

# North Country Ag Advisor

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Cornell University Cooperative Extension North Country Regional Ag Team **April 5, 2017** Sheep/Goat Week 7pm at CCE of St. Lawrence County

April 19, 2017 Dairy Goat Field Day 10am-12pm, State Rte 12, Glenfield, NY

> April 19, 2017 Dairy Goat Workshop 6:30pm, CCE of Lewis County

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

## 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."

# <u>Field Crops and Soils</u> Conventional Corn Weed Control Revisited

By Mike Hunter

Over the winter there were a lot of growers asking me about conventional corn weed control options. Some growers are looking to capture potential non-GMO corn premiums, dairy producers are intrigued by the possible GMO-free milk markets, others are looking to save money on seed costs, and some feel that they need to become more proactive with their herbicide resistance management strategies on the farm. Regardless of a grower's reason to plant conventional corn, preemergence weed control is almost a necessity for a conventional weed control program. It is extremely difficult to rely on a total postemergence conventional weed control program. There is a high risk of yield loss if the postemergence application is delayed. Application delays due to weather conditions can lead to tall weeds that are difficult or too big to control.

The goal is to select a solid, one-pass preemergence corn herbicide program. It is especially important to use a very good soil residual grass herbicide because it is difficult (and costly) to control certain emerged annual grasses with conventional postemergence herbicides. In conventional corn, a postemergence annual grass rescue treatment will cost around \$24 per acre. These are reasons why so many of the preemergence herbicide programs contain acetamide (smetolachlor, metolachlor, acetochlor, dimethenamid-P) products or premixes containing one of these active ingredients.

There are a number of suggested conventional preemergence corn herbicide programs to consider. These suggestions are based on the assumption that the herbicide will be applied

before the corn and weeds have emerged. The soil residual herbicides are to be used at the full labeled rate based on weed species and pressure. Some of the product application rates are determined by soil type, pH, and soil organic matter content. If sufficient rainfall is received soon after the preemergece herbicide is applied, we should expect season-long residual weed control with the following herbicide programs:

S-metolachlor + atrazine premixes (Bicep Lite II Magnum, Cinch ATZ, Cinch ATZ Lite) <u>or</u> acetochlor + atrazine premixes (Harness Xtra, Keystone NXT, Keystone LA NXT, Degree Xtra, Fultime NXT, Breakfree NXT ATZ, Breakfree NXT Lite) <u>or</u> dimethenamid-P (Outlook) + atrazine will provide good annual broadleaf, annual grass, and nutsedge control. For the control of triazine-resistant Lambsquarter and additional broadleaf weed control, include pendimethalin (Prowl 3.3, Prowl H2O) or Hornet WDG (a flumetsulam (Python WDG) + clopyralid (Stinger) premix) or Python WDG with one of these listed acetamide + atrazine combinations. If crabgrass or fall panicum is a problem, include simazine (Princep) in the tank mix. Be aware that simazine carryover will injure triazine-sensitive rotational crops. If heavy nutsedge pressure is expected, the preference would be to use one of the S-metolachlor + atrazine premixes.

Lumax EZ or Lexar EZ are premixes that contain Dual II Magnum, atrazine, and mesotrione (Callisto). Both Lumax EZ and Lexar EZ will provide good annual broadleaf, annual grass, and nutsedge control. Lumax EZ contains less atrazine than Lexar EZ. If common ragweed is a problem add an additional pint of atrazine to the Lumax EZ.

Acuron is a combination of Dual II Magnum, atrazine, Callisto, and bicyclopyrone (brand new active ingredient). The site of action for bicyclopyrone is HPPD inhibitor (group 27), like Callisto. You should expect Acuron to control weeds similar to Lumax EZ and Lexar EZ. Acuron will have enhanced control of common ragweed over Lumax EZ and does not require additional atrazine to be added.

### (Continued on page 4)



Prowl 3.3 or Prowl H2O plus atrazine is a conventional corn herbicide program that controls many annual broadleaf and annual grasses. This program will not control nutsedge. For improved common ragweed control, consider using the highest labeled atrazine rate allowed. Sharpen herbicide can be added to this tank mix to assist with annual broadleaf weed control, including common ragweed. Or Verdict (a saflufenacil (Sharpen) + Outlook premix) can be used for improved broadleaf and grass control. Verdict will also add suppression or partial control of nutsedge to this weed control program.

Resicore is a premix of Surpass NXT, Stinger, and Callisto. Resicore will control annual broadleaf, annual grasses, and nutsedge. For additional broadleaf and grass control add atrazine to this tank mix.

