part in this free in-person event highlighting land stewardship through soil health. Topics include how healthy soils reduce runoff; weed, insect, and disease challenges with tillage; and soil health indicators.

NYS DEC Pesticide Recertification Credits are available:  
Category 1A- Ag Plant, 0.75 points and  
Category 21- Field and Forage, 0.75 points.

Please bring your NYS DEC Pesticide Applicator License to receive credits.

Pre-registration is not required. Please arrive at the event and sign in.



## How you Administer Injections Matters

By Amy Barkley, Livestock Specialist

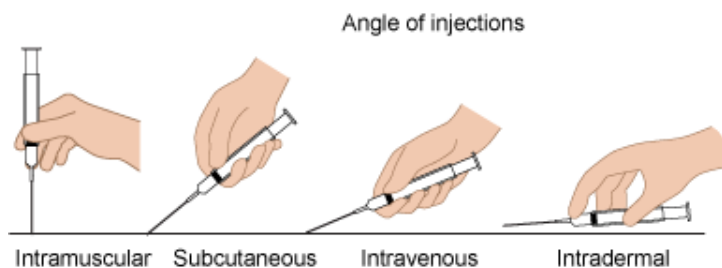
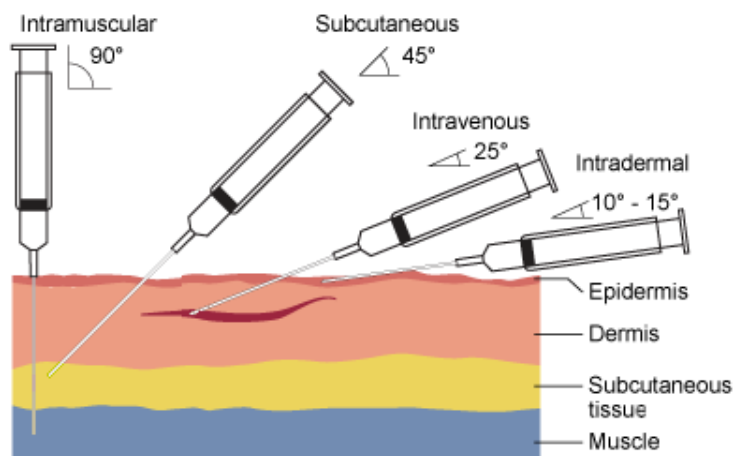
Injections are necessary, and sometimes even life-saving, for many of our livestock species. Each liquid that we inject is formulated to be placed not only in different regions of the body (think the triangular mass of muscle of the neck for most cattle vaccines vs the buttocks for some equine injections), but also in different layers of tissue (muscle vs skin vs vein). The correct placement of a needle allows the vaccine, fluid, or antibiotic to fall in the proper place to be absorbed by the body in the most effective manner. Angles of the four most common injections are listed below from largest (perpendicular with the skin surface) to smallest (nearly parallel with the skin surface).

**Intramuscular:** This injection is made to go deep into the muscle. The needle will be placed at a 90-degree angle (perpendicular) to the skin to allow for penetration into that tissue. A large muscle works best for these injections, but care needs to be taken with placement, especially on meat animals, since many of these injections cause damage, and ultimately condemnation, of the muscle tissue they come in contact with.

**Subcutaneous:** A properly placed subcutaneous injection is going to result in a lump of fluid underneath the two layers of skin (epidermis and dermis). The depth of these two layers varies with species, breed, and age. Under the skin layers resides connective tissues, which lack blood vessels, resulting in a slow absorption of any liquid placed there. An area of loose skin is an ideal place for these injections since there is room for the fluid to accumulate. The needle will be placed at an angle of 45 degrees to the skin surface.

**Intravenous:** The needles used for either injections or removal of blood should be placed where a vein is readily accessible. This is usually in the legs, neck, udder, or tailhead of our livestock species. Many times, the veins are readily visible, but sometimes moderate pressure needs to be applied below the area where blood is being removed to make the vein obvious. To access the vein, the needle should be inserted at an angle of 25 degrees to the skin. Drawing back on the plunger of a properly placed syringe should result in some blood in the syringe body, indicating the needle is in the vein.

