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DAIRY & FIELD CROPS DIGEST
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Vaccination Questions, Requirements, and Policies for Employees

By Richard Stup, Cornell University. The post Vaccination Questions, Requirements, and Policies for Employees appeared first in The Ag Workforce Journal

Cornell Cooperative Extension AGRICULTURAL WORKFORCE DEVELOPMENT

Farm employers are taking different positions on how they handle employee vaccinations. Some employers are aggressively encouraging vaccination, hosting mobile clinics, and even requiring all employees to be vaccinated. Other employers are taking a much more hands-off approach. Colleagues and I wrote earlier about: "How to talk about COVID-19 vaccination with your employees." In this post, we consider some key questions that farm employers are asking and attempt to provide some helpful resources.

Can an employer ask employees if they are vaccinated?
Yes, the Equal Employment Opportunity Commission (EEOC) weighed in on this question back in December 2020. Go to their publication: "What You Should Know About COVID-19 and the ADA, the Rehabilitation Act, and Other EEO Laws," and scroll down to section K about vaccination. Question K.3 goes into detail about how you can ask, and even ask for proof, that an employee was vaccinated. Be cautious, however, about any follow up questions about why an employee is not vaccinated. These could lead to discussions of medical or disability issues that might be protected by the American with Disabilities Act (ADA), so you want to avoid that.

Can an employer ask a job applicant if they are vaccinated?
The answer to this is also yes. Similar to the question above, the EEOC says that COVID-19 poses a direct threat to the workforce and employers have an obligation to protect the workforce from direct threats.

Can an employer require employees to have the COVID-19 vaccine?
Employers are certainly able to *recommend* and *encourage* the vaccine for their employees. Federal and state governments and health authorities are all asking employers to do this and even providing resources to help, so employers have little to no liability for *encouraging* vaccinations. *Requiring* employees to get vaccinated is a very different thing, but there appears to be no laws preventing it, according to FisherPhillips attorney Kevin Troutman, New York law firm Adams Leclair, and to the Society for Human Resource Management (SHRM). That said, if an employer does require the vaccine, they must comply with employee protections in the law. Specifically, employees who refuse vaccination based on a disability or religious beliefs may need to be excused from the requirement or accommodated according to the Americans with Disabilities Act (ADA).

An article from SHRM attorney Allen Smith in December 2020 discussed which employers might want to consider a vaccine mandate. Essentially, if a business and its employees interact extensively with the public, like healthcare, travel, or restaurants, then they have a better case for requiring vaccines of employees. Other employers, such as farms, may not have a lot of exposure to the public, so employers would need to make the case that vaccinations are required in order to keep the employees safe. In any case, if an employer decides to require vaccinations, they must be prepared to consider the ADA exemptions mentioned above, and discussed in detail by SHRM. ADA requires a back and forth discussion or negotiation between the employee and the employer to determine if a "reasonable accommodation" can be reached. A reasonable accommodation could be lots of things depending on the particular case: requiring mask wearing around others, limiting access to certain areas of the business, changing job duties, or altering hours. If a reasonable accommodation cannot be reached between the employee and employer then it is possible for the employee to be suspended from work without pay or terminated. Terminating someone for this reason is a big

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step and employers should definitely seek legal counsel for the reasonable accommodation process and to avoid termination. As always, document every step in the reasonable accommodation process in writing.

Do we need a written policy encouraging or requiring employee vaccinations?
Written policies are helpful when they are carefully written, consistently followed by employers, and communicated to employees. There are no specific requirements that employers have a written policy on this issue. The law firm Fisher Phillips has a library of vaccine resources, including example mandatory and non-mandatory vaccination policies.

These issues are difficult and vary greatly from case to case, consult a qualified labor attorney for specific legal advice. Farm employers should continue to provide leadership and encouragement for employee vaccination until we reach high rates of protection in our farm communities. I've heard some great stories about farm leaders who were able to use their influence to get nearly 100% of employees vaccinated in their own and neighboring farms.

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Six Keys to Retaining Great Employees

By Dr. Bob Milligan, Learning Edge Monthly, June 2021

As I drive around, I see two signs everywhere: "We are Hiring" and "For Lease." The "For Lease" signs are mostly for office space given that much work will remain virtual.

The "We are Hiring" signs are of great concern for us as I also hear from my farm clients that hiring is almost impossible. That means employee retention becomes crucial, perhaps the most important key to success in the coming months as we exit the pandemic. Below are my six keys to employee retention.

Learn leadership and supervision "best practices"

Think about the reasons for your success: precisely formulated rations, accurate fertilization, targeted use of pesticides, great logistics, etc. You have created this success by continual study and the use of industry "best practices."

Now think about what happens to those who do not keep up with the latest research and "best practices." The answer is that their productivity and profitability suffer.

Now let's turn our attention to your employees – to people. Just as there is research and "best practices" for animals, crops, and machinery; there is research and "best practices" for leading and supervising your workforce. The "best practices" for animals and crops lead to the greatest productivity and profitability. Similarly, the "best practices" for leadership and supervision provide the greatest chance to retain great employees.

We will touch on several leadership and supervision "best practices" below; here we address the three differences between managing animals, crops, and equipment and leading and supervising employees. People have three unique crucial attributes: they can think, they can speak, and they can feel – they have emotions. As a result leading and supervising "best practices" must be built around developing a strong interpersonal relationship between the leader/supervisor and the employee. This relationship must be based on mutual trust and a shared passion for the mission of the farm or agribusiness.

Understand what motivates employees

Money/compensation has a complex, often misunderstood, and not completely known connection to motivation. Perhaps this relationship is best summarized in the conclusion to 12: The Elements of Great Managing: "The Power of Money is limited in itself. It works only in combination with the non-financial drivers of employee engagement."

Herzberg's Two Factory Theory of Motivation can help further understand this relationship. Herzberg's theory argues that his first set of factors, the maintenance or dissatisfiers, lead to employee dissatisfaction when the employee believes he or she has an insufficient quantity of these factors. In other words, he or she is being treated unfairly. The second set of factors, the motivators, have a greater potential for increasing the motivation of the employee, especially over the long haul – retention!

The maintenance or dissatisfiers include compensation, working conditions and status. Many managers believe these are the key to motivated employees. They are important; however, without the motivational factors, retaining great employees will be problematic.

Herzberg includes the following as motivators: challenging work, feelings of personal accomplishment, recognition for achievement, increased responsibility, involvement in decision making. A focus on some or all of these will assist you in retaining key employees.

Provide clarity

Think about why so many of us are so involved in sports – as participants, as spectators, and with our children. I believe one of the important reason sports are so popular is the rules are known, the rules are (usually) enforced, and we know who is winning. **There is clarity.**

Now think about employees – yourself, those in your business, those in other businesses. I believe that very few employees have clarity. I call it "a chalked field" about what is expected of them and how they are performing.

