swnyteam@cornell.edu

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

swnydlfc.cce.cornell.edu

CROPS COWS & CRITTERS newsletter

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

Volume 5 · Issue 12 · December 2024

Photo by Katelyn Walley

Contact Our Specialists

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

Amy Barkley
Livestock
716-640-0844
amb544@cornell.edu

Katelyn Miller
Field Crops
716-640-2047
km753@cornell.edu

Katie Callero
Dairy Management
607-422-6788
krc85@cornell.edu

Kelly Bourne
Administrative Assistant
585-268-7644 ext. 10
klb288@cornell.edu

County Association Executive Directors

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

Cattaraugus County
Kelly McDonald
kmm525@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

(USPS #101-400)
Cornell Cooperative Extension of Chautauqua County
Subscription included in minimum of $65 Program Participation fee. Periodical Postage Paid at Jamestown, NY 14701. "POSTMASTER: Send address changes to the: Chautauqua County Extension Connection at 525 Falconer St. JCC Carnahan Center, PO Box 20 Jamestown, NY 14702-0020." "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

Cristian Acosta
Allegany County
Agriculture Educator
cfa34@cornell.edu
585-268-7466 ext. 14

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

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

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

Susan Walker
Steuben County
Agriculture Educator
smw272@cornell.edu
607-664-2574

Melissa Watkins
Chautauqua County
Agriculture Educator
mew235@cornell.edu
716-664-9502

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

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.

Agricultural English Mentorship Program Registration Open!

Registration now open!

Do you have Spanish-speaking farm employees eager to advance their careers and enhance communication on your farm? The Agricultural English Mentorship (AEM) program by Cornell Agricultural Workforce Development (CAWD) is designed to meet these needs. This course is offered virtually through the Moodle app, accessible from your phone or computer. Materials will be available beginning January 17, and live discussion sessions will be held via Zoom every Friday from January 24 through February 28, 2025.

Participants will be able to choose between a morning or afternoon session. Participation in the Zoom sessions offers valuable collaborative learning opportunities and personalized guidance from instructors, so attendance is highly encouraged. To get the most out of the course, it is recommended that you dedicate at least two hours per week to the activities. Having an English-speaking mentor on your ranch is a key component to success in the program.

Course Cost:
$275 (New York) - $325 (Out of State)

This is a mentorship program. A mentor must register with the English learner and commit to 15 minutes of mentorship each week. Mentors do not need to know Spanish to participate. The dual goals are to teach specific farm terminologies and to strengthen relationships between the English-speaking mentors and their Spanish-speaking employees while learning English.

¡Inscripciones ya abiertas!

¿Eres un trabajador agrícola de habla hispana ansioso por avanzar en tu carrera y mejorar la comunicación en tu trabajo? El programa de **Mentoría de Inglés Agrícola (AEM)** del Desarrollo de la Fuerza Laboral Agrícola de Cornell (CAWD) está diseñado para satisfacer tus necesidades. Este curso se ofrece de forma virtual a través de la aplicación Moodle, accesible desde su teléfono o computadora. Los materiales estarán disponibles a partir del 17 de enero, y se llevarán a cabo sesiones de discusión en vivo por Zoom todos los viernes, desde el 24 de enero hasta el 28 de febrero de 2025.

Los participantes podrán elegir entre una sesión por la mañana o por la tarde. La participación en las sesiones de Zoom ofrece valiosas oportunidades de aprendizaje colaborativo y orientación personalizada de los instructores, por lo que se solicita asistir a ellas. Para aprovechar al máximo el curso, se recomienda dedicar al menos dos horas por semana a las actividades. Tener un mentor de habla inglesa en su rancho es un componente clave para lograr éxito en el programa.

Precio:
$275 para los en NY | $325 para otros lugares

Este es un programa de mentoría. Un mentor debe registrarse junto con el estudiante de inglés y comprometerse a 15 minutos de mentoría cada semana. Los mentores no necesitan saber español para participar. Los objetivos son de enseñar la terminología específica del rancho y fortalecer las relaciones entre los mentores de habla inglesa y sus empleados de habla hispana mientras aprenden inglés.

Hurricane Debby Update!

As of December 5th, 2024, the USDA has declared a natural disaster which will open emergency credit to farms affected by August's Hurricane Debby. Both Steuben and Allegany Counties in our region are eligible. For more information, contact your local FSA office.

Steuben: 607-776-7398 **Allegany: 585-268-5133**

For more information contact Mary Bess Lewis: ml2656@cornell.edu . Para más información contacta con María Bess Lewis: ml2656@cornell.edu

CROPS COWS & CRITTERS newsletter

For further questions about AEM or USDA loans, please contact Katelyn Walley by phone 716-640-0522 or email kaw249@cornell.edu.

Keep Your Guard Up On HPAI

By Robert Lynch and Michael Capel, Cornell PRO-DAIRY and Perry Vet Clinic Respectively

CURRENT DAIRY H5N1 STATUS

We are fortunate that New York state's dairy herds remain free of illness from highly pathogenic avian influenza (HPAI). To date 616 dairy herds have been affected in 15 states across the country. This pathogen has caused a great deal of illness and financial loss to the dairy industry. Biosecurity is critical to minimize the spread of this disease.

CHART 1

USDA APHIS confirmed cases map

CALIFORNIA'S EXPERIENCE

HPAI was first confirmed in California in late August. Since then, 398 herds have become infected. California now has more than half of the HPAI herds in our nation's outbreak. The magnitude of the California outbreak is a good example of how quickly this disease can spread in an area where dairy farms are concentrated, as is the case in many areas of New York. Managing the movement of lactating cattle and strict biosecurity protocols for employees and outside vendors are critical to minimize disease transmission. The California outbreak occurred during a time of excessive heat stress. As a result, affected herds reported larger drops in herd level milk production, more severe disease in affected animals, and a higher death loss than had been seen in previous state outbreaks.

BIOSECURITY

Although inconvenient, enhanced biosecurity measures remain necessary and have likely helped to keep the virus out of New York so far. The United States Department of Agriculture (USDA) continues to offer support to both affected and non-affected farms that are looking to review and enhance their biosecurity plans.

TABLE 1

Biosecurity Considerations

Clean and dedicated farm clothing
Proper disinfection of footwear
Limit farm visitations and non-essential off-farm personnel from entering animal pens
Consider redirecting off-farm traffic to not overlap with on-farm traffic
Dedicated or properly cleaned livestock trailers

INTERSTATE MOVEMENT

The importation of dairy cattle into New York from a premise affected with HPAI is prohibited. The spread of this virus is limited by the USDA April 2024 Federal Order that requires a negative Influenza A test result for all lactating dairy cows prior to transport across state lines. Much of the spread of H5N1 to new herds has resulted from the introduction of new, infected but asymptomatic cows. New York recently instituted a testing requirement for non-lactating dairy cattle over 18 months of age coming from a state with an affected herd within the last 30 days.

DISEASE SURVEILLANCE UPDATE

Affected cows shed high numbers of viral particles in their milk. Raw milk remains the best sample for influenza testing. Many cows can be tested in a single bulk milk sample. Several affected states instituted bulk milk testing. Many unaffected states have also developed testing programs. Massachusetts (which currently has no affected herds) completed their statewide bulk tank milk influenza testing project in September which confirmed that 100 percent of their herds were free of the virus.

Recently Pennsylvania (which currently has no affected herds) announced a bulk milk Influenza A surveillance testing program. Last month USDA announced a plan to begin a tiered milk sampling strategy to better assess where H5N1 is present nationally, and details are being worked out to begin collecting samples from milk silos sometime in December. USDA continues to offer the voluntary Dairy Herd Status Program, which through regular bulk tank milk testing, herds can achieve a "Monitored Unaffected Herd" status. This can provide peace of mind that the herd is free of influenza virus and make interstate movement of animals from that herd easier.

