

Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program
Broome * Chemung * Cortland * Onondaga * Tioga * Tompkins

DAIRY & FIELD CROPS DIGEST

May/June 2020

COVID-19 ISSUE * COVID-19 ISSUE * COVID-19 ISSUE * COVID-19 ISSUE

COVID-19 Response: Leadership, Planning, and Communication/Collaboration Written by Dr. Bob Milligan

I have been visiting with clients and colleagues and thinking about how to respond to our COVID-19 crisis. My wife and I are hunkered down as we are among the vulnerable and are in position to isolate.

This issue is a series of short articles focused around what I think are the three keys to navigating this crisis. They are:

Leadership

Planning

Communication and Collaboration

Fear and Loss

Essentially every American has some level of fear and is experiencing loss/losses – loss of the normal if nothing else. From the work of Kubler-Ross in developing the Grief Cycle and subsequent research, we understand much about how we humans respond to loss.

All of us are in one or more of the first three stages of loss. A characteristic of these three stages is that we are at least to some degree decision-making challenged. The three stages and the decision-making challenge are:

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Shock and Denial: Need for decision making often not recognized.

Anger: Emotional drain makes decision making very difficult.

Depression and Detachment: Hard to find the energy to make decisions.

Please keep this loss of decision-making capacity in mind as you read the following articles.

Leadership in a Crisis

My favorite description of leadership comes from Marcus Buckingham: "Great leaders rally people to a better future." I have typically used this in discussing vision and strategy, where the future is distant. In the current crisis, we need to think of the better future as referring to any future – 1 minute, 1 hour, 1 day, 1 week, 1 month, 1 year, 1 decade, 1 career. In other words, rallying people to a better future is your constant responsibility and never more so than in our current COVID-19 crisis.

One of the most difficult responsibility of leaders is that their outward persona often must be very different from their inner feelings. Think of the manager of a baseball team in a tengame losing streak. He is frustrated, tense, maybe even scared for his job. His responsibility as the leader, however, is to be encouraging and upbeat to keep his team focused to end the losing streak.

In this crisis, you are in a similar position. You are responsible for rallying people to a better future by being encouraging, hopeful and providing direction. I am not suggesting that you be unemotional. It is certainly OK and likely helpful to share that you are stressed, even scared, but help your staff to move beyond your and their emotions.

I dare you to try to overcommunicate

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The **South Central New York Dairy and Field Crops Program** is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in 6 Counties.

CCE to Provide Facemasks and Hand Sanitizer for Farms & Their Employees

From NYS Farm Bureau

Cornell Cooperative Extension is partnering with the NYS Department of Agriculture and Markets and the NYS Fairgrounds to distribute free sanitizer (from NYS Cleans) and reusable cloth face coverings for farmers and farm employees. Farmers needing sanitizer and/or face coverings for themselves and/or employees can request supplies by contacting their local county cooperative extension (remember, if expecting employees later in the season, please consider their needs in requesting quantities). The general guidance is each person should have at least two face coverings, but if employees are working in a dairy or livestock situation, it may be practical to request three per person. Instructions in Spanish can be provided for farmers with Hispanic and Latino employees to help in

providing appropriate protocols for wearing face coverings and instructions for care. Cornell Cooperative Extension and Cornell CALS anticipates that additional deliveries will be made in the future, so if you do not receive free product this first distribution, please make sure to connect with your local county cooperative extension for future deliveries. The free products are available thanks to Gov. Cuomo and the NYS Department of Agriculture and Markets. Please contact your local CCE office for pick-up locations and hours of operation.





We are pleased to provide you with this information as part of the Cooperative Extension Dairy and Field Crops Program serving Broome, Cortland, Chemung, Onondaga, Tioga and Tompkins Counties. Anytime we may be of assistance to you, please do not hesitate to call or visit our office. Visit our website: http://scnydfc.cce.cornell.edu and like us on Facebook: https://www.facebook.com/SCNYDairyandFieldCropsTeam.

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Biosecurity for People: 7 Steps to Protect Farm Workers from COVID-19

By Mary Kate Wheeler, South Central NY Dairy and Field Crops Team

<u>Biosecurity</u> is second nature to many dairy and livestock producers, Visual so let's apply that perspective to the current pandemic. First, a quick review of what we know about COVID-19 and how it spreads.

According to the Centers for Disease Control (CDC), COVID-19 is a respiratory illness caused by a new coronavirus. The virus can spread from person to person through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. For this reason, most transmission is thought to occur between people who are in close contact with one another (within about six feet).

People are thought to be most contagious when they are most symptomatic (the sickest). However, some spread might be possible before people show symptoms. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads. Again, most transmission occurs between people who are in close contact with each other.

A COVID-19 outbreak on a dairy farm could dramatically reduce that farm's workforce, with catastrophic consequences for everyday operations. In New York State, local health departments have the authority to impose mandatory quarantine for any person who "has been in close contact (6 ft.) with someone who is positive but is not displaying symptoms for COVID-19." If one worker on your farm tests positive for the new coronavirus, how many other workers would be placed in mandatory quarantine? How would your farm get by if you suddenly lost a significant percentage of your workforce? These questions need to be on every dairy manager's mind as the industry begins to address this new biosecurity threat. To manage the human risks associated with COVID-19, every farm operator should be thinking about two things right now: prevention and contingency planning. This article addresses prevention, otherwise known as "biosecurity for people." Use these seven steps as a guide to develop your own biosecurity program aimed at keeping your farm workforce safe, healthy and productive.

1. Talk with employees about coronavirus.

Talk with your workers early and often about the new coronavirus, how it spreads, and how to prevent transmission. Make sure your employees know how to recognize symptoms of COVID-19
. Stress the importance of prevention through frequent hand washing, avoiding close contact with people who are sick, and regularly cleaning and disinfecting surfaces. Encourage respiratory etiquette, including covering coughs and sneezes. If soap and running water are not immediately available, provide alcohol-based hand rubs containing at least 60% alcohol. Be sure to model all of the behaviors that you ask your employees to adopt. Encourage employees to ask questions, and be honest if you don't know the answer. Only share information from reliable sources, such as the US Centers for Disease Control and the NYS Department of Health.

2. Post information about how to prevent the spread of germs.

Visual reminders can help workers change their behavior to prevent the spread of germs. Posting this information can also help to reassure your employees



that the farm's leadership cares about their safety and is taking the coronavirus seriously. Print posters from the NYS Department of Health in English or Spanish. Post this information in employee break rooms, bathrooms, and any other areas where employees gather on the farm. Don't forget to hang posters inside worker housing too! Hand washing and social distancing behaviors are just as important at home as they are on the job, especially if workers are living close together in group housing.

3. Actively manage cleaning and disinfection.

Adopt OSHA guidelines for routine cleaning and disinfection in the workplace. Set up regular daily and weekly cleaning schedules with assigned responsibility, not only for the workplace but also for employee housing. Provide the necessary cleaning supplies, equipment, and PPE so workers can stick to the schedule. When choosing cleaning chemicals, consult the **Environmental Protection** Agency (EPA) list of disinfectant products registered for use against the novel coronavirus. This list includes more than 300 products, identifies the active ingredient(s) in each product, and specifies the contact time needed to be effective as a disinfectant. Always follow the manufacturer's instructions for use of all cleaning and disinfection products, including the concentration, method of application, contact time, ventilation, and PPE. The CDC provides additional guidance for <u>cleaning and disinfecting your facility</u> if someone is sick. Similar guidelines are available for cleaning and disinfecting households with suspected or confirmed COVID-19 cases.