An expectation – behaviors or performance – does not have complete clarity unless:

1. Every detail is clearly explained.
2. An explanation of WHY the expectation is important and/or needed is included.
3. There are opportunities to ask questions and, where appropriate, provide input (engagement).

The detailed description can be accessed by the employee (employee manual, job description, policy manual, etc.).

Feedback

Excellent performance of cows, crops, and machinery occurs in the absence of problems – "no defects' in quality jargon. Thus our training and our focus is on preventing and detecting problems. We are trained to look for failures to meet expectations.

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Talking Points for Farmers on Unions

by Lisa A. Ovitt, Paralegal - Originally printed in Compliance Corner, Feb. 2020

NYFB gratefully acknowledges the work of Bond, Schoeneck & King Attorneys in the preparation of this column.

On July 17, 2019, Governor Cuomo signed into law the Farm Laborers Fair Labor Practices Act ("FLFLPA" "the Act"). The bill grants farm laborers overtime pay, a day of rest each week, disability and Paid Family Leave coverage, unemployment benefits, and other labor protections. It also provides for the creation of a Wage Board to examine the potential of lowering the overtime threshold. All of the provisions went into effect January 1, 2020 except for the migrant housing permitting requirement which are effective January 1, 2021.

Following is some guidance on speaking with your employees about the changes in labor law. Be sure to review this information thoroughly to be sure it applies to your specific operation.

What Can You Say If Your Employee Asks About a Union?

Be sure to provide factual information. Explain the collective bargaining process, and encourage your employees to make an informed decision. You may explain the disadvantages of unionization: payment of dues, a seniority-based system instead of a merit-based one. If an employee talks about a promise that a union representative has made, it is acceptable to tell the employee that there is no guarantee the union can deliver on the promise.

Do Not Remain Silent

Employees may look to supervisors for information and advice, so silence on the issue of unionism is not in your best interests. If an employee asks a question, try to answer it or find out the answer.

TIPS For Employers: Do Not Threaten, Interrogate, Promise, Surveillance

Be sure not to threaten your employees by predicting something bad will happen if they unionize. Do not question (interrogate) them about their union sympathy or activity. Do not promise that something good will happen if they reject a union. Do not spy on union meetings or eavesdrop on union conversations (surveillance).

Do listen and communicate. Do not threaten, interrogate, promise, or spy.

Discrimination is also prohibited. Do not treat any employee better or worse because the employee is for or against a union.

The Collective Bargaining Process

- Be aware of what unions cannot do for employees so you can have meaningful conversations with your employees
- Unions cannot guarantee wage increases;
- Unions cannot guarantee benefit improvements;
- Unions cannot guarantee job security in difficult economic times;
- Unions cannot prevent discipline or discharge where there is just cause.

Sample Responses to Your Employees

If your employee says to you, "We need a voice, the union will provide that for us" you may respond that they already have a voice, they can always bring any concerns to you, that a union may not necessarily use its voice in the employee's best interests, and using an outside third party is not the best way to communicate.

If your employee says to you that the union states they will get more of the salary going to the senior team, you may respond that it is possible collective bargaining may result in the same or lower wages or benefits; nothing can be guaranteed.

If your employee says to you that the union will guarantee job security and prevent layoffs, you may respond that even union employees are sometimes laid off during difficult economic times. Again, nothing can be guaranteed.

Other Things an Employee May Do

As a rule of thumb, do not make predictions. Do not talk about what will happen if a union gets in. Instead, discuss the facts about what has happened at other locations and at other workplaces.

Maintain positive employee relations. Develop strong and open communications, foster a respectful work environment, and treat employees fairly. Apply standards and policies consistently, be responsive to employee questions and concerns, and show appreciation and give positive feedback when appropriate.

Solicitation Rules

Off duty employees (including those working at other locations) have a legal right to solicit only outside the farm. Non-employee outsiders are not allowed on private property. Employees have a legal right to solicit one another only during non-work time, i.e. breaks, meal periods, before/after shift. Employees have a legal right to distribute union

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literature only during non-work time, and only in non-work areas. It is essential that an employer be consistent in enforcing these rules.

Unfair Labor Practices

Employees cannot strike/cause a work slowdown.

Employers Cannot:

- Lockout employees;
- Refuse to continue all the terms of an expired agreement;
- Discourage union organization or discourage an employee from participating in a union organizing drive or from participating in protected concerted activity;
- Blacklist an employee because of his/her participation in the union;
- Require, as a condition of employment, employees to refrain from joining a union;
- Refuse to bargain in good faith;
- Refuse to discuss grievances with the employee.

Collective Bargaining Process

Employers are required to negotiate in good faith with employees who have organized over "rates of pay wages, hours of employment and other conditions of employment." "Good faith" contemplates that parties will approach negotiations with an open and fair mind and with a sincere resolve to make an effort to arrive at an agreement. Good faith does not require employers to enter into agreement or accept conditions/proposals it finds unacceptable.

Employers must send to the bargaining table representatives who have authority to reach agreement on mandatory subjects. Employers have a duty to provide information. They must produce (at the request of the Union) information they possess that is relevant to the bargaining process.

Employers must deal directly with the Union and not circumvent the Union in an attempt to negotiate directly with any groups of employees. This includes, but is not limited to, communications, oral or written, with employees about bargaining positions not previously advanced to the Union; or the advocacy of positions to bargaining unit members whether or not those positions have been previously advanced to the Union. There must be no communications without prior legal review and approval.

The information contained in this article is provided for informational purposes only. It is not intended to be, nor should it be considered, a substitute for legal advice rendered by a competent attorney. If you have any questions about the application of the issues raised in this article to your particular situation, seek the advice of a competent attorney.

Dairy Grazing Pasture Walk Summer Series

Join the South Central NY Dairy and Field Crops Team for a series of pasture walks hosted by dairy farms throughout our region. Learn strategies for managing dairy cattle on pasture from experienced graziers and grazing educators. Be prepared for walking and standing outdoors. Please wear appropriate clothing and footwear, dress for the weather, and bring your own water bottle and snacks. **There is no cost to attend, however, pre-registration is required. Register online using the links below.** If further assistance is needed, contact Donette Griffith at dg576@cornell.edu or (607) 391-2662.

July 28 | 12pm - 2pm

Carey Farm, Groton, NY

With Cornell Cooperative Extension educators, Fay Benson & Mary Kate MacKenzie.

For Event Details and Registration link:
https://scnydfc.cce.cornell.edu/event.php?id=1631

August 18 | 12pm - 2pm

Troyer Farm, Candor, NY

With Upper Susquehanna Coalition Grazing Management Specialist and grass farmer Troy Bishopp, "The Grass Whisperer".

