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By law and purpose, Cooperative Extension is dedicated to serving the people on a non-discriminatory basis. Newsletter layout and design by Katelyn Walley-Stoll.

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CROPS COWS & CRITTERS newsletter

For accommodations or accessibility concerns, please contact our specialists at least one week prior to the scheduled event. If you need information provided in a different format, call 716-640-0522.

ALFALFA SCOUTING

We are looking for alfalfa field to scout throughout the region. Scouting entails:

- Measuring the height of the alfalfa to help determine estimated NDF value

Utilizing a sweep net to measure Potato Leafhopper populations

CALL KATELYN MILLER



716-640-2047

km753@cornell.edu

NEW YORK PORK PRODUCERS 2024 ANNUAL MEETING

Saturday, March 23rd The Lux Hotel & Conference Center 2468 NY 414 Waterloo, NY 13165

Registration opens at 8am, day-long program begins at 9am. Lunch is included.

Pork Producers interested in current swine production and youth interested in swine showmanship are invited and encouraged to attend. You do not have to be a member of NYPP to attend.



Pre-registration is encouraged. To register, fill out the form at the bottom of the page on https://newyorkpork.org/. Donations for the silent auction are open to everyone and appreciated! If you have any questions, please contact Krista Jaskier at info@newyorkpork.org.

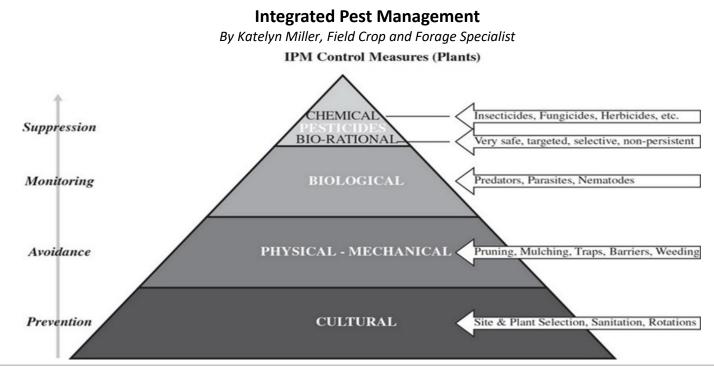
SCHEDULE

- Dr. Todd Price from North Central Vet in Ohio will present on Swine Diseases and Vaccinations and Swine Breeding.
- The National Pork Board and The National Pork Producers Council will be giving an update on all current issues in the pork industry.
- We will be featuring a Producer Spotlight and Q&A session with producers in NY.
- NEW THIS YEAR We will be hosting a Youth Swine Clinic and YQCA training session.

We're interested in scouting your alfalfa fields. Contact Katelyn Miller for more information at 716-640-2047 or km753@cornell.edu!



The NYPP meeting is free of charge and provides a networking opportunity with various facets of the industry. If you need assistance registering contact Amy Barkley 716-640-0844 or amb544@cornell.edu.



There are various steps to an IPM plan. They include preparation, identification, sampling, analysis, management alternatives, implementation, and re-evaluation. They all serve an important role in a complete IPM plan.

According to the National IPM Network, Integrated Pest Management (IPM) is a sustainable approach to managing pests by combining biological, cultural, physical, and chemical tools. These tools should be used in a way to minimize economic, health and environmental risks. Our main goal is to prevent pests from reaching economically damaging levels. Let's review the various management tools in our IPM toolbox.

Cultural practices help prevent a pest outbreak from happening. Some management tactics include crop rotation, seeding rates, and equipment sanitation. **Physical** (also known as mechanical) practices involve physically managing a pest. Examples of different management practices include hand weeding, mowing, and placing traps. Cultural and physical management practices focus on preventing pest issues from developing. **Biological** control involves the use of beneficial insects to control a pest. For example, lady beetles serve as a natural predator to soybean aphids. **Chemical** control involves utilizing different pesticides. Most commonly in field crops, that includes insecticides, fungicides, and herbicides. Relying on chemical control rarely succeeds in controlling pests.

PREPARATION: Before anything else, it's important to understand what information you might need. Your Cornell Cooperative Extension staff is always happy to help provide information. Research crop development,

Our goal for using IPM is to prevent pests from reaching economically damaging levels with the least risk to people, property, and the environment. understand field history, and learn different sampling methods for different pests.

IDENTIFICATION: Correct identification is the most important step in controlling a field problem. An incorrect diagnosis leads to mismanagement. After identifying the pest, learn about its biology. This will help you understand pest damage signs and susceptible crop stages.

SAMPLING: Sampling takes the guesswork out of pest control by quantifying the problem. Make sure to use the proper sampling method(s) for the right pest. Using the right method will allow you to accurately quantify the damage.

- Insect sampling can involve utilizing sweep nets or variations of traps (sticky, pheromone). Scouting will look different depending on if the insects are mobile or immobile.
- Disease sampling takes place throughout most of the growing season. This is because each disease is favored by different environmental conditions. Diseases can be present in patterns or randomly distributed.
- Weed sampling should be done in the spring and fall to gather information about the different species present. We want to document weed type rather than the count of each species.

ANALYSIS: This is your chance to decide how bad the problem really is. Weigh economic,

environmental, and time concerns when making

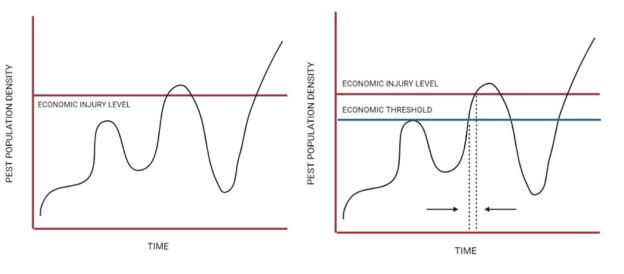
Contact Katelyn Miller at 716-640-2047 or km753@cornell.edu for more information about Integrated Pest Management and its applications for your farm.



the decision to control. Use thresholds to make the decision to spray. They allow us to avoid unnecessary applications reduce the

applications, reduce the risk of environmental impacts, avoid risk to non-target organisms and reduce the risk of pesticide resistance.

• The Economic Injury Level (EIL) is when the cost of pest control equals



savings from crop damage avoided. This is also known as the break-even point.

- Economic Thresholds (ET) are when the pest density is at a point at which control action must be taken to avoid economic loss. These are lower than the Economic Injury Level to give time to discover there is a problem and act.
- For example, the ET for soybean aphids is 250 aphids/ plant, but the EIL is 670 aphids/plant. If we waited to treat until the aphid populations reached 670 aphids, we would experience economic loss. With that, it's also not economical to treat before we reach the ET for the pest.

