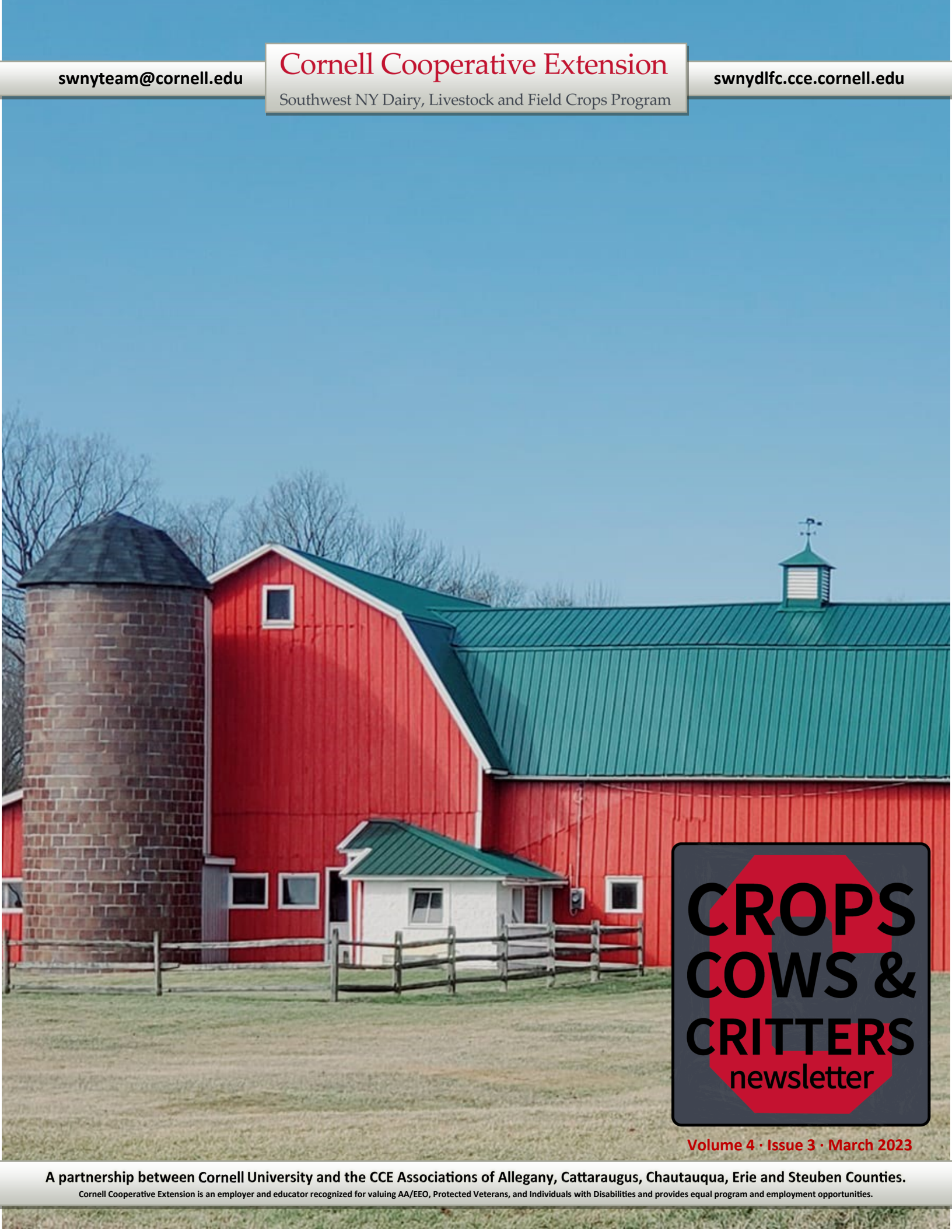


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Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

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**CROPS
COWS &
CRITTERS**
newsletter

Volume 4 • Issue 3 • March 2023

A partnership between Cornell University and the CCE Associations of Allegany, Cattaraugus, Chautauqua, Erie and Steuben Counties.

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 Every effort has been made to provide correct, complete and up-
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 Newsletter layout and design by Katelyn Walley-Stoll.

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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.

Tuesday, April 11th, 2023 at 1:00 pm

Managing In-Field Variability

Join us at the Teelak Farms in Cattaraugus County; 7301 Hinman Hollow Road Mansfield, NY 14755.

Each year presents new challenges for growing feed for your operation. Join Joe Lawrence, Dairy Forage Systems Specialist on Cornell's PRO-DAIRY team, as he discusses how to manage in-field variability to maintain feed quality.

Wednesday April 13th, 2023 at 1:00 pm

Incorporating Small Grains Into Your Forage System

Join us at Phillips Farm in Erie County; 1809 Brant Road North Collins, NY 14111.

Looking to implement new forages into your crop rotation? Evaluate how small grains like wheat, oats, and triticale can fit into current rotations, and what their value is as a forage.

Friday, April 14th, 2023 at 1:00 pm

Breaking Down Fungicides

0.5 DEC credits in 1a, 10, & 21

Join us at Mahaney Farms in Steuben County; 8316 Canaseraga Road Arkport, NY 14807.

Learn how fungicides work, ideal spraying conditions and how to reduce spray drift. Mahaney Farm will speak on their on-farm fungicide program, and how they utilize airplane application on their corn and wheat acreage.

Silage Trucks 101

Chautauqua County

Matt Luft from the NY State Troopers in Batavia will be reviewing new updates for Commercial Drivers License's (CDL) and Department of Transportation (DOT) roadside inspection information.

This workshop will be held in the Fall of 2023. If you're interested in hosting, reach out to Katelyn Miller at 716-640-2047 or km753@cornell.edu

The How To's of Calibrating a Manure Spreader

Allegany County

Did you know that you should be calibrating your manure spreader every year? Join Kirsten Workman, Nutrient Management and Environmental Sustainability Specialist from Cornell's PRO-DAIRY, as she walks through the calibration process.

This workshop will be held in the Fall of 2023. If you're interested in hosting, reach out to Katelyn Miller at 716-640-2047 or km753@cornell.edu

Join us for our 2023 Shop Talks. Topics include equipment, crop rotations, fungicides, and various management considerations.

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2023 Shop Talks

These in-person workshops are for Field Crop Producers to learn more about equipment, crop rotations, fungicides, and various management considerations. Registration is preferred, but not required. Contact Katelyn Miller at 716-640-2047 or km753@cornell.edu for registration and any questions. A light lunch will be provided at all meetings, thanks to our generous sponsors!

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Interested in hosting a Shop Talk in Chautauqua or Allegany County in the Fall of 2023? Contact Katelyn Miller at 716-640-2047.

Considerations For Alfalfa-Grass Mixtures

By Katelyn Miller, Field Crop and Forage Specialist

Eighty-five percent of alfalfa acreage in the Northeast is planted as a mix with grass. Planting a mixture allows for two things: the accommodation of variable soil drainage throughout a field and the ability to optimize yield. Both species, alfalfa and grass, will thrive depending on various weather conditions.

For example, last year's drought conditions meant that in many fields, the alfalfa was more present than the grass, regardless of seeding rate used during establishment. This is because the alfalfa's taproot was able to reach far enough down into the soil profile to acquire water. Although grasses have shorter roots, they can spread more effectively, filling in sparse areas to help reduce erosion. They are also more likely to survive in low spots and wet areas throughout the field. Another reason that mixes are commonly used is to optimize yield and quality when planting on ground ill-suited to alfalfa. Not all land can support a pure alfalfa stand, so utilizing a mix will allow at least one of the species to thrive based on variable soil conditions and weather.

PROS of Mixes	CONS of Mixes
Longer stand life	Variable forage quality
Less winterkill	Limited weed control
Less traffic damage	Timing harvest
Fewer pests and disease	
Improved soil health	

If you're considering using a mix, some questions to ask include:

1. Do you have less than premium quality alfalfa land?
2. Do you have alfalfa snout beetle? An adult Alfalfa Snout Beetle is shown in the picture below. For more information about this pest, visit <https://cals.cornell.edu/field-crops/forages/insects-forage-crops/alfalfa-snout-beetle>.
3. Can you separate forages by quality in storage?
4. Does your nutritionist utilize alfalfa-grass?
5. Are you willing to invest more in forage and feeding management?