Instigate is a premix of rimsulfuron (Resolve) and Callisto; it should be tank mixed with one of the acetamide + atrazine premixes (Cinch ATZ, Breakfree NXT ATZ etc...) for improved residual broadleaf and grass control. This tank mix addition will also provide nutsedge control. The active ingredients in Instigate are similar to those in Realm Q; however, Instigate does not contain the safener (isoxadifen). Instigate cannot be used on corn taller than V2 growth stage. Capreno is a premix of tembotrione (Laudis) and thiencarbazone-methyl and should be tank mixed with atrazine. If nutsedge is a problem the addition of Dual II Magnum is necessary. Dual II Magnum will also provide additional residual control of annual grasses.

A well planned, total preemergence conventional corn herbicide program can provide season-long weed control. While the success of these programs are dependent on sufficient rainfall to move the herbicide into the soil, our spring rainfall patterns are usually adequate to accomplish this. Try to avoid the temptation to skimp on herbicide rates to save money. Always read and follow label directions prior to using any herbicide. If you have additional questions feel free to contact me anytime at 315-788-8450 or meh27@cornell.edu.



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NYSERDA offers energy audits to help eligible farms and on-farm producers identify ways to save energy and money on utility bills. Reports include recommendations for energy efficiency measures.

#### Eligibility

Eligible farms include but are not limited to dairies, orchards, greenhouses, vegetables, vineyards, grain dryers, and poultry/egg. The farms must also be customers of New York State investor-owned utilities and contribute to the System Benefits Charge (SBC). Please check your farm's current utility bills to see if your farm pays the SBC.

#### **Energy Audit Options**

You can request the level of energy audit that best fits your farm's needs. NYSERDA will assign a Flexible Technical Assistance Program Consultant to visit your farm and perform an energy audit at no cost to you.

Level	Audit Activities	Type of Report that the Farm Receives
Level 1	Walk-through energy audit	Summary letter with limited evaluation of feasible energy efficiency measures
Level 2	Detailed energy audit	Energy audit report with calculated evaluations of appropriate energy efficiency measures including simple payback; meets ANSI/ASABE S612 standards
Level 3	Energy audit focused on specific systems, energy efficiency measures, or renewable energy	System-specific energy analysis report

#### Get Started

Visit **nyserda.ny.gov/agriculture** to download an application or apply online. Call **1-800-732-1399** to learn more, request an application, or for assistance with determining the audit level.



# Dairy

## 2016 Calf Health Evaluations - Research Updates

By Dr. Kimberly Morrill, Ph.D.



USDA reports that 12.47% of pre-weaned heifers in the U.S. are affected by respiratory illness, with 93.4% of these calves being treated with antibiotics. Calf respiratory disease is associated with decreased average daily gain, increased age at first

calving, decreased milk production in first lactation, and increased culling in the first 30 days. All of these factors lead to an increase cost of production and decreased revenue.

The primary objective of this winter's calf health evaluation project was to evaluate how pre-weaned calf housing, environment, and management strategies impact calf health on dairy farms in Northern New York during periods of cold stress. This study was conducted between 11/29/2016, and 1/4/2017, and included 27 dairy farms that represented 33,557 lactating cows, 32,269 heifers, and 2,408 pre-weaned calves. This is roughly 28% of the dairy cattle population in the six northern counties of NY State. Lots of data was collected, and more results will be coming related to environmental factors, bacterial contamination of feeding equipment, and seasonal variation. This article will focus on respiratory health parameters.

### **Calf Health Evaluation:**

A total of 426 calves were health scored in 27 facilities, with an average of 16.8 calves evaluated per farm (range = 9 to 22). The mean respiratory score was 2.8 with a range of 0 to 9; 14.5% of calves evaluated scored  $\geq$  5, indicating they have a respiratory challenge and should be treated (Figure 1).



Prevalence of respiratory illness among calves ranged from 0 to 46% on a farm basis (mean 15.0%), with eight farms having no respiratory illness, and six farms having 30 to 46% of evaluated calves exhibiting signs of respiratory illness (Figure 2).



Calf health score was impacted by housing, bedding, number of calves per pen, NH<sub>3</sub> concentration, temperature, and wind chill (at calf level). Calves housed in hutches had greater (worse) health scores as compared to those in group pens, while calves in individual pens did not differ in health scores from their counterparts. Risk of health score  $\geq$  5 increased if calves had a body condition score  $\leq$  2, if ammonia concentration in the pen was > 1 PPM, and if calves/pen was > 5.

The percentage of sick calves/farm was impacted by housing system, bedding, number of calves per pen, ammonia concentration (in the pen), nesting score, temperature, wind chill, and humidity.

#### **Conclusion:**

Individual calf health scores are impacted by both environmental and management factors. These factors vary from farm to farm and by season. Housing systems continue to have a great impact on calf health score. From an environmental stand-point, ammonia concentration, temperature, wind chill, and humidity (all in the calf pen) impact calf health. Management factors including the number of calves per pen, bedding type, and nesting score all have an impact on calf respiratory health.

