

## 2022 Dairy Business Performance in Central New York Compared to the Previous Year *By Mary Kate MacKenzie, Farm Business Management Specialist*

Cornell Cooperative Extension and PRO-DAIRY farm business management educators work closely with dairy operators to complete Cornell University's Dairy Farm Business Summary and Analysis Program (DFBS) on an annual basis. The DFBS is open to any dairy farm that wishes to participate, and participation is voluntary and confidential.

This article summarizes 2022 DFBS results compared to 2021 for dairy producers from ten counties across Central New York and the Southern Tier: Broome, Cayuga, Chenango, Cortland, Madison, Oneida, Onondaga, Schuyler, Tioga, and Tompkins. Thirty-six dairy farms from this region completed the DFBS in 2022, and 34 of those same farms also completed the DFBS in 2021. Dairies selling organic milk are not included in this sample.

### Farm Size & Production Yields

In 2022, the 34 dairies that completed the summary in both years reported an average herd size of 1,085 cows, an increase of 3% from 2021. Herd size ranged from fewer than 241 cows to more than 2,135 cows. Farms raised fewer heifers, on average, with a ratio of 0.75 heifers per cow in 2022, down 4% from the previous year.

Average milk sold per farm was 30.3 million pounds in 2022, a 3% increase over 2021. This growth in milk sales at the farm level was driven mostly by the increase in herd size, as milk production per cow remained relatively stable. Farms sold an average of 27,940 pounds per cow in 2022, up just 93 pounds or 0.3% from the previous year.

Average tillable crop acres per farm rose from 1,895 acres in 2021 to 1,950 acres in 2022, an increase of 3%. On average, dairy producers saw hay yields decrease by 15% and corn silage yields decrease by 5%, reflecting the drier growing conditions across the region in 2022.

### Farm Labor

While average herd size and tillable crop acres both grew by 3%, the average amount of labor used on these dairies increased by just 1% to 20.7 full-time worker equivalents (FTE) in 2022. As a result, this group of farms achieved gains in labor efficiency measures. The average number of cows per worker was 52.4 in 2022, up 2% from the previous year. Milk sold per worker also increased by 2%, from 1.43 million pounds in 2021 to 1.46 million pounds in 2022.

Hired labor continues to be the second largest production cost on New York dairy farms, and it rose again in 2022. Farms spent \$51,688 per FTE, on average, up 6% from 2021. The increase in labor efficiency offset some, but not all, of the higher cost per worker. The cost of hired labor per unit of milk production rose 4%, from \$2.95 per hundredweight in 2021 to \$3.07 per hundredweight in 2022.

### Milk Price & Income Generation

Farms reported an average gross milk price of \$27.34 per hundredweight in 2022, up \$7.39 per hundredweight or 37% from 2021. Gross milk sales averaged \$7,640 per cow in 2022, up \$2,085 per cow from the previous year. Accrual revenue from dairy cattle, dairy calves, and other livestock averaged \$426 per cow in 2022, up 18% from the previous year. In contrast, accrual crop sales fell 35% to \$163 per cow in 2022, driven by lower crop yields. Miscellaneous receipts, the income category that includes government payments and all other sources of operating income, rose just 2% in 2022 to \$154 per cow. Overall, these dairies generated average total operating revenue of \$8,383 per cow, or \$30.00 per hundredweight, up 32% from 2021.

### Cost Control

Dairies reported higher expenses across most cost categories in 2022, mirroring the relatively high inflation rates affecting the broader U.S. economy. On a per hundredweight basis, the total farm operating

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



# Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

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

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**Building Strong and Vibrant  
New York Communities**

## New York Dairy of Distinction Program Celebrates Milestone

June is Dairy Month. The highly anticipated month-long indulgence and celebration of all things nutritious and delicious found in real dairy milk and milk products. Dairy Month allows communities to celebrate quality dairy products, the local dairy businesses, and their vast contributions to New York agriculture and local economies. The New York State Dairy Farm Beautification Program (Dairy of Distinction) will share in the spotlight this Dairy Month as they embark on their 40th Anniversary. Incorporated in 1983, the NY Dairy of Distinction Program recognizes that attractive dairy farm businesses give consumers greater confidence in the wholesomeness of milk, stimulate milk sales, and encourage public support of the dairy industry. The Dairy of Distinction award recognizes dairy farm owners for neat and attractive farmsteads throughout New York State. Influenced by a Cornell Cooperative Extension tour series of farms on the West Coast in the '70s and '80s, the Dairy of Distinction Program began after tour participants observed attractive dairies designated as Dairies of Merit in Washington and Dairies of Honor in California. Tour leaders Gary Bigger, Jesse Hannan, Bill Quinn, and David Weaver thought a similar program would assist the dairy industry here in New York.

Fast forward to 2023, the NY Dairy of Distinction Program remains active in large part to a great assembly of supporters. Former dairy producers, agriculture business representatives, and Cornell Cooperative Extension personnel contribute their time and efforts to keep this organization operating and available to our dedicated and resilient NY State dairy farms. Financial contributions over the years came from American Dairy Association, now renamed American Dairy Association NE (ADANE). Their financial support is greatly appreciated and instrumental in operating the award program. The dairy industry in NY has experienced more than its' share of challenges, hurdles, and threats over the years. As time has progressed, we have witnessed dairy businesses exit the industry. Despite this fact, the resiliency and dedication to the industry from our NY Dairy of Distinction farms that are encroaching on 40 years with the program surely needs to be acknowledged. On behalf of the NY Dairy of Distinction Program, in recognition of all of the Dairy of Distinction farms, I raise a cold glass of milk to each of you!