For Event Details and Registration link:
https://scnydfc.cce.cornell.edu/event.php?id=1630

September 8 | 12pm - 2pm

Murraydale Farms, Truxton, NY

With USDA Natural Resource Conservation Service grazing specialist, Karen Hoffman.

For Event Details and Registration link:
https://scnydfc.cce.cornell.edu/event.php?id=1629

Managing Forage Digestibility to Combat High Commodity Prices *By Joe Lawrence Cornell PRO-DAIRY*

https://blogs.cornell.edu/whatscroppingup/2021/04/07/managing-forage-digestibility-to-combat-high-commodity-prices/

Forage quality is important, it is hard to attend a meeting or read an agricultural publication without hearing this point and while there is a risk of becoming numb to the message, this spring presents yet another reminder of how critical this can be to controlling production cost on a dairy.

In a recent article (Higher Grain Prices and Lower Starch Diets) Rick Grant revisited the results of a past study at Miner Institute comparing diets with varying forage and fiber byproduct levels, the article can be found in the March 2021 Farm Report. Dr. Grant concluded the article by stating "This study showed us that we can feed higher forage diets when the forage contains highly digestible NDF. As we enter a period of higher grain and feed prices, we need to re-focus on the fact that cows can do very well on higher forage diets if the forage quality is high. And if fibrous byproducts happen to be priced competitively, we should be prepared to take advantage of their high fiber degradability."

While striving for forage quality should always be the goal, the current price dynamics do offer an added incentive to optimize forage quality and specifically fiber digestibility entering 2021.

Cornell FIELD CROPS

Hay Crops

Key factors in hay field management remain constant. As always it really boils down to optimizing yield and quality while securing the needed quantity of forage for different groups of animals on the farm. As each season presents ample chances to make low quality hay, the emphasis should be put on securing needed inventories of lactating quality feed before shifting the focus to obtaining lower quality inventory. Dynamic Harvest Schedules discusses ways to adjust management to achieve these goals.

The next step to assuring access to the right quality forage, at the right time, for the right group of animals is planning out forage storage as discussed in Strategic Forage Storage Planning.

Alfalfa and grass, or a mixture, are still the most common sources of hay crop on dairy farms and both have the potential to offer a very highly digestible feed source but understanding their differences is important to successful management.

There remains a tendency to focus in on Crude Protein (CP) when evaluating hay quality and while CP should not be completely ignored, there are better metrics for analysis. Fiber digestibility is a key area of focus and is certainly relevant in the context of higher commodity prices.

In a recent Hoards Dairyman article Dr. Dave Combs wrote, "Good forage is the combination of the right amount of fiber at the right amount of digestibility." This is relevant to the grass and alfalfa discussion and research from Dr. Jerry Cherney at Cornell helps explain this.

In a study comparing the first cutting growth of grass and alfalfa in New York (NY), the Neutral Detergent Fiber (NDF) level of grass was found to be approximately 20 percent higher than alfalfa. However, when the NDF digestibility (NDFd) (on a percent of NDF basis) was measured, the grass NDFd levels averaged approximately 20 percent higher than alfalfa. In other words, grass has more total NDF but it is also more digestible. If this is understood it can be accounted for in proper ration development.

What the two crops did have in common was the rate of increase in NDF and corresponding rate of decline in NDFd as the crop matured. The levels of both were relatively constant until around May 10th (Ithaca, NY) at which time NDF levels began a linear increase while NDFd began a linear decrease. Between May 10th and May 30th NDF increased by 20 to 25 percent while NDFd declined by 15 to 20 percent for both crops.

An article from the University of Wisconsin, Understanding NDF Digestibility of Forages, provides a good comparison of the NDFd potential of Alfalfa, Grass and Corn Silage. Relative to the other two, grass has the highest potential, however, it can also measure the lowest levels if mis-managed, a higher risk, higher potential reward scenario. In contrast, alfalfa has the lowest potential of the three at the high-end but does not drop as low as grass on the low-end. Carrying this idea into mixed stands, Dr. Cherney has found that as little as 5% grass in a mixture can result in increases in NDFd that are meaningful to the cow and stands with approximately 30% grass optimize yield and quality.

The Cornell study exploring the springtime changes in fiber referenced above also helps shed light on why using CP as a quality indicator can be misleading with these crops. Crude Protein was tracked in the alfalfa and grass throughout the month and CP in both crops declined at a similar rate from May 10th to May 18th, from a starting point of 23 percent CP down to approximately 18 percent. At this point the lines diverged with the alfalfa CP value flattening out at approximately 18 percent and staying at this level through the end of May. In contrast, the CP content of grass continued a linear decline at a rate of 0.45 percent per day which resulted in a final measurement of approximately 14 percent at the end of May.

If comparing CP alone, the late cut alfalfa (at 18 percent CP) would be considered superior to the late cut grass (at 14 percent CP); however, from a fiber standpoint they would both be problematic by this time. Understanding this relationship and adjusting harvest decisions accordingly can be especially impactful when trying to maximize forage utilization in the diet during times of high commodity prices.

Optimizing the harvest timing of first cutting can be managed by understand the stand composition (alfalfa vs. grass) and progress of the crop. This differs by year as spring conditions can vary significantly. More information can be found in the following article, Time To Check The Progress Of Your First Cutting. Several CCE Ag Teams around NY offer first cutting monitoring programs and send out weekly updates during the month of May, contact your

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local CCE Ag Team for more information.

Corn Silage

The 2020 growing season can be generalized by below average rainfall which challenged the corn crop in many areas; however, one benefit realized was the positive impact the drier weather had of corn silage fiber digestibility. When considering a number of potential influences on corn silage fiber, aside from unique traits like BMR, we know that rainfall tends to have one of the most significant impacts on digestibility. More information can be found in Corn silage forage quality: Hybrid genetics versus growing conditions.

With 2021 growing conditions still an unknown, it is difficult to know what the 2021 crop has in store for fiber digestibility or overall yield and quality performance. Although it is difficult to predict the growing season, our understanding of fiber digestibility can help us plan ahead and manage for the best outcomes when feeding the 2021 crop.

As discussed, in general higher levels of rainfall leads to lower levels of digestible fiber with perhaps the largest impact related to rainfall just before corn tasseling. With this information, by August we should have a relatively good idea as to whether fiber digestibility is going to trend higher (like 2020) or lower (like 2017) as demonstrated in the data from the NY VT Corn Silage Hybrid Evaluation Program annual overview.

This could help planning in two ways. First, it may influence harvest decisions, specifically chop height. Penn State summarized a number of chopping height studies and found that on-average NDFd increases by 2.5 percent for each six inches the cutting height is increased. In a situation where the 2021 growing season results in a high yielding crop but there are concerns of below average fiber digestibility, increasing corn silage cutting height may be a worthwhile consideration. Conversely, if 2021 is similar to 2020, with limited rainfall, securing adequate forage inventory may be of more concern. Understanding that this will likely be offset by higher overall digestibility in the crop suggest a lower harvest height could be worth considering.

