

North Country Ag Advisor

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"Your trusted source for research-based knowledge"



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North Country Ag Advisor

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"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."

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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."

Field Crops and Soils When Does it Make Sense for a Livestock Farm to Grow Annual Forages?

By Kitty O'Neil

Each year, Extension staff across NYS get lots of questions about using annual crops for grazing or making stored feed for livestock. During a spring with extreme weather, we field even more inquiries than normal as farms try to adapt. Though mixes of perennial native and improved grasses and legumes are the mainstay for grazing livestock, there are some important benefits of fitting an annual forage into the plan, in some situations, for some farms. This article outlines a few reasons why NYS livestock farms that normally rely on perennial forages may want to consider planting or rotating annual forage crops on some of their acres. The converse is also important – annual forages are not always an ideal alternative. Some of those considerations are also outlined.

Annual forage species generally fit into one of three main categories: 1) cool-season, winter-hardy annuals (winter wheat, triticale, cereal rye), 2) cool-season, not winter-hardy annuals (oats, crimson clover, brassicas), and 3) warmseason, summer annuals (sorghum sudangrass, corn, soybean, buckwheat, cowpea). Winter hardiness depends on the severity of winter where crops are grown as well as the life cycle tendencies for a plant species. Cool-season perennial grasses (timothy, orchardgrass, bromegrass) and legumes (alfalfa, red and white clovers, birdsfoot trefoil), on the other hand, can persist for multiple growing seasons and survive our Northeast winters reliably... most of the time.

Reasons to plant summer annual forage crops are numerous.

Combat the summer slump. Here in the Northeast, we typically use cool season perennial grasses and legumes, such as orchardgrass, timothy, alfalfa, and clovers for pasture, for dry hay, and fermented feeds. Cool season forages, as a group, yield well in the spring and fall but their growth during the warmest part of the season is often referred to as the 'summer slump' due to their sluggish productivity. Our grazing operations that occasionally struggle to keep up with highly productive grasses and legumes in the spring, risk overgrazing that limited growth during the warmest weeks of July and August before having better yields again in the late summer and early fall. Annual forages like corn, brown midrib sorghum-sudangrass (BMR SxS), pearl millet, or teff are warm season grasses. These species respond well to warm or hot temperatures with growth and yield. These warm season forages can help to bridge the herd or flock through that low yielding, hot

portion of the summer because these summer annuals like the heat and produce big yields while cool season forages take a siesta. Put another way, warm season annual forages can help manage the risk of too little cool season forage during the warmest part of the season.

Rotate out old, declining stands or pugged up sacrifice areas. Some farms use a year of annual forage as a steppingstone to rotate out of a damaged or declining stand of grass and legumes and then back to fresh new perennial forage seeding. Annual forage selections may be planted with tillage or no-till methods, in spring or fall. Use of tillage can also provide an opportunity for lime to be tilled into the soil for faster pH correction, incorporation of fertilizers, disruption of some perennial weeds and other pest cycles, and alleviation of ruts or rough surfaces with targeted smoothing.

When grain prices rise or nutritional requirements demand higher energy or protein feeds. While standard perennial mixed grass-legume stands can be higher in digestibility than annual forages, they sometimes do not yield enough energy or protein at the right time of year for optimal breeding or for finishing livestock quickly enough or for a high quality grade. Additionally, high grain costs can sometimes make homegrown energy and protein appealing. In these situations, it may make sense to consider adding corn or a small grain or soybeans to a cropping plan. Additionally, while grass-finishing stipulations usually don't permit feeding grains, some annual crops can yield more energy per acre, more fattening potential per acre, than a perennial forage, especially during the summer or late in the season - if they are grazed or harvested before grain develops to meet grassfed market requirements. While some of these annual options may make economic sense when grain prices are high, it is important to "push a pencil" to calculate their true cost to the farm, considering both finances and realistic land, labor, and equipment resources.

<u>Use as an 'emergency forage' when weather delays or other</u> <u>forage failures arise.</u> Some springs are wet enough to delay planting until after the recommended window for spring perennial forage seedings has passed. Here in NNY, perennial forage fields or pastures can be seriously damaged by extreme winter temperatures, drought stress, or insect

Continued on Page 4...

damage, but the timing of this discovery can be wrong for immediate replacement with another perennial forage seeding. This year, perennial forage seeds are in very tight supply and some may not be available or may be extra costly. A summer annual forage planting can rescue some of these unusual situations. **Though summer annual forages may be a distinct advantage over continuing an established perennial stand in some situations, they can also create more headaches than keeping a perennial forage field.**

Annual crop seed and input purchases can be more expensive. Input costs per acre per year over the life of a perennial forage stand tend to be lower than for an annual forage crop. The increased yield and quality potential of the annual forage may make this investment in seed, herbicide, fuel, and labor worthwhile, but it will typically require a bigger annual cost. This spring, supplies of perennial forage seeds are expected to be extraordinarily tight, which may increase their cost, possibly making annual forages a bit more appealing.