The NY Dairy of Distinction Program accepts new applications annually in April. The 2023 application results will be released in the next month. We are actively seeking board members and volunteers to serve across the state in different capacities. If you are interested in getting involved in the NY Dairy of Distinction Program, please email [dairyofdistinction@gmail.com](mailto:dairyofdistinction@gmail.com) for more information.

Respectfully Submitted,

*Maryfynn Collins*

NY DOD Program President

expense (before depreciation) rose 15%, from \$19.12 in 2021 to \$22.04 in 2022.

Purchased grain and concentrates, the single largest expense category for New York dairy farms, was \$7.56 per hundredweight in 2022, up 16% from the previous year. Farms recorded an average milk marketing expense of \$1.66 per hundredweight in 2022, up 15% from 2021. High fuel prices in 2022 drove fuel costs up by 74% to \$0.87 per hundredweight. Crop expenses also rose in 2022. The average total cost of fertilizer, seed, spray, and other crop expenses was \$1.57 per hundredweight, up 34% from the previous year. The average interest expense rose 25% in 2022, up to \$0.50 per hundredweight, reflecting higher interest rates. Utilities, which include farm electricity and heating fuels, rose by 20% in 2022, up to \$0.44 per hundredweight. The only operating expense categories that declined on a per hundredweight basis in 2022 were livestock professional fees, including milk testing (down 11%), purchased forages (down 6%), and property taxes (down 4%). Together these three cost categories accounted for an average savings of \$0.05 per hundredweight in 2022.

The total economic cost to produce milk, which includes operating costs plus depreciation and the opportunity costs of owner labor and capital, increased 17%, on average, from \$20.30 per hundredweight in 2021 to \$23.66 per hundredweight in 2022. Despite this increase, the average milk price of \$27.34 per hundredweight exceeded the average total cost of production for this sample of farms.

### Net Farm Income & Return on Investment

Net farm income is a key measure of farm profit. Before appreciation, net farm income averaged \$1.89 million per farm in 2022, which is equivalent to \$1,740 per cow or \$6.23 per

hundredweight. This represents a 218% increase in net farm income compared to the previous year. Average net farm income for the same group of farms in 2021 was \$593,468 per farm, \$563 per cow, and \$2.02 per hundredweight.

Return ratios provide information about how well a business generates returns relative to the investment in the business. Rate of return on equity (ROE) measures the annual return as a percentage of the company's equity capital, while rate of return on assets (ROA) measures the annual return as a percentage of the total capital investment. Both measures account for the full economic cost of operator labor and management. Excluding appreciation, the average ROE was 15.3% in 2022, compared to 3.9% in 2021. The average ROA rose to 11.9% in 2022, compared to 3.6% in 2021. Higher ratios indicate larger returns per dollar invested, which implies stronger financial performance.

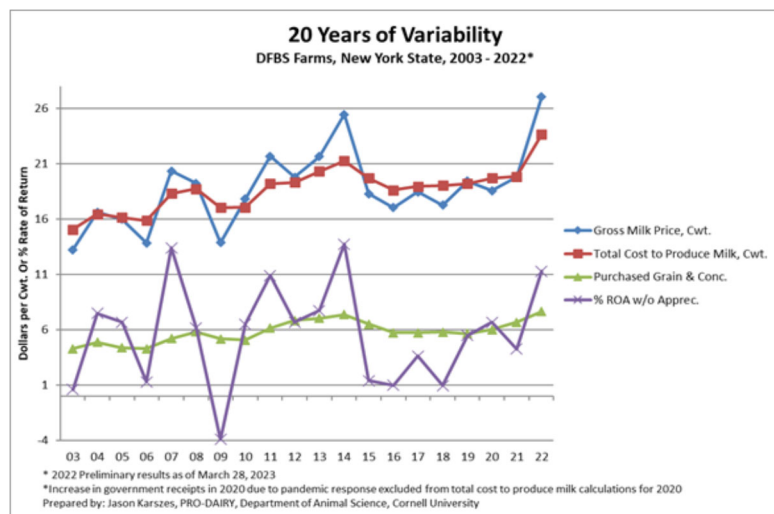
### Final Thoughts

Despite widespread cost increases, dairy farms in Central New York experienced strong financial performance in 2022 driven by high milk prices. In fact, preliminary DFBS data from the entire state show that 2022 was the most profitable year since 2014, on average, for New York dairy farms participating in the DFBS (Figure 1). Dairies that built up working capital in 2022 will be in a stronger position to handle the declining milk prices and tightening margins that the industry has so far experienced in the first half of 2023.

However, not all dairies performed equally well in 2022. Some dairies were more successful than others due to variation in business models, resources (including rainfall), and management strategies. This is evidenced by a relatively large range in the total economic cost to produce milk. Of the 36 Central New York dairies that completed in DFBS in 2022, the total cost of milk production averaged \$21.26 per hundredweight for the top 20%, while the bottom quintile averaged \$31.04 per hundredweight. This difference in cost structure of nearly \$10 per hundredweight is much larger than the reported range in milk price. As a result, these farms exhibited a large range in the rate of return on assets. In 2022, the most profitable 20% of dairies in our sample reported an average ROA before appreciation of 17.5%, compared to an average ROA of 0.4% for the least profitable quintile.

Tracking financial performance over multiple years is important, as individual farm performance in any given year may be influenced by extraordinary circumstances. However, farms with consistently high production costs and low earnings may need to assess their business strategy and make changes to control costs, increase revenues, and improve asset utilization to achieve long-term business and family goals.

Figure 1. Twenty Years of Variability in Milk Price, Cost of Production, Purchased Grain Expense, and Rate of Return on Assets for New York Dairies in the DFBS.



# When do I cut my beef cow hay? Well, it depends!

By Betsy Hicks, Area Dairy Management Specialist

One of my pet peeves in the hay world is when people refer to late cut hay as “beef cow quality”. I maintain that quality is in the stomach of the cow who is eating it. So how does one determine the quality of hay appropriate for said beef cow? Well, that depends on the sort of animal being fed and the goals the farmer has for that animal.