Second, having some level of confidence in whether fiber digestibility will be above or below average prior to harvest will provide a glimpse into what diet adjustments may be needed when switching to the new corn silage crop.

An inherent challenge of a dry year is that while digestibility is often higher, overall yield is often lower. This creates a scenario where cows are likely to consume more of the forage, particularly if striving for a high forage diet to combat high commodity prices, while inventories may be stressed. Planning ahead and using this information may aid in decision making regarding how many acres on the farm are harvested for silage versus grain or if purchasing additional corn silage (standing in the field or post-harvest) is warranted.

Although this article has focused on high forage diets to combat higher commodity cost, this information can also help in planning for what commodities may be needed in the new diet. Regardless of price trends this opens the door to watch markets for relative deals on these inputs throughout the late summer and early fall to lock in favorable prices for the period this silage will need to be fed.

References

- *Considerations in Managing Cutting Height of Corn Silage, Penn State*
- *Corn silage forage quality: Hybrid genetics versus growing conditions, Cornell University*
- *Dynamic Harvest Schedules, Cornell PRO-DAIRY*
- *Higher Grain Prices and Lower Starch Diets, Miner Institute Farm Report, March 2021*
- *NY VT Corn Silage Hybrid Evaluation Program annual overview, Cornell University*
- *Strategic Forage Storage Planning, Cornell PRO-DAIRY*
- *Time To Check The Progress Of Your First Cutting, Cornell PRO-DAIRY*
- *Understanding NDF Digestibility of Forages, University of Wisconsin*

Manure Systems & Antibiotic Residues: On-Farm Perspectives from CNY Dairy Producers

By Christine Georgakakos & Betsy Hicks

Managing manure is one of the many full-time jobs that dairy farmers integrate into day-to-day operations. Many of the multi-generation farms or multiple partner farms we interviewed divided manure management and milk production responsibilities between people, easing strain and allowing specialization. We were interested in manure management from the context of reducing the spread of antibiotic resistance: questions included why farmers choose to manage manure the way they do, and what barriers exist in changing those manure systems. No farmers we interviewed identified reduction of antibiotic residues or resistant bacteria as drivers of their manure management decisions, and many were unaware that antibiotic residues and resistant bacteria can be transported with solid and liquid manures.

Nutrient management considerations

Farms across categories of management practice, size, farmer age, and farmer generation identified nutrient management as one of the key drivers of their manure management decisions. Medium to larger farms tended to emphasize the usefulness of their storage facilities, allowing them "not to daily spread and … conserve as many nutrients in…timing with our corn planting". A small farm explained their focus on nutrient management from an environmental perspective, that "the biggest thing [is nutrient management] I was just at a meeting here a couple weeks ago about the effects that nitrogen, phosphorus, and sediment is having in the [watershed]."

Large farms also discussed nutrient management in the context of the regulations they must comply with as drivers of specific manure management decisions. Some farmers mentioned working with agencies, such as Soil and Water Conservation districts to establish management plans within regulatory guidelines - "we work with Soil and Water, use the standards and regulations, and they help us come up with protocols in place so then we can spread whatever we can spread, how much we can spread". Smaller farms that are not inspected for state or federal regulation compliance did not mention regulations as a driver of their manure management strategies.

Funding as barrier to change

Funding was the primary barrier to modification of manure management systems. The high investment barrier deterred older and younger farmers alike from changing their systems. One Baby Boomer farmer stated "we just haven't made the investment in a storage facility. Unless they require me, I'm going to get through to retirement without it. We'll see. At times it would be nice to have it. But it's a major investment.

Photo by: Betsy Hicks

And obviously there's nobody interested in taking the farm over. You know, I don't see the point in making that investment." Younger farmers similarly cited capital costs as a major barrier to changing manure systems.

Many farmers cited using existing manure systems with no additional capital costs as the primary drivers of their manure management, across the range of daily spreading to storage systems. One farmer stated, "It's the system we have…to be totally truthful, that's the [driver]. That's the biggest one. That's what we have, so it's what we use." Large to medium farms often expressed interest in new systems if financial barriers were overcome, especially through incorporation of new technology. Smaller farms tended to discuss desire to shift from daily spreading to other means of handling manure, such as composting systems.

Manure systems to reduce spread of AMR

Though reduction of antibiotic resistant bacteria and residue transport were not drivers in manure management strategies during our interviews, there has been research investigating manure management systems already in place on farms that achieve this goal. These methods have been shown to reduce the spread of antibiotic resistance by killing resistant bacteria or denaturing antibiotic residues. Systems shown to reduce spread of antibiotic resistance involve high temperatures to kill bacteria or denature antibiotic active ingredients. High temperature manure management systems that have shown positive results include high temperature aerobic compositing and anaerobic digesters operated at higher temperatures. However, it is important to note that due to the chemical diversity of antibiotic residues, not all antibiotics will degrade at the same rates. Solid/liquid separation may concentrate some antibiotics in one stream over the other, but again, the chemical nature of the antibiotic in question will determine

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which stream it is more likely to enter. Long term storage, such as lagoons, have shown both increased and decreased residue degradation and resistant bacteria growth, and should not currently be interpreted as a method to positively combat the spread of antibiotic resistance. Studies have shown that presence of antibiotic residues has reduced microbial activity and degradation rates of manure stocks across manure management systems, so antibiotic residues may influence nutrient release and availability for crops.

Antibiotic residues, as well as antibiotic resistant bacterial genes, have been found in many places - soils where manure was spread, surface waters, vegetables fertilized with manure, and even in drinking water. They interact with us all, regardless of our own usage. Though the usage of antibiotics in animal agriculture is not the only source of environmental antibiotic contamination, it is increasingly important for each source to continue to work and make changes to reduce the impact of their usage.

This article is part of a series, written from a peer-reviewed article entitled "Farmer perceptions of dairy farm antibiotic use and transport pathways as determinants of contaminant loads to the environment" published in the Journal of Environmental Management (https://doi.org/10.1016/j.jenvman.2020.111880). The work focused on twenty-seven interviews of dairy farmers in Central NY March through October of 2019, completed and summarized by the authors. Eight of the farms included managed their farms according to USDA Certified Organic standards, and the remaining nineteen farms managed their farms conventionally. Farm size ranged from under 50 mature cows to over 1000 mature cows. This series talks about the nuances between farm size and management, specific to findings interesting to the dairy farmer. This article highlights farmer perspectives of antibiotic usage on-farm as well methods farmers use as a means for disease prevention.