<https://www.pesttracker.org/pest?code=INASCPA>

Not all land can support a pure alfalfa stand, so utilizing a mix will allow at least one of the species to thrive based on variable soil conditions and weather.

Grass species typically used in alfalfa-grass mixes include orchard grass, fescues, reed canarygrass, and timothy. One of the complications of using an alfalfa-grass mix is managing harvest timing and forage quality. To adapt to this, some desirable traits to look for in grasses are a later heading date to match maturity timing with alfalfa, and the ability to handle a more intensive cutting schedule. Let's take a look at the qualities of these grasses, and evaluate their suitability for an alfalfa-grass mix.

Orchard grass is known for its early heading date, especially in the spring. This poses challenges for forage quality because if you harvest the forage when the alfalfa is at a suitable maturity, you have passed the quality parameters of the grass and you will have a lower quality mix.

Fescues include both tall fescue and meadow fescue, which are relatively well-suited to be planted in a mix. They both mature in closer proximity to alfalfa and can handle an intensive cutting schedule. An important factor to consider is seeding rate when using fescues because it can be more aggressive in its growth in comparison to alfalfa.

Reed canarygrass has similar harvest qualities to fescues, but it is actually one of the most aggressive grasses you can mix with alfalfa. Although reed canarygrass is slow to establish, within 2-3 years, it will begin to outcompete alfalfa. This makes it a good option to use for short-term rotations.

Timothy prefers growing in cooler temperatures, making it a grass not well-suited to mix with alfalfa. Not only does it not produce much forage in the hot, summer months, but it's similar to orchard grass in that the timing of harvest does not match well to alfalfa.

Something important to note is that these factors can change not only from season to season, but also in your specific growing climate. There are ways to manage grasses that allow alfalfa a competitive edge if you notice that the percentage of grass in your field is increasing. To reduce the grass percentage in a field, the biggest management option is changing cutting height (within reason of course). Lowering your cutting height by a half-inch to an inch can help to cut back grass growth temporarily, allowing for the alfalfa to get a head start. Be careful not to set the cutting height too low, or there will be additional ash and contaminants in your feed. It is not recommended to do this practice often, as it can affect the overall survivability of the grass. Refer to the chart on the following page for common seeding rates of these grasses, both on their own and in a mix. Meadow Fescue, which was mentioned above, is usually not seeded on its own. Utilize a seeding rate is 4-5 pounds/acre when in an alfalfa mixture.



Grass species typically used in alfalfa-grass mixes include orchard grass, fescues, reed canarygrass, and timothy.

Forage Seeding Rates When Seeded Alone or in Mixture Seeding Rate

Species	Seed/lb	Seeding Rate	
		Alone lb/acre	Mixture lb/acre
Legumes			
Alfalfa	200,000	15 - 20	8 - 15
Grasses			
Orchardgrass	654,000	8 - 12	4 - 6
Reed canarygrass	533,000	8 - 12	4 - 6
Tall fescue	230,000	12 - 14	6 - 12
Timothy	1,230,000	8 - 10	2 - 8

Table is from:
[https://www.canr.msu.edu/news/forage-seeding-rates-when-seeded-alone-or-in-mixtures.](https://www.canr.msu.edu/news/forage-seeding-rates-when-seeded-alone-or-in-mixtures)

You can also use tools like those available on <https://forages.org/>. This website provides recommendations on seeding rates based on factors such as drainage, forage use, and intended livestock being fed. By filling in the website information, you can select fields you are planning to seed down and will receive not only recommended seeding rates, but also which forages will be best suited to property characteristics. ■

Address _____

County _____

Coordinates _____

ADDRESS SEARCH

Please select a location by clicking on the map.

Soil pH ▼

If unsure leave at 0

Artificial Drainage Situation

Optimum

Moderate

Some

None

Forage Use

Hay/Silage

Pasture

Conservation Use

Intended Hay or Silage Use

Beef Cows

Dry Dairy Cows

Horses

Lactating Dairy Cows

Sheep

Cornell Cooperative Extension | Livestock Program Work Team

Presents

Fundamentals of Ventilation in Barns

For Small Ruminants and other Livestock



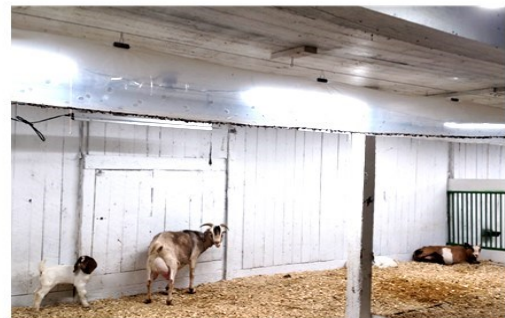
March 22, 2023 @ 7pm



Featuring guest speaker Tim Terry
 Farm Strategic Planning Specialist



- What is effective ventilation and what is not
- Natural Ventilation: Pro's and Con's
- Mechanical Ventilation systems explained
- Positive Pressure Tube Ventilation systems
 - Lower cost and effectiveness
- Tunnel and Cross Ventilation Systems explained and proper application situations



To Register: https://bit.ly/Barn_Ventilation
 Presentation to be recorded for future viewing



Questions? Contact Rachel Moody at ram72@cornell.edu, (518) 272-4210

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Utilize the tools on <https://forages.org> which provide forage recommendations based on factors such as drainage, forage use, and intended livestock being fed.

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If you need assistance registering for this webinar on barn ventilation, please contact Amy Barkley at 716-640-0844 or amb544@cornell.edu.

Spring Oats Seed Date: Seed Spring Oats In Early March

By Guojie Wang, Penn State Extension

As winter is becoming more unpredictable by the year, whether it is cold in December, record warm February, or moisture levels well above or below average, what remains predictable are farmers wanting to get started early. Farmers eagerly await the growing season's arrival, especially in the state's southeast. When the weather provides, should farmers take advantage of early spring to seed spring oats in early March?

Agronomics of Oats

Oats are a cool season annual crop for forage or grain production. They grow fast under cool temperatures and reach their milk stage 55-65 days after germination. Spring oats can tolerate light frosts but won't take a harsh freeze. Interestingly, the time of oats' establishment can affect their ability to withstand cold. Late summer or early fall-seeded oats can be killed by several hours of temperatures below 27°F. Spring-seeded oats, often more tolerant, are killed when the temperature is under 5°F. Spring oats need soil temperatures of at least 35°F to germinate. Still, higher soil temperature (above 45°F) will accelerate germination and promise a vigorous stand. Even though oats are a cool season crop, the yield will suffer when the temperature drops to 65°F or lower.

Optimum Planting Date

Researchers from different states studied the optimum seeding date for spring oats. Ohio State University research recommends early April as the optimum seeding time. New York research shows that the optimum planting date was April 18 and suggests that for each day past the optimum date, the yield average reduces by about one bu/acre.

Research has shown that spring oats yield decreases by approximately 1 percent daily when seeding is postponed past the optimum seeding date. How to know the optimum seeding date for spring oats? The best way to determine the optimum seeding date is to check the soil temperature in the seeding and root zone for oats (1.5 to 2 inches). It should measure 45°F at the minimum and be consistently warm for at least two weeks before seeding. Soil temperature can be checked with any thermometer that will read temperatures in the range of 30 to 65°F.

Concerns When Seeding Early

When we seed we seed spring oats earlier than the recommended optimum dates, we must pay close attention to several factors.

1. Weather conditions can change sharply during a Pennsylvania March. Oats seeded in spring are relatively tolerant to cold conditions compared

with other species; however, they can still have damage leading to yield drag. Cold weather, right after extended periods of warm weather, can kill the rapidly growing, recently germinated oats stand. This injury can lead to yield loss through a decreased population, tillering capacity, or even a stand failure. The earlier the crop is planted in March, the higher the possibility of adverse weather conditions.

2. Early spring is usually accompanied by soggy soil and fungal development. If the soil is not well-drained and the seed doesn't get enough oxygen to germinate, seed rot can occur. The newly developed roots can be rotted in wet soil, even after germination. Lower soil temperature, which slows spring seedling growth, can exacerbate fungal issues in newly established oats.
3. Oats planted earlier than usual will mature earlier than usual. Earlier maturing oats can be beneficial if the operation is in a double cropping system. If the oats are used as hay or silage, drying to the correct moisture content can be challenging. Frequent spring showers, with consistent wet soils, can prohibit the matured spring oats harvest at the right growth stage or moisture, potentially reducing forage quality.