<u>Timely planting.</u> As a group, annual forages provide more planting date flexibility than perennial forages, but each species should be planted on time for best outcomes and economic return. See the 'Emergency and Alternative Summer Annual Forages' factsheet linked at the end of this article for detailed planting and management recommendations for 9+ different annual forage species with recommended planting dates ranging from early spring to late summer.

<u>A terminated, open field is a risk.</u> Once a field is terminated, good soil conditions are needed for timely preparation and planting of the next crop and for the annual crop to emerge and grow to grazable or harvestable stages. Sometimes, wet weather can cause planting delays and complications. Other times, the neighbor's borrowed grain drill doesn't function as expected and requires time and effort to adjust or repair. In the worst scenario, bad weather lingers and the planting window comes and goes before the planting can be completed as planned. While the field is open, weeds can become established, erosion may occur, and no useful forage is available from that field. Planting experience and reliable equipment can minimize these risks, but cannot eliminate weather delays.

Annual crops do not belong on some perennial pasture and hay land. Here in the Northeast, we tend to use more marginal land, soils, and fields for grazing and hay production. Some pastures are too steep, stony, poorly drained, or wooded for annual crops to be a viable option. Our hay fields typically offer better potential, but some are too poorly drained to be good candidates for annual cropping. Those unsuitable fields should be managed to keep perennial stands



Annual forage trial in Northern New York. Photo credit: M. Hunter.

as healthy and productive as possible in the long term with good pH and fertility, harvest, and mowing practices. Once the decision to add an annual forage to a livestock system has been made, select a species or mixture based on seed availability, soil moisture status, timing within the growing season, any carryover of herbicide treatments, the nutritional needs of the animal group it will feed, and the farm's harvest and storage methods (dry hay, silage, baleage, or grazing).

Like all decisions among numerous alternatives, care and consideration is required to make a good choice. Some annual forage species are well-suited to baling dry hay while others should be grazed or fermented for silage or baleage. Some are only good for grazing and not well-suited for harvest of any kind. Some forages will work better in large round bales if they are roto-cut or net-wrapped. Choose a species or mixture that is a good fit for the climate and soil types in the field under consideration. A few warm season species can tolerate moderate drought, though any new planting will require at least some soil moisture for germination and establishment. Some annual species can better tolerate poor soil drainage or more acidic soils. The nutritional requirements of the herd or flock should be a main driver of species and mixture selections, too. Grass-finished beef or lamb, or a milking dairy herd needs higher digestibility forages than animals at maintenance, but different annual species can be used to suit a range of forage quality requirements.

Additional Resources:

- Thomas-Murphy, J. et al. 2021. Cornell Guide for Integrated Field Crop Management, Cornell University.
- O'Neil, K., M. Hunter, J. Cherney, J. Lawrence, T. Kilcer, T. Bjorkman, and Q. Ketterings. 2020. Agronomy Fact Sheet # 114: Emergency and Alternative Summer Annual Forages. Nutrient Management Spear Program, Cornell University. <u>http://</u> <u>nmsp.cals.cornell.edu/publications/factsheets/factsheet114.pdf</u>

2022 Cornell Guide for Integrated Field Crop Management Now Available

The Cornell Cooperative Extension Pesticide Safety Education Program (CCE-PSEP) is pleased to announce the availability of the 2022 Cornell Guide for Integrated Field Crop Management.

Written by Cornell University Specialists, this publication is designed to offer producers, seed and chemical dealers, and crop consultants practical information on growing and managing field corn, forages, small grains, and soybeans. Topics covered include nutrient management, soil health, variety selection, and common field crop pest concerns. A preview of the Field Crops Guide can be seen online at <u>https://cropandpestguides.cce.cornell.edu</u>.

Highlighted changes in the 2022 Cornell Field Crops Guide include:

- Revised pesticide options for economically important field crop pests
- Updated corn, forage, and small grain variety trial and research data
- Revised soil management information



2022 Cornell Guide for Integrated Field Crop Management

Cornell Cooperative Extension

These guidelines are not a substitute for pesticide labeling. Always read and understand the product label before sing any pesticide

Cornell Crop and Pest Management Guidelines are available as a print copy, online-only access, or a package combining print and online access. The print edition of the 2022 Field Crops Guide costs \$33 plus shipping. Online-only access is \$33. A combination of print and online access costs \$46.50 plus shipping.





Cornell Cooperative Extension

St. Lawrence County

January - March 2022 Registration is now open!

