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Porcine Epidemic Diarrhea virus (PEDv) - A New Threat For Pork Producers in New York

Biosecurity, the prevention of disease causing agents entering or leaving any place where farm animals are present (or have been present recently), is not something that many small farms or new farms consider when managing animals. However, farm to farm movement of infected livestock or pathagens is a major source of disease transmission. A new pork disease in the United States, Porcine Epidemic Diarrhea virus (PEDv), will make biosecurity planning and implementation critical for pork producers in New York.

Clinical signs of PEDv are severe diarrhea in pigs of all ages and vomiting. PED is almost 100 percent fatal for piglets, while older animals typically recover from the virus. There is no vaccine or cure. The virus does not pose a risk to human health, and is not a food safety concern.

PEDv arrived in the United States from Asia in 2013 and has killed an estimated four million pigs since then. It has been diagnosed on New York State farms. The virus is largely transmitted in the manure of infected swine. Effective means of spread include manure contaminated objects such as:

- Vehicles (for example, tires)
- Boots & Clothing
- Equipment (tractors, shovels, scrapers...etc.)
- Contaminated feed and water.

NY Ag & Markets has a fact sheet posted here: http://www. agriculture.ny.gov/Al/PEDV_Outreach.pdf.

For more information, visit: http://www.aasv.org/aasv%20 website/Resources/Diseases/PorcineEpidemicDiarrhea.php, the website for the American Association of Swine Veterinarians. Information is continually updated when it becomes available.

Markets, buying stations, and swine transport are considered major avenues of exposure to PEDv. There is also some con-

cern that pig feed that contains porcine origin blood plasma, a feed ingredient used as a protein source for early-weened pigs, may also be a source of transmission. Avoiding feed products that contain animal by-products (dried plasma) is one way to mitigate this risk until more information is available about its safety.

What can be done to decrease the chance of your herd becoming infected? Review and tighten your biosecurity protocols, small and large herds alike. Pay attention to anything or anyone coming in from out of state or from another farm and thoroughly clean and disinfect anything coming on to the farm. If you have questions about implementing biosecurity protocols, call your local Cooperative Extension office.



Cornell University Cooperative Extension Livestock Education Progam Sullivan, Orange and Ulster Counties



Cornell Cooperative Extension provides equal program and employment opportunities

2 **County News and Updates**

Orange County News

Amy's Kitchen Inc. is Seeking to Develop a Manufacturing Plant in Goshen

The Orange County IDA recently approved \$500,000 for infrastructure work, in conjunction with an additional \$800,000 provided by New York State, to support the plans of organic and natural food manufacturer Amy's Kitchen Inc. to build a 350,000- to 500,000-square-foot plant in the Town of Goshen. The company estimates the plant would employ 681 people earning between \$20,000 and \$150,000 annually.

The project comes to the IDA with the support of Goshen Supervisor Douglas Bloomfield. According to the Times Herald Record, in a Dec. 20 letter to the IDA, Bloomfield said, "We are excited about this project as it fits well with the town's strong agricultural heritage, and will likely provide a significant benefit to our region's farming community as Amy's Kitchen looks to source many of its ingredients locally."

In explaining why the company was seeking to build a new plant in New York rather than expanding operations in California, Kevin Haslebacher, Amy's executive vice president for manufacturing operations, stated that the company, one of the nation's largest makers of natural frozen foods, needs to make its products closer to more customers.

"Having an East Coast plant really is a necessity for us," said Haslebacher. "More than half of our sales are on the East Coast," Haslebacher said. "So it just makes good business sense to expand that way."

Information about the project is available on the Orange County Partnership's website: http://ocpartnership.org/ webpages/newsdetails.asp?id={433324BB-6C4B-4EF1-81A1-D02C4A2AE9C5}

Sullivan County News

CCE Sullivan County Seeking New Leadership

With regrets CCE Sullivan County's board accepted the resignation of Executive Director, Greg Sandor. Sandor, who helped guide the agency through a tumultuous year of funding cuts and staffing changes, accepted the position of Executive Director for CCE Nassau County to be closer to family.

Sandor was instrumental in reviving Cooperative Extension in Sullivan County, including restructuring the finances and revamping programs. The Entrepreneurial and Teaching Kitchen, the greenhouse project and Master Food Preserver classes are examples of new programs to enhance agricultural development in the county that were developed during Sandor's tenure at CCE Sullivan. Eat Smart New York and other nutrition programs were also expanded around the county.

"We're thankful for the leadership that Greg provided as a 'turn-around expert' who helped grow our programs and strengthen our relationship with Cornell University and county government," said Board President Joan Howard,

Hay and Forage Education Series

Class #1 – Soil and Hay Testing was held in February. Matt Cooper of Crop Production Services and CCE staff covered why soil testing and hay testing are so important to livestock and hay producers, how to test your soil and hay and how to read test results. How to use those results to improve your pastures and hayfields

Class #2 – Hay, Baleage, and Forage Quality (April 11, 10am-2pm) This class will be taught by Aaron Gabriel, CCE Washington County. He will cover renovating old fields and establishing new ones, field maintenance, hay and silage making processes and machinery, storing hay and baleage, marketing hay and baleage, and the economics of making hay – is it better to make hay or buy?