PHOTO CREDIT: J. Brackenrich, Penn State Extension

Summary

All in all, it comes to the risk-to-reward ratio for all the decisions we make for agriculture. If you want a planting date more specific to your farm:

1. Monitor the soil temperature (not air temperature) until it is consistently above 45°F for at least two weeks.
2. Determine when the soil is workable without excessive moisture.
3. Be sure early matured spring oats can be harvested on time with weather patterns in your location. ■

Soil temperature should measure 45°F for at least two weeks before seeding oats for an improved stand.

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Research has shown that spring oats yield decreases by approximately 1% daily when seeding is postponed past the optimum seeding time for your area.

Tools for farm succession planning

FREE Virtual Webinar Series for farms interested in planning for the future!

Wednesdays from 6:30pm - 8pm

3/8 - Building a Strong Management Team

3/15 - Assessing Your Business

3/22 - Tax Management in Succession Planning

Visit tinyurl.com/cceMarch to register!

more info



Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

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SWNY (Virtual) Field Crops Congress

A 5-part program for Field Crops Producers to learn more about the latest research-based recommendations for pest control, weed management, economic considerations, soil health and fertility, challenges for our 2023 season, and more.

To register and pay online visit:
<https://tinyurl.com/mtb68h3e>

Wednesday, March 1st 12:00pm - 1:30pm	Creating an Effective Herbicide Program	Mike Hunter, CCE North Country Regional Ag Team
Wednesday, March 8th 12:00pm - 1:30pm	Field Crop Disease Update	Gary Bergstrom, Cornell University
Wednesday, March 15th 12:00pm - 1:15pm	On-Farm Experimentation	Louis Longchamps, Cornell University & Katelyn Walley-Stoll CCE SWNY Dairy, Livestock, and Field Crops
Wednesday, March 22nd 12:00pm - 1:00pm	SCN in NY	Erik Smith, CCE CNY Dairy, Livestock, and Field Crops
Wednesday, March 29th 12:00pm - 1:30pm	Value of Manure Told Through Five Stories & CAFO Updates	Dr. Quirine Ketterings, Cornell University Kirsten Workman, PRO-DAIRY

\$20/farm with scholarships available to attend for \$0.

Presented via Zoom with in-person viewing options at our local CCE Association offices.

Cornell Cooperative Extension is an employer and educator recognized for valuing individuals with Disabilities and provides equal program and employment opportunities.

All of the presentations and resources for the "Tools for Farm Succession Planning" Series will be recorded and shared - contact Katelyn Walley-Stoll at 716-640-0522.



There are still meetings left for the SWNY Field Crop Congress. Register today at <https://tinyurl.com/mtb68h3e>.

Dairy Grazing Apprenticeship Program - Now in Partnership with the SWNY Team!

By Camila Lage, Dairy Management Specialist

The Dairy Grazing Apprenticeship (DGA) is a non-profit organization that partners with established grazing dairy farmers, universities, community-based organizations, and other stakeholders to deliver high-quality work-based training in managed-grazing dairy production in multiple states. DGA is registered with the U.S. Department of Labor-Employment and Training Administration. It provides a pathway for aspiring dairy farmers while offering experienced dairy graziers an opportunity to share their passion. Apprentices are engaged in full-time, paid employment while comprehensively trained in running a grazing dairy operation.

Train An Aspiring Farmer & Gain a Committed Employee

Mentor graziers are grass-based dairy farmers who have demonstrated excellence in managing pasture cows and are committed to mentoring the next generation of dairy farmers. Your apprentice will support your farm's labor needs over two years as they acquire on-the-job training and grow increasingly skilled with your mentoring. Apprentices also become more proficient as they complete 300 hours of off-farm related technical instruction, a requirement for graduating from Dairy Grazing Apprenticeship. Related instruction includes online coursework and other educational events. If you and your apprentice agree to it, you also have the option to continue your apprentice's employment at your farm after they graduate from the program. DGA provides educational support throughout the apprenticeship period, including training resources and access to workshops and events catered to Dairy Grazing Apprenticeship.

Is Hosting an DGA Apprentice for you?

- Must have five years of successful grazing experience OR be a Dairy Grazing Apprenticeship graduate with three years of grazing experience beyond the program.
- Must ensure that the apprentice is trained in core work processes OR employ a full-time qualified individual to supervise and train an apprentice.
- Must provide a safe work environment and full-time employment with compensation until the completion of the program (2 years).
- Whether or not an individual meets the above qualifications will be determined on a case-by-case basis by the Dairy Grazing Apprenticeship National Apprenticeship Committee.

Visit the [Dairy Grazing Apprenticeship national website](#) to learn everything you need to know about becoming a mentor grazer and how to apply.

Do you have questions or want additional information? You can get in touch with Camila Lage at cd546@cornell.edu or 607-422-6788.

8 - March 2023

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Become a Dairy Grazing Apprentice

Apprentices come from all walks of life. Some are farm kids who want to go deeper in their training on the home farm or want to work on another operation to gain a different perspective. Some are seeking a career change. Some are recent graduates interested in learning a trade that connects them to the earth and the food system in powerful ways.

Perspective apprentices must:

- Have a high school diploma or higher or GED, or a composite score of at least 18, or comparable Accuplacer test scores in math and reading.
- Be at least 18 years of age.
- Be physically able to perform the work of the trade with reasonable accommodations and without hazard to themselves or others.
- Have reliable transportation to and from work and school.

Apprentices receive training in the following major work categories. Training largely occurs on the job, complemented by 300 hours of related instruction through online courses and educational events.

- Managing dairy cattle in a grazing system.
- Managing milking operations.
- Managing dairy cattle nutritional requirements.
- Managing pastures for optimal production.
- Managing natural resources in a grazing system.
- Managing farm business operations to meet financial goals.

APPLY. To get started, first create a user account. Then follow the steps to create your online profile, or contact Camila for assistance.

MATCH. Apprentices choose their preferred areas of placement by zip code. Approved mentor graziers search an online database for an apprentice who will match their operation well.

TRAIN. Apprentices learn from those who know dairy farming best. Mentor graziers prepare employees for management, partnerships, and eventual ownership.



This program provides opportunities for experienced and new graziers to connect and share knowledge in a structured and supportive environment.

Dairy Technology Tuesdays Webinar Series

Recordings available!



Health Monitoring and Reproductive Management
Dr. Julio O. Giordano, Cornell University

Looking Ahead: Dairy Technologies of the Future. Jeff Bewley, PhD, Holstein USA



Technology for Housing and Managing Dairy Calves. Dr. Joao Costa University of Kentucky.



To Retrofit or Not to Retrofit.
Timothy Terry, PRO-DAIRY, Cornell University.



Milking Technologies - Robots, Parlors, Rotaries and more Dr. Larry Tranel, Iowa State University and Dr. Nancy Charlton, Delaval

Utilizing Drones to Track Forage Inventory. Harrison Hobart, Dairy Farm Specialist, Alltech



Integrated Barn Climate Systems.
Mark Reynolds, ASAP Interiors



To access all recordings, you can also go to: <https://tinyurl.com/techtuesday2023>



Unfamiliar with how to use a QR code?

1

Open your camera and point your device at the QR code



2

Wait for camera to recognize and scan QR code



3

Click banner or notification when it appears on your screen



4

Information associated with the QR code will automatically load



The Dairy Technology Tuesday recordings are available to all, free of charge. If you need assistance accessing them, you can reach out to Camila Lage!



Technology on dairy farms covers a wide range of management areas, and can help decrease labor to allow farmers to focus on other management aspects of the farm.

Choosing An Activity System For Your Dairy

By Matthew Haan, Former Extension Dairy Educator, Pennsylvania State University

There is growing interest in the use of activity monitoring systems on dairy farms. This interest is driven by the desire to improve reproductive performance, reduce labor, and reduce the cost of production. With the growing demand, an ever-increasing number of companies are developing and marketing these systems (see the table below, click on product name to go to the company's web site). This article will address some common questions about activity systems. Where trade names appear, no discrimination is intended, and no endorsement by Penn State Extension or by the author is implied.