**Intradermal:** This injection requires the needle to be placed just under the epidermis (outer layer of skin) and into the dermis (inner layer of skin). These injections take a very fine needle (larger gauge, shorter length). Correct placement of the needle is between 10 and 15 degrees with the skin surface. Correct placement is verified by the formation of a blister of fluid just under a thin layer of skin.



Graphic from Wikipedia

### CCE Flock Talks

#### Internal and External Parasites of Poultry Featuring Special Guest, Dr. Jarra Jagne

Wednesday, August 25th, 7pm-8pm via Zoom

Join Dr. Jarra Jagne, poultry veterinarian and head of the Avian Health Program at Cornell's Animal Health Diagnostic Center in Ithaca, to learn about common internal and external parasites of poultry. Dr. Jagne will speak to the biology of these parasites and how to manage them for a healthy, successful flock.

**Registration:** Free

**Register here:** <https://tinyurl.com/poultryparasites>

A call-in option and paper copies of the lecture notes will be made available upon request. If you'd like this option or to register through CCE, call Amy Barkley at (716) 640-0844 or email at [amb544@cornell.edu](mailto:amb544@cornell.edu)



Always read the label of injectable substances to ensure accurate administration rates and techniques.

**CROPS  
COWS &  
CRITTERS**  
newsletter

If you are interested in learning more about the stories shared here, contact Livestock and Beginning Farm Specialist, Amy Barkley, at 716-640-0844 or [amb544@cornell.edu](mailto:amb544@cornell.edu).

August 2021 - 5

# Dairy Market Watch

## July 2021



Prepared by Katelyn Walley-Stoll.

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
June 20	\$1.86	\$4.53	\$14.67	\$12.99	\$21.04	\$12.90	\$14.51	(\$6.53)	\$15.11	(\$5.93)	\$1.30
July 20	\$1.95	\$5.62	\$19.81	\$13.79	\$24.54	\$13.76	\$17.93	(\$6.61)	\$18.53	(\$6.01)	\$1.60
Aug 20	\$1.63	\$4.44	\$23.03	\$13.27	\$19.77	\$12.53	\$16.87	(\$2.90)	\$17.47	(\$2.30)	\$1.51
Sep 20	\$1.59	\$3.39	\$21.69	\$13.16	\$16.43	\$12.75	\$15.65	(\$0.78)	\$16.25	(\$0.18)	\$1.40
Oct 20	\$1.64	\$5.01	\$18.45	\$13.63	\$21.61	\$13.47	\$15.92	(\$5.69)	\$16.52	(\$5.09)	\$1.41
Nov 20	\$1.56	\$5.62	\$21.29	\$13.86	\$23.34	\$13.30	\$17.12	(\$6.22)	\$17.72	(\$5.62)	\$1.53
Dec 20	\$1.54	\$3.03	\$23.12	\$14.01	\$15.72	\$13.36	\$16.11	\$0.39	\$16.71	\$0.99	\$1.44
Jan 21	\$1.55	\$3.04	\$18.39	\$14.18	\$16.04	\$13.75	\$14.76	(\$1.28)	\$15.36	(\$0.68)	\$1.32
Feb 21	\$1.44	\$2.98	\$18.79	\$14.00	\$15.75	\$13.19	\$14.65	(\$1.10)	\$15.25	(\$0.50)	\$1.31
Mar 21	\$1.72	\$2.70	\$18.45	\$15.07	\$16.15	\$14.18	\$15.35	(\$0.80)	\$15.95	(\$0.20)	\$1.38
Apr 21	\$1.94	\$2.81	\$18.76	\$15.56	\$17.67	\$15.42	\$16.21	(\$1.46)	\$16.81	(\$0.86)	\$1.45
May 21	\$1.98	\$3.13	\$20.35	\$16.22	\$18.96	\$16.16	\$17.19	(\$1.77)	\$17.79	(\$1.17)	\$1.53
June 21	\$1.96	\$2.53	\$21.54	\$16.66	\$17.21	\$16.35	\$17.35	\$0.14	\$17.95	\$0.74	\$1.55

