Cornell Cooperative Extension



Northwest NY Dairy, Livestock and Field Crops Program

Proudly Serving Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming and Yates Counties

YEAR IN REVIEW 2018



SMALL FARMS/LIVESTOCK



More consumers are looking for products raised locally. Many of those consumers, however, have trouble connecting with nearby farms to satisfy their meat buying preferences. Working to continue to break down that barrier in the Finger Lakes was the second Meat & Greet Farmer and Chef Fair.

Producers do a great job of taking care of their animals and the day-to-day things but often marketing does not always come naturally to them. It is so important that farmers get out and let consumers get to know them. There is no one better positioned to tell an animal's and/or a farm's story than the farmers themselves. This year's event was again held at Hobart and William Smith Colleges in Geneva as a collaboration between Cornell Cooperative Extension and HWS Finger Lakes Institute. The event brought together more than 20 farms and approximately 65 consumers, including home cooks, professional chefs, restaurateurs, and food distributors. During the event, three local chefs prepared meat that was donated from some of the attending farms. The demonstrations were entertaining, educational, as well as, delicious! It was not only a networking event for consumers to connect with farmers, but farmers to connect with other farmers. New and beginning farmers attended to pick up some marketing and promotional ideas as well.

BEEF QUALITY ASSURANCE TRAININGS

Beef Quality Assurance trainings provide a learning opportunity for beef producers. It is a national voluntary program that was developed based on scientific research covering five topic areas:

- 1. care and husbandry;
- 2. feedstuffs;
- 3. feed additives and medications;
- 4. processing and treatment records;
- 5. injectable health products.



For level one certification, New York requires attending a classroom presentation or self-study, a test, plus a chute side training where participants are required to demonstrate how to give a proper injection.

Level two requires a signed veterinarian patient relationship (VCPR) form. Recertification is needed every three years by attending an hour-long educational event covering a health topic. The chute side portion is often assisted by a veterinarian; critical support for providing updated regulations and industry changes regarding antibiotic and other pharmaceutical use. Certification is also a required component for the NY Grown and Certified program for beef.

Two trainings were recently held in the region to certify and recertify 45 producers. These venues provided a great learning environment that goes beyond the requirements. Discussion outside the confines of the training are beneficial as well. Comments from participants stressed the importance of adequate handling equipment for both producer and animal welfare, safe handling and proper use of vaccines, and the importance of biosecurity.

DAIRY- BEEF CROSSES: A NEW OPPORTUNITY?

Dairy replacement heifers are at a low value due to low milk prices and ample supply. There has been increasing interest in looking at the strategy of breeding low production dairy cows with beef semen as an additional income stream. This concept has been around for several years but is now gaining momentum. The topic arose last winter at the dairy advisory committee and a newsletter article was published.

According to Cornell/USDA Market News Reporters, well-

muscled crossbred calves are bringing a \$50-100 premium to Holstein calves. There needs to be a farm-specific strategy for this to be advantageous. Some of the pieces are still coming into place. There are discussions underway with auction markets to hold special sales for these crossbred calves. There is also potential for pooling these calves or holding graded (by USDA certified graders) sales. There are opportunities for farms to raise them, either as another income stream, or as a new enterprise. Some farms are utilizing old heifer facilities or old free stall barns after exiting the dairy business. Options include raising them to weaning up to finished weight.

In the photo above, the calf on the left is straight bred steer, and on the right, is crossbred heifer.

NEW TOOL FOR BATTLING HERBICIDE RESISTANT WEEDS

The resistance to glyphosate herbicide has forced growers to look at different methods of weed control. One of the newest alternatives is the use of dicamba tolerant soybeans. These soybeans are resistant to dicamba herbicide, which is only effective on broadleaf plants, not grasses. It is a newer formulation of dicamba that has a much less volatility. This does not mean it cannot drift if not used properly, and therefore, there are lots of restrictions on the label for proper application.