Class #3 – Field Day (May 3, 10am-2pm) Building on the information presented during the first two classes, we will go out in the field with Dave Roberts, NRCS State Grazing Lands Specialist, who will discuss pasture management, plant ID, and hay production.

Ulster County News

Two New Farm Incubators in Ulster County will be Accepting Applications this Spring

Like traditional business incubators, farm incubator projects are intended to help new and beginning farm entrepreneurs establish their own successful businesses

by providing specific resources and services that are difficult for startup entrepreneurs to access on their own. Farm incubator programs are springing up all over the country, including in our own backyard. In 2014 two new farm incubators in Ulster County, one in New Paltz and one in Hurley, will be accepting applications. Both programs are seeking applicants with prior farming experience who are ready to start their own businesses.

Glynwood's Hudson Valley Farm Business Incubator, in partnership with the Open Space Institute (OSI), will be

4-H Youth Development Livestock Auction Program

Participants in the 4-H Youth Development Livestock Auction Program raise livestock each year with the end goal of producing a meat animal to be auctioned off. 4-Hers can choose to raise poultry, waterfowl, hogs, goats, lambs, rabbits, or steers. Participants in the program keep detailed records of their animals' growth, health, feed consumption, and feed, bedding, and vet costs. They also receive education in raising a quality meat animal and are educated about the best ways to market their animal to potential bidders. All auction animals are judged by an expert, with only those animals that are deemed ready for processing going on to an auction. After the auction, participants are responsible for transporting their animal to a processing facility, delivering the meat to the winning bidder, and ensuring that the winning bidder of their animal is satisfied with their purchase.

The 2014 Auction Program in Ulster County is set to begin shortly, with an informational meeting set to take place at the end of February. Contact Erin Campbell-Craven at CCE Ulster County for more information. One of the main focuses this year will be in educating participants in the program in how to market meat animals successfully to buyers in the community and raising the awareness of the program throughout Ulster County as an excellent teaching tool for youth and source of quality local meat. In 2013, twelve youth, aged 12-19, participated in the Ulster County 4-H Youth Development Livestock Auction Program. 48 animals were auctioned off to 53 bidders and the youth raised over \$20,000.

located on 323 acres of land at the base of the Shawangunk Mountains in New Paltz, NY. The majority of this land is cleared pastureland that is best suited for livestock enterprises. The land currently has six acres of irrigated, arable crop land suitable for vegetables. Applications are currently being accepted, and are due on June 30th. For more information about the Glynwood Incubator see the project website at www.glynwood.org/incubator/.

The Hudson Valley Farm Hub Incubator Program,

administered by the Local Economies Project of the New World Foundation as part of the Hudson Valley Farm Hub, will be located on the former Gill Farm in Hurley, NY. The program is in development, but it is anticipated that applications and detailed program information will be available in late March 2014 with applications due in early August. The goal is to have the first group of incubator farmers on site in early 2015.

2013 Auction participant Ariana P. with her Grand Champion turkey and winning bidder Sue Carroll*





Dairy and Beef

To do in February/March (Beef Cattle Checklist)

From Beef Cattle Comments, (v23,n1) February 2014

- Cows should be in body condition score of 5.0-6.0 for March calving (Smooth appearance, last 3-4 ribs are just visible, and there is some brisket fat).
- Heifers should be in body condition score 5.5-6.5 (slightly fatter than cows, can begin to see pockets of fat on either side of tail head).
- If forage quality is low, send sample in for nutrient analysis. Contact your Cooperative Extension agent, your feed dealer, or Dairy One Forage Testing Laboratory at 800-496-3344.
- If hay for the cow herd is in short supply, replacing up to three pounds of hay with two pounds of whole shelled corn or dried distiller's grain will stretch hay supplies. Include corn at no higher than 50% of the ration. Small grains like barley, wheat and rye can also be used, but unlike corn, must be processed.
- If corn or corn silage is a significant portion of the diet, calcium could be in short supply. Contact feed dealer or Cooperative Extension agent for assistance in balancing minerals in the ration.
- A good windbreak, e.g., woodlot, building, or hillside, can reduce energy requirements 10% in a cowherd.
- Watch for outbreaks of lice. Treat whole herd, not just affected individuals.
- If calf scours have been a problem, consider vaccinating cowherd. Consult your veterinarian for assistance.
- Calving season is here or fast approaching. Do you have the following items?
 - 1. Frozen colostrum,
 - 2. Calf pulling equipment.
 - 3. Stomach tube, thermometer, dry towels.
 - 4. Ear tags, navel dip (7% iodine).
 - 5. Selenium, Vitamin A&D injections.
 - 6. Castration and dehorning equipment.
 - 7. Therapy for scours and respiratory problems.
 - 8. VETERINARIAN'S PHONE NUMBER.



Marketings Under 4 Million Pounds		Marketings Over 4 Million Pounds		
Coverage Level	Premiums	Coverage Level	Premiums	
\$4.00	None	\$4.00	None	
\$4.50	\$.01	\$4.50	\$.02	
\$5.00	\$.025	\$5.00	\$.04	
\$5.50	\$.04	\$5.50	\$.10	
\$6.00	\$.055	\$6.00	\$.155	
\$6.50	\$.09	\$6.50	\$.29	
\$7.00	\$.217	\$7.00	\$.83	
\$7.50	\$.30	\$7.50 \$1.06		
\$8.00	\$.475	\$8.00	\$1.36	

Dairy Margin Protection Plan Premiums through 2018. Information about this new dairy support program is on the next page.

