

North Country Ag Advisor

www.nnyrap.cce.cornell.edu

"Your trusted source for research-based knowledge"





Cornell University Cooperative Extension Northern New York Regional Ag Team January 11, 2017

Milk Quality Program 10-3pm Mo's Pub and Grill, Malone

January 12, 2017

Milk Quality Program 10-3pm CCE of Lewis County

January 18, 2017

Shop Meeting at Butterville Farm, Adams 12-2pm, No Registration Required

VOLUME 2 ISSUE 1 January 2017

Kitty O'Neil Field Crops & Soils 315-854-1218 kao32@cornell.edu



Michael Hunter Field Crops & Soils 315-788-8450 meh27@cornell.edu

Kim Morrill Dairy Management 603-568-1404 kmm434@cornell.edu



Lindsay Ferlito Dairy Management 607-592-0290 lc636@cornell.edu

Ron Kuck Livestock 315-788-8450 rak76@cornell.edu



Betsy Hodge Livestock 315-379-9192 bmf9@cornell.edu

Kelsey O'Shea Ag Business Management 315-379-9192 kio3@cornell.edu



Tatum Langworthy Sr. Administrative Assistant 315-788-8450 tlm92@cornell.edu



Cornell Cooperative Extension of Clinton, Essex, Franklin, Jefferson, Lewis, St. Lawrence Counties

Ag Advisor is published by the NNY Regional Ag Team collaborating with Harvest NY

Layout/Design: Tatum Langworthy

Anika Zuber Dairy Processing 585-813-3539 adz8@cornell.edu





MacKenzie Waro Livestock Processing and Marketing 607-287-1292 mlw55@cornell.edu

Lindsey Pashow Ag Business and Marketing 518-569-3073 lep67@cornell.edu



Table Of Contents	
2016 Cornell Corn Silage Variety Trial Results	3
Not to Early to Plan Your Corn Weed Control	4
National F.A.R.M. Program: Preparing for Your Evaluation	7
NNY CCE Shop Meetings are Back!!	8
NNY RAP Finance 101	11
Farmer Tour of Cargill Meat Solutions	12
Meat the Labels Part 3	16
Upcoming Events and Programs	Back Cover

Contact us directly through our website: http://nnyrap.cce.cornell.edu/

Our Mission

"The Northern New York 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

2016 Cornell Corn Silage Variety Trial Results

By Kitty O'Neil

In 2016, Cornell's Corn Silage Hybrid Testing Program returned to New York State after a 2-year hiatus. Cornell Cooperative Extension, the Pro-Dairy Program and Cornell's Plant Breeding and Genetics Department collaborated to organize and implement the 2016 trials. Seed companies offering corn silage hybrids were invited to submit entries in Spring 2016. Twentynine corn silage hybrids were tested at the Musgrave Research Farm in Aurora, NY (Cayuga Co.) and at Greenwood Farms in Madrid, NY (St. Lawrence Co.). The objective of these variety comparisons is to provide independent, unbiased evaluation of commercial corn silage hybrids available in New York State. The variety trial provides farmers, seed corn companies and university personnel with information on the relative performance of corn hybrids grown under NY climate and soil types. Varieties planted in the trials ranged from 84 to 107 Relative Maturity and 4 field replications were used for each variety at each trial site. Upon harvesting, samples of all varieties were submitted for standard chemical and NIR analyses. New comparisons for 2016 include DM intake estimates and Predicted ME Allowable Milk Yield, calculated with the Cornell Net Carbohydrate and Protein System (v. 6.5.5; Cornell University, Ithaca, NY).

The Cornell Corn Silage Hybrid comparisons results are available on the <u>fieldcrops.org</u> website and the link is listed first below. Links to other Cornell variety trial results and to the Penn State Corn Silage Hybrid Trials are also listed.

References and Further Reading:

New York State Corn Silage Hybrid Testing Results – 2016 http://scs.cals.cornell.edu/sites/scs.cals.cornell.edu/files/shared/documents/2016%20CS%20Formatted%20Tables%2011-16-16.pdf

Cornell Field Crop Variety Trials, Soil and Crop Sciences Section of the School of Integrative Plant Science https://scs.cals.cornell.edu/extension-outreach/field-crop-production/variety-trials

Penn State Corn Silage Hybrid Test Results. http://extension.psu.edu/plants/crops/grains/corn/hybrid-tests/pa-commerical-grain-and-silage-hybrid-corn-tests-report-2015-results/silage

2015 Cornell Guide for Integrated Field Crop Management. Edited by W. Cox. Ithaca, NY: Cornell University Cooperative Extension.





It's Not to Early to Plan Your 2017 Corn Weed Control

By Mike Hunter

This is a good time of year to do some strategic weed control planning. There are several corn herbicide choices to choose from and there are application programs to achieve good weed control. The focus of this article is to look at the advantages and disadvantages of different herbicide application programs: one pass vs. two pass programs, preemergence (PRE), preplant incorporate and total postemergence (POST) programs.

A one pass application program pertains to both PRE and POST herbicide applications. You can make one trip before the corn has emerged or you can wait and make one trip after the corn (and weeds) have emerged. Most growers like the idea of a one pass herbicide application program. Fewer trips across the field will keep application costs lower. It doesn't matter if you hire your spraying done or you do your own spraying, this holds true for both situations.

A planned two pass (PRE followed by POST) program offers the best chance for optimum weed control. The main disadvantage is the additional application cost when hiring a custom applicator or the increased labor and fuel costs for those that spray their own corn. A two pass herbicide program is the most consistent way to achieve season long weed control and protect corn yield potential.