MANAGEMENT ALTERNATIVES: When action is needed, a strategy should be chosen that fits with your short and long -term goals, labor, capital, equipment, and finances. Look at the costs, benefits, and risks of different management strategies.

IMPLEMENTATION: Now it's time to implement your chosen strategy or strategies. Make sure to implement any changes at the right time for the best control.

<u>RE-EVALUATION</u>: Finally, we must evaluate our management strategies. Did everything go the way it was supposed to? Did the pest get controlled? Looking back at what you did enables you to learn from experience and find ways to improve management skills in the future.

It's important to remember that IPM is a philosophy that identifies and corrects a problem. There is no "cure-all" and eradication is seldom necessary. Our goal is to prevent pests from reaching economically damaging levels with the least amount of risk. In general, the goal is to integrate a variety of management tactics that best fit your situation.

For more information about IPM, contact Katelyn Miller 716-640-2047 km753@cornell.edu. •



integrate a variety of management tactics that best fit an individual situation.



In general, the goal is to integrate a variety of management tactics that best fit your situation. This is likely a compromise between crop loss and cost.

Brix: The Solution to Grass-Based Finishing?

By Amy Barkley, Livestock Specialist

I was sitting at the kitchen table with one of our region's farmers a few months ago, and we were discussing how to get a better and earlier finish on his grass-fed cattle. Typically, with grass-based finishing systems, producers have to wait until cattle are around 30-36 months old to process in order to achieve the weights and marbling preferred by many clients. This puts the producer in a pickle.

First, grass fed animals need to be maintained for about twice that of a traditionally finished animal. That means the producer needs to charge substantially more for their product to make up the difference of feed, housing, and care.

Second, the turnaround time for grass-fed animals is much longer, meaning that customers may have a longer wait for their beef, especially if a herd is small and the customer base is large.

Third, if the animal is 30 months or older when processed, the butcher is required by law to remove the spinal column, meaning no bone-in steaks.

Fourth, as the animal ages, it takes on a flavor and texture that can be more robust than that of beef many grain-finished customers are used to.

For all of these reasons, it makes all of the sense in the world that we would want to decrease the finishing time of grassfed beef. But, how do we do that?

Most grass-fed systems require that the animal be fed forages for the vast majority of its life, including through finishing. There are two main nutrients in forage that we need to concern ourselves with: Protein (CP) and Energy (TDN). In it's simplest terms, protein puts on muscle, energy puts on fat. As the animal goes from calf to finished animal, it's protein needs start high, and decrease over time. The opposite is true for energy. As the animal puts down more fat in the finishing phase, its energy needs increase. In cool season perennial pastures, we normally get enough protein, but the TDN is lacking for quick finishing.

Cool season forages grown in the Northeast are generally sufficient for weight gains of about 1-1.5 pounds a day on finishing animals. This unfortunately pales in comparison to gains from high energy, grain-based rations, which can get you in the 3.5-4 pound range for daily gains. Why is it that forages lag so much when it comes to putting on the pounds?

While protein levels in pasture and most stored forages is sufficient for muscle growth, they just don't have

Brix is not considered to be the most accurate test of forage quality, particularly for our region's cool season grasses. the energy needed for finishing. For instance, a finishing steer that you want to gain 3 pounds a day requires a TDN of 70% on a dry matter basis. If you are feeding that animal a diet with 50% TDN, expect gains of less than a pound a day. If you target 60%, that'll put you closer to 1.5 - 2 pounds a day.

Keep in mind that this is in ideal circumstances. If temperatures are outside those that are optimal for cattle, expect those gains to be less. In the harshest winter months, I've seen negative or near 0 gains for cattle in the finishing stages.

So, now the big question: how do we improve rates of gain for these critters? There has been much conversation around the Brix contents of the forages in the grazing community, which deserves some looking into. Brix is a term used to quantify the amount of dissolved sugars in a liquid sample (in this case, pasture plant juice). It's measured using an instrument called a refractometer, and can be used to compare the sugar content of forages. However, it's not very accurate for pasture forages, in part because it was developed to measure the sugar contents of fruit and honey. Pasture plants have about 1/4 - 1/3 of the free sugar concentrations of wine grapes, for instance.

In addition, Mississippi State and the US Department of Agriculture's Agriculture Research Service (USDA-ARS) share that Brix is highly variable in cool season pasture due to influences including time of day, ambient temperature, barometric pressure, soil moisture, drought conditions, fertilization, species, maturity, and human sampling error.

Furthermore, there is little research evidence to support how brix directly influences rates of gain in beef cattle. Based on the research I've read, it appears that until we understand more, the best way to add pounds to your cattle is not to focus on Brix measurements, but instead to focus on forage quality and TDN. So, as forage stand managers, we have to use tools that we already have in the toolbox to manage for the best cool season stand possible:

1. Manage pastures so that they don't over mature. Younger plants have less indigestible structural carbohydrates like lignin that are used to extend the plant stem in preparation for pollination/seeding. Younger plants tend to have less indigestible fiber, so they'll have a higher rate of passage, meaning that your animals will eat more forage per day and potentially get

more out of it. Furthermore, the consumption of

TDN is a measurement used to help estimate the energy in forages. If you're interested in testing the TDN of your stored forages, you can do so with sampling!



more readily available carbohydrates in the forage results in an increase in rumen microbes, which will increase organic acid production that is then used as energy by the cow.

- 2. Avoid grazing below 4" of residual. The lower you graze plants, the more they will naturally prune their roots, reducing the rate of regrowth and therefore making the stand take longer to replenish its free sugar content.
- 3. Nitrogen application will reduce the free sugar content in forages because the plant will be using its free sugars to grow. Nitrogen is good to increase tons/acre and increase protein content in forages.
- 4. Plant species that are known to have a high energy contents. You can work with your local seed dealer to identify species/varieties that have characteristics like a higher leaf to stem ratio, the ability to produce more digestible sugars, or mature later to give you a longer grazing window.

If you're open to planting summer annuals, species including sudangrass, forage sorghums, and legumes tend to have higher brix and TDN levels than perennial forages in part because of their tendencies toward more lush, vegetative growth. Annuals work for farms that have the open land and time to commit to harvesting forages at the ideal maturity stage for the best nutrition. Over mature summer annuals decrease in quality quickly once they move into their reproductive phases.

Through this article, I hope to have provided you with some ideas to increase the bang for your buck of your forage stands. We are continuing to look out for research on Brix and strategies to decrease the timeline for grass-fed finishing, so stay tuned!