**June Utilization (Northeast): Class I = 28.1%; Class II = 24.8%; Class III = 24.9%; Class IV = 22.2%.**  
*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 (Excerpts from USDA Dairy Market News – Volume 88, Report 25, June 25th, 2021)

**Dry Products:** Low/medium heat nonfat dry milk (NDM) prices are mixed this week. Buying demands are slowing. Low/medium heat NDM market tones are somewhat unsettled. High heat NDM prices are steady to lower. High heat NDM markets are flat. Dry buttermilk prices are to steady to slightly lower. Market participants' demands are fairly steady in domestic and international markets. The dry whole milk price range has tightened. Spot market activities are slightly quiet. Pricing for both acid casein and rennet casein are unchanged. Customer interest is beginning to increase.

**Butter:** Cream availability is mixed. Contacts report some tightness in the West, but others say cream is widely available in the East and Central regions. Although cream cheese operations are pulling heavy volumes of available cream, butter production is seasonally steady. However, some Northeastern contacts report that a few butter operations are selling cream in lieu of churning. Butter inventories are healthy. Butter is available to meet spot and contract demands. Retail sales are meeting seasonally softer expectations. Food service demands vary.

**Cheese:** Cheese sales are noted as steady or strong for producers across the nation. Cheese prices on market exchanges have enticed some export purchases, according to Western contacts. Milk is plentiful for production nationwide, although spot milk prices are moving higher in the Midwest. Inventories of cheese vary by plant. Eastern contacts say inventories are steady to growing. They report a limit on storage capacity, and load delivery snags and port congestion are not alleviating the situation. Cheese market tones are, in a word, a quiver.

**Fluid Milk:** Milk production is slightly decreasing throughout the United States. Milk supplies are beginning to fall more in line with end usage immediate needs and storage capacities. Some manufacturers are heavy with condensed skim volumes. Cream markets are mixed. In general, many market participants note cream remains available during the mid-summer season.

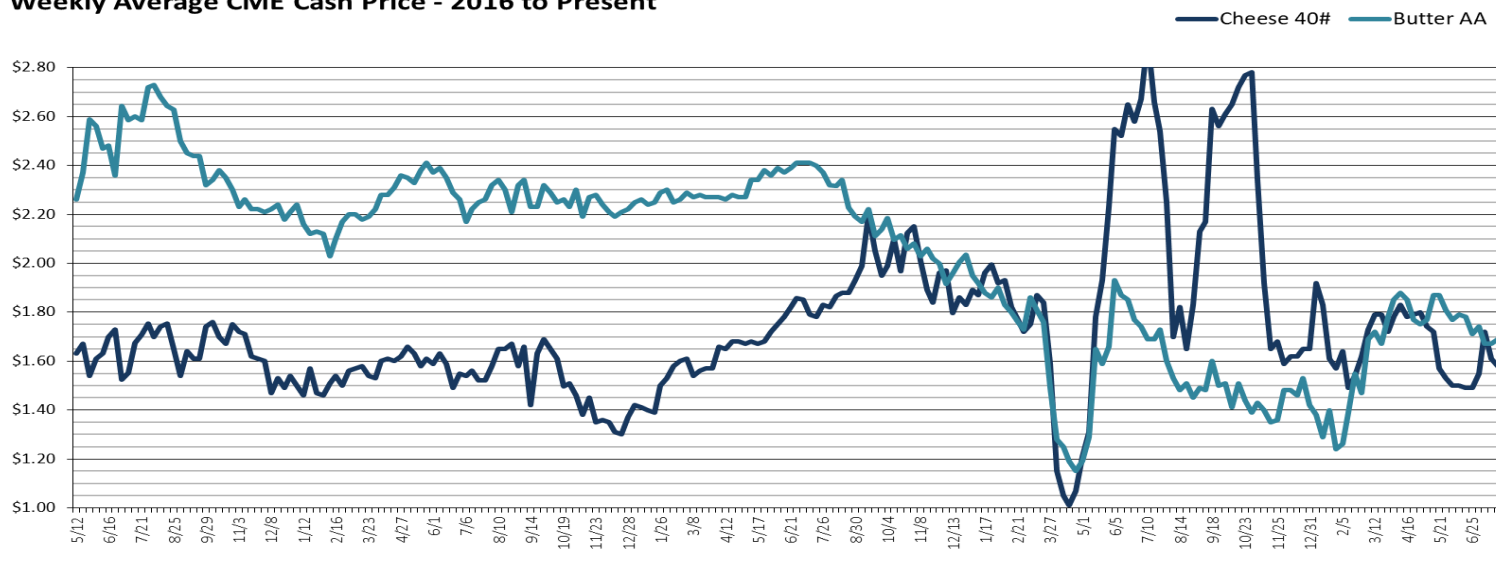
Friday CME Cash Prices					
Dates	6/25	7/2	7/9	7/16	7/23
Butter	\$1.71	\$1.74	\$1.67	\$1.67	\$1.69
Cheese	\$1.49	\$1.55	\$1.72	\$1.61	\$1.58