PRE corn herbicides can provide good weed control. An advantage of PRE herbicide programs is that the work is usually done before alfalfa and grass fields need to be harvested. The biggest drawback to a PRE herbicide program is in order for PRE herbicides to work they be present in the soil solution where the weed seeds germinate. Most weed seeds will germinate in the top one inch of the soil. PRE herbicides need about ½ to 1 inch of rainfall within a week of application to sufficiently move the herbicide to the soil depth required for effective weed control. Don't forget that many PRE herbicides can be applied prior to planting corn and mechanically incorporated to move the herbicide into the soil layer where the weeds will germinate.

Pre-plant incorporation of soil-applied herbicides is no longer a common practice, but still remains a viable option, especially when the soil and weather conditions are dry around planting time. The PRE herbicide only needs to be incorporated or mixed into the top 1 to 2 inches of the soil. To do this with a field cultivator, tandem disk, or spring-tooth harrows, an equipment operating depth of 3 to 4 inches will place the herbicide in the upper 1 to 2 inches of the soil. Be careful not

to put the tillage implement too deep or it will dilute the herbicide in the soil profile and compromise weed control.

Total POST herbicide programs have been around for a long time. This is not a new concept, however each year it seems more growers shift some of their acres to a total POST weed control program. The introduction of Roundup Ready and Liberty Link hybrids has certainly influenced the adoption of this weed control approach.

Corn growers considering using total POST programs must understand how early weed competition in corn can affect yields. An advantage to a POST program is that you are able to choose the herbicide based on the weed population present. Herbicide rates are adjusted according to the size of the weeds at the time of application. Generally speaking, the smaller the weeds, the less herbicide is necessary for control. The disadvantages to POST programs include: proper timing, weather conditions and potential yield losses if applications are delayed.

In most scenarios, the initial POST herbicide application should be done when the weeds are 2 to 4 inches tall. These are pretty small weeds, however, if you want good results you need to be timely. Research at the University of Guelph by Dr. Clarence Swanton determined the critical weed-free period for corn to be from the third to the eighth-leaf stage. Practical implications for corn producers are that weeds that emerge with the crop have little effect on corn yields until the corn gets to the third-leaf stage. However if these weeds are not brought under control early, they will affect final yields. This weed-free period in corn must extend to at least the eighth-leaf stage. Weeds that emerge after the corn passes this eighth leaf stage will generally have little effect on corn yields given near normal conditions. (Greg Stewart and Hugh Martin, OMAFRA)

Weather conditions always seem to create problems. Windy conditions, muddy fields and rain can prevent timely herbicide applications. If these conditions last for any length of time, your opportunity to apply POST herbicides when the weeds are still small may be missed. All of a sudden your small weeds are now too big to control. Once you have missed your narrow application window, your back is up against the wall. If you face these weather roadblocks when you are trying to apply a PRE herbicide program, it is not too late to switch to a POST program.

If a total POST program fails, then there are not many good options left. Depending on the height of the crop and when the weed "escape" or failure is discovered, you might be able to come back in with a rescue treatment. If it is too late for anything, yield losses may result from poor weed control.



Taken at Deer Valley Trails

Cook's Wildlife Buffet

Alfalfa, Soybeans, Corn

Conrad & Yvonne Cook

1105 State Highway 72 Potsdam, NY 13676

(315) 265-6788

Photo by Roger & Amy Cook Photography, Gouverneur, NY



Food and Mood

We know that a person's mood can affect how much they enjoy eating, and that certain foods can affect one's mood. Now, there's an app that attempts to connect the two.

LOVES

horseback riding, camping, the outdoors, gardening and



tax preparation.

A weekend camping trip with the family ... a long ride through wooded trails ... and spending quality time with IRS Publication 225. To Farm Credit East's Lindsay Eckman, there's nothing better.

You see, as much as Lindsay loves just about everything to do with the great outdoors, she's equally passionate about making sure her clients have their taxes filed properly and on time. Sure, her love of tax prep may seem a little peculiar to the rest of us, but we wouldn't have it any other way.



Burville, NY 800.626.3276 • Potsdam, NY 800.295.8431 FarmCreditEast.com/TaxPrep

What do you love? Send us your selfie at FarmCreditEast.com/WeAreYou.

A recent survey asked Farm Credit East clients to rate their satisfaction with our tax services. 99%

of respondents told us they would recommend our tax services to a friend. Call today to find out why.

Dairy

Diet and Stocking Density Affect Ruminal pH

By Lindsay Ferlito

"How much can I overstock my cows?" is a common question we get asked, and the answer is a crowd favorite, "it depends". Some producers need to maintain stocking density at 100%, while others are able to overstock at 130% based on their management and facilities. When deciding how much higher than 100% you want to go, make sure you are looking at the whole picture and not just at milk production. Research from multiple institutions has found



the negative effects of overcrowding can range from reduced lying time, increased idle standing time, increased lameness, increased feeding rate, reduced DMI for

subordinate animals, and more recently, lowered ruminal pH.

Researchers at the Miner Institute have been investigating the links between stocking density, diet, and rumen health. One of their recent studies compared two stocking densities (100% vs. 142% at the stalls and feedbunk) and two diets (no straw and straw), and the amount of time (h/d) the cows had a rumen pH of less than 5.8. When rumen pH is below 5.8 for 3 to 5 hours, it becomes a concern for an increased risk of subacute ruminal acidosis (SARA), and when it is below 5.8 for 5 hours or more, the risk for SARA and compromised rumen health is high.

Overall, there was no significant difference in DMI, with all treatments averaging about 25 kg/cow/d. However, cows fed the straw diet had higher NDF, peNDF, and uNDF intake (kg/d) due to the addition of straw.

