

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.

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

Volume 6 • Issue 8 • August 2025

Photo by Kelly Bourne

Contact Our Specialists



Amy Barkley

Team Leader

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



Kate McDonald Polakiewicz

Farm Business Management

716-640-0522

kem348@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 & 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

Lynn Bliven

Allegany County

Ag & Natural Resources

Issue Leader

lao3@cornell.edu

585-268-7466 ext. 18

Kim Oudemool

Cattaraugus County

Natural Resources Educator

kk35@cornell.edu

716-699-2377 ext. 106

Katelyn Walley-Stoll

Chautauqua County

Agriculture Team Leader

kaw249@cornell.edu

716-664-9502 ext. 202

Sharon Bachman

Erie County

Agriculture & Natural

Resources Educator

sin2@cornell.edu

716-652-5400 ext. 150

Susan Walker

Steuben County

Agriculture Educator

smw272@cornell.edu

607-664-2574

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

2 - August 2025

**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 585.-268-7644 ext. 10.

What's Moo with Cornell Research: Colostrum

By Katie Callero, Dairy Management Specialist, SWNYDLFC

Let's check out what is "moo" with Cornell dairy research. Two articles were recently published in the Journal of Dairy Science Communications from Cornell's veterinary school on colostrum.

Lag time from calving to first colostrum harvest in Holstein dairy cows: association with colostral IgG, volume, and dry matter - JDS Communications.

The first study (Mann et al., 2025) wanted to observe what would happen to the colostrum harvested from a cow if there was a delay between the time she gave birth and the time she was milked for colostrum. Cows were then separated into 6 different groups based off of how soon their colostrum was harvested. 640 Holstein cows were separated into the following groups: 0-3 hrs, 3-6 hrs, 6-9 hrs, 9-12 hrs, 12-15 hrs, and 15-18 hrs of delay. The results from their study stated the "first milking of colostrum can be delayed for up to 9 hours without a significant reduction in IgG concentration." While you can delay colostrum harvest from the dam up to 9 hours, it is still recommended to feed the calf colostrum immediately after birth.

Evaluating bacterial growth in raw, frozen, and heat-treated colostrum inoculated with fecal Escherichia coli - JDS Communications.

The second study (McKane et al., 2025) looked to explore how fecal E. coli grows in raw, frozen, and heat-treated colostrum. The colostrum samples were collected and then contaminated with E. coli by the research team. Next, the samples were incubated for 24 hours, and the bacterial growth was measured. The number of E. coli in the samples at 0 and 2 hours did not differ between the groups. Yet after 4, 6, 8, and 24 hours more E. coli was present in the heat-treated and raw colostrum as opposed to the frozen colostrum.

In conclusion, the best way to maintain the integrity of your high-quality colostrum is to not delay longer than 9 hours before harvesting your colostrum. Freezing is a great way to slow the growth of bacteria in colostrum. It is important to note that freezing only slows growth and doesn't stop it entirely. Thus, make sure that the colostrum you are freezing is as clean and high quality as possible to prevent high contamination levels. The better your colostrum management program, the greater the health benefits for your calves.

Meet our Farm Business Management Specialist Kate McDonald Polakiewicz



Kate is a production and extension systems specialist with 15 years of experience working in federal government, private sector, academic, and international settings. She comes to CCE from the US Agency for International Development (USAID) where she had managed the Farmer-to Farmer program, a longstanding agricultural extension program that provided short-term technical assistance from US-based farmers to other farmer communities abroad. She also managed agricultural research awards in horticulture, agronomy, aquaculture, and in scaling new technologies. Before USAID, Kate worked on agricultural programs while living in Ghana, Ethiopia, and Uganda. Her work in research and extension also brought her to lead education on soil fertility and plant pathology in Honduras, Guatemala, and Mexico. Kate holds a master's degree from the University of California, Davis, and lives with her young family in Amherst, NY.

Colostrum harvest can be delayed up to 9 hours before IgG concentrations are affected.