## Nutrition Talk for the Beef Cow

A common nutritional term used in the beef world for assessing quality is Total Digestible Nutrients, TDN, or the sum of digestible fiber, protein, fat and carbohydrate components (think sugar and starch). In simple terms, TDN is all the stuff in the plant cell that the cow can use for nutritional needs and provides a basis for comparison across different forages. It’s also a good comparison method for mostly-forage based diets. And for those who sample forages for nutritional analysis, it’s a number listed on a forage report.

Forage TDN can be grouped into three categories of “quality”. Low TDN content is typically under 52% TDN, average 52-59%, and high quality forage greater than 59% TDN.

My guess for what people who refer to late cut hay as “beef cow quality” is that a cow at maintenance levels can survive on it during the winter. And truly, a pregnant, non-lactating beef cow at maintenance requirements can survive on fairly low nutritional quality feed, provided she has access to shelter and feed on an as-needed basis. If sampled, the TDN may be on the lower end of the scale, even in the low 50’s to provide adequate nutrients to the maintenance cow. Typically, though, feedstuffs in the low range are not adequate nutrition for maintenance needs.

As a cow is lactating, she requires more TDN nutrients, typically in the higher 50’s to low 60’s, to provide adequate nutrients for the demands of lactation and reproduction. As production increases, the amount of TDN increases. An 1100lb cow producing 20 pounds of peak milk requires 58% TDN, while a cow producing 10 pounds of peak milk requires only 54% TDN. Conversely, if a cow has requirements of 58% and only 54% is provided, she will either be limited on milk production, or use body reserves to supply milk, or both.

## TDN for a Growing or Finishing Animal

The amount of average daily gain (ADG) a growing or finishing animal achieves is correlated with the amount of TDN that animal consumes. A 300 lb calf (finishing weight of 1100 lb) only fed a diet with 59% TDN, will only achieve 1 lb of gain/day. Supplying 75% of dry matter as TDN will achieve 3 lb/day gain. Simply, the more TDN supplied, the greater the amount of gain achieved. This holds true with a

heavier steer, although the amount of TDN needed to achieve higher ADG is not as high. A diet fed to a 800 lb steer with 60% of dry matter as TDN will supply 2 lb of gain, where 70% TDN gets to 2.9 lb ADG. Again, thinking about the feed offered to the steer – if we need a steer to gain 2.5 lb/day to get to finish weight on time, will we need to supplement our 57% TDN hay with other grains to achieve a diet that will finish that steer?

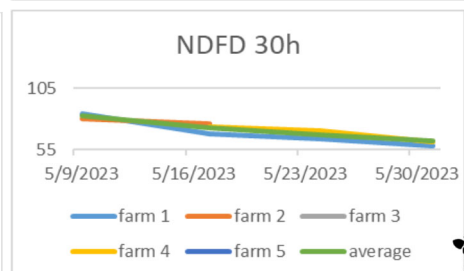
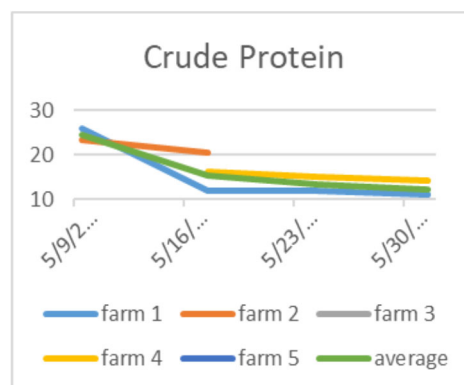
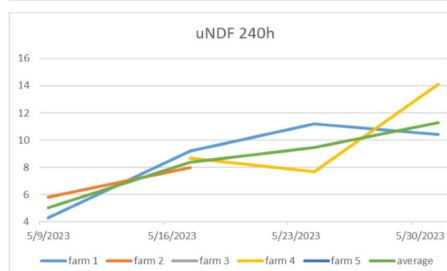
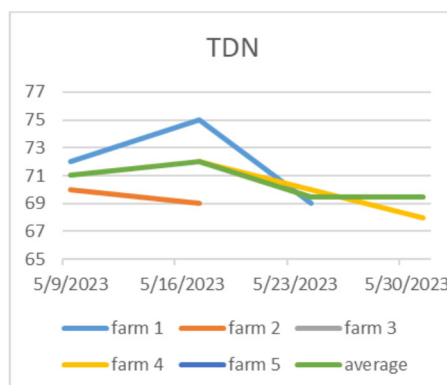
## Scissor Cut Analysis to Help Assess Quality During the Growing Season

The SCNY team collected scissor cuts of growing grass fields during May this spring to track the change in quality over time. In general, grass fields can be thought of to be very lush early on, with lots of TDN (remember, it’s made up of digestible fiber, protein, fat, and carbohydrates). As the season progresses, those numbers will typically fall as a percent of total, while the undigestible portion of the plant will increase (uNDF). The graphs below show the samples harvested and the change over the month. Most of these samples were taken in Cortland County.

## Determining Forage Quality

Forage samples of hay crop already in bale form can be taken and submitted for analysis. Keys for getting a representative sample include using a forage probe and sampling minimum 10% of the feed in that set of hay. Samples typically cost between \$30-40 and have fast turnaround. I encourage people who are purchasing hay to get a forage analysis done ahead of time, to ensure they’re buying what they need and that they know what they’re buying. For hay crop already in storage, it will help determine what feed should be fed to which class of animal, and at what time.

If you need help with analyzing your feed, reach out to your extension office – many of us have forage probes and can assist in getting your feed sampled for analysis.





