



Cornell Cooperative Extension North Country Regional Ag Team

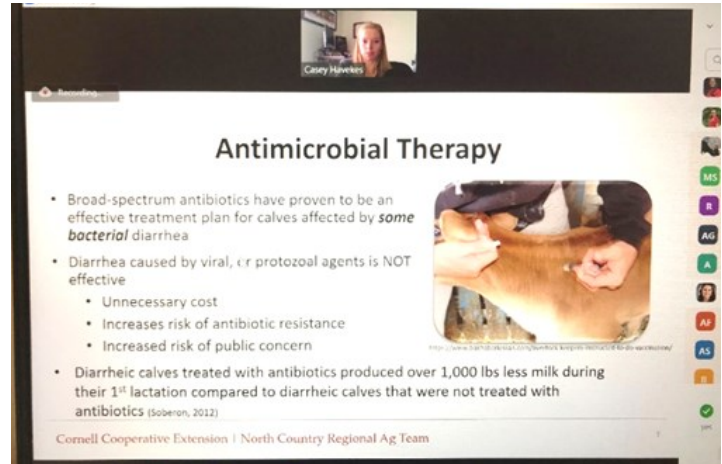
The North Country Regional Ag Team is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex counties.

Quarterly Report

January - March
2021

Virtual Dairy Day Provides Local Farmers with Timely and Valuable Information

There is an on-going need to provide North Country dairy farmers with local programming and educational seminars highlighting research updates, best management practices, and industry insights. The COVID-19 pandemic this past year did not change that, but it did impact how the CCE NCRAT Dairy Specialists provided these resources. Due to meeting restrictions, instead of offering the annual Dairy Day as the usual day-long in-person event, the CCE NCRAT Dairy Specialists converted it to a 4-day virtual program. Each of the 4 consecutive days focused on a topic area the CCE NCRAT Specialists and county CCE Educators across the region identified as areas of need, with multiple shorter presentations to allow ample time for questions and discussion. Topics included: Milk Quality, Industry Sustainability, Business and Markets, and Calf Management.



Casey Havekes, CCE NCRAT, presenting data from a NNYADP grant focusing on calf diarrhea and antibiotic usage on North Country dairy farms. Photo credit: L. Ferlito.

Dairy Day continued to be a success with the new format this year. There were 144 total registrants and 45-65 attendees each day, including farmers and agribusiness professionals from the North Country and across NY, as well as from 19 other states and provinces across the US and Canada, and 9 other countries around the world. A small subset of attendees completed the online program evaluation form, and the responses were generally positive. Almost all of the speakers scored at least a 4 out of 5 on the value of content presented, and the majority (61%) of responses indicated the program content was “somewhat valuable” and an additional 32% indicated it was “very valuable”. A couple attendees commented “I am on brain overload, loaded with a lot of information. It is good that I can access the recordings for review. I really appreciate being able to attend.”, and “I thought today was excellent. I do think that we could help increase awareness about mental health further. We in NY are very fortunate to have FarmNet!”

A silver lining of virtual programming is that through sponsorship from local agribusinesses, the Dairy Specialists were able to bring in speakers (via Zoom) that normally would never be attainable due to travel and costs. Additionally, recordings of each day are on the CCE NCRAT YouTube page, and shared via Facebook and the team Blog, and they have been viewed dozens of times. This highlights the extended reach that virtual programming such as Dairy Day provides, with local farmers, ag professionals, and other Extension employees having the opportunity to go back and watch (or re-watch) any presentations. The CCE North Country Regional Ag Team is looking forward to being able to offer some in-person programs later this year, while still incorporating some form of virtual resources to continue the success of the 2021 Dairy Day.

Authored by:

Lindsay Ferlito,
Mike Hunter,
Casey Havekes,
Kitty O'Neil,
Nicole Tommell

Layout/design by:

Tatum Langworthy

CCE Dairy Specialists Successfully Deliver “Critical Calf Care” Series



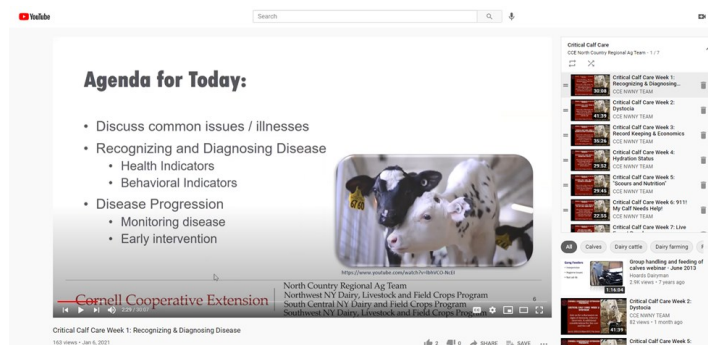
Dairy calves experience many challenges during the first 6-8 weeks of life, and it is notably one of the most vulnerable time periods during the animal’s life. While many producers have implemented excellent housing, bedding, and nutrition protocols, one area that proves to remain a challenge for New York dairy producers is decision making during critical periods in the pre-weaned calf’s life. In recognizing this area of opportunity, CCE Dairy Specialists Betsy Hicks (South Central NY), Margaret Quaassdorff (Northwest NY), Alycia Drwencke (Southwest NY), and Casey Havekes (Northern NY) developed a series of webinars to help producers develop the skills and confidence to make decisions during urgent cases. The series was titled “Critical Calf Care: Urgent Decision Making for Urgent Dairy Calf Health Situations”, and was offered weekly for 7 consecutive weeks starting January 5th, 2021. Each session lasted 20-25 minutes, with an opportunity for participants to ask questions at the end. The series focused on the following topics: disease diagnosis and recognition, dystocia, record keeping, hydration therapy, scours and total calories, and euthanasia decision making.

Overall, the series was well attended with anywhere from 30-61 people joining each session. Each webinar was recorded and posted to YouTube for future use – an aspect that proves to be important as the recordings have been viewed up 163 times. Several participants commented on their satisfaction with the program format. One participant said, *“I do like the smaller segments of calf care. With past programs, it was sometimes hard to digest and remember all the info.”*, and another participant said, *“Great job! I love the idea of having a series like this.....short webinars on different topics! Excellent!”*

In response to the final session on euthanasia, one participant said, *“Another great workshop on a very difficult topic! I am glad I have attended all of these in this series. I have learned a ton! Thank you.”* When asked if participants plan to implement any changes to their calf management protocols after attending the sessions, one participant said, *“We will plan to have a discussion with our heifer raiser to see if we can have special focus paid to calves that had hard births or just are lethargic...”*, and another participant said, *“Yes, we will adjust colostrum thawing temperature and tube calves that do not drink.”* The final session was a live panel discussion that featured 5 industry experts and an opportunity for participants to ask questions and engage in discussion. This final session was an excellent opportunity to collaborate with industry and overall, the session was very well received. A few of the sessions offered live video demonstrations to help participants visualize and understand concepts better. One participant said, *“The demonstrations were great. They added a practical, hands-on dimension to your lesson.”*

Additionally, participants rated their knowledge level before and after attending the program on a scale of 1-5 (1 being very little knowledge, and 5 being highly knowledgeable). On average, participants rated their knowledge at a 3.5 prior to, but that value increased to 4.2 following program delivery. Participants were also asked to rate their overall satisfaction of the program on a scale of 1-5, and the average response was 4.6. These two statistics demonstrate that the program was successful in adding value to calf raisers across NYS.

This series is an excellent example of the collaboration that exists between CCE Regional Ag Teams across the state. In joining efforts, the Dairy Specialists were able to showcase individual skills and develop a very strong program tailored to the needs of calf raisers across NYS and beyond.



Critical Calf Care presentation on the CCE NCRAT YouTube page. Photo credit: C. Havekes.



Addressing the Needs of NNY Farms by Providing DEC Credits...Without the Internet

The CCE North Country Regional Ag Team smoothly and quickly adapted to delivering all outreach and education programs via remote methods beginning in March 2020. The Specialists conducted troubleshooting and recommendations to small inquiries over the phone, text or email mostly, but relied on the internet for all classes, conferences, and workshop-type events. While this provided many benefits to most of the team's constituency through easier access to programs and avoiding winter travel, it meant the team was missing a large demographic in the North Country – households and businesses who do not, or cannot, use the internet.

The Specialists realized that the heavy reliance on the internet would have a few negative consequences for those non-internet farms and households. The first issue addressed was dissemination of information about the NY Forward Business Reopening Safety Plan requirement, issued by Governor Cuomo in May 2020. The team reached out to Amish and Mennonite communities and some of their leaders, and began making in-person contact to deliver business safety plan templates, hand sanitizer, face coverings, and other materials to farms and businesses in those communities.