At 100% stocking density, there was no difference between the diets in the amount of time rumen pH was <5.8 (straw: 1.9 h/d, no straw: 2.3 h/d). However, at 142% stocking density there was a difference, with the cows fed no straw having pH<5.8 for 4.1 h/d compared to only 2.8 h/d for the

cows fed straw. When looking at the average of each treatment variable (stocking density and diet), there was a 1.4 h/d difference in time spent below pH of 5.8 between the two stocking densities (more time at higher stocking density), but only a 0.9 h/d difference between the two diets (more time when there was no straw). Therefore, there was a greater contribution to an increased risk of SARA from stocking density than from the diet itself.

When looking at the impact of diet, adding straw at 100% stocking density reduced the time rumen pH was <5.8 by 0.4 h/d, but it was reduced by 1.4 h/d when straw was added to the 142% stocking density treatment. The addition of straw to the diet helped in both cases, but it had more of a significant positive impact when the cows were overcrowded. In terms of behavior, there was no significant difference in eating time, number of eating bouts, or rumination time between treatments. However, there was difference in where the rumination took place, with cows spending more time ruminating in the stall in the 100% stocking density treatment compared to 142%. Additionally, consistent with previous studies, overstocking greatly reduced daily lying time and increased idle standing time in alley.

To maximize rumen health and production, don't feed marginal fiber when cows are overcrowded at the stalls and feedbunk and consider all the potential impacts of overcrowding.



National F.A.R.M. Program: Preparing for Your Evaluation

By Kimberley Morrill, PH.D



Over the last few months we've provided lots of information on the National Dairy FARM program in regards to Version 3.0 changes, timelines and webinars. This article will focus on what you can do to prepare for your evaluation.

The first step of the FARM evaluation is setting a date and time for your evaluation. Your evaluator will call you to set the date and time. During this phone call, or visit, the evaluator will provide you with a pre-evaluation checklist. This checklist provides the evaluator with updated contact information, a herd profile (how many lactating & dry cows, heifers, calves and bulls are on the premises), and facility type. The last page of the checklist is of great importance to the evaluator – it's the animal group identification. How many groups of animals (high cows, fresh pen, sick pen, calf pens...), what are the corresponding pen numbers (or barn names), how many pens for each group and how many animals in each pen. This is important to determine the total number of animals observations for the farm and for each group of dairy cattle represented on the farm.

Once your evaluator arrives, you will answer some interview questions and they will review some documents, before they do animal and facility observations.

Documents that need to be available during your FARM evaluation:

- Vet/Client/Patient Relationship form that is signed and dated.
- Animal Caretaker training: documentation of training for all (new & existing) employees with animal care responsibilities for stockmanship as well as their assigned animal care responsibilities (ex. calf care, euthanasia, non-ambulatory cow care, etc...)
- Written protocols need to be readily available and translated as needed. These include:
 - ⇒ Milking procedure
 - ⇒ Newborn calf and calf care
 - ⇒ Injured and non-ambulatory cow care
 - ⇒ Culling & transporting animals to slaughter
- Drug treatment records: should include animal ID, date, product, amount, route, withdrawal time and signature/initials.
- A herd health plan, developed in consultation with the veterinarian of record to prevent, treat and monitor the incidence of common diseases. This should be

reviewed and updated annually. The plan should include written protocols for:

- ⇒ Pain management
- ⇒ Treatment protocols
- ⇒ Parasite, pest and fly control
- ⇒ Non-ambulatory cow management
- ⇒ Euthanasia
- ⇒ Lameness prevention and treatment
- ⇒ Dystocia management
- ⇒ Should be signed by employees, owners and other people who work with your cattle

For the next step, the evaluator will need to observe animals. The total number of animal observations is based on total herdsize. Animals will be assigned a lameness, hock and knee, hygiene and body condition score. Only lactating and dry cattle will be assigned a lameness score.

Once all questions are answered and animal observations are complete, the evaluator will want to meet with you for a closing meeting. Your assigned evaluator will depend on which Co-op you ship milk to. A farm shipping to DFA will have a different evaluator than a farm shipping to Agri-Mark. All evaluators receive the same training and are implementing the same FARM program. Some co-ops may add some additional questions, but the FARM portion remains identical for all farms.

If you have additional questions in regards to the National FARM program, or would like assistance in preparing your documents please contact Kimberley Morrill (604)-568-1404, or Lindsay Ferlito (607)-592-0290 with the NNY Regional Ag team or your milk co-op.

Farm Drainage Systems

-GPS- Tile Installation-



Ken Gerber 315-212-4658 Conrad Gerber 315-955-5639 Rock Haven Acres LLC. 24403 CR 47 Carthage, NY 13619

NNY CCE Shop Meetings are back!!

Wednesday, January 18th at Butterville Farms located at 11303 County Route 75, Adams, NY. *Friday, January 20th* at Silvery Falls Farm located at 6808 Bardo Road, Lowville, NY.

Join us from 12pm-2pm for coffee and light refreshments, conversation and important information related to the FARM Program changes and the veterinary feed directive (VFD) implementation plan.

If your milk co-op is a member of the NMPF, National Milk Producer's Federation, you are strongly encouraged to attend to learn more about changes that will affect your farming practices.

No Registration Necessary, Just Show Up!

Free Estimates RECYCLERS Insured 585-851-9550

- · Car ·
- Light Truck
- Commercial

SIDEWALLS FOR SALE

- ATTENTION FARMERS -We will cut your tires on site. Call for Free Estmate! · Car ·

Light Truck •

Commercial •

SIDEWALLS FOR SALE

Jefferson - Oswego - St. Lawrence - Franklin - Oneida - Essex - Clinton - Herkimer - Onondaga - Cayuga - Madison - Albany - Warren

Quality Milk Program



January 11, 2017

Mo's Pub and Grill Malone, NY 10-3PM January 12, 2017

Cornell Cooperative Extension of Lewis County Lowville, NY 10-3PM



Guest Speakers:

- Jessica Scillieri Smith, DVM, Senior Extension Associate,
 Quality Milk Production Services, Canton NY
- Rick Watters, PhD, Senior Extension Associate, Quality Milk Production Services, Warsaw NY

Topics (30 min each):

- Economics
- Review of anatomy and physiology
- Basics on mastitis causing pathogens
- What to do with a negative culture
- Milking procedures from the basics to new technologies
- Equipment a pulsator is a pulsator, no matter where it's located
- Keeping good records and using the information you



Page 9

Registration:

Cost is \$35.00 per person.