One requirement to use this technology is that growers go through an annual dicamba certification educational program. At this year's Soybean and Small Grains Congresses, the team worked with BASF to properly train participants and secure their certificates to use the new dicamba products on dicamba tolerant soybeans.

Over 400 growers and agriculture industry representatives attended the two meetings in Batavia and Waterloo. This represents the majority of the 265 thousand acres of soybeans planted in NY. It is estimated that at least 50% of the soybeans planted this year were dicamba tolerant varieties.





TALL WATERHEMP EXPANDS ACROSS WNY: GROWER EDUCATION IS KEY

Tall Waterhemp is a member of the pigweed family that was introduced into the Finger Lakes region just a couple of years ago. This weed species, like marestail, has been found to be resistant to glyphosate and possibly some other herbicide modes of action. It has very small seeds and can produce 200,000 seeds per plant.

Since its first identification on the Wayne/Seneca border it has moved south through Seneca and up into Wayne County. Another hot spot is at the Livingston/Genesee border. Just this summer individual plants were found on the roadsides in Orleans and Niagara counties.

As this weed begins to spread, education is needed to work with growers on how to best manage it effectively. **This winter, the team was invited to speak at five industry annual meetings about our experience with this weed and what are the best management options.** Approximately 420 attendees learned about proper waterhemp identification and how to manage it through proper crop and herbicide rotations along with cultural methods such as tillage, herbicide resistant varieties, and cover crops.

BILINGUAL DAIRY MANAGEMENT



DAIRY SKILLS TRAINING -HERD MANAGERS PROGRAM

In recent years, a statewide working group of regional dairy specialists has collaborated to select training topics, develop the curriculum, and provide presentation materials. Profacilitated Dairy has the meetings that guide the process. Each region determines the classroom and on-farm sites for programs and provides local promotion and registration. One of the topics selected for 2018 was a class for herd managers; the individuals charged especially with cow care, around the time of calving.

The period preceding calving through the first few weeks of lactation is critical to the health, production, and value of a dairy cow. As many factors can affect these outcomes, providing employees with basic training on the "how's" and "why's" of best management practices is cru-Employees are much cial. more likely to follow through with standard operating procedures when they understand importance. their Spanishspeaking employees can be at a greater disadvantage due to the language barrier.

The Herd Managers Training engaged 25 farm personnel, including eight Hispanics. These individuals represented some 17,000 lactating cows on their home farms with a range in size from 130 to 2,000. Farms in Wayne and Genesee Counties hosted the two-day program, and a manager at each farm explained their management practices. The sessions included real-time translation of the talks and on-farm demonstrations.

Through interactive presentations, attendees participated in discussions about stress, record keeping, data use, health management, anatomy, physical examination, ideal environmental conditions, antibiotic stewardship, monitoring cow performance and culling practices. Questions and discussions were lively. Survey results from 21 individuals indicated that 85% of the topic areas were rated well at 4 or 5 on a 1 to 5 scale. Participants said they found value in the course because it provided them with new, detailed information on practical topics.

FEEDER SCHOOL DRIVES PROFITS ON DAIRY FARMS



Feeding dairy cows is a daily task that can become monotonous over time. However, feed is the highest cost on all dairies, so meticulousness is essential. Over the course of two days in October and November, 20 dairy employees from five counties learned how to improve their feeding program. Four Spanishspeakers and sixteen Englishspeakers participated in classroom lectures and on-farm sessions. Topnotch guest presenters brought added depth and expertise to the class.

Many participants commented on the program evaluation that they planned to go home and make specific improvements to their feeding routines. Correcting an error like overfeeding by 5% a day would result in saving \$900 per 100 cows every month! When multiplied by the 22,500 head of cattle represented by the class, the dollars saved quickly add up. One participant commented, "Been feeding cows for 50 years and still learned at this course!"

DAIRY MANAGEMENT

DAIRY TRAINING RESOURCE GUIDE



Employee training often feels like an overwhelming task for dairy farmers. From keeping up with milk cooperatives' animal handling training requirements, to meeting OSHA safety training obligations, it can be a challenge to keep up with everything. Not to mention providing ongoing educational training for employees who are taking on new responsibilities.