4. Minimize contact between employees in the workplace.

Ask workers to stay at least six feet apart whenever possible to reduce the odds of transmission. Review and update work procedures to support social distancing. Consider adjusting schedules to minimize overlap between shifts. Conduct face-to-face meetings only when necessary, and postpone staff meetings whenever possible. Consider alternative communication technologies to conduct meetings remotely (see below). If you absolutely must meet as a group, conduct meetings in an open space where employees can stay at least six feet apart.

5. Minimize contact with outside service providers.

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Do's and Don'ts for Dairy Farmers When Facing Financial Difficulty

Prepared by: Wayne A. Knoblauch, Professor, CALS Cornell University & Jason Karszes, Senior Extension Assoc. PRO-DAIRY, CALS Cornell University







Do's

- 1. Complete a production and financial management analysis of your business for 2019. Determine strengths, but most importantly, areas for improvement that result in an immediate response and improvement in cash flow.
- 2. Complete a profitability and cash flow projection.
 - A. Partial budget of the expected impacts of any changes made to improve the business.
 - B. Whole farm budgets of expected cash inflows and outflows along with profitability.
- 3. Meet with your lender and share your financial management analysis and cash flow projections. Communicate with your lender often and provide periodic updates regarding your financial situation.
- 4. Continually review and update cash projections and partial budgets. Cash flow management is the key to surviving difficult economic times.
- 5. If you have past due balances, meet with suppliers to develop payment arrangements.
- 6. Effectively utilize farm produced feeds, especially forages.
- 7. Test all farm-grown forages and feed for nutrient availability. Evaluate the most cost effective commodities to purchase when feeding balanced rations, especially to early lactation cows. Focus on the goal of minimizing loss, not minimizing cost.
- 8. Treat disease outbreaks, such as mastitis, before they become worse.
- 9. Be an astute purchaser of inputs. Check more than once source for prices.
- 10. Examine family living to see if expenses can be reduced.
- 11. Maintain minimal inventory; cull unprofitable cows, buy feed as needed. If you have extra dairy replacements, consider selling them. When selling animals, remember to consult your tax preparer concerning associated tax liabilities.
- 12. Sell nonessential capital items, including machinery and equipment; that is not needed to operate the business. Consider selling land not essential to the business, including timber.

 Remember to consult your tax preparer concerning tax liabilities of a sale and your lender for any restrictions associated with selling collateral.
- 13. Examine debt for possible benefits of restructuring or alternative financing.
- 14. Perform tasks in a timely fashion, yet get enough rest. Sleep deprivation can interfere with task performance and judgement.
- 15. Consider off-farm work by all family members.
- 16. Communicate current financial situation often with management

- and team/family members. Seek and welcome their suggestions and involve them in key financial decisions.
- 17. Forward contract inputs such as feed, fuel, and other supplies if you can lock in a profit.
- 18. Monitor the financial health of those who purchase your farm products. They may also be under severe financial pressure in this economic period.
- 19. Seek management advice and analysis assistance early from cooperative extension, consultants, FarmNet, and others.
- 20. Seek personal counseling and advice from close friends, clergy, FarmNet, medical professionals, and others.
- 21. Routinely test manure for nutrient content. Employ modern soil testing technology to minimize purchased crop nutrients.
- 22. Evaluate risk management tools such as crop insurance, dairy margin coverage, and dairy revenue protection insurance in order to minimize production and price risk.
- 23. Evaluate business arrangements with other farms that have potential to reduce costs.
- 24. Adopt new technologies, such as variable rate seeding, only after careful study for impact on costs and returns.
- 25. Obtain price quotes from multiple suppliers for inputs such as feed, fuel, and other necessities.

Don'ts

- 1. Make decisions that will cause the problem to be worse in a week, month, or year down the road.
- 2. Continue the same practices simply because you've always done it that way.
- 3. Neglect needed accounting tasks because there isn't time right now.
- 4. Utilize farm produced feeds so rapidly that they are used up without a replacement plan.
- 5. Reduce purchased feed just to save money.
- 6. Purchase products that promise to be a cure-all, unless you have hard data and experiences of others to confirm.
- 7. Make capital investments to reduce tax liability or because "it is a good buy."
- 8. Borrow money unless the cash income to the farm is reasonably expected to increase in order to provide for repayment.
- 9. Neglect the details; cleaning and maintaining equipment, communicating with and managing labor, detecting heats, etc.
- 10. Use alcohol to excess. Alcohol and other drugs can make a tough situation even worse.
- 11. Assume a management strategy that worked for one farm will be effective on yours.



Dairy Farm Risk Management Options April 2020

By Christopher Wolf, Dyson SC Johnson College of Business, Cornell

April 3, 2020 - It would be an understatement to say that the current payments as of Friday, March 27 on 5 million covered pounds economic environment is one of uncertainty. The dairy markets are no exception. On January 22, futures contract Class III milk price was between \$17.75 and \$18.25/cwt from February through December 2020. Class IV futures were between \$17 and \$18.50/cwt. The resulting expected average margin from the DMC program was \$10.86/cwt for 2020. The market fundamentals at that point in time very much supported a good farm milk price year with slow growth in the major exporting countries, a healthy economy, and more positive trade prospects. As of Friday, March 27 Class III futures were between \$13.90/cwt (May) and \$15.51/cwt (September). Dairy product and class prices continued to drop the following week. With this rapid shift on prices, many questions are being asked about what options farms might have available to protect themselves from negative price changes. Milk price risk management options for US dairy farmers includes the Dairy Margin Coverage (DMC) program, crop insurance programs including Dairy Revenue Protection (Dairy RP), as well as cooperative options and futures and options contracts.

Dairy Margin Coverage Program

The DMC program is a program administered by the Farm Service Agency. DMC is the second incarnation of the Margin Protection Program (MPP) that was modified in the 2018 Farm Bill. The program uses a national income over feed cost estimate calculated using the US All Milk Price as well as the NASS US corn price, supreme alfalfa hay, and Central Illinois soybean meal price.

Sign up for 2020 DMC coverage took place from October into December 2019. Some producers signed up for 5 years of coverage (2019-2023) and took a discounted premium. From the enrollment data, of the 28,000 or so herds with a production history 13,000 signed up for 2020. Some of these did so at the \$4/cwt margin level. Nationally, 11,000 herds enrolled for 2020 at \$9.50/cwt level covering 28.3 billion pounds of milk (about 12.8% of expected milk production). For New York, 683 herds enrolled at \$9.50/cwt (17.6% of herds). 15.12 billion pounds of New York milk were enrolled at \$9.50/cwt for 2020 representing 10.25% of 2019 milk production. The DMC average margin on March 27 was \$8.33/cwt for 2020. Actually, that margin did not look so bad in a longer historical context but that is still a loss of \$2.50/cwt in projected income over feed margin in 9 weeks and it does not reflect the deep financial hole many producers find themselves in following the last few years of poor returns. DMC payments are projected to be \$2.95/cwt in June but that will be for a maximum of 4,167 cwt so the monthly payment would exceed \$12,000 prior to netting out the premium. Expected 2020 DMC

of milk production at \$9.50/cwt totaled just shy of \$60,000 even when netting out the \$0.15/cwt premium (UPDATE: As of April 1 the total was now in excess of \$90,000 but this depends on actual milk and feed prices in future months). The futures markets is currently predicting a bit of a recovery in margins in the fall months with payments ending. Should COVID-19 continue, it seems likely that may deteriorate resulting in a higher payments. Depending on the farm size and financial situation, the expected DMC payments may be very useful. If producers are not signed up for DMC in 2020, at this point it is no longer an option. Perhaps lawmakers will reopen DMC enrollment for 2020 but that remains to be seen.