Weeknights 6-7:30 pm ONLINE

Social Media Management: Planning your Presence Led by CCE Educator Lauren Olson with Nicole Ouellette of Breaking Even Communications

Prepare to Succeed: Business and Financing Options Led by Farm Business Specialist Nicole Tommell

Get Your Ag Online: E-Commerce For Producers and Food Businesses Led by e-Commerce Professional Jeremy Bloom of the Internet Farmer

Making Food Products in New York State Led by Local Foods Team Leader and Harvest Kitchen Manager Flip Filippi

Personalized learning to improve your food business



www.cals.cornell.edu/pro-dairy/ events-programs/regional-programs

Cornell Cooperative Extension

Net Zero for NY Dairy: What You Need to Know

February 2 and February 3rd, 2022 12:00pm-2:30pm ET A two day virtual conference

This conference has gathered dairy industry experts to shed light on what "getting to net zero" means for dairy producers.

Join us if you are ...

...curious about what getting to "Net Zero" means for dairy farmers and why it's being talked about so much.

... interested in the facts around dairy cattle and greenhouse gases.

...looking to learn about current and future farm practices and technology that can be used to reduce greenhouse gases?

... wondering where you'll find the time to attend a conference or workshop?

Wednesday February 2, 2022

U.S. Dairy Net Zero Initiative: Building a Roadmap to 2050 - Karen Scanlon

Cattle and Climate Change – Frank Mitloehner, PhD

Consumer Trends and Industry Sustainability - Sara Place, PhD

Thursday February 3, 2022

Management Practices for Managing Methane - Peter Wright

Innovative Crop Strategies for Reducing or Sequestering GHG – Quirine Ketterings, PhD

Nutritional Strategies for Reducing Greenhouse Gases - Tom Overton, PhD

Using Genetics to Impact Green House Gases – Christine Baes, PhD, or Research Associate

Dairy Producer and Industry Panel

Register:

https://cornell.zoom.us/webinar/register/WN_DJHRq9okT7SASqn2w6ZpRA



Presenters:

Karen Scanlon, EVP of Environmental Stewardship for Dairy Management Inc, and the Innovation Center for U.S. Dairy

Frank Mitloehner, PhD, Professor and Extension Specialist, Department of Animal Science, University of California at Davis

Sara Place, PhD, Technical Consultant in Sustainability, Elanco

Peter Wright, Agricultural Engineer, PRO-DAIRY, Cornell University

Quirine Ketterings, PhD, Professor, Nutrient Management Spear Program, Department of Animal Science, Cornell University

Tom Overton, PhD, Professor of Dairy Management, Chair of the Department of Animal Science at Cornell University

Christine Baes, PhD, or Research Associate. Christine Baes, PhD, Associate Professor, Canada Research Chair in Livestock Genomics, University of Guelph

Registration is free do to the generous support of our sponsors.

Questions? Contact your CCE Regional Dairy Specialist or Kathy Barrett kfb3@cor<u>nell.edu</u>

Dairy

Understanding Milk Protein

By Camila Lage, CCE Southwest NY Dairy, Livestock, and Field Crops Team, and Casey Havekes, CCE NCRAT

It's no surprise that a large portion of your milk check comes from milk components. The last year especially has demonstrated how fluctuations in component pricing can, and should, change our perspective on how to maximize components. Recently, a presentation delivered at Cornell Nutrition Conference by Dr. Kevin Harvatine, Penn State, highlighted that maybe we don't have to focus on only the higher priced component, but rather we can focus on maximizing both at the same time! The following article summarizes some concepts shared in Dr. Harvatine's presentation.

Since the onset of COVID-19, the dairy industry has faced numerous challenges including the establishment of 'quotas'/base programs, high feed prices, and fluctuating component pricing. This provides us with extra incentive to monitor and try to maximize both fat and protein percent. Dr. Harvatine highlighted that even if one component is paying better than the other, you shouldn't give up on the lower priced component because of the concept of marginal influence. For instance, if protein is paying better than fat, our thought process should be "well I already have this cow and am producing this much protein, now how much fat I can make on top of that?" Of course, this thought process should consider the profitability of what is being fed and how efficiently the cow can convert those ingredients into milk fat and protein. An interesting observation that Dr. Harvatine further emphasized is that overall, milk yield has little effect on protein and fat concentration at the herd level. In other words, there is no reason we can't have both high milk yield and high components simultaneously. After all, we shouldn't lose milk yield while trying to maximize components but rather focus on maximizing both.

