Our Mission

“The North Country Regional Ag Team aims to improve the productivity and viability of agricultural industries, people and communities in Jefferson, Lewis, St. Lawrence, Franklin, Clinton, and Essex Counties by promoting productive, safe, economically, and environmentally sustainable management practices, and by providing assistance to industry, government, and other agencies in evaluating the impact of public policies affecting the industry.”
Field Crops and Soils

NNY Soil Health Testing Research Yields New Sampling Guidance

By Kitty O’Neil, Mike Hunter, and Quirine Ketterings (Professor, Cornell University CALS)

The CCE North Country Regional Ag Team completed an important soil health research project recently, collaborating with County Association CCE staff and Soil and Water Conservation District offices. Soil health is a concern for farmers and has been an area of focus for CCE research and outreach efforts across the NYS. Farmers and crop consultants recognize that properly functioning soil is critical for long term farm viability and have begun making management changes to improve and protect it. Farms have started to use reduced- and no-till methods for planting and cover crops to protect soil between main crops. After implementing these sorts of changes, many farms want to evaluate the impact of those changes. What is the overall effect of these management changes on soil health? Slow and steady improvement is expected, but which practices are having the largest or quickest impact? A NNY Ag Development Program-funded research project, completed in February 2020, is helping to find answers to these questions.

The project spanned across 8 farms and 5 NNY counties, and made use of the Cornell Soil Health Assessment testing services. The Cornell assessment combines a set of chemical, physical, and biological measurements and interpretations to evaluate soil health and monitor its improvement over time. The testing service is available to farmers of any scale. Our project focused on the sampling procedures needed for reliable commercial farm-scale results. Appropriate sampling protocols for farm-scale fields must permit detection of small and slow changes in soil health parameters over a few years despite potential for large variability of some of these indicators within each field. To have confidence comparing soil health test results on a field before and after a few years of management changes, this variability within a field must be overcome with sufficient subsampling to detect a small change. To figure out how variable NNY farm fields are, we intensively sampled 9 fields on 8 farms across 5 NNY counties. Fields ranged in size from 6 to 80 acres and were sampled from 6 to 36 times. Fields were not sampled more than one location per acre. We submitted 171 individual samples to the Cornell Soil Health Lab for analysis. The results showed broad variation within and among fields as we hypothesized (see Tables 1 and 2 on next page). Each component of the soil health analytical package had its own variable nature with some components being relatively consistent across a field, while others varied tremendously. From these results, we calculated the number of subsamples that would be required for a farm or land manager to be able to detect a subtle 10% change in an average field for each parameter. Numbers of subsamples required ranged from just 9 to more than 1200 subsamples needed for different soil health parameters. Soil pH was one of the most consistent, least variable components of soil health test and required just 9 subsamples per field to detect a 10% change or about a 0.6 unit change for these fields. Soil phosphorus was one of the most variable parameters measured, and to detect a 10% change in soil P or 2.7 lbs per acre, 1207 subsamples per field would be needed for the average field.

Based on these results, we now recommend that 5- to 30-acre fields be subsampled at least once per acre, while larger fields should be subsampled up to 40-50 locations per field. While this is more intensive subsampling than soil fertility analyses require, we view soil health sampling as worthy of the extra time and effort, especially when this assessment may only be needed once or twice per decade. Using this approach, farms and landowners may be confident that any differences measured between soil health analyses on their fields over time will reflect real changes and not inherent sampling variation.

For more information about field crop and soil management, contact your Regional Field Crops and Soils Specialists, Mike Hunter and Kitty O’Neil.
Table 1. Mean and standard deviation (SD) for soil hardness, pH, and phosphorus results in 9 NNY row crop fields sampled in 2018 and 2019.