Register Online at:

https://reg.cce.cornell.edu/milkqualityprogram2017_10512

For more information contact Tatum Langworthy at 315-788-8450 or email at tlm92@cornell.edu.



Cornell University
Cooperative Extension
Northern New York 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

NNY REGIONAL AG TEAM 2016

Farm Business

Milk Prices According to Senior Dairy Analyst Thomas Bailey, Economist from Rabobank

By Kelsey O'Shea

I was fortunate enough to attend the Milk Business Conference in Las Vegas, NV on December 7-9th. The first speaker of the conference was Tom Bailey from Rabobank and his presentation was titled Global Dairy Markets 2016. He is part of a team of 94 analysts whose focus is to monitor the industries in which Rabobank invests,. The dairy industry occupies 14 of those analysts. He began by commenting that the US' participation in the global dairy market is still relatively new. His current analysis indicates that dairy commodity prices are up 35% in the last few months and that exports are on a "trajectory of recovery". With that being said, he did comment that there will be some lag in what we see for "farm-gate" prices.

He discussed the global dairy environment pointing out that the EU is currently, and continues to be, in a state of contraction in their milk supply caused by the governments effective reduction in its supply by 1 billion liters. He did point out that the Netherlands and Ireland are the exceptions to this trend of reduction in milk supply. This contraction, he pointed out, has contributed to the uptick in US exports. It is important to note as well that 6 of the 7 primary exporters of milk are contracting their supply. That fact combined with the fact that global demand for imports is coming back up means that the US could be well positioned to increase exports. China in particular showed a decrease in total imports by 7% in September with their milk production down 2% and YTD imports up overall by 15%.

The US milk supply in turn continues to grow and the trend in growth continues to move from west back eastward due to increasing costs of capital and regulations out west. He speculates that "Wisconsin could be the next California in three years". The Midwest's limited plant capacity combined with the milk supply continuing to grow steadily by 3% means that there will be a need for more plants or additional capacity in existing facilities. It is important to point out though that, for the time being, inventories of dairy products remain very heavy, but Bailey does not believe that there is much risk for these surpluses to hit the market all at once which could cause another market dip. The current surplus in the US is 1 million metric tons.

He also discussed the current consumer trends that will play a role in the disappearance of this milk surplus. He pointed out that natural cheeses along with drinkable yogurt are on the rise. He also indicates that "foodie millennials" that are highly discerning and keen on international options lead to no clear lead for any one product in the dairy industry. There is, however, a clear trend in companies incorporating vertical integration to take back control of more of the process separating the farm from the table.

He believes that increases in production will be relatively weak over the next 12 months due to small increases/stagnant prices followed by medium growth based on predicted price recovery. He explains that with the current "wobbly" economy- a condition created by opposing force conditions that affect milk price - there is not clear trajectory of recovery in the near future, but rather more stagnation in the immediate future. Some of these competing forces include: increased demand for imports (that could increase US exports) combatted by the persisting strong dollar that keeps pressure on exports increasing. In conclusion, his outlook was small improvements or stagnation in prices over the next 12 months with recovery/increases in prices afterwards.

NORTHERN NEW YORK FARMER'S MARKETING CO-OP

RT. 26, LOWVILLE, NY

NNY IS THE ONLY NEW YORK STATE LIVESTOCK MARKET OWNED AND OPERATED BY LOCAL FARMERS.

AUCTION EVERY MONDAY AND THURSDAY AT 2:00 P.M. CALVES FOLLOWED BY DAIRY, MISC. THEN BEEF. DAIRY CONSIGNMENT AUCTION SECOND WEDNESDAY OF EACH MONTH. COMPLETE FARM DISPERSAL SERVICE AVAILABLE ON YOUR FARM OR AT OUR AUCTION FACILITY.

IF YOU HAVE ANY QUESTIONS OR NEED TO ARRANGE TRUCKING TO NNY, THEN CONTACT THE MARKET.

PRESIDENT: DARRYL ROGGIE

VICE

PRESIDENT: DAN O'BRIEN TREASURER: PAUL WAITE SECRETARY: MIKE SULLIVAN MARKET MANAGER & AUCTIONEER TED SIMMONS 376-7441

NNYRAP Farm Finance 101

By Kelsey O'Shea

Ever wish you paid more attention in that accounting class? Maybe you're a bit rusty on financial ratios, or looking to learn something new. Each month I will go over an accounting or finance topic as it relates to your farm business, so stay tuned! This month is on leverage and repayment capacity measures:

 Debt Coverage Ratio: (Annual Net Income + Amortization/Depreciation + Interest Expense + other non-cash and discretionary items) / (Principal Repayment + Interest payments + Lease payments)

This ratio indicates whether or not a business is generating enough cash to pay its debts. In family farming operations, some lenders will deduct family living from the total cash income with the assumption that the allocation is taken before debt payments are made. Put simply: you have to feed yourself first. Any value over 1 for this ratio is good and indicates that the farm can cover its debt payments. Most lenders prefer a ratio of at least 1.

· Blended Capital Debt Term: Total Average Capital Debt (net of deferred tax and pension plan obligations) / (Annual Capital Debt Servicing Requirement – Total Interest Expense)

This ratio indicates how long it would take to pay off all debt based on the annual debt service amounts. This is important because it shows how long it would take a business to pay off all debts at their current rate of annual payments. A good value can vary based on the structure/type of business. Asset heavy businesses will usually have longer blended capital debt terms versus service businesses. It is ideal for farming operations to be between 7 and 12 depending on the current positions of the business.