Seasonally, milk production is on the decline in the country and as school orders come in, this has tightened fluid milk stocks.



For more information on Dairy Business Management and Market Analysis, contact Katelyn Walley-Stoll, Farm Business Management Specialist, at 716-640-0522 or kaw249@cornell.edu.

## Weekly Average CME Cash Price - 2016 to Present



### July 2021 Dairy Market Watch Commentary

*Katelyn Walley-Stoll, Farm Business Management Specialist, Cornell Cooperative Extension*

July 16th's Livestock, Dairy, and Poultry Outlook showed the softening of what was probably an overly optimistic milk price forecast. USDA's all milk price forecast for 2021 is \$18.30, Class III at \$16.80, and Class IV or \$15.40.

An improved export market seems to be helping industry prices recover. Red meat exports increased by 7.2% in 2021 compared to 2020, beef in particular by 16%. Dairy exports are increasing by almost 9% and should remain at that level through 2022 as Mexico, China, and Southeast Asia all up their purchases. While these numbers are all relatively large increases, there is strong international prices competition as the US, and worldwide, economy remains unsteady.

However, wholesale purchases have slowed or declined from their pickup as things started "returning to normal" across the country. While Fall would typically bring increased school orders and glimpses of a robust holiday season, the coming months remain uncertain as the Delta variant continues to work its way through vulnerable and unvaccinated communities. The prices for 40-pound cheese blocks (down 9 cents), 500-pound barrels (down 8 cents), and butter (down 1 cent) all decreased from June to July.

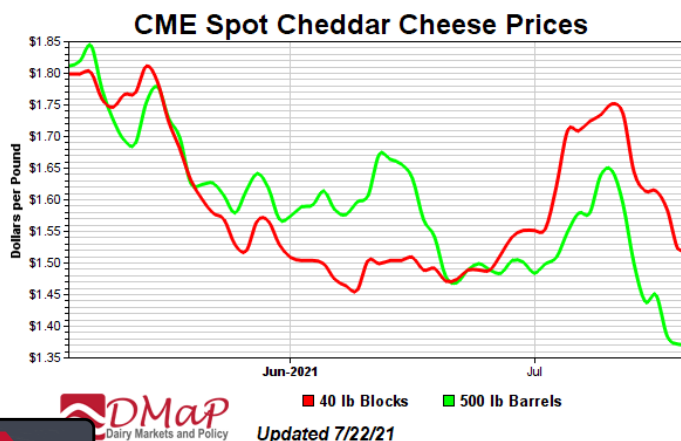
Additionally, cow numbers were higher than expected and continue to rise. May's estimated number of milk cows was 9.505 million, and 5,000 increase from April. According to USDA, this increase in cow numbers has been continual since July 2020. May to June's increase did seem to even out a bit.

Perhaps strong beef prices, tight forages, and pricey grain/commodity prices will pull the reins on

cow numbers moving into 2022, helping to reduce milk production and improve prices - but that situation includes a lot of moving pieces that would all need to come together and stay around for a while. From April to May we didn't see a huge milk per cow increase, reflective of high feed costs and seasonal weather conditions.