In early January and February of 2021, the CCE NCRAT Crops Specialists began to work with the DEC to identify licensed commercial and private pesticide applicators across the 6-county region who were at or near expiration and needed additional recertification credits to renew their licenses. Because all face-to-face pesticide credit courses were replaced with Zoom webinars, some of these producers were unable to attend accredited courses and acquire needed credits. The initial focus was on those applicators who would expire before the spring season without additional recertification credits. Staff at the DEC were very helpful in this search and quickly provided a list of applicators who fit these criteria. The CCE Crops Specialists then reached out to farmers and applicators on the list and were assisted in these efforts by leaders in those communities. There was a group of Amish and English farmers in St. Lawrence County who were eager to attend pesticide credit courses to fulfill their requirements, and Brent Phillips of Phillips Ag helped to work out dates, times, and locations. The DEC staff were highly supportive of these efforts and quickly renewed some previously accredited CORE credit courses that could be offered again, reducing the time needed for approval by the DEC. Additionally, there was a group of Mennonite farmers in Franklin County who were also feeling anxious about obtaining needed credits before spring. A local leader farmer in that group helped to identify dates, times, and locations for another set of meetings and to help spread the word.

In March and April, the CCE NCRAT Crop Specialists delivered four 1-hour courses to each community which fulfilled the needs of all interested applicators. Meetings were in small groups in a shop on 3 different farms so it adhered to all recommended and required COVID-19 safety protocols. Altogether, the Crops Specialists assisted 15 farmers remain in compliance and begin the spring season with valid pesticide applicator licenses. All farmers were appreciative of the assistance they received from CCE and the DEC.

NNYADP Research Highlights an Opportunity for Improved Antibiotic Stewardship on Dairy Farms



According to 2017 Northern New York Agricultural Development Program (NNYADP) research, calves on NNY farms between the ages of 8 and 31 days were most commonly treated with antibiotics for diarrhea. Calf diarrhea can be caused by a variety of different enteropathogens, and identification of the diarrhea-associated pathogen(s) can be difficult to achieve on-farm, yet many producers make the decision to treat affected calves with antibiotics. Over the past decade, considerable focus (within the industry and from consumers) has been placed on antibiotic usage in food animal production with a heavy emphasis on antibiotic resistance. Last year, the CCE NCRAT Dairy Specialists were successfully awarded funding from the NNYADP to evaluate antibiotic usage for diarrheic calves and to identify an opportunity to improve management for diarrheic calves, and antibiotic stewardship on NNY dairy farms. Overall, 90 fecal samples were collected from diarrheic calves and submitted for diagnostic testing. Of those 90 samples, 72 were from calves that were treated with antibiotics, and 18 were from calves that were not treated with antibiotics. The prevalence of pathogens infecting pre-weaned calves was variable across the region (Figure 1). The most prevalent pathogen across farms was Rotavirus, with 61.1% of calves sampled testing positive. The least common pathogen was *Salmonella* with only 5.6% of calves sampled testing positive. Interestingly, of the calves that were sampled and treated with antibiotics (n=72), only 33% of those calves required antibiotic treatment based on the identified pathogen, i.e., bacterial species. However, this assumes that all cases of *E. Coli* and *Salmonella* were suitable candidates for antibiotic treatment, which is not necessarily the case.

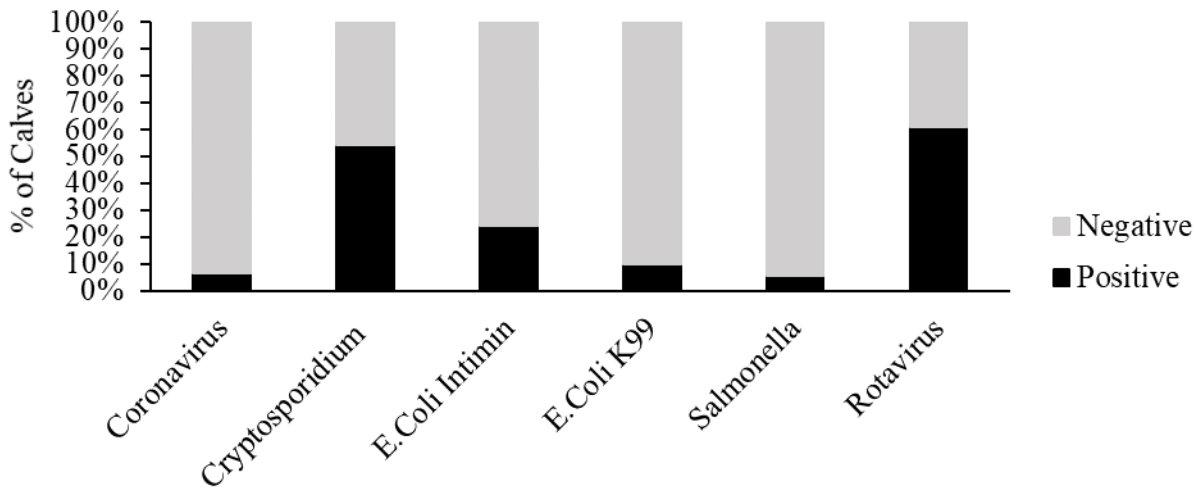


Figure 1. Prevalence of various pathogens infecting neonatal calves on NNY dairy farms, NNYADP project, 2020.