Body Condition Scoring Beef Cattle

Last month we discussed Body Condition Scoring (BCS) dairy cattle, sheep and goats. For beef cattle, liveweight should not solely be used as an indicator of nutritional status. Research indicates that body condition is a more reliable indicator of nutritional status than liveweight. Most herds have cows that range in age, frame size, and muscling all of which impact the weight of the animals. Therefore, only using liveweight may over- or under-estimate the amount of body fat.

The process and purpose of BCS is similar for beef cattle, but beef cattle producers use a 9 point scoring system rather than a 5 point system. Beef cattle with scores of 1-2 are very thin to emaciated. Cattle with scores of 4-7 are in the normal range and cattle with scores of 8-9 are obese.

A good resource on BCS for beef cattle is available by the Virginia Tech Cooperative Extension on-line at http:// pubs.ext.vt.edu/400/400-795/400-795.html

Areas useful for visually determining BCS in beef cows. (Oklahoma State University)

Dairy Margin Protection Plan for Dairy Producers (MPP) - A New Federal Dairy Program

One of the new dairy program authorized in the Farm Bill is the Dairy Margin Protection Plan (MPP). MPP is a voluntary program that pays participating farmers an indemnity when a national benchmark for milk income over feed costs (the actual dairy production margin or ADPM) falls below an insured level that can vary over a \$4 per cwt. range. It replaces the MILC program. A key feature of the overall plan is that it changes the focus of the safety net from the price of milk to a margin. The margin is the difference between the national average price for all (grades of) milk and the cost of three feeds that represent the bulk of purchased feeds fed to dairy cattle –corn, soybean meal and alfalfa hay. The exact formula is as follows:

ADPM in \$/cwt of milk = All Milk Price Minus the sum of: 1.0728 x the price of corn 0.00735 x the price of soybean meal 0.0137 x the price of alfalfa hay

Conditions that will trigger a payment are calculated in 2-month intervals, wherein the calendar year is divided into 6 periods consisting of consecutive pairs of months: Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, Sep/Oct, Nov/Dec.

Every farmer, in every State and U.S. territory or possession, is eligible for the MPP. Producers may elect to participate, or not participate, in the margin protection program in any calendar year. A year can be skipped without prejudicing enrollment in a future year.

Every Participating Dairy Operation will be assigned a Production History (PH). For all farmers who now have a complete history, the PH will equal the highest annual marketings in the three preceding years: 2011, 2012, or 2013. In subsequent years the Secretary shall adjust the production history of a participating operation to reflect any increase in the national average milk production. A farm that started in 2011 or 2012 would not have a complete three year history, but their PH would still be the highest of those three years. New entrants, having less than one year of history, are specifically mentioned in the Act and will be able to choose one of two ways to extrapolate their available production history to a 12-month equivalent.

In 5 percent increments, producers will be able to protect from 25 percent up to 90 percent of their production history. Producers will be able to select margin protection coverage at 50 cent increments beginning at \$4 per cwt. through \$8 per cwt. Premiums will be fixed for 5 years (through 2018) - see table on page 4.

Changes to Dairy Programs in the new Farm Bill

The programs that were repealed are those that have represented the milk price and dairy farm income safety net:

1. The Dairy Product Price Support Program (DPPSP), effective immediately,

2. The Milk Income Loss Contract (MILC), effective once the new Margin Protection Program for Dairy Producers becomes operational or 1 September 2014, whichever is earlier,

3. The Dairy Export Incentive Program (DEIP), effective immediately.

Dairy programs that were continued through 2018:

1. The Dairy Forward Pricing Program – which allows non-Cooperative buyers of milk who are regulated under Federal Milk Marketing Orders to offer farmers forward pricing on Class II, III, or IV milk, instead of paying the minimum Federal order blend price for pooled milk.

2. The Dairy Indemnity Program – which provides payments to dairy producers in the unlikely event that a public regulatory agency directs them to remove their raw milk from the commercial market because it has been contaminated by pesticides, nuclear radiation or fallout, or toxic substances and chemical residues other than pesticides.

3. Certain provisions to augment the development of export markets under the National Dairy Promotion and Research Program.

The new dairy programs are:

1. The Margin Protection Program for Dairy Producers (MPP) – a voluntary program that pays participating farmers an indemnity when a national benchmark for milk income over feed costs (the actual dairy production margin or ADPM) falls below an insured level that can vary over a \$4 per cwt range.

2. The Dairy Product Donation Program (DPDP) – a program that requires the Secretary of Agriculture to immediately procure and distribute certain dairy products when the ADPM falls below the lowest margin level specified for the MPP. These products would be targeted for use in domestic, low-income family, food assistance programs, such as, but not limited to, The Emergency Food Assistance Program.

Resources for More Information about MPP

Program on Dairy Markets and Policy Information, Letter 14-01, Dairy Subtitle of the Agricultural Act of 2014 http://dairy.wisc.edu/PubPod/ Pubs/IL14-01.pdf

Hoards Dairyman has a pdf of just the Margin Protection Program for Dairy Producers section of the Agricultural Act available at http://www. hoards.com/sites/default/files/IB/FarmBill-Dairy.pdf

6 Sheep and Goats

Best Management Practices for Lambing and Kidding

Preparation is key!