The values for expected DMC margins are updated with each trade day. Using this information, farms can assess the expected payments and assistance for 2020.

Dairy Revenue Protection Insurance

Dairy-RP is an insurance program administered by the USDA-Risk Management Agency. It allows producers to cover milk price using Class III or Class IV milk prices by quarter based on current futures contract prices. Producers can cover up to 95 percent of the average quarterly milk price with subsidized premiums. Butterfat and protein components may also be covered using this program which may be desirable to producers with high herd tests. As of the end of January about 3 billion pounds of milk were covered for 2020 under Dairy-RP which is about 1.5% of expected annual total. At the present time, the decision to lock in those prices looks brilliant. Unfortunately, it makes less sense to lock in prices where they are currently are as it would be considerably below costs of production for most farms. Are we at (or near) the bottom? In the nearby months, there are few opportunities at the current time that will excite dairy farmers. \$12.60/cwt Class III is very low—the last time milk prices were at this level was October 2009. For Dairy-RP, it would appear there might be opportunities in the first or second guarter of 2021. Of course, that is of little use for short-run but may limit risk if uncertainly continues over the year. Interested farm managers should monitor the futures prices for opportunities. If the virus is short-lived, markets may recover with more typical economic activity.

Dairy RP premium calculators are available from crop insurance providers and others that sell the policies including Farm Credit.

Private and Cooperative Price Risk Management

Producers may utilize futures and options for milk (on the Chicago

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Managing Stress in Unprecedented Times

By Jan Kirshenbaum, MSW, NY FarmNet Consultant and Kate Downes, NY FarmNet Outreach Director

First, a brief quiz, True or False:

- 1) Anxiety is a good feeling.
- 2) Feeling I have no control is fun.

If you answered "false" to both of those statements, you are in the company of most of the world. This is a time with no precedent, no reference points, no ability to remind ourselves "Well, the last time this happened, I _______." There is no previous time with the novel coronavirus.

Whatever our age, a life-altering event can leave us hoping there is some magical cure that will help us feel less bad: "If only I read the right book/ hear the right sermon/ go to the right workshop, I can learn how to feel less bad." Unfortunately, no magic exists in this situation. Amplifying our fears is the fact that the ultimate "grown-ups"—the President, governors, hospital administrators—are telling us there will be no quick solutions to this situation, and it may get worse before it gets better. Taking all of that into consideration, there are a few things to keep in mind:

Stress is characterized as inevitable events that occur that are difficult for us to manage or influence: a scary medical diagnosis, milk and commodity prices that are low, weather that impedes crop production, tensions within our family.

Distress is our reaction to these events. Trying to figure out how to deal with the distress—and, hopefully reduce the distress—gives us back some control at a time when we may feel like we have no control.

- First, acknowledge the feelings you are experiencing: fear, anger, disappointment. This is no time to be a hero; it is natural and universal to feel very bad in the midst of a catastrophic event such as this epidemic.
 - Consider sharing some of your feelings with family and friends. Things that frighten and anger us tend to get smaller when exposed to air and light.

- At the same time, if you find yourself watching endless coverage of this pandemic on television, ask yourself if that is helping you or making you feel worse.
- Reach out to friends and family members on the phone or online to check in with them to see how they're doing.
 Maintaining points of contact during uncertain times can help everyone.
- Many adults have learned some ways to try to lessen uncomfortable feelings when feeling distressed: go for a run, watch a funny movie, read to a child, walk outside, breathe.
 Engage in any of these coping strategies that you find works best for you.
- There are behaviors we turn to that have often caused us greater distress: drinking or eating too much, sleeping too little, lashing out at the people we care about because we are so worried. To the degree possible, try not to increase these behaviors during this difficult time. If you feel you need assistance to manage any of these behaviors, there are trained professionals available who know techniques to address these issues. Resources may include your pastor, the county mental health clinic, NY FarmNet, or a trusted family member or friend.

Sometimes taking healthy steps on your own to lower stress is not enough, and that is ok. Recognize when you need more help. If problems continue, or you are thinking about suicide, talk to a doctor, social worker, or professional counselor.

NY FarmNet 1-800-547-3276, www.nyfarmnet.org
National Suicide Prevention Lifeline 1-800-273-8255

(TALK), <u>www.suicidepreventionlifeline.org</u> **Crisis Text Line** Text "GOT 5" to 741-741,

www.crisistextline.org



(Dairy Farm Risk Management—Continued from page 5)

Mercantile Exchange website above), corn, soybeans (Chicago Board of Trade) and other commodities through brokers. Many that producers should at least cover the variable (operating) costs in the short-run. In the long-run, all costs must be covered. In recent options contracts but offer more contract size flexibility. years, farm milk prices have been boom or bust with some years

Price Risk Management Considerations

If the farm financial situation is such that catastrophic milk prices must be avoided then the farm manager must act accordingly

(unfortunately, we may already be there for much of 2020). Financial analysis can inform managers whether risk management is desirable but not what to do or when. One tenet of economics is that producers should at least cover the variable (operating) costs in the short-run. In the long-run, all costs must be covered. In recent years, farm milk prices have been boom or bust with some years below cost of production for many producers. In periods, when milk prices are below cost of production, the objective turns to

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Fitness for Transport to Auction Barns or Processing Plants

By Michael J. Baker, PhD Beef Extension Specialist -Cornell, Dr. Robert Lynch, DVM Cornell Pro-Dairy

Given that there may be a rush to get cull cows to market, there are some key factors to animal well-being that need to be taken into consideration. This is especially true if cows will have to be transported longer distances to get to a processing facility.

There are 3 main factors to determine fitness for transport. They

are: 1. the health of the animal,

- 2. the mobility of the animal,
- 3. and the body condition of the animal.

One of the most important decisions in transporting cattle is to determine if an animal is:

- 1. fit to be transported,
- 2. If transportation should be direct to a small processor, especially those that do emergency slaughter,
- 3. if transport should be postponed to allow for treatment,
- 4. or if proper euthanasia methods should be carried out.

The chart below provides a checklist to use when making the transport decision.

