

Livestock 360°

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Staff Changes to the Livestock Education Program in CCE Ulster and Orange Counties

Since the last issue of Livestock 360 we have said “goodbye” to two of our livestock educators and welcomed a new member to the team. This summer **Erin Campbell-Craven** of CCE Ulster County and **Jennifer Simpson** of CCE Orange County both left Cornell Cooperative Extension for new opportunities. Erin moved back to California to take some classes in preparation of entering a full time master’s degree program in animal science this coming fall (2016). Jennifer Simpson was offered the opportunity to become the Assistant Superintendent of the Dairy Program at Delaware Valley College and also plans to go back to get her master’s degree. Although we were sorry to see them both go, we are glad that they will be furthering their education as livestock educators. **Rachel Moody** in CCE Orange County has taken over Jennifer’s work with dairy farms.

CCE Ulster welcomed a new livestock educator, **Jason Detzel**, in early January. Jason is a diversified livestock farmer, specializing in beef production in Columbia County and comes to us with a background in psychology and social services. He has hit the ground running. Many of you have been receiving the Livestock Weekly Updates that he is writing and he has been offering a series of intro to livestock production classes this winter. He will also be working with us on the Hudson Valley Farmlink program, providing assistance to people seeking livestock farmers or land for livestock production. Jason has personal experience with these programs as his farm is currently leased to him through the Columbia Land Conservancy’s farmland matching program, one of the partner programs in the Farmlink network. Please welcome Jason and feel free to call him with any livestock related questions. His e-mail address is



jbd222@cornell.edu



Cornell University
Cooperative Extension
Ulster, Orange, Sullivan
and Dutchess Counties

Cornell Cooperative Extension provides equal program and employment opportunities

2 Farm Business Management

Hiring Workers for Your Small Ag Business – Federal and State Minimum Wage for Agricultural Workers

Elizabeth Higgins, Ag Program Leader, CCE Ulster County

Almost all small farms will need to hire someone at some point. Although the laws and regulations around agricultural employment can seem daunting, if you are running a business, it is very important to take your legal responsibilities seriously. Starting off on the right foot as an employer when you hire your first employee can save you a lot of headaches (and potential fines) later on.

At the federal level, the Fair Labor Standards Act, sets minimum wage and overtime rules for agricultural employers. In New York the Minimum Wage Order for Farm Workers (CR-190) covers the rules that govern wages for hourly farm workers. In both the state and federal regulations there are exemptions from the minimum wage provisions and the overtime pay provisions for certain agricultural employees. For example, family members that you employ (spouse, children, and parents – but not siblings) are exempt from minimum wage and overtime – if you can get them to agree to work for you. The exemptions from minimum wage can help small farms afford some agricultural labor.

There are other exemptions from minimum wage requirements for farm workers, but there are differences between what qualifies you for the exemption from the state minimum wage and what exempts you from federal minimum wage. Agricultural employers are exempt from the New York State minimum wage if the total cash remuneration paid all persons employed on the farm did not exceed \$3,000 in the previous calendar year.

The federal exemption from minimum wage, however, is based on the amount of time that labor was employed on the farm. For federal minimum wage, any employer in agriculture who did not utilize more than 500 "man days" of agricultural labor in any calendar quarter of the preceding calendar year is exempt this year from the federal minimum wage and overtime pay provisions of the FLSA. A "man day" is defined as any day during which an employee performs agricultural work for at least one hour. Good recordkeeping from the start will help a new employer stay in compliance with both rules. To be in compliance with both of these rules, it is very important to keep good timesheet records of your employees from their first day of employment as current exemptions are based on your prior period payroll or labor usage.

Can other benefits that you provide count towards the wage? Maybe. Although the value of meals and housing and other in-kind benefits that both the employer and the worker agree upon, that are at farm market value can count towards meeting the state minimum wage, New York State has very specific rules as to how much value can be credited for meals and housing, and they are pretty low. These amounts are listed in the minimum wage order (CR-190).