- Have everything ready to go at least one week before your first ewe/doe is due to birth
- Have your birthing kit prepped and ready for use two weeks before
- Relocate all animals due to birth to an appropriate barn or pasture a place with plenty of available shelter and water (Don't place water buckets on the ground in stalls with animals that about to kid babies can easily be birthed into water-filled buckets and drown!)
- Provide animals with fresh and clean pasture, if possible, that is highquality and not too tall to keep you from spotting stray babies easily
- Begin to observe all animals closely 2-3 times a day for signs of birthing

Know your pre-labor signs

- Distancing from the rest of the flock/herd
- Increased interest in previously born lambs/kids belonging to other ewes/ does (Watch for attempts at "baby-stealing" and separate animals if necessary)
- Frequent changes in position standing up then lying down
- "Bagging up", although this can be a deceiving sign a ewe's or doe's udder may begin to fill with milk six weeks to one week before birthing

Know when to intervene

• Go to the University of Alabama publication, "Reproductive Management of Sheep and Goats" http://www.aces.edu/pubs/docs/A/ANR-1316/ANR-1316.pdf to view pictures of normal and abnormal presentations for lambs and kids in the birthing canal and what to do in case of each abnormal presentation

• Follow the "30 minute rule" - if there has been no progress in 30 minutes, intervention may be necessary

- First-time lambers/kidders are more likely to need assistance
- If someone needs to "go in", choose the person with the smallest hands
- Cleanliness is key clean the ewe's or doe's vulvar area first with a disinfectant solution to avoid introducing bacteria, and be sure to wear gloves or wash hands thoroughly if no gloves are available, and remove all jewelry and clip nails short
- Assess the situation and form a plan of action before intervening
- Work slowly, gently, and with the ewe's or doe's contractions

After-care for mother and young

- Dry the kid with a cloth towel or blowdryer on low if necessary
- Make sure the ewe/doe is up and the young are nursing provide colostrum from an alternate source if necessary
- Watch for successful passage of afterbirth
- If the birth required any entrance of foreign objects (hands, OB chains) into the birth canal, you may insert a penicillin solution directly into the uterus to prevent infection
- ID kids with an ear tag or tattoo, trim the umbilical cord to no longer than an inch and dip the end in iodine solution to prevent infection
- Record the date of birth, lamb/kid ID number, ewe/doe ID number, and any difficulties encountered during kidding if a ewe/doe had particular difficulties during the birthing process, it may negatively affect her reproductive abilities in future, and you will need to keep this in mind when deciding whether to keep and breed her again

If your flock experiences excessive lambing problems, you need to consider your breeding and nutrition problems. For example, a lot of oversized lambs could mean you are overfeeding your ewes during late pregnancy or using too large of a sire breed on your ewes. In addition, ewe lambs should not be bred until they have developed sufficiently. The rule of thumb is not to breed ewe lambs unless they have achieved approximately 70 percent of the mature weight.





Improve your Pasture - March is Frost Seeding Time!

Adapted from a longer article by Nancy Glazier, NWNY Livestock/Small Farms Specialist in February 2014 Beef Cattle Comments

Spring may seem far away as winter winds and snows blow, but start planning now for pasture improvement. March is a great time of the year to add some legumes into your pastures or hayfields. It is a way to improve pastures without losing a production year. Added legumes will boost production and fill in thin patches or bare spots; they will provide needed nitrogen to the grasses already growing, and provide protein for the livestock. Little or no tillage is involved which reduces the potential for soil erosion.

Frost seeding is the same as any other type of seeding or planting, seed-to-soil contact is critical. What works with this technique is the freeze-thaw process in late winter/early spring. As the days get above freezing and nights are below freezing, this action works the seeds down into the soil in preparation for germination. Your best option is to spread seed on frozen ground to reduce the potential to rut up the pasture.

Legumes work best for frost seeding due to seed shape. Success will vary farm to farm, but clovers will establish better, especially red clover. They are shorter-lived in a pasture; a way to offset that would be to frost seed red clover with slower-establishing birdsfoot trefoil. By the time the clover dies out, the trefoil will be growing well. Another way would be to routinely frost seed half of your pastures every year. It can be an inexpensive improvement. Alfalfa can be frost seeded, but don't try to seed into a field with alfalfa (even a thin stand) growing. The existing plants have an allelopathic effect on alfalfa seedlings; they won't let them grow and become established. Suggested rates are in the adjacent table. The price of seed is relatively low, so don't skimp.

Equipment for frost seeding can be as little or as big as needed. The size of the pasture or field will dictate what's needed, unless you have time to walk a large field with a small cyclone spreader. A broadcaster can be mounted on the back of an ATV or small tractor. Fertilization will help seedlings get established, as well as existing grasses. Wait til late summer if a soil test shows phosphorous or potassium is needed. Dry spring conditions will discourage seed germination. Unfortunately, there is no way to control this. With the seed in place, there is a chance that it will germinate and grow when sufficient moisture is there.

Although frost seeding can improve your stand, improved grazing management is the long-term fix for areas where there are constant bare or thin spots. Contact your county Cooperative Extension livestock educator if you have questions about how to improve your pasture management.