Cattle Marketing and Transport Decisions Checklist				
Condition	Transport with Special Care	DO NOT TRANSPORT1		
Non-ambulatory		$\sqrt{}$		
Exhausted or dehydrated		$\sqrt{}$		
Unknown or beyond withdrawal times		$\sqrt{}$		
BCS <=2.0 (dairy and beef)		$\sqrt{}$		
Imminent calving		$\sqrt{}$		
Cattle requiring mechanical assistance to rise or walk		V		
Bone fractures of the limbs or injuies to the spine		$\sqrt{}$		
Body temp >103°F		$\sqrt{}$		
Conditions that will not pass pre- slaughter inspection 2		$\sqrt{}$		
Locomotion score 5	V			
Recent fracture unrelated to mobility (i.e. ambulatory)	√ 	_		
Protruding prolapse 3		_		

¹ Make the decision to treat, to cull, or to euthanize cattle promptly. ² Cancer eye, blindness in both eyes, distended udders causing ambulatory issues, staggering, turning in circles, foaming at the mouth.

₃Protruding prolapses and/or obvious surgery may reduce the price and will most likely result in testing for antibiotics.

Additional resources on COVID-19 can be found at: http://blogs.cornell.edu/beefcattle/covid-19/.

NYS Market Prices can be found at https://www.ams.usda.gov/market-news/feeder-and-replacement-cattle-auctions#NewYork.

NMPF FARM Program Resource Library – resources for health management, fitness to transport, and euthanasia

Cornell Waste Management Institute Composting Animal Mortalities

Herd Health Management: Do's and Don'ts for Dairy Farmers During the COVID-19 Pandemic

By Rob Lynch, DVM, CALS & Pro-Dairy

Each time the dairy industry experiences low milk prices, managers start looking for ways to save money. This is smart and something that all good businesses do. If less money is coming in, how do we cut down on how much money goes out without hurting the business in the long run? These decisions can be challenging when it comes to herd health expenses since the consequences of a bad decision might not be seen right away.

Here are a few *do's* and *don'ts* to consider as we all turn our attention again to reducing unnecessary expenses on the dairy. During this pandemic there are a few additional things to consider when making cost saving decisions like labor availability, social distancing, and cleaning protocols for high touch surfaces. These precautions add cost to daily operations but are effective in limiting spread of COVID-19.

<u>Do:</u> Review your treatment protocols to make sure they align with efficacy standards. This includes screening the daily treatment sheets to make sure protocols are being followed. Altering drug doses and/or treatment frequencies rarely leads to improved treatment outcomes, but significantly adds to treatment expenses, increases the risk of having a drug residue, and wastes labor hours.

Don't: Decrease the dose or duration of therapy from the agreed upon protocols without your veterinarian's approval.

Subtherapeutic use of medication reduces efficacy leading to increased treatment failure, poor animal performance, and increased risk of mortality.

<u>Do:</u> Eliminate steps in your vaccine protocol that lack sound disease prevention data. Have your herd health team review the current program. For disease threats faced by the dairy, does using the product make sense? Are those responsible for administering vaccines clear on what to do? Giving too many vaccines is a waste of money, time, and may increase the risk of compli es may not provide your herd protection from diseases.

<u>Don't:</u> Eliminate vaccination steps that lead to lowered herd protection from known disease threats unless you can absorb the cost of a disease outbreak. Reducing vaccines to save money could potentially end up costing you a lot more should the disease present itself.

<u>Do:</u> Critically evaluate replacement animal inputs to ensure they are contributing to heifer performance. Track heifer performance regularly to make sure your replacement program is working and maximizing your investment in those inputs.

Don't: Make cuts in your heifer raising program that end up

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Diet and Management Considerations for Emergencies: Reducing Milk Flow Without Harming Cows & Threatening Future Production

By Mike Van Amburgh, Tom Overton, and Julio Giordano—Dept. of Animal Science, Cornell University

Given the unprecedented market conditions and the inability to get milk processed effectively in the short-term, processors are asking dairies to reduce milk supply at a time when it is not possible to cull heavily due to decreased meat processing facility capacity for cattle. We are providing these diet and management considerations in an effort to help dairy producers and their advisors (e.g., nutritionists, veterinarians, other consultants) meet this unusual request, while maintaining cow health and working to ensure that cows have the capacity to resume normal milk production relatively quickly once this situation stabilizes. These considerations may fit management for some but not all dairies. Every operation will have to determine what might work best for them under their current management conditions.

Diet Related Strategies

To start, we recommend that the diets are formulated by your nutritionist. We need to ensure that all nutrients other than energy are being balanced according to the energy allowable milk. This is important as we want to ensure when the restrictions are removed, the cows are in good shape to be able to return to normal productivity.

The most logical and cow friendly approach would be to reformulate the diets to increase the amount of forage fed to the cows and reduce starch and sugar accordingly. In order to do this, forage inventories need to be measured, as you do not want to run out of forage prior to harvesting first cutting.

The decision to make changes negatively affecting milk yield in the high cows will be herd dependent as the most effective strategy is to limit the later lactation cows through nutritional strategies. The following strategies are not stage of lactation dependent, but the implementation might be.

The optimum aNDFom intake is 1.2% of body weight (BW) which for a 1,650 to 1,750 lb cow would be 20 to 21 lb. At 60 lb of dry matter intake that would be 33 to 35% aNDFom as a standard formulation. If you are not at that level of aNDFom, the first step is to formulate in that range assuming forage inventories will allow for that increase, otherwise increasing non-forage fiber sources would work. At the same time, reduce starch content of the diet to 20% or less while maintaining rumen nitrogen levels to keep the microbes in positive N balance. It is important to balance metabolizable protein (MP) allowable milk to predicted metabolizable energy (ME) allowable milk to maintain normal milk composition. It is also important to make sure minerals and vitamin levels are maintained to ensure good health.

For the post-peak cattle, generally greater than 120 to 150 DIM and pregnant, the aNDFom can be formulated up to 38% of the diet in an

effort to limit energy intake and reduce milk yield while keeping the rumen full of fiber. Again, reduce the starch and non-forage fiber sources and maintain MP and minerals and vitamins at the level that matches the ME allowable milk.

Management Strategies

Obviously, culling problematic cattle is the best strategy, but again this capacity is currently reduced due to decreased meat processing facility capacity issues. Reducing overcrowding to no more than 115% to 120% is one approach. Another is to set an upper limit on SCC and cull chronically high cows. Finally, any cows requiring more than three services to attain pregnancy would also be good candidates for culling at this point in time.

Another non-dietary management option to immediately reduce herd milk production is to dry off pregnant cows greater than 200 DCC, especially cows that became pregnant later in lactation and have long DIM, or cows below a milk yield threshold that will be farm-dependent. Certainly, cows that are likely lower margin cows based upon estimated Income Over Feed Cost are good candidates. Before doing this, ensure there is adequate pen space available to provide reasonable cow comfort, potentially convert late lactation milking group pens to additional far-off dry cow pens, and provide a low energy, high fiber dry cow diet to avoid too much BW accumulation since these cows will have longer dry periods.

Another option is switching from 3X to 2X milking. An important consideration for this strategy is to start with the fresh cows up to 21 DIM and the later lactation cows (>150 DIM). Changing the cows in peak production will cause stress and previous experiences suggest if they are near peak or just post-peak, intra-mammary pressure will be quite high causing significant discomfort in the cows. We have observed herds that made this change in the cows at peak milk yield and they were uncomfortable, do not lay down, leak copious amounts of milk and there are large increases in SCC as the gland is put under such stress. To mitigate this, it would be better to change the diet first to reduce the nutrient supply to start to lower milk yield and then make the switch after a few weeks. From our perspective and from the options discussed, decreasing milking frequency will result in the longest lag in terms of the herd returning to normal milk production, so it is our less preferred option.