RESOURCES

New York State Department of Labor Worker Protection https://www.labor.ny.gov/workerprotection/laborstandards/farm_labor.shtm

New York State Minimum Wage Order for Farm Workers (CR-190) <http://www.labor.state.ny.us/formsdocs/wp/CR190.pdf>

United States Department of Labor (Fact Sheet 12: Agricultural Employers Under the Fair Labor Standards Act (FLSA) <http://www.dol.gov/whd/regs/compliance/whdfs12.htm>

California Guide to Labor Laws for Small Farms https://www.biodynamics.com/files/images/nabdap/CA_Guide.pdf.

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Understanding Calf Scours for Cow-Calf Producers

Adapted by Jason Detzel, Livestock Educator, CCE Ulster County

Scours is a term for diarrhea; another term that may be applied to this disease is enteritis, which means inflammation of the intestinal tract. Cattle of any age can develop diarrhea, however, most cases of calf scours occur in the first month of life. There are a variety of causes of scours in baby calves. Most of these are infectious agents:

- **Viruses:** Examples include rotavirus and coronavirus, bovine virus diarrhea virus
- **Parasites:** such as Cryptosporidium and coccidia
- **Bacteria:** Certain strains of Escherichia coli, Salmonella

Scours is often caused by more than one of these infectious agents acting together. Research has shown that a substantial proportion of normal, healthy-appearing adult cattle can shed many of the infectious agents that cause calf scours. This shedding is particularly common for rotavirus, coronavirus, and cryptosporidium. Studies have demonstrated that many pathogens responsible for scours are shed in the normal-appearing feces of healthy, pregnant beef cows and shedding increases as the pregnant cows approached their calving date. Further, healthy older calves can become infected with these agents, remain otherwise healthy, and shed large numbers of these agents into the environment, thereby contributing to accumulation of these agents in high enough numbers on a farm that a calf scours outbreak occurs. In the end, calves become exposed to scour-causing pathogens from the fecal contaminated environment.



Photo Credit: Jason Detzel

If some of these infectious agents are commonly shed by healthy cows, why do scours outbreaks occur on one farm but not another, and vary in occurrence from year to year on the same farm? This variability in the incidence of scours from farm to farm and year to year likely reflects the fact that the rate of occurrence is influenced by many different factors. With respect to scours these factors may include:

- **Nutritional status of the cow herd:** Protein, energy and micronutrient (mineral and vitamin) malnutrition during the latter half of gestation will likely affect calf health.
- **Age of the cow:** Calves born to heifers are at higher risk of developing scours.
- **Duration of time in one area:** In general, the longer that cattle are kept on any calving area, the more fecal contamination occurs. This translates to more scours risk for calves.
- **Weather:** Wet conditions favor survival of these agents in the environment. Remember, when the cows lay down, whatever is on the ground is going to contact their udder – and therefore be taken in by the calf when it nurses. Cold weather also increases the rate of shedding of certain agents by the cows.
- **Immunization status of the cow herd:** This influences the availability of antibodies in the colostrum (first milk) that may help protect the calf against certain scours-causing agents.
- **Stocking rate:** Scours risk increases with higher stocking rates especially in the calving and post calving area.

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4 Swine Production

Injection Techniques for Swine

Adapted by Michelle Lipari, Livestock Educator, CCE Sullivan County

Correct placement and care in making an injection in your animal can make a significant difference in both the comfort and welfare of the animal, and meat quality. Here are some guidelines and techniques for better management of injections.

Subcutaneous (SQ): Deposits the Drug Under the Skin

- Inject only into clean, dry areas.
- Use the loose flaps of skin in the flank and elbow of small pigs.
- Use the loose skin behind the ear of sows.
- Slide needle under the skin away from the site of skin puncture before depositing the compound.