**CROPS
COWS &
CRITTERS**
newsletter

Kate will be working in the areas of financial management, production economics, risk management, business planning, and market analysis.

Pricing Corn Silage - Preliminary Fall 2025 Estimates

By John Hanchar, NWNLDLFC

DETERMINING CORN SILAGE PRICE

Some readers may be checking their calendars wondering why results from the team's annual pricing corn silage work are being published early this year when compared to the usual September/October reporting in Ag Focus. This year, weather conditions present challenges to farm business owners working to implement cropping programs as planned. Depending upon adjustments being considered, farm business owners seek price information for relevant crop alternatives. For example, dairy farmers and cash grain farmers, when faced with a need to consider changes to cropping programs due to weather and/or markets, seek corn silage price information when deciding selling and buying agreements.

The farm business owner can examine how much corn silage the owner would be willing to supply to a market at a given price. Analysis of the farm business' cost structure for corn silage production combined with consideration of other factors help define the supply relationship. The seller can develop a target based upon the above, but actual market conditions provide no guarantee that a buyer will purchase quantities desired at prices that achieve the producer's target.

Some farm business owners might approach the task of determining corn silage price from a value in production, or input demand perspective. Amounts of corn grain and corn stover in a ton of corn silage, relevant output and input prices, and corn silage's place in the milk production process relative to other inputs are key factors. The buyer can develop a price target based upon the above, but actual market conditions provide no guarantee that a producer will sell the quantity desired at a price that matches the buyer's willingness to pay target.

Although factors in price determination, the two approaches described above, in isolation, don't completely determine price and quantity. Supply and demand relationships work simultaneously in markets to determine price and quantity. Empirical price analysis brings supply and demand relationships together to determine price.

CORN SILAGE PRICE ANALYSIS

Empirical price analysis suggests that corn silage price is a function of corn silage quantities, alfalfa hay price, the price received by farmers for milk sold, and corn grain price. An ordinary least squares regression model expresses

corn silage price as a linear function of the above variables. The statistical analysis used here is fairly basic. However, readers of the original work, annual update articles note that the analysis, and estimates help farm business owners price corn silage.

CORN SILAGE PRICE ESTIMATES - PRELIMINARY FALL 2025

The ordinary least squares regression model originally reported in August 2012, updated annually to reflect additional data available, as well as changes in other underlying factors produced corn silage price estimates for NY. Estimated corn silage price is a function of alfalfa hay price, and corn grain price with other factors (corn silage production, and milk price) fixed at expected levels. Expected corn silage quantity is set at 8,430 units (one unit = 1,000 tons), the approximate state average for the period 2007 through 2024, subject to change.

SUPPOSE

NY alfalfa hay price is \$240 per ton, the most recent value reported, (USDA/NASS. Agricultural Prices. Washington, DC: National Agricultural Statistics Service. QuickStats website. 2025-06-24 access date.), and corn grain price is \$4.33 per bushel, an approximate value based upon reported bids for fall 2025 (Western NY Energy. "Corn Bids." Website. 2025-06-24 access date). Using the estimating equation, and the above prices for alfalfa hay and corn grain as expected prices, estimated corn silage price is about \$60 per ton. The estimate represents the expected value of corn silage post harvest/in the bunk/wet, for the fall months of September, October, November, 2025. Compare this to last fall's estimate of about \$53 per ton. Late planting dates and other agronomic factors may combine for lower production when compared with the average. Using an expected corn silage quantity of 7,938 units (1 unit = 1,000 tons), about one standard deviation less than the initial value, yields a corn silage price estimate of about \$63 per ton. Buyers and sellers use an estimate as a base, typically adjusting for quality and/or harvest, hauling, and storage costs based upon the situation, for example, when pricing standing corn for silage. Corn silage price estimates combine with understanding of important supply, and demand factors from the individual farm business owner's perspective, including local conditions, to aid decision making regarding corn silage price.

Continued on next page...