<table>
<thead>
<tr>
<th>Field</th>
<th>Surface Hardness, PSI, 0 to 6&quot;</th>
<th>Subsurface Hardness, PSI, 6 to 18&quot;</th>
<th>Soil pH</th>
<th>Soil P, lb / acre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>CL</td>
<td>109</td>
<td>17.8</td>
<td>294</td>
<td>10.5</td>
</tr>
<tr>
<td>GM</td>
<td>238</td>
<td>33.3</td>
<td>295</td>
<td>8.1</td>
</tr>
<tr>
<td>G3</td>
<td>213</td>
<td>26.1</td>
<td>300</td>
<td>0.0</td>
</tr>
<tr>
<td>SWT</td>
<td>172</td>
<td>35.8</td>
<td>300</td>
<td>0.0</td>
</tr>
<tr>
<td>CF1</td>
<td>35</td>
<td>14.6</td>
<td>299</td>
<td>2.9</td>
</tr>
<tr>
<td>MT</td>
<td>122</td>
<td>18.3</td>
<td>285</td>
<td>20.7</td>
</tr>
<tr>
<td>RM</td>
<td>100</td>
<td>11.5</td>
<td>190</td>
<td>48.9</td>
</tr>
<tr>
<td>BW3</td>
<td>129</td>
<td>27.4</td>
<td>277</td>
<td>32.6</td>
</tr>
<tr>
<td>BW4</td>
<td>167</td>
<td>34.5</td>
<td>298</td>
<td>9.2</td>
</tr>
</tbody>
</table>

10% of Average\(^1\)  
Maximum SD\(^2\)  
Average SD\(^3\)  

<table>
<thead>
<tr>
<th>Field</th>
<th>No. Samples needed to detect 10% change, max. SD(^4)</th>
<th>No. Samples needed to detect 10% change, average SD(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>GM</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>G3</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>SWT</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>CF1</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>MT</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>RM</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>BW3</td>
<td>164</td>
<td>77</td>
</tr>
<tr>
<td>BW4</td>
<td>164</td>
<td>77</td>
</tr>
</tbody>
</table>

\(^1\) Average of field means, multiplied by 0.1.  
\(^2\) Maximum standard deviation within column.  
\(^3\) Average standard deviation within column.  
\(^4\) Number of samples required, at each of two time points, to detect a 10% change in that parameter calculated using the maximum standard deviation in that column with 95% confidence.  
\(^5\) Number of samples required, at each of two time points, to detect a 10% change in that parameter calculated using the average standard deviation in that column with 95% confidence.  

Table 2. Mean and standard deviation (SD) for soil organic matter, aggregate stability, respiration, and overall soil health score results in 9 NNY row crop fields in 2018 and 2019.

<table>
<thead>
<tr>
<th>Field</th>
<th>Soil Organic Matter, %</th>
<th>Aggregate Stability, %</th>
<th>Respiration, mg CO(_2)/g soil</th>
<th>Overall Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>CL</td>
<td>3.5</td>
<td>0.9</td>
<td>47.1</td>
<td>9.2</td>
</tr>
<tr>
<td>GM</td>
<td>3.7</td>
<td>0.8</td>
<td>68.0</td>
<td>2.6</td>
</tr>
<tr>
<td>G3</td>
<td>2.8</td>
<td>0.6</td>
<td>59.1</td>
<td>4.3</td>
</tr>
<tr>
<td>SWT</td>
<td>2.6</td>
<td>0.9</td>
<td>48.5</td>
<td>9.4</td>
</tr>
<tr>
<td>CF1</td>
<td>2.8</td>
<td>0.2</td>
<td>41.6</td>
<td>3.2</td>
</tr>
<tr>
<td>MT</td>
<td>2.5</td>
<td>0.4</td>
<td>47.8</td>
<td>8.9</td>
</tr>
<tr>
<td>RM</td>
<td>4.8</td>
<td>1.0</td>
<td>51.8</td>
<td>6.5</td>
</tr>
<tr>
<td>BW3</td>
<td>3.5</td>
<td>1.0</td>
<td>46.2</td>
<td>7.6</td>
</tr>
<tr>
<td>BW4</td>
<td>3.5</td>
<td>0.8</td>
<td>44.1</td>
<td>7.3</td>
</tr>
</tbody>
</table>

10% of Average\(^1\)  
Maximum SD\(^2\)  
Average SD\(^3\)  

