Dealing With Cool and Wet Conditions
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(Edited by: Stephanie Mehlenbacher, CCE Steuben)

Corn and soybean growers are nervously watching the forecast, wondering what the cool, wet weather means for planting and for new seedlings. Emerson Nafziger, professor in the crop sciences department at the University of Illinois, breaks it all down.

Emergence. Before the drop in temperature, corn was emerging within 7 or 8 days of planting. “Although not much corn has been planted since April 26, it will take at least 2 weeks for corn to emerge under current temperatures,” Nafziger says.

Chilling injury. Rain and cool temperatures have raised some concern about “imbibitional chilling injury” that can accompany such conditions. “We don’t think there should be much of this because seeds took up warmer water after planting,” Nafziger notes. “But growers should check seeds when 100 growing degree days (GDD) have accumulated after planting. They should look to see if corn seedlings show any of the corkscrew growth that often goes along with this injury. Soybeans may not show this, but may still fail to emerge.”

Flooding. Nafziger says a larger concern is how seeds and seedlings might be affected by heavy rainfall, especially where standing water has developed. “Seeds will usually not survive the low oxygen levels in saturated soils for more than a few days,” he warns. “They will survive longer in cool soil, because that slows growth and lowers oxygen demand, and also because cool water carries more oxygen into the soil.”

Nitrogen. The fate of nitrogen fertilizer is another concern. Nitrogen from fall or early spring applications was still present before the rains came, but Nafziger explains that the longer it has been in the soil, the more ammonium-form fertilizer has converted to nitrate. “About 75 percent of fall-applied nitrogen was nitrate in samples taken in mid-April,” he says. Unlike ammonium, nitrate can move with water as it percolates down in the soil. Nitrate can also be lost to denitrification in saturated soils, but that process is slow when soils are cool.

Although growers are concerned about nitrogen leaving the rooting zone, Nafziger cautions it is too early to decide whether to apply extra nitrogen. “Water that runs off the field normally carries little nitrogen if the fertilizer was incorporated or injected, or if it moved into the soil with rainfall before runoff started. Water movement down through the soil in tile-drained fields is not very fast, and a return to drying conditions will further slow this movement.”

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As part of the State's on-going efforts to slow the spread of EAB, NYS Department of Agriculture and Markets (NYS DAM) and NYS DEC have revised their quarantine regulations by creating 14 Restricted Zones more tightly encompassing the current known EAB infestations. These Restricted Zones replace the larger contiguous quarantine that spanned the state east to west, following the NYS Thruway.

Seven towns in Livingston county are included in a quarantine area. They are Avon, Caledonia, Geneseo, Lima, Livonia, York, and additionally this time, Leicester.

What is a "Restricted Zone"?
A Restricted Zone is a quarantine around an EAB infestation, following town lines. If 30% or more of a town falls within the core infested area and/or the surrounding five mile buffer, it will be included in the Restricted Zone. Restricted Zones will be created or expanded through regulation amendments, as additional EAB infestations are found.

Regulated articles may not leave a Restricted Zone without a compliance agreement or limited permit from the Department of Agriculture and Markets, applicable only during the non-flight season (September 1 - April 30). Regulated articles from outside of a Restricted Zone may travel through a Restricted Zone as long as the origin and the destination are listed on the waybill and the articles are moved without stopping, except for traffic conditions and refueling. Wood chips may not leave a Restricted Zone between April 15th and May 15th of each year (when EAB is likely to emerge).

Regulated articles may be moved freely for disposal, treatment or utilization within the Restricted Zones at any time of year.

What is a "regulated article"?
The following are regulated articles:
- Ash wood
- Ash logs
- Ash firewood (untreated)
- Ash nursery stock
- Wood chips (only between April 15th and May 15th of each year)

In addition, 6 NYCRR Part 575 Prohibited and Regulated Invasive Species prohibits the movement of emerald ash borer, in any life stage, unless for management, control, identification or disposal.

Regulated articles (ash wood, logs, untreated ash firewood, and ash nursery stock and EAB in any life stage) may not leave the restricted zones without a compliance agreement or permit from the Department of Agriculture and Markets. Because EAB does not travel far on its own, limiting human movement of potentially infested material will slow its spread.

How will this change slow the spread of EAB?
Emerald ash borer does not travel far on its own, as it has a fairly slow natural rate of spread. Human movement of infested materials, especially ash firewood and logs, is the biggest cause of spread of EAB to uninfested areas. Limiting human movement of potentially infested material will slow its spread and provide greater protection for uninfested communities and forests.

How does this change in regulation affect me?
- Infested ash wood may be moved freely within a restricted zone for disposal or utilization.
- Bark and mulch are no longer regulated articles and may move freely.
- Chips of any size are not regulated except for between April 15th and May 15th of each year, when they may not be moved out of Restricted Zones.
WESTMORELAND, N.Y. — May is Beef Month in New York State. The New York Beef Council is leading beef industry awareness month with the return of the “Farm to Food Bank” initiative to combat hunger. New York Beef Council in partnership with Empire Livestock Marketing, Finger Lakes Livestock Exchange, Inc., Hosking Sales, Northern NY Farmer’s Marketing Coop, Inc. and NY Beef Producers Association are encouraging beef and dairy farmers to donate cattle sale proceeds for the sole purchase of beef for six regional food banks serving all 62 counties in New York State.