# Cropping Notes

By Janice Degni, Regional Field Crop Specialist

The spring planting season has been a bit of a roller coaster but certainly not all bad. We don't seem to have incremental seasonal transitions anymore. This year we had abrupt changes since March, with early warming and anticipation of an early planting window which shifted to wet and cool conditions and at least 3 nights of low temperature frosts in early May. New seedlings went in timely but conditions for the most part prohibited early corn and soybean planting.



The deluge that delivered 3-4" of rain the last weekend of April across the region caused streams to crest their banks causing some flooding in fields and soaked our soils. That was virtually the last precipitation we have had in six weeks. Once the soils dried out

planting proceeded in earnest. We accumulated 148 growing degree days (GDDs) in May which spurred corn emergence to come on strong by the third week of May. Soybeans followed suit. Corn needs 119 and soybean 130 GDDs to germinate. The rows of emerging corn look particularly beautiful this year. Maybe it's because of the clear blue sky. On June 7 we had an accumulation of 224 GDDs based on Freeville weather data.

A series of late May frosts, on the 18<sup>th</sup>, 25<sup>th</sup> and 26. The lowest with a temperature of 26 degrees came on the 18<sup>th</sup>. Alfalfa showed damage from the cold, leaves were yellow or white. Thankfully most field crops were only mildly affected. The fruit crops were hit very hard, especially grapes across the state. This was followed



by temperatures in the 80's and 90's during the last week of May. Considering how dry it is, corn is still growing. I had to dig a lot of plants for a project in the last week of May and corn root development looks great and there is moisture in our silt loam soils at two to three inches deep. We do need rain to activate our pre-emergent herbicides.

Reports of first cutting yields vary from great to below normal. Soil



moisture and fertility status would be factors on which side of the scale they fell. One thing about the lack of rain the window for harvest was about the largest I've seen and lots of beautiful dry bales were

made. Grass maturity was slow this spring allowing good quality to be captured through May. See our weekly reports for details. (<https://blogs.cornell.edu/scnydairyandfieldcrops/2023/05/23/first-cutting-monitoring-may-23rd-2023-report/>)

Alfalfa weevil (AW) feeding damage was almost non-existent in first cut alfalfa this year. One possible reason is that the crop stayed ahead of beetle emergence. There are no signs of potato leaf hopper (PLH) yet but we need to be ready to monitor once we get storm fronts that brings them in. Their feeding damage is always greater in drought stressed crops. The tolerable threshold drops in half. Trap catches for cutworm and armyworm moths has been light.

What's ahead? Fertilize, fertilize, fertilize. Once we see some rain in the forecast fertilize hay with nitrogen as needed or head out with the manure spreader on the stubble. Topdress alfalfa where needed. The time for nitrogen sidedress on corn is fast approaching as well as clean up weed control.

**It's been dry – SUPER dry – in most places across the Northeast.** Have you changed your pasture management to account for that?

If not, you should be! Here are some ideas:

- **Don't graze it too low** – the plants need both leaf area and a root system to grow back when we do get some rain. If it's over-grazed, it will take much longer to regrow.
- **Don't graze it too low** – the plants help to shade the soil, retaining what little moisture is in the soil, plus keep the soil temperatures lower to help the underground biology.
- **Don't graze it at all** – if you've already grazed it too low – pull your animals off and feed them in the barn. It's not doing them or your pastures any good to leave them out there.

- **Don't mow or clip after grazing** – we know it looks bad with all those seedheads, but hey, it's free seed! Besides that, re-read the above suggestions.

- **Don't graze it too quickly after rain** – the plants need time to break out of their drought dormancy, put out new leaves, and get their root system working again.

- **If you don't have any grass**, and it's all dead brown, and your neighbor still has green grass – there's a reason for that! And it's not because they had a rain shower that you didn't – it's because they did one or all of the above.

—Janice

# Seed Corn Maggot: Applied Research to better Understand the Level of Crop Damage it Causes *By Janice Degni, Regional Field Crop Specialist*

This spring, I have been cooperating on a statewide research project to assess the risk of damage in corn from seed corn maggot. Seed corn maggot has long been recognized as a major pest of corn and other crops. Although corn is in the name it is a generalist that feeds on a wide array of seeds and possibly prefers bean species over corn.

Seed corn maggot is known to be attracted to fields with fresh organic matter which could be from green or livestock manure. Damage is usually in an irregular pattern in a field. The seed corn maggot adult is a fly, about the size of a house fly. It is the larval stage or maggot that seeks out seed to feed on. They hatch from eggs and feed on the germ of the seed before and during early germination. There are known to be several flights of adults and each flight lays eggs for a new generation to hatch. Damage is correlated with cool, wet periods in the spring when seeds are slow to germinate. Once soils warm and seeds germinate rapidly, damage is unlikely.

Dr. Elson Shields, our Cornell Extension Field Crops Entomologist, recently retired, explains,

“Under NY growing conditions, measurable yield losses in corn start to occur between 10-20% stand losses. The magnitude of the yield loss is dependent on the corn variety, degree-day maturity requirements and the subsequent growing conditions which influences the ability of the undamaged plants to compensate for the missing plants. Due to the short growing season in NY, the decision to replant the field is seldom a viable option due to the additional expense of replanting (ca. \$130/ac) and the yield reductions associated with shorter season corn variety required to be planted for maturity to be completed before killing temperatures in the fall. Typically, if the surviving corn stand has less than a 40% stand loss, the resulting yield loss is less costly than the combined cost of replanting and yield reduction associated with late planting.”

For the last two years there has been a network of extension educators from across the state collaborating with the Poveda Lab at Cornell to assess and monitor seed corn maggot populations by using sticky traps on the edge of corn fields to identify periods of peak flights.

