Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

2nd Quarter Report

April—June 2018

Welcome to Mary Kate Wheeler: Dairy Farm Business Management Specialist

Mary Kate joined the SCNY Dairy and Field Crops team in May from the NYS Beekeeper Tech Team, where she provided one-on-one business development support and conducted applied business management research with honey producers. She is excited to use her financial analysis and business planning skills to support our dairy and crop producers.

Mary Kate has an M.S. in Applied Economics and Management from Cornell University and a B.S. in Environmental Studies from Bowdoin College. During her graduate program she spent time in Peru working with farmers on issues of agriculture and climate change. Mary Kate grew up outside Ithaca, NY and now lives in Newfield, where she just welcomed her first beef steers.

Mary Kate has been busy getting oriented to extension and acquainted with our clientele.



Introductory Farm Visits: Visited 31 dairy farms across the region to meet farmers; learned about the history of their farm businesses; and discussed perceived business challenges and opportunities.

Building Relationships with Ag Professionals:

Attended 20 meetings with agricultural service providers and other county and regional professionals to network and discuss resources and possible collaborations.

Collaboration with PRO-DAIRY: Completed training on data collection and data entry into the Dairy Farm Business Summary.

Dairy Month Outreach & Education: Provided education and assistance for Onondaga County Ag Awareness Day, Cortland County Agstravaganza, and McMahon's Farm Tour.

Direct Marketing Consultation: Provided a 3-hour marketing consultation to a dairy farmer who is in the process of developing a new direct market beef enterprise.



Cornell Cooperative Extension links the research and extension efforts at Cornell University, the Cornell University Agricultural Experiment Station and the New York State Agricultural Experiment Station, providing the knowledge to maximize New York State's agricultural and natural resources.

SCNY Dairy & Field Crops Extension Program

Getting to Know our Producers: Mary Kate Visits Onondaga County Farms By: Melanie Palmer, Ag Educator

To get acquainted with our farmers, Mary Kate recently spent a day with me visiting some Onondaga county dairy farms (June 29th). The purpose was to expose her to concerns of dairy farmers and to give her the opportunity to discuss the business side of dairies.

It was exciting for me to choose farms to visit. I wanted farms that were successfully operated and managed, with a variety of size, facilities and business structure. We also had an additional goal to consult with a farm looking for new opportunities and strategies to market their farm raised beef. We were able to discuss in depth, some marketing strategies to improve sales. Mary Kate had previously met the producer. Armed with background on the producer's needs she was able to put together a packet with a direct marketing strategy plan that we provided to the producer prior to the visit so that we could optimize the impact of our visit.

The discussion during the visit was productive and certainly necessary for this producer to turn things around and generate more sales. He was left with "homework", options for changing some current practices and new ideas to consider. Communication lines will remain open with this producer to address concerns or obstacles and provide input and guidance, as needed.

The other farm visits were successful, meeting the purpose for the day. Farmers welcomed Mary Kate's questions and requests to see specific aspects of their operations. Time ran short to get to all of the farms that we had planned to visit, so there will be more days of visiting Onondaga County dairies.

NYODP Collaboration Results in Two Scientific Publications Fay Benson, Small Dairy Support Specialist

The New York Organic Dairy Program (NYODP), lead by Fay Benson, collaborated with researchers from four other Northeastern States on a five year USDA OREI Grant. The project ended in 2016 and the work has resulted in two research papers recently published in the "Journal of Dairy Science". The papers describe work done on organic dairy farms from each of the five states including one farm from Tompkins County and another from Cortland County.

Our research team was interested in the quality of pasture during the grazing season on these farms as well as the feeding of flax meal to dairy cows during the winter months. The first paper describes how the quality and quantity of the pasture leads to higher levels of Omega-3 in milk. The second paper describes an experiment in which the herds were divided in two groups with one half receiving a ration balanced with corn and soybeans and the

other half ration balanced with flax meal. The milk from each group was then tested for the types and amount of the two fatty acids.