From April 24th through May 31st auction markets throughout the state will assist NYBC in promoting the Farm to Food Bank Initiative. Beef and dairy farmers will have two levels of donations from which to choose or can designate their own dollar contribution. A single $50.00 donation can provide meals for 150 people. Each $50.00 donation will allow the food banks to purchase over 300 pounds of beef through their Food Bank’s purchasing system. The donations generated will help ensure more protein will reach families and individuals in need.

In addition to collecting donations the New York Beef Council will be spreading the message of beef’s role in a healthy diet by providing trainings for food bank staff on how to economically utilize and prepare beef donations. Beef is a high value protein and often underutilized by low income families, despite its nutrient dense value. Peter Ricardo, Product Donations Manager for the Food Bank of CNY, states, “We continue to be humbled and impressed by the generosity and compassion in our community. We thank you on behalf of the many families and individuals that have a need for our services.”

Farm to Food Bank will be posted on New York Beef Council’s Instagram, Facebook and Twitter (@NYBeefCouncil) pages as a means to reach out to our farmers to encourage participation. #Farm2FoodBank. Information can also be found at: http://www.nybeef.org/farmtofoodbank1.aspx –Beef Checkoff Program

CROTON, N.Y. — As the largest provider of crop insurance in the Northeast, Crop Growers, LLP, is committed to serving the region’s producers with risk management tools. In agriculture there are a number of uncontrollable variables, from weather conditions, to insects and disease, along with fluctuating market prices and feed costs. Crop insurance helps producers better manage these risks.

“It with more than $1.2 billion of protection in force covering 2.6 million acres throughout the Northeast, producers have made sound risk management decisions to protect their livelihood from weather related events,” said Jeremy Forrett, Farm Credit East/Crop Growers, LLP vice president. “These producers understand the risks associated with agriculture and have made business decisions to be able to rebound quicker after unexpected events.”

In 2016, much of the Northeast dealt with a severe spring freeze that resulted in crop damage to early fruit development. This was followed by an extremely dry summer, resulting in drought conditions that reduced yields and quality for many crops. These types of extreme weather conditions will present great challenges to any producer. (Alan Levine, Flickr/Creative Commons)
Crop insurance agents worked with farmers through the difficult 2016 growing season. Insurance providers brought in additional claim adjusters to support the heavy volume of claims, and the Risk Management Agency Administrator, Brandon Willis, made farm visits to view freeze and drought-damaged crops. Additionally, the Secretary of Agriculture declared 113 Northeast counties as disaster areas.

At the close of the 2016 season, 4,876 claims, totaling $130,116,652, were paid to producers throughout the nine state region Crop Growers serves: Connecticut, $2.2 million; Massachusetts, $2.99 million; Maine, $2.8 million; New Hampshire, $1.1 million; New Jersey, $3.6 million; New York, $62.4 million; Pennsylvania, $53.4 million; Rhode Island, $226,952; and Vermont, $880,890.

Crop Growers, LLP, is an independent agency that sells and services crop insurance for 34 different crops through a nine state territory. Crop Growers is owned by Farm Credit East, in conjunction with other Northeast Farm Credit Associations. Producers do not need to be a Farm Credit customer to purchase crop insurance. Contact the Crop Growers Customer Service Center at 1-800-234-7012 to learn more.

Survey Details Impact of 2016 Drought on New York Farming

A survey of more than 200 New York farmers late last summer – during the worst drought in two generations – found that more than 70% of unirrigated, rain-fed field crops and pasture acreage had losses between 30 and 90 percent, according to a new report published by the Cornell Institute for Climate Smart Solutions.

For farmers all over the state, arid conditions were so pervasive that fruit and vegetable growers who had capacity to irrigate lacked water to keep up with the drought. Irrigated farms estimated crop losses of up to 35%, said Shannan Sweet, NatureNet postdoctoral science fellow with Cornell’s Atkinson Center for a Sustainable Future and The Nature Conservancy.

“New York’s farmers have asked if they should expect more dry summers like the one we had in 2016. The answer is: We don’t know,” said Sweet, also a postdoctoral associate in the Horticulture Section of the School of Integrative Plant Science, working with David Wolfe, professor of horticulture. “Climate scientists forecast that the number of frost-free days will continue to increase and summers will be getting warmer, increasing water demand for crops.”

The warmth and lack of snow in December 2015, the scarce snow in January and February 2016, and low rainfall and high temperatures during the growing season led to drought conditions throughout New York state. Streams in western and central New York broke records for low water flow by late July and August.

New York’s Department of Environmental Conservation put the state on a drought watch, while the Finger Lakes region and western portions of the state, in particular, battled dry conditions. The drought was so acute that the U.S. Department of Agriculture’s Farm Service Agency declared most counties in the region natural disaster areas. This resulted in eligibility
for financial relief in the form of low-cost loans for farmers, according to Sweet.

Western New York farmers lost an average of 39% of their field crops, compared with 22% for eastern New York farmers. Western farms saw 48% forage crop losses, 45% for soybeans and 40% for corn, according to the report, “Anatomy of a Rare Drought: Insights From New York Farmers.”

Fruit growers in western New York lost about 52% of their crop, due to the drought, as grape growers in that region lost 26%. Western berry producers lost 96%, while the state’s eastern berry growers lost about 75%, according to the survey.