In the spring of 2023, we continued to monitor with sticky traps and expanded the project to include field scale trials comparing the efficacy of neonic and

diamide seed treatments to control larval feed damage. A fungicide-only seed treatment serves as the control. Currently we rely on neonicotinoid insecticide seed treatments with clothianidin (Poncho) or thiamethoxam (Cruiser). A low rate provides control of seed corn maggot as well as wireworms and white grubs. Many of you may remember the use of planter box treatments for their control before neonics came on the market in the early 2000's. There is also a comparison of corn planted into ground with and without a fall planted small grain cover crop. A cover crop provides a fresh infusion of organic matter. The experimental protocol includes collecting 30 plants from 2 rows in each treatment. Plant populations will be measured for each treatment and missing plants checked for damaged seed in the soil. Crop yield by treatment will also be measured at the end of the season.



## Why is this Research Needed?

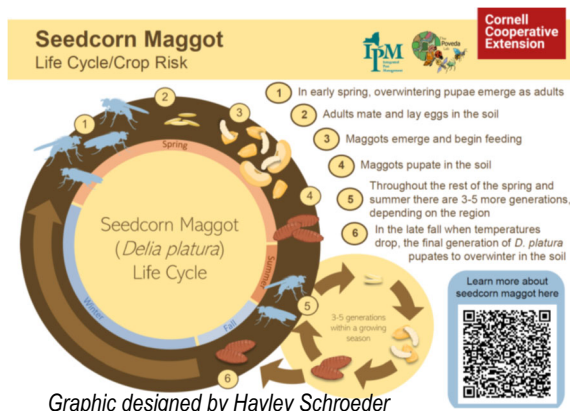
This research is timely because of legislation that is currently active in the Senate (S1856A.) The bill is commonly known as - *The Birds and the Bees Protection Act*. You can find the bill here: <https://www.nysenate.gov/legislation/bills/2023/S1856>. This law if passed would prohibit the use of neonicotinoid seed treatments on January 1, 2027. (While writing this I learned the bill passed in the Senate and Assembly June 9 and will be sent to the Governor for her approval or veto.)

There is concern that neonics have contributed to the decline of honey bees in particular and other pollinators. The report, *Neonicotinoid Insecticides in New York State economic benefits and risk to pollinators* by Travis A. Grout, Phoebe A. Koenig, Julie K. Kapuvvari & Scott H. McArt implicates neonics as a factor that contributes to the decline of pollinators. There is disagreement among experts about the interpretation and relevance of some of the data in the report relating to the importance of neonic seed treatments to different agricultural sectors and their impact to honey bees and other pollinators.

The following quote captures the disagreement among experts about the importance of current seed treatments in corn and soybean production.

“And yet despite all this risk of toxicity, there’s a growing body of evidence suggesting that neonics—at least in their almost universal use as seed treatments—provide little direct benefit to farmers. A 2020 report by Cornell University’s CALS found that, while neonic sprays and direct soil applications provide important crop protection from five kinds of pests for which few other alternatives exist in the state, the “routine use of neonicotinoid-treated seeds does not consistently increase net income for New York field corn or soybean producers.” Even when compared with

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Graphic designed by Hayley Schroeder

plots using no insecticides at all, 89% of the field trials in the Cornell study saw no increase in corn yield using neonic-treated seeds. Other studies, including one by the EPA, have found a similar lack of consistent yield benefit for soybean farmers.” (Source: [Neonic Nation: Is Widespread Pesticide Use Connected to Grassland Bird Declines?](#) | [All About Birds All About Birds](#))

The following information is taken from the report, *Seed Corn Maggot, Stand Losses and the Need for Insecticide Seed Treatments*, authored by Elson J. Shields, Entomology, Cornell University, Ithaca, NY

In contrast to the findings stated above of little benefit of seed treatments to yield, a two-year study (2021-2022) was conducted by Dr. Shields to examine the impact of SCM and the necessity of insecticide seed treatments on 1) corn grown under continuous corn culture with minimal organic matter and 2) corn following a green manure cover crop with high organic matter. Each area was planted on a weekly basis yielding 6 different sequential planting dates in 2021 and 5 different sequential planting dates in 2022.

Each row of the 4-row planter contained a different treatment and the plots for each planting date were comprised of a single planter pass in the continuous corn and two planter passes in the cover crop site. The following treatments were planted as single rows within each planter pass.

- 1) conventional corn (non-Bt-RW) with no seed applied insecticide,
- 2) conventional corn (non-Bt-RW) with seed applied insecticide,
- 3) Bt-RW corn with no seed applied insecticide and
- 4) Bt-RW corn with seed applied insecticide.

Each planting date was replicated four times at each location. Data collected included stand counts after the plants were V3-4 growth stage and excavation of the missing plants to document the reason for the missing plant.

Combining the two growing seasons, 65% of the non-insecticide treated seed plantings suffered a 10% or greater stand loss from SCM. A 14% or greater stand loss was recorded in 54% of the non-insecticide treated seed plantings and 40% of the plantings suffered a 20% or greater stand loss from SCM. Stand losses exceeding 40% were recorded from 18% of the plantings.

The tables that follow summarize the data for the two background conditions of continuous corn and winter cover crop by with and without seed treatment by four defined levels of percent stand loss for each year of the study.

Results from 2021 with 24 pairs of treated vs untreated seed in continuous corn site				
Yield Loss Thresholds with Economic Loss Consequences:	10 %	14%	20%	40%
% Stand Loss from untreated rows in continuous corn	9 of 24 pairs (38%)	8 of 24 pairs (33%)	6 of 24 pairs (25%)	4 of 24 pairs (17%)
Averaging across all planting dates and treatments, insecticide untreated seeds had stands reduced 30.6% which translates to a significant yield loss.				

