



Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

SECOND QUARTER HIGHLIGHTS

APRIL – JUNE 2022



Alfalfa Monitoring for Optimum Forage Quality: Ongoing Program reaches New Audiences in 2022 *Mary Kate MacKenzie, Farm Business Management Specialist*

Why monitor alfalfa heights?

Every spring, we pick up yardsticks and head out to the field to measure alfalfa heights on a weekly basis. Why do we pay such close attention to the growth of this one plant during the month of May? Research has shown that alfalfa height is a reliable indicator of forage quality for both alfalfa and grass hay. By tracking alfalfa heights each week, we can calculate growth rates and predict first cutting harvest dates to help farms achieve optimal forage quality. Alfalfa heights are easy to measure, and they are more accurate than other methods used to determine harvest timing.

Outcomes

- ◆ In May of 2022, our team completed the following activities as part of our 8th year of Alfalfa Monitoring for Optimum Forage Quality.
- ◆ Trained 3 CCE ag educators to assist with alfalfa monitoring
- ◆ Recorded weekly alfalfa height measurements from 68 fields across 7 counties.
- ◆ Summarized results and published them on our blog: blogs.cornell.edu/scnydairyandfieldcrops
- ◆ Rapidly disseminated results by email to 485 blog subscribers, including 230 new subscribers from Cayuga County
- ◆ Shared May 10 blog post to Facebook, reached 418 people
- ◆ Mailed print copies of reports to 14 Amish dairy and livestock farms in Tioga County
- ◆ Provided education and resources on forage quality and harvest timing through the blog, social media, Dairy Digest, and personal communications

Impacts

This program combines applied research and timely education to influence management decisions that drive economic performance on dairy farms. Harvesting the first hay cutting at the right moment “defines the success of the forage making year” and provides the greatest opportunity to harvest a high concentration of quality feed. Farms that do a good job with first cutting can feed more hay and less grain, which leads to healthier cows, more milk, and lower feed costs.

The first hay cutting is not only the most important, but also the easiest to mess up. Weather conditions are more variable in the spring, and forage quality declines faster in the spring compared to summer and fall. Once farmers begin planting corn, it can be very difficult to park the planter and switch to cutting hay. Farms that fail to achieve forage quality goals for the first hay cutting tend to struggle with lower milk production and higher feed costs until the next crop season.

Every spring we receive positive feedback from dairy producers that read our weekly reports and use the information to prepare for spring hay harvest. Nutritionists, crop consultants, and other agricultural service providers use our information to advise their clients. This impact has grown over time as more producers and agribusinesses learn about the research supporting this method and view our team as a trusted source for production information.



Rankin, M. (2020, April 28). There's no cutting like first cutting. Hay and Forage Grower Magazine. Retrieved June 29, 2022, from <https://hayandforage.com/article-2981-there%E2%80%99s-no-cutting-like-first-cutting.html>



Cornell Cooperative Extension links the research and extension efforts at **Cornell University**, and **Cornell AgriTech**, the New York State Agricultural Experiment Station, **providing the knowledge** to maximize New York State's agricultural and natural resources. The **South Central New York Dairy and Field Crops Program** is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in 7 Counties.



Spring Pasture Planning - One-on-One Farm Consultations utilizing Grazing Charts *Betsy Hicks, Dairy Management Specialist*

Following last year's success of Pasture Regrowth Monitoring, several farms in the SCNY region reached out to focus on implementing a plan for pasture rotation. Rotational grazing allows for less dependency of supplemental feed throughout the grazing season when compared to a continuous grazing strategy. While requiring more management than continuous grazing, many farms who dedicate the time and energy to employ even a simple rotation find it is well worth the effort.

Using grazing charts obtained through the Upper Susquehanna Coalition, seven farms met with Betsy to either take their grazing system up another level and intensify their grazing system or learn basic principles of rotation and start with a simple system to move their cattle through. All seven farms received a grazing chart and consultation to set up and ready their pasture system for implementation of a rotation, some with assistance of local CCE agriculture educators. Throughout the spring and early summer, they have received support from Betsy on planning their next rotation, walking through pastures to make sure they're on the right track, and phone check-ins for encouragement.

Farms working with Betsy include:

Chemung County beef farm, intermediate grazier, first year using a grazing chart

Cayuga County beef start-up farm, first year grazier

Cortland County dairy farmer, third year rotationally grazing, first year with a grazing chart

Cortland County beef farmer, intermediate grazier, first year with a grazing chart

Tioga County dairy farmer, intermediate grazier, first year with a grazing chart

Tioga County dairy farmer, experienced grazier, first



year with a grazing chart

Tompkins County beef farmer, novice grazier, first year with a grazing chart

Quotes from participating farmers:

"The grazing chart is very nice, my son has been keeping close track and has already been talking about next year! And the cows seem to really like to be moved!! Again, thank you so much for your time and effort!"

"I just wanted to reach out and thank you for the lesson on the sheets as well as all the other insight you offered. The sheets are getting put to use and I'm excited to track the progress. Thank you both for taking time out of your schedule for that meeting!"