Prevalence of respiratory illness continues to be a challenge for NNY dairy farmers. Mean respiratory scores, and overall percentage of calves evaluated with a respiratory score of 5 or greater increased from summer 2015 to winter 2016. The management factors and environmental factors that impacted respiratory health changed based on season. Knowing what factors have the greatest impact on calf health will help farmers manage seasonal changes and hopefully improve respiratory health in the future.

If you are interested in participating in the next round of calf health research, or would like an evaluation done on your farm, please contact Kimberley Morrill at 603-568-1404 or kmm434@cornell.edu.



## Farm Drainage Systems

-GPS- Tile Installation-



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## **Dairy Webinars** By Lindsay Ferlito

For some producers, getting off the farm to attend a workshop or seminar can be challenging to say the least. Thankfully there are several resources available that producers can access at home anytime. The sites below (listed alphabetically) offer FREE webinars with information on almost everything dairy related, including facility design, cattle behavior, animal care and health, calf management, nutrition, financing, and labor. Some offer webinars in both English and Spanish. For most sites, you can either watch the webinar live as it airs, or watch an archived recorded webinar anytime.

### **Cornell PRO-DAIRY Dairy webinars**

https://prodairy.cals.cornell.edu/production-management/dairy-webinars

### **Dairy Herd Management Webinars**

http://www.dairyherd.com/webinars

### eXtension Dairy Video Archive

http://articles.extension.org/pages/15830/dairy-video-archive

### Hoard's Dairyman Webinar Series

http://hoards.com/flex-309-Webinars.html 2<sup>nd</sup> Monday of each month, 1-2pm EST

Merck Dairy C.A.R.E. & FARM Animal Care Webinar Series

http://nationaldairyfarm.com/merck-training-materials

## Penn State Extension Technology Tuesday Webinar Series

http://extension.psu.edu/animals/dairy/courses/technology-tuesday-series One Tuesday a month, 8:30-10:30am EST

## Antibiotic Stewardship: Protocols, Treatment Records & Residue Avoidance

By Dr. Kimberly Morrill, Ph.D.



The U.S. dairy industry is committed to producing safe, abundant, and affordable milk and dairy beef of the highest quality. Healthy animals mean safe food, and disease

prevention is the key to keeping cows healthy. Among the measures available to treat and prevent the outbreak and spread of animal diseases in the nation's dairy cattle, the responsible use of antibiotics has a positive effect on animal health and well-being while keeping the milk supply safe for everyone. When dairy animals get sick and treatment is necessary, producers and veterinarians use drugs judiciously. Antibiotics should be used appropriately to prevent residues from occurring in milk or dairy beef sent to market.

#### Why should dairy farmers be concerned about this issue?

Misuse and overuse of antimicrobials is one of the world's most pressing public health problems – this goes beyond the individual dairy farmer's actions and extends across all livestock production, companion animals, and human use of antimicrobials. In the dairy industry the Pasteurized Milk Ordinance (PMO), requires that all bulk milk tankers be sampled and analyzed for beta-lactam drug residues before the milk is processed (some processors may require additional testing). Any tanker that tests positive is rejected for human consumption.

While dairy farmers like to focus on milk, we also need to think about meat residues. Nearly 3 million adult dairy cattle enter the beef supply every year. While drug residues in dairy beef have decreased over the last few years, the percentage of dairy cattle (and cull calves) that have a positive residue is much greater than beef cattle. Selling animals for food with antibiotic residues above the set tolerance is illegal and causes adulterated food.

#### Prevention is key:

The prevention of milk and meat antibiotic residues takes a team effort that begins with the Veterinary Client Patient Relationship (VCPR). The dairy farm owner(s), herdsman, manager, or other employees must work with the herd veterinarian to develop an individualized herd health plan, with treatment protocols that ensure judicious use of antibiotics. Protocols ensure that cattle are treated in a

#### Best management practices to avoid drug residues:

- 1. Establish a valid VCPR
- 2. Use only prescription drugs, or FDA-approved over the counter drugs with veterinarian's guidance.
- 3. Administer all drugs properly and identify all treated cows.
- 4. Maintain and use proper treatment records on all treated animals.
- 5. Implement employee/family training of proper drug use to avoid marketing adulterated milk and meat products.
- 6. Use drug residue screening tests.
- 7. Market only healthy cattle.

manner that is legal, minimizes the risk of residues, and treats the illness. All employees or family members who treat cattle should be trained on the protocols as well as made aware of the importance of treatment records and the consequences of marketing adulterated milk or meat.