Producers who irrigated used moveable sprinkler pipes and large “gun” sprinklers, according to the report. Farmers who lacked irrigation equipment used hoses, garden sprinklers and hand-watering to save their crops.

Sweet said that of the farmers who irrigated, 65% reported using well and pond water, while 15% used municipal water supplies, a method that turned out to be cost-prohibitive.

To protect against drought, farmers said they would expand irrigation capacity, increase water-holding capacity, improve soil organic matter, obtain drought-resistant crops, consult online tools for long-range forecasting and seek training about drought.

Due to creeping climate change, farmers are seeing more heavy rainfall and drought events.

“The recent rainfall trend we’ve seen are heavy rainfall events – more than 2 inches in 48 hours – and severe short-term droughts in summer that could increase in frequency,” said Sweet. “Flooding and drought will continue to challenge New York farmers.”

Quick and Easy Resources for Farm Food Safety
Robert Hadad, Cornell Vegetable Progam - VegEdge, Vol. 13; Iss. 5

There are many questions concerning farm food safety and with the new FDA regulations. The Cornell Produce Safety Alliance has a great website where you can find very useful information. The website is listed here http://producesafetyalliance.cornell.edu/resources.

To find out if you need to comply or if you are exempt, check out the PSA Power Point presentation found on the resources page of the PSA “FSMA Produce Safety Rule Exemptions & Exclusions Power Point”.

If you are looking for compliance dates, check out this link http://producesafetyalliance.cornell.edu/sites/producesafetyalliance.cornell.edu/files/shared/documents/compliance-date-add-on.pdf.

This will provide a list of dates when produce farms need to have completed their training course and instituted their food safety practices. The list is divided by farm size based on the value of sales averaged over the previous three years.

Also on the PSA reference page is a comprehensive listing of sanitizers on the market for wash water or for sanitizing food contact surfaces etc. It is titled, “Labeled Sanitizers for Produce - Excel Tool”. Accompanying this spread sheet is a video on how to use the sheet in an easy to follow tutorial.

Penn State has put out a useful video on YouTube on how to use sanitizers properly. Visit: https://www.youtube.com/watch?v=Ee5xq_B79xs&t=24s
The great majority of nutrients are taken up by the plant’s root system. Foliar applications can be useful but almost exclusively for trace nutrients since the plant can only absorb a small amount of nutrient from its leaves and stems. Root uptake is via the soil solution because as an agronomist said many years ago, “plants ain’t got teeth”. However, how much of each nutrient is plant-available depends on several factors including soil pH, the amount of nutrient, the amount of other nutrients in the soil, soil moisture status, and the health of the plant’s root system.

Some people assume that manure nutrients are available to plants vs. the nutrients in commercial fertilizers. This just isn’t true, especially for potassium. Research in Quebec found that the potassium in manure is more plant-available than the potassium in a commercial fertilizer such as muriate of potash. Manure is a great source of major, secondary and minor nutrients, which is why I call it a “multivitamin for plants”. Dairy manure is close to neutral in pH, so supplying nitrogen as manure is much less acidifying to the soil than an equivalent amount of N as urea, UAN or ammonium sulfate. There’s still need for commercial sources of N on most farms, but it makes both practical and economic sense to rely on manure to the greatest extent possible, supplementing with N fertilizer as needed.

I worked for Cornell Cooperative Extension in Northeastern NY for 15 years, which included making lime and fertilizer recommendations for literally thousands of soil analyses by Cornell University’s soil test lab. Cornell would mail the results to the Extension educator for that county, and he or she would either make fertilizer recommendations based on the results or simply forward them to the farmer (since the analysis included basic nutrient recommendations). I always wrote out detailed fertilizer recommendations for each field, tailored to the individual situation if I knew the farmer — and I knew most of them. I assumed that top crop managers could benefit from 25% more N on their corn, and the soil fertility specialist at Cornell agreed. Where we used to disagree was on potassium rates for alfalfa: I’ve always been liberal on fertilizing alfalfa, especially where there’s a good crop and soil test K is medium or less. An extra 100-200 lbs/acre of 0-0-60 seems like cheap insurance, especially since a soil sample is a composite of soil cores so some areas in a field are higher and some lower in fertility than the soil analysis. I became enough of an irritant (hard to believe, eh?) that Cornell did a trial in its research plot area at Miner Institute, using a three-year old stand of alfalfa on a soil with low soil test K. We compared the university’s potassium recommendation of 160 lbs/acre to a rate twice that high. Guess who won? ☺

If you do pre-ensiling forage analysis of fresh alfalfa and alfalfa-grass (especially “wet chemistry” analyses), check the potassium concentration. Average K for alfalfa is about 2.5%; any field producing alfalfa that’s 2.0% or less should be soil tested immediately — especially if you plan on keeping the stand for another year.

**FAO Food Price Index Dips Again**

Weakening trade volumes, robust supply conditions for wheat and maize

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Source: Morning Ag Clips

ROME — Global food commodity prices fell in April amid expectations of ongoing robust supplies of many key staples.

The FAO Food Price Index averaged 168 points in April, down 1.8 percent from March although remaining 10 percent higher than a year earlier.

The Sugar Price Index led the decline, dropping 9.1 percent on the month as large export supplies from Brazil met with continued weak global import demand.