The Status of Seed Corn Maggot as a Pest in Corn and Soybean

Janice Degni, CCE Field Crop Specialist

This spring a network of field crop specialists participated in a risk assessment for predicting seed corn maggot (SCM). Seed corn maggot is an insect that attacks several crops during the stage of seedling development. The adult fly lays eggs in the soil. The larvae which emerge eat the germ of corn, soybean, dry beans and other large-seeded crops. The larval feeding can cause economically damaging levels of stand thinning which then require replanting.



Seeds showing feeding damage by seedcorn maggot larvae. Image Number: 5434908. Photo credit: Mariusz Sobieski, Bugwood.org, Image Number: 5434907. Creative Commons Attribution-Noncommercial 3.0 License.



Targeted Soybean Population



SCM Thinned Soybean Population

The statewide network organized by Dr. Katja Poveda, Dept. of Entomology, Cornell, established sticky traps on numerous fields across the state to monitor the incidence of this pest.

Control methods have evolved over time from treatments manually applied to the boxes of seed on the planter to insecticide treatment applied to the seed prior to distribution. Seed treatments carry micro-grams of insecticide and eliminate the hazards of handling pouches of seed treatment poured into the seed hopper and stirred into the seed or soil-applied insecticides with high toxicity to humans.

The seed treatments that have been relied on for excellent control of SCM for the last 20 years are in the neonicotinoid family. These insecticides are preventive, present to control the pest when it arrives. Neonicotinoids have come under scrutiny for their possible role in honeybee population decline and adverse effects to native pollinators, although data under NY conditions does not exist. However, a statewide network of extension researchers is currently investigating the relative effectiveness of several insecticidal seed treatments for SCM control, including the current neonic standard and some alternatives. Testing of replacement insecticides from the diamide family are only 50% effective in

preventing seed corn maggot damage, while neonics are 85-90% effective (Dr. E. Shields, personal communication).

The Birds and Bees Protection Act (S699D) is legislation that has been introduced in the NYS Senate but was not brought to the floor for a vote during the 2021 session. The bill would prohibit the use of neonics beginning in 2024 in the state.

The data collected from our trap network will inform the prevalence of adult SCM across the landscape of NYS and the need or lack thereof for control. Data from our seed treatment trials will help us determine whether we have any reliable alternatives, if neonics are banned in the future.





Southern New England Soil Health Trailer Tour

Fay Benson, Small Dairy Support

At the invitation from four regional agricultural stakeholders, NY's solar-powered soil health education trailer traveled the 900 miles to Vermont, Massachusetts, Rhode Island, and Connecticut to offer five free programs from June 20 through June 24, 2022. Attendees at the Southern New England Soil Health Trailer Tour programs saw demonstrations and learned how to regenerate soil to its natural functions for agricultural crop and livestock grazing success. Northeast SARE (Sustainable Agriculture Research and Education), the University of Massachusetts Extension, Rhode Island Farm Bureau, and the American Farmland Trust were the sponsors of this soil health educational programming. The two events organized by the American Farmland Trust took place on grazing dairies and had 26 attendees. In addition to the demonstrations conducted by the soil health trailer, Fay led pasture walks to further emphasize practices that lead to improving the health and functioning of soil. Fay and the trailer were the lead off presentations for the University of Massachusetts Research Farm's Field Day. There were 83 in attendance (see photo).



Rhode Island's Farm Bureau organized and on farm event on Jamestown Island. The event drew an audience of 45 with most being farmers. The audience found the soil health demonstrations of great importance due to their farms being in such close proximity to water. The final event of the five days was in Connecticut on a beef operation.

The trailer has been a popular request for diversified groups since Fay's collaboration with New York's Grazinglands Coalition on a National Conservation Innovation Grant in 2014. Since that time it has been seen by close to 3000 people. The invitations the trailer receives are from diverse organizations. In addition to the four previously mentioned organizations, this summer's requests include:

- ◆ Two events by the NY Beef Check-off to train Ag Teachers from across the country, how to incorporate soil health into their teaching.
- ◆ An urban apprenticeship farm in Syracuse asked for the trailer's demonstrations to aid in teaching non English immigrants about soil health since seeing the demonstrations reduces the need for translations. This event is sponsored by Mother Cabrini Health Foundation,
- ◆ The NRCS has invited the trailer to Maine in September to aid in their training of their field staff in the area of pasture soil health.
- ◆ Other requests are from CCE and New York's Soil Health Alliance.



SCDFC Team Member Receives NACAA Achievement Award

The South Central Dairy & Field Crops team is pleased to announce that a team member was honored with an award amongst her peers. Mary Kate MacKenzie, the Farm Business Management Specialist, received the National Association County Agricultural Agents (NACAA) Achievement Award in West Palm Beach, Florida during their conference over July 17—22, 2022. In her four years as a regional specialist, she has developed a strong program on farm business record keeping and analysis. She builds on the foundation of record keeping helping farmers with effective succession planning and labor management. Her program contributes to viable farms in the region for the next generation.



Congratulations, Mary Kate! We are proud of your well-deserved recognition of the hard work and dedication to you put into serving the farmers and producers in our region.



By Donette Griffith, Administrative Asst