Se plas			
	Frost seeding rates into existing stands		
	Red clover	6 - 10	
	Ladino clover	2-5	
	Birdsfoot trefoil	5 - 8	
· · · · · · · · · · · · · · · · · · ·	Alfalfa	6 - 10	

8 Pigs and Poultry

Universal Ear Notching System for Pigs

From "Proper Way to Ear Notch Pigs", University of Nebraska-Lincoln, publication G1880

Ear-notching helps identify a pig's litter and which one of the litter it is, giving each pig a unique identity number. Notches are placed in one of five locations in the pig's right ear — to show the litter number — and in one of three locations in the left ear — to show the individual pig number. "Reading" the notches allows producers, judges, and other swine professionals to know more about the pig they're viewing.



Correctly notching the pig is key. Each pig must be notched differently. So, to notch pigs properly, you must know the location and associated number of each notch.

The right ear has five locations for notches, and each location is assigned a number. Those five numbers are 1, 3, 81, 9, or 27. Look at Figure 1 to find each notch location. Except for the 81 notch, one or two notches may be at each of the other four locations.

All numbers in the right ear are added to make the litter number. All the numbers in the left ear are added to identify the individual pig within that litter.

With this system every number from 1 through 161 can be created on each ear with a minimum of one notch on each ear and a maximum of 9 notches on an ear, with no more than two noches in a quadrant.

Although studies have indicated that ear-notching does cause some discomfort to piglets, the consensus is that it is critical for livestock producers to be able to accurately identify individual animals. Ear notching is the most reliable and effective form of swine identification. Following the best practices in the box on the right will help to minimize distress to your animals.

Techniques to Ensure Effective Notching

Avoid placing a notch midway in the outside edge of either ear (that is, close to the dotted line indicated in Figure 1). Such marks can easily be mistaken for either a 1 or a 3 or a 9 or a 27.

Remember, the reference to left and right ear refers to the pig's left or right ear, as viewed from the rear of the pig. Left and right does not refer the viewers' left or right in a situation where the pig is facing the viewer.

If pigs are notched at 1-3 days of age, the task is much easier on you and on the pig. If you allow pigs to become large (100 lb), the task is considerably more demanding mentally and physically.

Use a V-ear notcher to notch piglets weighing less than about 25 pounds. These notchers typically make a notch that is 3/16 to 1/4 inch deep. For larger pigs, a notcher that makes notches 1/2 inch deep is recommended.

It is important to have some disinfectant available to dip the notchers in after each use. In some cases, spraying larger pigs with a wound dressing can be helpful.

Avoid making notches too shallow, as they may become hard to read or possibly heal shut. A notch that is too deep, especially one toward the ear tip, may result in a torn ear.

Leave at least 1/4 inch between notches to ensure easy reading. Do not make notches too close to the tip of the ear, as these can be torn off. When making the #27 notch, uncurl the ear with your fingers so you can make it deep into the cartilage. Otherwise, it might be unreadable later.

If notching ears on older or larger pigs, it may be necessary to house them in separate pens until the notches heal. Pen mates not notched may be attracted to the bloody notches and start ear biting.

When combining ear notching with other pig processing, consider doing the notching last, as it tends to cause more bleeding than other procedures, such as teeth clipping, naval care, injections or tail docking.

Marketing

Differences between Kosher and Halal Dietary Slaughter

Maire Ullrich, CCE Orange County

As livestock producers research new markets one of the specialty markets is for kosher or halal meats. Below is a basic description of the differences between the community regulations. This was produced with tremendous help from Joe Regenstein, Cornell Food Science Professor who specializes in food processing for religious communities. Should you be seriously interested in tapping one of these markets CCE staff could help you learn more and contact the appropriate specialized educators and regulators.

General Questions:

What are the differences between Kosher and Halal slaughter for animal welfare?¹ There are differences between Kosher and Halal in terms of the last few hours of an animal's life. Kosher standard practice is similar to commercial pre-harvest practices with regards to minimizing stress, but permitting withholding of feed and water. Halal guidelines place great emphasis on the animal's treatment before slaughter (in addition to the slaughter requirements listed above). Halal requires that the animal, prior to harvest not be kept from food or water and possibly be rested. Halal guidelines can also be more specific about stress in that the knife used to kill the animal should not be sharpened in front of any animal nor should any additional animals witness slaughter.

Can something be both kosher and halal or dual-labeled? This depends mostly on the type of product. This is possible for dairy and other non-meat products but, even though possible for meat, it would require special planning and dual agency dispensation since the tradition is for each group to do its own slaughter.

Are there government regulations overseeing Kosher/Halal? In about 20 states, plus some smaller municipalities, there are laws regulating the claim of "kosher" while about 6 states have "halal" regulations. If you are interested in labeling a product Kosher or Halal you will not only have to investigate the religious requirements but also any state or municipality regulations that are usually related to "truth in labeling" and/or "consumer right to know."