· 10 yr Blended Excess: (EBITDA* - Total Interest Expense) - (Closing Capital Debt (net of deferred tax and pension plans obligations) / 10)

This shows how much cash excess a business would have if all of their debt was scheduled over 10 years. This can show increased profitability if a businesses Blended Capital Debt Term is under 10 years. This measurement can show a businesses profitability should their debt structure change.

*EBITDA— Earnings before interest, taxes, depreciation and appreciation

2017 Cow Comfort Conference

"Working with What You Have and Looking Towards the Future"

March 20-21, 2017

Keynote speaker - Gordie Jones

Holiday Inn 441 Electronics Parkway Liverpool, New York 13088

Register Online Today!!!

https://reg.cce.cornell.edu/cowcomfortconference2017 10512



Cornell University Cooperative Extension Northern New York Regional Ag Team



Livestock

Farmer Tour of Cargill Meat Solutions

By Betsy Hodge

In November 2015 we had Mark Miller, Quality Control Manager for Cargill Meat Solutions in Wyalusing PA speak at our Beef Week meetings in Northern New York. We held a session in the afternoon for dairy farmers as well. Mr. Miller turned out to be a very interesting and candid speaker. Our beef group stayed and talked to him until 11:00 PM! In the end, we decided we should visit the plant for a tour. One year later...

On November 16th an adventurous group of farmers and educators headed out for Binghamton, NY to stop overnight on our way to Wyalusing, PA to visit the Cargill Processing Plant. We had a caravan of cars and after picking up another person in Watertown, we headed down 81.

We couldn't travel all that way and not stop at a farm! Near Homer, NY, Heather and Dennis Birdsall hosted us for a visit to their Hereford farm. They raise Hereford beef for show, breeding stock and restaurants. Fortunately they were able to purchase land around the original farm when they were starting out. This allows for a nice rotational grazing system on the hilly pasture slopes around them. Now they are hemmed in by large dairies that have bought up the land nearby. They take advantage of these big dairies to help with their cropping program.

Their cows calve in a very large open barn on a bedded pack. Calving takes place in the colder weather so the bedded pack is important to providing a dry protected place to calve. The calving is spread out over 60 days and then by carefully managing the feed and the natural size differences between the calves, they manage to have finished beef every week (or two weeks) year round for their restaurant customers. They have a standing appointment at a local processor that works closely with them.

Dennis and Heather met in Jr Hereford activities and are still working together. They described how they worked up from a couple registered animals and many commercial cows to a purebred herd by using purebred embryos and also using their commercial cows as surrogate mothers for others to get embryos raised. They did a great job hosting the tour and sharing ideas with us while trying to beat the rain and the dark that was closing in on us

On to Binghamton we went and were pleased to see several other people who met us there (including Mike Baker from

Cornell and Berni Ortenzi from Adirondack Grazers). They joined us for dinner and the tour the next day. After a nice steak dinner (a necessity after hearing about all that good Hereford beef!) we settled down and agreed at leave at 7:15 am the next morning.

In the morning, we were joined by a few more people including students from Morrisville and some beef farmers from southern NY. Now we really had a caravan of vehicles! We started off on time and gamely followed the GPS – only stopping once to be sure everyone was still in line.

I have to preface this by saying that I was not excited to go to a slaughterhouse. The thought of killing that many cows just didn't seem that appealing but I was curious about how it was being done and knew they had a good reputation. The tour, it turns out, is pretty amazing. I highly recommend it if you get a chance to go!

At the plant (which some of you will remember as Taylor Packing) we had to show ID and sign in and remove any jewelry and watches. The place looks like a shopping mall with big parking lots and low rectangular buildings. We started in the office area in a meeting room with an intro to the business. On the tour we were often on a catwalk above the operation (hence the need to remove jewelry and watches – they don't want things dropping into the food stream). Twelve hundred employees work at the plant in all sorts of capacity – from the office to the fabrication floor to shipping and handling. Most are local people and many times several members of the same family work there. They get good benefits and have a chance to move around within the plant to do different jobs.

The plant processes 1600 cows per day – 5 days a week (that's 8000 a week and over 400,000/year!!). Two thirds of them are cull dairy cows and one third are beef cattle. Five percent of processed cattle come from Northern NY.

The cattle arrive at a big open barn with a high ceiling and many pens and wide alleys for sorting. They have mostly women working the cattle and they have cameras watching everything. They have a third party audit the tapes and also out on the floor making sure the animals are treated well. The animals we saw were very calm and being moved up and down the alleys in an efficient but kind manner. Slow animals are put into a pen and the USDA vet checks them. Any animal

that isn't ambulatory is euthanized and goes to the rendering plant. Any meat from animals on the suspect sheet is boned and boxed separately until it passes all the tests required.

The knock box has several back-ups so there are no mistakes putting the cows down. The cows ride along on a breast rail and are just looking around calmly when they are knocked. They go from there to dressed in 20 minutes. The room where all this happens is warm and steamy and the cattle carcasses move along on a chain and workers along the way remove the hide and the organs. Inspectors look at the organs on a conveyer belt. It was obvious they were checking the livers and spreading out the other organs and looking thru them.

There really isn't any hang time. The cattle are pretty much processed right away. They make 350,000 pounds of ground beef per day. We saw the grinders and saw how they mix and package the finished product. Some is in bulk and some is in case ready trays. There are cardboard boxes everywhere being loaded with cuts and ground. Meat and boxes are moving everywhere quickly.