Intramuscular (IM): Deposits the Drug Into the Muscle

- Use a spot on the neck just behind and below the ear.
- The neck area should be used for IM injections. (See area outlined in figure to the right.)
- Damage to the ham or loin can result in condemnation of the meat cut.
- Use proper needle size to ensure medication is deposited in the muscle.

Intraperitoneal (IP)

- Should be used only upon veterinary instruction and guidance as serious injury to abdominal organs can occur.

Correct Injection Techniques

- Ensure proper restraint of the animal prior to injection.
- Ensure proper syringe adjustment.
- Ensure proper needle placement onto the syringe.
- Prevent swelling and/or abscessation at the injection site by:
 - Using sterile needles.
 - Injecting only into clean and dry areas.
- Preventing contamination—don't use the same needle to inject pigs and remove product from multidose vials.
- Consult with your veterinarian about potential adverse drug and vaccine reactions.

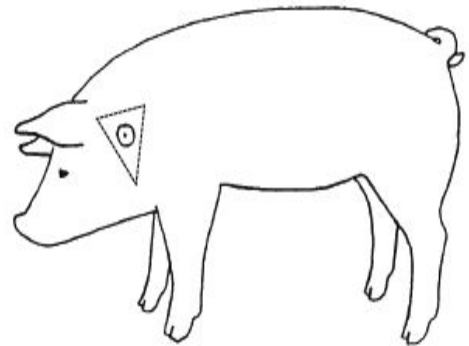
Needle Usage Guidelines

Correct needle use is not an option - it is a necessity.

- Change the needle regularly. A sharp needle minimizes tissue damage.
- A sharp needle assists in delivering the product into the right site in the muscle or under the skin.
- To protect yourself and others, safely remove and properly dispose of used needles
- Promptly get medical attention if accidental self-injection occurs.
- Under normal use, a needle shaft will not break but if a needle bends during use, discard it.
- Never use a needle that has been bent and restraightened.
- If a needle breaks and you can't retrieve it, mark or identify the pig.



Subcutaneous sites



Intramuscular sites

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Farm Skills Workshop: FAMACHA Scoring- Diagnosing Internal Parasites in Small Ruminants

Jason Detzel, Livestock Educator, CCE Ulster County

FAMACHA is a diagnostic tool to help farmers identify parasite infection in small ruminants, such as sheep and goats. The tool matches eyelid color to anemia levels, an indicator of parasite infection. This type of diagnosis allows farmers to target treatment only to infected animals, which in some systems has reduced use of deworming agents by 90 percent. Not only do farmers save money, they significantly reduce the likelihood of causing parasites to become resistant to de-wormers. FAMACHA was developed in South Africa and is distributed in the United States through the American Consortium for Small Ruminant Pest Control. We will review the criteria and general usage of the system and then practice on some of Glynwood's animals. Bring sturdy boots, farm clothes and a brown bag lunch. Suggested reading:

http://web.uri.edu/sheepngoat/files/FAMACHA-Scoring_Final.pdf with strategies to minimize that risk.

Here is a link to the course <https://www.glynwood.org/event/farm-skills-workshop-famacha-scoring-diagnosing-internal-parasites-in-small-ruminants/>

This course will be offered in Ulster County early this summer. Keep up to date with what classes are being offered by subscribing to our livestock by emailing jbd222@cornell.edu



(Injection Techniques, continued from page 4)

Check with your packer about their policy for identifying and handling a pig that may have a physical hazard like a broken needle in its muscle.