Links to both papers can be found below:

Feeding strategy and pasture quality relative to nutrient requirements of 3 dairy cows in the northeastern U.S.

https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/ e/4211/files/2018/07/Pasture-Quality-PAS-2016-FINAL-2mfd318.pdf

Impacts of seasonal variation and winter supplementation of ground whole 3 flaxseed on milk fatty acid composition of organic dairy cows in the 4 northeastern United States

https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/ e/4211/files/2018/07/Hafla-OREI-Winter-Flax-Supp-PAS-2018-R1-1ximgdd.pdf



Animal Agriculture, Dairy Cattle Welfare & Consumer Perspectives: How the Industry is Responding *Betsy Hicks, Area Dairy Specialist*

This spring, I had the opportunity to attend two separate conferences dedicated to animal welfare, with a focus on consumer perspectives of animal agriculture. The first was the Annual Stakeholder Summit, put on by the Animal Agriculture Alliance held in Arlington, Virginia in early May. This conference was not dairy specific, but focused on all of animal agriculture. The second was the Dairy Cattle Welfare Symposium, held in late May in Scottsdale, Arizona and focused on the dairy industry in specific.

The Animal Agriculture Alliance held a variety of topics, from consumer perspectives on food labels to comparing animal agriculture from years past to today, from the future of consumer choice to potential impacts of "no antibiotics ever" on animal welfare, and radical animal rights extremism as well as debunking myths about animal agriculture and environmental impact. This two and a half day conference was packed with speakers from universities across the country, Ted McKinney – the USDA Under Secretary for Trade & Foreign Ag Affairs, industry leaders in each of the animal ag sectors, as well as experts in human nutrition and companies leading the way at providing food for a growing global population.



Many of the growing issues dairy producers face are the same across all of animal agriculture. A growing population several generations removed from farming is voicing opinions about how their food is raised, while

having to separate facts from sensationalism that animal extremists broadcast daily. Those in the room learned about differences in generational preferences of consumers, how to use media to share your "roots" as a farmer, and how ag in general needs to be proactive – not just "reacting faster" to what non-ag people are saying. This conference was invaluable to attend; the array of speakers and participants in one room allowed an opportunity to learn that is rare.

At the Dairy Cattle Welfare Symposium, dairy producers and dairy business personnel from across the country focused on the idea of intersecting best practices and sustainability in the dairy industry. This symposium focused not only on consumer perspective of our industry, but also on how we perceive dairy cattle welfare on farm and ways to continually improve. Speakers here also included several from

universities in Canada, including Drs Charlotte Winder and David Kelton from the University of Guelph and Dr Nina

Von Keyserlingk from the University of British Columbia. Both of these universities are leaders in dairy cattle research as it pertains to



dairy cattle behavior. Included between speakers were several presentations by graduate students on research they were conducting on dairy cattle behavior, including calving behavior, pain response and mitigation in dehorning dairy calves, and several others.

Far and away, the presentation that garnered the most interest was the panel discussion of seven women consumers on their preferences and view of dairy. These women mainly worked for the hotel the symposium was held at, but featured women of various ethnicity, stage of life and child status. Many of their perceptions were difficult and frustrating to hear, as they were outdated and far from reality of today's dairy industry. In addition, the way they described their purchasing preferences in terms of what the label says was doubly frustrating, as they often didn't know what the terms meant but looked for them when they were looking to buy dairy products. These women said almost universally that they wanted to learn more about how milk is produced, but had little to offer with how farmers could educate them. One panelist said she was unaware that there were dairy farms close by in Arizona, when in fact Shamrock Farms, one of the largest dairies in Arizona and a short drive from Scottsdale, gives farm tours to the public on a regular basis. Hoard's Dairyman, a publication for dairy farmers, highlighted this panel discussion in an article, which can be found at https://hoards.com/article-23430-consumers-scantdairy-knowledge-is-scary.html.