On the fabrication floor, the different cuts are trimmed and portioned and packaged. It's cold in there and everyone is wearing white. People are lined up along white tables with conveyers running above them and bins under holes in the tables. Employees are skilled and trim and sort the products at an amazing speed. They rotate to different jobs during the day so that they don't get sore from standing in one place and doing repetitive movements. There is a steady rhythmic noise and hum and lots of movement. I wish I could have taken pictures to share. It kind of reminded me of an old black and white cartoon of a factory or Santa's workshops where the elves are all working in a rhythm. Cuts are packaged mostly by machines or by people aided by machines. Tenderloins slide down a shiny metal tube into plastic sleeves that are shrunk onto the meat and labeled and boxed at a rapid pace. People were handling the sleeves and packing the boxes and doing some sorting as they worked.

Nothing is wasted. Bones are shuttled to a room where people with special circular, spinning knives peel off any scraps they can find on the bones. The scraps are collected and ground and go into the ground beef mixes. Bones are made into bone meal and blood into blood meal. The equipment in the plant is pretty amazing. It's large, stainless steel and very specialized. Stuff goes in the top and something else comes out the other end all packaged or ground or sorted or whatever that machine is supposed to do. There are many people there monitoring the whole system as well.

Boxes are moved to cold storage and many are shipped out that day. There are small forklift type vehicles moving along marked paths on the floor. And I mean they are moving. It takes a lot of coordination to move that much product that quickly and keep it all safe and organized.

Speaking of safety, everyone we saw had eye protection, ear plugs, white coats, etc. The plant has their own crew that comes in and cleans after the 8 hour shift of processing cattle. The cleaning takes another 8 hours.

The staff mentioned that injection site blemishes are one of their biggest concerns and causes the most waste. They ask that producers do a good job with record keeping and do injections in the neck and subQ whenever possible.

They prefer cattle under 2000 pounds. Their buyers are on the road and buying at the local auctions as well as doing some direct buying from larger farms. All animals are identified and the meat is traceable back to the farm. It is tracked through the plant with RFID.

The plant packages most of its meat under the Circle T label that comes from the old Taylor Packing. We saw many packages that were labeled with Excel and they do package meat for other labels like Meyer and Strauss. There is no sausage or other added ingredient or cooked products made in the main plant.

The staff was very willing to answer our questions before and after the tour. I think they enjoyed talking to a bunch of farmers from the other end of the business. I know we enjoyed the tour and the good conversations during the drive down and back.



2017 NYCO Winter Meetings

Jordan Hall, Geneva Experimental Station 614 W. North Street, Geneva NY

The NYCO winter meetings have grown over the last 23 years from a gathering of six organic grain producers in the Martens Farms' farmhouse kitchen in 1994 to the auditorium in Geneva. Last year more than 300 farmers attending the 3 meetings.

There is no cost or need to register to attend the meetings, which start promptly at 10:00am. Participants are asked to bring a dish to pass at the potluck lunch. The New York Crop Insurance Education Team and Cornell Cooperative Extension provide support for these meetings. There will be a brief description of how Crop Insurance can benefit organic farmers at each of the meetings.

Tuesday, January 10th 10:00 am – 2:00 pm

Invited Speakers:

- **Bob Quinn** leads the Quinn Organic Research Center of Big Sandy, Montana which includes a 2,800 acre farm. Where organic markets are going and how New York's producers can prepare for the future.
- Mark Sorels, PhD. is the chair for the Atkinson Center for a Sustainable Future at Cornell University. Mark will review the results of this study done at the Cornell University's Musgrave Research Farm.
- **Tim Christensen** farms with his father, Guy in Penn Yan, NY.Tim will share some of the success and failures he has had on his farm.
- **Sandra Wayman** is a research technician with the Cornell Sustainable Cropping System Lab. She will review their work with the newly developed perennial grain, Kernza.

Tuesday, February 14th 10:00 am – 2:00 pm

Program devoted to the opportunity to diversify your farm with organic poultry. The focus will be for farms with 2,000 - 10,000 birds.

Invited speakers:

- Dr. Jara Jenge with Cornell Diagnostic Lab who will discuss Bio-Security and Health issues for poultry.
- Jeff Mattocks with Fertrell who will discuss the nutritional needs of poultry.
- Mark Bruland with Potters Poultry Equipment Company to discuss housing and outdoor access.
- Jeff Armstrong, Chief Operation Officer with Handsome Brook Poultry who will describe marketing through their company.

Monday, March 13th 10:00 am – 2:00 pm

Program devoted to Nutrient Balancing, Crop Production and Alternative Forage Production.

Invited speakers:

- Quirine Ketterings and Karl Czymmek with Cornell's Nutrient Management Spear Program will go over the use of Mass Nutrient Budgets to track imported and exported nutrients on a farm.
- Heather Darby will share some of the organic field trials she has done at the University of VT.
- A Farmer Panel discussing forage production on their farms.

For more information contact Fay Benson at 607-391-2669 or at afb3@cornell.edu
Fay Benson
Small Dairy Support
Cornell University SCNY Regional Team
NY Crop Insurance Education Team
http://www.agriculture.ny.qov/AP/CropInsurance.html

Project Manager NY Organic Dairy Initiative http://blogs.cornell.edu/organicdairyinitiative/

Facebook NY Soil Health Trailer - https://www.facebook.com/nysoilhealthtrailer



The Right Feed. The Right Time. The Right Place.

The Right Company

Our Dairy Specialists: Terry White, Scott Durant, and Mike Watson (ARPAS Certified)



Gold Star Dairy Services:

- Commodity Contracting
- Farm Goals 2.1

- Ration Balancing on NDS Rumen Model
- Feed Delivery on Company Owned Trucks



DAIRY WELLNESS MAKES A DIFFERENCE™

zoetis.