References:

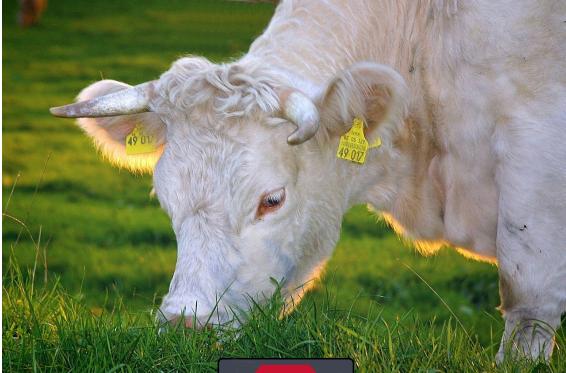
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If you want help testing your forage or interpreting forage reports, contact Amy Barkley by calling 716-640-0844.



Managing and finishing grass-fed cattle can be a challenge and a balance between economic returns and ideal finishing.

Check your farm shop for these things before a busy spring and summer season!

Inspect compressed air systems. Fix air leaks so it's not an issue when you want to use it.

<u>Check fire extinguishers.</u> Make 5 sure they are in the shop, properly inspected, and recharged.

<u>Consider upgrading lighting.</u> LED lighting is more efficient so consider upgrading your lighting fixtures and bulbs.

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<u>Make updates to heating and</u> cooling systems. Address any furnace issues now - don't wait until fall.

<u>CLean your computer space.</u> Make sure to clear out any clutter that doesn't belong.



Keep floor drains functioning properly. Make sure you won't have a backed up drain.

<u>Consider epoxy flooring</u>. Think about upgrading existing flooring, it's easier to clean.

<u>Make a master check list.</u> Before the summer workload hits, make a list of everything in the shop that needs servicing, repairing or upgrading.



Curated from article by Tom Bechman - Farm Progress

Have you ever heard the phrase that March "comes in like a lamb and out like a lion"? Even with the nice weather we've had, we should be prepared for more winter.



Use this checklist on a winter day to make sure that everything in your shop is operational before the busy spring season.



Hands-on Dairy Animal Care Training

9:30am to 3:00pm

Offered in English & Spanish at each site

Featuring stations with mostly hands-on activities and demonstrations

Who should attend:

- Dairy farm owners or managers that want to learn more about the FARM Animal Care Program and receive continuing education credits.
- Dairy farm workers with animal care responsibilities that want to learn more, gain hands-on experience, and receive continuing education credits.

Topics covered:

- FARM Animal Care Program Version 5.0 updates
- Physical exam and nonambulatory cow management
- Dairy stockmanship (heifers)
- Pre-weaned calf care
- Euthanasia
- Fitness for transport

Registration: \$15 per person (includes lunch)

For more information: Lindsay Ferlito, CCE NCRAT; Lc636@cornell.edu; 607-592-0290

Thank you to our generous sponsors!

Boehringer Ingelheim fairlife, LLC Cargill Farm Credit East Delaval Horizon Organic DFA Jefo Lactalis Novus Int Perry Vet Clinic Seedway Upstate Niagara Coop Zoetis

2024 Dates & Locations:

Northern New York

Mar 11 | Butterville Farm, 11279 County Rd 75, Adams, NY

Mar 12 | Beller Farm, 10300 NY 126, Castorland, NY

Register: <u>ncrat.cce.cornell.edu/</u> event.php?id=2314

South Central New York

Mar 13 | Glezen Farms, 1024 Caldwell Hill Rd, Lisle, NY

Mar 14 | Green Hill Dairy, 2288 Mosher Rd, Scipio Center, NY

Register: <u>scnydfc.cce.cornell.edu/</u> events.php

Central New York

Mar 15 | SUNY Cobleskill , 120 Saratoga Dr, Cobleskill, NY

Mar 22 | SUNY Morrisville Dairy, Co Hwy 103, Morrisville, NY

Register: cnydfc.cce.cornell.edu/ event.php?id=2344

Northwest New York

Mar 18 | Orleans Poverty Hill Dairy, 13646 West County House Rd, Albion, NY

Mar 19 | Lake Country Holstein, 4602 Yautzy Rd, Stanley, NY

Register: <u>nwnyteam.cce.cornell.edu/</u> events.php

Southwest New York

Mar 20 | R&D Adams Dairy Farms, 4435 Walker Rd, Randolph, NY

Mar 21 | Alfred State College Farm, 1254 SR 244, Alfred Station, NY

Register: <u>swnydlfc.cce.cornell.edu/</u> events.php

THE NORTHEAST GOAT & SHEEP DAIRY DEVELOPMENT GRANT PROGRAM IS NOW ACCEPTING APPLICATIONS

The Northeast Dairy Business Innovation Center is now accepting applications for their Goat and Sheep Dairy Development Grants, which can be used for both individual business projects and sector enhancement projects.

The deadline to apply is June 6.

Grant Overview & Eligibility

https://nedairyinnovation.com/grants/goatsheep-dairy-development/

How to Apply

- 1. Review the full Goat and Sheep Dairy Development Grant RFA (request for applications) for the complete details on eligible projects/applicants and the full application process.
- 2. Register in WebGrants (may take up to two business days).
- Complete your application in WebGrants using our Application Guide when it becomes available. The application will be open February 1 – June 6, 2024 at 2:00 pm ET. Please note that this grant application period has been extended from the original deadline.
- Applicants who do not already have a Unique Entity Identifier (UEI) through SAM.gov are strongly encouraged to start this process during the application period to ensure a timely start to their grant, if awarded.

Have a question about this grant?

Contact Kathryn Donovan kathryn.donovan@vermont.gov

HAZARD ANALYSIS CRITICAL POINT (HACCP) TRAINING PROGRAM FOR MEAT & POULTRY

Course registration fee: \$550

Registration includes coffee and bagels in the morning and lunch each day.

REGISTER: https://cvent.me/vrOQM3 by Friday, April 5th

There is still time to register for the Hands-on Dairy Animal Care Training! Call or email Kelly to save your spot klb288@cornell.edu (585-268-7644 ext 10). April 17th & 18th Cornell University Warren Hall 137 Reservoir Ave Ithaca, NY 14850

CROPS COWS & CRITTERS newsletter For more information about course content Martin Bucknavage mwb124@psu.edu 814-867-1839

> Questions about discounts Matt LeRoux mnl28@cornell.edu

HACCP is a critical part of your food safety plan as you scale up your food processing ventures. This training provides the highest level of support and resources.



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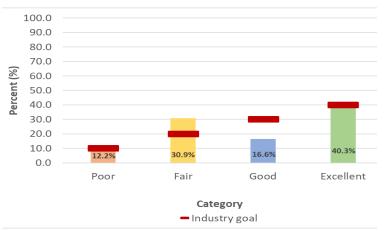
Lessons Learned From SWNY Calves' Transfer Of Passive Immunity Project

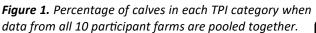
By Camila Lage, Dairy Management Specialist

After almost four months of "stabbing" calf necks to collect blood samples to evaluate the transfer of passive immunity in 10 farms across SWNY, it's time to reflect on our lessons learned. First, I would like to thank all the farms that participated in the project. I appreciate the time we spent together, during which I had the opportunity to meet you for the first time and/or to get to know you and your farm better.