After Dr. Harvatine explained the concept of maximizing both milk fat and protein, he switched gears and dived into the mechanisms driving milk protein synthesis. We can think of the mammary gland as a milk synthesis factory with three assembly lines: one for fat, one for protein, and one for lactose. He further explained that each of these lines have some level of coordinated regulation. After all, we never have 0% production of any of these components, so in one way or another they are working together to drive production. The challenge we face now is understanding how to minimize the coordination between lactose and protein because as Dr. Harvatine explains, although lactose is driving volume through osmotic regulations, it's also a waste of energy for the cow to produce. The end goal would be to increase fat and protein synthesis, but not lactose – similar to the way the Jersey cow functions.

Getting back into the mechanism driving milk protein synthesis, Dr. Harvatine explains that it all starts at the DNA level. The cow has genes that instruct her to make protein, but those genes must be turned on and this all happens through hormonal regulation. With any biological process,

there are key regulated and limiting steps and in the case of milk protein synthesis one of these limiting steps is amino acid availability. That being said, it was emphasized that although amino acids are important tools in our toolbox, it is hard to simply push metabolism by adding substrate. If we think about this from a human perspective, you cannot become a body builder by simply eating whey protein every day. You need to go to the gym and stimulate that muscle for it to grow. The opposite is also true, you can't get strong by working out hard



Photo Credit: BING

if you don't have a balanced diet that gives you the substrate for this muscle to grow. In other words, milk protein synthesis is not solely driven by amino acid supply (although important), but cell signaling mechanisms have an equally important role.

Based on a large data set analyzing over 6000 herds for 12 months, Dr. Harvatine pointed out that variation in milk protein among herds is not as large as the variation in fat yield, but it shouldn't be ignored as it can equate to a lot of money and opportunity. The challenge is that we do not know exactly what is causing variation in milk protein yield and as a result we have a hard time managing it. When it comes to both milk fat and protein, there are two major influences: nutritional and non-nutritional factors. On the non-nutritional side, we have physiological effects such as genetics, season, time of the day, stage of lactation, and parity. On the nutritional side, milk protein is largely influenced by energy supply and amino acid supply. Maximizing microbial protein yield should be our first goal. If we focus on this, we can get optimal amino acid supply, normal biohydrogenation, optimal acetate yield, and optimal energy intake.

To increase milk protein yield we can focus on management (optimal calving intervals and DIM, cow comfort, forage quality, silage management, genetics, seasonal management, etc.) and nutrition (increase amino acid supply and energy supply for optimal rumen fermentation). At the end of the day, we should strive for high milk yield, high protein yield, and high fat yield all at the same time to maximize profitability. This should be the goal regardless of what independent components are paying!



Photo credit: L. Ferlito.



Dairy Day

Join us <u>VIRTUALLY</u> for the main dairy program offered for *FREE* by Cornell Cooperative Extension this winter in the North Country. This 3-part seminar will provide the latest information on dairy production and farm business management, emerging trends, and local research updates.

January 18, 2022 – Dairy Markets and Business

- Finding and Keeping Employees (Dr. Bob Ceglowoski, Rupert Vet Clinic)
- Dairy Market Update (Dr. Chris Wolf, Cornell University)
- NY Dairy Business Benchmarks (Jason Karszes, Cornell PRO-DAIRY)

January 19, 2022 - NY Dairy Research Updates

- NNYADP Calf Ventilation Project Case Studies (Tim Terry, Cornell PRO-DAIRY)
- NNYADP Transition Cow Management and Nutrition (*Casey Havekes, CCE* NCRAT)
- NYFVI On-Farm Management: Areas of Excellence and Opportunity (*Lindsay Ferlito, CCE NCRAT*)
- NYFVI Forage Variability on NY Dairies (Dr. Kristan Reed, Cornell University)
- NY Dairy Labor Updates (Dr. Richard Stup, Cornell University)
- Heat Stress on NNY Dairies (Emily Freed, Miner Institute)

January 20, 2022 — Animal Welfare and Industry Sustainability

- Dehorning Best Management Practices (Alycia Drwenke, UC Davis)
- Transition Cow Welfare (Dr. Trevor DeVries, University of Guelph)
- Dairy Genetics Updates (Dr. Kristen Gaddis, Council on Dairy Cattle Breeding)

<u>Registration</u>: This event is free, but registration is required.

https://ncrat.cce.cornell.edu/event_preregistration_new.php?id=1751

Program is in part sponsored by Northern New York Agriculture Development Program grant funding

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January 18, 2022 12:00pm - 2:15pm Markets and Business