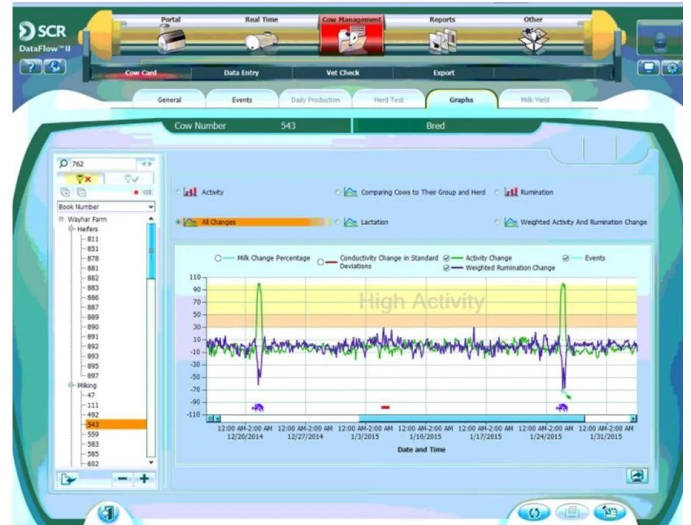
Product (Company)	Also Marketed As
Afi Act II (AFI)	-
CowScout (GEA)	-
Heatime (SCR)	Semex AI24 , Lely Qwes
Heat Watch II (CowChips)	-
MooMonitor+ (DairyMaster)	SelectDetect (Select Sire Power)
SensOor (Agis Automatisering)	CowManager (Select Sires)
Track a Cow (Animart)	-
Activity Meter System (Delaval)	-

What do the systems consist of?

The systems typically consist of three main parts 1) an activity tag containing a pedometer or accelerometer attached to the leg, ear, or a collar on the cow's neck; 2) an antenna to read the activity tag; and 3) a computer with software that allows the dairy farmer to enter information into the system and view output from the activity tags.

What do the activity tags measure and how is that data accessed?

Very simply, the activity tags measure cow activity or movement. The computer takes this information and compares it to previously collected data to determine when a cow's activity is increasing or decreasing. The activity data is presented to the farmer in tables and graphs, and typically the number of hours until ovulation or an optimum time to insemination is also shown.



Activity and rumination graph from Heatime Pro activity system

In addition to activity, many of these systems also monitor cow temperature, eating time, rumen function, and cow position (standing vs. lying). Cow activity and these other measurements are often combined to provide an overall indication of cow health. Some systems also allow the dairy farmer to locate a specific animal in the barn.

How long will it take to pay back the cost of the system?

Most companies selling the systems report a one- to two-year payback period on the cost of the system. The actual time will depend on the existing reproduction program and how well the dairy can integrate the new technology into their management system. Some areas where dairy farms obtain cost savings with the introduction of an activity system include decreased labor for watching standing heats, decreased hormone costs and labor from less use of an ovsynch program, and decreased semen costs. Revenue generation from an activity system can come from an earlier age at first calving, decreased calving interval, and an increased average milk production resulting from a decreased DIM. When activity is combined with other measures to provide a health indication, additional savings can be obtained by treating a cow before other clinical signs are observed.

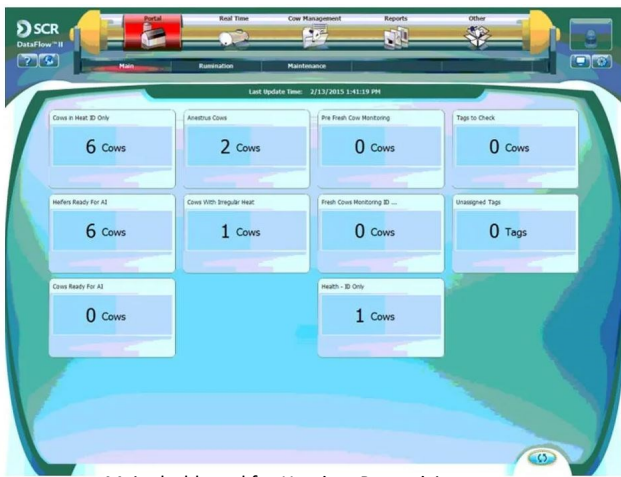
How easy is the system to use?

Data from most systems can be accessed from a computer or smartphone, with some systems using a standalone terminal to view and enter data. In most cases, only basic computer skills are required to operate the system, and many companies will offer training on how to use the system. Data from the activity system can often be integrated with PCDart or other herd management software to avoid the need to enter data into multiple systems.

Increased movement can indicate that cows are cycling and should be monitored for other signs of heat.



Each system uses a slightly different type of software to collect and analyze data. Before committing to a system, take some time to see which will work best for you and your farm's goals!



Main dashboard for Heatime Pro activity system



Cow with Heatime Pro activity and rumination collar

Will the system work on my dairy?

The activity systems can work with most management systems and most-sized dairy farms. There are examples of activity systems used on dairy farms with a 50-cow, tie-stall barn to a 900-cow, free-stall barn, and any management system in between. Some systems require a reliable internet connection.

Does every cow need an activity tag?

That will depend on how you want to use the system on your farm. For most systems, once the activity tag is on the animal it will take seven to ten days for the system to establish a baseline for that individual. If you want to use the system only for heat detection, you need enough activity tags to put one on each cow a few weeks after freshening until confirmed pregnant. If you want to use the activity tags to monitor cow health around freshening and for heat detection, you need enough activity tags for cows about one month before freshening until confirmed pregnant. If you want to use the activity tags to monitor cow health throughout her life or you do not like the idea of switching

activity tags all the time, you need enough tags for the entire herd.

Questions to ask before purchasing an activity system :

- What training or support is provided with the system?
- How long is the warranty period on the tags or other system components
- How large of an area will the tag reader or antenna cover? Will the system read the activity tags in all parts of the barn or pastures?
- Is there another farm in the area using the system that I could visit?
- What is the payback period for the system? Several companies have a payback calculator that allows you to enter information about your current system and provides assumptions about changes that can be expected with the system.
- Is the activity system compatible with my current herd management software?
- Do I need an internet connection for this system to work? ▪

Hands-on Calving & Dystocia Workshop

Offered in English & Spanish

Steuben County on 3/17

Cattaraugus County 3/21

<https://swnydlfc.cce.cornell.edu/events.php>

You can also register by contacting Camila Lage at cd546@cornell.edu or 607-422-6788 or Amy Barkley at amb544@cornell.edu or 716-640-0844

- Understand the Anatomy and Physiology of Calving
- Recognize and Monitor Signs of Labor
- Assess Normal and Abnormal Calf Position
- Properly Assist the Calving Process
- Use chains, calf puller/calf jack safely and effectively
- Immediate post-partum cow and calf care

There are a variety of activity systems that will fit dairies of all sizes. While one type of technology might not suit your needs right now, there are several options!



Dystocias, or difficult births, can result in calf loss and a decrease in dam performance. This workshop provides tools to work through these situations.

Follow Best Practices to Prevent the Spread of Bird Flu

By Nancy Glazier and Amy Barkley, Livestock and Beginning Farm Specialist

We are now one year into the avian influenza outbreak, and field season is just around the corner. With this comes a higher potential exposure to and spread of this virus from wild birds to domestic birds as well as between domestic flocks. It's not time to let our guard down, as we anticipate similar rates of infection to what we saw in 2022. Please take precautions when visiting fields with migratory birds and farmsteads.

Highly Pathogenic Avian Influenza (HPAI) continues to be a threat, and is the largest domestic animal disease outbreak recorded in U.S. history. In New York, we have seen 13 cases in domestic flocks and hundreds of cases in wild birds as of March 1, 2023, with the most recent domestic flock case having been identified in mid-February. This strain can infect chickens, turkeys, game birds, waterfowl, ratites (emus, etc.), and a wide variety of wild birds including waterfowl, raptors, and corvids. It can spread from bird to bird by direct contact as well as through farm equipment, clothing, and shoes.

Birds affected with HPAI may show one or more of the following clinical signs: sudden death without clinical signs; lack of energy and appetite; decreased egg production; soft-shelled or misshapen eggs; swelling of the head, eyelids, comb, wattles, and hocks; purple discoloration of the wattles, combs, and legs; nasal discharge; coughing, sneezing; lack of coordination; and diarrhea. The Highly Pathogenic strain can spread and kill an entire flock within days, backyard flocks

included. Many, if not all of the birds in a flock will be affected. Precautions are needed to prevent further spread. This virus is not known to be a public health concern.