To recap, this project aimed to survey the transfer of passive immunity in calves in our region. In 2020, researchers released new recommendations to measure success when evaluating colostrum programs on farms. Rather than using a cutoff point of > 5.1 g/dL of total protein to determine the success of passive immune transfer on an individual level, Lombard et al. (2020) recommended that we aim to have at least 40% of calves in a herd with serum IgG concentrations \geq 6.2 g/dL, and less than 10% with concentrations below 5.1 g/ dL. These new goals are driven by research demonstrating that higher serum IgG concentrations than traditionally recommended in dairy calves lead to improved health, increased disease protection, and, ultimately, lower morbidity rates. So, long story short, the project's goal was to give farmers a report on how they are doing on colostrum management in perspective to the new "goals."

When we pool the data from all farms, we have an average of 40.3% of sampled calves in the excellent category and just 12.2% of calves failing passive immunity (in the poor category). This is great! This shows how good farms in our region are doing based on the old and new standards and reflects the hard work I know you all do in caring for the animals and always ensuring you are caught up with the latest recommendations.





Thank you to all the farms that accepted participation in the project. We appreciate your help and the time spent at your farm.



In this article, I want to discuss some points I learned while doing the project. I would say that I had four major takeaway messages.

1. Awareness is the first step to improvement.

I am a very analytical person and love data. I know not everyone shares this passion with me, but we can all agree that "we can not manage what we do not measure." Once in a while, I "audit" specific areas of my life; this year, it has been my finances. Not surprisingly, I am overspending money. I already imagined that to be true, but learning how much money I spent on coffee still shocked me. Similarly, in farming, data can reveal areas that seem to be working but aren't, guiding us towards necessary changes to enhance our results. Remember that learning about a problem does not necessarily mean we will solve it (I still may be spending more money than I should on lattes). However, knowing something is a problem is the first step to solving it.

CROPS COWS & CRITTERS newsletter

10 - March 2024

2. Data may not tell the whole story, but it rarely lies.

Data is one piece of the equation, and in some instances, other factors will affect how it shows in real life. Examples in calf management include a farm with a high proportion of calves in the excellent category experiencing high rates of diarrhea and a farm with more failure in passive immunity than what we would like to see that only reports a few sick animals during the pre-weaning phase. Diseases are complex and often multifactorial; therefore, in addition to immunity, environmental challenges and other factors will play a role in morbidity. A good example is a healthy person who travels a lot, getting the flu more times than an immunocompromised person who never leaves home and rarely gets sick. Exposure to the agent will make the person who travels more likely to get sick; however, getting sick is more dangerous to the immunocompromised person. The same happens with calves. The fact that calves are not getting sick does not necessarily mean they are protected. You may have excellent environmental management that prevents them from getting sick. However, your mortality rates can still be high for the calves that do get sick. In both cases, the data can guide you in fine-tuning management. On one hand, knowing colostrum management doesn't seem to be a big issue, a better understanding of the pathogens affecting the calves and investing in measures that will help control those pathogens are the priority. On the other hand, reviewing colostrum protocols to increase herd immunity will help the farm reduce the chance of mortality of calves that get sick.



This project was free of cost to farmers thanks to our partnership with Steuben, Allegany, Cattaraugus, Chautauqua, and Erie counties.

3. Record-keeping and data management matters.

In this small project, farms that track colostrum data, including feeding schedules, feeders' information, and colostrum quality evaluations, had higher percentages of calves in the good and excellent health categories, regardless of farm size. While collecting and organizing calf data can be challenging, accessing historical data can be invaluable for monitoring progress and identifying issues. For instance, one farm noticed a pattern of calves being classified as fair rather than excellent on certain days. Upon investigating their records, they discovered discrepancies in the performance of different employees. This insight prompted the farm to review protocols with the underperforming employees, ensuring they followed all necessary steps for success with future calves.

4. Organization, protocols, and communication are essential pieces of calf management.

The book "Atomic Habits" by James Clear offers valuable insights into human behavior, particularly regarding habit formation. Applying its principles to calf management, three key steps come to mind: making tasks obvious, easy, and attractive. This involves establishing clear protocols for routine tasks (making it obvious), creating an organized and functional calf kitchen to streamline operations (making it easy and attractive), and fostering open communication between teams to ensure coordination and efficiency. For instance, aligning the milking and calf teams on the importance of promptly and cleanly harvesting colostrum is crucial. Delays or improper handling may occur without clear communication, undermining the operation's success. Therefore, maintaining an open line of communication is vital to ensure everyone is on the same page and to achieve desired outcomes.

In summary, colostrum is liquid gold, and following the 5Qs of Colostrum Management when building our colostrum program is essential to ensuring success. Periodically or routinely evaluating herd total protein to audit colostrum programs helps identify unknown bottlenecks, solve issues, and/or motivate the team. Moreover, organization, protocols, and communication are essential pieces of calf management, as they will be directly related to how obvious, easy, and attractive doing the crucial tasks at the farm are and, therefore, if it will get done the way we want it to be. I hope the information collected on the project was as valuable to the participants as it was to me. I for sure learned a lot. If you think your farm could benefit from a similar analysis, please

reach out (cd546@cornell.edu or 607-422-6788), and I would be happy to assist.

Special thanks to additional financial support received from special funds from Cornell Cooperative Extension of Steuben County, and the sponsorship of Denkavit.