This year, weather conditions present challenges to farm business owners working to implement cropping programs as planned.

**CROPS
COWS &
CRITTERS**
newsletter

Analysis suggests corn silage price depends upon corn silage quantities, alfalfa hay price, the price received by farmers for milk, and corn grain price.

...from previous page

SUMMARY

Analysis suggests corn silage price depends upon corn silage quantities, alfalfa hay price, the price received by farmers for milk, and corn grain price.

Analysis for NY suggests corn silage price estimates are most sensitive to changes in alfalfa hay price and corn grain price.

Price estimates, combined with understanding of relevant supply and demand factors from an individual farm business owner's perspective can aid decision making regarding corn silage price, while also aiding in the pricing of other forages. Given recently available alfalfa hay, and corn grain prices (USDA/NASS, and Western NY Energy, respectively, 2025-06-24 access date), the initial fall 2025 price analysis for NY suggests an estimated corn silage price of about \$63 per ton. The fall 2024 estimate was about \$53 per ton.



Mock Truck Inspection Day at CLEREL

We will be welcoming Trooper Andrew Lawrence who will be giving a classroom type presentation which outlines why the inspections are done and what the troopers are looking for as well as how to prepare your fleet and drivers to pass these inspections. There will be two trucks on site and we encourage attendance for not only those who are hauling grapes this fall, but also those hauling grain. A mock inspection will be done on each truck/trailer following the presentation.

If you or someone in your business drives a commercial vehicle we recommend that you attend and get a refresher to save yourself a possible headache and fine down the road. A commercial vehicle is any single or combination motor vehicle used on a highway in commerce to transport property or passengers AND has a gross vehicle weight of 10,001 pounds or more. Commercial vehicles can also transport hazardous materials. The trooper will review the DOT inspection process as well as what happens when there are violations against a DOT number. He will also go over the state licensing which includes how big of a vehicle can be driven on the standard class D license, air brakes, CDL requirements – both class A and B, and appropriate licensing for farm vehicles.

Wednesday, August 20th
9am-Noon

Cornell Lake Erie Research
& Extension Laboratory
6592 West Main Rd
Portland, NY 14769

The event is FREE but we do ask that you register so we can be sure to have enough room available for all who are interested.

Registration is at this link:
<https://lergp.cce.cornell.edu/event.php?id=635>

or contact Kate Robinson at 716-792-2800 or kjr45@cornell.edu



FREE to attend!

**CROPS
COWS &
CRITTERS**
newsletter

To register contact Kate Robinson at
716.792-2800
kjr45@cornell.edu

The Scoop on Poop: Custom Spreading vs Doing it Yourself

By Katelyn Miller, Field Crop & Forage Specialist, SWNYDLFC

If you have livestock, you have manure, a fabulous waste product that contains all essential nutrients plants need. As great as it is, it's also not the easiest product to handle, requiring careful management. Many farms elect to handle manure themselves, viewing it as a necessary task that they must complete. While something does need to be done with that manure, you may not need to be the one to do it. So, what are the considerations to make the decision on whether to haul your own manure or hire someone to apply it?

ECONOMICS

Before you make any decision, you need to calculate your operating costs. Calculate your equipment costs, depreciation interest, repairs, fuel, time, labor, and any other expenses that go into hauling manure on your farm. Understanding your costs will allow you to compare against custom applicator rates.

Manure is a valuable resource that we want to apply in a way to minimize runoff and maximize nutrient utilization. While it is quick and easy to apply to the closest field at max application rates, it does not mean it's the most cost-effective option. Nutrients should be placed where they are needed the most, which could mean transporting nutrients longer distances. While that means a higher transportation cost, placing it where nutrients are needed makes the most economical sense. The soil can only hold so many nutrients, so applying excess manure to a field that doesn't need it results in lost nutrients and money. Compare your transportation costs for traveling to farther fields with manure against purchasing fertilizer to meet crop needs. Understanding the marketplace like fertilizer prices and commodity prices can also help.

