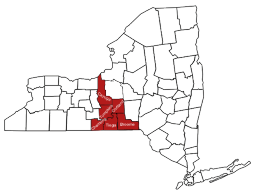


Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

Broome | Cayuga | Chemung | Cortland | Tioga | Tompkins

Dairy & Field Crops in Cayuga County
An Important Economic Engine

DAIRY FACTS: **74** Dairy Farm Businesses earning

315 Million Dollars of farm gate income for milk

Caring for nearly **50,000** dairy cows, Producing **158** million gallons of milk/yr.

Growing forages: hay crop and corn silage for their feed on

84,102 Acres with a value of **$65** million and

$210 million income for cattle and calves sold.

Market Value of Ag Products Sold in Cayuga County in 2022 - $462 Million!

Hands-On Learning Labs

Feeder School: Understand equipment maintenance, proper feed mix, cow behavior and communication with farm team

- Optimize feed bunk management, silage storage, best practices and SAFETY.

Transition Calf Workshop: Identifying bottle necks for raising calves through weaning & transition

Sprayer & Planting Clinics: Prepare machinery to optimize performance

Focus on Forage Quality

Alert for Hay Crop First Harvest - Measuring alfalfa height is a reliable indicator of forage quality for both alfalfa and grass hay. By tracking alfalfa heights weekly in the early spring , we can 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. A report is sent weekly reporting crop status and anticipated harvest dates.

Corn Silage Clinics - Our burndown clinics are designed to help producers develop a harvest plan based on field maturity. Corn silage is a cornerstone crop for dairy farms because it provides a high-energy, digestible forage that supports milk production and herd health. Its ability to deliver consistent nutrition—especially in the form of fermentable carbohydrates and fiber—makes it a reliable feed source throughout the year.

Forage quality directly impacts milk yield, and corn silage offers a balance of starch and fiber that complements other feed components.

On-Farm Trainings

Dystocia, or difficult calvings, are common on dairy farms but unpredictable, making it hard to train employees without risking cow or calf health. Language barriers also make it challenging for English-speaking managers to explain calving complications to Spanish-speaking workers.

To address this, CCE dairy educators Betsy Hicks and Daniela Gonzalez offered Spanish-language maternity trainings. These sessions included background information, discussion of farm protocols, and the reasoning behind each step.

A hands-on portion used the "Birtha" maternity model, allowing participants to practice correcting calf malpresentations. Observers could see inside the model, while the "birther" worked by feel, simulating real-life conditions. The model's realistic joints and safe environment allowed trainers to pause and correct mistakes without risk.

Daniela Gonzalez of CCE CNY Dairy Team talks about the consequences of a difficult calving to a gathering of Spanish-speaking employees from different farms.

As a result, new workers gained confidence, and experienced staff practiced advanced techniques. Farm owners appreciated the on-site, tool-equipped trainings that reinforced their protocols and engaged all employees without leaving the farm.

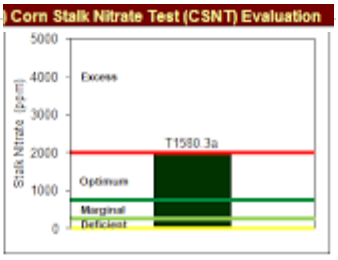
Applied Research

The Cornell Spear Nutrient Management Program has data from several years of on-farm research projects to better define the nutrient and fertility contribution of manure in cropping systems. This spring Janice recruited a cooperating farmer that has provided fields for the *Power of Manure Study*. This study is collecting data to help us learn:

- ✦How much N can my soil provide?
- ✦How does past manure applications and management impact soil N supply?
- ✦Can microbial biomass predict soil N supply?

Nitrogen is our most important nutrient for increasing yield in both hay crop and corn. It is an expensive nutrient. Prices fluctuating with energy markets in addition to supply and demand. Soil N supply can be impacted by field management (manure, cover crops, rotation, etc.).

This experiment was set up to measure yield where nitrogen side-dress occurs and is then compared to 3 areas which do not receive side-dress nitrogen. In addition to yield, soil microbial biomass, soil fertility, silage or grain quality, and stalk nitrogen tests (CSNT), a post-mortem evaluation of N levels in the crop, and nitrogen uptake are measured. A second field received fall applied manure and no additional spring manure and no sidedress. The same data will be collected from the field before and around the time of harvest. The data that is collected will contribute to our understanding of the contribution and uptake of soil nitrogen from both organic and inorganic forms in fields under different management conditions.



The CSNT is an evaluation tool for identifying opportunities .

By the Numbers 2024 Meetings and Workshops

- 30 Meetings / Workshops with 687 participants
- 203 Personalized Consultations & Responses to phone inquiries
- 11 Events to Increase Public Awareness of Agriculture
- Podcasts with 201 listeners
- Virtual Seminars totaling 350 contact hours