### Conclusions:

These 2021-22 research data indicate the level of potential and

Results from 2022 with 20 pairs of treated vs untreated seed in continuous corn site				
Yield Loss Thresholds with Economic Loss Consequences:	10 %	14%	20%	40%
% Stand Loss from untreated rows in continuous corn	13 of 20 pairs (65%)	10 of 20 pairs (50%)	8 of 20 pairs (40%)	5 of 20 pairs (25%)
Averaging across all planting dates and treatments, insecticide untreated seeds had stands reduced 21.1% which translates to a significant economic yield loss.				

Results from 2022 with 20 pairs of treated vs untreated seed in continuous corn site				
Yield Loss Thresholds with Economic Loss Consequences:	10 %	14%	20%	40%
% Stand Loss from untreated rows in continuous corn	13 of 20 pairs (65%)	10 of 20 pairs (50%)	8 of 20 pairs (40%)	5 of 20 pairs (25%)
Averaging across all planting dates and treatments, insecticide untreated seeds had stands reduced 21.1% which translates to a significant economic yield loss.				

Combined Results from 2021/22 of treated vs untreated seed in cover crop site				
Yield Loss Thresholds with Economic Loss Consequences:	10 %	14%	20%	40%
% Stand Loss from untreated rows in continuous corn	(65%)	(54%)	(40%)	(18%)

Combined Results from 2021/22 of treated vs untreated seed in continuous corn site				
Yield Loss Thresholds with Economic Loss Consequences:	10 %	14%	20%	40%
% Stand Loss from untreated rows in continuous corn	(62%)	(42%)	(33%)	(18%)

realistic economic losses by NY corn farmers, if seed applied insecticide is not available for use. NY field testing across multiple growing seasons has shown that all possible insecticide replacements are only 50% effective under field conditions, whereas the currently used neonic insecticides are more than 85% effective. It has also been suggested that SCM damaged fields could be simply replanted. However, replanting a field in NY with its short growing season is a double-edged economic risk. Replanting costs are estimated to be \$130/acre and the shorter season corn is typically lower yielding than the full season variety originally planted. Based on multiple years of NY data, if the surviving corn stand has less than a 40% stand loss, the resulting yield loss is less costly than the combined cost of replanting and yield reduction associated with late planting. Additionally, conservation practices such as reduced tillage and planting cover crops to reduce erosion and runoff and increase sequestering of atmospheric carbon are not only encouraged, but also incentivized in NY State. It is important to understand that in the absence of these seed protectants, farmers may revert to planting fewer cover crops to avoid losses to SCM.





# Beef Herd Pasture Walk

## Managed Grazing System: Design & Management

Wednesday, July 12 - 6:30-8 pm

(rain or shine)

Co-sponsored  
with:



Located at:  
2965 East Brutus Street  
Weedsport, NY

Light refreshments will be served.

To pre-register:  
[https://scnydfc.cce.cornell.edu/  
event.php?id=2169](https://scnydfc.cce.cornell.edu/event.php?id=2169)

Need help registering online?  
Call Donette @ 607-391-2662

**Host Greg Weller** will share his experience

- ⇒ Establishing the farm,
- ⇒ Review design of a managed grazing system including building grazing infrastructure,
- ⇒ Managing a cow/calf pair operation
- ⇒ Pasture management, pasture species,
- ⇒ Supplementing pasture with difficult weather patterns (drought & drowning)
- ⇒ Marketing strategies
- ⇒ Accessing cost-share programs and technical assistance from the county Soil and Water Conservation District & NRCS

## Agricultural Supervisory Leadership Certificate Series

### Staffing and Organizing Your Team

June 16 - July 27, 2023

Finding the right employees to work on your farm can pose many challenges but hiring the wrong person can be costly! In Staffing and Organizing Your Team you will learn the benefits of professionalizing your human resource systems and becoming a preferred employer. Learn how to recruit a candidate pool to find the right employees, and how to avoid bias and discrimination in hiring. You will also learn how to improve your interview and selection process, and how to implement a strong onboarding program.

#### 6-week online course outline:

***Becoming a preferred employer \* Personnel planning \* Job descriptions \* Avoiding bias and discrimination  
Recruiting and interviewing \* The selection process \* Hiring and onboarding***

***\$275 per person \* Pre-registration ASAP***

*Course Format: This is an online course facilitated through the web-based platform, Moodle. Materials release on June 16 and live weekly Zoom discussions will be held on Thursdays from June 22 through July 27 from 3:00 to 4:00 PM ET. Participation in the live sessions is highly encouraged and provides a valued opportunity for peer to peer learning and networking. To get the most out of the course, students should plan to spend a minimum of two hours each week on combined course activities.*

**Use this Link to Register:** <https://agworkforce.cals.cornell.edu/agricultural-supervisory-leadership-certificate-program/>

For questions, contact Rachel McCarthy, Supervisory Leadership Certificate Program Coordinator, at [rachel.mccarthy@cornell.edu](mailto:rachel.mccarthy@cornell.edu).



# Protecting Pastures From Drought

by Fay Benson – Cornell Cooperative Extension of Cortland County

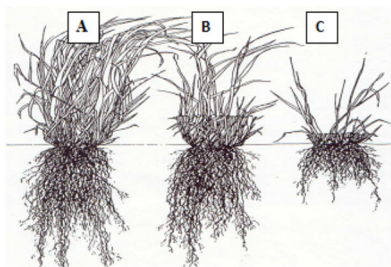
I've had plenty of opportunity in my work to watch other graziers, as well as graze my own animals. One conclusion I've come up with is that anyone can graze in a wet year; it takes a good grazer to graze in a dry year. Drought disrupts grazing operations more than confinement operations, since confinement operations plan to have stored feed for their animals. When drought weather hits, confinement operations have time to react and make alternative plans. It doesn't affect their livestock. As pasture soil dries, grass growth slows, graziers try to keep their rotation going hoping for rain. When it doesn't come, they must change to stored feed, which can have a negative effect on livestock production.