<table>
<thead>
<tr>
<th>Field</th>
<th>No. Samples needed to detect 10% change, max. SD(^4)</th>
<th>No. Samples needed to detect 10% change, average SD(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>GM</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>G3</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>SWT</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>CF1</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>MT</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>RM</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>BW3</td>
<td>265</td>
<td>132</td>
</tr>
<tr>
<td>BW4</td>
<td>265</td>
<td>132</td>
</tr>
</tbody>
</table>

\(^1\) Average of field means, multiplied by 0.1.  
\(^2\) Maximum standard deviation within column.  
\(^3\) Average standard deviation within column.  
\(^4\) Number of samples required, at each of two time points, to detect a 10% change in that parameter calculated using the maximum standard deviation in that column with 95% confidence.  
\(^5\) Number of samples required, at each of two time points, to detect a 10% change in that parameter calculated using the average standard deviation in that column with 95% confidence.  
\(^6\) Means within a column with different letters are statistically different.
The USDA Drought Mitigation Center in Lincoln, NE, officially classified St. Lawrence and Franklin Counties, along with portions of Lewis and Clinton Counties, as D0 or ‘abnormally dry’ in their weekly update published May 21st. Much of Herkimer County and portions of Hamilton and Oneida Counties are also abnormally dry. The Center bases this classification on conditions that respond to precipitation on time scales ranging from a few days to a few months, such as wildfire danger, non-irrigated agriculture, topsoil moisture, range and pasture conditions, and unregulated streamflows. Fire risks have also been rated as ‘moderate’ for NNY and the Hudson Valley regions this same week. The D0 classification indicates that an area is experiencing general short-term dryness that is typical with the onset of drought, or that may be experiencing lingering water deficits after a drought. This type of dryness can slow crop growth and elevate fire risk to above average.

Cooler than normal temperatures have dominated the whole Northeast, with most areas at least 2-4 degrees below normal for the past week. Precipitation was mixed for the week for the Northeast region, with NYS remaining dry while some northern states recorded normal to slightly above normal precipitation. Ongoing dryness in portions of northeastern New York did allow for the introduction of D0 this week, based upon the short-term indicators.

The outlook for the next 6 to 10 days from the Drought Mitigation Center are for slightly above normal temperatures and precipitation, while the 8-14 day outlook predicts slightly greater probabilities for below-normal temperatures and normal precipitation.
Black Cutworm in Field Corn


Note from Mike Hunter and Kitty O’Neil: As of May 25, 2020, there have been documented reports of Black Cutworm feeding damage that warranted the use of an insecticide application for control in field corn in NNY. Continue to scout your fields for early season pest problems.

Several species of cutworms are found in New York; the black cutworm is most commonly found in corn. The adults (moths) migrate into the state from the southern overwintering sites on the spring storms and are attracted to weeds on which they lay their eggs. One or more generations may occur per year, but it is the first generation which causes economic loss in NY corn. Cutworm larvae are large (1 to 2 inches long when fully grown), smooth, dull-colored caterpillars, which curl tightly when handled. They hide in the soil during the day and feed at night at the base of small corn plants during May and June. Symptoms include missing, cut, or wilted plants. The large, nearly mature larvae do most of the feeding damage. Each one is capable of destroying several plants, and damage may appear very suddenly as the larvae grow larger.

The key to cutworm control is to monitor emerging plants closely, particularly in fields with conditions favoring cutworm outbreaks. These conditions include late planting, weed infestations, low wet areas, and fields previously in pasture or sod. Cutworm problems may be worse in fields planted with minimum or no tillage. Plowing, good weed control, and early planting should help reduce cutworm problems. Check fields every two or three days until plants are well established for signs of missing, cut, or wilted plants. Search for the larvae in the soil near damaged plants. Treatment is suggested if 5 percent or more of the plants have been cut.

Cutworm larvae should be controlled while small – 1/2 inch long or less. Since the larvae are active at night, chemicals should be applied late in the day. When the soil is dry and crusted, larvae remain beneath the soil surface and will be difficult to control. Only the infested area and a 20- to 40-foot surrounding border need be treated. Direct the spray at the base of the plants. Portions of the field may need to be disked and replanted if damage has gone beyond the point of control. Application of soil insecticides at planting does not provide effective control of cutworms despite claims by the insecticide manufacturer.
Report Seedcorn Maggot and Wireworm Damage: We Need Your Input

Given the recent controversy surrounding the proposed legislative bans on some pesticides in NY, Cornell researchers and extension specialists are working to provide necessary data on the efficacy, usefulness, and perceived need for these products in our agricultural systems. To do this, we need your help with identifying, documenting, and quantifying losses to early season pests, such as seedcorn maggot and wireworm in your corn and soybean fields.