"MEAT" YOUR FARMER AN EVENT FOR LIVESTOCK FARMERS AND THE COMMUNITY TO MEET AND LEARN ABOUT LOCAL BULK MEAT SALES AND TO TASTE RECIPES CREATED FOR NYS SCHOOLS FEATURING MEATS FROM NEIGHBORHOOD FARMS. THURSDAY, MAY 2, 2024 5:00PM - 8:00PM THE POWERHOUSE AT THE ROYCROFT CAMPUS 39 S. GROVE ST. EAST AURORA, NY WE ARE LOOKING FOR FARMER PARTICIPANTS! COME JOIN US! THE AUDIENCE WILL BE SCHOOL LUNCH PURCHASING PROGRAM OFFICIALS AND THE LOCAL COMMUNITY PARTICIPANTS WILL HAVE THE OPPORTUNITY TO: **CARNE ASADA:** 10.5 POUNDS ROUND ROAST SET UP A BOOTH AND OFFER YOUR PRODUCTS FOR SALE, INCLUDING BULK MEAT OPTIONS. MEATLOAF: 8 POUNDS GROUND BEEF INTERFACE WITH THE COMMUNITY TO SHARE WHAT IT IS YOU DO AND WHY YOU DO IT (: **LOADED BEEF NACHOS:** 8 POUNDS GOUND BEEF SELECT ONE OF THE MENU ITEMS LISTED IN THE BLUE CHOPPED CHEESE SANDWICH: 8 POUNDS GROUND BEEF BOXES, AND MAKE A DONATION OF THE MEAT REQUESTED TO BE TRANSFORMED INTO TASTING PORTIONS BY OUR CATERER, DAILY'S. **MOJO PORK:** 13.5 POUNDS OF FRESH HAM OR PORK SHOULDER **TERIYAKI CHICKEN:** 4 WHOLE CHICKENS (5-6 LB) OR 21 CHICKEN THIGHS (LARGE) **PULLED PORK:** 13.5 POUNDS OF FRESH HAM OR PORK SHOULDER CHICKEN SOUVLAKI: 21 LARGE CHICKEN THIGHS EGG CURRY: 8 DOZEN MEDIUM EGGS CHICKEN MAC AND CHEESE: **3 POUNDS CHICKEN BREAST** BREAKFAST BAKE: 8 DOZEN LARGE EGGS **TURKEY CHILI:** 7.5 POUNDS GROUND TURKEY DO YOU WANT TO JOIN US OR HAVE QUESTIONS? CONTACT AMY BARKLEY AMB544@CORNELL.EDU OR (716) 640-0844 **Cornell Cooperative Extension** New York bork Pork Producers Southwest N Program MEATSUITE Funded by Beef Farmers and Ranchers We are planning on a one-hour presentation This event is going to focus on school food on purchasing bulk meat and expectations service directors who are working to and a 2 hour tasting. source local meat. newsletter 12 - March 2024

Take Care Of The Teat End

By Katelyn Allen, Associate Editor Hoards Dairyman Magazine Article Originally published in Hoard's Dairyman



It seems elementary, but it's an important fact to remember when we're aiming to produce high-quality milk and maintain udder health: The way pathogens infect the udder is through the teat end.

Paul Virkler, D.V.M., of Quality Milk Production Services, touched on multiple areas that affect teat-end health during a Cornell Cooperative Extension webinar. Starting in the barn, he emphasized that poor bedding management leads to dirty cows, dirty udders, and dirty legs.

Many types of bedding can work if they keep the stall clean and dry. When there isn't sufficient bedding to soak up manure, urine, and milk, we're raising the chances of mastitis, said Virkler. He encouraged attendees to have someone on the farm review stall bedding levels regularly. It may be a good idea to switch that person up to have a fresh perspective; just ensure the whole team is communicating about what the bedding goals are.

Sufficient bedding, dry stalls, and clean alleyways matter for dry, prefresh, and fresh cows, too, Virkler reminded. These cows should be treated as well as the lactating herd.

In addition to bedding, he noted that stall cleanliness is often impacted by poor cow position. When cows lay too far forward, more manure stays in the bed instead of the alleyway. Then, you are relying on the person _____

The teat end experiences the most manipulation in the parlor. We must do everything we can to keep the teat end happy, and a big part of that is the milking routine.



scraping stalls to always do a great job of removing that contamination from what the udder will be in contact with.

Virkler said more farms are using what he called brisket pipes, pieces of PVC that are gentler and less bulky than brisket boards, to avoid inhibiting lying time. "But we do want to position cows better," he urged.

He noted that adjusting the neck rail does not solve this problem. It will position cows when they're standing, but cows often scoot forward after laying down. Lowering the neck rail will actually cause more perching, Virkler said.

In the parlor

The teat end experiences the most manipulation in the parlor. We must do everything we can to keep the teat end happy, and a big part of that is the milking routine, Virkler noted. Achieve five to 10 seconds of stimulation time and 90 to 180 seconds of lag time to encourage sufficient milk letdown.

Poorly adjusted machines will also cause damage. Talk with your dealer about your goals for milking speed and cow comfort to find the right liner, he encouraged. Then, follow the ideal vacuum and pulsation rates for that liner. Virkler said the most common mistake in milking equipment is not the wrong liner but the wrong system for the liner you have.

A final point of emphasis in the parlor is how cows are dried off. Right after dry-off and right after calving are the most susceptible times for a cow to contract mastitis, Virkler said, so we must handle the teats with care when we administer dry cow treatment and/or teat sealant. From an independent evaluation his team did of employees drying cows off, Virkler said there is a lot of room for improvement in ensuring the environment is sterile, the cow is prepared, the product is administered correctly, and employees are trained and monitored well.

They developed a free, open access training platform available in English and Spanish to help farm workers improve their dry-off technique. Good teat care in the parlor is a valuable place to start improving teat-end health because the most important variable is often the people, Virkler concluded.

> If you think there is room for improvement on your milking routine and need help with it, please feel free to contact Camila Lage at 607-422-6788.

Dairy Market Watch February 2024 Prepared by Katelyn Walley-Stoll. Funded by PRO-DAIRY.

An educational newsletter to keep producers informed of changing market factors affecting the dairy industry.