	Kosher	Halal	
Word for permitted / not permitted	Kosher/treife.	Halal/haram	
Basic foundation for the rules	Hebrew Scriptures (first five books, commonly called "Torah")	Quran	
How are acceptable animals slaughtered	All kosher mammals and birds have to be slaughtered according to kosher law	All halal mammals and birds have to be slaughtered according to halal law	
Hunting	Not permitted	Permitted as long as it is for food and in a humane fashion.	
Animal Prohibited	Non-ruminants (eg. Swine, cat, dog), Rumi- nants w/o a complete cloven hoof (eg. camel), Fish that do not have fins and removable scales. (eg. crustaceans, mollusks, catfish, shark), Birds of Prey, Rattites (ostrich, emu), Insects (except some grasshoppers). Unless specifically permitted, not permitted	Swine, Carnivores (eg. cat, dogs), Birds of prey (uses it's claw to hold food), Any animal fed "unclean" food w/o quarantine, Amphibians, Any- thing dedicated to something other than Allah, Any animal that died of reason besides proper slaughter, All others prohibited	
Prohibited parts of animals	Hind quarters of ruminants, but can be used if sciatic nerve is removed (not common in US slaughter). Blood (why carcasses are salted) Certain veins & arteries, Certain fats	Blood, Parts considered "filthy"	
Blessing before slaughter (only for land animals)	Slaughterman asks blessing for taking life at the beginning of session, not for each animal.	Slaughterman is required to acknowledge God's Creation and to thank God for providing sustenance by reciting a prayer before each and every slaughter with the statement, "In the name of God – God is the Greatest."	
Specific rules	Blade must be a straight blade twice the diameter of the animal's neck and blade must be checked between each animal for sharpness and free from nicks. Carotids, jugulars, trachea and esophagus are cut.	Slaughterman must be a mentally competent adult. Must be done by cutting 3 of 4 (carotids, jugulars, trachea, esophagus) to have rapid and complete bleeding. Knife must be sharp. Cannot sharpen knife or kill in front of another animal.	
Identification of animal defects	Generally, any internal defect that would signal that the animal would not survive the year. "Glatt" means smooth and this refers to few, if any lung adhesions. This is a stricter standard. All mammals require lung inspection while both still in the carcass and after removal.	Seriously bruised and gored animals are not permitted	
Special treatments of parts	Hearts are cut & drained, then soaked and salted, Liver is broiled, All other meat is soaked, salted, and rinsed, Storage of meat before salting and soaking has special requirements.		
Processing plant considerations	Due to the prohibition of mixing any meat or chicken and, in some cases, fish with dairy products, kosher processing plants have strict restrictions on sanitation, processes, additives and chemicals used. No animal derivatives unless from kosher animals.	Prohibition of alcohol/fermented products or any other intoxicant at any concentration. No animal deriv- atives unless from halal animals	
Symbols to des- ignate	Circle-K, O-U, Kof-K, Star-K and the CRC (Chicago) are the largest supervisions although many others are used to designate kosher products. Different supervisory organizations have different symbols.	IFANCA (Islamic Food & Nutrition Council of America) is the main US certifier. Other agencies and symbols are also available.	

Note on humane-ness of religious slaughter: In 1958 Congress declared kosher and similar religious slaughter to be humane. However, pre-slaughter animal handling practices can still be questioned by a variety of organizations/buyers as to their humane-ness.

10 Livestock of the Month: Llamas and Alpacas

Raising Llamas and Alpacas

Llamas and alpacas are members of the Camelidae family that have been domesticated in South America for centuries. The llama, the largest of the types, is used as a beast of burden, as a fiber source, and as a meat source in South America. Llamas have been raised in the United States since the late 1800s. The smaller alpaca is used primarily for fiber production, and is a more recent arrival, first imported to the United States in 1983. They are very popular livestock animals for hobby farmers - but commercial llama and alpaca production may present some economic challenges as detailed below.

Llama and alpaca production practices are similar to those for sheep. Llamas and alpacas are adaptive feeders, eating grasses, forbs, shrubs, and trees. They can be kept on a variety of pastures and hay. About 3 to 5 llamas or 5 to 10 alpacas can be grazed per acre, depending on quality of the pasture. A bale of hay will generally feed an adult llama for a week. Because of the animals' high feed conversion, hays with high protein, like alfalfa, are not recommended because the animals can easily become overweight.

4-5 foot-high fencing is generally adequate but llamas and alpacas are very agile and can jump a standard 4-foot-high fences if they feel they need to do so. Fencing for llamas and especially for alpacas may need to be substantial to control predators, especially dogs. Because of their size, to be safe, producers will need a small catch pen, a chute, or other safe restraint to catch and hold llamas or alpacas for trimming toenails, administering vaccinations and shots, or handling an injured animal. A three-sided shed or other shelter should be provided for inclement weather. Llamas and alpacas do not adapt well to dark sheds, but prefer shelters with large doors or windows. For a group of five adult llamas accustomed to each other, an open shed should be at least 12 feet by 16 feet, while six mother llamas and crias (babies) can fit into a 16 by 16 foot shed.

Markets for llamas can include breeding stock, fiber-producing stock, pack animals, companion pets, and guardians for sheep or goats. Those chosen as guard animals should not exhibit aggressive behavior towards humans as that will make them a danger to their owner and others. Alpacas are mainly used for breeding stock and fiber-producing stock. Alpacas are prized for their wool or fiber, which is noted for its fine and soft touch and strength. It also holds dyes well. It is warmer than sheep's wool, less likely to produce allergens, and contains less lanolin. The average adult alpaca produces 6–9 pounds of fiber per year, and shearing one animal can produce enough fiber to make 4 to 6 sweaters.