The FAO Vegetable Oil Price Index fell 3.9 percent on the month, pushed down by weakening demand for palm oil and expectations of bumper soy harvests and plantings in South and North America.
FAO’s Food Price Index is a trade-weighted index tracking international market prices of five major food commodity groups.

The Cereal Price Index also shed 1.2 percent in April, pushed down by sagging wheat prices even as international rice prices firmed.

The Dairy Price Index fell 3.3 percent as production in the northern hemisphere entered peak season, allaying short-term sourcing concern.

By contrast, the FAO Meat Price Index rose 1.7 percent, as pigmeat prices increased in response to strong domestic demand in the European Union and increased sales to China.

Maize on the march, wheat in retreat
FAO updated its global cereal production forecasts for 2017, which now point to a likely 0.4 percent annual decline from 2016 even as the pace of utilization grows by around one percent.

The net result of the new projections, released today with the Cereal Supply and Demand Brief, would be a drop in the cereal stocks-to-use ratio in 2017/18 to 25.8 percent, still a comfortably high figure in historical terms but slightly below the current season’s level.

The new global cereal output forecast was raised from the April figures, as Brazil appears poised to enjoy stronger-than-expected maize yields, lifting the global output for that crop to 1.054 million tonnes. Projected global rice output remained stable at 506 million tonnes, while the forecast for wheat – 740 million tonnes – was also unchanged as expected smaller crops in Australia, Canada, the Russian Federation and the United States are offset by likely expansions in the European Union, India and Morocco.

On the consumption side in 2017/18, abundant maize and other coarse grains are expected to push up use for livestock in China and South America, while rice utilization is expected to grow 1.2 percent due to expanding food intake.
Study Examines Potential of Grassfed Beef Industry
(from ATTRA News)

Stone Barns Center for Food and Agriculture has released Back to Grass: the Market Potential for U.S. Grassfed Beef. This study found that grassfed beef is inaccessible to many consumers due to price premiums, but that the price of grassfed beef could come down significantly if the industry were to establish well-managed grass-finishing operations that take advantage of economies of scale in processing, distribution, and marketing. The study found that a number of labels and standards confuse the marketplace and the consumer. The complete 58-page report is available online http://www.stonebarnscenter.org/farm/news/from-pasture-to-plate.html

When Should you Harvest Grasses?
Source: The Ag Report
Produced by Aaron Gabriel

When the seedhead inside the stem is higher than 4 inches above the ground. Take a sharp knife and split the main grass stems and some tillers (smaller side stems). Locate the seedhead hidden in the stem and measure its height above the soil surface. We set our cutter bars at 4 inches high. If the seed heads are below 4 inches, then they will not be cut off at harvest. Then in a week they will shoot up you will have a field of nothing but seedheads. So, wait for the seedheads to rise more than 4 inches, then begin harvest as soon as the weather and field conditions allow.

This is orchardgrass on 5/9. The seedhead is at 4 inches on a main stem. So we need to wait just a few more days (depending on temperature).

This is tall fescue on 5/9. The seedhead is only at 1 1/2 inches above the soil surface. We still have a little time.

Teff Hay a Drought-Tolerant Option for Dairy Cows
(from ATTRA News)

Researchers at Kansas State University have found that teff hay has the potential to replace alfalfa and corn silage in the diets of lactating dairy cows. Teff is a warm-season grass native to Ethiopia, well-suited to drought conditions, and also used for human consumption. In study trials, intake, milk yield, and milk-fat percentage were no different when cows were fed teff diets versus a control diet, although milk-protein levels were higher for cows on the teff diets. https://www.ksre.k-state.edu/news/news-stories/2017-news-releases/april/teff-grass-dairy.html
How to Deal With Trespassing on Your Farm
Curt Harler,
Farming Magazine

The on-farm horror story typically starts innocently enough – a neighbor calls. Someone in a pickup truck is in the back 40 where you usually park your sprayer and cultivator. Is that pickup up to no good?

Or, perhaps the tension starts when your daughter notices that the wireless video camera monitoring the barn shows a shadow moving around. Who is out there at this time of night?

It is not always someone with bad intentions. Perhaps you notice someone crossing a meadow. Or you note that there are a couple of kids on ATVs tearing through your alfalfa field.

What do you do?

Take three deep breaths!

The law frowns on all forms of trespass. Every state considers trespass – as well as other forms of property and personal injury – a crime. All allow a property owner to sue for damages that result from trespass.

However, except in extreme circumstances like murder, it is a bad idea to go “Rambo” on anyone you find on your property.

Yes, those folks are trespassing. A typical definition of “trespasser,” one which would hold up in most state courts, is a person who enters someone else’s property for their own purposes without being authorized, invited or induced to do so by the landowner. Usually, the definition of landowner is expanded to include a property lessor or renter, hired person or other person who reasonably would be expected to have control or authority on the land.

Just as the law will back you up if someone trespasses, the law also protects the trespasser. States all say that a property owner has a “duty of care” to interlopers on their farm.

For starters, farmers cannot just start plunking away with a 12-gauge or 30.06 when they spy someone on their ground. Most state laws say a property owner has a duty to keep from intentionally harming a trespasser upon discovery.