| Milk Component Prices | | | Milk Class Prices | | | Statistical Uniform Price & PPD | | | | | |
|-----------------------|--|---------|-------------------|---------|---------|---------------------------------|---------|---------|---------|--------|-----------------------------|
| Month | Butterfat | Protein | l (Boston) | Ш | ш | IV | Jamest | own, NY | Alban | y, NY | Albany \$/gal. to farmer |
| Jan 23 | \$2.77 | \$2.80 | \$25.66 | \$21.61 | \$19.43 | \$20.01 | \$20.71 | \$1.28 | \$21.31 | \$1.88 | \$1.84 |
| Feb 23 | \$2.71 | \$2.36 | \$24.03 | \$20.83 | \$17.78 | \$18.86 | \$19.60 | \$1.82 | \$20.20 | \$2.42 | \$1.74 |
| Mar 23 | \$2.73 | \$2.41 | \$22.24 | \$19.52 | \$18.10 | \$18.38 | \$18.78 | \$0.68 | \$19.38 | \$1.28 | \$1.67 |
| Apr 23 | \$2.70 | \$2.56 | \$22.10 | \$19.20 | \$18.52 | \$17.95 | \$18.62 | \$0.10 | \$19.22 | \$0.70 | \$1.66 |
| May 23 | \$2.75 | \$1.80 | \$22.82 | \$19.11 | \$16.11 | \$18.10 | \$18.31 | \$2.20 | \$18.91 | \$2.80 | \$1.63 |
| Jun 23 | \$2.76 | \$1.51 | \$21.26 | \$18.83 | \$14.91 | \$18.26 | \$17.46 | \$2.55 | \$18.06 | \$3.15 | \$1.56 |
| July 23 | \$2.79 | \$1.19 | \$20.57 | \$19.12 | \$13.77 | \$18.26 | \$17.08 | \$3.31 | \$17.68 | \$3.91 | \$1.52 |
| Aug 23 | \$3.02 | \$2.08 | \$19.87 | \$19.91 | \$17.19 | \$18.91 | \$18.28 | \$1.09 | \$18.88 | \$1.69 | \$1.63 |
| Sep 23 | \$3.12 | \$2.30 | \$22.15 | \$19.98 | \$18.39 | \$19.09 | \$19.27 | \$0.88 | \$19.87 | \$1.48 | \$1.71 |
| Oct 23 | \$3.71 | \$1.04 | \$22.72 | \$21.95 | \$16.84 | \$21.49 | \$20.05 | \$3.21 | \$20.65 | \$3.81 | \$1.78 |
| Nov 23 | \$3.46 | \$1.32 | \$23.00 | \$21.21 | \$17.15 | \$20.87 | \$19.59 | \$2.44 | \$20.19 | \$3.04 | \$1.74 |
| Dec 23 | \$2.97 | \$1.44 | \$23.01 | \$19.88 | \$16.04 | \$19.23 | \$18.56 | \$2.52 | \$19.16 | \$3.12 | \$1.65 |
| Jan 24 | \$2.97 | \$1.12 | \$21.73 | \$20.04 | \$15.17 | \$19.39 | \$18.16 | \$2.99 | \$18.76 | \$3.59 | \$1.62 |
| Chara I. (| January Utilization (Northeast): Class I = 30.7%; Class II = 24.6%; Class III = 30.7%; Class IV = 14.0%. | | | | | | | | | | |

Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.

Dairy Commodity Markets (Excerpt from USDA Dairy Market News - Volume 91, Report 8, February 23rd, 2024)

newsletter

Dry Products: Low/medium nonfat dry milk (NDM) prices moved lower in all regions. Domestic demand is steady to weaker. High heat NDM prices moved lower in the West and higher on the bottom of the range in the Central and East region. A few manufacturers noted production is being slotted in only upon request and price agreement.

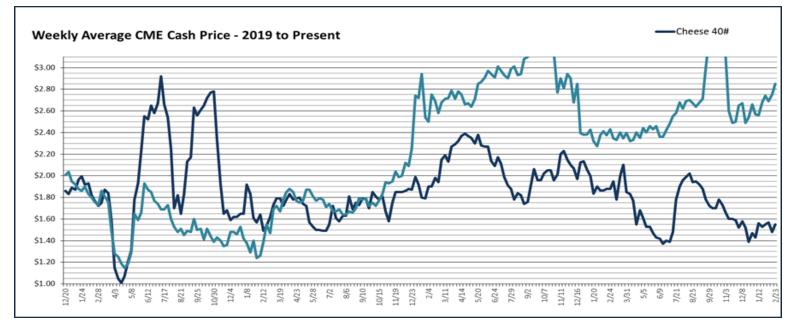
Cheese: Eastern cheese plant managers share seasonally steady production schedules. Retail demand is noted to be seasonally strong. Foodservice demand is steady to lighter. Inventories are comfortable. Cheddar inventories have been growing slowly. Barrel producers say their orders are steady to stronger. Spot barrel loads are selling above market prices.

January's Dollar per Gallon to the farmer was \$1.62. This was another decrease from month to month, bust still higher than last year's low of \$1.52 in July. **Butter:** Retail and food service demands are seasonally steady to stronger. Cream for butter makers is plentiful throughout most of the country. Slower ice cream production, in some parts of the country, remains a factor in abundant cream availability for butter makers.

Fluid Milk: Milk production is steady throughout the East region. Condensed skim demand remains strong in the Northeast, and contacts shared above Class prices for spot milk loads once again. Cream availability remains ample in the Northeast. Some Class I bottling orders were lower than anticipated due to President's Day school closures. Milk production at the farm level is variable throughout the U.S. The first NASS Milk Production report of 2024 listed a 0.9 percent decrease in January 2024 when compared to January 2023 (in the 24 selected states).

| Friday CME Cash Prices | | | | | | | | |
|------------------------|--------|--------|--------|--------|--------|--|--|--|
| Dates | 1/26 | 2/2 | 2/9 | 2/16 | 2/23 | | | |
| Butter | \$2.68 | \$2.74 | \$2.69 | \$2.75 | \$2.85 | | | |
| Cheese | \$1.53 | \$1.55 | \$1.57 | \$1.48 | \$1.55 | | | |

Dairy Market Watch is an educational newsletter compiled by Katelyn Walley and funded by Cornell PRO-DAIRY.

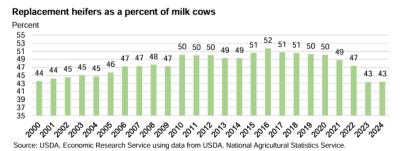


Katelyn's Drop in the Bucket - February 26th, 2024

Short notes about dairy markets this month.

newsletter

The **USDA Federal Order national hearing** is officially over after a whopping 49 days of testimony. Final comments are due in early April and then the USDA will release it's final recommendation in early July.



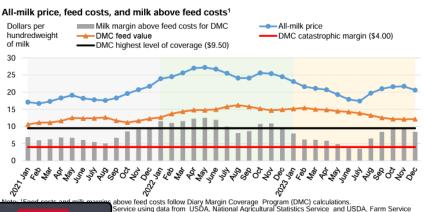
Dairy heifer replacements have decreased by 15% over the past six years, a 20-year-low, according to the most recent cattle report. As feed prices rise, the use of beef-on-dairy breeding practices becomes routine, and farms tighten up their heifer management, there are fewer heifers being raised on the market. With the **decline in dairy heifers,** and a lag in raising dairy heifers, we might start to see a shortage when milk prices tick upwards.

We're continuing to see low, **stagnant milk prices**, brought on by the winter spending lull and decreased consumer demand. However,

2024's all-milk price estimate is now \$20.95 according to USDA's latest Outlook report. While 2024 will be a year of price recovery, it'll be slower paced. forecasts show that this should be the bottom for most dairy prices with a slow chug upwards for the rest of the year.

What should you watch for as we go through 2024? Dairy Herd Management says - **inflation, consumer confidence, and global demand** will be key indicators. This will be a slow price recovery as farms continue to battle high input costs and will keep 2024 prices uncertain.

2024's milk production estimate "decreased due to lower expected yield per cow which more than offsets higher expected cow numbers", says USDA in the latest Outlook report.