We want to emphasize that these approaches are intended to be for short-term conditions and if properly applied should not have long-term consequences on overall lactation performance other than the change to 2X milking. If nutritional changes are implemented to reduce milk output, reversing the process should be conducted over a couple weeks to allow the rumen to adjust to the higher starch, lower aNDFom diets.



(COVID-19 Response - Continued from page 1)

In one of Ken Blanchard's books that used a story to convey the importance of purpose/mission/vision, the business owner used a daily phone message to all his employees to develop that common purpose and an engaging business culture. The importance of constant, consistent communication (the President and probably every Governor are having daily news conferences) cannot be overemphasized. The communication needs to be empathic, hopeful, and send clear messages.

Today, we have an even better method of conveying these messages – group texts. I encourage you to consider sending a daily short group text. The text can say something inspiration, share an update, or just have reassuring words. The goal is to reassure and engage everyone in your business and show that you care about your employees. If your business has multiple owners or key leaders, I encourage you to rotate. This will show unity of leadership.

Workforce needs

With everyone stressed, the last thing your workforce needs is additional stress due to a shortage of workers. That is always a danger on the livestock side and especially as we approach planning on the crop side.

Added to the usual dangers of being short staffed are 1) workers we have been counting on are not now available because of travel restrictions or other employment opportunities (yes, some businesses are hiring), and 2) current employees sick with or confined due to COVID-19. The greatest danger is an outbreak at your farm. Minimizing the likelihood must be paramount in your COVID-19 farm plan.

My recommendation is that you make certain you have access to more labor than in a normal year. You may need to be creative in finding this additional staff.

The hiring opportunity is that there are now many (too

many!!) people unemployed. They likely will not have the exact skills and experience you are looking for, but let's be creative:

For livestock work, like milking, restaurant employees, especially those in the kitchen, have dexterous hands and are used to routine and precision.

For crop work, there may be those available with experience working with large, complex machines.

It is time to step up our recruitment and selection game.

Collaboration

We live in Minnesota. The collaboration to address this crisis has been amazing, perhaps the best in the country. Even though we have the only divided legislature in the country, they have been working together with the Governor to move forward quickly. The government and medical industry are working together to get everything necessary so the State can handle medical cases as we relax our stay in place order. The Governor's office worked with University of Minnesota faculty working in shifts around the clock to develop analytical tools to provide information to make better decisions.

Not only are you decision-making deprived, the uncertainty requires varying skills and perceptions and piggybacking on ideas to make and revise plans. **Collaboration is required.**

Take care of yourself

My wife and I are both very much in the high-risk category. We have a very young new grandson. I am talking to my clients who are struggling in this crisis. It is very easy for me to get uptight. I now take a 2.4 mile walk every day. It is amazing how much calmer I am when I return and the ideas I have generated. Most of this newsletter was developed in my head while on those walks.

You can't take care of your workforce unless your take care of yourself. You don't need to walk 2.4 miles but find a time everyday to do something to relax, think, and focus.

Cropping Notes

By Janice Degni, Field Crop Specialist

We cannot say the cropping season is off to a gangbuster start. It has been progressing slowly since March when conditions allowed field work to begin. There have been some early planted oats and some waiting to be planted asap. Manure is spread, fields are tilled, fertilizer has been spread and finally corn planting is underway – slowly but surely as the calendar turns to May 1.

Controlling weeds in established alfalfa stands

While checking established alfalfa fields during the end of April, I've seen some fields with a variety of winter annual weeds like chickweed, yellow rocket, purple deadnettle, henbit and speedwell. The weeds appeared to be smothering the alfalfa in some cases. I want to review some weed control options for established stands and new seedings.

For the control of the winter annual weeds listed above Kate

Wheeler, our BASF rep, recommends Pursuit at 4 oz with 1 qt

NIS/100 gal, and AMS 12 lbs/100 gal or UAN. Pursuit has a 30-day

pre-harvest interval (PHI). When 2 days of 50-degree temperatures
are predicted – spray. Adding 2 pints of Prowl H2O for extended
residual control of annual grasses and broadleaves is an option if the
stand is thin. You will not see the winter annuals in later cuttings
this season even if left untreated. Pursuit can be used in alfalfa-grass
mixed stands after the establishment year. Pursuit does provide
residual control of may weeds. See the label for specific species.

RoundupPowerMAX or Roundup WeatherMAX 5.5L can be used in Roundup Ready alfalfa only. In established stands applications can be made up to 5 days before mowing, but the smaller the weeds the better the control. To practice good stewardship and not overuse an effective chemical and drive a weed population to resistance it is recommended that the Roundup Ready system be used in the seeding year and then rotate to herbicides with different modes of action in following seasons.

Controlling weeds in new seeding alfalfa-clear stands with no companion grass

For control of annual broadleaves and grasses:

Control with Pursuit* (4oz) or Raptor (5oz) are recommended for seedling alfalfa which should be in the 2nd trifoliate state or larger with weeds 1-3 inches tall. It is often difficult to find the crop and weed development in sync. Use a crop oil or NIS and add 1-2 qts/ac of liquid fertilizer to spray solution. Add 1-2 pts of Butyrac 200 if ragweed or lambsquarters are a problem.

For control of annual grasses:

Poast Plus (1.5 pt with an oil conc.-surfactant blend) or Select Max* (9-16 fl oz with labelled adjuvants), target 2-4" grasses. Both have preharvest intervals (PHI). Seven days for grazing or undried forage

and 14 days for dry hay for Poast Plus and 15 days after application for Select Max.

For control of annual broadleaf weeds:

Our older reliable options: Bromoxynil (1-1.5 pts of 2lb/gal product) applied when alfalfa has a minimum of 4 trifoliate leaves and weeds should not exceed 4 leaves or 2", Do not apply if temperatures exceed 70°F at and 3 days following treatment. To control weeds with Butyrac 200 apply 2 qts/ac and target the same weed sizes as above. Wild radish will not be controlled. Maximum allowed rates are needed to control seedling curly dock. There is no PHI but feeding of treated forage is restricted for 60 days.

For control of emerged annual broadleaves and perennial grasses in clear alfalfa & trefoil:

Post emergent applications of Select 2EC (6-16 oz) or Select Max1EC 12-32 fl oz. can be applied to new seedings or established stands. Apply to actively growing grasses. Use 10-40 gal/Ac spray volume. Refer to the label for recommended adjuvants for each product and grass size, generally less than 6 inches. Always add a crop oil concentrate at 1.3 fl oz/gal.

Dwight Lingenfelter, Extension Weed Scientist at Penn State explains an option for **mixed stands and pasture**:

"Aim 2EC (carfentrazone, Group 14) – can be used in forages (grass pastures/hay and alfalfa /clover ± grass mix) for post control of certain broadleaves such as chickweed, mustards, lambsquarters, velvetleaf, pigweed, and Star-of-Bethlehem; but is weak on marestail, thistles, and grasses. The typical use rate is 1 -2 fl oz/A plus necessary adjuvants. Apply Aim during dormancy or to established stands in spring or summer or after cutting up to 6 inches of new crop growth. Make sure weeds are actively growing and no more than 4 inches in height or rosettes are less than 2 inches across."