On top of that, setting up booby traps is forbidden – even if those booby traps are intended to catch trespassers. In short, stringing piano wire across a trail where mountain bike riders often run will cause trouble for the property owner.

The rules are totally different if a person is invited onto the property – say the holder of a hunting lease or a person who is on a pick-your-own operation. FARMING covered those scenarios in its November 2015 issue.

Don’t go macho

A scene from the recent movie “Hell or High Water” shows the danger of taking law enforcement into your own hands. After crooks rob a rural bank, a group of local cattlemen takes off after the getaway car. Each pickup truck has a gun rack. Many of the ranchers are carrying hand guns. As the showdown plays out, it turns out the bank robber has an automatic weapon and quickly sends the townsfolk into a headlong retreat. The locals are happy to turn the situation over to law enforcement.

When confronting a criminal, one never knows what the bad guy will do.

One thing is for certain: in most states it is the landowner who will run afoul of the law if they do any harm or apprehend a criminal. The exception is if a felony – like murder – has been committed.
The concept of citizen’s arrest – where a private individual holds a person suspected of a crime – is shaky at best. Many states, including Massachusetts and New Hampshire – require a felony situation before an individual can attempt a citizen’s arrest. Many states are silent on the issue. In Vermont, statute 13-59-4954 spells out someone not a sworn police official can hold a person charged with a crime in another state for extradition. But it is strangely silent on crimes committed within state borders.

New Jersey (which does not have the felony designation that other states have) says in NJSA 2A:169-3, “Whenever an offense is committed in his/her presence any constable or police officer shall, and any other persons may, apprehend without warrant or process any disorderly person, and take him/her before any magistrate of the county where apprehended.”

In many jurisdictions, the closest parallel to a farmer holding a person suspected of bad intent on a farm is a store owner holding a person suspected of shoplifting. It goes better for the owner if it is proven that the individual in question is, indeed, in the process of a wrongdoing. If the bad guy is blazing away with a gun, a landowner has every right to defend himself or herself.

New Jersey says a private citizen – farmer, shop keeper or homeowner – may lawfully arrest another person without a warrant if they know that a crime has actually been committed and that there is probable or reasonable cause to suspect that the person detained did the crime.

There can be no delay in notifying the law. When a citizen’s arrest is made, the detainee must immediately be turned over to legal authorities and a warrant must be issued based on the complaint.

However, the law often is not on the landowner’s side if the farmer causes harm to a person simply because that person is on their property or because they suspect that maybe the other person intends to or will harm their property.

In those states that do allow a citizen’s arrest, most require that the citizen making the arrest has actually seen the crime being committed. In other words, if your neighbor calls and tells you a black Ford F-150 was pulling out of your Back 40, you have no right to go out on the road, stop and detain the next black F-150 that comes down the highway.

Despite what many groups will maintain on the internet, the whole concept of holding another person at gunpoint (or any other way) because you saw or suspect them of a crime is fraught with danger – for you.

You read that right: the bad guy has rights, too.

You cannot detain a trespasser unless that individual has committed a felony. Being on your land is not enough.

The trespasser gives up that presumption if he demonstrates the ability, intent and opportunity to cause you or another person bodily injury or death.

Remember, a trespasser can sue you for injury or damages – whether you actively cause the injury or the trespasser accidently stumbles into the situation while wandering around your property.

**My home is my castle**

Many states recognize some form of the “castle doctrine” defense. The common law principle of castle doctrine says that individuals have the right to use reasonable force, including deadly force, to protect themselves against an intruder in their home. This principle has been codified and expanded by numerous state legislatures.

The question on a farm is just how far out you can place the moat around that castle. Pennsylvania defines that area as a “building or structure, including any attached porch, deck or patio, though movable or temporary, or a portion thereof, which is for the time being the home or place of lodging” of the citizen. In Pennsylvania’s 2011 HB 40, the castle is extended to vehicles. The measure is explicit that property owners cannot invoke the castle doctrine if they know they can avoid the necessity of using such force with complete
safety by retreating or by surrendering possession of a thing to a person asserting a claim on an item.

Some people refer to the castle doctrine as the “stand your ground” law. Maine gives citizens the right to stand their ground and defend themselves when they believe that deadly force is being or is about to be used against them. Maine Criminal Code Title 17A also allows the use of deadly force if someone is trying to burn down your barn or otherwise commit arson.

Maine’s 2007 law is quite broad and includes as part of one’s castle any land, private ways and buildings or structures thereon. Other states do not go so far as to cover cattle barns or hog facilities.

Ability to justifiably use of non-deadly force is simple and broad under Maine’s Castle Doctrine. “Non-deadly force can be used if you reasonably believe it’s necessary to prevent someone from trespassing, or about to trespass, on your land, private roads, or in any buildings on your land,” according to attorney William T. Bly, Biddeford, Maine.

Under Maine’s law, deadly force cannot be used against someone inside your own home until you’ve given them the opportunity to stop their criminal activity, by demanding they stop what they’re doing, and leave the premises, Bly said. “Using deadly force to defend your home is only justified if the intruder doesn’t immediately comply with your demand.”

With that said, Bly said that a property owner who reasonably believes that confronting the intruder would put you or someone else in danger, then demanding that the trespasser stop what they’re doing and leave is not necessary before you use deadly force.