Both of these conferences allowed me the opportunity to see outside of our little NY/NE dairy bubble. Often, our producers here are focused on production results while knowing that animal behavior is important. These occasions brought "dairy cattle welfare" to a focus for me, with the term being defined by a presenter as fusing *animal behavior* with *best practices* and *sustainability*. Without these things being practiced together, dairy producers will have limited success. Putting this lens on, I am better educated to help my producers make decisions that have all three in mind. A Comparison of the Performance of Pre & Post Tassel Fungicide Application in Corn for the Control of Northern Corn Leaf Blight. A research project supported by the NYS Corn & Soybean Grower's Association, administered by the NYS Farm Viability Program. Janice Degni, Area Field Crops Specialist, Project PI

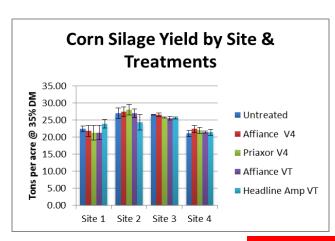


Northern Corn Leaf Blight (NCLB) is one of the most serious diseases of corn. It has become endemic in NYS. affecting all corn growers. Although we cannot predict when first infection will occur, it has occurred regularly for over ten years consecutively. This field scale study sought to measure and compare effects on yields and quality from fungicide treatment at an early and late timing on five cooperating farms in Northern, Central and Eastern New York. Applications were made

at two timings: early vegetative and reproductive. Treatments included: 1) an untreated control, two early vegetative fungicide treatments with 2) Priaxor and 3) Affiance and two post tassel treatments of 4) Affiance and 5) Headline Amp.

2017 was an anomaly because occurrence was absent to arriving fairly late and then only with light infection. NCLB disease incidence was very low, below 1% in the majority of the plots. Although disease pressure from common rust was abundant as well as other abiotic stress factors, there were no statistically significant effects on yield or forage quality components from the fungicide treatments compared to the untreated check plots.

This study provided NYS data from on farm trials that found results similar to Midwestern studies. The interplay of the timing of infection, % disease incidence and a hybrid's resistance to NCLB, all have an impact on how the disease progresses in a given season and the impact on yield.



Profitability, Competitiveness, Sustainability Improvements

This project contributes to the body of knowledge of the efficacy and benefits of fungicide use in corn for control of Northern Corn Leaf Blight. Industry encourages prophylactic sprays for "plant health benefits". This study did not measure any plant health benefits in a year with extremely low disease pressure from NCLB.

Unnecessary sprays are potentially very expensive and troublesome to the industry because of the increase in selection pressure for the development of resistant fungal strains. Negative impacts to non-target species are also a concern. Most farmers need a payback in crop yield or crop quality from their production inputs. This study did not see any benefits from fungicide treatments under the conditions of the 2017 growing season with little to no disease pressure.

Knowledge Gain

This study provided local, NY data on the effects of fungicide application in corn for NCLB. We have relied on the research from the corn belt since University resources have been limited in the ability to build our own dataset. Interestingly from reviewing the data, Midwestern studies show a benefit from fungicide use in about 50% of them.

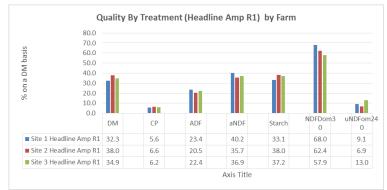
It is important to evaluate several risk factors for potential severity of disease development. Scouting is essential for making an informed disease regarding to treat or not.

The final project report summarizes supporting information and data.

Farm Success Stories

One of the participants in this trial used the data from this research project to guide and plan for fungicide treatments this growing season. The fact that yields were not impacted in a year with low disease pressure confirmed for this farm cooperator that prophylactic treatments are not justified.

A 2nd cooperating farmer plans to scout fields to determine the need for treatment based on the levels of NCLB detected in the fields.



NY farm viability

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