HPAI can spread easily from farm-to-farm, especially in areas with many farms, if biosecurity protocols aren't put into place.

Interstate movement of cattle is restricted, so check with your veterinarian to make sure all testing requirements are in place.

POULTRY INDUSTRY IMPACT

HPAI spread from migratory birds is a constant threat to our colleagues in the poultry industry. Dairy herds infected with H5N1 now pose an additional risk. Since the start of the outbreak in dairy cattle, 32 flocks consisting of over 20 million birds have been depopulated from infections with the dairy cattle strain of HPAI (H5N1 strain B3.13). Diligent biosecurity in the dairy industry is critical for the safety of our nation's poultry flocks.

TABLE 2

USDA HPAI Support Programs

Non-Affected Herds
Diagnostic testing (sample collection, shipping, and testing)
Biosecurity planning
In-line milk sampling installation

Affected Herds
Diagnostic testing (sample collection, shipping, and testing)
Costs incurred for treating HPAI infected cattle
In-line milk sampling installation
Biosecurity planning
Worker PPE and/or laundry service*
Financial assistance to dairy producers who incur milk losses due to HPAI
Heat treatment system installations

* Pending their workers' participation in a USDA-CDC workplace and farmworker study)

HUMAN SAFETY

It is important to keep a global health perspective in mind about Influenza A as well. This virus infects and replicates in many animal hosts. Influenza viruses are prone to mutation each time they replicate, creating an opportunity for the virus to develop a strain that can more easily infect humans and spread from person to person. If this were to happen, we would experience another global pandemic. Thankfully, this has not happened yet. The Influenza A virus is known to occasionally infect humans, particularly those exposed to high levels of the virus. Because of this, individuals working closely with potentially infected animals and raw milk from those animals should take extra precautions to limit their exposure. Eye protection, disposable gloves, and face masks/shields should be made available to those employees. Frequent hand washing and simply not touching your face when working with cows or raw milk should also be encouraged.

SUPPORT REMINDERS

USDA continues to cover all costs associated with Influenza A testing on dairy farms, up to $1,500 per premises. Diagnostic options include testing of clinically ill cows, asymptomatic cows, other domestic animals and wildlife found dead on the premises, and bulk tank milk. Discuss these testing options with your veterinarian and local NYS Department of Agriculture and Markets field veterinarian. ▪

Robert Lynch, DVM is the Herd Health and Management Specialist with Cornell University's PRO-DAIRY Team in Ithaca, NY. Michael Capel, DVM DABVP, is the Past President of the American Association of Bovine Practitioners and Managing Partner of Perry Veterinary Clinic. This article is a Herd Health and Management Fact Sheet #PD-2024-11-04.

CALLING ALL FIELD CORN GROWERS!

We'd like your input on the most troublesome invertebrate pests and diseases you've encountered this year, last year, and over the past five years.

Please take a moment to complete our short survey by entering the web address below into your internet search bar. Your valuable feedback will help shape research efforts to improve pest and disease management in organic field corn production.

Feel free to email Katelyn Miller directly with any questions or concerns or to access a paper copy of the survey.

Thank you for your time and support!

https://cornell.ca1.qualtrics.com/jfe/form/SV_czK2wmG5ac37vDg

USDA continues to cover all costs associated with Influenza A testing on dairy farms, up to $1,500 per premises.

CROPS COWS & CRITTERS newsletter

All Field Corn Growers are invited to share their issues with invertebrate pests and diseases by completing this short survey.

Fertilizer Calculations

By Katelyn Miller, Field Crop & Forage Specialist, SWNYDLFC

In last month's newsletter, we discussed how to interpret soil test results from Dairy One's lab, along with a brief overview of how to calculate fertilizer requirements based on those results. However, two things became clear:

1. There are many different formulas for calculating fertilizer needs, and the right formula depends on the situation.
2. A refresher on how to calculate fertilizer applications would be useful for many of us.

So, this month's article is packed with math (yes, you read that right) to help walk you through the calculations needed to determine the right fertilizer applications for your farm. We'll cover everything from understanding fertilizer labels to calculating how much of each fertilizer to apply based on your soil test results.

Fertilizer products are labeled with three numbers in the format **N-P2O5-K2O** (or **N-P-K**). These numbers represent the weight percentages of Nitrogen (N), Phosphorus (P2O5), and Potassium (K2O) in the fertilizer. For example, a fertilizer labeled **15-10-10** contains:

- **15% Nitrogen (N)**
- **10% Phosphorus (P2O5)**
- **10% Potassium (K2O)**

The purpose of this labeling system is to help farmers understand the nutrient composition of the fertilizer so they can calculate how much of each nutrient is present in the product.

Example 1: Calculating Pounds of Nutrients in a Bag

Let's say you have a 50-pound bag of fertilizer labeled **15-10-10**. You want to calculate how many pounds of nitrogen (N), phosphorus (P2O5), and potassium (K2O) are in the bag. Here's how:

The general formula to calculate the pounds of nutrient is:

Pounds of Nutrient in Bag =
Weight of Total Product in Bag × (Percentage of Nutrient/100)

Now, let's break it down:

- **Nitrogen (N)**: 50 lbs × 0.15 = 7.5 lbs of nitrogen
- **Phosphorus (P2O5)**: 50 lbs × 0.10 = 5 lbs of phosphorus
- **Potassium (K2O)**: 50 lbs × 0.10 = 5 lbs of potassium

So, in a 50-pound bag of **15-10-10** fertilizer, there are **7.5 lbs of nitrogen**, **5 lbs of phosphorus**, and **5 lbs of potassium**.

Now that you understand how to calculate the nutrient content in a fertilizer, we can move on to calculating how much fertilizer you need to apply based on your soil test results.

Example 2: Meeting Potassium Needs with Muriate of Potash

Let's say your soil test shows you need to apply **80 pounds of K2O per acre**. You're planning to use **muriate of potash (0-0-60)**, which means the product contains **60% potassium (K2O)**.

$$\frac{\text{60 lbs K2O}}{\text{100 lbs fertilizer}} = \frac{\text{80 lbs K2O}}{\textbf{X} \text{ lbs fertilizer}}$$

To calculate how much muriate of potash is required, you can use the following ratio:

In this case, the unknown is **X**, or the amount of fertilizer you need to apply to meet the potassium requirement. To solve for **X,** we can cross-multiply and solve the equation:

$$60 \times \mathbf{X} = 80 \times 100$$
$$60\mathbf{X} = 8{,}000$$

Now, divide both sides of the equation by 60 to solve for **X**:

X = 8,000 / 60 = 133.33 lbs of muriate of potash per acre

So, you would need to **apply 133.33 lbs of muriate of potash per acre** to meet the potassium requirement of 80 lbs K2O.

In many cases, you may need to blend different fertilizers to meet multiple nutrient needs for your crops. Let's say your soil test recommends applying **80 lbs of P2O5** and **95 lbs of K2O** per acre. You have access to two fertilizers:

- **0-46-0** (for phosphorus, P2O5)
- **0-0-60** (for potassium, K2O)

Here's how we can calculate how much of each fertilizer you need to apply.

Phosphorus (P2O5) Requirement

First, we calculate how much **0-46-0** fertilizer is needed to meet the phosphorus requirement. Using the same formula as before:

$$\frac{\text{46 lbs P2O5}}{\text{100 lbs fertilizer}} = \frac{\text{80 lbs P2O5}}{\textbf{X} \text{ lbs fertilizer}}$$

This article is designed to help walk you through the calculations needed to determine the right fertilizer applications

CROPS COWS & CRITTERS newsletter

If you have any questions, contact Katelyn Miller at 716-640-2047 or by emailing km753@cornell.edu.