Harvest NY

Meat the Labels - Part 3

By MacKenzie Waro, HNY

Happy New Year! In August, the terms 'Natural' and 'No Hormones Administered' were discussed, and in December we discussed the terms 'Grass Fed' and 'Antibiotic and Chemical Free'. This month, we are going to discuss "Animal Welfare Approved" and "Certified Humane Raised and Handled". Both of the terms "Certified Humane" and "Animal Welfare Approved" are considered Third Party Audits, which are not Federal nor State programs.

Animal Welfare Approved (AWA) is a food label for meat and dairy products that come from farm animals raised to the highest animal welfare and environmental standards. AWA requires animals to be raised on pasture or range, prohibits dual production, awards approval only to family farmers, charges no fees to participating farmers, and incorporates the most comprehensive standards for high welfare farming. To accomplish the goals of the AWA program, all standards address every aspect of each species' lifecycle needs from birth to death. Every farm in the AWA program is audited at least once a year to ensure compliance with their standards. AWA has standards for all commonly domesticated farmed animals, and bison, in the US.

AWA is one of only two labels in the U.S. that require audited, high-welfare slaughter practices. This means that the farm must be AWA approved, AND the slaughter house/facility that you use must also be AWA-approved in order for you to use the AWA label on your meat packaging. There are a number of AWA-approved slaughter and processing facilities in New York State.

Humane Farm Animal Care (HFAC) is a nonprofit certification organization dedicated to improving the lives of farm animals in food production from birth through slaughter. When you see the Certified Humane Raised and Handled label on a product, the food products have come from facilities that meet precise, objective standards for farm animal treatment.

The Certified Humane® label assures consumers that the producer meets HFAC's Animal Care Standards and applies them to animals, from birth through slaughter. There are a

number of guidelines the farm must meet; animals are never kept in cages, crates, or tie stalls. Animals must have ample space, shelter and gentle handling to limit stress. Animals must have ample fresh water and are fed a healthy diet of quality feed, without animal by-products, added antibiotics or hormones. For a more complete list, visit their website. The Animal Care Standards are upheld through annual inspections conducted by scientists and veterinarians who are experts on the species they are inspecting. These are independent inspections of all farms, ranches and slaughter facilities in the program.

Slaughter and processing facilities must comply with the American Meat Institute Standards (AMI) through the Certified Humane Raised and Handled. Again, this means that the producer must be HFAC certified, and the animal must be slaughtered and processed in a HFAC certified plant in order to use the term on your meat label.

But what does this mean for you as the producer? Will is bring you more money when selling to your markets? Using third party audits just gives you another avenue for selling your meat products. Some restaurants want or would like to see the labels because they can sell the meat at a higher price point. There is a trend that consumers want their meat raised and slaughtered with more care, and these two labels will help insure that for the consumer.

For more information on Animal Welfare Approved, visit: http://animalwelfareapproved.org/.

For Certified Humane, visit: http://certifiedhumane.org/.

May 2017 bring you new markets, new labels, and many new buyers! Happy 2017!





The Food Safety Modernization Act

By Anika Zuber, HNY

In 2011, President Obama signed the Food Safety Modernization Act (FSMA) into law. Essentially, FSMA gives increased oversight to the Food and Drug Administration in enforcing preventive controls. These preventive controls are the measures that food processors take to ensure any food safety hazards are reduced or minimized to an acceptable level. According the CDC, 1 in every 6 Americans get sick from a foodborne disease every year. Their focus is to minimize these preventable illnesses. There is an animal food and human food portion of the final FSMA rule. Compliance dates are different for companies depending on their size.

People familiar with food processing may think FSMA sounds similar to a Hazard Analysis Critical Control Point (HACCP) plan. In HACCP, a critical look at every process step is taken to evaluate if there are any chemical, physical or biological hazards introduced at each point in the process flow. If there is a specific step taken to eliminate a hazard in a food, that step is a "critical control point" (CCP). An example of this would be the pasteurization step when bottling fluid milk. It is a CCP because it provides a 5 log reduction of pathogens in milk, proving it safe for human consumption.

FSMA still has critical control points, but the program extends beyond preventive measures in the process flow alone. FSMA also requires processors to take a closer look at whether they require supply chain preventive controls, allergen preventive controls and sanitation preventive controls in addition to the Process Preventive Controls we refer to as CCPs.

Supply chain preventive controls apply to any ingredient containing a hazard that is not controlled in the manufacturer's process. Allergen mislabeling is the number one reason for food recalls, thus ensuring proper allergen control and labeling is critical. Sanitation preventive controls are necessary where there is a likelihood of pathogen or allergen contamination. Of course, CCPs remain an important preventive control.

hazards introduced at each point in the process flow. If there is a specific step taken to eliminate a hazard in a food, that step is a "critical control point" (CCP). An example of this would be the pasteurization step when bottling fluid milk. It is a CCP because it provides a 5 log reduction of pathogens in milk,

THIS THE <u>LAST FREE ISSUE</u> OF THE PAPER VERSION OF THE NORTH COUNTRY AG ADVISOR.

Our budget will not support mailing over 1000 paper newsletters each month. Staying in touch with you is important to us, however, so we have 2 options for you to consider:

<u>Subscribe to the electronic version of the North Country Ag Advisor – it's free.</u> Simply send an email to Tatum Langworthy at <u>TLM92@cornell.edu</u>. In the email indicate which email addresses you'd like us to send the electronic version of the newsletter too. Simple.

Purchase a 2017 subscription for the paper version of the North Country Ag Advisor for the low cost of \$15. Return the form below along with a check or money order for \$15 to Tatum Langworthy, Cornell Cooperative Extension, NNY Regional Ag Team, 203 North Hamilton Street, Watertown, NY 13601. We'll send you the newsletter each month during 2017. Subscriptions expire with the December 2017 issue.