If you are visiting a poultry farm, follow these procedures:

- Do not enter any farm premise without permission from the owner.
- Whenever possible, make an appointment prior to traveling to the farm.
- Wear clean clothes and shoes on the day of the visit and clean and sanitize footwear in-between farm visits.
- When you arrive, park your vehicle at the end of the farm drive or on the roadside and use your cell phone to notify the owners of your presence and to receive instructions for entry. Or, set up an appointment ahead of time
- Let the farm owner know if in the previous five days you have been on another poultry farm or if you've had contact with wild birds. Also let them know if you personally own or care for birds or poultry.
- Observe all of the farm's instructions regarding biosecurity procedures.
- Do not enter animal housing areas without express permission from farm owner.
- Do not touch animals unless that is part of your tasks on the farm.
- Immediately report anything unusual to farm owner, especially sick or dead birds.



HPAI 2022/2023 Confirmed Detections

as of March 1, 2023

Last reported detection Tuesday, February 28, 2023

Data updated weekdays by 12pm Eastern

[Download Data](#)

777 Confirmed Flocks

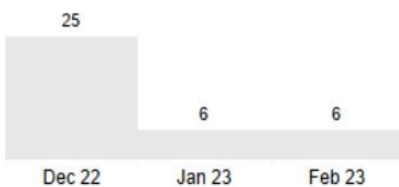
31 confirmed last 30 days
Birds tested and confirmed having HPAI

47 Affected States

14 states last 30 days
States with at least one confirmed infected flock

Commercial Flocks

318



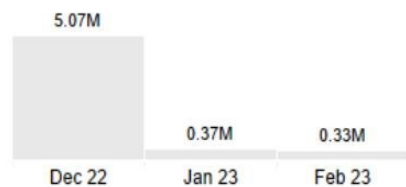
Backyard Flocks

459



Birds Affected*

58.53M



*Number of birds on confirmed infected premises.
Bars reflect millions (do not add up to total).

If you are working on farms with poultry, staying away from the poultry or washing your footwear in-between farms is a good step to prevent disease spread.

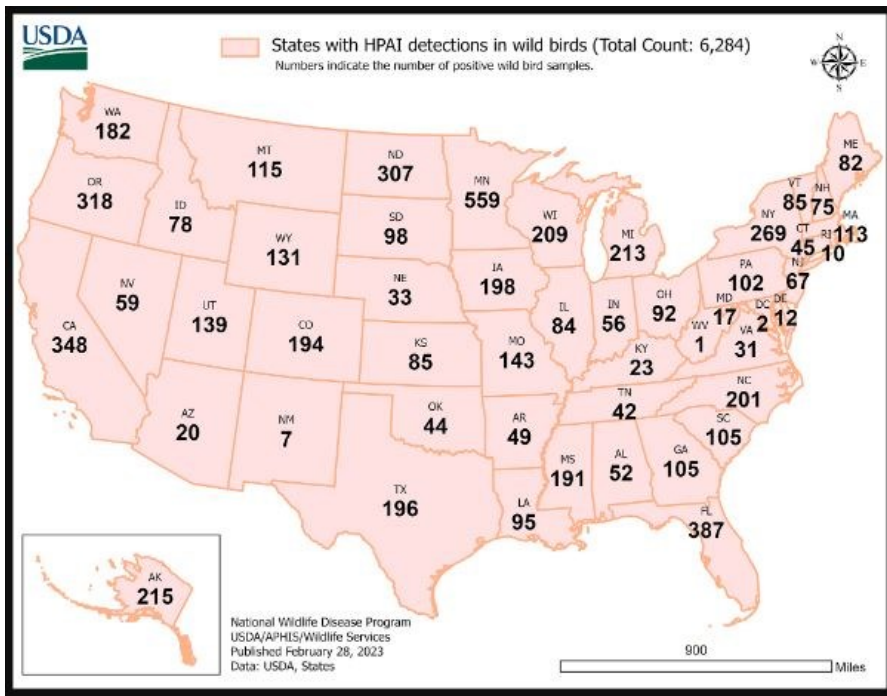


HPAI has recently been found in wild bird populations in SWNY. We encourage you to take steps to help keep your birds away from wild birds to help stop the spread!

New York and many other states have enacted emergency regulations that restrict interstate transport of poultry and add new, more stringent requirements for entry. If you are planning to move poultry across state lines, be sure to check with the state veterinarian's office in the receiving state to be sure you're meeting all the requirements.

If you have death loss in your home flock or a flock you manage, call NYS Department of Agriculture and Markets at 518-457-3502. This number is available 24 hours a day. If after normal business hours, select State Watch Center option. More information can be found on the website, <https://agriculture.ny.gov/animals/poultry> or by calling your local Cornell Cooperative Extension office. Your attention to these precautions is critical to protecting bird health and our state's farm economy!

The New York Extension Disaster Education Network (NY EDEN) is a collaborative educational network based at Cornell University and dedicated to educating New York residents about preventing, preparing for, and recovering from emergencies and disasters. NY EDEN is working with the New York State Department of Agriculture and Markets to provide resources and updates to poultry producers. ■



CCE Seeks Participants for 2-Year Pastured Broiler Cost of Production Study

Do you raise pastured broilers as a farm enterprise? Are you curious about your true costs of production and ways to improve efficiency? Want to know how your costs of production compare to farms across the state? Our team was awarded a grant to look at just that!

The SWNY Dairy, Livestock, and Field Crops Program is currently seeking participant farmers in Allegany, Cattaraugus, Chautauqua, Erie, and Steuben counties to take part in a 2-year study that will evaluate the true costs of production in pastured broiler enterprises. Farmers will be compensated for their time on the project. Preference will be given to slow-growth broiler producers, but all producers will be welcomed and considered.

If you're interested in learning more, reach out to Amy Barkley at amb544@cornell.edu or 716-640-0844.

For more information on practical biosecurity measures for small flocks, visit the USDA's **Defend the Flock** Program webpage!



The Broiler Cost of Production Study will take your data and determine ways to make more money on your broiler enterprise.

Dairy Market Watch

February 2023



Prepared by Katelyn Walley-Stoll. Funded by PRO-DAIRY.

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
Jan 22	\$2.95	\$2.35	\$22.96	\$22.83	\$20.38	\$23.09	\$21.59	\$1.21	\$22.19	\$1.81	\$1.91
Feb 22	\$3.02	\$2.31	\$24.89	\$23.79	\$20.91	\$24.00	\$22.52	\$1.61	\$23.12	\$2.21	\$1.99
Mar 22	\$3.09	\$2.71	\$26.13	\$24.76	\$22.45	\$24.82	\$23.59	\$1.14	\$24.19	\$1.74	\$2.09
Apr 22	\$3.41	\$3.42	\$27.63	\$25.71	\$24.42	\$25.31	\$24.92	\$0.50	\$25.52	\$1.10	\$2.20
May 22	\$3.10	\$3.86	\$28.70	\$25.87	\$25.21	\$24.99	\$25.42	\$0.22	\$26.03	\$0.82	\$2.24
June 22	\$3.33	\$3.41	\$29.12	\$26.65	\$24.33	\$25.83	\$25.83	\$1.50	\$26.43	\$2.10	\$2.28
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 22	\$2.77	\$2.80	\$25.66	\$21.61	\$19.43	\$20.01	\$20.71	\$1.28	\$21.31	\$1.88	\$1.84

January Utilization (Northeast): Class I = 29.9%; Class II = 24.8%; Class III = 28.4%; Class IV = 16.9%.
 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 8, February 24th, 2023)

Dry Products: Dry buttermilk prices shifted lower in all regions. Demand is light, and inventories are reportedly widely available, particularly in the Western states. Low/medium heat nonfat dry milk (NDM) prices slid lower in the West, while moving steady to higher in the Central/Eastern regions. Condensed skim availability is anything but variant, as contacts say it is widely available for drying. Dry whole milk prices increased, on spring demand upticks. Dry whey prices were mixed throughout the regions.

Cheese: In the Northeast and West, milk is available for cheesemakers to operate steady production schedules. Contacts in the Midwest say they are running busy schedules, but some in the upper parts of the region anticipate down time this week due to winter storms. Milk is being sold in the region for as much as \$10 under Class III as volumes remain ample. In the Northeast, demand for Italian-type cheeses is strong, while retail and food service demands are steady. Cheese block inventories are available, though lighter than previous weeks, in the Northeast. On the CME, the gap between blocks and barrels looms, but contacts in the Midwest view current price points as healthy.