Another thing to watch will be the Western drought situation. This will bring decreased milk per cow, reduced forage harvests, and have caused some heat-related plant closures.

In their recent dairymarkets.org podcast, Bob Cropp and Mark Stephenson shared that the dairy stocks have tightened, which should help give prices a boost as well. Cheese stocks declined from May to June and Butter remained stable. They also shared, what we saw here in NY, that a lot of folks saw a return of positive PPD's this month as the Class III and Class IV prices moved closer together.



Cow numbers were higher than expected and continue to rise. May's estimated number of milk cows was 9.505 million, and 5,000 increase from April.

**CROPS  
COWS &  
CRITTERS**  
newsletter

USDA's all milk price forecast for 2021 is \$18.30, Class III at \$16.80, and Class IV or \$15.40

# Strategic Forage Storage Planning

By Joe Lawrence and Ron Kuck, Cornell PRO-DAIRY

The dairy and livestock industries have seen continued advances in options available to improve forage management, from crop species and variety selection, to harvest management, to recognizing the class of animals on the farm that will most benefit from different forage types and qualities.

A shift away from upright silos over the last several decades has largely been driven by the need to store increased quantities of feed and to increase the speed of filling and feeding out. The tradeoff in this is storage systems that provide more efficiency and flexibility present additional challenges to preserve the forage, particularly with horizontal silos (bunks and drive-over piles). As a result, a number of resources developed focus on how to minimize storage losses. These efforts include strategies to improve packing density, use of inoculants and preservatives, options to cover, and strategies to minimize exposure to oxygen at feed out. All of these remain critical and should continue to be a high priority for every farm.

The ability to develop and maintain the number of storage options necessary to adequately separate forages is a challenge, particularly for farms experiencing change. This challenge is intensified by the fact that it is also an area of the farm where implementing such changes can be very difficult. Regardless of forage storage structures used by a farm, all available options require a sizable footprint, are often capital intensive, and are fairly rigid in location and capacity. These commonalities often challenge a farm's ability to adapt their storage options to match the advances made in forage production and feeding programs.

Fortunately, the wide-ranging approaches to operating a farm has fostered the development of many different options for forage storage. While there are inherent characteristics of certain storage systems that make sense for certain farms, the ability to consider all of the options can help overcome some of the limitations associated with each system. Regardless of farm size and management, a mix-and-match approach warrants consideration and no farm should rule out any storage options.

In developing or updating a storage plan, a number of considerations and ways to attack the planning process depend on current status. The various attributes of commonly available storage options are known by most, but a review of the main points will assist in thinking

about how each option may have a place on your farm (Table 1).

## TYPES AND QUANTITY OF FEED REQUIRED FOR EACH ANIMAL CLASS

Work with your farm's nutrition team to develop a list of forages most desirable for each group of animals and the quantities needed. Not every animal benefits from the high quality desired for lactating cows, and when these forages can be targeted to the correct group (dry cows or young stock) their value to the farm is enhanced. In doing this, keep in mind the need to balance what crops will work best for the animals with your land base and management system. Frequently debated examples include the use of highly digestible crops, such as BMR corn and low-lignin alfalfas. Other important options include the use of grasses (alone or with alfalfa), double-cropping with winter grains for forage, and summer annuals.

The ability of the harvest team to execute the plan needed to harvest at the proper quality is also important. This question will mean different things to

Is this crop a good fit on my soils?  
How many tons of this will I need, keeping in mind shrink and carryover needs?  
Do I have enough acres to support these needs and at what cost?

different farms but will include labor availability, equipment, timing with other farm activities (i.e., first cutting or manure hauling) and length of time needed to harvest. Similar to the mix-and-match approach to storage structures, utilizing custom services does not have to be an all-or-nothing strategy. The access to custom harvesting and equipment rentals can facilitate this approach while minimizing capital investments. Targeted use of custom service providers for certain tasks or times of the year can effectively reduce the effect of bottlenecks and achieve desired forage qualities.