For control with a small grain companion:

Alfalfa: Bromoxynil (1 pt of 2lb/gal product). Weeds sizes and precautions as outlined above.

Red Clover seedings only: MCP Amine 4 (1/4-1/2 pt) or Rhomene MCPA (1/2 pt/ac). Small grain should provide a protective cover and spray volume should not exceed 6 gallons/ac.

Indicates a Restricted use pesticide

References:

2020 Cornell Guide for Integrated Field Crop Management.

The Agronomy Guide 2019-2020. Penn State Extension

Lingenfelter, D. Spring Weed Control in Alfalfa. Penn State Extension. https://extension.psu.edu/spring-weed-control-in-alfalfa

How Much Nitrogen Does Your Corn Need?

By Sally Krueger, Farmer Business Network

All plants require nitrogen to grow—what does your corn crop require right now?

Corn plants use large quantities of nitrogen to grow and yield. Corn removes about 1 pound of nitrogen for every bushel of grain produced, so a 250 bushel per acre yield goal requires 250 pounds of nitrogen available to be used by your growing corn plants.

Each growth stage requires nitrogen at different amounts

Corn will accumulate 65 percent of the total nitrogen need by the time flowering begins. In the seedling stage of corn growth through V5 (5 leaf), corn plants have taken in approximately 10 percent of total nitrogen needed. It may be the most important 10 percent used because ear size as well as both rows around and row length are developing then. A shortage of nitrogen at V5 can cause reduced ear size formation and lessen yield potential, which cannot be reversed as the plant continues to grow.

During the rapid growth stage, or V6 (6 leaf) to V18 (18 leaf), corn will absorb up to 8 pounds of nitrogen per acre per day. If environmental conditions are right, corn plants can grow more than 4 inches per day. A nitrogen shortage at this stage of corn development can result in a significant and permanent yield loss. Look for any symptoms of yellowing corn leaves to become visible and any kernels on the ear tips being aborted due a nitrogen deficiency.

How much nitrogen is too much nitrogen?

Nitrogen is one of the most expensive nutrients applied in corn production. That is typically due to the quantity of N corn requires. It makes sense not to over apply from an efficiency standpoint, but over-applying nitrogen can have a negative effect on yield, too.

Stalk rot diseases flourish in high nitrogen environments and can cause premature plant death and stalk lodging, which makes machine harvest difficult and can cause some grain loss.

Get nitrogen credits where you can

Once a reasonable yield goal has been established for your crop, credits for residual nitrogen from a soil test can be deducted from the total amount of nitrogen your crop needs. If a legume crop was grown in rotation, you should deduct a reasonable credit for estimated nitrogen produced naturally by those plants. Also, be sure to deduct any nitrogen applied as a starter fertilizer and any nitrogen used as a herbicide carrier.

Applying just enough N

Split applications of nitrogen prevents nitrogen losses from leaching and volatilization issues, and they are more efficient South Central NY Dairy & Field Crops Digest

than applying the total amount of nitrogen required as preplant. The timing of sidedressing nitrogen allows for efficient rates and uptake.

All in all, it is best to have all of your nitrogen applied to corn before R1 (or silk emergence) because nitrogen applied later than that is not as efficient and generally has little, if any, impact on your final yield.

JD notes: Ms. Krueger provides a concise summary of corn nitrogen needs. The Cornell Spear Nutrient Management program has developed several spreadsheet tools for calculating N rates including the N Calculator pictured here and a Value of Manure Calculator as well as others available at the web address cited below.

Source: NYS Corn Nitrogen Calculator. Cornell Spear **Nutrient Management** Program, Access calculator at

nmsp.cals.cornell.edu/ software/calculators.html.

NYS Corn Nitrogen Calculator Manure Analyses (for all fields)	Current Year	Last Year	2 Years Age	terings, and K.J. Czymm		
Animal Species		Cows	Cows	N Guidelines at the		
Units	lbs/ton	lbs/ton	lbs/ton	Nutrient Management		
Total N	9	9	9	Spear Program site		
Ammonium-N	4	4	4	(must be online)		
Organic-N	5	5	5			
Total Solids (%)	8	8	8	Set all analyses to same as Current Year		
Density (lbs/gallon)		8.34	8.34			
Field and Crop Info	Fiel	d 1		Field 2		
Soil Type	HONE	OYE	VII	LOWEMOC		
Artificial Drainage	Adeq	uate		Adequate		
Yield Potential (YP) bulacre	14	0		122		
Use Cornell Yield Potential	Ye	rs		Yes		
If No, Enter Yield Potential						
Tillage Depth	1-7 Inches 1-7 Inches					
Type of Ployed Sod	26-50%	Legume	1-2	5% Legume		
Year in Corn After Ployed Sod	Second		Third			
Manure Application Info						
rrent Year Application Units				tons		
Application Ratelacre	75			15		
Application Method & Timing	Topdressed or incor	porated after 5 days	Spring inco	Spring incorporated within 3 days		
ast Year's Application Units	gall			tons		
Application Rate/acre	5000			15		
oplication 2 Year's Ago Units	gall			tons		
Application Rate/acre	50	00		10		
Starter Fertilizer N Ibs N/acr	2	0		25		
N Balance		lbs N / acre	lbs N / ac			
ideline=(1.2xYP-Soil N-Sod N)	/Use Efficiency	84	±10 88	±10		
Manure N Credit		72	62			
Starter N Credit	_	20	25			
N Balance	Surplus	8	1	Deficit		
Need for Sidedress N	_	No Sidedress N	1_			
PSNT Connection To double check on the need fo sidedress N is needed, even if o						

Nitrogen Availability from

Table 1: Expected nitrogen availability for corn from sods in years following sod turnover.

% legume	Total N pool	Year 1	Year 2	Year 3
		lbs N/a	acre	
0	150	83	18	8
1-25	200	110	24	10
26-50	250	138	30	13
50 or more	300	165	36	15

Table 2: Addition of a small N starter (30 lbs N/acre) was sufficient for optimum corn silage yield

Starter N	Side- dress N	Corn silage yields (35% DM)*				Moist conte	
lbs N	V/acre	tons/acre		%)		
0	0	19.6 b		58.8	а		
30	0	21.1 ab		58.6	a		
30	50	21.5	a	58.2	а		
30	100	22.6	a	58.8	а		
30	150	22.1	a	58.6	а		

Manure:

Organic N (N-OM) - is slowly available

Ammonia N (N-NH₃) - immediately available and easily lost

Availability	Year 1	Year 2	Year 3	Year 4	
N-OM	35%	12%	5%	2%	
Availability	Immediate Incorp	2 days	3 days	4 days	Injection @ sidedress
N-NH ₃	65%	50%	40%	20%	100%

Average Values of Nitrogen in Dairy Manure

Non-	Tons/yr	% dry	Total N	N-(N-	N-OM	P ₂ O ₅	K ₂ 0
Liquid		matter		NH ₃)			
					Lb	/ton	
	15	15	10	6	4	5	8
		(15-20)	(8-12)	(5-8)	(3-5)	(4-6)	(7-10)
Liquid	Gal/yr				Lb/1	000 gal	
	5600	10	27	16	10	13	24
		(8-12)	(22-34)	(12-20)	(7-12)	(10-15)	(20-30)

Source: Field Crop Handbook. Cornell University. References: Nitrogen Needs in First Year Corn. Agronomy Factsheet #21

http://nmsp.cals.cornell.edu/publications/factsheets/factsheet21.pdf



Early Wheat Management Tips

By Mike Stanyard, Regional Agronomist, Cornell Cooperative Extension

It is time to take care of your wheat! Fields are greened up nicely as you read this and early N already applied. See the reminders below on tiller counting, fertility, herbicides, and fungicides.