Identification of treated animals and treatment records are an essential way to reduce the risk of a residue. Withholding times are never decreased for meat or milk from treated

animals. Milk from treated dry cows, newly purchased animals, animals treated in an extra-label manner or even animals treated according to directions, should be tested for residues prior to entry into



the bulk tank. To reduce the risk of meat residues, always follow the withdrawal times. Make sure cattle have a body condition score of 2 or more, are well hydrated, and alert. Ensure that calves are not fed antibiotic waste milk and sent to slaughter before the withdrawal time is met – yes a calf can have a positive residue if fed waste milk.

## Treatment records: What to include and how long to keep them?

Treatment records can help dairy producers (and livestock producers) easily know what animals have been treated, which drugs were used, and what the withdrawal period is for each treatment. Inadequate drug treatment records can increase the risk of milk and meat residues.

Animal treatment records need to be easily accessible and should include:

- Animal ID who was treated
- Why the animal was treated
- What drug was used to treat the animal
- Date the drug was given
- Dosage and route of administration
- Milk and meat withholding times
- Who treated the animal

#### NYSCHAP - Sample Treatment Records

Daily Treatment Record med					_ 1929 have				۲			
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#### Reducing the risk of a residue:

Common causes of illegal tissue residues include: exceeding the drug's approved dose, as the labeled withdrawal period may not be long enough to allow the drug to metabolize and residues might be present for a longer time frame; using a shorter withdrawal period than what's stated on the drug's label; using a drug in an extra-label manner without a veterinarian's involvement; giving a drug not approved for that species; using an unapproved route of administration; or giving a drug by mistake.

Prevention, protocols, proper use of antibiotics, identification, treatment records, and working with your veterinarian all help reduce the risk of a drug residue in milk and meat and help maintain consumer confidence in our food supply.



Taken at Deer Valley Trails

Photo by Roger & Amy Cook Photography, Gouverneur, NY

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# Livestock

## **Colostrum and Calf Productivity in Our Cow/Calf Operations** By Ron Kuck

In the dairy world, monitoring newborn calves for Ig (immunoglobulins or antibodies) absorption from colostrum is very common. Calves that do not receive adequate levels of Ig from colostrum can experience increased sickness and mortality. It has also been researched that colostrum is crucial for the newborn calf to enhance feed efficiency, health, and later life performance. It is reasonable to assume the same holds true for beef cattle.

Failure of Passive Transfer (FPT) or inadequate absorption of Ig following birth is relatively common among beef calves. There are surprisingly few peer- reviewed publications assessing passive transfer in beef calves and the majority of research is aimed at dairy herds. However, older studies have determined that the rate of FPT in beef calves can run between 11% and 31%.

Calf managers on dairy farms draw blood from about 10% of their calves to assess FPT. This might not be practical on most beef farms, so how should you assess Ig absorption? "The time to stand and the time to nurse" says Dr. Victor Cortese, DVM, of Zoetis, "is an important number to know to judge your calves Ig absorption." His presentation at this year's NY Beef Producers Association Annual Meeting had me thinking about all the great calf nutrition research being done by Dr. Mike Van Amburgh and others at Cornell, all relatable to our beef herds.

Beef calves should stand and nurse within 2 hours of birth if everything is normal and weather is not severe. For maximum antibody absorption, calves need to nurse within four hours of birth. By 12 hours, the calf's ability to absorb antibodies from colostrum is reduced by 50%, and by 24 hours they cannot absorb antibodies (see chart below).



Calves that have high antibody levels in their blood stream by 24 hours after birth are less likely to get scours and will grow faster than calves with low antibody levels. Calves that don't get enough colostrum in the first 12 hours are more likely to have scours and respiratory problems. Research at the Clay Center, Nebraska USDA experiment station compared beef calves with adequate serum Ig concentrations to those with inadequate passive immunity (FPT). Calves with FPT were 6.4 times more likely to be sick within the first 4 weeks of life and 5.4 times more likely to die before weaning. Also, weaning weights of calves with FPT were 35 pounds less than calves with adequate passive immunity.

The first 24 hours is a good time to give the calf a tag for ID and any other processing you normally do. You can then check on your calf that looks cold, hunched up, and droopy. A quick check of the mom's udder (either tight and overfull or flat and milk-less) will often reveal the reason this calf looks hungry and unhappy. That cow and calf need to be put in a pen or barn and observed to see if the calf is nursing and if the cow accepting the calf.

The antibodies from colostrum protect the calf until the active immunity from vaccination and boosters can take over (see graph below). Calf survival rates are better than 96% when Ig levels from colostrum are at high levels (see graph below).

## **Colostrum and Survival**



Hours after birth

12

20 10

0

6

48

24

The calf's first 24 hours of life are critical to their lifetime health and productivity. The calf should double its birth weight by day 56, but if it was sickly, it may fail to achieve that. By day 60 you will have set how that animal is going to perform.