January 19, 2022 12:00pm - 2:15pm NY Research Updates

January 20, 2022 12:00pm - 2:15pm Animal Welfare and Industry Sustainability

* All sessions are offered online only (via Zoom) *

Contact Info: Tatum Langworthy tlm92@cornell.edu 315-788-8450

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

Digital Dermatitis Case Study - Achieving Success Over Hairy Heel Warts

By Betsy Hicks, CCE South Central NY Dairy and Field Crops Team

Digital Dermatitis, or Hairy Heel Wart, as most dairy farmers know it, is a painful experience for the cow, and a frustrating and costly lameness issue for the farmer. The case study I'll share in this article was from a participating farm in our NY Farm Viability Institute grant project "Focus on Farm Management: Areas of Excellence and Opportunity with Calves, Transition Cows and Cow Comfort". Participating farms received assessments in these three areas, worked with their Cooperative Extension Dairy Specialist to come up with an action plan, implemented the plan, and then had their farms reassessed about a year later. A benchmark of all fifteen participating farms was created for each farm to compare to, as well as against their original assessment. This grant was a collaboration between the CCE South Central NY Dairy and Field Crops Team, CCE Northwest NY Dairy, Livestock, and Field Crops Team, and CCE North Country Regional Ag Team.

Cow Measurements

This case study farm knew that heel warts and lameness in general was an area on their farm that they wanted to focus on. Their first assessment of cow comfort included lameness scoring, as well as hock and knee injury and hygiene scoring in their high lactation pen. Upon comparison to the benchmark of participating farms, the farm's suspicions were confirmed that lameness was an area they needed to focus on; while almost 80% of their mature high group scored sound, almost 15% scored mildly lame and almost 6% scored severely lame. Benchmark numbers in contrast showed over 86% sound, 11% mildly lame and less than 3% severely lame (Figure 1). Hock injuries were also a concern, with mild hock injuries over double the benchmark average. Knee injuries were better than benchmark, with none found, but hygiene was also shown to be worse than the benchmark, with over 30% of cows scoring slightly dirty compared to only 20% of the benchmark.

Facility Measurements

Along with cow measurements, management factors were also assessed on each farm. Stall sizing as well as stall hardness, bedding amount and cleanliness, and stocking density were evaluated and compared to the benchmark. Bedding amount at first assessment was scarce, as the farm only bedded once per week, but stall base hardness and bedding cleanliness were both close to recommendations.



Figure 1. Lameness prevalence (%) graph for high lactating pen and fresh pen for the 15-herd benchmark.

The farm also noted their stocking density was almost 125% of stalls, but thankfully with lots of feed and water space, they were achieving 23" of bunk space and 3.3" of water space per cow in that pen.

Forming the Action Plan

After talking through the first assessment results, the farm wanted to develop their action plan to focus on improving their numbers associated with lameness and injuries. The first area they decided to work on was bedding in the stalls – to save time, they had been bedding only once per week. They changed that two twice a week. As hygiene was a concern, they took a good look at stocking density and the number of cows in the pen and did some strategic movement of cows, as well as implementing a better scraping schedule. We also invited a third party to assist us in thinking "big picture" about how we can more fully impact lameness on this dairy.

A Third Set of Eyes

Inviting the third set of eyes turned out to be the key for this dairy. We met as a group to go over the goals for the herd and what we found in the assessment, and then walked the dairy in the same pathways as the herd walks them. Because heel warts were a significant concern, the outside eyes discussed common issues that occur on dairies that also struggle. Areas of uneven ground, standing water/ manure slurry, and 90 degree turns with elevation change were all areas pointed out to be addressed. These things, along with areas that are slip hazards for cows, are all places for the skin on the back of the foot to get micro-tears and allow the digital dermatitis pathogen to enter and infect the foot. Evening out areas of the flooring, adding rubber strategically, and more grooving to prevent slipping were recommended to the dairy.

Footbath Changes

A big change for the dairy was also implementing a better footbath strategy. The footbath was in a strategic location – easy to fill and easy to clean, and able to be bypasses if necessary. Footbath design was also correct – 12 feet long and narrow, with no option for cows to go around or step over. They were achieving the correct number of dunks per foot, but were concerned with cost of opper sulfate and total cost of baths. Right off the bat, we calculated the correct amount of copper for the bath, and found their percent solution was less than adequate. Secondly, we

implemented a soap bath. Remember, hygiene scores were less than ideal. In dealing with heel wart, the treatment must get to the skin and if manure is caked on, the treatment cannot reach the skin. The farm decided to implement the soap bath protocol 2-3 days before a treatment bath, and focus on cleaning feet with the hose in the parlor for those that needed extra attention.

The Results

About nine months after making changes, the farm received their second assessment. The results? The cases of severe lameness disappeared, and the foot trimmer had far less heel wart cases to treat. In addition, attention to the stalls showed that severe hock injuries also dramatically decreased, and hygiene scores improved to benchmark averages. The farm is now controlling stocking rate to 115% and focusing on keeping the footbath protocol up to snuff, as well as keeping a focus on hygiene.

