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NWNY Dairy, Livestock & Field Crops Team


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NORTHWEST NEW YORK DAIRY, LIVESTOCK & FIELD CROPS TEAM

Ag Focus

Ready or Not the VFD is Here!

By: Jerry Bertoldo, DVM

Effective January 1, 2017 the Veterinary Feed Directive (VFD) is the new sheriff in town as far as the use of antibiotics added to feed. This FDA regulation covers all animals involved with food production. Central to the VFD's impact are the "major species" which include cattle, horses, swine, chickens and turkeys. Inexplicably, dogs and cats are also on this list. "Minor species" include sheep, goats and bees.

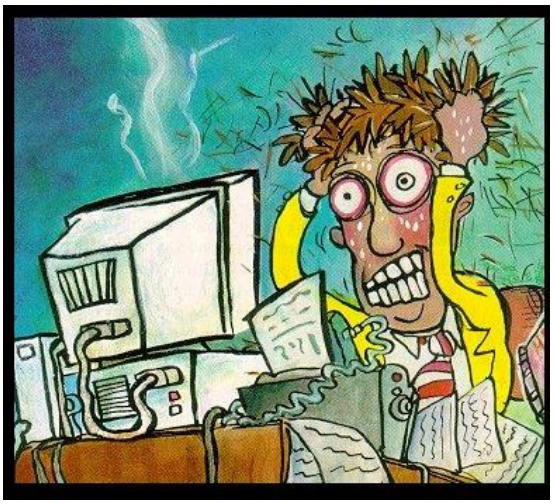
Photo source: Flickr

Gone now is any use of antibiotics for growth promotion. Dairy cattle are least impacted amongst food producing animals. Here approved OTC feed additive antibiotics such as chlortetracycline, tetracycline, neomycin and sulfamethazine have always been limited to under 20 months of age. Growth promoting, low dose use of products such as tetracycline common to beef production were never approved in dairy production.

The days of just going to the feed mill or farm supply store and picking up bags of Aureo-S® or Aureomycin® Crumbles or tubs of Neo-Terramycin® powder to manage disease problems in calves and heifers are history. Now these type products require a VDF order from a licensed veterinarian. A VFD order is similar to a prescription. Veterinarians along with registered VFD distributors have been designated as gatekeepers in this regulatory process.

Photo source: Zoetis

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Mission Statement

The NWNY Dairy, Livestock & Field Crops team will provide lifelong education to the people of the agricultural community to assist them in achieving their goals. Through education programs & opportunities, the NWNY Team seeks to build producers' capacities to:

- Enhance the profitability of their business
- Practice environmental stewardship
- Enhance employee & family well-being in a safe work environment
- Provide safe, healthful agricultural products
- Provide leadership for enhancing relationships between agricultural sector, neighbors & the general public.

Continued from page 1

Photo source: Zoetis

Part and parcel of the VFD order is the requirement that a valid veterinary-client-patient-relationship or VCPR exists before an antibiotic to be added to a feed can be approved by the veterinarian of record. As with the dispensing of prescription drugs, the VFD requires that the veterinarian has sufficient knowledge of the animals, their care and medical condition before writing an order. The frequency of premises visits and level of farm interaction is not defined well by state or federal practice law. Despite this lack of strict interpretation veterinarians should not be expected to fill out a VFD order without sufficient knowledge of the situation. Here is where the backyard operation, the 4-H project or the "I only call the vet in a dire emergency" animal owner will run into problems.

Difficulties unforeseen with the VFD continue to be worked out. Antibiotic manufacturers had until December to relabel or withdraw products covered by the rules. Many vet practices were reluctant to hold informational meetings too early knowing the changes that might take place down the road. Word has it that at least for the first six month of 2017 the FDA is mainly interested in observing and talking to distributors and producers about how well the program is working.

The hope that the new administration could eliminate the VFD mandate with the stroke of a pen is wishful thinking. The directive was part of a comprehensive piece of legislation a few years ago. It would require Congressional review and a rewrite of the law taking approximately two years according to informed sources.