## MAPPING OUT STORAGE OPTIONS AND NEEDS

A useful exercise for all farms is to evaluate current storage options and strategize what modifications or additions could enhance their storage system. While this exercise is often prompted by the need for additional space, modifications to better meet current needs can pay large dividends.

When considering modifications or additions, look at the feed system in the context of the whole

The ability to develop and maintain the number of storage options necessary to adequately separate forages is a challenge, particularly for farms experiencing change.



Work with your farm's nutrition team to develop a list of forages most desirable for each group of animals and the quantities needed.



farm layout and potential future growth to avoid investments that will be in the way down the road. Considerations for feed preservation, accessibility and environmental stewardship are also important.

**TABLE 1**

Storage Opportunities and Challenges

Structure	Opportunities	Challenges
<p><b>Upright Silos</b> It is not common to see new upright silos built given their capital cost and inflexibility once built, but they do offer some benefits to store certain feeds in a small footprint.</p>	<ul style="list-style-type: none"> <li>• Small footprint</li> <li>• Ease of maintaining feed quality in storage</li> <li>• Repurpose existing facilities for classes of animal or feeds needed in smaller quantities</li> </ul>	<ul style="list-style-type: none"> <li>• Cost per unit of storage</li> <li>• Inflexibility once built</li> <li>• Stuck feeding whatever is in that layer of silo</li> </ul>
<p><b>Wrapped Bales (Baleage)</b> Large silage bales are viable as a primary storage option to certain farms. They can also be used as a strategic supplemental storage option for other farms, but this application has some limitations.</p>	<ul style="list-style-type: none"> <li>• Flexibility at feed out</li> <li>• Can be moved to and from remote locations</li> <li>• Ease of maintaining feed quality in storage</li> <li>• Less capital cost</li> </ul>	<ul style="list-style-type: none"> <li>• Wildlife damage</li> <li>• Feed variability from bale to bale</li> <li>• Requires specific equipment that is only applicable to certain forages</li> </ul>
<p><b>Silo Bags</b> Often pigeonholed to certain size farms or as temporary options for farms in transition, silo bags can be used on their own as a complement to another system present. This is a tremendous opportunity for strategic forage management successfully used by farms with 40 to over 4,000 cows.</p>	<ul style="list-style-type: none"> <li>• Flexibility in segregating different quality forages at harvest</li> <li>• Flexibility at feed out</li> <li>• Ease of maintaining feed quality in storage</li> <li>• Expandability</li> <li>• Less capital cost</li> </ul>	<ul style="list-style-type: none"> <li>• Footprint</li> <li>• Best used with a good base under bags</li> <li>• Annual cost</li> <li>• Wildlife damage</li> <li>• Small face leads to variability in forage at feed out</li> <li>• Matching filling equipment to bagger options for larger acreage</li> </ul>
<p><b>Bunk Silos</b> These can and have been adapted to a number of farm sizes and scenarios. They require a great deal of management and farms often feel forced to make them work amidst other changes on the farm.</p>	<ul style="list-style-type: none"> <li>• Cost efficiency per unit of forage</li> <li>• Potential for segregation of different quality forages at harvest</li> <li>• Potential for flexibility at feedout</li> <li>• Uniformity of feed nutrient profile at feedout when forage is layered horizontally during filling and fed out vertically</li> </ul>	<ul style="list-style-type: none"> <li>• Capital cost</li> <li>• Ability to adapt once built</li> <li>• Maintaining feed quality in storage</li> <li>• Ability to access target feeds at certain times of the year</li> </ul>
<p><b>Drive-over Piles</b> These can and have been adapted to a number of farm sizes and scenarios. Require the highest level of management but can provide benefits in flexibility.</p>	<ul style="list-style-type: none"> <li>• Cost efficiency per unit of forage</li> <li>• Expandability</li> <li>• Ability to segregate different quality forages at harvest</li> <li>• Flexibility at feed out</li> <li>• Uniformity of feed nutrient profile at feedout when forage is layered horizontally during filling and fed out vertically</li> </ul>	<ul style="list-style-type: none"> <li>• Require a good base</li> <li>• Footprint</li> <li>• Maintaining feed quality in storage</li> <li>• Controlling face size at feedout</li> </ul>

Is the current use of each structure the best use?