The keys to get the farm to make changes? In their words, "Having an outside person to point out areas to improve, having an external motivation". If you'd like to focus on foot health, feel free to reach out to your local Cooperative Extension Dairy Specialist - we'd be glad to be your third set of eyes!



The Price is Right! Pricing Livestock Products Online Panel Discussion for Farmers and Food Producers

Register to Attend | January 12th | 7-8:30pm











Featured Panelists

Shannon Hayes: Sap Bush Hollow Farm Shawn Youngman: Youngman Farms Sarah VanOrden Morrow: Crosswinds Farm & Creamery

Cornell Cooperative Extension St. Lawrence County

Dairy Reproduction and A.I. Training Course



Attend this 2-day training course to become trained in dairy reproduction and artificial breeding techniques. There will be classroom sessions in the morning, followed by hands-on practice on farm in the afternoon. After this class you will be trained to artificially inseminate dairy cattle.

January 25 and 26, 2022

9:30am - 3:00pm Beekmantown Town Hall (mornings) Adirondack Farms, Peru, NY (afternoons)

Topics Covered:

- Bovine anatomy and reproductive physiology
- Heat detection
- Artificial insemination technique
- Proper thawing of semen
- Loading A.I. guns
- Practice breeding cows (hands-on)

Speaker:

Javier Cheang, Genex

Registration:

https://ncrat.cce.cornell.edu/event_preregistration_new.php?id=1756

Contact: Lindsay Ferlito (607-592-0290, LC636@cornell.edu)

Cornell Cooperative Extension North Country Regional Ag Team

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.

- Includes materials and lunch both days.
- Class capped at 10 participants.
- Must attend both days.



COVID-19 guidelines will need to be followed including social distancing, hand sanitizing, and masking.



Genex Cooperative, Inc.

Farm Business

For Immediate Release: December 6, 2021

CONTACT: Jola Szubielski, <u>Jola.Szubielski@agriculture.ny.gov</u>, 518-457-0752 Hanna Birkhead, <u>Hanna.Birkhead@agriculture.ny.gov</u>, 518-457-0752



STATE AGRICULTURE COMMISSIONER ENCOURAGES THE AGRICULTURAL INDUSTRY TO APPLY FOR THE COVID-19 PANDEMIC SMALL BUSINESS RECOVERY GRANT PROGRAM

Grants of Up to \$50,000 are Available for Eligible Small Businesses With Revenues of Up to \$2.5 Million and Experiencing Financial Hardship Due to COVID-19

State Agriculture Commissioner Richard A. Ball today encouraged New York State's agricultural industry to apply for the \$800 million COVID-19 Pandemic Small Business Recovery Grant Program. Grants are available for eligible small businesses that have revenues up to \$2.5 million and are experiencing hardship due to COVID-19. Additional information and the application are available <u>here</u>.

Commissioner Ball said, "There are so many agribusinesses that are still feeling the effects of the COVID-19 pandemic and facing many challenges after having lost markets at schools and restaurants. This grant program provides an opportunity for our food and beverage producers, our farmers, and our growers to access some much-needed capital to help recover their losses and rebuild their businesses."

Empire State Development and Lendistry, the minority-led Community Development Financial Institution that was selected to administer the program, are accepting and reviewing applications on a rolling basis. There is no deadline at this time. Questions about the program can be directed to Lendistry at 877-721-0097.

Empire State Development Acting Commissioner and President & CEO-designate Hope Knight said, "New York's food and agricultural industry is vital to the state's economic recovery and ensuring that our agribusinesses are moving forward and thriving is crucial for the state's economic post-pandemic progress. We encourage eligible agribusinesses to apply for these grants, which will help us all move forward."

Grants for a minimum award of \$5,000 and a maximum award of \$50,000 are calculated based on a New York State business' annual gross receipts for 2019. Reimbursable COVID-19 related expenses must have been incurred between March 1, 2020, and April 1, 2021, and can include payroll costs; commercial rent or mortgage payments for New York State-based property; payment of local property or school taxes; insurance and utility costs; costs of personal protection equipment necessary to protect worker and consumer health and safety; costs for heating, ventilation, and air conditioning, or other machinery and equipment; and supplies and materials necessary for compliance with COVID-19 health and safety protocols.

Additionally, the limitation for businesses that received Federal Paycheck Protection Program loans has been increased from \$100,000 to \$250,000.

For additional information regarding the various resources available to support businesses seeking pandemic relief, ESD has created a webpage, <u>https://esd.ny.gov/business-pandemic-recovery-initiative</u>. The webpage is continuously updated as more details and funding information becomes available.