During the 2017 Advisory Committee meeting, farmers lamented the fact that it was hard to find resources to aid them in providing training to their employees. In response to this, the NWNY team compiled a list of training resources that are easily accessible for farm managers. These resources include online videos, articles, fact sheets, posters, booklets, comic books, and webinars. Many of them are in Spanish and English. The topics covered include safety, animal handling, milk quality, herd health, learning Spanish and English and many more.

The document is available on our <u>website</u> and managers have expressed great appreciation in having a place to turn when they need ideas and resources to help them train their employees. Hosting the guide on our website makes it easy to update in response to website address changes and newly released resources, ensuring that it will be a valuable resource for years to come.



CORN SILAGE PRE-HARVEST WORKSHOPS PREPARE HARVEST TEAMS FOR LONG-TERM SUCCESS

A lot of time is spent on the basics to achieve an optimum corn silage harvest. This time is justified, as these foundational steps are critical to a successful harvest, where the decisions made during a very short time period impact the farm's production performance and economics for the upcoming year.

In late August 2018, the NWNY Team combined efforts with Joe Lawrence of **PRO-DAIRY** and industry representatives to discuss the 2018 corn silage crop outlook, and best management practices for the year's corn silage harvest. Forty plus participants attended one or more of the four separate workshops held on four different progressive farms over two days throughout the NWNY region.

Participants learned of the benefits of putting up a high

quality crop, and the steps to reach quality and yield goals. They were also encouraged to consider the short and long-term economics of corn silage cutting height, additional packing tractor weight, kernel processing score, and inoculant use.

Abundant farmer to farmer discussion was valuable in sharing experiences with different equipment and technologies, with highlights including learning from each host farm's harvest practices, as well as seeing and exploring the different aspects of each farm's kernel processor.

Participants left feeling better prepared for the 2018 corn silage harvest, aware of the impact their decisions have on the farm's success, and thinking about improvements to be made in the years to come.

TRANSITIONING FROM CONVENTIONAL TO ORGANIC PRODUCTION FOR THE CORN, SOYBEAN, WHEAT (CSW) CROPPING SYSTEM: TRANSITION PERIOD ECONOMICS



Farm business owners producing corn, soybean and wheat may look to the production and sale of organic grains as means to improve results. If economic analysis yields favorable results, and the owner concludes that organic production is a good fit for the business, then the decision to transition from conventional to organic production is made. Some owners, after making the decision to transition to organic production, ask, "Is there an optimal crop sequence for the 36 month transition period that positions the business for the first year of organic production with organic prices?"

The NWNY Team developed economic analysis to answer the above question. Analysis required agronomic data including yields, input levels and other information by crop for the transition period. The NWNY Team worked with Cornell University's Professor Emeritus William Cox to summarize agronomic data from a multiyear study that he led; and to develop the economic analysis. Analysts reported on their work in an <u>Ag Focus</u> article that provided highlights, and in a more detailed reporting of the work available on the team's website.

Net Present Value analysis of a feasible set of crop sequences for the CSW cropping system during the transition period yielded the following optimal sequence where acres are allocated equally among corn, soybean, and wheat annually.

- Conventional corn as an entry crop precedes organic red clover which precedes organic corn.
- Conventional soybean as an entry crop precedes organic corn which precedes organic soybean.
- Conventional small grain, barley, as an entry crop precedes organic soybean which precedes organic wheat/red clover.

ECONOMICS OF PRODUCING INDUSTRIAL HEMP IN NYS: 2017 COSTS OF PRODUCTION ESTIMATES

Farm business owners in the NWNY region frequently express interest in alternative, new crops for their potential to enhance the economic viability of their farm businesses. Recent examples include double cropping winter cereals for forage corn silage, grain sorghum, and malting barley. Due to legislation at the state level and funding decisions by New York State's (NYS) executive branch, the state's agricultural sector can add industrial hemp to the list.