Solving for **X**:

46 **X** = 80 × 100
46 **X** = 8,000

X = 8,000 / 46 = 173.9lbs of 0-46-0 per acre

So, you need **173.9 lbs of 0-46-0 per acre** to meet the phosphorus requirement.

Potassium (K2O) Requirement

Next, we calculate how much **0-0-60** fertilizer is needed to meet the potassium requirement. Using the formula:

$$\frac{\text{60 lbs K2O}}{\text{100 lbs fertilizer}} = \frac{\text{95 lbs K2O}}{\textbf{X} \text{ lbs fertilizer}}$$

Solving for **X:**

60 **X** = 95 x 100
X = 95 x 100
X = 9,500 / 60 = 158.3 lbs of 0-0-60 per acre

So, you need **158.3lbs of 0-0-60 per acre** to meet the potassium requirement.

Total Fertilizer Requirements

To meet the needs of both nutrients, the total amount of fertilizer needed for each nutrient is:

- **0-46-0:** 173.9 lbs/acre x 20 acres = **3,478 lbs**
- **0-0-60:** 158.3 lbs/acre x 20 acres = **3,166 lbs**

To calculate the final nutrient analysis of the blended fertilizer, we need to find the percentage of phosphorus and potassium in the final mix:

For phosphorus:

$$\frac{\text{173.9 lbs P2O5}}{\text{173.9 + 158.3}} \times 100 = 24\% \text{ P2O5}$$

For potassium:

$$\frac{\text{158.3 lbs of K2O}}{\text{173.9 + 158.3}} \times 100 = 28\% \text{ K2O}$$

So, the final analysis of the blended fertilizer will be **0-24-28** (0% nitrogen, 24% phosphorus, and 28% potassium).

Liquid fertilizers are also common, and calculating their application rates is slightly different because they are measured by volume, not weight. Let's look at an example using a liquid fertilizer labeled **10-15-10**, with a weight of **12 pounds per gallon** and a tank size of **50 gallons.**

Example 3: Nutrient Content in a 50-Gallon Tank

To find how many pounds of each nutrient are in the tank, we multiply the concentration of each nutrient by the weight of the product and the number of gallons:

- **Nitrogen (N):**
  10 lbs N x 12 lbs/gal x 50 gal =
  60 lbs of N in the tank
- **Phosphorus (P2O5):**
  15 lbs P2O5 x 12 lbs/gal x 50 gal =
  90 lbs of P2O5 in the tank
- **Potassium (K2O):**
  10 lbs K2O x 12 lbs/gal x 50 gal =
  60 lbs of K2O in the tank

Example 4: Gallons Needed to Apply Nitrogen

If you want to apply **50 pounds of nitrogen per acre,** you can calculate how many gallons of this liquid fertilizer are needed using the following formula:

$$\frac{\text{60 lbs N}}{\text{50 lbs N}} = \frac{\text{50 gal}}{\textbf{X} \text{ gallons}}$$

Solving for **X:**

60**X** = 50 x 60
X = 2,500 / 60 = 41.7 gallons per acre

Thus, to apply **50 lbs of nitrogen per acre,** you would need to apply **41.7 gallons of fertilizer per acre.**

By understanding how to read fertilizer labels and perform these calculations, you can ensure that your crops get the right amount of nutrients without over– or under-applying. Whether you're using granular or liquid fertilizers, knowing how to calculate nutrient requirements and fertilizer application rates is essential for optimal crop growth and cost-effective farming. ▪

Making these calculations will allow you to apply the appropriate amount of nutrients needed based on your soil test results.

Knowing how to calculate nutrient requirements and fertilizer application rates is essential for optimal crop growth and cost-effective farming.

Corn Stunt: A New Disease and A New Insect Vector for New York State

By Gary C. Bergstrom
School of Integrative Plant Science, Plant Pathology and Plant-Microbe Biology Section, Cornell University

The presence of the corn stunt spiroplasma was confirmed in corn fields in four non-contiguous New York Counties (Erie, Jefferson, Monroe, and Yates) in October 2024.

The causal agent of corn stunt, *Spiroplasma kunkelii*, belongs to a specialized class of bacteria known as mollicutes which also includes phytoplasmas. Spiroplasma cells lack walls, and they have a short, spiral shape. They live an obligate lifestyle, i.e., they survive and reproduce only in living leafhopper hosts and in the phloem sieve elements of specific plant hosts.

The pathogen that causes corn stunt is transmitted by the corn leafhopper, *Dalbulus maidis*, also not documented previously in New York (Figure 1). That status changed this October as individuals of *D. maidis* were caught on a yellow sticky trap in Jefferson County. One captured leafhopper was confirmed by molecular tests to be infected by *S. kunkelii*. This is the first documentation of the corn leafhopper and of *S. kunkelii* in both corn leaves and corn leafhoppers in New York.

HOW IS THE SPIROPLASMA TRANSMITTED AND SPREAD?

The corn leafhopper, *D. maidis*, can acquire spiroplasma through its probing mouthparts in less than an hour of feeding in phloem tissues of infected corn plants, but it can take up to two weeks of spiroplasma replication in the leafhopper's body before the insect can then transmit the spiroplasma into the phloem of healthy corn plants.

Symptoms don't generally appear until about a month after plants have been infected. The most severe symptoms are the result of infection at early corn growth stages (from VE to V8). An infected leafhopper can transmit spiroplasma to many nearby plants and can also be blown by air currents and deposited into distant corn fields.

WHERE DID THE LEAFHOPPER AND SPIROPLASMA IN NEW YORK COME FROM?

Corn stunt is a disease complex first described nearly 80 years ago in the Rio Grande Valley of Texas. *Spiroplasma kunkelii* is the principal pathogen causing corn stunt. However, other pathogens, either alone or in combination, also can cause corn stunt; these pathogens include the maize bushy stunt phytoplasma, the maize rayado fino virus, and the maize striate mosaic virus. Leaf samples from New York have been archived for later testing for these additional pathogens.

Over past decades, there have been observations of corn stunt symptoms in several southern and eastern states but epidemics of corn stunt with well documented isolation of *S. kunkelii* have been primarily in Texas, Florida, and California. In recent years, corn stunt has occurred as a yield-reducing disease primarily in Mexico, Central and South America, particularly in Argentina and Brazil. The principal vector, the corn leafhopper, can be transported long distances by air currents and carries the pathogen within it. While there is no direct proof, it is very likely that long-distance atmospheric transport of the corn leafhopper into the Midwest and Northeast in 2024 was aided by storm systems that moved north from southern states.

WHAT ARE THE SYMPTOMS OF CORN STUNT?

Corn stunt symptoms present similarly to other stresses in corn, including drought, soil compaction, and phosphorous deficiency. Leaf blades and sheathes can show white or yellow stripes (loss of chlorophyl) or red or purple streaks (anthocyanin pigments) and plants may show premature senescence (but without stalk rot) (Figure 2). Corn stunt varies from several common stressors in that plants can show significant stunting and ear abnormalities such as poorly filled ears, no ears or multiple ears at the same node. Symptoms may appear in patches within a field or across larger portions of a field.

HOW WAS CORN STUNT DETECTED IN NEW YORK?

From conference calls with my field crop pathology counterparts in southern and corn belt states this summer, I became aware that, in association with stunted and discolored corn plants, corn stunt and corn leafhopper were being observed further north of their usual ranges in 2024. Yet, I thought that New York was at a sufficiently northern latitude to avoid these problems.