The major drawback to commercial llama and alpaca production is that the initial capital investment in breeding stock is high, and profitable market channels for the animals are few. As a result, llama and alpaca farming is considered a high-risk enterprise by banks and other agencies. An important consideration for potential llama and alpaca producers is that the driving force for current high prices is primarily demand for breeding stock. There are few, if any, alternative markets for llamas or alpacas that would continue to justify the high price of the animals if the breeding market decreases. Potential producers who are considering raising breeding animals should take this into consideration. The market for alpaca fiber in North America is limited due to lack of large-scale processing facilities and low prices. An analysis of the alpaca industry by the University of California, Davis in 2005 concluded that the

Resources for learning more about llama and alpaca production

- Llama and Alpaca Farming (ATTRA publication, December 2000) http://www.caes. uga.edu/topics/sustainag/ documents/attrallamaalpaca.pdf
- Pennsylvania Llama and Alpaca Association http:// www.plaa-net.org/
- Do Alpacas represent the Latest Speculative Bubble in Agriculture? UCDavis, 2005 http://aic.ucdavis.edu/ research1/alpaca_RAE.pdf

Trekking with pack-llamas (USFS photo)



long-term likelihood of alpaca fleece production being profitable was low to non-existent given alpaca pricing and market dynamics, based upon the most reasonable assessments of fiber value and the variable costs of raising alpacas to produce fiber. Even if there were improvements in the market for alpaca fleece, the authors concluded that the supply of fiber would continue to depress prices. Anyone considering raising llama and alpacas commercially should, therefore, carefully assess their local marketing options prior to making a large investment.

Upcoming Regional Trainings and Programs 11

Date(s)		Program Information	Time	Location (s)	To Register
March					
March 1	Old Apple Tree Care	Do you have some old neglected apple trees on your property? Haven't been cared for in decades? Don't just let them go; bring 'em back to life! We'll demonstrate how to properly re-invigorate this tree from years of neglect. A demonstration will take place @ Charlie Blume's Lucky Dog Orchard in Grahamsville. Call for directions. (CFA members free) \$10 non-CFA members. Preregistration required.	10am-12pm	Lucky Dog Orchard, Grahamsville, NY	Call 845-292-6180 or e-mail Michelle Lipari at mml249@cornell.edu for more information about registration.
Mar 3 and Mar 11	Day-old Pheasant Chick Program Registration deadline (Mar 3) and Raising Pheasants 101 class (Mar 11)	For those interested in the 4-H pheasant rearing project, this is a class on how to care for pheasant chicks. To register for the "Raising Pheasants 101" program on March 11th please call 292-6180. To order the chicks, the deadline is March 3.	6:00pm-8:00pm (Mar 11)	CCE Sullivan County Office, Liberty, NY	Call 845-292-6180 or e-mail Michelle Lipari at mml249@cornell.edu
Mar 4	Introduction to Backyard Chickens	Basic class for people thinking about raising backyard chickens. Learn the basics of what you would need to get started. First class in a backyard chicken education series at CCE Ulster County.	6:30pm-8:00pm	CCE Ulster County Office, Kingston, NY	Contact Erin Campbell-Craven at (845) 340-3990
Mar 7	NOFA NY Organic Dairy and Field Crop Conference	We welcome veteran farmers, beginning farmers, and farmers interested in transitioning to organic management.	8:00am-5:30pm	Holiday Inn, 75 North Street, Auburn, NY	http://www.nofany.org/dairyconference stephanie@nofany.org
Mar 12	Cornell Small Farms Summit	Beyond Direct Marketing: Exploring New Ways to Sell, features small farmers' perspectives on the pros and cons of selling wholesale. Farmers that have made a successful switch to a new wholesale market will reflect on their decision making process, benefits and challenges, costs, and infrastructure needed. Farmer speakers will also address how well the new market meets their goals, values or other lifestyle preferences.	9:30am - 3:30pm	CCE Ulster County Office	To register on-line go to https://docs. google.com/forms/d/1hhdKNTW9ETeUP- ggPs01p7AFIOrlQmfjE_da-u5cnqL4/ viewform
Mar 12	Orange County Dairy and Livestock Day	Annual event. 4-H animal public presentations, trade show, buffet lunch	10am-3pm	Pine Bush Fire Hall, 2405 Rt. 52, Pine Bush, NY	http://counties.cce.cornell.edu/orange/ DairyLivestock_Day_14.pdf . Please register by March 7th.
Mar 12-13	Organic Pesticide Applicator Training	Pesticide applicator training specifically for organic growers. Will cover equipment, regulations, safety, organic product overview and efficacy. DEC Recertification Credits!	9:00am-4:30pm	NYAES Hudson Valley Lab, 3357 Rt. 9W, Highland, NY	Emily Cook, 845-943-9810 or e-mail ekc68@cornell.edu
Mar 22	Herd Health and Calf Health (Youth Program)	In Herd Health we will go over body condition scoring, lameness scoring, common post-partum diseases, and mastitis. In Calf Health we will go over calf health and immunity, vaccination schedules and common diseases.	10:00am-12:00pm	Indian Acres Dairy, Port Jervis, NY	Jennifer Simpson at 845-344-1234 or jks236@cornell.edu
Mar 25, 27 and Apr 1, 3, 8, 22, 25 and 26.	Ulster County 4-H Tractor Safety Certification Course for Teens (Youth Program)	This National Safe Tractor Training Program enables young workers (ages 14-19) to obtain a US Department of Labor Certificate of Training certification which is required to operate farm tractors and equipment.	7pm for course (Mar 25-Apr 8)	Stone Ridge Firehouse, Route 209, Stone Ridge, NY	For more information or to register, contact Kristin Frangione, at 845-340-3990
Mar 27	Winter Dairy Management	Class will offer dairy financials, robotic milking, parlor conversions, calf care, and quality milk premiums.	10 am – 3 pm	Cornell Cooperative Extension Orange County, Middletown, NY	For more information call Jennifer at 845- 344-1234 or email jks236@cornell.edu.
Mar 28-29	Animal Career Path Program: Dairy Discovery (Youth Program)	The annual Dairy Discovery Program provides New York youth (14-19) with fun, hands-on science-oriented learning experiences on dairy production and management topics which feature the unique facilities, industry professionals, and staff of Cornell University. This year's program focuses on Herd Health.	6:15pm-9:00pm Friday and 8:15am-4:00pm Saturday (main program)	Cornell University Campus, Ithaca, NY	Contact your county 4-H office or register on-line at http://www.ansci. cornell.edu/4H/php/4H_register.php?ac- tion=order&icourse=4HDAIRY
Mar 31-Apr 2	Introduction to Artisan Cheesemaking — 3-Day Training	This three-day workshop is designed for people interested in the making of artisan cheeses. This class includes two full days of hands-on cheesemaking as well as information about aging cheese, and facilities and equipment for the creamery.	9 am – 4 pm all three days	Pine Bush Fire Hall, 2405 Rt. 52, Pine Bush, NY	For more information call Cathy at 845- 344-1234 or email cah94@cornell.edu
April					
Apr 1-3	3-day Beginning Quickbooks Class for Farmers	Learn how to use Quickbooks to manage your farm finances.	12:30-3:00 each day	CCE Ulster County, Kingston, NY	Elizabeth Higgins, emh56@cornell.edu http://www.cceulster.org/Quickbooks%20 registration%20form%20April%20 sessions.pdf