Keep Accurate Records

Accurate records are essential to using animal health products like antibiotics correctly and judiciously. Judicious Use Guidelines (JUGs) and the PORK QUALITY ASSURANCE™ Program say written records of all treatments should:

- Be kept for at least 12 months following the marketing of the medicated animal
- Be used to evaluate the success of a treatment regimen and should include:
- identity of the animal(s) medicated
- date(s) of treatment
- name of medication administered
- who administered the medication
- amount of medication administered
- withdrawal time prior to slaughter
- name of the veterinarian giving directions, if use is other than what is indicated on the label

Intramuscular Injection Gauge Length Baby Pigs 18 or 20 5/8" or 1/2" Nursery 16 or 18 3/4" or 5/8" Finisher 16 1" Breeding Stock (depends on back-fat depth and method of restraint) 14 or 16 1" or 1 1/2" Subcutaneous Injection Length Nursery 1/2" Finisher 3/4" Sows 1"

6 Weed Management

Using Sheep to Weed Hop Yards

Jason Detzel, Livestock Educator, CCE Ulster County



The recent explosion in craft breweries across the United States has led to more than just increased beer choices at your local pub. An entire craft industry is developing to support these breweries including hop yards and hop processing facilities. The current state of hops in New York is very promising and the perennial plant can now be seen hanging along road sides and off of private residencies. Hops, like most other plants, are susceptible to weed pressure and benefits from pruning at certain times of the year. Growers have historically relied on industrial chemical controls to achieve the weeding and cleanup of the yards but there are other viable alternatives. One of the most interesting is the use of sheep to help weed around the hop vines and to prune the bottom leaves off of the plants to increase air flow and prevent the development of competitive weeds.

As with any ruminant, timing is everything, and the seasons require varying approaches to sheep management in the yard. Once spring has arrived you can leave the sheep in the yard right up until the time that you are ready to string up the bines. At this time, you will need to move the sheep out of the yard as they will nibble the bines and stop the growth of the plants. The sheep will still need forage and this is why you will also need to utilize some of the other areas on the farm to graze the sheep and/or feed hay until the bines have grown to about 7 feet. At this time, the plants are robust and unpalatable to the sheep and they will prefer the tender weed plants and the lower leaves growing on the hop plants to the bines themselves.

As the yard transitions into the summer the sheep should be rotational grazed around the yard to consume weeds and the lower leaves of the plants. This helps with pest control and allows the crown of the hop plant to receive sunlight. Once the leaves are eaten back enough, it is time to move onto the next part of the yard and start the cycle all over. If there is enough forage available you can continue this rotation for the entire growing season. After the hops are harvested in the fall it is a good idea to remove the sheep from the yard and give the plants time to develop more leaves and restore their root stores prior to winter.

Sheep are gregarious animals that stick together and are gentle by nature. It is not enough to just let them loose in the hop yard for the season, it is vitally important to monitor your animals daily. Once you decided on a climate appropriate breed and can stock 10-15 animals per acre, they will require the same things that most animals require. They are going to need appropriate forage, they are going to need water, shade from the sun and rain, minerals to keep them healthy, protection from predators, and the occasional TLC. You must decide to erect permanent or temporary fencing and what type to employ. The temporary plastic netting offers the most advantages in this situation because it is electrified. This will keep the sheep in where you want them and keep the predators out. Another important consideration with sheep is that copper is poisonous to them so you cannot utilize copper sulfate as a fungicide in the yard.

It is also important to plan out your year with the sheep. There may be the possibility of renting the sheep or hiring a shepherd to care for them during the off season, but if not, you are going to need to take care of them during the winter and that will require additional resources. If you do decide to keep a flock of your own there is the possibility of additional enterprises such as meat and fiber. It is clear that sheep can be an integral addition to your hop enterprise and if you are interested in utilizing sheep in your hop yard or have any further questions please feel free to contact me.

Donkey's Unique Nutritional Needs

Adapted by Rachel Moody, Livestock Educator, CCE Orange County

Just like in horses, forage needs to be the foundation of a donkey's diet. However, their specific forage needs are a little different than those of your horse. Without careful management, donkeys are prone to obesity, metabolic issues, and laminitis.