Overall, it was impactful to determine the frequency of potentially unnecessary antibiotic usage for diarrheic calves on these NNY dairy farms. These findings highlight the importance for dairy farmers to improve their antibiotic stewardship and present an opportunity for herds to continue to work with their veterinarians on treatment protocols for calves with diarrhea. This research project is an example of how the efforts from the CCE NCRAT Dairy Specialists reached several producers across the North Country as well as beyond through various presentations and articles. Further, this project is an example of how the team's research efforts address emerging topics and trends, in addition to providing informative data to both local producers and the industry as a whole.



CCE NCRAT Specialists Successfully Secure Northern New York Agricultural Development Program Funding for 2021

The CCE NCRAT specialists were very successful in being awarded grant funding through the Northern New York Agricultural Development Program (NNYADP) for the 2021 research year. The CCE NCRAT Dairy Specialists were successful in being awarded funds for two research projects. The first project is focused on calves, with a specific focus on calf barn ventilation. One objective of this project is to assess and troubleshoot ventilation systems (mechanical and/or natural) and calf health in pre-weaned calf barns in Northern NY. The second objective is to follow calves through weaning and troubleshoot problem areas as they relate to ventilation and respiratory disease. This will help NNY producers better understand the importance of investing in and properly managing calf barn ventilation systems. The second dairy related project is focused on transition cow nutrition, metabolic health, and feeding management practices. A specific objective of this research is to evaluate relationships of productivity, reproduction, and health on various dairy farms in NNY using the existing Metabolite Health Index. A second specific objective of this research is to evaluate how feeding management practices, feed sorting, and variation in TMR composition during the dry period, influences metabolic health and performance post-calving. The Crop Specialists also had success in their application efforts. One of the awarded projects will evaluate several different herbicide programs for the control of glyphosate resistant horseweed and other important annual weeds in soybeans. This trial will include soil applied and postemergence herbicides to determine the most effective means of controlling resistant horseweed. The development and evaluation of several herbicide programs will help NNY soybean growers make informed decisions about their weed control systems. The other awarded crops project will examine the relationship between corn yield and soil compaction severity in conventionally managed fields on commercial NNY farms. Historical yield data collected over multiple seasons will be used to map yield zones and, within each yield zone, soil hardness will be measured using a penetrometer at 50-100 georeferenced locations. Soil hardness data will be used to examine the relationship of soil compaction with corn yield and with stability of corn yield over time. The team's success with securing grant funding to organize and execute these important research projects is an example of how the CCE NCRAT Specialists help to bring hands-on, practical, and relevant research findings to North Country agricultural producers.

Program Developed to Help Producers with the USDA Value Added Producer Grant (VAPG)



COVID-19 had a negative impact on many businesses and farmers. One of the ways the USDA is addressing this issues is through increased funding for the Value Added Producer Grant, but some local producers require assistance in understanding the program and how to access these funds to help their business.

According to the USDA website (<https://www.rd.usda.gov/programs-services/value-added-producer-grants>), "The Value Added Producer Grant (VAPG) program helps agricultural producers enter into value-added activities related to the processing and marketing of new products. The goals of this program are to generate new products, create and expand marketing opportunities, and increase producer income." Due to COVID-19 impacts, the Value Added Producer Grant added an extra \$35 million of funds allocated to the pool for a total of \$76 million the 2021 grant season. Producers can apply for up to \$250,000 of working capital and \$75,000 for product planning. Additionally, the criteria for applying to the grant changed in favor of small businesses allowing for less producer match funds.

Over the winter, CCE programming was developed to educate producers on the Value Added Producer Grant (VAPG) and how to apply. Producers participated in a three-week series where they learned the mechanics of applying for the grant, accessing tips from a professional grant writer, and had a question and answer session with a professional grant reviewer. There were over 150 participants signed up for the series. Overall, the program was a success and it helped NYS producers better understand the grant program, how to apply, and how to access these valuable funds.

Our Mission

"The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people, and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically, and environmentally sustainable management practices and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry."

Contact us directly through our website: <http://ncrat.cce.cornell.edu/>

Building Strong and Vibrant New York Communities

Cornell Cooperative Extension provides equal program and employment opportunities. NYS College of Agriculture and Life Sciences, NYS College of Human Ecology, and NYS College of Veterinary Medicine at Cornell University, Cooperative Extension associates, county governing bodies, and U.S.D.A. cooperating.