Important Notice for Licensed Pesticide Applicators

Due to COVID-19, the DEC did not require growers whose licenses expired in November of 2019 or later to renew their applicator’s license in order to buy and spray restricted-use materials during the 2020 growing season. That discretionary policy is no longer in effect.

If your license expired between November 2019 and Nov. 23, 2020, you must obtain the full number of recertification credits and renew your license. Starting Nov. 24, 2020, you cannot buy or apply pesticides until your license has been renewed.

The DEC is giving growers a 90-day grace period before adding penalty credits to overdue renewal applications. Growers should complete COVID-delayed license renewals by February 23, 2021. If your license expires after Nov. 23, 2020, you will follow the typical DEC renewal process.

CORE Pesticide Training

Looking for DEC credits?
Join CCE Field Crops Specialist, Josh Putman, for another opportunity to learn about pest management, current regulations, and pesticide use.

Pre-registration is required by noon the day before your preferred date/time.

OR

Cost: $20/person payable via card on our website

Register Online:
January 12th
https://swnydlfc.cce.cornell.edu/event.php?id=1429

January 14th
https://swnydlfc.cce.cornell.edu/event.php?id=1428

Questions?
Contact Josh Putman at:
716-490-5572 or jap473@cornell.edu

A confirmation email will be sent the day before the training with information for accessing the virtual classroom.

This event will be offered via Zoom video conferencing software. Participants will need to use a computer, tablet, or phone with video and audio capabilities.

1.75 Pesticide recertification credits in the CORE category, approved!
Soybean cyst nematode (SCN) is considered to be the number one pest of soybeans nationally and globally. It was estimated to have caused 109 million bushels lost in the US alone in 2017. The nematode has not been considered a pest of concern to NY growers until it was first discovered in Cayuga County in 2016. Since then, the NYS Integrated Pest Management Program in cooperation with statewide extension specialists, with support from NYS Department of Ag and Markets and the NY Corn and Soybean Growers Association, has been leading efforts on surveying for this pest to determine how widespread it is, and at what levels so that we can help growers make the best and most economical management decisions. In 2019, we confirmed SCN in an additional six counties, and expect to find it in additional locations every year. That means it’s time for our soybean growers to start actively managing for this potentially devastating pest, before it becomes our number one problem for soybean production in NY.

The 2020 statewide SCN survey revealed 23 **NEW** counties confirmed with at least one field positive for SCN. In SWNY, 3 out of 5 counties tested positive for SCN (Steuben, Allegany, and Chautauqua). This brings us to a total of 30 counties with SCN confirmations since 2016. The maps below illustrate the progress and results of our SCN testing over the past few years. Additional resources about SCN can be accessed at: [https://www.thescncoalition.com/resources/tools-to-download](https://www.thescncoalition.com/resources/tools-to-download). Also, check out these short videos titled “Let’s Talk Todes” to learn more about managing soybean cyst nematode.
Going into winter season, highly destructive SLF pest confirmed on Staten Island, areas in the Hudson Valley, and in the Southern Tier. DEC will be monitoring ongoing and public urged to continue to report findings of insects and egg masses through the colder months.

The New York State Department of Agriculture and Markets today urged the public to stay vigilant and report live Spotted Lanternfly (SLF) or overwintering egg masses, following additional confirmed finds of the invasive species in areas of the Hudson Valley and the Southern Tier. SLF (see photo below), an invasive pest from Asia, was first confirmed in the State on Staten Island in August. Adult SLF and egg masses have since been found in Port Jervis, Sloatsburg, Orangeburg, and Ithaca. The destructive insect feeds on more than 70 plant species, including tree-of-heaven, and plants and crops that are critical to New York's agricultural economy, such as maple trees, apple trees, grapevine, and hops.

State Agriculture Commissioner Richard A. Ball said, "SLF can be devastating to New York agriculture, including some of our leading crops, such as apples and grapes, which is why we have been aggressively working to prevent this pest's establishment in New York. While we have additional confirmations in areas of the Southern Tier and the Hudson Valley, thanks to the public's assistance, we have been able to begin immediate survey work and targeted management plans. We ask that, despite the approaching cold weather and winter months, the public continue to provide their assistance and watchful eyes and report any egg masses."

"DEC is actively supporting the Department of Agriculture and Markets in their work to track the invasive pest Spotted Lanternfly as part of New York State's ongoing efforts to prevent its establishment and spread in the state," said DEC Commissioner Basil Seggos. "This pest has the potential to severely impact our state's agricultural and tourism industries and poses a risk to our forests and ecosystem health. I encourage all New Yorkers to be vigilant in reporting possible sightings of Spotted Lanternfly to support our efforts to prevent further spread of this destructive invasive species."