LABOR

Labor is a challenge, both in terms of finding it and paying for it. Do you have enough staff to support hauling manure in-house? What's not getting completed because of all the manpower getting dedicated to manure hauling? Consider the hourly rate of paying someone, or multiple people, to haul thousands (if not millions) of gallons of manure. Is time better spent elsewhere? The reality is, you are livestock farmers first, not manure handlers.

AVAILABILITY:

Are there custom applicators in the area? What does their schedule look like? Do they have the capacity to take on additional farms? This is a decision that requires preplanning.

EQUIPMENT

There is a significant upfront investment in hauling/application equipment, regardless of whether it's a dry spreader, dragline, injection bar, etcetera. In addition to the investment you made with your equipment, it requires the knowledge and skill to operate and repair it. You are responsible for maintenance, repairs, fuel, and storage costs. The size of your operation could also help determine whether the investment in equipment is worth it in the long term.

Look at the application system you currently have in place. Is it working for you? How far are you traveling to fields? Are there any changes you want to make?

TIMING

I do not need to explain the tight windows that are available to get field work done, especially this year. Owning your own equipment allows you to respond quickly to changing weather and crop needs. It also allows you to apply when it's most convenient for you. On the flip side, if you don't have the labor available, this is a challenge.

THE VALUE OF MANURE

The Nutrient Management Spear Program (NMSP) over the last few years has been conducting a "Value of Manure" study. Looking at two farms on the project in Central and Northern NY, manure positively impacted yields and reduced fertilizer needs over two years. Without sidedress nitrogen, manure provided a cumulative yield benefit of 39 bushels/acre. At the MERN (Most Economical Rate of Nitrogen)*, manure reduced fertilizer N requirements by 23 pounds of N/acre and increased yields by 34 bushels/acre. This resulted in an economic gain of \$159/acre, excluding manure costs and sidedress application. It's important to note that these values will vary depending on the farm. If you are interested in getting this type of data for your farm and participating in the project, let Katelyn Miller know at 716-640-2047.

Manure management is not one size fits all. You may do it all yourself, hire it all done, or use a mix of both. There is no right or wrong answer but knowing your operational costs will help lead you to make the best decision for your operation.

*The MERN value represents the point at which adding extra fertilizer stops paying for the extra yield increase. The calculation assumed a fertilizer price of \$0.73/pound of N, a \$55 per ton silage value, and a \$4.2 per bushel grain value.

Resources

<https://blogs.cornell.edu/whatscroppingup/2025/06/11/the-power-of-manure-boosting-yields-for-multiple-years/>

Before making any decisions, calculate your operating costs including equipment, fuel, labor, etc.

**CROPS
COWS &
CRITTERS**
newsletter

Understanding your costs will allow you to compare against custom applicator rates.

Deerworm Fact Sheet for Sheep and Goat Producers

*Courtesy of Cornell Sheep & Goat Program and Cornell Ambulatory Veterinary Services. Modified by Amy Barkley for length.
Funding provided by the Beakman Fund and the Hatch & Smith-Lever Federal Capacity Fund Grant "Application of New
Concepts for Control of Internal Parasites in Sheep and Goats".*

What is Deer Worm?

Deer worm, aka meningeal worm, (*Parelaphostrongylus tenuis* (abbreviated *P. tenuis*)) is a parasitic worm of ruminants. It is very common in white-tailed deer in the Northeast United States (up to 90% of deer harvested during hunting season have been shown to be infected) but does not cause disease in this species. The worm has an indirect life cycle, requiring land snails or slugs as intermediate hosts before being able to infect a sheep or goat from the consumption of slugs/snails and their slime from pastures shared with deer. Sheep and goats are not the ideal host, so this parasite ends up causing serious neurologic disease as it attempts to grow and reproduce in these species.

What are the Signs of Deer Worm Infection?