Butter: Cream is plentiful in all regions, though contacts in the Central and West regions report steady to lighter demand this week. Butter makers in parts of the upper Midwest report winter storms this week may have an impact on production and require some cream handlers to look for different destinations for loads. In the Northeast, butter makers are running active schedules, and some manufacturers are churning butter on a seven-day schedule. Butter makers are producing strong amounts of butter, despite persistent regional labor shortages.

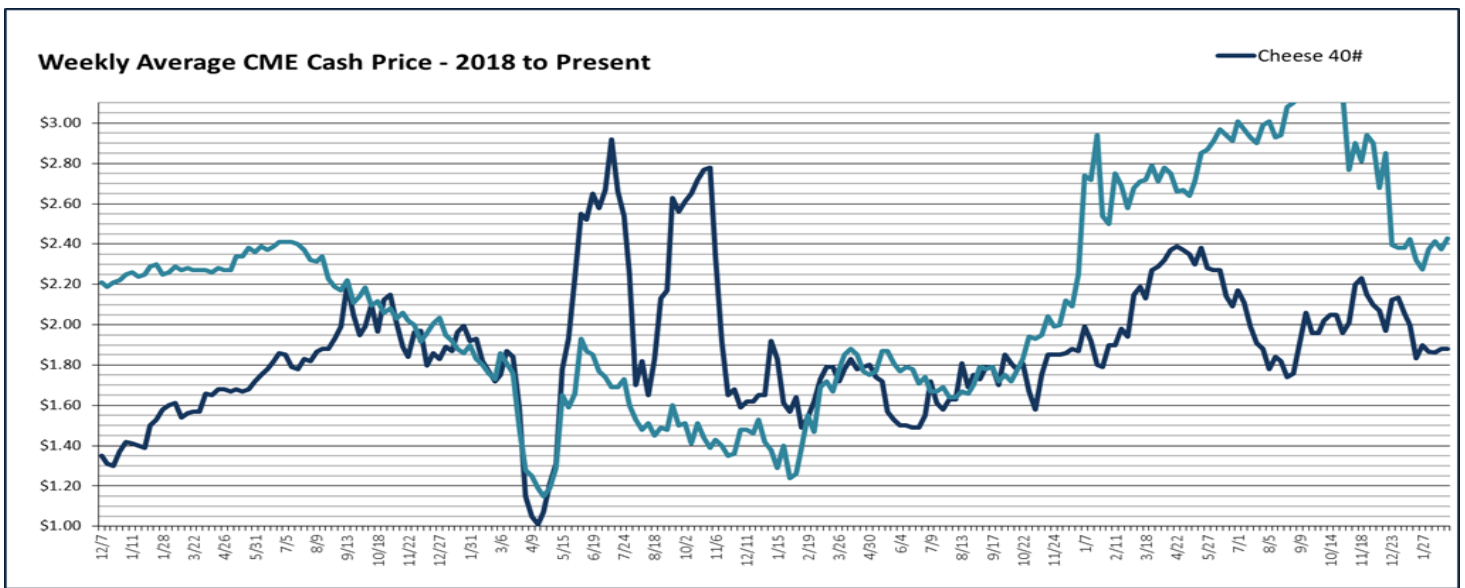
Fluid Milk: Milk output is mixed from region to region and from state to state. There is plenty of milk available for processing across the Classes. Bottlers are taking on steady to lighter milk loads, as schools are breaking or prepping for spring vacations. Cream is readily available in all regions.

Friday CME Cash Prices					
Dates	1/27	2/3	2/10	2/17	2/24
Butter	\$2.27	\$2.38	\$2.41	\$2.38	\$2.43
Cheese (40# Blocks)	\$1.90	\$1.87	\$1.86	\$1.88	\$1.88

Dairy Market Watch is an educational newsletter to keep producers informed of changing market factors affecting the dairy industry.



January's Albany \$/gal was \$1.84, a 10 cent drop from last month and the lowest it's been since January 2022.



Dairy Situation and Outlook - February 22, 2023 by Bob Cropp, Professor Emeritus, University of Wisconsin-Madison
 Originally published here: <https://fyi.extension.wisc.edu/kewauneeag/files/2022/12/Dairy-Situation-and-Outlook-February-2023.pdf>

Cheese prices have moved up and down during January and February but the trend is downward. Barrel cheddar cheese averaged \$1,6803 per pound in January and is now \$1.60. Forty-pound cheddar blocks averaged \$2.0024 per pound in January and are now \$1.96. Dry whey which was \$0.30's per pound in January have been \$0.415 to \$0.46 per pound in February. As a result Class III which was \$20.50 in December fell to \$19.43 in January. The February Class III will be even lower around \$17.90. The Class III price has fallen a long way from the record \$25.21 last May. The price of butter weakened some in January with some recovery in February. Butter averaged \$2.3553 per pound in January and is now \$2.38. Nonfat dry milk averaged \$1.2279 per pound in January and is now \$1.215. The December Class IV was \$22.12 but weaker December and January butter and nonfat dry milk prices pushed the January Class IV to \$20.01. The February Class IV may move even lower to around \$18.90.

The level of milk production, domestic sales and dairy exports will determine milk prices for the months ahead. As of now these factors indicate much lower milk prices than 2022. Milk production is expected to increase but by less than 1% in 2023. USDA is forecasting an increase of 0.8% marking two consecutive years of less than a 1% increase. Milk production was just 0.1% higher in 2022. Fewer dairy replacements, expected higher culling of cows from the herd, relatively high feed prices and lower milk prices could reduce the average number of cows in 2023. USDA forecasts the average number of cows for the year to be down 24,000 from 2022, a 0.3% decline.

Dairy exports were a major factor for stronger milk prices in 2022. Exports for all of 2022 were a record. Compared to 2021 exports were higher by 5% on a total volume basis, 9% for whey products, 12.5% for cheese which was a record, and

41.5% for butterfat but 5.5% lower for nonfat dry milk/skim milk powder. USDA is forecasting 2023 exports to be lower than 2022. U.S. will face more competition for exports as Europe's milk production increases. New Zealand could experience increased milk production depending upon weather conditions. Also, there is softness in international demand that could limit exports. A lot depends upon China. Exports to China were lower in 2022.

The production of dairy products has been above year ago levels. Compared to December a year ago butter production was 3.9% higher and total cheese production 2.2% higher. Butter and cheese stocks increased from November 30th to December 31st. Compared to a year ago December 31st stocks of butter were 9% higher and total cheese stocks at the same level. Stocks are more than ample to meet current use.

Opinions as to the level of 2023 milk prices vary considerably but all forecast much lower milk prices than 2022. USDA has lowered their price forecast. Class III averaged \$21.94 for 2022, \$4.86 higher than 2021. The forecast for 2023 is \$17.90, \$4.04 lower than 2022. Class IV averaged \$24.47 for 2022, \$8.38 higher than 2021. The forecast for 2023 is \$18.25, \$6.22 lower than 2022. As we move through the year and monthly increases in milk production slow as expected, milk production hits its normal low this summer, demand strengthens as schools open late summer and butter and cheese sales have their normal seasonal strength during the holidays milk prices are likely to improve the second half of the year over the first. Current futures reflects this with Class III in the \$17's and \$18's first half of the year and the \$19's and \$20's the second half of the year. Futures are more optimistic than USDA's forecast. Some forecasters see the possibility of the Class III getting as low as the \$16's during the first half of the year. So much uncertainty exists as to the level of milk prices in 2023.

The January Class III was \$19.43, down \$5.78 from the \$25.21 peak in May. February's Class III price will be even lower, around \$17.90.



2023 prices are expected to be much lower than 2022. For more information, contact Katelyn Walley-Stoll by calling 716-640-0522.

If Money Doesn't Grow on Trees - Maybe It Grows in Hay Fields?

Pricing Home-Grown Forages for Farm Use and Sale: Part One

By Katelyn Walley-Stoll, Farm Business Management Specialist

Cornell Cooperative Extension
Southwest NY Dairy, Livestock and Field Crops Program



If you grow, feed, or sell hay, it's important to know how to manage the green - the money, that is - to make profitable decisions. Hay production, whether it's sold off the farm or fed to livestock, is a key part of many of our farms in SWNY. Producing your own hay can diversify and improve the profitability of your farm. But, hay production can decrease your farm's profitability over time. Not tracking financial and production records can lead to poor decision-making.