Freezing temperatures are expected to kill off adult SLF, however egg masses are still a concern during the winter months. In the fall, SLF will lay their eggs on any flat surface such as vehicles, firewood, outdoor furniture, stone, or other items, which can be inadvertently transported to new areas. If this insect becomes established in New York, it could impact New York's forests and agricultural and tourism industries.

SLF feedings stress plants, making them vulnerable to disease and attacks from other insects. SLF also excretes large amounts of sticky "honeydew," which attracts sooty molds that interfere with plant photosynthesis, negatively affecting the growth and fruit yield of plants, and impacting forest health. SLF also has the potential to significantly hinder New Yorkers' quality of life and recreational activities due to the honeydew and the swarms of insects it attracts. First discovered in Pennsylvania in 2014, SLF has since been found in New Jersey, Maryland, Delaware, West Virginia, and Virginia. Given the proximity to the Pennsylvania and New Jersey infestations, New York State is at high risk for infestation.

Since 2017, AGM, working with its partners at the NYS Department of Environmental Conservation, the State Office of Parks, Recreation and Historic Preservation, the U.S. Department of Agriculture, and the NYS Integrated Pest Management Program, has taken an aggressive approach to keeping SLF from establishing in New York State, conducting surveys of high-risk areas across the State; implementing an external quarantine that restricts the movement of goods brought into New York from quarantined areas, inspecting nursery stock, stone shipments, and commercial transports from those quarantine areas; and launching a comprehensive education and outreach campaign to enlist the public's help in reporting SLF.

While these insects can jump and fly short distances, they spread primarily through human activity. SLF can lay their eggs on any number of surfaces, such as vehicles, stone, rusty metal, outdoor furniture, and firewood. Adult SLF can hitch rides in vehicles, on any outdoor item, or cling to clothing or hats, and be easily transported into and throughout New York.

The public is encouraged to thoroughly inspect vehicles, luggage, and gear, and all outdoor items for egg masses and adult SLF before leaving areas with SLF, particularly in the counties of states in the quarantine area—Pennsylvania, New Jersey, Maryland, Delaware, West Virginia, and Virginia. If SLF adults are found, residents should remove them and scrape off all egg masses.

Residents can also help by allowing surveyors access to properties where SLF may be present. Surveyors will be uniformed and will always provide identification.

Adult SLF are active from July to December. They are approximately one inch long and half an inch wide at rest, with eye-catching wings. Adults begin laying eggs in September. Signs of an SLF infestation may include:

- Sap oozing or weeping from open wounds on tree trunks, which appear wet and give off fermented odors.
- One-inch-long egg masses that are brownish-gray, waxy, and mud-like when new. Old egg masses are brown and scaly.
- Massive honeydew build-up under plants, sometimes with black sooty mold developing.

For more information on Spotted Lanternfly, visit spottedlanternfly@agriculture.ny.gov

Early reporting can help with the development of targeted management plans to slow the establishment and spread of this insect.

Photos provided by NY DEC.
Cheese: Cheese markets remained in a bearish raincloud this week. Barrel prices have held at the $1.40 mark, while block prices have slipped daily. Customers are in wait-and-see mode as they await for prices to find a bottom. Cheese inventories have begun to loosen as a result. Milk availability is growing. Spot prices ranged from $2 to $5 under Class in the Midwest spot market. Additionally, some contacts report spot offers at even lower discounts than the reported prices. Midwestern cheese plant managers continue to report working through staffing issues as employees are quarantines and COVID-19 related absences. Still, cheese production remains steady in most of the country.

Dry Products: Low/medium nonfat dry milk prices while mostly steady this week are trending lower, but high heat prices moved marginally higher in the Central and East regions. Production is mixed as most manufacturers manage inventory levels beyond customers near-term needs. Demand from bakery and confectionery is active. Dry whey prices varied across the regions, with some firming in the West and Northeast, but steady to lower in the Central region. Demand is active in both domestic and international markets. Whey protein concentrate 34% prices are steady to higher in the mostly series. WPC 34% inventories are tight and largely committed. Q2 2021 contracting activity is underway.