There are two common types of signs that an infected sheep or goat may show. Many affected animals will have trouble moving around; early signs of deer worm infection include mild stumbling, knuckling and/or dragging the toes of one or both hind limbs, and general weakness of the hind limbs. In more advanced cases the sheep/goat may suffer total paralysis of the hind limbs, leaving it sitting in a dog-sitting posture or down and unable to get up. The front limbs are less commonly affected but can have the same problems as the hind limbs. Even in a case of total limb paralysis, animals may still recover fully given proper treatment and/or time.

Another common sign associated with deer worm infection is excessive itching and rubbing of one area on the side of the body. Migrating larvae can irritate an individual nerve where it merges with the spinal cord, making the animal rub and/or bite incessantly at the area where the nerve runs. This leads to hair loss and occasionally a wound in the skin. Less commonly, infected animals will show signs of brain disease such as a head tilt, walking in circles, rapid eye flickering, and difficulty chewing. Appetite and body temperature typically remain normal in animals affected with the deer worm, which is not often the case with other common diseases of the brain in sheep and goats. It is important to note that not all affected animals will show all these signs. There can be a wide range of manifestations of deer worm infection, so it is important to be vigilant in watching for any problems with your animals.

The diagnosis relies heavily on gazing history combined with symptoms. If you would like to confirm the

diagnosis, your vet can submit a sample of brain and spinal fluid to confirm the characteristic microscopic signs of infection.

Cornell's Deer Worm Research Shows a Promising Treatment

A four-year study by the Cornell Sheep & Goat Program and Cornell Ambulatory Veterinary Services investigated the effectiveness of two different treatment protocols for naturally infected sheep and goats. Participating goat and sheep farmers knowledgeable about deer worm contacted the researchers when they observed a suspected case of deer worm infection to determine if the animal qualified for enrollment in the study. Enrolled animals were randomly assigned within herd to a treatment or control group with treatments alternating for succeeding animals from the same farm. The treatment group received 5 days of oral fenbendazole (25 mg/kg), intramuscular dexamethasone (0.2 mg/kg for 3 days followed by 0.1 mg/kg for 2 days) and subcutaneous ivermectin (0.5 mg/kg); the control group received the same 5 day course of fenbendazole and dexamethasone with a similar volume of placebo vehicle subcutaneously. Farmers and study veterinarians were blinded to treatment. Neurologic examinations were conducted on all animals. Animals received a neurological score at the time of enrollment and after treatment that ranged from 1 (unable to stand) to 5 (no detectable neurologic deficits or only an expert would notice), with a score of 4 indicating likely to function in the herd for breeding though noticeably impaired.

Twenty goats and 18 sheep from 10 central NY farms were enrolled in the trial with 9 goats and 9 sheep in the control group and 11 goats and 9 sheep in the treatment group. Animals were classified as recovered if they required no further treatment to potentially remain in the breeding herd after the 5-day treatment period. Six of 9 sheep treated with ivermectin recovered without further treatment but 3 had to be euthanized. Five of 9 sheep treated with the placebo recovered without further treatment; 2 required additional treatment, and 2 had to be euthanized. All 11 of the goats treated with the ivermectin recovered, while six of the nine treated with the placebo recovered without further treatment, and 3 required additional treatment.

Continued on next page...

For the more detailed treatment protocol by animal weight, reach out to Amy Barkley at amb544@cornell.edu or 716-640-0844

**CROPS
COWS &
CRITTERS**
newsletter

Cornell researchers added Ivermectin to their treatment protocol improve treatment efficacy.

Statistical analysis indicated that higher pretreatment neurological scores improved outcome. That is, the less severe the symptoms were before treatment started, the better the chance of recovery. The effect of adding ivermectin to the treatment protocol showed promise, though not statistically significant. However, all 11 goats treated with ivermectin were categorized as recovered. The better outcomes for goats are probably explained by closer observation of goats (coincidentally all goats were returned to barns at night while all sheep were left in pastures 24/7) which resulted in better pre-treatment neurological scores. Given the importance of pre-treatment score on the odds of recovery, close observation of animals at high risk for *P. tenuis* infestation is warranted for timely treatment. Studies with larger numbers of animals are needed to definitively state whether including ivermectin in the treatment protocol improves outcome. Inclusion of ivermectin increases the drug withdrawal period for the standard protocol to 96 days or more according to FARAD, the Food Animal Residue Avoidance Databank. If there is no concern about the withdrawal period, we cannot rule out the possibility that ivermectin may be beneficial in the treatment of highly valuable animals.