A collaborative effort between the NYS Integrated Pest Management program and Cornell Cooperative Extension Field Crop Specialists will begin in 2020, with the goal of monitoring for and documenting losses to pests that the neonic seed treatments are intended to protect against. Given the sporadic distribution of damage caused by seedcorn maggot and wireworm, it can be challenging to quantify losses to these pests in research plots alone. Therefore, we need assistance from farmers, crop consultants, agribusiness associates, and crop insurance claim adjusters to report fields with damage from these pests across NY State.

Your valuable input would require nothing more than a phone call or email to your local Field Crops Extension Specialist to report the specific location of damage soon after planting, while pests are still active and can be confirmed (by V2 stage). The Extension Specialist will then visit the field to confirm pest activity, and may conduct plant stand counts to estimate potential yield losses. Location and farm identity will remain anonymous, as we are only interested in quantifying losses across NYS, not where they occur.

Claims on the value (or lack thereof) of these insecticide seed treatments in NY field crop production cannot be validated or quantified without this sort of data, and we can’t obtain this statewide data without your assistance. Therefore, whether you grow corn for silage or grain (or even sweet corn), soybean or dry beans, conventionally or organically, we need to hear from you! Please refer to the following list of Specialists to contact in your region to report damage from seedcorn maggot or wireworm in your fields this spring:

Mike Stanyard (NWNY CCE) – mjs8@cornell.edu, 585-764-8452
Jodi Putman (NWNY CCE) – jll347@cornell.edu, 585-991-5437
Jaime Cummings (statewide, NYS IPM) – jcc246@cornell.edu, 607-255-1747
Josh Putman (SWNY CCE) – jap473@cornell.edu, 716-490-5572
Janice Degni (SCNY CCE) – jgd3@cornell.edu, 607-391-2660, x414
Ron Kuck (Cayuga Co. CCE) – rak76@cornell.edu, 315-255-1183, x242
Jeff Miller (Oneida Co. CCE) – jim14@cornell.edu, 315-736-3394, x120
Kevin Ganoe (CNY CCE) – khg2@cornell.edu, 315-866-7920, x230
Aaron Gabriel (ENY CCE) – adg12@cornell.edu, 518-380-1496
Ken Wise (ENY, NYS IPM) – kw24@cornell.edu, 845-677-8223
Christian Malsatzki (SENY CCE) – cpm78@cornell.edu, 845-340-3990
Joe Lawrence (statewide, PRO-DAIRY) – jrl65@cornell.edu, 315-778-4814
Mike Hunter (NNY CCE) – meh27@cornell.edu, 315-788-8450, x266
Kitty O’Neil (NNY CCE) – kao32@cornell.edu, 315-854-1218
Elson Shields (Cornell Field Crops Entomologist) – es28@cornell.edu, 607-255-8428
As a result of the current COVID-19 circumstances and a majority of dairy farms being required to reduce milk production to some extent, several management strategies have been discussed as a means to reduce milk production. One of the more popular strategies being shared is to dry cows off early and consequently extend her dry period (relative to the commonly recommended 60-day dry period). While I believe this can be a successful strategy, my main concern with extended dry periods is the cow’s metabolic health which ultimately could not only reduce her subsequent lactation milk yield, but also her overall well-being. In agreement with my own opinion, research in the Journal of Dairy Science reported that when cows were dry for 77 to 142 days, they had higher chances of death in the subsequent lactation compared with cows that were dry for 53 to 76 d (Pinedo et al., 2011). Further, other research in the Journal of Dairy Science reported that cows with a 90-day dry period experienced more severe negative energy balance post-calving compared to cows with a more traditional 56-day dry period, as indicated by blood metabolites (Weber et al., 2015). I recognize the need and importance for immediate practical strategies to reduce milk production; however, these should not come at the cow’s expense. The purpose of this article is not to argue for or against extended dry periods (I do think this strategy can work if managed correctly), but rather the purpose of this article is to encourage you to consider the following factors before implementing such a change.