I credit a very observant agronomy specialist, Rafaela Aguiar with Kreher Family Farms, for noticing unusual symptoms in field corn in Erie County in late summer. Rafaela, a native of Brazil and with previous agronomic experience in South America, thought the symptoms resembled corn stunt which she had seen in South America. Though I was skeptical, it turned out that Rafaela was correct. We initially collected samples of symptomatic plants (Figure 2A) from three Erie County fields and sent them to the Diagnostic Lab at Oklahoma State University. Two of the three

Corn stunt is a new corn disease that has been identified in four New York Counties this year.

Corn stunt symptoms present similarly to other stresses in corn, including drought, soil compaction, and phosphorous deficiency.

fields came back as strongly positive for the corn stunt spiroplasma. In a race against corn harvest and frost, samples were then collected from corn in other counties where similar symptoms had been reported. Samples from Jefferson, Monroe, and Yates Counties were also positive (Figure 2B). I suggest that, given more time for scouting in October, corn stunt may have been diagnosed in many more corn fields in New York this year.

WHAT DOES THIS MEAN FOR FUTURE CORN PRODUCTION?

Documentation of the pathogen and its insect vector in New York in 2024 demonstrated that corn stunt could occur in New York in future growing seasons. And if spiroplasma-infected corn leafhoppers arrive at earlier corn growth stages, significant yield losses could result. Then again, the atmospheric pathways that carried corn leafhoppers to New York in 2024 might not be repeated for several years. Many presume that the corn leafhopper will not overwinter as far north as New York, but, with climate change, that may be proven incorrect.

There is much that we don't know. Cornell University, Cornell Cooperative Extension, and the New York State Integrated Pest Management Program have committed to participate in a Corn Stunt Working Group of plant pathologists and entomologists in states affected by corn stunt and corn leafhopper. One aim of the group is to deploy a common protocol to monitor the corn leafhopper during the 2025 growing season. Also, the Cornell Plant Disease Diagnostic Clinic is gearing up to offer a molecular test for corn stunt spiroplasma in 2025.

HOW WILL THE CORN STUNT DISEASE BE MANAGED?

Awareness and accurate diagnosis of corn stunt and regional monitoring for corn leafhopper are necessary first steps in managing this complex. Based on limited observations in 2024, it appears that corn stunt could cause significant yield reductions under New York corn growing conditions. Plant breeding is the long-term solution to prevent corn yield losses. Hybrids with moderate resistance to the spiroplasma and/or the leafhopper have been deployed in Latin American countries to manage the corn stunt complex. International companies that sell seed in the U.S. as well as Latin America are aware of which germplasms are most promising for incorporation into hybrids for northern temperate areas such as ours. I do not expect much choice of resistance in northern hybrids in 2025. Management of corn leafhopper populations with insecticides at corn vegetative stages to reduce corn stunt deserves further investigation. My principal advice to New York growers in 2025 is to plant corn at the earliest recommended date to avoid arrival of leafhoppers at the most vulnerable plant stages for infection by spiroplasma. ▪

Figure 1. Corn leafhopper, *Dalbulus maidis*, the insect vector of corn stunt spiroplasma, is characterized by two prominent dark dots between its eyes and a deeply imbedded V-pattern on its upper thorax. Photo courtesy of Dr. Ashleigh Faris, Oklahoma State University.

Figure 2. Corn plants testing positive for corn stunt spiroplasma showed stunting, leaf reddening, and abnormal ears in (A) Erie County and (B) Jefferson County, New York near the end of the 2024 growing season.

Based on limited observations in 2024, it appears that corn stunt could cause significant yield reductions under New York corn growing conditions.

If you have any questions, contact Katelyn Miller at 716-640-2047 or by emailing km753@cornell.edu.

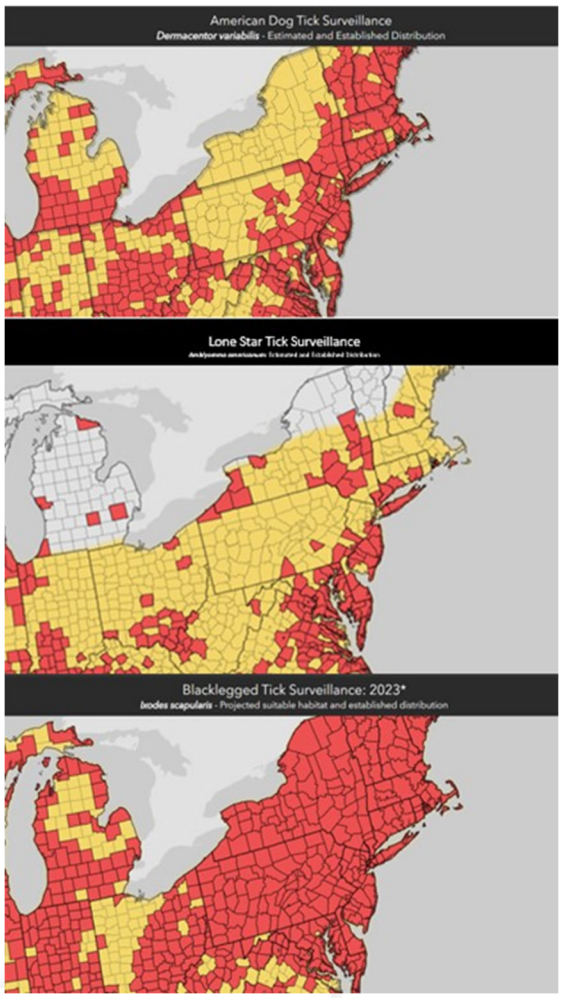
Ticks Don't Die Over Winter? Well, That "Ticks" Me Off!

By Amy Barkley, Livestock Specialist, SWNYDLFC

There is a long-held belief of many, including myself up until a few weeks ago, that the reason we've been seeing more ticks around is because our winters have been mild, since cold winters kill ticks. What we've been experiencing. in WNY seems to support this claim! This November alone, my family ended up with multiple ticks on our cats and ourselves, which is unusual for us in WNY. However, with the past few years of mild winters, we weren't too surprised. I was wishing for a hard winter to kill them off, but apparently that's not going to work – here's why:

Ticks are hardy critters and go through multiple molts and feeds over the course of their lives. It's a relatively seasonal life cycle, where they feed on their hosts, drop off and develop for a season or two, and get their next blood meal to enter their next stage of life. It can take up to a year from the time ticks are hatched to the time they're ready to reproduce, and evidence shows that they'll survive months of sub-freezing temperatures. Observations of multiple populations also indicate that their lifecycle can be extended if they encounter adverse conditions, like very cold, snowy weather.

What cold winters do, however, is slow the spread of ticks into new ranges. In WNY, we commonly see the American dog tick, blacklegged tick, and lone star tick. The distribution maps to the right show the estimated distribution (shown in yellow) and established distribution (shown in red). The estimated distributions are likely where the ticks are living, but an established population has not yet been found. The red areas indicate where an established population has been found. Cold winters limit those established populations from migrating to other regions as quickly as they would in generally warmer winters or winters that have extended warm seasons on either shoulder.



Another thing to consider is that there are two new species of ticks, the Gulf Coast tick and the (Asian) longhorned tick, which are invasive and migrating up the East Coast. The longhorned tick's current distribution is limited to the eastern side of the state and the Gulf Coast tick is just entering into that same region. As their populations become more established, we'll slowly see them moving northwest. If the winters continue to be mild, we'll see them move into our region faster.

Ticks are a cause of concern because of the human and livestock diseases they carry. Some common tickborne disease include lyme, alpha-gal allergy, tick paralysis, tularemia, anaplasmosis, borrelia, and others. Some ticks, like the longhorned tick, can build up in populations so large that they can cause anemia and death in livestock. We should do our best to limit exposure to these arachnids by reducing interactions with forest edges and keeping brush, weeds, and high grass mowed. Using pesticides for livestock and repellents for humans are successful ways of managing tick attraction and attachment. Checking your livestock regularly for ticks and collecting specimens to share with the NSY IPM lab can help researchers identify which ticks you have and determine if some of the more invasive species have settled in our region. Joellen Lampman is our contact for unusual tick ID and reporting of large infestations, and she can be reached by contacting her at (518) 441-1303 or jkz6@cornell.edu. ▪

Chart From The Cornell IPM Program

Ticks are surprisingly tolerant of sub-freezing temperatures.