In other words, you cannot shoot someone who stops when you catch them attempting to steal something from your barn. Nor can you shoot a bad guy who is in full retreat from you.

It is an interesting call – note all the professional law enforcement agents who face legal action for on-the-job shootings.

There are interesting exceptions to the Pennsylvania law. One is if the item being stolen is any amount of anhydrous ammonia. This does not imply that legislators want farmers to have a right to tall, green corn. Rather, they were worried about criminals using it to make bombs. There is an exception for firearm theft, too.

Given the landowner was operating within the boundaries of the law, Pennsylvania holds that person free of liability or damages.

There are 22 states with self-defense laws including Maryland, New Hampshire, Pennsylvania and West Virginia. New Jersey goes further, asserting that civil remedies are unaffected by criminal provisions of the self-defense law.

Some state self-defense laws include provisions that address a property owner’s duty to retreat from an intruder in one’s home or from an attacker in other places, notes the National Conference of State Legislatures.

In Maine, you must warn the intruder about your intent to use deadly force before doing so. Know what your state laws say.

**Dealing with kids**
All of the above applies to adults. The story is different with children.

There is a much heavier burden on a property owner when it comes to protecting children who may stray onto a property.

Whereas most adults would say “ugh” at the thought of swimming in a manure lagoon, a child might see it as an interesting place to play. And diving into a grain bin can be a fun prospect until the grain shifts.

In many states, however, livestock is not considered an “attractive nuisance.” So, if a child decides to pet a nice sheep and it turns out it’s a ram and that ram takes exception to the trespass, the landowner is somewhat off the
hook. This situation varies by state.

Some states go so far as to exempt farm ponds and streams – any “natural” feature – from being termed attractive nuisances.

Whether adults or children, never assume that people are aware of what is dangerous on a farm. Even other farmers or farm children might not be alert to a danger on a neighboring farm.

This means that it is a good idea to eliminate dangers in places where others are likely to come onto your land. Posting warning signs is a first step. Fencing off such areas is another.

When you do such things, keep a record. A simple cellphone photo of your brother nailing up signs is a good start. So is a picture of the barrier around an open pit or other dangerous situation. It will not prevent people from moving the barrier – but it will show you did take due caution to help strangers avoid injury.

**Bottom line**
Most cops would make lousy farmers. They are not ready – either by training, experience or equipment – to do the job. By the same token, most farmers make lousy police officers.

If there is someone trespassing on your property, call local law enforcement or “911.” Do take notes – get good descriptions of the people and any vehicles used. Again, cellphone photos can prove valuable.

Unless there is a felony being committed – someone is shooting at you – forget about gunplay. Not only will you get into a world of trouble but cleaning up the aftermath of a shooting is a horrid job that usually requires hiring a hazardous materials team.

“Hurting or killing someone in self-defense is a life-changing event,” Bly said, warning that – after the actual conflict – you’ll likely face criminal charges, as prosecutors take you to court to test your claim that you were acting in self-defense.

Consult an attorney now to ascertain exactly what your state’s law allows and does not allow. In the heat of the moment, there will not be time to ring up your farm’s lawyer and ask what actions are defensible and which are not.

**Agricultural Energy Audits Available to New York Farms Through NYSERDA**

New York farms can cut energy use and energy costs with the Agriculture Energy Audit Program.

Last spring, NYSERDA launched the Agriculture Energy Audit Program. The Program offers farms and on-farm producers no-cost energy audits. No up-front costs are required form the farmer as NYSERDA pays the consultant directly. Three levels of audits are offered. The level II audit adheres to ANSI/ASABE S612 standards and can be submitted with EQIP applications or to other third parties for funding consideration.

The next EQIP deadline is June 18, 2017. Farmers are encouraged to sign up for the audit immediately and begin the application process with their local NRCS office. Level II audits are required for EQIP applications. The audit does not have to be completed by June’s deadline but farmers must be enrolled in the AEAP program to qualify.

Audits are available on a first-come, first-served basis. The program runs through the end of the 2017 or until funds are expended. For general information or to request flyers for your office call 800-732-1399 or email aeep@nyserda.ny.gov. To discuss the program further or contact the Program Manager, Lisa Coven, at extension 839 or lisac@ensave.com.

Applications available at https://nyserda.seamlessdocs.com/f/AgAudit
Export Sales of Wheat Plunge in Week That Ended on May 4
From: Successful Farming

Corn and wheat sales plunged week-over-week to their respective marketing-year lows, according to the U.S. Department of Agriculture.

Corn sales for delivery in the seven days that ended on May 4 totaled 277,700 metric tons, down 64% from the previous week and 66% from the prior four-week average and the lowest since the marketing year started on Sept. 1, the USDA said in a report.

Mexico was the biggest buyer, taking 109,400 metric tons, Japan was in for 89,500 tons, Venezuela took 30,000 tons, Jordan bought 26,300 tons and Ireland purchased 19,600 tons.

Wheat sales also plummeted last week as exporters actually saw net reductions in sales for the marketing year that ends on May 31. While it’s not terribly unusual this close to the end of the fiscal season to see sales decline, total sales last week came in a negative-24,200 tons.

Sales for the 2017-2018 marketing year that starts on June 1 totaled 273,400 metric tons with China the big buyer, taking 60,000 tons. Mexico was in for 56,000 tons, an unknown buyer purchased 46,000 tons and the Philippines took 45,000 tons.