Figure 1. In more advanced cases, the animal may experience paralysis of the hind limbs

Can Infection be Prevented?

Regular deworming to prevent deer worm is expensive and time consuming, and results in faster dewormer resistance to the other worms of economic importance to sheep and goat producers. Reducing exposure is the most reasonable preventative. Pastures bordering woodlands and low-lying/wet areas are the highest risk of both deer exposure and snail/slug habitat. If these areas need to be part of a regular pasture rotation, consider not grazing them during the wet season or after tree leaves have fallen. Having a livestock guardian regularly patrolling pastures can limit deer visits as well.

While deer worm used to be a disease limited to the eastern side of the state, we are seeing an increased incidence of cases in WNY. Prevention, vigilance, and treatment for this parasite are now necessary. If you are in SWNY and have questions about parasites, feel free to reach out to Amy Barkley at 716-640-0844 or amb544@cornell.edu.



Figure 2. Another common sign is constant itching often in a streak below the spinal column

Pay attention to meat and milk withdrawal periods for all of the drugs that you are using in a treatment protocol.

**CROPS
COWS &
CRITTERS**
newsletter

Limiting exposure to wet pastures can also help manage parasites like barber pole worm.

2025 Soil Health & Climate Resiliency



FIELD DAYS SEPTEMBER 11TH 10AM-NOON

PRESENTERS:

- Rod Porter, King's AgriSeeds
- Jerry Stewart, Balanced Biologics
- Dale Bartholomew, Rovensa
- Matt Havens, NRCS Soil Scientist
- Andrea Martinez, PhD Student Cornell University

TOPICS & ACTIVITIES:

- Cover Crop Demonstration Plots
- Organic cover crops and soil health benefits
- Linking soil health, crop health & animal health
- Soil biology and microbial activity
- Rainfall simulator, slake test, soil infiltration,
- "tighty whities" test



Hinz-Sight Dairy Farm
10400 County Rd 23
Fillmore, NY 14735
FREE | LUNCH TO FOLLOW



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

Cornell Cooperative Extension
Allegany County

Register by 9/5
Online or Call:

fielddays.newyorksoilhealth.org
(585) 268-7644 ext. 18 (Lynn Bliven)

FREE to attend!

**CROPS
COWS &
CRITTERS**
newsletter

Please register by September 5th

Tar Spot and Fungicides on Corn: Will it Pay?

By Dan Steward

One of the hottest topics this past winter revolved around how widespread tar spot would be in the summer/fall of 2025 and how to manage it. The main management decision is whether and when to apply a fungicide. Many of us didn't make a definite decision, preferring to proverbially kick the can down the road until we had more information. Fortunately, or unfortunately, the time to decide whether to apply fungicides on corn for northern corn leaf blight (NCLB), gray leafspot, and/or tar spot is here.

If you haven't made the decision yet, here is the pertinent information that plant pathologist Darcy Telenko presented at our annual meeting this past February.

PRESENCE OF TAR SPOT

Past history- Tar spot was first identified in western NY in the fall of 2021. It could be easily found in Chautauqua, Erie and western Cattaraugus counties in the late fall of 2024. It was found, but was less prevalent in counties to the east. This is important. In previous years, the spores would have blown in from infected residue on corn to the west. Now it will be starting locally.

WEATHER MATTERS FOR TAR SPOT

Temperature is critical: Optimum conditions are when there are extended periods (30 days) of mild temperatures (64-73° F).