We know that the diet consumed by dry cows can have a profound impact on cow success across the transition period. Typically, the dry period is divided into two phases: the far-off period (from dry off to ~21 d pre-calving), and the close-up period (~ 21 d pre-calving to calving). Many farms use these guidelines as an opportunity to both group and feed these cows separately. For the purpose of this article I’m only going to touch on the far-off dry period as this is the area that will be impacted the most by extended dry periods. Despite the diet consumed by close-up cows having a direct impact on post-calving metabolic health and performance, I would argue that the diet consumed by far-off dry cows may be even more important. Many researchers have investigated the link between body condition gain in the dry period and post-calving performance, and they found that minimizing excessive body condition gain over the course of the dry period is extremely important. Specifically, body condition gain pre-calving is linked with poorer intake, and increased risk of metabolic disease post-calving. Given that close-up dry cows naturally have lower intake as they approach calving, it is increasingly important that your far-off dry cows are not able to over-consume energy relative to their needs and thereby increase their chances of gaining excessive body condition. For example, Dann et al. (2006) demonstrated that when cows were overfed energy in the far-off dry period, they had the lowest energy balance and the greatest body condition loss in the first 56 days after calving compared to cows that were fed to either 100% or 80% of their energy requirement. Keep in mind, the target body condition score (BCS) for cows at calving is 3.0-3.25, which means that if we are striving to maintain (not gain or lose) body condition, we should be targeting a dry off BCS of 3.0-3.25, also. It is common for late lactation cows to be over-conditioned, especially if they are fed the same lactating ration as high producing cows while producing significantly less milk. Take a walk through your cows and pay attention to the BCS of your late lactation cows; if they are over-conditioned (BCS > 3.25) and still have more than 60-90 d to calving, consider implanting a late lactation group and diet, and then pay even closer attention to them in the dry period. If you are using an extended dry period, make sure that the diet you are providing them is formulated to meet, but not exceed their energy requirements (i.e. ~100% of their energy requirements, according to the NRC). These diets are referred to as “controlled energy dry cow diets” and they incorporate large amounts of low nutrient dense feedstuffs (straw or hay) to dilute the energy density.

In the introduction I mentioned a study by Weber et al. (2015) where cows with a 90-day dry period experienced more severe negative energy balance compared to cows with a more traditional dry period. It should be noted that those researchers reported cows with an extended dry period had higher body weights at dry off and the cows were fed a higher energy diet than what is currently recommended. With that in mind, I think 90-day dry periods can be successful, if energy levels are monitored and BCS and body weight at dry off is considered. Furthermore, the other study mentioned (Pinedo et al., 2011) states that cows with an extended dry period are at the greatest risk of death in their subsequent lactation. Once again, I think this can

Continued on Page 9
certainly be avoided if cows in the far-off period are managed and fed correctly. I’ve seen these types of diets work exceptionally well for some herds, and I’ve seen them be a complete train wreck for other herds – it all comes down to management. I encourage you to work with your trusted nutrition advisor to develop a plan to get your dry cows on this type of diet. I’ve also linked a very helpful article on BCS management written by Dr. Jim Drackley, which highlights the science and research behind the recommendations I made in this brief article. Additionally, I’ve linked my previous dry cow diet article and YouTube videos (Transition Cow Nutrition: Part 1; Transition Cow Nutrition: Part 2) that provide more details on how to manage these diets successfully, but please don’t hesitate to reach out if you would like more information on this topic.

Not only is nutrition a very important consideration, but how you group these cows can also have a profound impact on their health and well-being. If you are drying cows off early, make sure that you have sufficient space for them. Wisconsin Dairyland Initiative recently shared a nice summary of how much space dry cows should be getting at each respective time in their dry period (See figure on the right). I recognize that over-crowding dry cows may be unavoidable given the current circumstances, but I strongly encourage you to avoid over-crowding your close-up cows at all costs. The behavioral response, in addition to the physiologic response, can negatively impact that cow’s ability to have a successful transition into lactation. Lastly, some research has shown that cows may increase their DMI in response to overstocking. If dry cows are not fed a controlled energy diet as I discussed above, an increase in DMI will very likely result in excessive body condition gain and poorer metabolic health after calving.