Forage in the arid regions from which donkeys originate is sparse and of very low nutritional value. As a result donkeys have a number of unique adaptations that allow them to survive in such areas. The first adaptation is that feed passes through their digestive systems at a slower rate than it would through the tract of a horse or pony. This allows for greater digestion and absorption of nutrients. It's a good thing if you're consuming feeds of very low nutritional value but becomes a management challenge for owners when higher quality forages are fed.



Donkey on Pasture (Photo: Clair Thunes)

As a result of this adaptation, donkeys show higher percentage-digestibility for protein and various fiber fractions of feeds than ponies. As the nutritional value of the tested feeds decreases the relative digestibility of these feeds when consumed by donkeys increases as compared to ponies. With an understanding of some of the donkey's key survival adaptations, it becomes clear why these loveable animals can pose such a management challenge in developed areas where feed quality is high and readily available.

Water Needs

Typically, if water intake is limited, horses and ponies reduce their feed intake. This is true for donkeys too, but what's interesting is that unlike horses and ponies the digestibility of the feed that is consumed increases instead of decreasing. Donkeys also conserve water by decreasing their resting metabolic rate during periods of dehydration, which decreases water needs for thermoregulation.

Recycling Nitrogen

Another key adaptation is the donkey's ability to internally recycle nitrogen, which is something horses and ponies can't do. Horses and ponies excrete excess nitrogen as urea by the kidneys. However, donkeys can resorb this urea and reuse the nitrogen and they can up and down regulate this mechanism depending on the level of protein in the diet and how much nitrogen they need. Crude protein requirement for donkeys is thought to be somewhere in the range of 3.8-7.4% of the diet compared to 8-12% percent for mature horses.

Donkeys Eat Grass, Browse, and Forbs

Because food availability in their native settings is sparse donkeys in such environments don't only eat grass. They happily eat browse (woody shrubs, trees, and broadleaf plants) and forbs (flowering plants) as well. Donkeys have such a

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strong desire to browse that they can become quite destructive when forage is limited. Providing sources of browse, such as brambles as well as tree branches and twigs, from safe tree species can give a donkey something to do and reduce destructive tendencies.

Forage and Fiber

The key to successful donkey nutrition is to find high-fiber forages of low nutritional value. An ideal choice is clean straw, which in many ways is the most similar choice to feeds donkeys would find in their native environments. Straw tends to be lower in calories than even mature grass hay—0.73 to 0.8 Mcal per pound versus 0.8 to 1.0 Mcal per pound respectively. The lower the calorie content the more you can feed. Straw is also far lower in protein than a typical grass hay and, certainly, donkeys should not be fed alfalfa due to its significantly higher protein content.

However, the thought of feeding straw often does not sit well with owners, especially if they are more familiar with feeding horses hay and using straw as stall bedding. Even if you want to feed straw you might have a hard time finding straw that is clean enough for consumption. The Donkey Sanctuary has found barley straw to be the best choice for healthy donkeys. Wheat straw is more fibrous and difficult to chew, making it less suitable for very young donkeys or donkeys with poor dentition. Oat straw is more digestible and can cause weight gain.

Depending on the donkey, straw might make up 100% of the diet or be fed in combination with other forage sources such as pasture. Pasture is beneficial as it allows movement, which is important for the donkey's overall health. However many improved pastures are too high in nutritional value and unrestricted access will likely lead to obesity. Limited turnout or utilizing strip grazing can work well when grass is abundant. Grazing at times when sugar content is lower is also recommended. Allowing pasture grasses to mature and go to seed so that nutritional value is lower is another useful tool. Even when pasture is readily available, maintaining at least 50% of the forage as straw is advisable. If enough clean straw is not easily available, opt for a very mature grass hay. Looking for hays with a greater proportion of stems than leaves will insure a lower nutritional value.