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## **Got Gas?** By Paul Hetzler

Some foods give you gas, but this is the time of year when gas gives you a really delicious food. Maple syrup, which is nutritious enough to be listed by the USDA as a food (I say it deserves its own Food Group designation), is gas-powered. Carbon dioxide-powered, to be specific. If it wasn't for a bunch of little gas bubbles in the xylem tissue, maple sap would not flow. Who knew that wood was carbonated? A mere ten or so years in the past, science was at a loss to explain what causes maple sap to run. I always like it when people who are smarter and better-paid than I am don't have the answer either. We all know that below-freezing nights and warm days lead to sap flow. But it wasn't until recently that the mechanism behind sap flow was understood.

Throughout sugar maple's range, maple production has been economically important since Native Americans first taught European settlers how to gather maple sap to make syrup and sugar. Back then it involved placing red-hot stones into containers of sap to boil it down. We're all thankful that technology has improved. Today's maple producers have reverse-osmosis units, vacuum pumps, and efficient highcapacity evaporators.

Aside from maple, very few tree species have a spring sap run. Birch and butternut are exceptions, but their roots generate pressure that forces sap upward, which is not the case in maples. It turns out maple sap flow is due to the way its wood interacts with freeze-thaw cycles. In biology we learned that wood, or xylem, is responsible for upward transport of water and dissolved nutrients, while sugars move down through the phloem, the outermost layer of cells. Fortunately for us, xylem "misbehaves" during the spring sap run, ferrying sugars upward where we can get to them. Later in the season, xylem casually returns to the textbook model, acting as if nothing unusual happened.

Xylem is composed of several types of cells, including vessels to transport liquid, and fiber cells to provide strength. Unlike most trees, maples have fiber cells which are partially gasfilled. Carbon dioxide and other gases in those fibers are critical to generating flow because they dissolve in sap. The geyser that results when we open a seltzer bottle (especially a warm one) too fast is a reminder that plenty of carbon dioxide can dissolve in water. If that bottle is icy cold, the risk of a gusher is low because cold water holds more dissolved gas. During the night, gases in fibers shrink as they cool, eventually dissolving into sap in the vessels. This contraction of gases causes the tree's internal pressure to drop, creating a suction that draws sap up from the roots. As the temperature warms in the morning, gases bubble out of solution and expand, increasing the tree's internal pressure and forcing sap out the tap hole at about 15 pounds per square inch (psi) on average, occasionally up to 40 psi.

Rather than flowing up from the roots and out the tap during the day as was once commonly thought, sap actually flows down from the crown (in addition to some lateral flow) toward the tap hole. When a warm day follows a sub-freezing night, sap may run for a few hours or up to several days, depending on the tree, and factors like barometric pressure changes. If temperatures remain warm at night or below freezing during the day, sap will not run.

Using vacuum changes this picture because it reduces a tree's internal pressure. A tap hooked up to vacuum will yield twice as much sap as one that isn't. Even a sapling will yield quite a bit sap if vacuum is applied to its severed trunk. Of course it will have a very short life—a tree needs a full complement of leaves to produce enough sugar to support itself.

All native maples yield sweet sap. Although sugar (hard) and black maples are most commonly used, producers will also tap silver and red maple if available. Even the much-maligned boxelder belongs to the genus *Acer* and can be tapped. Also, though I hesitate to admit it, the Norway maple, which along with its red-leaf cultivars is listed as an invasive species, can be used.

Maple sap is two to three percent sucrose on average, although sugar content can range from one up to ten or more percent. In addition to sugar, sap contains organic acids, amino acids, minerals and other compounds, many of which contribute to maple's flavor. During the boiling process, insoluble sediment composed of sugar and calcium maleate forms. This is called niter or sugar sand, and is filtered out.

If tasting great is not incentive enough to use maple syrup, consider its health benefits. One 100-gram serving of maple syrup provides more than 100% of the recommended daily amount of manganese and riboflavin (vitamin B-2), and is a significant source of magnesium, zinc, and calcium. In 2016, a Toronto-based research team announced they had identified a compound in maple syrup that may inhibit beta-amyloid brain

proteins from clumping, which could help prevent Alzheimer's disease.

The freeze-thaw, dissolved-gas, pressure-differential explanation of sap flow has some holes, though. While the mechanism should work with pure water, it turns out that sap only flows if it has a minimum level of sucrose. Flow should also happen in all xylem tissue, not just the living sapwood, but that's not the case either. So the mystery of sap flow continues. Sometimes it's a relief not to have all the answers.

In recent years, a higher percentage of maple producers have been branching out, you might say, into value-added products like maple cream and candy. Another item gaining in popularity is maple sap. Fresh sap is filtered, bottled, pasteurized, and then—of course—carbonated. What goes around, comes around, it seems.