I empathize with dairy producers as they are navigating through this unimaginably difficult time, and I acknowledge that some of the strategies that you are implementing are out of the ordinary and not a part of your long-term plan. I hope that the points made in this article serve as a reminder that the dry period is an extremely vulnerable time for the cow and everything she experiences in those 60 (or more) days leading up to calving will have a huge impact on her subsequent lactation. I think it’s important to highlight that it’s not just her milk yield in the weeks following calving that will take a hit if she is stressed (metabolically and behaviorally) in the dry period, but her health will suffer. This will unfortunately result in more economic setbacks if you are spending more time and money getting her through the transition period, or ultimately if you end up having to cull her due to poor performance.

References:
Press Release: Northeast Dairy Management Webinar Series

College of Agriculture and Life Sciences
Cornell University
272 Morrison Hall
Ithaca, NY 14853
607-225-4478

Northeast Dairy Management Webinar Series

The Northeast Dairy Management Webinar Series is a five-part presentation series to re-energize businesses and improve performance, even in challenging times, and includes presentations and speakers that would have been featured at the Northeast Dairy Management Conference in March. The conference, and these webinars, are hosted by Cornell CALS PRO-DAIRY and Northeast Dairy Producers Association.

The series will include one-hour webinars held each Wednesday at 1:00 PM, beginning June 3 and continuing through July 1, in honor of June is Dairy Month. The webinars will be recorded and available to registered participants. Speakers include Tom Wall – Dairy Coach LLC; Phil Plourd – Blimling and Associates; Cheryl Jones - University of Kentucky; and Steve Bodart - Compeer Financial. A farm labor producer panel moderated by Rich Stup, Cornell Ag Workforce Development, will wrap up the series on July 1.

The Northeast Dairy Management Webinar series is free through generous support from industry sponsors, but registration is required. Registered participants will receive links to all five live, weekly presentations and will have access to the recorded sessions. Links to join webinars are provided upon completion of online registration.

To learn more: prodairy.cals.cornell.edu/webinars/
Proper Management of Non-Ambulatory Animals

By Lindsay Ferlito

As part of the National Dairy FARM Program Version 4.0, each dairy farm needs a non-ambulatory protocol and those involved in handling these animals need annual continuing education in this area. The objective of the non-ambulatory animal protocol and training is “to provide comfort and support to animals aiding in their recovery from injury/disease or to humanely euthanize animals that will not recover.”

As part of your protocol, you should be able to answer the following questions:

- How are employees trained to manage non-ambulatory animals?
- Who is responsible for decision making (ie: how to treat a down cow, when she should re-enter the herd, or when she should be euthanized)?
- What equipment is used to move non-ambulatory animals and how many employees should assist at one time?
- Where are non-ambulatory animals moved to, and does this location provide protection from the elements and predators and other animals in the herd, and is feed and water provided and accessible?
- What medical care is provided to these animals and when?
- Are treatments recorded and where?
- What other methods of rehabilitation are provided?

The first step to managing non-ambulatory animals is prevention. Ensure all employees handling animals receive stockmanship training (and annual continuing education) so animals are moved in a calm and low-stress manner. Facilities should provide adequate floor traction (ie: grooved and scraped clean), wide transfer alleys, and pens should be stocked to an appropriate level to allow animals enough room to move around safely.

Even with all the proper management and facility considerations, things can happen. Animals may become non-ambulatory and need special care, and it’s the farm’s responsibility to prepare for the worst and be able to respond quickly and appropriately. During a Dairy Cattle Welfare Council webinar last summer, Dr. Conrad Spangler from Riverview LLP, outlined his three key considerations when creating a farm’s “down cow team” including: “select the right people, give them the right training, and measure the right things”. Each facility needs to identify key people that are trained in how to respond to a non-ambulatory animal, and every employee needs to know who these people are to ensure the animal receives prompt attention.