Nitrogen. Count the number of tillers to determine if you should put all of your nitrogen up front, split it into two applications, or put it all on at a second application at stage 6 (jointing). With the lack of snow this March I'm

sure many of you have already assessed how many plants and tillers you have per square yard. If you haven't and need a refresher course, see Mike's video on how to do so, https://vimeo.com/124455368.

See chart to guide N timing and rates based on tiller numbers. If your plant/tiller counts are low, be prepared to get more N on early as wheat plants green up fast and need to be fed. This N is utilized to increase vegetative production and promote additional tillers. If tiller counts are in the middle, then get some N on early and the remainder on at jointing. If tiller counts are high, hold off on applying N at green-up and apply it all at jointing. This later N application timing should coincide with stem elongation which means nitrogen is going towards increasing the number of seeds per head and seed size, not additional tillers. However, I will throw in a word of caution here. Last year was a wet year and those who held off for just one later application of N could not get in the field when they needed to and the wheat turned off-color. This is definitely not what we want at this crucial growth stage and yield potential was lost. I now have some growers who are going to apply 20 pounds of N early even if their tiller count is high, to protect against the potential for a delayed second application.

Tiller Numbers (per sq. yard)	Nitrogen Recommendation
< 300	up to 60 units of N at green up, rest applied at GS 5-6
450-600	Up to 45 units of N at green up, rest applied at GS 5-6
>700	No N at green up, all N applied at GS 5-6

Weeds. We continue to encourage the earliest planted fields to be sprayed for winter annual weeds (purple deadnettle, chickweed, chamomile) in late fall. Some of the later planted fields may have had a burndown sprayed prior to planting. You never know what the weather will be like in the spring and timely weed control can be tricky. Most fields are sprayed in the spring. We are still encouraging that you **do** not mix your herbicide and nitrogen applications and spray separately. The leaf burning can cost us up to 10 bushels and could get worse as temperatures increase. If grasses such as roughstalk bluegrass and cheat are a problem, Osprey does a good job of cleaning them up. It has no activity on broadleaves. Research by Russ Hahn has found that it has been very effective on bluegrass with better control achieved in the spring versus the fall. It can be applied up the jointing stage in winter wheat.

Fungicides. We have seen that fungicide applications in wheat can really pay off. Powdery mildew and leaf rust can move in during the early vegetative stages and result in yield losses. These leaf diseases can be more prevalent with thicker wheat stands. Weather conditions also can play a role. Wet, cool conditions are more conducive to disease development. That means that early scouting of all your wheat fields is crucial to stay on top of powdery mildew a spring disease. Look for large areas where the leaves are turning yellow. Lower leaves will gradually turn light brown. If you applied higher N rates (90-120 pounds), fungicides are even more important to keep the wheat healthy to prevent lodging.

(Do's and Don'ts for Dairy Farmers—Continued from page 7)

delaying their entry into the milking herd or decrease their performance as adults. Adding unnecessary time to first calving will increase your heifer raising costs significantly and may also reduce their future milking potential.

<u>Do:</u> Review your herd management procedures to look for ways to complete tasks with fewer people, a minimum of six feet of space between people doing the tasks, and appropriate PPE and cleaning

procedures added to the tasks.

Don't: Take chances with your health or your employees' health in order to more quickly complete your herd health protocols. Consider the risk of contracting COVID-19 along with all the other safety concerns while working on the dairy. Also, don't take chances with your, your employee's, or your animals' safety by trying to complete a task with less than the necessary number of people needed to do the job without injury to the animals or people doing the job.

Cornell Pesticide Management Education Program: Pesticide Use Guidance During COVID-19Source: CCE PMEP

Along with the increased use of disinfectants and sanitizers during the COVID-19 pandemic, there has been an increase in adverse health effects from the misuse of these products. There have also been several fraudulent products produced during this time that potential applicators should be made aware of. Please read and share the following statements from Cornell's Pesticide Management Education Program (psep.cce.cornell.edu).

Beware of fraudulent pesticide claims related to SARS-CoV-2 (the COVID-19 coronavirus):

It has come to our attention that unregistered disinfectants claiming to protect against the virus are being marketed in the US. The efficacy and safety of these products is unsubstantiated and their use is illegal.

Regulators are taking steps to prevent such products from reaching the market, but it is your responsibility to use only those products designated by the New York State Department of Environmental Conservation for use against SARS-CoV-2, listed at https://www.dec.ny.gov/docs/materials_minerals_pdf/covid19.pdf. Please check this list frequently, as content is subject to change.

Be safe disinfecting your home:

(Biosecurity for People—Continued from page 3)

Dairy operations cannot isolate themselves completely from the outside world, as they depend on regular visits from outside personnel. The milk hauler, veterinarian, breeder, feed supplier, and other deliveries are all essential to ongoing operations. Consider restricting visits from non-essential personnel, and replace in-person farm visits with other forms of communication whenever possible. Ask all visitors to stay at least six feet away from other people on the farm. Many of them have already received this guidance from their employers. Make sure to include surfaces handled by outside visitors in your cleaning and disinfecting routine.

6. Use technology to improve communications.

Identify tools and technologies that your team can use to stay in touch while staying apart. Low-tech tools like white boards can be helpful for recording and sharing information. People with smart phones can take advantage of group texting and free three-way calls (see instructions for Apple and Android phones). Workers can use WhatsApp and FaceTime to make video calls, which can be helpful for troubleshooting livestock or mechanical issues from a distance. For group meetings, try one of several free video conferencing apps: Skype, Zoom, Google Hangouts. There are quite a few cloud-based file sharing services, including Google Docs, Dropbox, and Box, that allow workers to create, edit and share digital files from multiple

Cornell Cooperative Extension Pesticide Management Education Program

Disinfectants are pesticides and you can only use them as directed by the label. Therefore:

Never mix different disinfectant products together because doing so is dangerous. For example, mixing bleach with acids (such as vinegar) or ammonia releases lifethreatening toxic fumes.

Never use disinfectants or disinfectant wipes on your skin. Instead, wash with soap and water; you can also use hand sanitizer on your hands.

Never wash fruits and vegetables with soap, sanitizers, or disinfectants as this could also result in poisoning. Wash produce only in clean water.

For more information on disinfecting your home and how to handle food during this crisis, visit https://www.cdc.gov/coronavirus/2019-ncov/downloads/disinfecting-your-home.pdf and https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/food-safety-recommendation-consumer/.