All the numbers to justify this topic.

Based on the latest Ag Census data (2017), hay production in SWNY is big business. In our five county region, there were 3,102 farms producing 292,372 acres of hay, haylage, grass silage, and greenchop. This is 57% of farms producing some type of hay on 46% of all the SWNY farmland. 723,275 dry equivalent tons of hay crop was produced in 2017 with an estimated value of over \$114 million.

Financially, feed is the biggest cost for livestock based farms in our region. For NY dairies, feed and crop expense per cwt. milk was \$8.30 in 2021, which accounted for 42% of the total cost of producing milk. The cost of feed and crops increased by 11% from 2020 to 2021, and based on preliminary data for 2022, this will continue to increase. For livestock producers, the cost of forages on a unit of production basis can range from 20% to 80%! Based on FINBIN data for cow-calf beef operations, hay and pasture expense was \$327/cow/year, or 46% of total direct expenses.

Still don't believe that hay and forage production on farms is a big deal financially? Take a look at your own farm's numbers. Even if you're not keeping accurate financial data (don't worry, I'll convince you otherwise by the end of this), you can still estimate how much hay production is costing you. Take a look at your latest tax return – on your Schedule F, how much money did you spend on Fertilizers and Lime, Gasoline, Fuel, and Oil, Repairs and Maintenance, Seeds and Plants, etc. ? How much of that total, based on your estimate, went towards producing hay this past year? Now...add in your depreciation expense on your hay equipment, interest on any financed equipment, mortgage interest or rent payments for hay ground, and any other costs. Probably a pretty big number, right? And I haven't even asked you to estimate how much of your time/labor you spent making hay!

If Money Doesn't Grow on Trees - Maybe It Grows in Hay Fields?
Pricing Home-Grown Forages for Farm Use and Sale
By Katelyn Walley-Stoll,
Cornell University Cooperative Extension
Farm Business Management Specialist

Land Used for All Hay, Haylage, Grass Silage, and Greenchop in SWNY from the 2017 Ag Census

County	2017 # of Farms Producing Hay	Percent of Total Farms	2017 # of Acres in Hay Production	Percent of Total Acres
Allegany	474	60%	44,950	51%
Cattaraugus	551	58%	41,888	47%
Chautauqua	616	50%	46,042	36%
Erie	444	47%	42,233	44%
Steuben	1017	66%	117,259	49%
Total SWNY	3102	57%	292,372	46%

Why you should produce your own hay.

Producing your own hay, from a financial perspective, has many benefits. For one, and probably the biggest consideration, you can control the costs of your own production. An example – if you buy hay for your farm, you're going to have to pay whatever the seller is asking for, or keep looking around for a better deal. Producing your own hay, you can control how much you spend and how much you sell it for. Even if you can't control the price of your inputs (I'm looking at you fertilizer and fuel), you can control how much of those inputs you use. If you're selling hay off the farm, you can set your price above your costs to guarantee a profit. If you're feeding hay, you can incorporate the cost of your hay by essentially "selling" the hay to yourself.

Part One of this series focuses on Hay production in SWNY and outlines the decision of making, buying, and selling hay. Part Two will provide decision making tools.



Hay production is big business in SWNY with an estimated value of over \$114 million. However, much of that hay is fed to livestock within the same farm and never sold off the farm.

Along with controlling the cost and price, you can control the quality to be as efficient as possible. Buying hay is always a risk. You never know what you're going to get and can't always guarantee the quality from bale to bale. Producing your own hay means you know exactly what went into it, when it was harvested, etc. If you're buying high quality hay, you will pay a premium. If you're making your own hay, you know what quality you need and can make input decisions accordingly.

Fixed Costs are overhead operating expenses that you would still need to pay even if you had a very small amount of sales. Equipment, buildings, rent, insurance, etc.

Especially for farms that have more than one enterprise, producing your own hay allows you to spread fixed assets over more production areas. For example, if you have a tractor that you use to spread manure while cows are in the barn during winter, you can also use that tractor to make hay in the summer. This spreads out the fixed cost of owning the tractor, but will increase the variable cost of operating the tractor (fuel, maintenance).

Why you shouldn't produce your own hay.

While buying hay is risky, so is producing it. For some farms, not making hay is the better option, even if it's very difficult to let go of that control. If you're raising livestock and you're looking to grow or buy hay to feed them, there are several advantages to the latter option. Land that you own, or are renting, to make hay could instead be used for pastures, grain crops, or additional production areas. This is especially important if you're paying high rent/lease fees for ground you do not own, and we're seeing land rent prices steadily rise in our area. If you're paying a high rent price, and can buy hay for cheaper than the cost to pay the rent and produce it, making hay might not be the best fit.

A "Thinking About Money" Exercise:

Income - Expenses = Profit

But now try it with putting profit first.

Profit = Income - Expenses

Making decisions with profit in mind doesn't mean you're a bad person. It's how you create a sustainable, healthy farm business.

For more information about pricing home-grown forages, risk management, and farm diversification, contact Katelyn Walley-Stoll by calling 716-640-0522.

**CROPS
COWS &
CRITTERS**
newsletter

The other big bucket of "stuff" that can be used elsewhere is your time. I can bet that you're not writing yourself a paycheck to make the endless laps around fields, and that's not including the time spent watching the weather, maintaining equipment, and storing or marketing the hay. If there are areas of your farm that are struggling because you don't have enough time in the day to devote to them, removing forage production can help with your time balance. Even if you can produce hay cheaper than you can buy it, could you be making a higher profit elsewhere to make up for the added expense?

Also, equipment is stupid expensive. That's it. That's the paragraph. Even if you're utilizing used equipment, consider maintenance costs. Do you have the expertise to diagnose and fix and maintain your required fleet of hay implements? And if you're using new equipment, can you keep up with financing? ■



USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

The Four Phases of Feeding the Dairy Goat Kid

Tue., Mar. 21st

6:30 PM - 7:30 PM

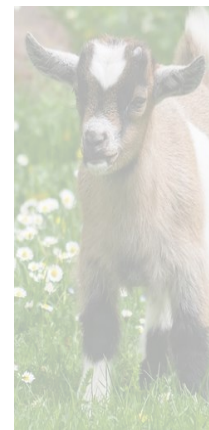
Live Online via Zoom (FREE EVENT)

Who is this for?

Dairy goat producers
New and beginning farmers

What will you learn?

- Four phases of feeding dairy goat kids
- Importance of each phase's effect on kid health & development
- Learn management techniques that can help increase efficiency and survivability of replacement kids



You can register here:

<https://web.cvent.com/event/3c567c33-318c-4a75-8ac6-c1c8e84ac9b0/regPage:911f432f-0ca9-4237-8397-0536f07a1de3>
or by contacting Amy Barkley at 716-640-0844 or

amb544@cornell.edu

This article was written as part of Cornell Cooperative Extension's "Diversifying Your Dairy" initiative. This material is based upon work supported by USDA/NIFA under award number 2021-70027-34693.

Assessing (Beef) Calf Vigor

By Barry Whitworth, DVM, Senior Extension Specialist, OSU Department of Animal and Food Sciences

In human medicine newborn babies undergo an APGAR test following birth. APGAR stands for appearance, pulse, grimace, activity, and respiration. The purpose of the test is to assess how well the baby tolerated the birthing process and how well the baby is doing outside the mother's womb. An APGAR test for calves similar to the one in human medicine would give cattle producers a clue when to intervene in a newborn's life. Unfortunately, most attempts to develop such a test for calves have not been successful; however, there are several studies that provide some practical advice on when to intervene with a newborn calf.

In two studies Dr. Homerosky and associates in Canada found two good predictors of calf vigor, calving ease and suckle reflex. Most producers have the ability to assess both components. First, was the calf born in a timely manner and required no assistance. Calves from births that require assistance are more likely to have acidosis. Acidosis is associated with failure of immunoglobulin absorption, sickness, and death in calves. Dr. Homerosky found a correlation between acidosis and the inability of a calf to withdraw its tongue after being pinched. A producer can check a calf for acidosis by pinching the calf's tongue. If a calf cannot withdraw their tongue after being pinched, it is likely acidotic and is a good candidate for early colostrum intervention. Colostrum should be consumed in the first four hours following birth.