Summer Interns with South Central DFC

The South Central Dairy and Field Crops Team welcomes summer interns, Megan Wittmeyer and Lydia Young. They are both getting first hand experience with Cornell Cooperative Extension.

Megan Wittmeyer is a senior in Agricultural Sciences at Cornell. She grew up on a small dairy farm in Erie County. This summer she is an intern for the Nutrient Management Spear Team where she is part of the Dairy Sustainability Key Performance Indicators project. The project aims to help farmers measure and manage greenhouse gas emissions. She is also working with Janice Degni with the South Central NY Dairy and Field Crops team. After graduation she plans to continue working on her family farm and possibly pursue a career in extension. In her spare time, Megan enjoys working outside, cooking, and reading novels.

Lydia Young is a senior at SUNY Morrisville majoring in Dairy Management and Agricultural Mechanics. She is currently interning at Cornell in the Nutrient Management Spear Program on the Dairy Sustainability Key Performance Indicators project. This project is focusing on quantifying the amount of greenhouse gases that are associated with dairy production and help farmers find areas where they can reduce these emissions. Lydia grew up on a 700 cow dairy farm in Cortland County. She plans to return to her home farm in a few years to manage crop production and machinery. She enjoys driving truck in her free time, and she is currently working on getting her private pilot license.

SUSTAINABLE DAIRY

SCIENCE FOR SUSTAINABLE PRODUCTION

This fact sheet outlines the objectives of a dairy sustainability project by better understanding the impacts of typical production practices in dairy and then finding ways to reduce any negative environmental impact from them. Although the dates in the article have passed the efforts are on-going and evolving. -Janice

Building Sustainable Dairy Systems

Dairy farming in the United States is a multi-billion industry that produces high-quality sources of protein, vitamins and minerals in the form of dairy products to an ever growing world population. While more cows on fewer farms produce an increasing volume of milk, dairy systems may be vulnerable to changes in society and our environment, including climate change.

The production of dairy products contributes about 2% of all greenhouse gas emissions in the US, primarily from the digestive system of the cow, the production of nitrous oxide from soil nitrogen cycling, and the application of manure and commercial fertilizers. The dairy industry, through the Innovation Center for US Dairy, has pledged to reduce greenhouse gases by 25% by the year 2020 by developing and using beneficial management practices on the farm.

The Sustainable Dairy Project

To better understand how dairy agriculture can become more sustainable, the U.S. Department of Agriculture is investing in a large, collaborative research project to examine dairy production systems across the Great Lakes region. Eight universities, four federal research centers and one business partner comprise the research team of scientists who specialize in soil science, animal science, social sciences, climate science and bio systems and agricultural engineering.

The five-year project focuses on aspects of feed efficiency and feed production, manure processing and energy use, economic aspects of manure handling, water use, nutrient use, and soil quality.

Reductions of greenhouse gas can occur at all stages of production, but the biggest reductions will occur through changes in feed management and manure processing.

As beneficial management practices are implemented across the Great Lakes region, farmers will make dairy production systems increasingly beneficial to the economy, the environment, and society, and consumers will be confident

Research

Over 50 scientists are involved in the research project. Data are being are collecting data in Wisconsin, New York and Pennsylvania to better understand:

- Feed rations and their effects on methane and milk production;
- Manure storage and alternative processing techniques such as anaerobic digestion and their effects on GHG emissions;
- How changes in diet and manure processing affect the nutrient availability of manure;
- Manure application and rates and their effects on GHG emissions and crop production;
- Water balances and budgets across grain and dairy cropping systems; and
- Cover crops and their influence on carbon and nitrogen cycling.

The measurement team is sharing the data collected with computer modelers whose tasks are to analyze physical, biological and chemical processes that occur on typical dairy farms and to identify where in the life cycle of the farm emissions are greatest. The process models are continually being refined to improve accuracy of greenhouse gas emission predictions and carbon capture rates in soil.

Climate scientists are also using existing global climate models and applying their predictive capabilities to the Great Lakes region. As climate models and process models are integrated, scientists will be able to recommend where in the life cycle of the farm alternative management practices can be implemented to improve resilience.

Dairy farmers can improve sustainability by implementing beneficial management practices to reduce greenhouse gases without sacrificing productivity or profit.

Management Tools

Several farm management tools will be available to farmers and their advisors as a result of the Sustainable Dairy project. The first is a refined measurement tool that accounts for emissions for the whole life cycle of the farm. An economic manure management tool examines alternative manure processing systems available to reduce emissions while weighing the costs of each system. Additionally, beneficial management practices will be identified to improve sustainability and resilience to climate change.

Research results will be shared with producers, co-ops, consultants, business groups, Extension agents and students at conferences, one-on-one interactions, and through various web-based tools. Additional information, research findings and extension materials can be found at www.sustainabledairy.org.

Images to support this information can be found on following page.

Cows produce half of the world's methane gas as part of their multi-chambered digestive system.

Researchers measure greenhouse gases emitted from the soil under different cropping rotations and management practices.

Nitrous oxide, an extremely potent greenhouse gas, is emitted during the applicatin of manure and chemical fertilizers.

Cows are sequestered in special chambers and the gases they belch are captured and measured. Cow genetics and feed both contribute to how much methane is produced.

Extreme weather events like flooding are associated with our changing climate and are occurring more frequently.

Manure collected from cows being fed different diets is captured and spread on soil before crops are grown to better understand how manure processing affects greenhouse gas production and crop performance.

Research can determine where on a farm most of the greenhouse gases occur and where changes can be made without sacrificing profit or productivity.

Photo 1: © UW Communications
Photo 4, 6 & 7 © UW-Madison CALS
Photos: 2, 3, 5 & 8 © Carolyn Betz

Information provided at www.sustainabledairy.org by:

USDA United States Department of Agriculture | National Institute of Food and Agriculture

NYFVI Farm Tour

When: August 12th, Noon lunch followed by Meeting/Tour from 1-3pm

Where: Riverside Dairy, Cincinnatus, NY

Cost: Free, supported by NYFVI grant program outreach

Topics: Cow Comfort, Calf Care, Transition Cow Facilities

Register here: https://scnydfc.cce.cornell.edu/event.php?id=1637

Riverside Dairy is proud to host a farm tour focusing on cow comfort, calf care and transition cow facilities as it related to a NY Farm Viability grant project over the past year. CCE Dairy Specialists will go over results and benchmarks from assessments of these areas from all 15 farms involved in the study and the farm will share areas they've worked to improve on their dairy, as well as give a farm tour of facilities. The tour is free to all participants, but registration is required. People should bring a chair to sit on for the lunch hour/ start of meeting.