Keep an eye on livestock for strange looking or large populations of ticks and report them to the Cornell IPM lab.

Preparing Your Lambing and Kidding Kits

By Amy Barkley, Livestock Specialist, SWNYDLFC

As the daylight hours fade and start to increase again over the next month, we're going to start seeing the first lambs and kids of the season born. Now's the time to check your lambing or kidding kit inventory to restock, replace out-of-date supplements and antibiotics, and mentally prepare for the upcoming season!

The Cornell Sheep and Goat Program and SWNYDLFC Team outline the following to be included in lambing and kidding kits, divided up into the "essentials" and "advanced essentials".

THE ESSENTIALS

- **The phone number of your vet.** Ensuring you have a vet ready to call, preferably one with whom you already have a working relationship, can mean a speedier diagnosis and treatment if things take a turn.
- **Mild dish soap** to clean equipment, the udder if it's dirty, and your hands.
- **Sterile lubricant** for internal exams.
- **Single use OB or exam gloves** protect you from uterine and fetal fluids, which can carry disease-causing agents. It also protects the uterus from the introduction of excessive amounts of bacteria or fluids from other animals that you've recently assisted.
- **Tri-Iodine 7 Tincture** is used as a naval dip to prevent infections.
- **Clean towels/rags/newspaper** to dry kids off if no clean hay or straw is present. It's also handy to have these to wipe your hands and clean equipment.
- **Clean, non-porous buckets** made of stainless steel or solid plastic carry water or sanitizer and can be used to warm colostrum or mix colostrum replacer.
- **Digital rectal thermometers** are used to check the body temperature of the younglings and the dam to check for fever or hyperthermia.
- **Extra colostrum** saved from other dams in the herd/flock or a **colostrum replacer powder** that's in date allows for you to get a first milk into a lamb or kid if they don't get it from their dam.
- **A bottle with a nipple sized for small ruminants** at the ready allows for emergency feeding in the case that there's something amiss with the dam's milk supply, udder conformation, the dam passes during labor and delivery, or the dam rejects the lamb.
- **Flashlights, battery-operated lanterns, or head lamps (with new batteries)** come in handy when you're assisting mothers and babies in an area with no electricity or lights.
- **Access to water, preferably warm,** allows for easy clean-up, warming of colostrum, or mixing of colostrum replacer.

THE ADVANCED ESSENTIALS

- **Antibiotics recommended and prescribed by your veterinarian** to manage the potential for infections caused by dystocia or a retained placenta.
- **Stomach tube and 60 cc dosing syringe** for tubing newborns or older kids that are weak but able to swallow.
- **Warming box** to warm hypothermic newborns. Many times, this requires them to be brought inside a heated shop or the house.
- **Vitamin E / Selenium (Bo-Se) injections or oral paste** for those newborns or youngsters showing symptoms of white muscle disease, or as a prophylactic for babies from those herds or flocks that chronically struggle with white muscle disease.
- **50% dextrose** solution to be diluted with boiled water and cooled to give intraperitoneal injections in very weak lambs. **A 20 gauge x 1.5" sterile needle and 60mL sterile syringe is also required.**
- **23% calcium gluconate** for treating milk fever.
- **Propylene glycol** for treating ketosis.

We recommend keeping these supplies readily accessible during the lambing and kidding seasons. Storing the items in a clear plastic tote can easily help you find what you need quickly while protecting the contents from dust and debris.

A video series of goat reproduction and kidding, including videos explaining more about what to expect during and following the birthing process, can be found on our team's YouTube page @cceswnydlfc or https://www.youtube.com/@cceswnydlfc/playlists.

A little preparation now can limit frustrations later!

Regularly checking the status of both dam and lambs/kids is important during this stressful time. Having a veterinarian ready to call is key to managing situations that require an expert.

Looking for more information? Check out our SWNYDLFC Youtube page! We have an entire playlist all about creating a kidding kit and what to stock them with.

Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

Questions? Contact
Katelyn Walley
Farm Business Management Specialist
716-640-0522
kaw249@cornell.edu

Setting Your Farm Financial Resolutions

The start of a new year is the perfect time for farm businesses of all shapes and sizes to reset their financial management. Join this INTERACTIVE workshop to start your farm off on the right path towards financial success in 2025. Topics include Record Keeping, Tax Management, Financial Goals, and Strategies for Profitability. Participants will receive handouts that can be used throughout the year and a quarterly farm financial checklist.

Workshops are Saturdays from 9am – 11am at the following dates and locations. Each workshop is the same, so choose the one that works best for you!

*Tues, 1/7 – Virtual Webinar

9am - 11am. Participants will not receive printed handouts, a sign on link will be emailed.

1/11 – Chautauqua County

CCE Chautauqua, Jamestown Community College,
525 Falconer Street, Jamestown, NY

1/18 – Cattaraugus County

CCE Cattaraugus, Ellicottville Town Center,
28 Parkside Drive, Ellicottville, NY

1/25 – Erie County

CCE Erie, Roycroft Campus,
21 South Grove Street, East Aurora, NY

2/1 – Allegany County

CCE Allegany,
5435 County Road 48, Belmont, NY

2/15 – Steuben County

CCE Steuben, County Annex Building,
20 East Morris Street, Bath, NY

Registration is required but participation is free.
Every farm will receive useful handouts and will be notified if the event is rescheduled due to weather.

To Register: visit www.tinyurl.com/syffr25 or call Kelly at 585-268-7644 ext 10 by 12noon on the prior Thursday.

We're excited to bring important financial information through this series across the region!

CROPS COWS & CRITTERS newsletter

For more information, contact Katelyn Walley by calling 716-640-0522 or emailing kaw249@cornell.edu.

It's Time - End Of The Year Tax Planning (Part Two)

By Katelyn Walley, Farm Business Management Specialist, SWNYDLFC

While the sun seems to have been replaced by feet of snow across much of our region, thinking about tax planning might be creeping into your mind while also seeming far away. By creating a tax strategy BEFORE January 1st, you'll avoid those (always fun) December 31st equipment purchases and (less fun) stress and headaches.

Below are some additional considerations for end-of-the-year tax strategies. This is part two of a three-part series.

Prepaid Farm Expenses: Choosing to prepay and prepurchase regular farm expenses is an excellent management tool. Prepaying expenses are a way to manage your tax liability from year to year while still making smart purchases that will benefit your day to day operations. This is also an excellent approach to negotiating and locking in beneficial prices that can give you a discount and assist with budgeting and managing cash flow in the new year. The IRS will allow you to claim prepaid expenses totaling less than 50% of all of your farm expenses in a typical year. For example – let's say your total farm expenses on your Schedule F are $250,000. In this situation, you could prepay for up to $125,000 worth of products. Other limitations include needing a business purpose for the prepayment outside of tax management (obtaining a discount, guaranteeing quantities, etc.) and purchasing an actual product – not just providing a deposit or account credit. If this is a route that you'd like to go, call your accountant now to begin coordinating purchases with your vendors and service providers.