Monthly temperatures that **exceed 73°** reduce tar spot progression.

The average temperature for the past 30 days at the Jamestown airport has been approximately 72°. Not 73, but close.

Moisture Plays a Role. In studies, tar spot developed when relative humidity was under 90% over a 2-3-week span. Interestingly, while moisture early in the infection process might aid spore germination, extended periods of excessive moisture (RH > 90%), especially at higher temperatures, can hinder disease progression.

Decision Tools can help. The Crop Production Network has a crop risk model that can be accessed on-line. <https://cropprotectionnetwork.org/crop-disease-forecasting> It is site specific, utilizing weather data. **For the Randolph area, it has current tar spot risk at 8% which is very low.** In theory, a weather pattern similar to the last 30 days over the next 45 days is not conducive to tar spot development. As a sidenote: *for those who are in areas with a lot of gray leaf spot, the risk is 100%! This is because gray leaf spot thrives in*

hot, humid weather.

Scouting- There are no defined scouting procedures for tar spot, but it is important to keep an eye out for early development as it may help to determine when a fungicide should be applied. Although we will not be systematically scouting for tar spot, the staff of WNYCMA will be on the lookout as we visit your fields throughout the summer and early fall. It has been reported that some tar spot was found in Niagara County last week.

If the risk of tar spot in an area is high, there are other considerations to take into account before spraying.

SUSCEPTIBILITY OF HYBRIDS PLANTED

Resistance- Many companies have a rating of their hybrids for resistance to tar spot. There are no hybrids that are 100% resistant, however, a quick look at your seed catalog can help identify if you have any highly susceptible hybrids that may need more protection.

Research studies of fungicidal treatments, either at planting or with an herbicide application are unlikely to give any significant protection against tar spot.

VALUE OF THE CROP WE ARE PROTECTING

The value of the crop to be protected should factor into whether a fungicide is likely to pay. Obviously, corn at \$4 per bushel, will take a larger yield response to pay for the fungicide versus \$7 corn. A calculator on the Crop Protection Network site can be used to help make that decision. The calculation is similar whether the crop is intended for silage or grain.

Yield potential of stand. Surprisingly, the health of the crop has little effect on the potential for infection or the % yield loss. In other words, droughty or nutrient deprived corn is no more susceptible than healthy corn. Fungicide applications on stands with poor population due to weather, compaction, etc. are less likely to pay because the yield potential is lower.

HOW MUCH YIELD DO WE STAND TO LOSE

If fields are infested early with tar spot and the weather is cool and dry during pollination, losses can be substantial. In our area, late developing infestations have not resulted in significant yield losses.

How much does it cost to make an application? There are a number of products out there that reduce tar spot symptoms. Costs can range from \$30 to \$60 per acre depending on whether a farm does one or two passes.

Continued on next page...

The goal is to protect the ear leaf and leaves above it, which are most important for grain production.

**CROPS
COWS &
CRITTERS**
newsletter

Any questions?
Katelyn Miller
716-640-2047
km753@cornell.edu

Cornell's Animal Health Diagnostic Lab - A Resource for NYS Livestock Farmers

By Amy Barkley, Livestock Specialist, SWNYDLFC



As part of its mission, Cornell's Animal Health Diagnostic Center (AHDC) offers valuable diagnostic services to New York State livestock producers. This state-of-the-art facility is staffed by a team of veterinarians, pathologists, and scientists dedicated to determining the causes of animal illness and death. These services can be especially important in cases of high mortality in herds or flocks, or when the cause of illness is unclear.

When animals are submitted, they undergo a gross necropsy, where the body is opened up and the tissues are evaluated by eye. Samples of tissues that may be associated with the mortality or illness based on client-reported history will be taken and evaluated microscopically, by culturing bacteria, and/or testing for viruses. This comprehensive evaluation will many times, but not always, identify an exact cause of illness/death. In some forensic cases, a definitive diagnosis may not be possible, and a best estimate is provided based on pathological findings and the animal's history.