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Hired Labor on New York State Dairy Farms: Cost, Efficiency, and Change From 2011 Through 2020

By Jason Karszes, Cornell PRO-DAIRY, and Dr. Christopher Wolf, Cornell University

Jason Karszes, PRO-DAIRY, and Dr. Christopher Wolf, Cornell Charles H. Dyson School of Applied Economics & Management, have released a new publication that summarizes cost, efficiency, and changes associated with hired labor on NY dairy farms from 2011 to 2021. As average dairy farm size grows in New York, reliance on hired labor increases and the cost associated with the hired workforce is a significant expense. For most farms participating in the Dairy Farm Business Summary and Analysis Project (DFBS), hired labor is the second largest expense category after purchased grain and concentrates. With farms participating in the DFBS project for multiple years, an analysis of costs and efficiencies associated with hired labor and how they have changed over the last 10 years was recently summarized.

Below are selected highlights from the <u>2021 hired labor</u> <u>publication</u>:

- Average herd size grew between 2.9% to 6.8% a year.
- Hired worker equivalents increased between 2.0% to 8.3% a year. One hired worker equivalent equals 2,760 hours of labor a year.
- Total payroll expenses for the year more than doubled over the timeframe, reflecting an increase in the amount of hired labor along with increases in labor costs per

hour. The total payroll costs increased on average 7.5% a year.

- The cost per hour increased on average 3.5% a year, from \$12.92 per hour in 2010 to \$17.34 per hour in 2020, or a 34.2% increase from 2010 to 2020.
- The rate of change in hired labor costs per hour from one year to the next is accelerating, with increases over 5% occurring twice in the last 4 years.
- Labor efficiency as measured by milk sold per worker equivalent increased 0.5% a year for 2011 through 2015.
 From 2016 to 2020, milk sold per worker equivalent increased by 3.4% a year on average.
- Labor costs per hundredweight of milk sold increased from \$2.66 to \$3.08, an increase of 15.8% over 10 years. The percent increase in labor costs per hundredweight of milk sold is less than the increase in cost per hour in hired labor, reflecting management changes undertaken by the farms over the timeframe to increase labor efficiency. If labor efficiency had not improved, cost per hundredweight would have increased to \$3.62.

Job Opportunity with the CCE North Country Regional Ag Team

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ANNIE'S PROJECT

12:30 – 2:30 PM January 25, February 1, 8, 15, 22

Registration is \$100 and covers the course and materials.

Register online by clicking this link <u>tinyurl.com/cceannies</u> or call 716-640-0522.

For additional information, contact Katelyn Wallely-Stoll at 716-640-0522 or kaw249@cornell.edu

Annie's Project

Know Your Numbers, Know Your Options

This five-session course focuses on financial literacy to help you:

- Understand the importance of preparing financial statements for your business.
- Objectively review the financial position of the farm using financial ratios.
- Enhance decision making skills
- Effectively communicate with families, business partners, and others about the financial position of the business.





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If you have a disability and need materials in an alternate format, contact kaw249@cornell.edu or at 716-640-0522for assistance.

"If you want good employees, be a good employer:" A Performance Improvement System

By: Dr. Bob Milligan, Sr. Consultant at Dairy Strategies, and Professor Emeritus, Cornell

* Article first printed in Learning Edge/ November 2021

We have been wondering what the "new normal" after COVID will look like. When it comes to employment, the picture is emerging. The hiring challenges before COVID are intensifying and workforce mobility is escalating. Some are calling this the "Great Resignation." There are no easy solutions, but I completely agree with a speaker at a recent conference I attended: "If you want good employees, be a good employer." Over the next several months, I will address several topics on this theme. This month we address perhaps the greatest opportunity to improve your standing as an employer – a performance improvement system. Excellent feedback has the dual advantages of improved performance and increased engagement.

Conversation 1:

Between Gene (Supervisor) and George (Employee, feeder)

Gene: George, we must talk. I am concerned that you are becoming less accurate with the feed proportions. You must improve! The only thing that was clear to George after his conversation with Gene was that he was not meeting expectations; unfortunately, he had no idea why. Ash

George: I don't understand. I don't see that I am doing anything different.

Gene: You must be more careful and concentrate on what you are doing.

George: I am doing that. What exactly should I change? Gene: You just must concentrate more.

Conversation 2:

Between Ted (Supervisor) and Ashley (Employee, feeder)

Ted: Ashley, I can't believe another month has passed. It is time for our monthly performance improvement discussion. Ashley: I know, it has gone fast. It has been a good month. Ted: Before we look at your performance numbers, do you have any issues you wish to discuss?

Ashley: Not this month

Ted: This has been a tough weather month. How did your results hold up?

Ashley: Pretty similar to last month. My performance exceeded the expectations we set on ingredient proportion variation. I was a little below expectation on completion time. I am certain it was due to the weather.