For more information about any of these topics, please contact Katelyn Walley by calling 716-640-0522 or emailing

Grazing Small Ruminants To Avoid High Spring Parasite Loads

By Amy Barkley, Livestock Specialist

Getting our sheep and goats out on pasture is something that The "5 Point Check" should always include FAMACHA scoring we all look forward to this time of year. Having the animals to estimate their state of anemia because anemia outside makes it easier to get the barns cleaned and helps is the primary indicator of barber pole worm infection. For decrease our feed bills. Plus, there's nothing more serene than watching our charges walking in the lush green grass, heads down, thoroughly enjoying the buffet after a winter of stored forage. If over that number, 50 individuals representing the herd can provide a good measure. Those animals showing danger signs based on their "5 Point Check" should be dewormed, with

At the same time, internal parasites that have been hibernating in the gut lining during the winter, including the infamous barber pole worm, the main cause of anemia in our sheep and goats, start to "wake up" and cause higher rates of clinical disease. We must be vigilant as we begin our pasture rotations, even early in the season.

The barnyard or sacrifice lot is going to the most highly infected pasture this time of year. This is especially true if the animals have had access to it for months on end because eggs and infective larvae populations build up. Unless your sacrifice lot has an impermeable surface, there's going to be forage growing either inside or around the perimeter. Our small ruminants think that these small shreds of green are delightful.

This presents two issues. First, feces, and subsequently worm eggs and larvae, pollute this area. Second, these little bits of grass are so scarce that they will be eaten down to the ground. The closer a sheep or goat eats to the ground, the easier it is for them to pick up infective larvae. Therefore, it makes sense to move the animals from this area as soon as the pasture has enough forage (6" at a minimum) and is dry enough to accept them.

It's also a good idea to disallow them access to their winter barnyard for 60 - 90 days to allow the high numbers of larvae to die off. If they need to access a barn through a sacrifice area, eliminating any green forage will help, as will fencing off a walking path to discourage them from consuming anything on their way to and from their pastures.

Before letting the sheep or goats out to graze for the year, it may be tempting to deworm everyone to give them a clean slate. Research into parasite resistance indicates that this is not ideal. If a whole population of worms is treated, only those resistant ones will survive and reproduce, leading to a resistant population.

Instead, individuals should be checked for parasite loads through a "5 Point Check" to identify animals appearing to have a substantial gastrointestinal parasitic worm load by screening animals for un-thriftiness, diarrhea, and anemia.

The "5-Point Check" reviews various parts of the animal to determine its thriftiness and if it may need to receive a dose of dewormer. The "5 Point Check" should always include FAMACHA scoring the animals to estimate their state of anemia because anemia is the primary indicator of barber pole worm infection. For herds and flocks with under 50 animals, all should be checked. If over that number, 50 individuals representing the herd can provide a good measure. Those animals showing danger signs based on their "5 Point Check" should be dewormed, with future herd checks scheduled every 2 weeks throughout the grazing season. Once the selected number in a herd are treated, the whole group can be moved to a new pasture to prevent reinfestation. Moving forward, they should be moved every 4-6 days, which is the minimum time it takes for gastrointestinal worms such as barber pole worm larvae to hatch.

Another rule of thumb that experts share is to continue using the same single dewormer drug class that you've been using historically if it works for you. If there are especially vulnerable individuals in your flock or herd, it's sometimes recommended to treat those animals with two dewormers from two different chemical families that you know work on your farm sequentially during the same deworming session. The transition back-and-forth between dewormer classes may actually cause an increase in resistance to multiple dewormer classes at the same time. This can result in lots of trouble down the road! Instead, being judicious with what works now ensures that dewormers on your farm remain viable for years to come.

With these management tips in mind, we can move into a healthy, productive spring grazing season!

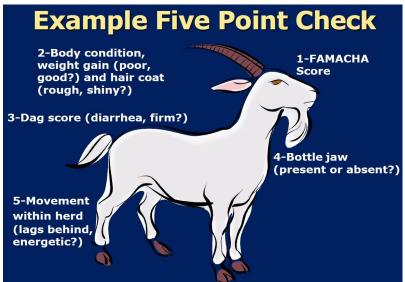




Diagram by Dr. Tatiana Stanton

A combination of low body condition score, rough coat, diarrhea, bottle-jaw, and pale eyelid mucous membranes can indicate that a small ruminant needs deworming.

2024 Cash Rental and Custom Harvest Rate Survey

From Cornell Cooperative Extension, funded by the New York Farm Viability Institute

We're working to survey NY farmers, custom harvest operators, and agribusiness professionals to create an up-to-date snapshot of land rental rates and custom harvest fees. We invite you to complete the survey!

- All the information that we collect will be kept anonymous. Any identifying features or outlying data will be removed.
- If you are using in-kind services as payment (i.e. you plow for me and I will bale for you, snowplowing, freezer beef, etc.), please estimate the dollar value of that service.
- If you charge for these services on a different unit basis than what is listed (ton, acre, hour, etc.), please make a note in the comments area and we will work to make that adjustment.
- Data will be reported on a regional basis.
- Please use your best judgment when filling out this survey. You might not know all the rates we're measuring, but we welcome your feedback for those you are familiar with. Skip past those you don't have sufficient knowledge about.
- If you have any concerns, please email landrental@cornell.edu or contact Katelyn Walley kaw249@cornell.edu or Nicole Tommell <u>nt375@cornell.edu</u>.

You can also complete the survey online! Help streamline our data collection efforts by completing our online survey available:

https://farmbusiness.cornell.edu/cashrates/

Classifying Information

Please circle ALL the option(s) that best describe your role in the agricultural industry:

- a. Farmer
- b. Custom Harvester (Do work for others)
- c. Hire custom work done
- d. Non-Farming Landowner
- e. Agribusiness representative (lender, appraiser, sales rep, crop consultant
- f. Government Representative, Regulatory Agency, or Extension
- g. Other: ___

Please select the region (or regions) that you work within, own, or lease land in.

- a. Southern Tier (Allegany, Broome, Cattaraugus, Chautauqua, Chemung, Steuben, Tioga)
- b. Western New York (Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca Wayne, Wyoming, Yates)
- c. Mohawk Valley (Oneida, Herkimer, Fulton, Montgomery, Otsego, Schoharie)
- d. Central (Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Schuyler, Tompkins,)
- e. North Country (Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, St. Lawrence
- f. Capital Area (Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, Washington)
- g. Southeast (Delaware, Dutchess, Orange, Putnam, Rockland, Suffolk, Sullivan, Ulster, Westchester)

This project has been years in the making, and we're so grateful for the funding we've received from New York Farm Viability Institute to make it happen!