How can I adapt what I have to better suit my needs?

Are current structures leading to unacceptable losses?

If so, can these losses be minimized by changes in management or are they inherent to the structure?

Does the current setup and placement of different forages lead to certain feeds being inaccessible when access is needed?

Are additional options needed? What type would work best in the short and long term?

Each farm faces unique challenges and opportunities related to forage storage. No matter what your farm's feed situation is, all can benefit from re-evaluating and setting a course for improvements. Use a team of key on-farm personnel and advisors to critically assess the strengths and weaknesses of the current storage system. An improved forage and feed center will prove productive and will capitalize on other forage management advances, from improved varieties to precision equipment, implemented in the coming years.

An improved forage and feed center will prove productive and will capitalize on other forage management advances, from improved varieties to precision equipment, implemented in the coming years.



While our Field Crops Specialist position is still open, you can still call or text 716-640-0522 with questions and we'll help you out!

## Would you like to expand the reach of your ag business?

For more information on becoming a sponsor, contact Kelly Bourne,  
Administrative Assistant, by calling  
585-268-7644 ext. 10 or email [klb288@cornell.edu](mailto:klb288@cornell.edu).

## Upcoming Events

Date, Time, Location	Topic	Learn More...
Wednesday, August 25th, 9:15am - 12:30pm Lesch Farms, LLC	Chautauqua County Soil Health Field Day	See page 4
Wednesday, August 25th, 7pm - 8pm Online Webinar	CCE Flock Talks: Internal and External Parasites of Poultry	See page 5
Tuesday, August 31st 10am - 3pm Mulligan Farm 5403 Barber Road, Avon, NY	American Farmland Trust Soil Health Field Day	Contact Aaron Ristow <a href="mailto:aristow@farmland.org">aristow@farmland.org</a> , or (315)748-5029
Wednesday, September 1st 10am - 12noon Blesy Dairy, LLC Springville, NY	Corn Silage Pre-Harvest Meeting	See page 1
Wednesday, September 1st 2pm - 4pm Lismore Dairy Arkport, NY	Corn Silage Pre-Harvest Meeting	See page 1
Friday, September 10th 11am - 4pm Ostego County Fair Grounds	Southern Tier Wool Pool	Contact Sue Smith 607-293-8810
Friday & Saturday, Sept. 24th - 25th Lott Farms, 2973 SR 414, Seneca Falls, NY	NY Beef Expo	Amanda Dackowsky (716) 432-9871 <a href="mailto:nybeefproducers@aol.com">nybeefproducers@aol.com</a>

## Beginning Farmers

### New Self-Paced On-Farm Poultry Processing Course Available

Has your insurance provider told you they won't underwrite your on-farm processing of poultry unless you complete a training? Do you need to brush up on best practices for processing meat birds on-farm?

Learn more:

<http://allegany.cce.cornell.edu/agriculture/beginner-farmer>

To register, please contact Lynn Bliven  
[lao3@cornell.edu](mailto:lao3@cornell.edu)

# swnydlfc.cce.cornell.edu

Stay connected: Follow us on social media, sign up for our newsletter,  
visit our website.



**AMERICAN  
NATIONAL**

George E. Haffenden

Agent, LUTCF, LACP

716-386-5393

[ghaffenden@american-national.com](mailto:ghaffenden@american-national.com)

**Country  
Crossroads  
Feed and Seed**

Darleen Krisher-Meehan

Andover, NY

607-478-8858

[countrycrossroadsfeedandseeds.com](http://countrycrossroadsfeedandseeds.com)



Brendan Knoll

Eden, NY

716-992-3830

Call for all of your fertilizer & seed needs



**ANIMAL BEDDING /**

**Kiln Dried Sawdust**

800-255-1543

[lmaher@lvmmaterials.com](mailto:lmaher@lvmmaterials.com)



Don Wild

Box 7, Great Valley, NY 14741

716-969-4386

King's Agri Seeds - WNY, Forage Mgt. Ser.

Thank you to our Newsletter Sponsors!