For info on the event: Betsy at 607-391-2673
For help registering: Donette at 607-391-2662

Central NY Dairy Girl Network

Peer Group Meeting

Friday, July 16 11:30am - 1:30pm

Bob's BBQ
5290 State Rte 281
Homer, NY 13077

Dairy Girl NETWORK

The South Central NY Dairy and Field Crops Team is excited to announce that we will resume in-person meetings of our Central NY Dairy Girl Network Peer Group this summer. This peer group brings dairy women together to build camaraderie, share ideas and experiences, and learn from one another. We typically invite a guest to share an informal presentation about a topic of interest, and we encourage everyone to join the discussion. All women involved in any aspect of the dairy industry are welcome to attend.

We will discuss different systems for tracking herd records and how farms use herd records to make management decisions.

The meeting is free. However, attendees should **bring money to cover the cost of** their own **lunch**.

Please register here using the following **link** so we know how many people to expect.
Registration link: https://scnydfc.cce.cornell.edu/event.php?id=1627

For more info or help registering; contact Donette Griffith at dg576@cornell.edu or (607) 391-2662.

Dystocia and Difficult Calvings: A Perspective from Dam and Calf (Part 1) *By: Betsy Hicks (SCNY) & Casey Havekes (NNY)*

Dystocia is defined as an abnormal or difficult time during birth, at any stage of labor. A 2007 National Animal Health Monitoring System (NAHMS) study of calf loss in North America showed that 15.9% of calves died before weaning, and 8.1% of these deaths were from problems during calving and in the first 48 hours of life. We know that difficult calvings are hard on the dam, but from this we can infer that difficult calvings also negatively impact the calf. Calf vitality can be defined as the capacity to live and grow with physical and mental energy and strength, and we know that the physiology and behavior of a newborn calf is impacted by low vitality. It is estimated that dystocia has a cost of $400 million to the dairy and beef industries in the US annually, with the costs including losing the dam and/or calf, dams being culled earlier, producing less milk and rebreeding back more slowly, as well as calves being more susceptible to disease and growing more slowly. In this 2-part series, we will discuss dystocia from the dam's perspective in Part 1, and from the calf's perspective in Part 2. The information shared below was originally shared as part of Cornell Cooperative Extension's Critical Calf Care series. You can find links to the recordings by clicking here, and supplemental materials by clicking here.

Dystocia can occur as a failure in any one or more of the three main components of calving – expulsive forces, birth canal adequacy, or fetal size and positioning. Causes for dystocia can be broken up into three main categories – proximal causes (things that present themselves at calving), intermediate causes (things leading up to calving) and ultimate causes (the main reason for dystocia) (Mee 2008). Attributes of a difficult calving might present as a uterine torsion, abnormal position of the calf, or a disproportion of the calf to the birth canal. Intermediate causes can be diagnosed as longer gestation length, nutritional causes such as hypocalcemia or stress around calving. Ultimate causes can be attributed to gender of the fetus, multiple fetuses, or fetal abnormality, as well as parity, breed of sire or dam, season, nutrition of dam, region, disease presence, history and interactions between all causes. The most common type of dystocia seen is fetal size and positioning, with the most important risk factor for dystocia being calf birthweight. Birthweight can be influenced by many of the ultimate causes formerly mentioned.

To help identify when the dam may be in need of help and may be experiencing dystocia, it is important to know the three stages of parturition. Stage 1 involves changes that may or may not be visual cues to an observer. The cervix starts to dilate 4-24 hours before birth, and pelvic muscles around the tailhead start to loosen. The cow may have increased activity, and mucus may be present. Stage 2 is what people normally think of the calving process – first the water bag and amniotic sac appear, then the calf's two front feet and a nose should appear. The dam should be making visible progress every 15-20 minutes, and 1-2 hours after the start of Stage 2, the calf should be born. Stage 3 includes the expulsion of the placenta, which involves contractions and should occur 4-24 hours after the birth of the calf. Identifying which stage the cow is in may give cues as to what issue a cow may be facing during labor. Each farm should have specific protocols for timeframes to check for problems with calving, and how to give assistance to the dam, if needed.

If assistance is needed, there are a few things to keep in mind. First, the person assisting the birth should assess the problem. Is the calf positioned correctly? Is the cervix adequately stretched? Is the uterus twisted or normal? Is the calf appropriately sized to fit through the birth canal? Assuming these questions are answered, likely the birth can be assisted with minimal issue. If they aren't, or the answers aren't clear, a call to the veterinarian is never a bad idea. If assistance is given, remembering some key things will ensure the best outcome for both the calf and dam. Cleanliness, proper chain placement on the calf's legs, lubrication, proper force without using too much force, and pulling during contractions are all important factors to keep in mind when assisting a birth. Figure 1 shows the proper chain placement on a calf's legs to ensure minimal stress to the calf when being pulled (illustration courtesy of Alabama Extension).

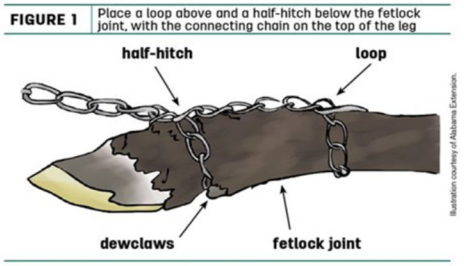

Figure 1. Proper chain placement on a calf's legs.

Retaining records on all births is recommended, but especially so for dystocia births. These records can be used to give prioritized care to both dam and calf after the birth. Things to note in records include: cow ID, person assisting, date, calving ease score, calf ID, results, and notes on dam and calf. For more information on record keeping, please refer to Episode 3 of Critical Calf Care (click here to access the recording). According to 2007 NAHMS data, severe dystocia impacts 6.8% of heifers and 3.5% of cows, and mild dystocia impacts 11.8% of heifers and 7.3% of cows. With that in mind, we know dystocia and difficult calvings are inevitable; however, understanding the stages of parturition and being prepared for recognizing signs of distress during calving are critical components of helping both the dam and calf through a difficult birth. Part 2 will discuss the impact of dystocia on the newborn calf and strategies for the producer to use to give the best quality of care to dystocia calves. If you have dystocia problems on your farm, please reach out to one of us (Betsy Hicks: bjh246@cornell.edu; 607-391-2673 / Casey Havekes: cdh238@cornell.edu; 315-955-2059) and we can help you troubleshoot this challenging area.

Read part 2 in our next issue; September/October Digest.

Considerations for Timely Euthanasia in Calf Care

By: Alycia Drwencke (SWNY) & Betsy Hicks (SCNY)

Calf care can be a tricky and frustrating task on farms. When everything runs smoothly, calves can be a source of joy for the care givers. However, when calves are sick or experience an injury, particularly if recovery is unlikely, stress for both the animal and caregiver increases. This highlights the importance of preventing illness and injury in calves, but unfortunately preventative measure aren't always successful. When a calf does become sick or injured, farms should work quickly to identify the problem and treat it accordingly, or perform timely euthanasia if prognosis is poor.