This is page 1 of 3 for our Cash Rents and Custom Harvest Rates Survey. You can also complete the survey online by visiting the website listed.

Cash Rental Rates Survey Information

For the following questions, please use these qualities to differentiate between different types of land:

- High Quality Excellent cropland, above average corn/forage yields, excellent drainage and/or artificially drained
- Medium Quality Good cropland, normal/average crop forage yields, acceptable drainage
- Low Quality Poor cropland, below average crop/forage yields, poor drainage or unimproved
- 1. What percentage of farmland you work with (own and lease) would fall in the following categories? (please sum to 100)
 - a. High Quality ____
 - b. Medium Quality _____
 - c. Low Quality ____
 - d. I'm a regional service provider who does not own/operate land.
- 2. What is your estimate of the average rental price (in \$/acre) for high, medium, and low-quality cropland in your region? Please assume there is no infrastructure on the property.
 - a. High Quality \$_____ / acre / year
 - b. Medium Quality \$____ / acre / year
 - c. Low Quality \$_____ / acre / year
- What is the average rental price (in \$/acre) for high, medium, and low-quality pastureland in your region? Assume the pasture includes sufficient fencing and water supply, but no animal management.
 - a. High Quality \$____ / acre / year
 - b. Medium Quality \$_____ / acre / year
 - c. Low Quality \$_____ / acre / year
- 4. In your region, what's the average cash rental rate/fee for dairy housing facilities? Assume no utilities.
 - a. Freestall (modern, parlor included) (on a per stall/day)
 - b. Traditional (tie stall) (on a per stall/day) ______
 - c. Pasture (limited housing, care included) (per cow/day) _____
- 5. In your region, what's the average rental rate of crop storage?
 - a. Bunk silo per ton _____
 - b. Upright silo per ton _____
 - c. Dry hay (large or small, adjust to tons)
 - d. Grain (per bushel/per season) _____

Custom Harvest Rates Survey Information

For field activities, assume machinery, power, fuel, and operator are included. If fuel is separate, please note that in your answers, or estimate the total cost.

| Grain Harvest Activities (List the rate in the empty box to the right for each item) | | | | | | |
|---|--|------------------------------|--|--|--|--|
| Corn Combining – Per Acre Small Grain Drying – Per Acre | | | | | | |
| Grain Corn Picking – Per Acre | | Soybean Combining – Per Acre | | | | |
| Corn Drying – Per Acre | | | | | | |
| Complete Harvesting Small Grains – Per Acre (Combine, grain cart, hauling, unloading) | | | | | | |
| Complete Harvesting Soybeans – Per Acre (Combine, grain cart, hauling, unloading) | | | | | | |
| Complete Harvesting Shell Corn – Per Acre (Combine, grain cart, hauling, unloading) | | | | | | |
| | | | | | | |

This is page 2 of 3 for our Cash Rents and Custom Harvest Rates Survey. You can also complete the survey online by visiting the website listed.



If you'd like to receive a copy of the survey results, list your name and mailing address or email on any of these pages.

| Grass Silage and Hay Making (List the rate in the empty box to the right for each item) | | | | | | | |
|---|----------------------------------|--|--|--|--|--|--|
| Mowing – Per Acre | Mowing & Conditioning – Per Acre | | | | | | |
| Tedding – Per Acre | Raking – Per Acre | | | | | | |
| Small Square Baling – Per Bale | Large Round Baling – Per Bale | | | | | | |
| Large Square Bailing – Per Bale | Wrapping – Per Bale | | | | | | |
| Bagging Hay Silage – Per Foot | | | | | | | |
| Complete Harvesting Silage – Per Acre (Chopping, Hauling, Packing) | | | | | | | |

| Corn Silage Activities (List the rate in the empty box to the right for each item) | | | | | |
|--|--|--|--|--|--|
| Pull-Type Chopper and Tractor – Per Hour | | | | | |
| Self-Propelled Chopper – Per Hour | | | | | |
| Bagging Corn Silage – Per Foot | | | | | |
| Complete Harvesting – Per Acre (Chopping, Hauling, Packing) | | | | | |

| Tillage (List the rate in the empty box to the right for each item) | | | | | | | |
|---|---------------------|---------------------------|--------------------|----|--|--|--|
| Moldboard Plowing – Per Acre Disk Plowing – Per Acre | | | | | | | |
| Other Deep Plowing – Per Acre | | Tandem Disking – Per Acre | | | | | |
| Tandem Disking with Harrow/Cul | tipacker – Per Acre | | Harrowing – Per Ac | re | | | |
| Cultivating – Per Acre | | All Inclusive Tili | ng – Per Foot | | | | |

| Planting, Fertilizer Applications, and Spraying (List the rate in the empty box to the right for each item) | | | | | | | |
|---|-----------------|---------------------------------|--|--|--|--|--|
| No-Till Planting – Per Acre | | Corn Planting – Per Acre | | | | | |
| Broadcast Seeding – Per Acre | | Spraying – Per Acre | | | | | |
| Spreading Dry Fertilizer – Per Acre | | Side Dressing – Per Acre | | | | | |
| Spraying Liquid Fertilizer – Per Acre | | Injecting Fertilizer – Per Acre | | | | | |
| | | Spreading Lime – Per Ton | | | | | |
| Small Grain or Grass Seeding/Dril | ling – Per Acre | | | | | | |

| Tractor Use (List the rate in the empty box to the right for each item) | | | | |
|---|--|--|--|--|
| Bunk Packing (One Tractor, One Operator) – Per Hour | | | | |
| Tractor Rental (Less than 80 HP) – Per Hour | | | | |
| Tractor Rental (80 – 120 HP) – Per Hour | | | | |
| Tractor Rental (120 – 160 HP) – Per Hour | | | | |
| Tractor Rental (160 + HP) – Per Hour | | | | |

| Manure Handling and Management (List the rate in the empty box to the right for each item) | | | | | | | |
|--|--|--|--|--|--|--|--|
| Manure Loading (Solid) – Per Hour Manure Spreading (Liquid) – Per Hour | | | | | | | |
| Agitating Boat (pits) – Per Hour Manure Pumping (Liquid) – Per Gallon | | | | | | | |

Don't forget - You can complete this survey online!

https://farmbusiness.cornell.edu/cashrates/

If you have any questions or concerns regarding this survey, please contact Katelyn Walley by calling 716-640-0522.



This is page 3 of 3 for our Cash Rents and Custom Harvest Rates Survey. You can also complete the survey online by visiting the website listed. The Crops, Cows, and Critters (USPS#101-400) is published monthly by Cornell Cooperative Extension of Chautauqua County, JCC Carnahan Center 525 Falconer Street, PO Box 20 Jamestown, NY 14702-9608.

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