Ted: Excellent, especially given the weather we have had.

Let's start by comparing two performance conversations. How would you compare the two conversations? Here are some of my comparisons:

- The biggest difference is that George received essentially no useful feedback compared to Ashley's participation in a performance improvement process.
- Ted and Ashley were talking about quantified measure of performance; Gene and George were not.
- The Ted and Ashley discussion was more informal and collaborative; Gene and George's was one way with George on the defensive.

When it comes to performance, employees have two key questions:

- 1. What performance is expected of me?
- 2. Am I meeting those expectations (winning)?

The only thing that was clear to George after his conversation with Gene was that he was not meeting expectations; unfortunately, he had no idea why. Ashely, on the other hand, knew the expectations and was able to compare her performance to those expectations. She could answer both questions.

Let's use a football game to illustrate why measurable performance expectations are crucial to performance improvement. I am a University of Minnesota Gopher football fan. In a recent game we attended, the Gophers scored 31 points. Did they win? You do not know because you do not know how many points the opponent scored.

You are in the same predicament as most employees. Typically, employees are not provided clear expectations to know how they are doing – winning? This leaves them feeling more like George after his performance discussion.

Historically, around the world and in agriculture, the annual performance review has served a major role in performance feedback. Think about how useful it would be to know the opponents score for all the games only at the end of the season. I refer to the traditional form as the "dreaded annual performance review." Every human resource expert that I know recommends that this annual meeting be

eliminated or transformed (I am in the transformed camp) and replaced with a performance improvement system. The key to a performance improvement system is that it regularly answers the winning question and resets performance expectations while providing continuous feedback. Such a system is depicted in the diagram below that comes from my participation on the team developing the Cornell Agricultural Supervisory Leadership Certificate.



Structurally this system is like your animal and crop systems where you set goals, continually observe, analyze performance compared to those goals, and reset the goals. The crucial difference is that the performance improvement system works best when the employee is integrally involved and committed to the process and improvement.

The two sides of the diagram represent a focus on answering each of our two key employee performance questions:

- 1. The left side answers: What performance is expected of me?
- 2. The right-side answers: Am I meeting those expectations (winning)?

I recommend that this system be implemented with three key components:

- 1. Frequent immediate feedback.
- 2. A regular feedback system focused on comparing actual and expected performance.
- 3. A development/career focused meeting typically annual.

The first component is crucial because feedback does not age well. Just as you want to continually know the score when watching a game, employees want to continually know how they are performing. I have often written about the challenges of the dual role of a working manager – tasks and supervision. This component can be integrated with your task work, but it does require a change to identify and provide feedback on employee performance. Positive feedback is key with people, not so much with animals and crops.

The second component is more challenging for a working manager because it requires structure including a scheduled meeting with the employee. Working managers are very familiar with and comfortable with task structure – milking schedule, equipment maintenance, spray schedules, etc. That same commitment and priority must be applied to the regular meeting with employees. Think back to the conversation between Ted and Ashley. The regular, often monthly, meeting should be collegial and informal. I use the term informal formal meeting to illustrate that some structure is required, but the conversation should be informal and collaborative.

The meeting should have two major themes:

- Review actual performance vs. expected on the selected performance measures (keep the number small), discuss the results, and reset performance expectations.
- 2. Address any issues brought forth by the supervisor or the employee. Recall Ted's question to Ashley: "Before we look at your performance numbers, do you have any issues you wish to discuss?"

Because performance has been addressed as it happens, the Stay Meeting third component, a replacement for the traditional annual performance review, looks forward to address employee growth opportunities and career planning.

A Final Comment: A performance improvement system can increase performance and enhance engagement reducing the likelihood of turnover. Next month, we will continue this discussion focusing on large quantities of high-quality feedback.

Contact:

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What's Happening in the Ag Community

Due to COVID-19, there may be some restrictions for in-person work and programming. Check out our CCE NCRAT Blog and YouTube channel for up to date information and content.

Young Farmer Grant Program, https://www.youngfarmers.org/youngfarmergrants/

CCE St. Lawrence Ag & Producers Food Academy. See page 5 for more information.

Net Zero for NY Dairy: What You Need to Know. See page 6 for more information.

Dairy Day 2022 - Virtual . See page 9 for more information.

The Price is Right - Pricing Livestock Products. See page 11 for more information.

Dairy Reproduction and AI Training Course. See page 12 for more information.

Annie's Project. See page 15 for more information.

Save the date: *Implementing Practical Genetics for Commercial Dairies*. Weekly Wednesdays, Feb 16, 2022, 12-12:45pm.

Save the date: *Foot Health for Your Dairy Herd.* March 22, 2022, 10:00-3:00pm via Zoom.

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