<table>
<thead>
<tr>
<th>Milk Component Prices</th>
<th>Milk Class Prices</th>
<th>Statistical Uniform Price &amp; PPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>I (Boston)</td>
<td>II (Chicago)</td>
</tr>
<tr>
<td>Nov 19</td>
<td>$2.32</td>
<td>$3.91</td>
</tr>
<tr>
<td>Dec 19</td>
<td>$2.19</td>
<td>$3.65</td>
</tr>
<tr>
<td>Jan 20</td>
<td>$2.11</td>
<td>$2.96</td>
</tr>
<tr>
<td>Feb 20</td>
<td>$1.98</td>
<td>$3.03</td>
</tr>
<tr>
<td>Mar 20</td>
<td>$1.92</td>
<td>$2.84</td>
</tr>
<tr>
<td>Apr 20</td>
<td>$1.32</td>
<td>$2.48</td>
</tr>
<tr>
<td>May 20</td>
<td>$1.38</td>
<td>$2.09</td>
</tr>
<tr>
<td>July 20</td>
<td>$1.95</td>
<td>$5.62</td>
</tr>
<tr>
<td>Aug 20</td>
<td>$1.63</td>
<td>$4.44</td>
</tr>
<tr>
<td>Sep 20</td>
<td>$1.59</td>
<td>$3.39</td>
</tr>
<tr>
<td>Oct 20</td>
<td>$1.64</td>
<td>$5.01</td>
</tr>
</tbody>
</table>

October Utilization (Northeast): Class I = 31.9%; Class II = 24.9%; Class III = 26.0%; Class IV = 17.2%.  
Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.

Fluid Milk: Milk production is trending seasonally higher across most of the country. Significant gains in milk production are noted in the Pacific Northwest, Idaho and Utah in the mountain states, and the Midwest region. The latest NASS milk production report shows that in the 24 major States, during October, output totaled 17.7 billion pounds, up 2.5 percent from October 2019. Class I sales pale in comparison to previous years at this time, resulting from limited to lighter school milk sales due to the pandemic. The condensed skim market is in balance. Cream supplies are mixed.

Butter: Butter churning is fairly active across the country, depending on cream availability. A surge of cream supply is anticipated, next week, as some processing operations take off for the Thanksgiving holiday. Manufacturers continue to pull heavily on stored butter to help meet the strong ongoing yearend holiday needs.

<table>
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<tr>
<th>Friday CME Cash Prices</th>
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<tbody>
<tr>
<td>Dates</td>
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<tr>
<td>Butter</td>
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<tr>
<td>Cheese</td>
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Despite rather strong milk production milk prices continue to strengthen in November. The September Class III was $16.43, strengthened to $21.61 in October and November will be close to $23 surpassing the previous November record high set in 2014 at $21.94. Continued government purchases of cheese under the Farm to Families Food Box Program, cheese exports above a year ago and higher retail cheese purchases strengthened cheese prices and higher dry whey prices pushed the Class III price higher. But the Class III price will take a big tumble in December and could fall close to or below $16. Cheese prices are coming down rather fast in November which will impact the December price.

Forecasting milk prices into next year has so many unknowns. If the COVID-19 virus comes under control and things return more to normal by the second half of the year it would have a big impact on milk prices. As of now the virus is hurting the U.S. economy and the world economy which does not bode well for domestic sales and dairy exports. Dairy producers have responded to much improved milk prices along with government payments and milk production is now running relatively high. If milk production continues at this rate, it will be a challenge for domestic sales and dairy exports to hold up milk prices. Will dairy cooperatives implement base type milk production plans on dairy producers liked they did this year to slow milk production? Will some type of Farm to Families Food Box program continue into next year?

USDA’s milk production report showed October milk production to be up 2.3% from last year, the second month in a row with a 2.3% increase. The increase was the result of 0.5% more milk cows and 1.9% more milk per cow. Milk cow numbers started to increase in July and increased another 14,000 head September to October to bring the total increase to 40,000 head. With milk production increasing at this rate the combination of domestic sales and exports cannot prevent the price of milk from a rather big decline. Of the 24 states just 7 had a lower October milk production than a year ago. Each of these states had reduced milk cow numbers. October milk production increases from a year ago for the top 5 dairy states that produce more than half of the nations production was: California 1.2%, Wisconsin 1.7%, Idaho 1.7%, New York 1.0%, and Texas 8.2%. Of these states only Idaho and Texas had more milk cows than a year ago, 14,000 head and 28,000 head, respectively. October milk production increases were led by South Dakota 12.9%, Indiana 10.7%, and Colorado 6.6%. Each had added a number of milk cows. Other relatively strong increases were Michigan 3.0%, Minnesota and Pennsylvania 2.5% and New Mexico 1.9%. Milk cow numbers were lower than a year ago in Minnesota and Pennsylvania.

