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

**First Annual Dairy Day**

The practice of crossing a portion of a dairy herd with beef sires is becoming increasingly popular with cross calves more numerous. Industry trends, markets, and infrastructure are evolving. Farmers are asking to learn more about breeding, raising, and marketing strategies. Ten NWNY dairy and beef farmers along with 12 agriservice industry members from 8 counties attended the first annual NWNY Dairy Day held on December 6, 2022 at the Terry Hills Restaurant in Batavia.

Claire Mulligan of ABS Global presented on beef x dairy industry trends and genetic selection strategies. Anna Richards of 2020 Consulting engaged attendees in a discussion designed to consider and evaluate the economics of their own dairy replacement programs. Margaret Quaassdorff presented survey results of NY dairy farmer beef x dairy practices and updates regarding industry trends. Farmers, industry agriservice members and extension educators networked and swapped experiences over the lunch hour. The program closed with panel discussion, consisting of farmers Rachel Holtz and Gabe Carpenter (also with Keystone Mills), where they shared their insights regarding management and marketing strategies for beef x dairy producers and growers.

Dairy and beef farmers participated in discussions and networking with industry experts throughout the day. From the presentations, participants benefited from strategies to maximize the genetic potential of their dairy herds, and enhance the profitability and sustainability of their farm businesses. The program was interactive and participants reported that they learned the "importance of understanding your farm’s numbers/economics to make management decisions", and "how to better talk to farms I work with about economics of beef x dairy crosses." Other participants mentioned that calf growing practices and the number of calf [raising] barns in Seneca County were new information to them, and that they would likely attend or recommend NWNY Dairy Day again next year.

**Survey Identifies New York’s Dung Beetles**

Dung beetles have many positive environmental attributes in cattle pastures. They help recycle manure into the soil, which improves soil health. They increase water infiltration by creating macropores and return needed nutrients for grasses to grow. Just as important, dung beetles help reduce populations of horn and face flies that develop in the manure; they compete with horn and face flies in manure pats. In ideal situations, dung beetles can reduce horn fly populations by 95%, depending on the species in the pasture. Dung beetles also compete with gastrointestinal nematodes (GIN).

Dung beetles are found throughout the world, but little was known about species present in NYS. As pastures are an essential part of many of NYS’s dairy and livestock farms, a statewide study was conducted by 7 educators with federal funding. Three farms were sampled weekly in the NWNY region in Livingston, Ontario, and Wyoming Counties. Of the 15 species of dung beetles found in the state, 8 were found regionally. Two participating farms used a product to control GIN; preliminary analysis of these farms’ samples showed reduced dung beetle populations.

More data analysis is needed, with the possible goal of finding species that could be reared in a lab setting and released. This would be a tool for natural pest control and reduce the need for insecticides and possibly deworming products. There are many other species of beneficial insects in the pats, as well. They were also identified in this survey.
Feeder Schools Offer Education from Industry Experts and Farm Colleagues Alike

The employee in charge of mixing and delivering daily rations on a dairy farm is key to the farm’s success. Not only is that employee in charge of the biggest input cost on the farm, the feed ingredients, but they are also largely responsible for maintaining herd health through proper execution of the farm’s nutrition plan. These points were driven home during two feeder schools held in November in Wyoming and Ontario Counties. The program was part of a series of feeder schools developed by regional dairy specialists across the state and was taught by NWNY Dairy Specialists, Nutritionists, Industry Specialists and Cornell Graduate Students.

The program drew 40 participants representing 21 farms and two industry partners. Both locations offered simultaneous delivery in English and Spanish and covered topics essential to feeder success. These topics included: accounting for variable humidity within the ration, economics, lean management, quality control, safety at the feed bunk and equipment troubleshooting. The interaction between attendees was notable, and there was a great degree of learning by sharing experience from one professional feeder to another. Participants commented that the hands-on nature of the course helped solidify concepts learned in the classroom. After the course, participants had a new appreciation of their role in feeding consistency and farm economics and how to better achieve both.

Malting Barley Production in NYS: Land Grant Mission Resources at Work

About a decade ago NYS implemented an effort to stimulate economic activity generated by a barley grain to beverage value chain. NYS growers had not grown barley for malting purposes since Prohibition, roughly 100 years ago. When NYS began its efforts, NYS growers did not have access to seed varieties suitable for NYS’s growing conditions – conditions characterized by a relatively humid climate and its effects. Most of the US production takes place in the Upper Midwest and Upper West. Nor did NYS growers have experience with best management practices for growing malting barley. To successfully produce barley for successful malting, brewing, and distilling, NYS growers and the value chain needed: 1) seed varieties tailored to growing conditions, and the stakeholders’ desires regarding quality, traits, specs, etc.; and 2) research-based knowledge regarding best management practices – variety selection, seeding rates, planting dates and methods, nutrient, pest and harvest management practices.

Guided by its land grant mission, Cornell’s College of Agriculture and Life Sciences’ (CALS) teaching, research and extension expertise collaborated with other NYS barley grain to beverage value chain participants to address the above needs. Professors M. Sorrells and G. Bergstrom, lead the group of CALS research and extension staff. As members of the group NWNY Team have made valuable contributions related to the agronomic, economic, and risk management aspects of growing malting barley in NYS. During the fourth quarter of 2022, NWNY Team members worked as part of a planning committee to organize and offer a summit designed to bring the latest research-based information to value chain participants, and provide attendees with opportunities to discuss progress, challenges and next steps.

On December 14, 2022, over 100 people attended the Sixth Annual Empire State Barley & Malt Summit sponsored by the NYS Department of Agriculture and Markets, CALS and Cornell Cooperative Extension. Attendees included growers, maltsters, brewers, distillers, other goods and services providers, and other stakeholders. NWNY Team members delivered about an hour of programming during the half day event, focusing on risk management, farm level economics, and grain producers’ needs to successfully expand barley/small grain production. Dennis Nesel, Maltster and Co-Owner of Hudson Valley Malt, described the event as “… an opportunity to celebrate this year’s arrival of new Cornell-bred barley varieties, designed to withstand New York’s wet climate and fungal pressures.” Attendees learned about the new Cornell bred varieties, their characteristics, and availability; best management practices for successful production, harvest and storage of barley grain; practices, needs and next steps for achieving improved results throughout the value chain. By applying what they learned value chain participants expect improved results.

Maltster Dennis Nesel effectively describes the value of this work. Nesel says, “These new varieties take some of the risk off the shoulders of the growers and give us [NYS’ barley to beverage value chain] the opportunity to really deliver on the promise of craft beers and spirits grown here, malted here, brewed here and enjoyed here in NY.” “In 2015 we bought maybe 20,000 pounds of grain. This year we bought 1.35 million pounds, and I want to double that next year because I have the customers,” he said. “You can only get brewers and distillers to commit to NYS grains if they have faith in the supply chain, and now they see that Cornell has addressed a priority need with these new varieties. I think the future holds a lot of good things for NY craft beers and spirits.”