Soybean futures were modestly lower in overnight trading after Brazil’s agricultural consultancy raised its outlook for the country’s crop and as dry weather moves into the Midwest.

Statistics agency Conab said on Thursday that the domestic crop would total a record 113 million metric tons, up from a month-earlier projection of 110.2 million. Argentina’s crop was pegged by the Buenos Aires Grain Exchange at 57.6 million tons, up 1 million from a prior estimate.

Meanwhile in the U.S., some dry weather is on the way to the Midwest where as much as six times the normal amount of rain has fallen in the past two weeks, according to the National Weather Service. The break in the rain should allow growers to get into muddy fields to plant their corn and soybean crops, which are behind the normal pace for this time of year.

Soybean futures for July delivery fell 3 ¾ cents to $9.62 ½ a bushel overnight on the Chicago Board of Trade. Soymeal declined 20 cents to $314.70 a short ton and soy oil futures lost 0.20 cent to 32.29 cents a pound.

Corn futures were unchanged to $3.69 ¼ a bushel in overnight trading.

Wheat futures for July delivery fell ½ cent to $4.33 ¼ a bushel in Chicago. Kansas City futures declined ¾ cent to $4.40 a bushel.
**Dairy Market Watch**

**Milk Component Prices**

<table>
<thead>
<tr>
<th>Month</th>
<th>Butterfat</th>
<th>Protein</th>
<th>I (Boston)</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tbody>
<tr>
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<td>$2.20</td>
<td>$1.92</td>
<td>$17.03</td>
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<td>$2.23</td>
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<td>$16.99</td>
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<td>$16.95</td>
<td>$13.53</td>
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<td>$16.95</td>
<td>$15.16</td>
<td>$15.24</td>
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<tr>
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<td>$18.32</td>
<td>$15.21</td>
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<tr>
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<td>$2.31</td>
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<td>$16.21</td>
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<td>$14.32</td>
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**Milk Class Prices**

<table>
<thead>
<tr>
<th>Month</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
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<tbody>
<tr>
<td>Mar 16</td>
<td>$13.66</td>
<td>$(0.08)</td>
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<td>$0.52</td>
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<tr>
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<td>$(0.49)</td>
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<tr>
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<td>$17.22</td>
<td>$0.34</td>
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<td>Mar 17</td>
<td>$16.15</td>
<td>$(0.34)</td>
<td>$16.75</td>
<td>$(0.94)</td>
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</table>

**Statistical Uniform Price & PPD**

<table>
<thead>
<tr>
<th>Month</th>
<th>Jamestown, NY</th>
<th>Albany, NY</th>
<th>Albany $/gal. to farmer</th>
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</thead>
<tbody>
<tr>
<td>Mar 16</td>
<td>$2.42</td>
<td>$2.09</td>
<td>$2.09</td>
</tr>
<tr>
<td>Apr 16</td>
<td>$2.23</td>
<td>$1.82</td>
<td>$1.46</td>
</tr>
<tr>
<td>May 16</td>
<td>$1.46</td>
<td>$1.47</td>
<td>$1.54</td>
</tr>
</tbody>
</table>

**MPP**

<table>
<thead>
<tr>
<th>Month</th>
<th>Milk Margin Minus Feed Costs ($/cwt)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 16</td>
<td>Not Available</td>
</tr>
<tr>
<td>Apr 16</td>
<td>$7.46</td>
</tr>
<tr>
<td>May 16</td>
<td>$6.83</td>
</tr>
<tr>
<td>June 16</td>
<td>$5.77</td>
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<td>July 16</td>
<td>$5.75</td>
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<td>Sep 16</td>
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<td>$8.84</td>
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<td>Dec 16</td>
<td>$9.98</td>
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<tr>
<td>Jan 17</td>
<td>$11.10</td>
</tr>
<tr>
<td>Feb 17</td>
<td>$10.58</td>
</tr>
</tbody>
</table>

**March Utilization (Northeast):**

- **Class I = 32%**
- **Class II = 24%**
- **Class III = 25%**
- **Class IV = 19%**

**Costs ($/cwt)*:

- 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

*At a milk margin minus feed costs of $8 or less, payments are possible depending on the level of coverage chosen by the dairy producer.

**Cheese:** Cheese plants across the nation are handling abundant milk intakes. Class III spot milk prices were reported from $1.50 to $5.00 under Class. Cheese production, therefore, continues at active levels. In some cases, processors are seeing seven-day workweeks. Cheese inventories are long throughout the country. In the West, some fast food chains are transitioning from process to natural cheese, and some contacts are curious to see how this will impact the block versus barrel demand.

**Butter:** The United States butter production is at active levels. Cream is readily available throughout the country. Butter inventories are heavy. In the Northeast and West, there has been seasonally lighter demand. Bulk butter sales are at 4 cents below to 6 cents over the market, with various time frames and averages used.

**Fluid Milk:** Overall U.S. milk production is increasing. Northeast milk production is higher than one year ago. Southeast milk production is heavy. Milk output is adding to Mid-Atlantic manufacturers’ milk supplies. Midwest milk production shows no signs of a near term slowdown. Spot milk is moving to cheese plants at prices between $1.50 to $5.00 below Class.