Dairy exports will be an important factor determining the level of milk prices for the remainder of 2020 and for 2021. Dairy exports have supported higher milk prices in 2020. September marked the 13th straight month that the volume of exports was higher than the year before. Through September exports were equivalent to 16.2% of U.S. milk production on a total milk solids basis. At this pace 2020 exports could exceed the 2018’s record year of exports. September’s export expansion was the result of year-to-year growth in whey product exports primarily destined to China and better than expected cheese exports despite domestic cheddar cheese prices above world prices since May. But exports will continue to face challenges in 2021. COVID-19 has hurt world economies dampening world demand for dairy products. Also, milk production is not only improving in the U.S. but also in the major dairy exporting countries. Of what we know now milk prices next year are likely to be less volatile than this year and average lower than this year. USDA’s latest forecast has the Class III price averaging $18.55 this year and $17.25 next year. The average all milk price was forecasted to average $18.25 this year and $17.70 next year. No doubt this forecast will be revised as more comes known about developments next year.
Nonlethal Predator Management

By Amy Barkley, Livestock & Beginning Farms Specialist, with the SWNY Dairy, Livestock, and Field Crops Program

The original podcast recording from which this article was derived was recorded by the American Sheep Industry Association, featuring speakers Dr. John Tomececk of Texas A&M University and Dan Macon of the University of California Cooperative Extension.

Where there is livestock, especially grazing livestock, there are predators waiting to take advantage of a free and easy meal. While the kneejerk reaction is to eliminate the pressure through lethal means, there are non-lethal methods that can be just as successful. This is especially true if a population of predators lacks boldness and aggression. Generally, eliminating predators does not mean the pressure will go away long-term. Instead, it leaves an opportunity for other predators to take the place of the fallen ones. The new predators have the potential to be more aggressive, which may lead to higher losses. If a relatively well-behaved group of predators exists, managing them through non-lethal methods can be successful.

The role of predators in an environment is important to understanding their management. Predators are part of the native ecosystem that farmers rely on; they consume other animals that eat pasture resources that would otherwise be used for the growth of livestock. Without them, challenges in pasture availability may arise, especially in adverse times such as droughts or years with pasture renovations. That said, during difficult times when prey becomes scarce, otherwise lazy predators may look to your herd or flock for sustenance.

Predators with the largest impact on the largest variety of livestock are coyotes, but there are local differences between predator pressures. Some communities may experience predation by free-roaming dogs, wolves, bobcats, or fox for instance. Ariel predators pose a threat to pastured poultry.

Coyotes are one example of territorial predators, which is part of their instinctual behavior. Their territories are maintained over many years by the same individuals, though they are plastic to the world around them. If the coyote population increases, territories will shrink in size. If resources become limited or hunting/trapping pressure increases, territories will increase. Older animals move around less than younger animals. If the coyotes have a large territory, litters of pups will be larger. Smaller territories produce fewer pups per litter. This example illustrates one of the most highly managed predators in the region, but keep in mind that each predator has a different territorial schema.

What causes predators to attack livestock? Are they more likely to seek out a specific livestock species if they were raised on it? The answer is: not necessarily. Research has shown that predators raised on a diet of beef, lamb, or goat will not always seek that out as their primary food source. Most predators are not concerned about what they are eating so much as how easy it is to attain. Predators want to keep energy expenditure low when they can. However, if a predator can get to livestock easily, kill easily, and have a decent meal, that can develop into a learned behavior, which will keep them coming back for more. This positive feedback loop may result in them teaching their offspring to kill where there’s opportunity. It can therefore be reasoned that predator exclusion and dissuasion practiced at the start of grazing can help keep populations from developing this learned behavior. It is easier to manage predator populations that have a slight aversion to livestock, rather than those which see them as a free meal.

Nonlethal management can include multiple methods: biological, managerial, and physical. More about each of those control measures is outlined below:

**Biological:**
This method is used to select for more predator resistant herds or flocks. Animals that tend to stomp and stand their ground when being moved by herding dogs and/or people are likely the same animals that will stand up to a predator. Therefore, propagating these genetics in the herd or flock can be useful.

**Managerial:**
Managerial aspects of predator control are those which the livestock caretaker uses to help reduce the attractiveness of a herd or flock to scavenging predators. This technique is most often used during birthing seasons. If predators are at their peak during certain times of the year, ensuring young stock are born outside of those times may result in higher survivability. Furthermore, keeping a pasture clean of afterbirth and dead stock can help keep advantage-seeking animals at bay.

**Physical:**
Well maintained net wire fences are the #1 tool producers use to protect their stock. Fencing will not stop all predators, especially if they are determined, but good fences cut down on the number of potential assaults. Fences, combined with other physical dissuasions, can be highly effective in controlling predation.