The second predictor a producers can check for is a strong suckle reflex. To measure the suckle reflex, a producer should insert two fingers in the mouth and rub the roof of the calf's mouth. A calf should have a strong jaw tone with a rhythmic suckle reflex. A weak suckle reflex indicates the need to feed colostrum.

In another study Dr. Murray found that calves that did not sit up (sternal recumbency) within 15 minutes of birth had reduced absorption of immunoglobulins. Also, calves born to cows that had difficulty birthing took longer to stand. These observations provide clues that the calf will require more care and colostrum intervention to increase the chance of survival.

Most producers are capable of assessing calf vigor based on the above parameters. Any calf born to a cow that has difficulty birthing and/or a calf that has problems with the above tests would be a candidate for early intervention. The

best treatment is to give 2 to 3 liters of colostrum from the mother within the first 4 hours of life. Any delay in getting colostrum into the calf will only increase the chance of the calf having problems in life. This does require more work from the producer but should pay off with more pounds of beef at weaning.

References:

Homerosky ER, Caulkett NA, Timsit E, Pajor EA, Kastelic JP, Windeyer MC. *Clinical Indicators of Blood Gas Disturbance, Elevated L-lactate Concentration and other Abnormal Blood Parameters in Newborn Beef Calves*. The Veterinary Journal, January 2017 Vol.219: pp.49-57.

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Beef calves that “ain’t doin’ right” can usually benefit from human intervention. Knowing what indicators to keep an eye on helps take out the guess work.

**CROPS
COWS &
CRITTERS**
newsletter

Making sure a calf receives quality colostrum in the first 4 hours will improve how it will perform throughout its life. Colostrum will provide immediate energy and necessary antibodies.

Some Reminders from Your Friendly, Local Farm Business Management Specialist

By Katelyn Walley-Stoll

ST-125
(8/19)

Department of Taxation and Finance
New York State and Local Sales and Use Tax
Farmer's and Commercial Horse Boarding Operator's Exemption Certificate

Name of seller: _____ Name of purchaser: _____
Address (purchase and/or seller): _____ Address (purchase and/or seller): _____
City, town, or village: _____ State: _____ ZIP code: _____ City, town, or village: _____ State: _____ ZIP code: _____

Commercial horse boarding operator – provide Certificate of Authority number _____

Mark an X in the applicable box: Single-purchase certificate Blanket certificate

You cannot use this form to purchase motor fuel (gasoline) or diesel motor fuel exempt from tax (see Note below).
I certify that the purchase(s) is (are) exempt from payment of sales and use taxes on the property or service(s) indicated below. The property or service(s) will be used or consumed in farm production or in a commercial horse boarding operation, or in both, in the exempt manner indicated below. Mark an X in any applicable boxes.

A. The tangible personal property, whether or not incorporated in a building or structure, will be used or consumed predominantly (more than 50%) either in the production for sale of tangible personal property by farming or in a commercial horse boarding operation, or in both. This includes farming equipment as well as building materials that will be used to erect, install, repair, maintain, or service a building or structure used predominantly either in farm production or in a commercial horse boarding operation, or both.

B. The service consists of installing, repairing, maintaining, or servicing exempt tangible personal property used or consumed predominantly either in farm production or in a commercial horse boarding operation, or in both.

C. The service consists of repairing, maintaining, or servicing a building, structure, or other real property used or consumed predominantly either in farm production or in a commercial horse boarding operation, or in both.

D. The motor vehicle will be used predominantly either in farm production or in a commercial horse boarding operation, or in both.

E. The gas (including propane in containers of 100 pounds or more), electricity, refrigeration, or steam, or the gas, electric, refrigeration, or steam service, will be used or consumed either in farm production or in a commercial horse boarding operation, or in both.

F. The drugs or medicine will be used by a person (including a veterinarian performing veterinary services) on livestock or poultry used in farm production. **Note:** This box is valid only for purchases on or after June 1, 2018 (see instructions).

Note: To purchase motor fuel (gasoline) or diesel motor fuel exempt from tax:
• Use Form FT-1004, Certificate for Purchases of Non-Highway Diesel Motor Fuel or Residual Petroleum Product for Farmers and Commercial Horse Boarding Operations, for certain purchases of diesel motor fuel.
• Use Form FT-420, Refund Application for Farmers Purchasing Motor Fuel, to claim a refund of the motor fuel excise tax, the petroleum business tax, and the state and local sales tax on certain purchases.
• Use Form FT-500, Application for Refund of Sales Tax Paid on Petroleum Products, to claim a refund of sales tax on certain purchases.

Certification: I certify that the above statements are true, complete, and correct, and that no material information has been omitted. I make these statements and issue this exemption certificate with the knowledge that this document provides evidence that state and local sales or use taxes do not apply to a transaction or transactions for which I rendered this document and that willfully issuing this document with the intent to evade any such tax may constitute a felony or other crime under New York State Law, punishable by a substantial fine and a possible jail sentence. I understand that this document is required to be filed with, and delivered to the vendor as agent for the Tax Department for the purposes of Tax Law section 1038 and is deemed a document required to be filed with the Tax Department for the purpose of prosecution of offenses. I also understand that the Tax Department is authorized to investigate the validity of tax exclusions or exemptions claimed and the accuracy of any information entered on this document.

Signature of purchaser or purchaser's representative (see instructions) _____ Date: / /
Type or print the name, title, and relationship that appears in the signature box _____

This certificate is not valid unless all entries have been completed by the purchaser.

It's that time of year where everyone is wrapping up paperwork, completing their taxes, and analyzing their 2022 and 2023 farm finances. Below are some reminders for farms of all shapes and sizes!

ST-125: NYS farms and commercial horse boarding operators are exempt from paying sales tax on purchases that are directly related to the farming operation. To do this, farm businesses need to file an ST-125 with each vendor they purchase from. Some vendors require an annual update or re-filing. Farms do not need an EIN (Employer Identification Number) to claim tax exempt status! Pro-Tip? Keep copies of pre-completed ST-125's in all of your vehicles as many stores don't keep them on hand.

Separate Checking Accounts: Just a friendly reminder that you should have a separate checking/banking account for your farm business that's not comingled with your personal expenses. While this is in place for most farms, it's easy to get relaxed on keeping things separate! Looking at your personal expenses and your farm expenses separately, and in separate accounts, will help with recordkeeping, defining what's part of your business, and cash flow management. Getting a separate farm account is usually as easy as visiting your county's clerk office to file a DBA (Doing Business As), and visiting your local bank to open a new business account. These are usually free or carry a small

Revisit Your Business Plan: There are two different types of business plans, from my perspective - the one you show your bank and the one you show your spouse/management team. Should these be different versions? Ideally, no. But, it's my experience that the business plan you keep to your inner circle is usually more to the point, accurate, and realistic about the situation your farm is in. A business plan doesn't have to be something that follows a strict format or is printed on laminated paper with strategically selected fonts. A business plan is a road map for your farm that reviews where you've been, where you are now, and where you're headed. Don't have a business plan yet? We've got several resources, trainings, and practical information to help you build one.

Update Your Balance Sheet: While most lenders will require an annually updated Balance Sheet, it's a great habit to update yours at least once a year. Go through and calculate your feed, animal, and supply inventory (and their values). Double check your loan balances, interest rates, and projected payments. A great side effect from this update? You can use it to complete a FREE Farm Business Summary with your friendly, local Farm Business Management Specialist (that's me for those of you in SWNY). A Farm Business Summary helps you monitor the financial health and productivity of your business! New to preparing a Balance Sheet - I can help with that, too.

Supporting Your County's Cooperative Extension Association: Your County's Cornell Cooperative Extension Association relies on federal, state, and county funding to stay in business. Additionally, several counties rely on annual enrollments/subscriptions/financial support from their supportive farm families and communities. Our team, CCE's Southwest New York Dairy, Livestock, and

Field Crops Program, is primarily funded by shares that our 5 CCE Associations pay to provide support to their county's farming community (Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Cornell Cooperative Extensions). You can support us by supporting them! Call your county's CCE office to see if you're enrolled or subscribed, volunteer to serve on their committees or boards, or connect with our team for more information.



We appreciate the support of our five CCE Associations in Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Counties!



For information on any of these topics, call Katelyn Walley-Stoll at 716-640-0522. Now is a great time to go through a farm financial analysis or business planning update.

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