When a problem arises with a calf, physical and behavioral measures can be used to determine and monitor the severity of the situation. These same measures may also be used to evaluate the prognosis. Indicators of health can include hydration, feed or milk intake, amount of time spend lying down, posture such as arched back or droopy head, vigor scores, and so on. A calf that is identified as sick or injured should be checked for signs of distress, which include increased respiration rate, body temperature, heart rate, paddling/thrashing, or non-ambulatory status. Calves in distress may need to be euthanized immediately to minimize suffering for the calf and caregiver. If the cause of illness is unknown, performing a necropsy after euthanasia may be useful for farms. This resource from Colorado State University is extremely useful in performing on farm necropsies.

While the decision to euthanize an animal (particularly a calf) is extremely difficult, it is also important to make the decision in a timely manner. According to research, 95% of pre-weaned calf mortality on dairy farms in the U.S. occurred without euthanasia in 2014 (Walker et al. 2019). This is a concern for the welfare of the calves, the caregivers, and public perception. Within the dairy industry there is a need to focus more on *timely* euthanasia, especially in pre-weaned calves. While the decision to euthanize can be extremely difficult to make, having established protocols on farm can help alleviate some of the stress and guesswork of when to perform timely euthanasia. The emphasis here should be on the timely aspect. If an animal needs to be euthanized, reducing the amount of time they spend suffering is crucial. We have put together a "Euthanasia Decision Tree" that can help guide a farm when creating protocols to make the best decisions for calves in their care. It can be accessed at: https://cornell.box.com/v/criticalcalfcare.

Several things should be kept in mind when euthanasia is performed. First, only trained personnel should perform the procedure, and they should do so as soon as the decision is made. Second, during the euthanasia only an American Veterinary Medical Association (AVMA) approved method should be used. For dairy calves, these include three approved methods. 1) An intravenous (IV) administration of a lethal dose of a barbiturate or barbituric acid, 2) gunshot using an appropriate firearm, ammunition and anatomic site, or 3) non-penetrating captive bolt can be used for the euthanasia of neonates and calves less than 2-3 months of age. After the procedure has been performed, calves should be checked for signs of life and a second method used if needed. Farmers and calf care givers should request training from their veterinarian on the method they choose, as well as how to monitor for signs of life after the procedure. Finally, don't overlook the toll that performing euthanasia can have on the humans involved. It's important to provide a supportive environment to promote the mental health of caregivers performing euthanasia, and to rotate those responsibilities among trained employees if necessary. Euthanasia can often be viewed as a form of failure in caregivers, making it emotionally straining to both make the decision and perform euthanasia. This emotional strain can result in pushing off the decision to euthanize an animal, even if it's the most appropriate next step.

Additionally, farms should have a protocol in place for a severe disease outbreak on their farm which may result in mass euthanasia or mortality. This protocol should include contacting your local and state veterinarians, the plan for carcass disposal, and how other animals on farm will be protected along with the physical and mental health of humans. Risk factors for disease outbreaks include exposure to older animals, poor cleanliness or ventilation, damp bedding, crowding, and inadequate colostrum or nutrition. Especially when disease is present, humans working with sick calves should wear gloves, wash their hands regularly, and avoid touching their face to reduce the risk of contracting a disease that can pass between them and the calf.

Even while farms work hard to promote calf health, illness and injury are bound to happen from time to time. To those who care for calves, making the final decision of euthanasia can take a toll and it's important to account for the mental strain of making the decision as well as the procedure. When these situations arise, it's important to be prepared and have protocols in place to promote the welfare of both calves and caregivers.

Cropping Notes

By Janice Degni—Field Crop Specialist, South Central Regional Team

It's late June and the crop season is moving along and crops look good. Because of an extended planting season, corn is anywhere from 1-2 leaves to above knee high. Since late May and through June we have been fortunate to have adequate moisture and some higher temperatures to support crop growth. Other areas of the state are much dryer. Many have reported bumper yields of first cutting and a "best ever" wheat crop. A cold, wet period in early to mid-May impacted corn planted at that time with uneven growth in the field from delayed emergence and chilling injury.

Pests

The main task now is weed control. The weeds are growing as aggressively as our crops. Early weed control looks good but if you are finding escapes or problem perennials you may need another treatment for control. If you need help with identification or a recommendation, please feel free to contact me.

You may have noticed some chewing on the leaves of alfalfa of first cutting and the regrowth of 2nd cutting. There were reports of alfalfa weevil damage across the state. Some years their emergence and growth get out of sync with their natural enemies, and we see significant feeding damage in the crop. If the numbers are high enough treatment is necessary to stop the feeding damage. After assessing 50 random stems across the field the threshold for treatment before first cutting is feeding damage on 40% of the stems and 50% in 2nd cutting. If populations are heavy, you may see larvae on the ground after first cutting or you may see cocoons which means the feeding is done for the year and no treatment is needed at that point.

Potato leaf hopper has been reported in some fields, which means its time to sweep your field to monitor for presence and populations. Damage is always worse when conditions are dry because the plants cannot outgrow the feeding damage. A general guide from the NYS Alfalfa IPM guide follows (https://nysipm.cornell.edu/sites/nysipm.cornell.edu/files/shared/alfalfa-scouting-proc.pdf).

Base PLH management decisions on the chart below. If the average number of leafhoppers per sweep equals or exceeds the threshold in the right column, control is recommended.

Average Stem Length (in.)	Leafhoppers per Sweep (Threshold)
less than 3 in. (new seedings)	0.2
3 to 7 in.	0.5
8 to 10 in.	1.0
11 to 14 in.	2.0
15 in. or above	If PLH numbers exceed 2.0 per sweep, and if regrowth is within 1 week of harvest, no action is needed. If not, use a short-residual insecticide.

Watch your soybean for PLH and soybean aphid. Remember that beans can tolerate heavy leaf feeding from Japanese beetle and other leaf chewers because there are many leaves throughout the canopy.

Consideration for Sidedress Nitrogen in Corn

The time for applications of additional **nitrogen** by side-dressing is upon us. I will review the guidelines for need and rates. First year corn generally does not need additional N beyond the starter because the decaying sod provides a lot of nitrogen (See Table 1). Continuous corn with no manure definitely needs additional N. Other fields fall in the middle depending on year in rotation, prior haycrop and manure rates applied. Decaying sods contribute nitrogen for 3 years in the rotation at a diminishing rate. The breakdown is shown in Table 1.

Table 1. Nitrogen contributed by Rotation from Sod

% Legume	Amount N	Lbs N Mineralized		
	Plowdown	Year 1	Year 2	Year 3
		55%	12%	5%
>50%	300	165	36	15
25-50%	250	137	30	12
1-25%	200	110	24	10
0	150	83	18	8

Manure can be a wildcard in the equation because of a combination of application timing and guestimate of rate as well as the nutrient content of the manure. To get a handle on the nutrient content samples can be analyzed at Dairy One.