Feb. 2020



locations. Remind employees not to handle each other's phones, and be sure to regularly disinfect shared whiteboard markers, keyboards and touch screens, along with other frequently handled items.

7. Tell employees to stay home if they are sick.

Make sure your employees know how to recognize the symptoms of COVID-19, and understand that they must not come to work if they experience any symptoms. This is not a time to tough it out! If a sick employee comes to work, they risk turning an individual problem into a workplace disaster. Consider whether your workers will feel financially or otherwise obligated to come to work if they are sick. This is a good time to review your farm's sick leave policy, and make sure you understand the new state and federal regulations that require employers to provide emergency paid leave. For more information about this legislation, see NY Farm Bureau's fact sheets on New York State's New Emergency Paid Sick Leave For COVID-19 and Federal Emergency Paid Leave During the COVID-19 Outbreak.

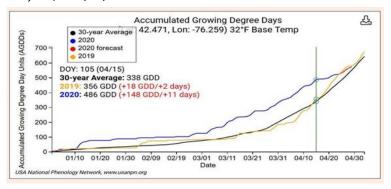
This article draws from resources developed by Cornell Ag Workforce Development. To learn more, visit their website on <u>Novel Coronavirus</u> <u>Prevention & Control for Farms</u> and check out this recording of their recent <u>COVID-19</u> and Your Dairy Webinar.

2020 Harvest Analytics

By John Winchell, Alltech

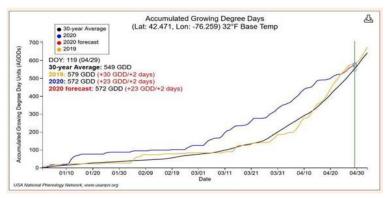
It has been an interesting spring. On the heels of a mild winter, we had a warm March that showed early harvest promise.

Dryden, NY 4/15/2020



April stalled into with a much cooler, snow spotted reminder of Upstate New York Springs. The 11 days ahead of 30 year average dwindled to 2 days ahead of 30 year average.

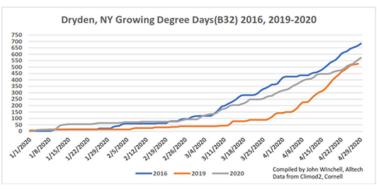
Dryden, NY 4/29/2020



The bright side is that we did have a jump start on the spring. Daffodils are blooming and silver maple buds are waiting to reach their growing degree day phenological date. The next trigger will be dandelions, which will escort in pure grass stands. Typically, when you see the majority of the dandelions going to seed, you need to be ready to mow your small grain silages and pure grass stands.

2020 was tracking very close to 2016 growing degree days, but with this cold stretch we are aligning with 2019's growing season.

Dryden, NY 2016, 2019, 2020 through 4/29



The weather is supposed to straighten out around 5/6/2020 and become more "normal". I expect that once we get some heat, combined with the early growth, the grasses will mature at a good clip.



I use Climate Smart Farming to track growing degree days by zip code in New York. It has been a great tool to maximize forage quality.

View a video of the Forage Innovations Webinar Series - Forage Harvest Analytics with John Winchell online. For digital copies, <u>click here</u>.



(Dairy Farm Risk Management—Continued from page 6)

minimizing losses. When assessing future prices, it is useful to benchmark them to costs—in particular operating costs. Keep in mind that milk futures prices in far out months are a best estimate with current information. These values have the potential to change with new market information. So one must ask, is it desirable to lock in a loss or in a low margin, or pay a high insurance premium, or to wait for the opportunity for higher prices?

Helpful Resources

General information about DMC is at:

https://www.fsa.usda.gov/programs-and-services/dairy-margin-coverage-program/index

A very useful tool to examine expected DMC margins and probabilities of triggering by margin protected is available at: https://dairymarkets.org/MPP/Tool/

Dairy futures and options prices are available at: https://www.cmegroup.com/trading/agricultural/dairy/
General Dairy-RP information is at:

https://www.rma.usda.gov/en/Fact-Sheets/National-Fact-Sheets/Dairy-Revenue-Protection

Reducing Dairy Production Costs Through the Use of Pasture

By: Fay Benson - Cornell's South Central NY Dairy Team

The current and future disruption of the dairy industry will require producers to think outside the box and possibly inside the fence. Two dairy enterprises that can benefit the most from pasture are the heifers and cull cows.

Raising livestock on pasture can reduce the cost of production for certain groups of dairy animals. Allowing the animal to harvest their own forage and spread their own manure has been shown to reduce machinery, fuel, and labor costs. A paper from the Journal of Dairy Science states, "On average, over the 8-yr period, each additional tonne of pasture dry matter used increased gross profit by €278 and net profit by €173 on dairy farms. Conversely, a 10% increase in the proportion of purchased feed in the diet resulted in a reduction in net profit per hectare by €97 and net profit by €207 per tonne of fat and protein".

Like any other management regime, grazing takes top management to be successful. It is a style that doesn't fit every manager. Typically, most grazing dairies are less than 300 milking animals but that doesn't mean larger dairies can't benefit from the use of grazing to reduce their costs. Work done in Minnesota and repeated locally by work I have done through Cornell, has shown that grazing yearling and bred heifers can reduce their costs of raising. In my study I used work put out by Cornell PRODAIRY on the cost of raising heifers in confinement. It showed that just the feed and labor costs of raising heifers in confinement was higher than the cost of working with a custom grazier to raise the animal for 6 months. This didn't include the savings on fuel, machinery, and repair costs. To see a series of fact sheets on grazing dairy heifers go to the NE SARE web site.

Immediate Benefits

Many dairy producers could be using pasture to hold cull animals though the summer when there will hopefully be a stronger price for the animals. With the recent change in dairy markets there has been a double negative impact on milk prices for the northeast: first lowering the Class 3 and

4 prices to below cost of production levels, and second the move by some processors to instigate a two tier pricing with a substantially lower price for up to 15% of a producer's production. As to be expected this has caused producers to begin culling their herds to reflect this change in pricing structure. This culling is happening while beef prices are at unprecedented lows. Putting cull animals on pasture can maintain them at a lower cost per day to allow the producer to choose a more profitable marketing opportunity when supply chains have adjusted. For example, a 1400 lb. cull animal kept at a custom grazing operation at a cost of \$1/day would only need to see an increase of \$0.08/lb in cull prices to pay for 112 days of boarding.

Custom Grazing

If a dairy is looking to adopt grazing as part of their reorganization, they need to decide if they have the resources to add it to their operation or do they work with a custom grazier to do it at the grazier's farm. As stated earlier, grazing management is not for every producer. The managing of grasses for harvest at the most nutritious stage of growth and avoiding all the other potential pitfalls of grazing takes experience. Those that have adopted it enjoy it which improves their success with it. If a dairy producer is interested in finding information about grazing in their area, I advise reaching out to County Extension offices or Soil and Water Conservation Districts to find resources for pasture management and custom grazing in their region.

https://www.nrcs.usda.gov/Internet/FSE DOCUMENTS/ stelprdb1044245.pdf

https://www.sciencedirect.com/science/article/pii/ S0022030218302054

http://publications.dyson.cornell.edu/outreach/extensionpdf/2014/Cornell-Dyson-eb1402.pdf

https://cdn.sare.org/wp-content/



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