# Farm Business

## 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 partial budgets:

- **Partial Budget** A budgeting tool used to evaluate incremental or single changes on a farm that looks at only the financial factors that are affected by the desired change. This is done to evaluate the financial feasibility or "payback" of this incremental or single change. The primary factors that are affected by the desired changes are as follows:
  - 1. Increase in income
  - 2. Reduction or elimination of costs
  - 3. Increase in costs
  - 4. Reduction or elimination of income
- ⇒ The above effects are combined taking the positive financial changes minus the negative financial changes to determine if the overall impact on the business is positive or negative. Another important factor to remember is even if the impact overall is not positive, the investment or change may still be worthwhile.
- Increase in income this is an estimate of the increase in income from the desired change or investment to the business. Some changes being evaluated will not add income, but rather reduce costs, such as a purchase of equipment (unless the equipment will be used in custom harvesting).
- **Reduction in costs** this is the amount which the investment or change will increase efficiency and hence decrease costs. An example would be an increase in milking parlor size that allows you to hire less labor, and labor costs would go down.
- Increase in costs this is the estimate of the increase in costs from the change/investment. For example, if you were to increase herd size, the associated increased costs of feed, bedding, etc. would go under this category.
- **Reduction in income** this is the estimate of the reduction in income the change or investment may have.



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## **Dairy Goat Field Day and Workshop**

Two programs are scheduled for Wednesday April 19, 2017

Daytime Session 10:00am to 12:00pm FREE!

Dairy Goat Field Day - For any youth interested in getting started with dairy goats (adults also invited to attend)

Blake and Andy Place / Hidden Pastures Goat Dairy State Route 12 Glenfield, NY

- Start-up dairy with milking facilities
- Housing & herd management

Evening session 6:30pm - 9:00pm \$5 per farm. Youth free.

Farmstead Processing - Selling milk and milk products to the public (Youth also invited to attend)

Lewis County Cooperative Extension

5274 Outer Stowe Street, Lowville

- Regulations and standards of goat milk production.
- Marketing and costs of production

Guest speakers:

Anika Zuber; Harvest NY Dairy Processing Specialist Gregory Kulzer; NYS AG & Markets

Contact:

Ron Kuck - Dairy / Livestock Educator; CCE Jefferson County & North Country Regional Ag Team 315-788-8450 (office) 315-704-8810 (cell) <u>rak76@cornell.edu</u> Mellissa Spence - Sustainable Agriculture Educator; CCE Lewis County 315-376-5274 <u>mms427@cornell.edu</u> Betsy Hodge - Livestock Educator CCE St. Lawrence 315-379-9192 <u>Bmf9@cornell.edu</u>



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# Harvest NY

## What actually is "USDA inspected meat"? Part 1– The USDA Slaughter Process

By MacKenzie Waro

Over the past year, many producers have asked me what is the difference between USDA inspected meat, and 'custom' meat. If producers are not sure what the difference is, then how is the end consumer supposed to know? It is the job of the producer to know about the differences in meat slaughter and processing in order to educate our local and global consumers.

The United States Department of Agriculture division on Food Safety and Inspection Services (USDA FSIS) is tasked with regulating animal slaughter and processing, as well as the safety of the meat products. There are currently 37 USDA inspected slaughterhouses throughout New York State. Each house has a USDA inspector, along with a USDA vet. The inspector is present for every kill and every slaughter. If an inspector is not present for the slaughter, the animal cannot be stamped as USDA inspected. Every carcass is inspected for safety standards. The carcass may be swabbed for bacteria, antibiotic residue, and is searched for any questionable issues (such as cancer cells). Every animal is inspected 'antemortem' which means the animal is inspected alive and must be healthy before being slaughtered.

The USDA inspectors are also tasked with making sure the plant is following their HACCP (Hazard Analysis Critical Control Points) and SOPs (Standard Operating Procedures), which include sanitary and good management practices. This is to insure that all the meat coming out of that inspected plant is at the highest form of food safety for the end consumer. If a carcass looks suspicious in any way, the USDA vet will ask for the carcass to be removed, segregated, and disposed of. If the vet agrees that the carcass needs to be condemned, the carcass will not enter the food supply. Because of bovine spongiform encephalopathy (BSE/Mad Cow), cattle appearing symptomatic, or 30 months of age or older, will have their spinal column removed at time of slaughter. As a producer, it is important to have birth records on your animals. If you do not have birth records and the USDA inspector says your beef steer is 30 months or more, but they are only 24 months, who do you think will win the argument? The USDA inspector and vet will, because it's their duty to err on the side of caution. Birth records must accompany the animal at the time of slaughter. You want to get the most money for

your animals; having the birth record if the animal is under 30 months will save the meat from the entire spinal column. According to the FSIS website, "if the establishment fails to maintain sanitation, does not follow its HACCP plan, or violates other regulations, FSIS inspection program personnel will issue a citation to the establishment in the form of a noncompliance record to document the noncompliance. If necessary, they could also take regulatory control action." This means that parts, if not all of the plant can be shut down. The USDA plant must follow their HACCP plans, and agree and abide by all FSIS regulations.