When an animal goes down, the trained personnel should be notified immediately. They should assess the situation, determine the potential prognosis and if moving the animal is the best option. The animal should only be moved using an approved method such as an appropriate sling, sled, or bucket, and not pulled or dragged. The animal should be placed in a hospital or sick pen that is separate from other animals in the herd. This pen should provide enough space, a lot of bedding and good traction, protection from the elements, adequate ventilation, and water and feed should be accessible to an animal that cannot rise. Here the animal should receive any further medical attention required and be checked on regularly to assess the status of recovery or if other treatments or actions are needed. Finally, each incident involving a non-ambulatory animal should be recorded, and include information on the cause, location, how it was handled, and the outcome. This will help identify any trends or indicate areas where more training may be needed.

If a non-ambulatory animal is unable to recover, euthanasia is most likely the only option. On-farm euthanasia practices must adhere to AABP/AVMA guidelines, and should include consultation from your herd veterinarian, and follow your euthanasia protocol (as required by the National Dairy FARM Program). Next month’s article will highlight what is needed for your euthanasia protocol on-farm.

The National Dairy FARM Program website includes a lot of resources including a template for a non-ambulatory protocol as well as a poster highlighting the proper care of these animals (https://nationaldairyfarm.com/wp-content/uploads/2018/10/DownCowPoster-Final.pdf). For more information or questions, please reach out to Regional Dairy Specialist Lindsay Ferlito (607-592-0290, lc636@cornell.edu).
Farm Business

Information Update on PPP and EIDL of the CARES Act for Farmers

By Kelsey O’Shea

“As of 5pm May 5th, 2020, the PPP program still has nearly $130 billion in available funding. The tremendous backlog of applications at many lenders from Round 1 appears to be mostly resolved, and SBA is strongly encouraging businesses to get their applications now if they have not yet. SBA and Treasury have clarified a significant number of common questions and concerns about the program via Interim Final Rule and FAQ’s (though the forgiveness procedures are still pending).”- Dan Rickman Deputy District Director Upstate New York U.S. Small Business Administration.

CCE has also developed a FACT SHEET about PPP that you can access via the link, and here is an excerpt from that:

“You can apply for both the PPP and the EIDL, and because the programs are so competitive if you need this help for your business it’s probably worth applying to both, just in case you are not able to access the other program. However, you cannot use the funds for the same purpose. So, if you do receive a PPP loan, it would be to your benefit to first use the PPP loan funds for salary because that use of the PPP is forgivable and uses of the PPP are more restricted. EIDL loans, for example, can be used to pay vendors and pay other operating costs. Many local areas are also developing emergency loan and grant programs for businesses, so it may be worth looking closer to home – especially if the amount of funding you need is more in the under $10,000 range.”

Here is a chart summarizing the differences between the two assistance programs:

<table>
<thead>
<tr>
<th></th>
<th>EIDL + Advance</th>
<th>PPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Loan Amount</td>
<td>$2 million</td>
<td>2.5 x average monthly payroll, up to $10 million</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>3.75% (2.75% for non profits)</td>
<td>1%</td>
</tr>
<tr>
<td>Maximum Forgivable Amount (aka Grant)</td>
<td>up to $10,000 – even if EIDL loan is not approved</td>
<td>The first 8 weeks of payroll immediately after you receive PPP funds + (rent, utilities, mortgage interest) BUT the total amount forgiven for non-payroll expenses is capped at 25% of the total amount forgiven.</td>
</tr>
<tr>
<td>Repayment Period</td>
<td>up to 30 years</td>
<td>2 years</td>
</tr>
<tr>
<td>Allowable Uses</td>
<td>working capital</td>
<td>payroll, mortgage interest, rent, utilities</td>
</tr>
<tr>
<td>The Lender</td>
<td>SBA</td>
<td>commercial banks</td>
</tr>
</tbody>
</table>

FAQ’s about the EIDL application:

1. What should be entered on the COGS (cost of goods sold) line?
   • What SBA will want to know is total operating expenses. If a business does not have a cost of goods sold, like a dairy farm, then all of their expenses are counted as operating expenses.