To help determine industrial hemp's place in farm business owners' cropping systems, NWNY Program team members seek to answer four questions regarding the economics of growing industrial hemp in NYS.

- 1. What are expected costs of production?
- 2. What is the expected value of production?
- 3. What is the value of expected profit?
- 4. How sensitive are results to variability in key factors?

To date, analysts have focused on the costs of producing industrial hemp.

Via an article in the July 2018 issue of <u>Ag Focus</u> and a posting to the team's website, readers learned the following:

- Variable costs of production estimates for 2017 are \$282, \$268, and \$269 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively.
- Fixed costs of production estimates for 2017 are \$145, \$183, and \$160 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively.
- Total costs of production estimates for 2017 are \$427, \$451, and \$429 per acre for industrial hemp for fiber only, fiber and seed, and seed only, respectively.

Producers looking to evaluate industrial hemp's possible fit in cropping systems will achieve better results from decision making efforts when they apply a better understanding of expected economic effects and variability.



SOIL HEALTH: A MEANS FOR ACHIEVING ON-FARM ECONOMIC, ENVIRONMENTAL AND RESOURCE OBJECTIVES

Various advisory and program committees that direct work of the NWNY Program reinforce what team members hear from other producers about the increasingly important topic of soil health -- understanding agronomic, economic, environmental and other resource considerations underlying decisions regarding soil health practices are key to realizing optimal soil health practice adoptions levels.

NWNY Team members developed and implemented multisubject matter, multi-target audience research and extension efforts to increase farmers' and other stakeholders' (land owners, advisors, etc.) understanding of soil health topics.

At the request of USDA/NRCS regional economists, the team developed and delivered a 1 hour webinar for NRCS conservation planners titled, **"Cost Effectiveness in Conservation Programs: Return on Investment for Conservation Practices and Systems", February, 2018**. In response to USDA/NRCS, NE Soil Health Specialist, the team developed and delivered a similar session for a NYS Soil Health Planners Certification Course, May 2018.



American Farmland trust contracted with the NWNY Team as part of a *Great Lakes Protection Fund Pilot Project* in the Genesee Watershed to increase the adoption of conservation practices and enhance soil health. Extension organized learning circles that engaged women, mostly over sixty, non-operating landowners in learning opportunities about soil health and conservation practices.

In addition, the NWNY Team worked to implement a **Soil Health TAG Team**, and participated with the WNY Soil Health Alliance Board. A team member is also a contributor in American Farmland Trust's first *NY State Soil Health Specialist Training Program*.

The live NRCS webinar event had 313 participants, 131 viewers of the archived webinar to date, and about 40 participants from the NYS Soil Health Planners course who learned to estimate expected changes in profit associated with conservation practices and systems. Analysis provides valuable information when helping farm business owners with decisions. Estimates from the NYS certification course suggest that about 25 certified planners will apply what they learned while working with over 300 NYS farmers, helping them achieve objectives via soil health practice planning and implementation.

Learning circles participants represent underserved landowners that are hungry to learn about farming practices and how they enhance productive value of their land while protecting the environment. Building soil health is part and parcel to achieving these goals. Through reflective appraisal exit evaluations women have indicated an increase in knowledge of greater than 20% as a result of participation in learning circles.

The first Soil Health TAG Team consisted of 20 participants including growers with advanced knowledge and experience in the adoption of soil health management practices. The group was able to sufficiently talk about their experiences and provide knowledgeable advice to others in the group looking for more direction on specific types of management practices.

LIBBY EIHOLZER NANCY GLAZIER JOHN HANCHAR ALI NAFCHI JODI PUTMAN JOAN SINCLAIR PETZEN MARGARET QUAASSDORFF MIKE STANYARD LINDA RISEWICK BILINGUAL DAIRY SPECIALIST SMALL FARMS/LIVESTOCK FARM BUSINESS SPECIALIST PRECISION AG FIELD CROPS SPECIALIST FARM BUSINESS SPECIALIST DAIRY MANAGEMENT FIELD CROPS & TEAM LEADER ADMINISTRATIVE ASSISTANT





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