Ideally, all donkeys should be maintained on a diet low in starch and sugars. Therefore knowing the starch and sugar level of the forages you are feeding is important. Experts advise that horses and ponies sensitive to nonstructural carbohydrates be fed no more than 12% on a dry-matter basis; donkeys likely need even less than this. When creating diets for a horse, nutritionists generally consider neutral detergent fiber (NDF, the most common fiber measurement used for animal feed analysis) levels below 40% excellent and those more than 65% unlikely to be eaten. Acid detergent fiber (ADF, the cell wall portions consisting of cellulose and lignin; ADF relates to the animal's ability to digest the forage) values over 45% for horses have little nutritive value and below 31% are considered excellent. However, for donkeys, with their specific adaptations for consuming high fiber forages, NDF percentages in the low 70s are ideal. Typically as the amount of NDF and ADF in a hay increases crude protein level decreases, making this an ideal scenario for donkeys. Left to their own devices, donkeys have an appetite to consume between 1.3-1.8% of their body weight per day in dry matter. It's therefore important when limiting forage intake not to feed forage at an amount below the lower end of this intake range.

Supplementation

Just like your horses, your donkeys will need a source of micronutrients, such as trace minerals, and vitamins to complement their forage. Ration balancers typically fed to horses and ponies for this purpose are not generally suitable for donkeys due to the additional calories they add to the ration and the fact that additional unnecessary protein. Ration balancing supplements with a 3- to 4-ounce serving size are typically a better choice.

Poultry Predator Control

Jason Detzel, Livestock Educator, CCE Ulster County

Ahh Spring. It's that time of year when nature is waking up and all of the cute woodland creatures are emerging from their dens, shaking out their bushy tails, and making a bloody feathery mess of your poultry. Not that I blame them, this is the time of year when our wild friends are carrying their lowest fat reserves, are spending a lot of energy putting on mating displays, or are already caring for their litters. Whether you are raising a few backyard chickens or are working on hitting that 1000 bird exemption, this is the time of year we all face the same predation problems.



The key to protecting your flocks is preparation and understanding how the predator pressure will change as the season moves forward. The life cycles of all domestic poultry begins in a brooder. This incubator is putting out heat, smelling like warm grain, and the irresistible sound of the chicks inside acts as a beacon for all sorts of creatures. Your best defense from brooder intrusion is to build a really solid brooder. Filing holes with latex or similar items to prevent rodents or snakes from coming through, and pouring a solid floor over which to lay your wood chips, can make or break you at the end of the year. You must have plenty of ventilation at the top of the brooder and this area needs to be well protected with chicken wire, or other breathable material, to raccoons out.

Most chicks are highly susceptible to rats until they begin roosting. A couple of ways to increase the safety of your brooder are to store your feed grain away from the brooder itself and always use feeders built for chicks. As far as the brooder itself goes, making sure that the bottom couple of feet are solid is a good idea. Another technique is to bury bricks around the perimeter of your brooder walls. This ensures that the rats will not be able to dig down and under the boards to get at the chicks. Rats are nocturnal so I've never seen a rat take one of my chicks, but when they do, I usually find the chicks stuffed in holes in or near the brooder.

Many of you are raising poultry in residential environments and this is where you can find a whole variety of highly adaptable wildlife. Domestic cats and dogs also pose a real risk to all livestock. When building your facilities, keep in mind how strong and adept cats and dogs are at getting what they want. They often have little fear of humans, are well fed, and may see your poultry as trophies not food. Good fences make good neighbors and being a good neighbor involves communicating any issues you may have with people's pets.

The next category of concern is the small carnivorous mammals. These animals inhabit both rural and residential areas and can cause a lot of damage. Foxes are usually nocturnal hunters, and if it is a female with kits, she will often carry as many prey animals as she can back to her den as feed for the little ones. In this scenario you will usually notice the chickens missing but there will be no trace of them.