2. What financial information should be used, tax returns or on-farm records?
   • They can use their schedule F from 2019 to collect revenue and expense totals.

3. Under the line for other grants or funding received, what do farms need to list?
   • If the farm received anything to cover working capital or expenses, then they need to list the amount and from who (DMC and Dairy RP).

4. Do LLC members count as employees towards the $10,000 advance?
   • Yes, they need to include all employees (LLC members) of the business who receive income from the business.

The EIDL loan advance will trigger a call from an SBA loan officer. The farm will have the opportunity to apply for a low interest loan. Some farms will not take the loan, others will. Please note that anything over $25K will have to be collateralized.
DON’T REACT, P.R.O.A.C.T.!

INTRO: Taking control of your farm business in uncertain times can feel extremely daunting. With conditions changing daily, planning feels nearly impossible. We are here to tell you that YOU CAN plan, YOU CAN take control and YOU CAN stay on track. We recommend taking it one step at a time, but most importantly don’t wait to start: don’t REACT, instead PROACT

PROACT CHECKLIST:

P- is for Prioritize. This is the triage step and takes some reflection. Take some time to think about the largest areas of risk for your business within the next 12 months, 24 months or even longer. Identify the top two to three concerns you have and move forward to the next step knowing that the goal is address those concerns through both short term and long-term management changes.

R- is Reflect. When considering your top two concerns, what information do you need to address those? You will want to identify the size and scale of those issues, the length of time they cover, AND the most realistic possible solutions.

O- is for Organize. This means collecting financial information, market information, and your gut intuition. When you combine those three items to shed light on your top concerns, you can then strategize solutions to your top concerns. While this is not a simple task, CCE can help - reach out to your County Agent or the Farm Business Management Specialist for more information or assistance.

A- is for Action! and you have identified the best possible mitigation plans for your top two to three concerns based on projections or data there should be steps to take to implement changes on the farm. These may be immediate on farm management changes or may be changes that require more information gathering or organization of your farms team of experts. Either way, the important part is to just get started, one change on one day can start the process and help motivate and forward.

C- is for Check-In. All action plans have roadblocks, stumbling points, or even stalls. But you will not know what has happened unless you circle back to check in on the progress of you plan to address your top concerns in your business. This may mean re-budgeting, re-training, checking reports, or just simply having a conversation with one of your trusted advisors. Just be ready for the possibility that things have not gone according to plan. That’s okay, you can jump back to O and keep moving towards the solution.

T- is for Transform & Tailor. As you take the steps needed to address your primary concerns you will find that you business transforms somewhat on its own- each small change you make truly adds up to take your business to a new place of stability and success. Indecision, lack of action, and lack of change have the same cumulative effect as small changes but for the negative instead of the positive. So when you start to achieve goals and address concerns you will then need to continuously tailor your process to the new normal for your businesses to stay sharp.

FOR ASSISTANCE WITH THIS FOR YOUR FARM
REACH OUT TO: KELSEY O’SHEA AT KIO3@CORNELL.EDU OR 315-955-2795

Cornell Cooperative Extension
North Country Regional Ag Team
## Classifieds

### Mixed Grass Haylage
- one bag 9ft by 200
- one partial bag 9 ft with 120ft first mixed grass haylage

Call Walter: 315-783-9910
Antwerp, NY

### Round bale haylage or annual forage
- Custom service
- No-till forage seeder
- Baling and wrapping
- Deep subsoil plowing on contours

Call Dean Yancey: 315-376-4713
Lowville, NY

---

### Thank You Farmers
For continuing to produce safe and wholesome agricultural products during this crisis.

---

### Farm Credit East

**PAYROLL SERVICES** Whether your business is large or small, seasonal or year-round, it's important your payroll is timely and accurate. The experts at Farm Credit East will help you manage your payroll and keep your business Strong at the Roots.
Due to COVID-19 social distance restrictions, all in-person CCE programs have been postponed until further notice. Check out our CCE NCRAT Blog and YouTube channel for up to date information and content.

Northeast Dairy Management Webinar Series, June 3 - July 1, at 1pm. See page 10 for more information.