USDA inspected red meat can be sold at farmer's markets, stores, shipped across state lines, and is regulated to the highest food safety standards. If you would like more information on USDA slaughter guidelines, please visit, <u>https://www.fsis.usda.gov/wps/portal/fsis/home</u>.



#### Residential Agricultural Discount Program Lindsay Ferlito

New York State is offering the Residential Agricultural Discount Program for 2017. Fill out the form, attach your Schedule F (Profit or Loss From Farming), and submit by July 1, 2017, to start receiving a discount on your monthly energy bill starting in September. Remember, you must apply each year, so don't forget to reapply for 2017. For more information, visit https://www.nationalgridus.com/agricultural-discount. For NYSEG customers, visit http://www.nyseg.com/resagriculturaldiscount/.

## Application for Residential Agricultural Discount (RAD)

nationalgrid

In accordance with Rule No. 46.2.6.7 of P.S.C. No. 220 - Electricity, the electric schedule for retail service of Niagara Mohawk Power Corporation d/b/a National Grid (the "Company") filed with the New York State Public Service Commission, applicant is applying with the Company for the Residential Agricultural Discount ("RAD") Program. Applicant must fill out this form and supply the Company with either:

- A copy of the Applicant's most recent Internal Revenue Service ("IRS") Schedule F (Form 1040), Profit or Loss From Farming, as filed with the customer's most recent federal income tax return, or
- 2. A Form 1120, 1120S, or 1065 as filed with the customer's most recent federal income tax return.

The Business Activity indicated on the form must be one of the Business Activity codes listed below: Agriculture, Forestry, Fishing and Hunting Crop Production

111100 - Oilseed & Grain Farming

111210 - Vegetable & Melon Farming (including potatoes & yams)

111300 - Fruit & Tree Nut Farming

111400 - Greenhouse, Nursery, & Floriculture Production

111900 - Other Crop Farming (including tobacco, cotton, sugarcane, hay, peanut, sugar beet & all other crop farming)

#### Animal Production

112111 - Beef Cattle Ranching & Farming

#### 112112 - Cattle Feedlots

112120 - Dairy Cattle & Milk Production

112210 - Hog & Pig Farming

- 112300 Poultry & Egg Production
- 112400 Sheep & Goat Farming
- 112510 Aquaculture (including shellfish & finfish farms & hatcheries)
- 112900 Other Animal Production

#### Forestry and Logging

- 113110 Timber Tract Operations
- 113210 Forest Nurseries & Gathering of Forest Products
- 113310 Logging

#### Fishing, Hunting and Trapping

- 114110 Fishing
- 114210 Hunting & Trapping

The Applicant must reapply for the RAD Program on an annual basis by providing the most recent Internal Revenue Service ("IRS") Schedule F (Form 1040), Form 1120, Form 1120S or Form 1065 at least sixty days before the expiration date of the RAD credit.

# nationalgrid

# **Residential Agricultural Discount**

## Customer Information: (please print clearly)

National Grid Account	the first page of your National Grid bill)						
Name:		<b>-</b>					
Address:	Last Name	First Name	Middle Initial				
Addressi	City	State	Zip				
Phone Number:		Email Address:					
The Company will provide the Applicant with an acknowledgement copy of this application upon review and verification that the applicant is eligible to receive the RAD. DECLARATION: (please read and sign) I agree by signing this form that the proof provided to Niagara Mohawk, d/b/a National Grid qualifies me to receive the RAD discount. I understand that if I receive the discount without qualifying for it, I may be required to pay back the discount I received. I declare under penalty of perjury under the laws of the State of New York that the information I have provided in this application is true and correct.							
Signature:							
MMDD/YYYY Please submit your completed application and supporting documentation to National Grid via:							
National Grid Accounts Process ResAgriculturalDi 300 Erie Blvd W Syracuse, NY 133 ResAgriculturall Fax: 315-477-779	sing C-1 iscount 202 Discount@nationa 92	algrid.com					

## New York State **Crop Insurance** Basics 2017



## Why crop

#### **Crop Insurance Deadlines 2017** 2/1: Onions

3/15: Barley (spring), Beans (dry, green - processing, green - fresh), Cabbage, Corn, Forage Seeding (spring), Grain Sorghum, Green Peas, Oats (spring), Potatoes, Soybeans, Sweet Corn (fresh-market, processing), Tomatoes (processing), Whole Farm Revenue 5/1: Nursery (field grown and container)

7/31: Forage Seeding (fall)

9/30: Barley (winter), Forage Production, Wheat (winter)

11/15: Apiculture, Pasture and Hay

Monthly: Dairy, Swine (Livestock Gross Margin)



SD

Whole Farm Revenue Protection allows diversified growers to insure their whole operation rather than individual crops.