To know how much side-dress to supplement, you need to know how much nitrogen the corn crop needs and consider all the sources that provide nitrogen including the soil organic matter, past sod or soybean crop, and current and past manure applications. Tables 2 and 3 show the availability of manure,

(Continued on page 15)

(Cropping Notes. Continued from page 14)

based on time of incorporation and the breakdown over years and the average value of nitrogen in manure.

Table 2. Manure-Sources and Availability:

Organic N (N-OM) –slowly available

Ammonia N ($N\text{-}NH_3$) – immediately available and easily lost

Availability	Year 1	Year 2	Year 3	Year 4	
N-OM	35%	12%	5%	2%	
Availability	Immediate incorpora-tion	2 days	3 days	4 days	Injection @ sidedress
$N\text{-}NH_3$	65%	50%	40%	20%	100%

Table 3. Average Values of Nitrogen in Manure

Non-Liquid	Tons /yr	% Dry matter	Total N	N: $N\text{-}NH_3$	N: N-OM	P_2O_5	K_2O
			----------Lbs/ton----------				
average: range:	15	15 (12-20)	10 (8-12)	6 (5-8)	4 (3-5)	5 (4-6)	8 (7-10)
Liquid	Gal/ yr		----------Lbs/1000 gal----------				
average: range:	5600	10 (8-12)	27 (22-34)	16 (12-20)	10 (7-12)	13 (10-15)	24 (20-30)

The long-term rule of thumb for calculating nitrogen needs in corn is 1.2 lbs nitrogen per bushel (bu) of yield. Recent research has shown that current hybrids and our cropping practices have increased the efficiency of N uptake and can be as low as .8 lb per bu of yield.

"Today N is expensive, corn price is low, and we can't let N escape into the environment. Today's corn hybrids also are much more nitrogen efficient, and continuous corn is common. We see rates of 0.9 to 1.0 pound per bushel and some farmers are even pushing it to 0.7 to 0.8 pound per bushel yield goal. In general I believe the 1 pound per bushel expected yield works quite well, but we need to take the right credits and apply that N smartly to protect it from losses. As yields go up from 200 to 250 and now even 300 bushels per acre, it takes more N per acre and we have to be smarter on how we manage that investment."

– Dr. Dan, Progressive Farmer

Reference: Nitrogen Math: Simple Calculations Give You the Right Rates. https://www.dtnpf.com/agriculture/web/ag/crops/article/2016/03/21/nitrogen-math-simple-calculations

(Six Keys to Retaining Great Employees—Continued from page 3)

One of the additional attributes of people is feeling. We learned from Herzberg, that positive feedback is a motivator. A crucial "best practice" for leaders and supervisors is, therefore, identifying specific successes and providing positive feedback to the employee.

We typically believe there are two forms of feedback – positive and negative - with negative feedback typically thought of as a reprimand. Please DELETE the idea that there are only two forms of feedback from your mind.

Three forms of feedback are required because there are two reasons for employee performance failing to meet expectations:

1. The failure to meet expectations was caused by the situation or the context of the performance – lack of training, ineffective supervision, unpredictable circumstances, unreasonable expectations.
2. The situation cannot explain the failure; the failure to meet expectations can only be explained by the employee's personal characteristics -- motivation, effort, commitment.

The second reason may call for negative feedback. Negative feedback, however, is completely inappropriate for the first reason as it would be UNFAIR. Here we need to use redirection feedback to redirect the employee to success.

To successfully provide quality feedback, three forms of feedback are required – positive, redirection, and negative. Excellent use of especially positive and redirection feedback will dramatically enhance retention and reduce the need for negative feedback.

Career oriented compensation

Compensation on most farms and agribusinesses is formulated to serve young employees who are unlikely to make a career working for the farm/business. To retain key employees, compensation packages need to be redesigned to encourage career oriented employees to stay with the business. Each package will be different, but potential components include health insurance, retirement plans, long term disability, and financial support, partial or full, for professional development programs potentially including degree programs.

Hire the right people

The sixth and final point is that retaining great people requires that we hire them. Developing more professional and structured recruitment and selection process will increase the likelihood of hiring great employees that we will then wish to retain as career employees.

Cornell Cooperative Extension
South Central NY Dairy and Field Crops Program
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Upcoming Events

July 16, 2021 **11:30—1:30 pm**	**CNY Dairy Girl Network Peer Group Meeting—Herd Records** Bob's BBQ—5290 State Rte 281. Homer, NY / **No Charge**, Bring Lunch Money Register here https://scnydfc.cce.cornell.edu/event.php?id=1627 or 607-391-2662 for assistance
July 27, 2021 **12 pm—2:30 pm**	**South Central NY Organic Dairy and Field Crop Day** Scheffler's Farm 643 Cobb St, Groton, NY 13073 / Various Speakers / No Charge Register here:: https://scnydfc.cce.cornell.edu/event.php?id=1635 or 607-391-2662 for assistance
July 28, 2021 **12 pm—2 pm**	**Dairy Grazing Pasture Walk Summer Series—Session One; Carey Farm– Groton, NY** With CCE Educators, Fay Benson & Mary Kate MacKenzie / No Charge Register here https://scnydfc.cce.cornell.edu/event.php?id=1631 or 607-391-2662 for assistance
August 12, 2021 **12 pm—3 pm**	**New York Farm Viability Initiative Farm Tour—Riverside Dairy** Topics: Cow Comfort, Calf Care, Transition Cow Facilities / No charge *supported by NYFVI grant* Register here https://scnydfc.cce.cornell.edu/event.php?id=1637 or 607-391-2662 for assistance
August 12, 2021	**2021 Cornell Hemp Research and Extension Team Field Day** Offering a hybrid field day this year—both in-person at Cornell AgriTech in Geneva and on Zoom. FMI: https://hemp.cals.cornell.edu/2021/05/26/upcoming-event-2021-cornell-hemp-field-day/
August 18, 2021 **12 pm—2 pm**	**Dairy Grazing Pasture Walk Summer Series—Session Two; Troyer Farm– Candor, NY** With Upper Susquehanna Coalition Grazing Specialist /"*The Grass Whisperer*" Troy Bishopp / No Charge Register here https://scnydfc.cce.cornell.edu/event.php?id=1630 or 607-391-2662 for assistance
September 8, 2021 **12 pm – 2 pm**	**Dairy Grazing Pasture Walk Summer Series—Session Three; Murraydale Farms– Truxton, NY** With USDA Natural Resource Conservation Service Grazing Specialist, Karen Hoffman / No Charge Register here https://scnydfc.cce.cornell.edu/event.php?id=1629 or 607-391-2662 for assistance