Issue 1099 Forms: Prepare now to make sure you're ready to file your 1099 forms. 1099's are created for independent contractors, consultant fees, rent, and more. If you paid over $600 to any qualifying INDIVIDUALS for SERVICES you'll need to work with your accountant to file 1099 forms by JANUARY 31st! To file, you'll need the individual's Social Security Number or Employer Identification Number, name and address, and the total payment amounts. You DO NOT need to file a 1099 for an incorporated business – these are for sole proprietorships, partnerships, and LLC's typically. Here are some specific instances for when you need a 1099:

- Paying a veterinarian for their SERVICE fees totaling more than $600. This excludes medication, supply, and mileage costs.
- Paying a landowner for RENTED LAND in amounts over $600. This is not $600 per field but $600 TOTAL, so you might be paying them for multiple fields through multiple leases.
- Paying a consultant that works on an individual basis and not through an incorporated company, such as a nutritionist, finance manager, or crop consultant.
- Paying a contractor who charged more than $600 for labor, not including building supplies.
- Paying a mechanic who performed maintenance on farm equipment for labor, not including supplies and replacement equipment.
- Paying a trucker who charged more than $600 for their services throughout the cumulative year.
- Paying a butcher or meat processor who performed more than $600 of CUT fees (not supplies or wrap) for your farm business.
- Paying a lawyer or legal counsel who is not part of an incorporated practice.

Both of these considerations are important end-of-the-year tax tasks that should be on your radar! Call your accountant today if you have any questions or concerns to get the ball rolling. ▪

It's important to work with your tax preparers throughout the year and especially towards year end.

CROPS COWS & CRITTERS newsletter

For more information or assistance, please contact Katelyn Walley by calling 716-640-0522 or emailing kaw249@cornell.edu.

2025 NYBPA Annual Conference & Membership Meeting

KEYNOTE SPEAKER:
MR. KEVIN OCHSNER
"PLANNING TODAY FOR TOMORROW'S SUCCESS"

EDUCATIONAL TOPICS:

JOHNE'S DISEASE
DR. SHANNON CARPENTER, NYSCHAP

GRASS & PASTURE: MASTERING ESTABLISHMENT & MANAGEMENT
ADAM ROBERTSON, SEEDWAY

OPTIMAL NUTRITION MEETS QUALITY PRODUCTION
DR. TARA FELIX, PSU

BEEF INDUSTRY MARKET OUTLOOK

- TRADE SHOW
- BEEF FARM OF EXCELLENCE AWARDS
- NYBPA ANNUAL AWARD CEREMONY
- SCHOLARSHIP WINNERS ANNOUNCED
- SILENT AUCTION
- SUPREME SHOW SPONSOR AUCTION
- NYJBPA MEETING
- BREED ASSOCIATION MEETINGS
- PHOTO CONTEST

Dinner, annual meeting, keynote:
January 24, 2025: 4:30pm - 7:00pm
Educational Sessions:
January 25, 2025 8:00am - 3:30pm

DoubleTree by Hilton
6301 State Rt 298, East Syracuse, NY 13057

Cost: Full conference - $175, One day: $100
Register by January 2nd
For a copy of the registration form, email Becky Kron at nybeef@nybpa.org

The annual meeting consists of the formal meeting, a keynote speaker, and educational sessions.

This event allows you to network with other farms, Extension, and cattle related business across the state and beyond.

DON'T SKIP THIS!

You May Be Required to File An Ownership Report

Have you heard of the Corporate Transparency Act? Farmers who operate as a corporation, LLC (including single member), or limited partnership are required to provide information about the company and each beneficial owner. Businesses (including farms) need to file by January 1st or face fines and penalties. For more information, reach out to your accountant or contact Katelyn Walley at 716-640-0522.

CLASS A CDL TRAINING COURSE

NYS Certified Instructor: Todd Swimelar, "The CDL Guy"

Training required by NYS to take Class A CDL exam and driving test.
Permit not required for classroom time, but is required for driving time.

DATES & LOCATIONS

January 18th - Lismore Dairy (Arkport, NY)
February 22nd - Country Crossroads Feed & Seed (Greenwood, NY)
March 22nd - Leland Harris Farms (Lindley, NY)

Class will be held 8am-5pm, you choose date & location.

Cost: $550 for members, $650 for non-members
Breakfast refreshments & lunch provided

Please contact MacKenzie for more information and to register.
607-661-6304
$100 deposit required at the time of registration

Reach out to your accountant ASAP for assistance with your ownership report! Almost all LLC's, Partnerships, and Corporations are required to file.

CDL trainings are coming up in Steuben County from Farm Bureau. You DO NOT need to be a Steuben County resident or farm business to register.

Colostrum Construction: Building A Firm Foundation

By Katie Callero, Dairy Management Specialist, SWNYDLFC

When we feed colostrum, we are pouring the foundation for our cows on which all other things, like milk production and health, will be built on top of. In construction and on our farms, a solid foundation requires four key steps: creating a detailed plan, choosing quality materials, building the foundation, and evaluating & adjusting. Whether it is colostrum or construction, closely following these steps will help ensure success and a firm foundation on which you and your calves can stand.

CREATE A DETAILED PLAN

Blueprints are essential to have as a physical reference point for the project at hand. What is the blueprint for your colostrum management? This blueprint is an SOP (standard operating procedure). Successful SOP's are printed, have pictures associated with each step, are easy to find for reference, and are regularly reviewed with employees.

CHOOSE QUALITY MATERIALS

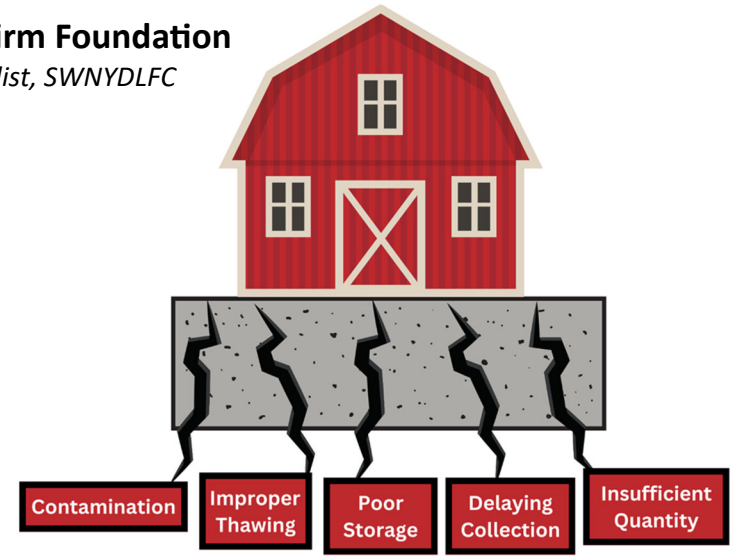
Whether it is concrete, brick, or colostrum, the quality of the materials you are using matters. Quality will ultimately determine the strength of your foundation. Checking the quality of the colostrum you receive from your cows will help ensure you are using good resources. A Brix refractometer is the easiest and cheapest way to test your colostrum quality. Any colostrum with a Brix reading over 22% is considered good quality. Any low-quality colostrum (Brix under 22%) can be used for a second feeding for the calf.

BUILD THE FOUNDATION

Building a foundation takes time and you want to make sure that every step of the process is executed properly. Timing is everything. Rushing certain steps can lead to a sloppy, uneven results. The most important time consideration is how soon after birth the calf receives colostrum. The sooner the better, as the calves' ability to absorb key nutrients begins to rapidly decline after birth.

EVALUATE AND ADJUST REGULARLY

As tempting as it can be to fall into a "set it and forget it" mindset, most buildings need periodic inspections. Your colostrum management plan and execution are no exception. If you have multiple staff members, take the time to review the "blueprints" and ensure that you are all working towards the same goals. Continual improvement and review of what is and isn't working is the best way to keep on track for achieving long-term success of fantastic cow health and production.