Name		
Farm Name		
Street Address		PLEASE READ
City	State	VERY IMPORTANT
Zip code		
Phone number		

21st Annual North Country Crop Congress

& Agribusiness Trade Show

"Crop information, Pesticide applicator recertification credits and CCA credits all in one day"

Thursday, February 2, 2017

10-3pm Best Western, Canton

Vendor Fee \$75 (includes 1 lunch)

Register Online at:

https://reg.cce.cornell.edu/2017cropcongress-2 10512

Attendee Fee \$25 if you Pre-Register before 1/28/2017

Pre-Register Online at:

https://reg.cce.cornell.edu/2017cropcongressattendee_10512

\$30 At the Door.



Cornell University
Cooperative Extension
Northern New York Regional Ag Team

Speakers/Topics:

- Managing Western Bean Cutworm with Bt traits- Reality Check Mike Hunter, Cornell University Cooperative Extension
- Management of Corn Rootworm: Continuing failures, Trait preservation and New technologies
 Elson Shields, Cornell University
- Lessons Learned from the Neonicotinoid Seed Treatment Restrictions in Ontario
 - Gilles Quesnel, Independent Agronomist, Winchester, Ontario
- Guidance for Growing BMR Dwarf Brachytic Forage Sorghum in NNY Quirine Ketterings, Cornell University
- Field Crop Weed Control Management for 2017
 Industry Representative Panel Discussion
- Late Summer Planted Oats for Forage: A Viable Option?
 Kitty O'Neil, Cornell University Cooperative Extension
- Crop Insurance Updates
 Kelsey O'Shea, Cornell University Cooperative Extension

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





It's great how farming brings people together.

We offer Nationwide farm and ranch insurance and would welcome the chance to discuss it with you.

LASHOMB INSURANCE AGENCY

Star L Bashaw

Phone: (518)483-3598

bashaws@nationwide.com



Nationwide and the Nationwide N and Eagle are service marks of Nationwide Mutual Insurance Company. © 2016 Nationwide GPO-0292AO (06/16)

Classifieds

For farmers only: To place a free classified advertisement in NNY Regional Ag Classifieds, please fill out this form and mail to: Tatum Langworthy at Cornell Cooperative Extension of Jefferson County, 203 North Hamilton Street, Watertown, NY, 13601. Or, you may email your ad to Tatum Langworthy at tlm92@cornell.edu. Please provide all information requested below. Unless specified, your ad will run one time only, in the next monthly publication. Additional ads may be written on another sheet of paper. Please limit each ad to 25 words or less and include your contact information. Deadline for submitting ads is the second Monday of the month for the following month's publication.

NAME:		FARM NAME:		
ADDRESS:		CITY:		ZIP:
PHONE:	AD SECTION:		MONTH(S) TO RUN AC):

Cornell Cooperative Extension Associations of Jefferson and Lewis Counties reserve the right to reject any advertisement deemed unsuitable for our publication.

Cornell Cooperative Extension Associations of Jefferson and Lewis Counties do not endorse any advertised product or business. We are providing an informational service only.

Livestock



Crops

FOR SALE: Corn Silage by the ton (\$50 per ton) or 8x200ft ag bags (\$8500 a bag). Call 315-212-1386.

FOR SALE: 1st, 2nd, 3rd Dry Wrapped Round Bales, VG Quality, Delivery Available. Call 315-346-1741.

FOR SALE: Barley straw for sale. 150-200 small square bales. Arnold Chapin, 315-854-4513.

Farm Machinery, Equipment, and Supplies

FOR SALE: Large thermal pride oil furnace. Make an offer. Call 315-482-9092.

FOR SALE: Military trailers, tires like new. Call 315-482-9092.

FOR SALE: Kory Wagon Model 6672, good rubber, several to choose from. Call 315-482-9092.

FOR SALE: Ideal brand gutter cleaner. Complete unit, CCW chain, already removed from barn. Call 315-348-8184.

FOR SALE: Rissler TMR Mixer 300 cubic feet. \$4000 or best offer. Call 315-783-7823 or 315-783-7074.

FOR SALE: 300– 4'x5' First Cut Round Bales. Call 315-659-8524.

How to Advertise in NNY Regional Ag Classifieds

Farmers: Advertising in NNY Regional Ag Classifieds is FREE for farmers. To place an advertisement, email details to Tatum Langworthy at tlm92@cornell.edu by the second Monday of the month before you want your ad to appear. Publication is the first week of every month.

Fine Print: To qualify for free advertising, you must meet all of the following criteria:

- You must own, rent, or be employed on a farm.
- Your farm must be actively engaged in the production of agricultural commodities, such as milk, meat, eggs, produce, animal by-products, or feed, etc.
- Your goods must relate to farming.

Anyone wishing to purchase a larger display ad in the newsletter, should call Tatum Langworthy at (315) 788-8450 for more information. (All income generated from the sale of ads goes to support publication and mailing costs.)

NNY Regional Ag reserves the right to reject any advertisement deemed unsuitable for our publication.

NNY Regional Ag does not endorse any advertised product or business—we are providing an informational service only.

CCE Northern NY Regional Ag Team 203 North Hamilton Street Watertown, New York 13601

What's Happening in the Ag Community

2017 Calf Management Workshops, Feb. 7th & 14th at Farm Credit East, Burrville. 2017 Calf Management Workshops, Feb, 9th & 16th at Miner Institute, Chazy.

Lamb Cutting, SUNY Cobleskill, February 3, 2017.

Miner Institute Corn Congress, Chazy, Feb 1, 2017 and Crop Congress, Canton, NY, Feb 2, 2017

Beef Cutting 2.0 + Pork Cutting 2.0, SUNY Cobleskill, March 20-24, 2017.

Quality Milk Program, for more information see page 9..

SAVE THE DATE - 2017 Cow Comfort Conference, for more information see page 11.

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.