Cornell Cooperative Extension | Northwest NY Dairy, Livestock and Field Crops Program

A partnership between Cornell University and CCE Associations in these nine counties: Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne and Wyoming.

QUARTERLY HIGHLIGHTS   April - June 2022

Economics of Growing Cannabis for CBD in NYS: New Analysis by Production Scenario Provides Information for Decision Making

Established and potential cannabis growers seek research based knowledge regarding the expected costs of production and returns to evaluate enterprise alternatives and make decisions regarding an enterprise's place in the cropping system. Growers ask: "Does it make sense to add a cannabis CBD enterprise?" and "What specific production scenario or combination of scenarios would work best – land based broad acres; land based, vegetable/horticulture (similar to tomatoes, peppers); land based high tunnel; greenhouse?"

During the quarter, the NWNY Team worked with Cornell University/CALS & CCE, cooperating growers and others to develop costs and returns estimates by production scenario. The New York Farm Viability Institute provided funding for the work. The group began reporting findings via web based and other delivery methods. The delivery phase of the project continues through the next several months by way of field days, grower meetings, conferences, and other contact.

Active and potential growers and their advisors:

- learn about the expected costs and returns for the three production scenarios
  - □ Estimated variable costs of production per cannabis plant equal $9.84, $9.42, and $4.42 for the greenhouse, high tunnel, and outdoor scenarios, respectively, while fixed costs per plant total $33.95, $9.36, and $0.26 for the three scenarios, respectively.
  - □ Initial value of production (revenue) estimates equal $6 per plant, but value of production varies by output price and % point CBD per pound of plant material.
  - □ Estimated returns above variable costs per plant equal negative $3.84, negative $3.42, and $1.78 for the greenhouse, high tunnel and outdoor cannabis CBD production scenarios.
- apply research based knowledge to make decisions regarding enterprise alternatives
- maintain or improve the business' capacity to achieve financial and other family objectives

Helping Livestock Farmers with Meat Marketing

With supermarket prices on the rise, local meat continues to be a value and demand remains high. Tools are available to assist farmers with setting prices to ensure they are profitable. The Meat Suite website has been relaunched to connect consumers and farmers. A new calculator was developed to assist in pricing products and was launched at a workshop in Ontario County. The NWNY Team held a Pricing for Profit: Cornell Meat Price Calculator Workshop. About 16 participants learned about the marketing tips, marketing channels, and tracking expenses to help price their meat products for profit.

Another tool recently developed is an interactive map of NYS meat processors interested in being posted in NYS. The list was initially developed from the Livestock Program Work Team's survey in 2021. The map has the processing options available – USDA, Custom Exempt and 5A for poultry. Since it was posted with limited promotion until recently the map had over 1,600 visits in 14 months with nearly 13,000 clicks on the map. Since there is no other resource like this available, it has been a very useful tool for CCE statewide in fielding questions from farmers. It is updated regularly to stay current. The map can be found here: https://www.ccelivestock.com/livestock-processors-in-ny-state.
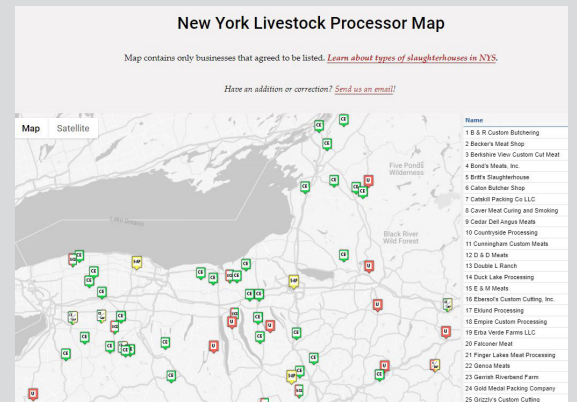
View of the online processor map.

Crop Alert: Timely Pest and Agronomic Observations for Growers

The NWNY Team begins publishing a weekly on-line Crop Alert starting in May. Crop Alert is published on the NWNY Team Blog (https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/) and informs growers and industry reps what we are currently seeing in corn, alfalfa, soybean and small grain fields. We include pictures of pests and plant injury and possible management solutions with additional resources. We even have short videos produced by team members that show how to scout and manage many of the pests. These videos can be viewed on the teams YouTube page (https://www.youtube.com/user/CCENWNY). We also have agronomic pieces to help maximize production like nitrogen fertility timing, planting, harvesting and storage tips and improving soil health. Our hope is to get the ag community out in the field at the right time looking at the health of their crops and maximizing production.

NWNY TEAM
CROP ALERT

One example of the timeliness of our alerts is our utilization of pheromone traps to monitor for Black Cutworm and Common Armyworm. Both of these pests migrate in every spring on storm fronts from the south and can cause severe yield losses in corn and wheat. The traps allow us to monitor their first arrival into NY and how big of a flight comes in each week. Based on moth numbers and degree-day data we can determine when larvae will be large enough to cause economic plant injury. We had some large flights of black cutworm this spring and we were able to predict when corn fields should be scouted to determine if cutworms were present. As little as a 3% reduction in plant population results in an economic yield loss in corn.

Another example is the weekly measuring of alfalfa height to help growers determine when the best time to harvest their forages to maximize quality. By the 2nd week in May, alfalfa heights varied between 11-15 inches across our region. In general, we say 100% grass stands should be cut when nearby alfalfa is 14 inches tall to achieve the desired 50% neutral detergent fiber (NDF). When the neighboring alfalfa reached 22 inches tall, we informed our growers to cut 50/50 alfalfa and grass stands for the desired 44 % NDF. We then start cutting 100% alfalfa at 28 inches for 40% NDF. Feeding forages with increased NDF will enhance digestible minerals, net energy, and feed intake, boosting milk production. Forages with high NDF digestibility promote high-producing, forage-maximizing herds.

Calving Class Put Participants in a Position to Succeed

Dairy farmworkers are often inexperienced in some aspects of their job duties as new hires. Dairy Skills trainings put on the NWNY Team, teach these skills which are critical to the success of the new employee and the farm business.

In April, 56 dairy farmworkers from 12 counties participated in one of 5 hands-on workshops presented in both English and Spanish. The in-person workshops included an oral presentation followed by a hands-on demonstration and practice intended to train farm personnel in the performance objectives of:

1. Understanding anatomy and physiology of calving
2. Monitoring close-up cow for signs of labor
3. Assessing normal and abnormal calf position
4. Properly assisting the calving process
5. Properly using chains, calf/puller/calf jack
6. Assembling a calving toolkit
7. Properly caring for the newborn calf

Dairy farmworkers participated in a hands-on demonstration and practiced identifying and repositioning abnormally presented calves. Under the guidance of experienced educators, participants applied the new concepts learned using sedated calves and a bovine pelvis. Participants said that they learned, "How to pull a calf and correctly use the 'calf jack'...(a difficult skill and tool that could be dangerous if used incorrectly)", and that "It helped me a lot [in order] to help cows [that are] calving."

A participant practices the skill of "repositioning a calf" by manipulating a sedated calf through the pelvic bone of a cow during the Calving Workshop in April 2022. Photo by M. Quaassdorff