WATCH OUT FOR CRACKS IN YOUR FOUNDATION

DELAYING COLLECTION

This can cause a weakness in your program. Colostrum should be harvested within 6 hours after calving. Waiting too long to harvest the colostrum from the cow can cause a drop in quality due to dilution as her transitional milk comes in. There are many strategies farms can use to avoid delays: dedicating a worker each shift to check close-up cows, having a portable milking unit on-hand, or installing livestream cameras that allow for remote monitoring of pens.

CONTAMINATION

Bacterial contamination can have detrimental effects on calves with no immune system. The items you use to feed your calves, whether it's a tube feeder or a bottle, can collect bacteria rather quickly. Proper cleaning protocols are necessary to prevent unwanted bacterial growth. Best practices include proper dilutions of cleaning products, appropriate water temperature, and thoroughly drying items on clean, well-maintained racks.

INSUFFICIENT QUANTITY

Occasionally you may find you do not have enough quality natural colostrum to feed a calf. You can be prepared for these times by freezing excess quality colostrum, keeping colostrum replacer on hand, and/or using colostrum supplements. If you find your cows are consistently not making enough colostrum, it may be time to review their diets.

POOR STORAGE

Freezing colostrum in large amounts can make the thawing process more difficult than it needs to be. Aim to

Good colostrum management builds a strong foundation for cow health and production.

CROPS COWS & CRITTERS newsletter

For more information or assistance, please contact Katie Callero by calling (607) 422-6788 or emailing krc85@cornell.edu

freeze individual servings in 1–2-quart portions. If you freeze in lay flat Ziploc bags, you can maximize freezer space and you will freeze the colostrum more quickly.

LACK OF LABELING

Putting a date on the colostrum you are storing is helpful. Colostrum should be stored no longer than 2-3 days in the refrigerator and no longer than 6 months to a year in the freezer. Failure to date the colostrum when storing can lead to unnecessary waste and confusion.

BAD FREEZER

"Frost-free" freezers sound nice in theory but typically these freezers undergo freeze-thaw cycles that can compromise the colostrum quality. When selecting a freezer for colostrum storage, be sure that it is not frost-free and not part of a refrigerator. I recommend keeping a thermometer inside your freezer to ensure the minimum temperature of -5 degrees Fahrenheit is maintained.

IMPROPER THAWING

Colostrum needs to be thawed slowly in warm, not hot, water. Microwaves should be avoided as they do not heat evenly. This is to ensure that the proteins the calves need stay in the proper form for the calf to utilize them.

Calves are the future of your herd and farm. By taking the time to thoroughly review your colostrum protocols, you can be confident that you are creating a firm foundation for your calves.

Not feeling the most confident about your current protocols or simply want a fresh set of eyes to review them? If you have any questions or need further assistance, feel free to reach out to me, Katie Callero, at (607) 422-6788 or via email at krc85@cornell.edu. ▪

Cornell Organic Grains Conference

The (1st Annual!) Cornell Organic Grains Conference

February 6th, 2025

Jordan Hall @ Cornell Agritech Geneva Campus

- Keynote Speakers: Dr. Erin Silva, OGRAIN and Dr. Heather Darby of UVM Northwest Crops and Soils
- Farmer panel discussions
- Breakout groups: postharvest grain handling, organic no-till, precision tech
- Organic trade show

Join us as we kick off a new tradition!

Co-sponsored by NYCO, Cornell Field Crops and more, our goal is to bring together organic grain farmers from across the Northeast to share knowledge and learn from experts across the country.

More details to follow.

2025 Winter NYCO Meetings (New York Certified Organic)

Jordan Hall @ Cornell Agritech
Geneva Campus

Tuesday, January 14th

10 - 2pm, potluck lunch

Topics:
Organic Grain and Dairy Market Outlook
Alternative Marketing Approaches

Tuesday, March 11th

10 - 2 pm, potluck lunch

Topic:
Alternatives for Organic Fertility Management

As always, meetings will have lots of time for open discussion.

We will not be having separate dairy and grain meetings this year.

More details to follow!

The 1st Annual Cornell Organic Grains Conference will be held in February at Agritech in Geneva.

CROPS COWS & CRITTERS newsletter

New York Certified Organic's Winter Meetings will be held in January and March at Agritech in Geneva.

Dairy Market Watch

November 2024

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
Oct 23	$3.71	$1.04	$22.72	$21.95	$16.84	$21.49	$20.05	$3.21	$20.65	$3.81	$1.78
Nov 23	$3.46	$1.32	$23.00	$21.21	$17.15	$20.87	$19.59	$2.44	$20.19	$3.04	$1.74
Dec 23	$2.97	$1.44	$23.01	$19.88	$16.04	$19.23	$18.56	$2.52	$19.16	$3.12	$1.65
Jan 24	$2.97	$1.12	$21.73	$20.04	$15.17	$19.39	$18.16	$2.99	$18.76	$3.59	$1.62
Feb 24	$3.10	$1.22	$21.24	$20.53	$16.08	$19.85	$18.54	$2.46	$19.14	$3.06	$1.65
Mar 24	$3.23	$1.12	$22.05	$21.12	$16.34	$20.09	$19.03	$2.69	$19.63	$3.29	$1.69
Apr 24	$3.33	$0.83	$22.43	$21.23	$15.50	$20.11	$18.94	$3.44	$19.54	$4.04	$1.68
May 24	$2.46	$1.73	$21.71	$21.50	$18.55	$20.50	$19.74	$1.19	$20.34	$1.79	$1.75
June 24	$3.54	$2.05	$23.33	$21.60	$19.87	$21.08	$20.68	$0.81	$21.28	$1.41	$1.85
July 24	$3.57	$1.94	$24.36	$21.82	$19.79	$21.31	$21.11	$1.32	$21.71	$1.92	$1.87
Aug 24	$3.56	$2.17	$24.57	$22.05	$20.66	$21.58	$21.49	$0.83	$22.09	$1.143	$1.90
Sep 24	$3.61	$2.92	$24.85	$22.40	$23.34	$22.29	$22.42	$(0.92)	$23.02	$(0.32)	$1.98
Oct 24	$3.08	$3.32	$26.42	$21.01	$22.85	$20.90	$21.78	$(1.07)	$22.38	$(0.47)	$1.93

October Utilization (Northeast): Class I = 30.9%; Class II = 26.7%; Class III = 29.0%; Class IV = 13.4%.

***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 91, Report 48, November 29th, 2024)

Dry Products: The holiday-shortened trading week did little to slow down market bulls for dried dairy ingredient markets this week. Prices were generally steady for low/medium heat and high heat nonfat dry milk (NDM) this week on limited reporting trading activity. Still, markets are viewed as firm as the final month of the year approaches. Dry buttermilk prices were steady to higher throughout the country.

Cheese: Cheese manufacturing schedules remain varied throughout the U.S. In the East region, milk volumes remain somewhat snug. Cheese plant managers relay using all the milk available to them for production. Contacts in the region share retail demand remains strong. Cheesemakers in the Central region are running seasonally steady production schedules. Cheese plant managers share surplus milk loads are not as available as they have been during previous Thanksgiving weeks. Spot milk loads were reported at $3 below Class III to at Class. Both curd and barrel producers share demand is slightly quieter.

Butter: Butter demand is mixed for the holiday week. Although stakeholders in the Northeast note slightly tighter cream volumes, loads are readily available across most of the nation. Many butter producers are not looking to secure spot loads and turning away spot cream load offers. Like butter demand, butter production schedules are mixed for the holiday week also, with some butter producers noting various degrees of downtime for the final week of the month. A few butter manufacturers indicate shifting more of the production focus to bulk butter.