Next on the list of nocturnal predators is the skunk. These guys are usually after eggs but will kill and eat young stock if they come across them. They tend to consume the intestines and back end of the bird. Another, more obvious clue, is the telltale stink that lingers after a skunk attack. Much like the skunk, the opossum also prefers to start at the back end of the animal and is usually after eggs. Raccoons feed a little differently. They possess amazing dexterity and have

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(Poultry Predators, continued from page 9)

been known to pull chickens through cages by the feet or head. Raccoons will usually eat the neck and meaty parts of breast of the poultry abandoning the rest of the carcass near the point of attack. Rounding out our list of nocturnal mammalian predators are the weasels and minks. These animals are strong and able to squeeze into small spaces. Like the fox with kits, these animals will kill many more birds than they can consume but will leave them near where they were killed.



Mink in South Dakota (Photo: NRCS– Dennis Larson)

In our last category of poultry predators we have the hawks and owls. Hawks hunt during the day and owls at night. These birds prefer to sneak attack, kill quickly, and open up the meatiest part of the bird to eat. You will often find piles of feathers next to the kill where the bird plucked its meal before dinning. We had a hawk one year that would fly down and sit on top of our chicken tractor and flap its wings. This would send the chickens into a panicked frenzy and eventually one of them would find some small area to slip through. Once it was out, it was all over as a white poult in a

sea of green has no way of getting away from a hawk. These are often the most difficult predators to control as they are protected under the migratory birds act and are therefore illegal to kill. The best defense against owls is to make sure that your birds are inside covered areas at night and in the early morning. There are a few things you can do for hawks. Having mature roosters in your flock can alert them to danger overhead. There is also the possibility of putting up scarecrows and hanging lines around the area to confuse and deter the hawks from flying near the birds.

As for defenses against the other predators, your best bet is to build solid predator-proof housing. If you are raising chickens on pasture, your best friend could be the electro netting that is so common now. Prices have come down, the technology has improved, and although the price may seem prohibitive at first, it could end up saving you a lot of money in lost poultry in the future. I have personally found the netting to be effective in controlling all of the predators except for hawks although it is really a pain to use and you will spend a fair amount of time untangling it at some point.

There are also times of the year where you can employ traps to catch and move animals. There are strict rules about relocating animals to other properties because they may spread disease or cause problems for other people. You must contact your local division of fish and wildlife to understand and stay in compliance of these rules. As a last resort there are lethal tactics to take the animal out. This remedy also requires diligence as many nuisance animals require DEC permits in order to be removed from the gene

(Scours, continued from page 3)

- **The number of calves infected:** Once infected, calves can produce millions, even billions, of infectious agents each day. This can cause the number of affected calves to increase rapidly.
- **Sanitation:** Clean calving and post calving areas reduce the risk of scours.
- **Genetic makeup of the herd:** This is always tough to quantify and verify, but certain breeds and lines appear to have heartier newborns than others.

Treatment options: Oral fluids are the most important life-saving treatment you can provide. Any number of oral electrolyte preparations can be found from your veterinarian and animal health stores. While antibiotics are the first thing on everyone's mind, because many causes of scours are not bacterial, antibiotics may have little if any effect on the outcome.

[Scours in Beef Cattle, Causes and Treatments](http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/20600/em8977-e.pdf), a fact sheet by Oregon State University gives a good summary of Scours and recommended treatment options: <http://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/20600/em8977-e.pdf>

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Changes in Worker Protection Standard Coming

Maire Ullrich, Agricultural Program Leader, CCE Orange County

Many of you have heard that changes to the EPA Regulations on Worker Protection Standards and training will occur. These will come into effect January 2, 2017 but you want to have an eye on them now so you can start preparing this season for next. See the EPA website for more information <https://www.epa.gov/pesticide-worker-safety>



What are the Major Changes for Farmers and Farmworkers? The revisions to the Worker Protection Standard cover many different areas. The major revisions include:

- **Annual mandatory training** to inform farmworkers on the required protections afforded to them. Currently, training is only once every 5 years.
- Expanded training includes instructions to reduce take-home exposure from pesticides on work clothing and other safety topics.
- First-time ever minimum age requirement: **Children under 18 are prohibited from handling pesticides.**
- Expanded mandatory posting of no-entry signs for the most hazardous pesticides. The signs prohibit entry into pesticide-treated fields until residues decline to a safe level.
- New no-entry application-exclusion zones up to 100 feet surrounding pesticide application equipment will protect workers and others from exposure to pesticide overspray.
- **Requirement to provide more than one way for farmworkers and their representatives to gain access to pesticide application information and safety data sheets** – centrally-posted, or by requesting records.
- Mandatory record-keeping to improve states' ability to follow up on pesticide violations and enforce compliance. Records of application-specific pesticide information, as well as farmworker training, must be kept for two years.
- Anti-retaliation provisions are comparable to Department of Labor's (DOL).
- **Changes in personal protective equipment will be consistent with DOL's standards for ensuring respirators are effective, including fit test, medical evaluation and training.**
- Specific amounts of water to be used for routine washing, emergency eye flushing and other decontamination, including eye wash systems for handlers at pesticide mixing/loading sites.
- **Continue the exemption for farm owners and their immediate families** with an expanded definition of immediate family.

A great comparison factsheet looking at current and new regulations can be found at: <https://www.epa.gov/sites/production/files/2015-09/documents/comparison-chart-wps.pdf>

(Poultry, continued from page 10)

pool. Most of this information can be found on the Department of Environmental Conservation website or through your local cooperative agent.

This is not a comprehensive list of the animals that may prey on your poultry but it is a good start. It seems as though some poultry make it their mission in life not to make it to maturity. You need to realize that you are not going to do it right the first time and instead of blaming the predator for snacking on a fat meal, you need to blame yourself for not providing enough protection to your flock.

(Hiring Workers, continued from page 2)

What about volunteers, interns, apprentices and stipends? Many small farms are creative when it comes to managing their labor costs. For most agricultural production jobs (field work, animal care, harvesting etc...) it is unlikely that many seasonal apprenticeships, internships, volunteer labor or stipends on a commercial farm for farm workers would be found to be in compliance with either federal or state labor laws. According to federal law, for example, volunteers are allowed only for charitable, religious or faith-based 501(c)3 organizations. This means that for-profit businesses are not legally allowed to have volunteers work for them.

Failure to comply with minimum wage requirements in federal and state law can be serious. Although the odds of a very small farm being randomly investigated by the Department of Labor may be small, complaints by a disgruntled

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worker or former worker could lead to an investigation and the fines could be significant. In New York, for example, employers would be required to pay the back wages due, and may be subject to interest and civil penalties up to 200 percent of the unpaid wages. Several small farms in California and Oregon were cited for significant wage violations related to farm interns. A publication in our resources list developed by ATTRA/NCAT and California Farm Link helps outline and educate growers about some of the issues, and presents options for farmers who want to engage in educational and mentorship programs on their farms.

In the long run, setting your farm up to be in compliance with federal and state minimum wage requirements will give you more peace of mind as your business grows. If you are about to hire your first employee or have questions about federal or state minimum wage requirements in agriculture, contact the NYS DOL at 1-888-4NYS DOL. Or e-mail your questions to LSAsk@labor.ny.gov.



4-H Calf Sale and Silent Auction
Sat., May 7 at 7:00 PM
At the Brand New Education Ctr. & 4-H Park
300 Finchville Turnpike, Otisville, NY

All proceeds support the O.C. 4-H Dairy Program!

Something for Everyone!

- ✓ Chicken BBQ at 6 PM. Pre-order required, due May 1. \$10/adult; \$5/child (12 & under)
- ✓ Silent Auction featuring country crafts, agriculture products, plants, services, gift certificates, home & garden supplies, plus lots more!

For more information contact Vanessa Merrill 845-344-1234 or vam29@cornell.edu

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