There are many devices available to help scare off potential animal threats. Dissuading tools such as fox lights and noise makers fall into this category. Alternative options can include flappy arm flailing inflatable tube-people (like the ones sometimes seen in store parking lots) or mannequins dressed in flappy clothes. Using these tools can result in avoidance of an area, which can ultimately lead to a phenomenon called “disruption”, where the predator will change their pattern of behavior by avoiding an area that they sense contains a threat. While these tools have their merit, the key to any of these static dissuasion devices is to rotate their use and understand that they are not a permanent solution.

Continued on page 8....
Critical Calf Care:

Urgent Decision Making for Dairy Calf Health

CCE Regional Ag Teams are excited to offer this NEW calf care series! Join us VIRTUALLY for a 7 week series on critical calf care topics! This series will be offered every Tuesday starting January 5, 2021 at 12:30pm EST.

Our last session on February 16, 2021 will be a LIVE panel discussion with Dr. Fernando Soberon (Standard Nutrition Consultants), Dr. Rodrigo Molano Torres (Valacta), Dr. Laura Rath-Brown (Midstate Veterinary Services), Dr. Jen Walker (Danone North America), and a local NY dairy producer.

Registration:
https://tinyurl.com/calfcare

Thanks to our generous sponsors, this program is offered at NO COST!

For registration help / questions please contact:
Alycia Drwencke, amd453@cornell.edu
585-343-3040 ext 138

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.
Livestock guardians can act as dissuaders, too, but instead of staying in the same place like fox lights and noisemakers, they follow the animals around, resulting in a more dynamic dissuasion. A guardian’s size may indicate to a smaller predator that they are potentially dangerous, and result in a predator not approaching a herd or flock. The dynamic nature of using an animal as a protector works better for long-term management vs innate objects.

Livestock guardians work by reacting to threatening situations. Dogs in particular have what is known as an escalation strategy, where they may start addressing a threat with barking, then advance to chasing, fighting, and then killing if needed and they are able. Llamas in smaller open systems paddocks can be reasonably effective with canine predators, too. That said, there is a chance in sheep flocks that they will hang out with the slower sheep, inadvertently pointing them out to predators.

Most livestock guardians are in with the herd or flock, which is enclosed by fencing. This results in more barking and posturing at enemies, rather than having the encounter escalate further. The mere presence of livestock guardians can disrupt the ranges of predators. Sometimes the predators will change ranges entirely, but other times, depending on area predator population pressures, may remain within the same range, but purposely not cross paths with the livestock and their guardians.

Properly trained livestock guardians will bond to the herd or flock. They will provide more protection during times of vulnerability, such as lambing, and more general oversight in times when there are less vulnerable individuals around. Some charges will bond with their livestock guardians, too, creating a more powerful dynamic. Those animals with the greatest bonds will receive the most focused attention, but the other members of the herd or flock will still remain under the watchful eye of the guardian.

Alpha predators like bears can be managed with livestock guardians, but the guardians are less effective on them vs beta predators. If experiencing high pressure from these predators, there may need to be a two-pronged approach made, such as penning the sheep up in a more secure pen and having a guard dog present. Another option could be employing a guard dog breed which is specifically bred to work against these larger predators.

In thinking about non-lethal actions livestock caretakers can take against predators, there are many tools at our disposal. The same set of tools will not work for everyone, so using those tools and methods that work for your set of predators, livestock type, and surrounding environment will be the key to developing a robust control program.

To hear the full podcast on the American Sheep Industry website, visit https://soundcloud.com/user-637754734/asi-research-update-predator-management-tools-nonleathal-methods

Would you like to sponsor our monthly mailer or weekly update?

Contact Kelly Bourne  |  klb288@cornell.edu  |  585-268-7644 ext. 10

Troubleshooting Herd Health Issues on Your Dairy

This podcast series focuses on troubleshooting herd health issues on dairy farms. Episodes will discuss specific areas to look at when experiencing issues in different life stages of the dairy cow. Episodes focus on preweaned calves, transition through weaning, heifer phase, calving pen issues, metabolic disorders of the transition cow, specific fresh cow issues, lactating cow issues from mastitis, issues with reproduction, production, feeding behavior and facilities, hoof health and lameness, and problems during the dry period.

Podcast series available: https://cals.cornell.edu/pro-dairy/events-programs/podcasts

Series Introduction

Dr. Rob Lynch, PRO-DAIRY Herd Health and Dairy Management Specialist and Betsy Hicks, Cornell Cooperative Extension Regional Dairy Specialist describe the importance of managing dairy cows to optimize herd health.

Available November 30