Services are available for a wide range of species, from poultry to cattle, and include abortion case evaluations. Fees are based on animal weight, and costs are **subsidized for NYS residents**. A detailed fee schedule is available at: <https://app.vet.cornell.edu/ahdc-portal/test-fee>.

Whole animals can be delivered to the diagnostic lab or shipped via overnight mail. If shipping, recognize that the weight of the shipment is limited by the postal carrier, so check with them before shipping larger animals. Freshly dead or euthanized animals are the best candidates for evaluation, since their tissues have not yet had a chance to break down. Animals being shipped need to be shipped on ice, and should be sent out earlier in the week to ensure that they make it to the lab during operating days. Calling the lab prior at 607-253-3319 will allow you to get information on how to ship or deliver your samples. They will also send you the sample submission form.

While it's required to work with a veterinarian to interpret the diagnosis and treatment recommendations for most species, poultry can be sent independently of a vet, with the results interpreted by a veterinarian on the Center's staff. For all species, it generally takes 1-2 weeks to get preliminary results, with some cases taking up to 4 weeks to finalize.

We encourage producers to take advantage of this local service if they have any concerns about mysterious illnesses or death in their livestock. Early diagnosis can help protect the health of the rest of your animals and your peace of mind.

Tar Spot and Fungicides on Corn: Will it Pay?

...from previous page

Are fungicides effective? One past research study showed an average \$29.2 to \$48.5/acre net return under high tar spot disease pressure relative to no fungicide treatment. However, under low disease pressure the average was -\$25.8 loss to \$1.6/acre net return.

If you do decide to apply a fungicide, what should the timing be?

Michigan State University Extension recommends fungicide applications from VT/R1 to R3. (Tassel to milk stage) Most pathologists do not recommend spraying before V10. The goal is to protect the ear leaf and leaves above it, which are most important for grain production.

Conclusion:

This year has been incredibly challenging. Fortunately, the current weather- hot and humid with less fog than some years- is less than ideal for tar spot. So far, very little has been found in western NY. If you have historically sprayed for northern corn leaf blight and/or gray leaf spot, an application at tasseling to silking is coming right up. We will continue to monitor corn fields.

The services at AHDC are available to farmers both in and outside of NYS.

**CROPS
COWS &
CRITTERS**
newsletter

Whole animal necropsy is a way to determine how an animal may have died, which provides you knowledge to protect the other in the herd or flock.

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.**



**WILD ACRES
FAMILY FARM**

Don Wild

Box 7, Great Valley, NY 14741

716-969-4386

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

**COUNTRY
CROSSROADS**

FEED & SEED, LLC

"We plant the seeds to your success"

Feed | Seed | Lime | Fertilizer | Farm Supplies

3186 CR 61 | Andover NY | 607-478-8858

94 Front St | Addison NY | 607-359-2424

**THANK YOU TO
OUR SPONSORS.**

**WE APPRECIATE
YOU!**



NYFARMNET

Providing free and confidential consulting
for NYS farmers and agribusiness
professionals.

Contact us today!

1-800-547-3276

www.nyfarmnet.org

Drum
2017
Cornell College of Business

Cornell
CALIS
Cornell University Library

**WANT TO SEE
YOUR AD HERE?**

Contact:

**Kelly Bourne,
Administrative Assistant**

585.268.7644 ext. 10

klb288@cornell.edu



Andy Vosburg

avosburg@pdscows.com

716-697-5758

**PROGRESSIVE DAIRY
SOLUTIONS**

A NUTRITION & MANAGEMENT CONSULTING FIRM



**Contact Us to
Request a
Catalog!**

Natural & Organic Fertilizers | Livestock Nutrition
Feed Supplements | Agronomy Consulting

The Fertrell Company

PO Box 265, Bainbridge, PA 17502

800-347-1566 • www.fertrell.com



**ERNST
SEEDS**

www.ernstseed.com

(800) 873-3321

sales@ernstseed.com