## An Ounce of Prevention

Some of the management practices that can help prevent drought disruption are:

**1. Graze Half and Leave Half** – This refers to managing your residency of animals in the paddock. You should have an estimate of the dry matter before your animals enter a paddock, then remove the animals when half the dry matter is grazed. This practice is depicted in the drawing below with (A) being the sward when animals enter, (B) when animals should be removed, and (C) if overgrazing is allowed. The practice increases productivity in normal weather, but protects from future droughts in the following ways:

- Leaving more residue sward above ground leaves longer roots below ground so they can reach more water.
- The increased residuals also shade the soil so that evaporation is reduced.
- More leaves increase solar collection to get the plants off to a quicker start.



**2. Soil Organic Matter and Droughts** – When I first started grazing in the 1980's, we were told to follow the New Zealand style of grazing ryegrass, which was to put animals in when grass was ten inches and remove them at three inches. This provided very high protein and low fiber forage for the grazing animal. Since then, our graziers have evolved to a Northeastern style of grazing, which is closer to putting the animals in around fifteen inches or more and remove when half is consumed. This fits our climate and native grasses better since the New Zealand style was found to reduce the amount of soil organic matter (SOM). The lower fiber in the plants decreased the carbon content of the residue, as well as in the manure from animals eating it. Forty percent of SOM is carbon. The shorter residue will also be

more prone to droughts. Graziers should monitor their organic matter in their soil for the following reasons:

- For every one percent increase in SOM, an acre of pasture will hold 16,000 gallons of water per acre. If you can raise SOM by two percent, it will hold more than an inch of rain than it did previously.
- For every one percent increase of SOM, the soil will have 20 -30 lbs. more nitrogen, 4-5 lbs. of phosphorous and one lb. of sulfur.

## Can Irrigation be a Tool for Drought Relief?

Over the years, I have heard many experiences and have read a few studies about using irrigation on pastures. The experiences and studies both show that more often than not, irrigation doesn't work well. These are the questions a grazer needs to answer to see if irrigation can work for them:

1. Do you have access to the volume of water you need? Optimum pasture sward can be produced with one inch of water (27,000 gallons per acre) every week. Obviously, it gets by with much less. For my example lets irrigate a half of an inch a week (13,750 gallons). With a forty-acre pasture system, this would require 540,000 gallons per week.
2. Do you need legal permission to use this much water? As I understand DEC rules, they allow taking up to 100,000 gallons per day from surface water.
3. Do you have the infrastructure to move the water around your pastures? This is where the math gets complicated. It involves what type of sprinkler system you'll be using. For example, the K-Line system (photo 1) handles low volume for smaller areas, like 8 acres in seven days. It requires a flow rate of 40 GPM at 50 PSI at the pump discharge: Sizing a pump to this depends on size of your water lines, how many sprinklers, and the amount of head or elevation the water needs to travel up or down.
4. If you move up to the water reel system (photo 2) for larger pastures these requirements go up to: 75-150 GPM at 70-120 PSI.



Photo 1: K-Line System



Photo 2: Water Reel System



# SRE

SECRETARÍA DE  
RELACIONES  
EXTERIORES

## Consulado General de México en Nueva York

### PASAPORTES, MATRÍCULAS CONSULARES Y CREDENCIALES PARA VOTAR EN:

Watertown, NY	Ithaca, NY	Lockport, NY	Geneseo, NY	Brockport, NY	Syracuse, NY
All Souls Unitarian Universalist Church 1330 Gotham Street, Watertown, NY 13601	First Congregational Church 309 Highland Road, Ithaca NY, 14850	Ridgewood Bible Church 7073 Ridge Road Lockport, NY 14094	Saint Michael's Episcopal Church 23 Main Street Geneseo, NY 14454	St. Luke's Episcopal Church 14 State Street, Brockport, NY 14420	Pebble Hill Presbyterian Church 5299 Jamesville Road Syracuse, NY 13214
<b>14 al 16 de Junio</b>	<b>6 a 7 de Julio</b>	<b>16 a 18 de Agosto</b>	<b>6 a 8 de Septiembre</b>	<b>4 a 6 de Octubre</b>	<b>1 a 3 de Noviembre</b>
Miércoles 11:am-3:30pm Jueves 1:00pm-6:00pm Viernes 9:00am-1:30pm	Jueves 11:00am-6:00pm Viernes 9:00am-1:30pm	Miércoles 11:am-3:30pm Jueves 1:00pm-6:00pm Viernes 9:00am-1:30pm	Miércoles 11:am-3:30pm Jueves 1:00pm-6:00pm Viernes 9:00am-1:30pm	Miércoles 11:am-3:30pm Jueves 1:00pm-6:00pm Viernes 9:00am-1:30pm	Miércoles 11:am-3:30pm Jueves 1:00pm-6:00pm Viernes 9:00am-1:30pm

Agredecemos al: Programa de Apoyo a los Trabajadores Agrícolas de Cornell/Cornell Farmworker Program,  
Finger Lakes Community Health, Western NY Coalition of Farmworker Serving Agencies,  
CNY Workers Center, Alianza Agrícola y a todas las iglesias involucradas



- Favor de hacer tu cita gratuita en mi consulado
  - Teléfono: 1-424-309-0009
  - Internet: <https:// citas.sre.gob.mx/>
  - citas disponibles 1 semana antes del evento.
- Para más información sobre requisitos, precios y otras sedes visita:



[HTTPS://CONSULMEX.SRE.GOB.MX/NUEVAYORK](https://CONSULMEX.SRE.GOB.MX/NUEVAYORK)

## Consulado Guatemalteco



### Móvil 2023

El consulado guatemalteco **requiere citas** para la visita.