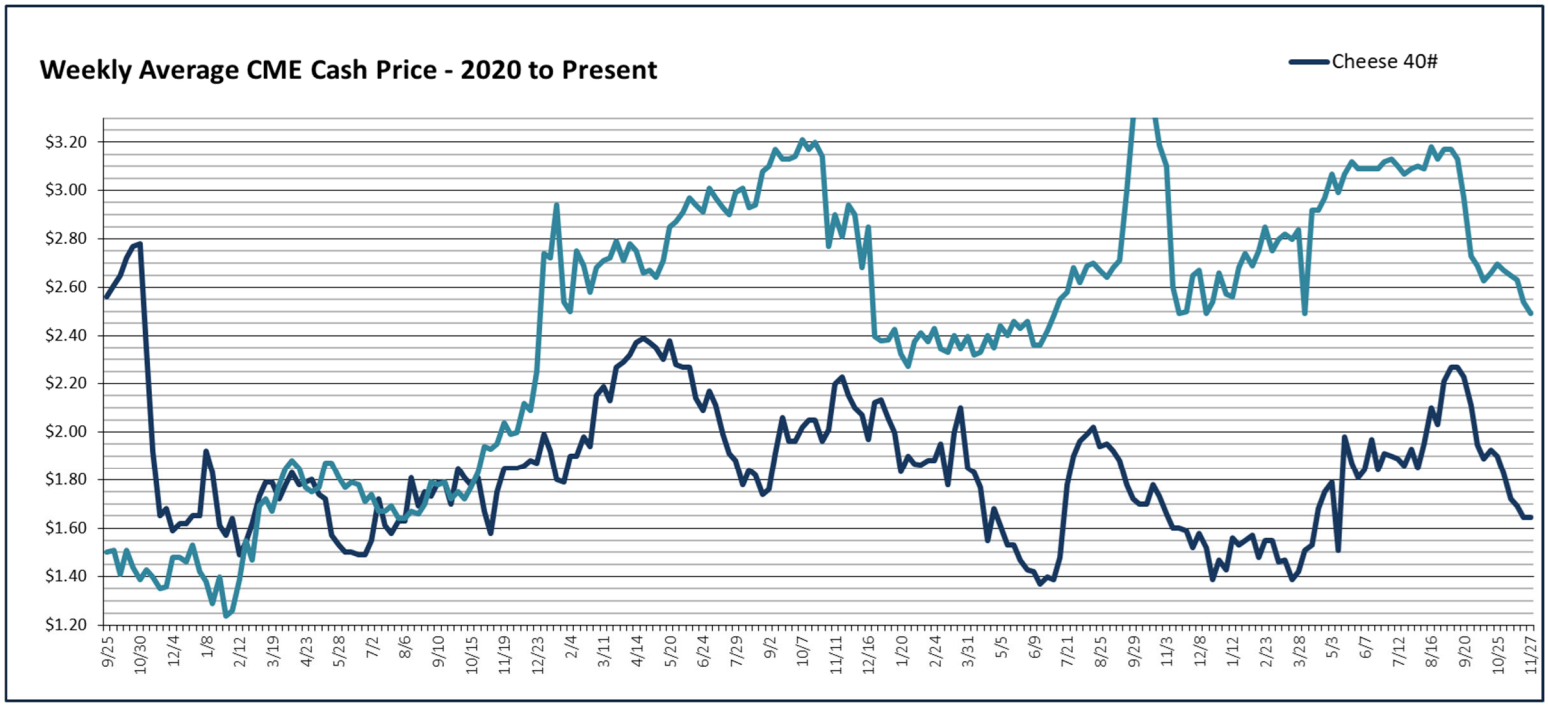
Fluid Milk: Farm level milk outputs are mixed across the country. Steady volumes are being seen in the East and Central regions as favorable weather and good feed quality contribute to milk production. Class I activity has been busy this fall. Demand for bottled milk has been strong over the past few months.

Friday CME Cash Prices					
Dates	8/30	9/6	9/13	9/20	9/27
Butter	$3.17	$3.17	$3.13	$2.97	$2.73
Cheese (40# Blocks)	$2.21	$2.27	$2.27	$2.23	$2.11

October's $/Gallon paid to the farmer was $1.93. This is an decrease from last month's $1.98 and an increase from one year ago when it was $1.78.

CROPS COWS & CRITTERS newsletter

Dairy Market Watch is an educational newsletter compiled by Katelyn Walley and funded by Cornell PRO-DAIRY.



Selected quotes from the Livestock, Dairy, and Poultry Outlook

November 15th, 2024, LDP-M-365: https://www.ers.usda.gov/publications/pub-details/?pubid=110423

The prices for 40-pound blocks and 500-pound barrels (adjusted to 38-percent moisture) of Cheddar cheese declined by 26.27 and 50.98 cents per pound, respectively. Similarly, the price for butter declined by 18.75 cents per pound. Conversely, nonfat dry milk (NDM) and dry whey prices rose by 2.71 and 3.75 cents per pound, respectively.

Dairy products wholesale prices
Dollars per pound

	For the week ending		
	October 5	November 2	Change
Butter	2.9019	2.7144	-0.1875
Cheddar cheese			
40-pound blocks	2.2578	1.9951	-0.2627
500-pound barrels *	2.5137	2.0039	-0.5098
Nonfat dry milk	1.3329	1.3600	0.0271
Dry whey	0.5459	0.5834	0.0375

* Adjusted to 38-percent moisture.

Source: USDA, Agricultural Marketing Service, *National Dairy Products Sales Report*, November 6, 2024.

Weekly dairy cow slaughter in 2024 remains below last year's levels, with a slight increase in the week ending October 19 (week 42). Due to factors such as tight replacement heifer supplies, high replacement cow prices, persistent high demand for beef-on-dairy heifers, and lower feed costs, dairy farmers are likely extending the productive life of older cows, limiting culling. Replacement cow prices have been relatively high. In October, the average price for a replacement cow surged to $2,600, a 41-percent increase from October 2023. This price increase makes it more expensive for dairy farmers who may be planning to expand their dairy herds.

Dairy exports increased year over year in September on strong international demand. On a milk-fat milk-equivalent basis, September dairy exports totaled 970 million pounds, 124 million pounds above September 2023.

Domestic use on a milk-fat basis totaled 57,091 million pounds in 2024-Q3, about 0.2 percent higher than 2023-Q3. Compared to 2023-Q3, in 2024-Q3 domestic use increased for butter and other-than-American cheese, while domestic use declined for dry skim milk, American cheese, dry whey, whey protein concentrate, and lactose.

The forecasts for the herd size and milk per cow in the fourth quarter of 2024 are unchanged from the previous month's forecast. The milk production forecast for the year is 226.0 billion pounds, 0.2 billion pounds more than the previous forecast. Following the recent movement in dairy product prices—weakness in butter prices and strength in dry whey and nonfat dry milk prices—the fourth-quarter 2024 price forecasts have been adjusted accordingly from previous forecasts. With an unchanged cheese price forecast and a higher price forecast for dry whey, the fourth quarter Class III milk price forecast is raised to $21.15 (+$0.10) per hundredweight.

The 2025 forecasts for the herd size, milk per cow, and total milk production—9.36 million head, 24,325 pounds, and 227.7 billion pounds— are unchanged from the last month's forecast. With higher expected prices for cheese and dry whey, the Class III price forecast for 2025 has been raised. ▪

The all-milk price forecast for 2024 is $22.75 per cwt, $0.05 lower than the previous forecast.

The all-milk price forecast for 2025 is $22.85 per cwt, $0.10 higher than the previous forecast.

The Crops, Cows, and Critters (USPS#101-400)
is published monthly by Cornell Cooperative Extension
of Chautauqua County, JCC Carnahan Center
525 Falconer Street, PO Box 20
Jamestown, NY 14702-9608.

Periodical Postage Paid at
Jamestown, NY 14701.