Continued on next page

Date(s)		Program Information	Time	Location (s)	To Register
Apr 11	Hay, Balage, and Forage Quality Workshop	Second class in the new hay and forage management series. Learn to better manage your hay crop for quality and value with Cornell Cooperative Extension. Whether you are a seasoned veteran or a new farmer, this class is for you! An in-depth school on producing and marketing hay and balage; and feeding forage to beef, sheep, goats, horses, and alpaca to maximize livestock performance.	10:00am-2:00pm	3 sites: CCE Sullivan County, Liberty, NY; CCE Ulster County, Kingston, NY; & CCE Orange County, Middletown, NY	For more information: Contact the livestock educators in Ulster, Sullivan or Orange County.
Apr 17-18	Mortality/Manure Composting Workshop	Presented by Cornell Waste Management Institute, Jean Bonhotal. Looking to start a composting system to help manage your waste stream? Already have one, but want to learn more effective ways to manage it? Then this workshop is for you! Attendees will have the opportunity to visit and learn about on-site composting systems at local farms and agribusinesses in Orange, Sullivan and Ulster counties. During and following the tours we will discuss composting systems and methods, successes and challenges associated with different technologies, and how to improve management of organic materials.	8-5 both days	CCE Ulster County Office, CCE Sullivan Office and sites in Orange County. (TBD)	For more information: Contact the livestock educators in Ulster, Sullivan or Orange County.
Apr 19	Milking (Youth Program)	There is a lot to think about when milking a cow if you are not familiar with the process. We will go over the parts to a milking machine, milking procedures, and mastitis	10:00am-12:00pm	Orange County, location to be determined	Jennifer Simpson at 845-344-1234 or jks236@cornell.edu

Blast from the Past Cornell Recommendations from 1892

Preserving Eggs

The method most generally employed where cold storage is not available is that of preserving in a solution of lime and salt, and this is probably the most successful method to use. A solution which has given very excellent results can be made as follows:

Mix four quarts of fine slaked lime and one quart of common salt in five gallons of water. Stir thoroughly several times, and after all is dissolved that is possible (better to let stand for a day and a half), decant the clear liquid into a glazed earthenware or wooden vessel. Then add one-half ounce of boracic acid. The eggs are put in the solution, and it is well to keep the liquid a the depth of three inches above the eggs. The eggs should be kept in a cool place and not disturbed until the eggs are taken out for use.

It is always essential to have eggs with a clean and perfect shell, and absolutely fresh, if they are to be preserved.

Contact Information

Cornell Cooperative Extension of Sullivan County Jerry Skoda Education Center 64 Ferndale-Loomis Rd Liberty, NY 12754 (845) 292-6180 Michelle Lipari, Livestock Educator - mml249@cornell.edu Melinda Meddaugh, Agriculture Program Leader - mm2592@cornell.edu

Cornell Cooperative Extension of Orange County

18 Seward Ave, Ste. 300 Middletown, NY 10940 (845) 344-1234 Jennifer Simpson, Dairy and Field Crop Educator - jks236@cornell.edu Maire Ullrich, Agriculture Program Leader - mru2@cornell.edu

Cornell Cooperative Extension of Ulster County 232 Plaza Rd. Kingston, NY 12401 (845) 340-3990 Erin Campbell Craven, Livestock Educator - eac266@cornell.edu Justin O'Dea, Field Crops Educator - jko32@cornell.edu Elizabeth Higgins, Agriculture Program Leader - emh56@cornell.edu