**Managing Drought Risk** By December 2016, New York state producers had received over \$8 million in 2016 drought-related indemnities.



## Job Opportunity

Field Enumerator position open for St. Lawrence and Franklin counties. Work is intermittent part-time collecting data for USDA reports. Reliable transportation with clean registration, license, and insurance required as

is occasional out-of -area travel for training. Ag background and basic computer skills beneficial.

Compensation is an hourly wage and mileage reimbursement. If interested contact the field supervisor at grjarcher@aol.com or at the below phone numbers.



USDA/NASS Northeastern **Regional Office** 

**Dale Archer** Supervisory Enumerator

Office: (518) 457-5570 Albany, NY 12235 www.nass.usda.gov/ny

Enumerator: Phone: (315) 528-0955 Watertown, NY 13601

NASDA





The Ag PhD Field Guide app allows growers to easily identify pests in the field. The app provides a library of weeds and insects by name/ photo and offers control recommendations. Users will also have access to the latest agronomy information through regular newsletters. This is a good app for insect pest detection.



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# 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 tim92@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 AE	):
·····				

Cornell Cooperative Extension Associations of J Cornell Cooperative Extension Associations of Jefferson	efferson and Lewis Counties reserve the right to reject any adv n and Lewis Counties do not endorse any advertised product o	vertisement deemed unsuitable for our publication. r business. We are providing an informational service only.			
Livestock	Farm Machinery, Equipment, and Supplies	How to Advertise in NNY Regional Ag Classifieds			
FOR SALE: Piglets \$30.00 for 30 pounds. Muscovy ducks \$10.00 each. Contact Enose Miller.	<b>FOR SALE:</b> Complete DeLaval milking system, vac pump 2 motors, 200' pipeline + vac line vats, hot water heater tank and washer. 6 units	<b>Farmers:</b> Advertising in NNY Regional A Classifieds is <b>FREE</b> for farmers. To place a advertisement, email details to Tatum Langworth at <u>tIm92@cornell.edu</u> by the second Monday of the month before you want your ad to appea			
Crops	pre-cooler. Call 315-642-3381.	Publication is the first week of every month. <b>Fine Print:</b> To qualify for free advertising, you			
FOR SALE: Horse oats-recleaned aged whole white oats. 40lb bag, \$6.00. Call 315-654-2405.	Complete unit, CCW chain, already removed from barn. Call 315-348- 8184.	<ul> <li>must meet all of the following criteria:</li> <li>You must own, rent, or be employed on a farm.</li> <li>Your farm must be actively engaged in the</li> </ul>			
FOR SALE: Forage oat-spring white,	Wanted to Buy	milk, meat, eggs, produce, animal by-products, or feed, etc.			
wt., & 7.50/bu. Call 315-654-2405.	Triple or Double High Round Corn Crib. Call 315-767-3084.	<ul> <li>Your goods must relate to farming.</li> <li>Anyone wishing to purchase a larger display ad in</li> </ul>			
<b>FOR SALE:</b> Hay 600-800 square bales. Call 315-386-3826.		the newsletter, should call Tatum Langworthy a (315) 788-8450 for more information. All income generated from the sale of ads goes to support			
FOR SALE: 1st, 2nd, 3rd Dry Wrapped	as siding, kitchen cabinets, and insulation. Call 315-771-3397.	publication and mailing costs.			
Round Bales, VG Quality, Delivery Available. Call 315-346-1741.	<b>FOR SALE:</b> Organic eggs, \$0.79 per	NNY Regional Ag reserves the right to reject any advertisement deemed unsuitable for our			
<b>FOR SALE:</b> Barley straw for sale. 150-200 small square bales. Call Arnold Chapin, 315-854-4513.	dozen. Call 315-771-3397.	publication. NNY Regional Ag does not endorse any advertised product or business - we are providing an informational service only.			

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

# What's Happening in the Ag Community

Dairy Goat Field Day and Workshop, see page 14 for more information.

Sheep/Goat Week, April 5, 2017, at 7pm, CCE of St. Lawrence County.

Dairy Goat Meeting, April 7, 2017, at 7pm, Malone Court House.

Dairy One Annual Meeting & Dinner, April 7, 2017 at 7pm, Elk's Club, Watertown, NY Contact Dan Reed for more information 315-767-1296 or reedjoanne9@gmail.com.

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