#### Visítanos a:

**Lansing, NY- viernes y sábado, el 21 y 22 de julio**  
All Saints Parish, 347 Ridge Road, Lansing, NY 14882

Los cupos llenan rápidamente. Favor de registrarse lo más pronto que posible para una cita en julio. Hay que mandar la siguiente información por mensaje al: **(607) 254-5194:**

- 1) nombre completo
- 2) dirección en los EEUU completa (calle, ciudad, código postal)
- 3) número celular
- 4) fecha de nacimiento
- 5) lugar de nacimiento en Guatemala
- 6) lista de documentos requeridos (pasaporte, ID consular- no brindara servicios para tramitar el DPI este año)

Haremos una cita y confirmar por mensaje de texto el día y la hora.

Se encuentra información sobre los costos y documentos requeridos en nuestro sitio web: [www.trabajadores.cornell.edu](http://www.trabajadores.cornell.edu).

## Welcome to Our Summer Intern

Gretchen Wittmeyer is a senior in Agricultural Science at Cornell. She grew up on a small dairy farm near Buffalo, NY. Gretchen is currently an intern for the Nutrient Management Spear Program, where she works in the lab processing soil samples for a soil health/ yield stability zone project. The project goal is to determine the effect of soil health on climate resiliency in yield stability zones in corn. She will also be working with Janice Degni in the field, shadowing and learning about extension work. Gretchen does not know what she wants to do after college, so she is interested in seeing various types of agricultural careers through this internship. In her free time, Gretchen enjoys cross-country skiing, painting, and kayaking.



## USDA Offers Assistance to Help Organic Dairy Producers Cover Increased Costs with the new Organic Dairy Marketing Assistance Program (ODMAP)

The U.S. Department of Agriculture (USDA), announces assistance for dairy producers with the new Organic Dairy Marketing Assistance Program (ODMAP). ODMAP is established to help mitigate market volatility, higher input and transportation costs, and unstable feed supply and prices that have created unique hardships in the organic dairy industry. Specifically, under the ODMAP, USDA's Farm Service Agency (FSA) is making \$104 million available to organic dairy operations to assist with projected marketing costs in 2023, calculated using their marketing costs in 2022.

FSA will begin accepting applications for ODMAP on May 24, 2023. Eligible producers include certified organic dairy operations that produce milk from cows, goats and sheep.

### How ODMAP Works

FSA is providing financial assistance for a producer's projected marketing costs in 2023 based on their 2022 costs. ODMAP provides a one-time cost-share payment based on marketing costs on pounds of organic milk marketed in the 2022 calendar year.

ODMAP provides financial assistance that will immediately support certified organic dairy operations during 2023 keeping organic dairy operations sustainable until markets return to more normal conditions.

### How to Apply

FSA is accepting applications from May 24 to July 26, 2023. To apply, producers should contact FSA at their local [USDA Service Center](#). To complete the ODMAP application, producers must certify to pounds of 2022 milk production, how documentation of their organic certification, and submit a completed application form.

Organic dairy operations are required to provide their USDA certification of organic status confirming operation as an organic dairy in 2023 and 2022 along with the certification of 2022 milk production in hundredweight.

ODMAP complements other assistance available to dairy producers, including Dairy Margin Coverage (DMC) and Supplemental DMC, with more than \$300 million in benefits paid for the 2023 program year to date. Learn more on the [FSA Dairy Programs webpage](#).

## Organic Dairy Fluid Overview from the United States and the European Union

*Compiled by Fay Benson,  
SCNY Dairy & Field Crop Team*

*This is a synopsis of the report released on May 19, 2023 by USDA's Ag Marketing Service. To see the complete report go to: [https://www.ams.usda.gov/mnreports/md\\_da902.txt](https://www.ams.usda.gov/mnreports/md_da902.txt)*

**Organic Market Support.** The USDA Agricultural Marketing Service (AMS), through the Organic Market Development Grant (OMDG) Program, will issue up to \$75 million in competitive grants to support the development of new and expanded organic markets that help increase consumption of domestic organic agricultural commodities. The program focuses on building and expanding the capacity for certified organic production, aggregation, processing, manufacturing, storing, transporting, wholesaling, distribution, and the development of consumer markets. AMS will give priority consideration to projects addressing specific market needs for organic grains and livestock feed, organic dairy, organic fibers, organic legumes, other rotational crops, and organic ingredients currently unavailable in organic form. Applications are being accepted through July 11, 2023. To find out more go to: <https://www.ams.usda.gov/services/grants/omdg>

**Organic Milk Product Sales.** The Agricultural Marketing Service (AMS) reported March 2023 estimated fluid product sales. The U.S. sale of total organic milk products was 256 million pounds, up 1.3 percent from the previous year and up 1.1 percent year-to-date. Organic whole milk sales, 122 million pounds, were up 5.2 percent compared to a year earlier and up 6.0 percent year-to-date. Reduced fat milk (2%) sales were 83 million pounds, down 4.3 percent from the previous year and down 3.0 percent year-to-date. Organic flavored whole milk sales, 1 million pounds, decreased 30.5 percent from the previous year, while declining 49.6 percent year-to-date.

### European Average Organic Milk Pay Prices. March 2023

European organic milk average pay prices declined in Germany, Bavaria, and France when compared to February average pay prices. Additional information is shown in the table below.

#### March 2023 Organic Milk Pay Prices in Europe Per 100 Liter (100 Liters = 26.41 Gallons)

	Euros	*\$USD	% Change Feb.2023	% Change March 2022
Germany	60.60	\$65.50	- 1.85	+ 12.31
Bavaria	60.73	\$65.64	- 1.54	+ 12.69
France	48.15	\$52.04	- 3.48	+ 6.11

\*Results are based on the May 19, 2023, exchange rate





## Change Service Requested