**Dry Products:** All nonfat dry milk prices are stronger for low and high heat in all regions except Central and East high heat, which is steady. The low/medium heat market tone is uncertain/unsettled in all regions. Production and inventories are generally ahead of demand, driven by heavy milk supplies. All buttermilk powder prices are weaker in all regions except steady in the Central and East’s bottom of the range. Inventories are adequate.

**Organic Dairy Market News:** The latest AMS national data reports total organic milk products sales for February 2017 were 203 million pounds, down 4.8% from the previous February. January-February 2017 sales are even with January-February 2016. March increases in organic milk sales have been reported in the Northeast. Federal Milk Market Order 1 reports utilization of types of organic milk by pool plants. During March 2017, organic whole milk utilization totaled 16.3 million pounds, up from 14.6 million one year earlier, an 11.6% increase.

**Friday CME Cash Prices**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Butter</th>
<th>Cheese (40# Blocks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/24</td>
<td>$2.09</td>
<td>$1.39</td>
</tr>
<tr>
<td>3/31</td>
<td>$2.10</td>
<td>$1.52</td>
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<tr>
<td>4/7</td>
<td>$2.09</td>
<td>$1.46</td>
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<tr>
<td>4/13</td>
<td>$2.08</td>
<td>$1.47</td>
</tr>
<tr>
<td>4/21</td>
<td>$2.09</td>
<td>$1.54</td>
</tr>
</tbody>
</table>
Milk prices have been trending downward since last December and will likely continue through May. The Class III price was $17.40 last December, fell to $16.77 in January and was $15.81 in March. April should be around $15.15 and May at $15 or a little below $15. Prices should start to trend upward again by June. This pricing pattern is not unusual. After strong seasonal sales of butter and cheese during Thanksgiving through Christmas sales soften, and at the same time milk production starts to increase seasonally. Then as we move into summer milk production slows, by September schools open increasing beverage milk sales and by fall milk plants and buyers of cheese and butter start building stocks to again meet the strong seasonal sales.

First quarter sales of butter and cheese have softened some from a year ago, but are expected to show growth for the year. For the nine months from last June through February dairy exports have improved over a year earlier. February exports were the highest since May of 2015. Milk production has been lower than a year ago in major dairy exporters with the exception of the U.S. World demand has picked up with China, Mexico and others increasing their imports. With a tighter world supply demand situation world dairy product prices have increased making U.S. dairy products more competitive. Compared to February a year ago, exports increased 26% for nonfat dry milk/skim milk powder, 8% for cheese, 22% for total whey products, but were 55% lower for butterfat and 5% lower for lactose. On a total solids basis February exports were equivalent to 14.8% of milk production compared to 13.4% a year ago.

With relatively strong milk production stocks of dairy products have been building putting downward pressure on prices. Butter stocks grew by 27.6% January to February with February stocks 20% higher than a year ago. Natural American cheese stocks grew by 2.9% January to February as did total cheese stocks, and February stocks were 8.1% and 6.4% higher respectively than a year ago.

Milk production is expected to continue to run higher than a year ago. USDA is forecasting 2017 milk production to be 2.3% higher than last year. But, with expected growth in butter and cheese sales along with continued improved dairy exports milk prices are forecasted to increase starting with the month of June. While reduced some from earlier in the year milk prices are expected to average for the year higher than last year. The Class III price could be back to about $15.35 by June, in the $16’s by July with the $17’s possible by September giving an average for the year around $16.35 compared to $14.87 last year. Some price forecasters have a possible Class III of $18 by August. However, Class III futures do not reach the $16’s until August and stay below $17 for the remainder of the year giving an average for the year of about $16.10. USDA forecasts Class III to average between $16.10 and $16.60. No doubt as we move through the year and observe the actual level of milk production, dairy product sales and exports price forecasts will be revised, and that could be higher or lower than now forecasted. It doesn’t take big changes to result in changes in milk prices.
COMING EVENTS:

May 19 – 7pm-9pm-Successful Reproductive Management Forum, CCE Ontario, 480 N. Main St., Canandaigua, NY. A few of the leading reproductive herds in the Northeast will share how they achieve outstanding reproductive results through a roundtable discussion. To register, contact Dave Keller at 913-242-0549 or at dave.kellar@parnell.com

May 31-June 1-Cured Meats Workshop, Cornell University, Stocking Hall, 411 Tower Rd., Ithaca, NY. The Cured Meats workshop is tailored to small-scale meat processors and restaurant owners interested in creating a value-added meat product for their customers. To register visit https://dairyextension.foodscience.cornell.edu/content/cured-meats-workshop-may-31-june-1-2017?utm_source=May+17+Extension+Notes&utm_campaign=March+2017+LFN&utm_medium=email

June 14 – 6pm-8pm-Learn How To Grow Your Own Mushrooms, Chemung County Fairgrounds, 4-H Building, In this hands-on class Ken Mudge, Agroforestry Expert from Cornell University, will be walking us through the basics of growing shitake mushrooms on logs. Each participant will take home their own mushroom spawn inoculated log. Cost to attend is $15/person, class size is limited. Pre-registration with payment is required by 6/9/17! For more information please contact Shona Ort of CCE Chemung at 607-734-4453, ext. 227 or sbo6@cornell.edu. To register visit https://reg.cce.cornell.edu/GrowYourOwnMushrooms_207