Other need - to - know VFD points:

- Antibiotics labeled for use in water are not under the VFD rules. These go from OTC to prescription status.
- No extra labeled use of a VFD antibiotic is allowed except for therapeutic administration in a minor species where no approved option exists. This is a very recent change in guidance from FDA.
- A VFD order has an expiration date of no more than 6 months.
- A VFD order must describe the age or weight of animals to be fed, the numbers, the condition being prevented or treated, the length of feeding and the premises.
- Milk and milk replacer are both considered "feeds" under the VFD. No antibiotics of any kind are permitted to be used in an extra labelled fashion.
- The addition of neomycin and tetracycline in milk replacer is permitted, but not on a continuing basis for the entire "wet" feeding phase of a calf.
- Ionophores – anticoccidial agents and growth enhancers such as Rumensin, Bovatec and Deccox – although technically antibiotics are not impacted by the VFD.
- Ionophore use in combination with certain antibiotics is not allowed whether hand fed or formulated in the feed. As an example Aureomycin® can be mixed or hand added to be fed with Bovatec®, but not Rumensin®.
- To date (12-9-16) there are 59 VFD distributor locations across New York. This includes only 2 veterinary practices. Most notably Tractor Supply Co. is not on the list of distributors.

The following links are excellent sources of information regarding the VDF rules and changes that may be made.

https://ahdc.vet.cornell.edu/programs/NYSCHAP/nysvfrp/vfd.cfm

http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/ucm071807.htm

https://www.ag.ndsu.edu/publications/livestock/understanding-the-veterinary-feed-directive

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2004 KENWORTH C500; 475 HP CAT C15 Diesel; 18-Spd.; Engine Brake; 4.88 Ratio; 24.5 Tires; Alum. Wheels; 340" WB; Tandem Axle; 20,000# F/A; 46,000# R/A; Double Frame; Heavy Duty Truck w/26½" Frame Behind Cab; 216,455 Miles; Stk. #5151CC - **$39,500**

2007 PETERBILT 378; 475 HP CAT C15 (Upgradable By Flash To 550 HP); 18-Spd.; Tandem Axle; Engine Brake; 24.5 Tires; Alum. Wheels; 12,000# F/A; 46,000# R/A; Clean, Daycab Tractor w/Heavy Rears, Dual Exhaust and Air Cleaners; 390,597 Miles; Stk. #5250 - **$57,000**

2007 MACK VISION CXN613; 480 HP Mack AC460; Engine Brake; 13-Spd.; 22.5 Tires; Alum./Steel Wheels; 192" WB; 14,000# F/A; 46,000# R/A; Wetline; Headache Rack; Air Slide 5th Wheel; 264,079 Miles; Stk. #5247 - **$35,000**

2003 OSHKOSH F2346; 330 HP Cummins ISM; 10-Spd.; 212" WB; 20,000# F/A; 46,000# Full Locking Rears; Good Running 6x6; Haulmaax Susp.; 17' Frame Behind Cab; 128" CT; 162,140 Miles; Stk. #5073 - **$39,900**

2010 PETERBILT 367; 485 HP Cummins ISX Diesel; 10-Spd. Engine Brake; Air Trac Susp.; 24.5 Tires; All Steel Wheels; 202" WB; Tandem Axle; 13,200# F/A; 46,000# R/A; Very Clean Daycab Tractor w/Air Slide 5th Wheel; Steer Tires 99%, Drives 90%; 369,622 Miles; Stk. #4990/4991 - **$43,900**

1996 PETERBILT 357; 300 HP CAT 3306 Diesel; 8LL Trans.; 12.00 x 22.5 Tires; All Steel Wheels; 216" WB; Tandem Axle; 22,000# F/A; 46,000# R/A; Very Clean 6x6 Cab & Chassis w/17' Frame Behind Cab; 132" CT; 3/4 Locking Rears; Stk. #5091 - **$36,000**

2013 PETERBILT 330 DUMP TRUCK; 325 HP Paccar PX-6; 6-Spd. Trans.; 3.55 Ratio; 10 ft. Aluminum Box; 9,000# F/A; 17,000# R/A; 62,540 Miles... **$51,500**

2005 WESTERN STAR 4900; 475 HP CAT C-15; 18-Spd.; Tandem Axle; Engine Brake; 4.30 Ratio; 22.5 Tires; Alum. Wheels; 244" WB; 14,600# F/A; 46,000# Full Locking Rears; Very Good Condition; Double Frame; 545,068 Miles; Stk. #3636 - **CALL**

2009 PETERBILT 365; 350 HP Cummins ISX; Allison Automatic Trans.; Tandem Axle; 24.5 Tires; Alum./Steel Wheels; 252" WB; 20,000# F/A; 46,000# R/A; 20' Frame Behind Cab; 167" Back Of Cab To Center Axles; Heavy Single Frame; No Rust; 140,000 Miles; Stk. #5264 - **$59,500**

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2006 MACK GRANITE CTP713; 460 HP Mack AI Diesel; 18-Spd.; Engine Brake; 24.5 Tires; Alum. Wheels; 232" WB; Tandem Axle; 4,500 Gal. Steel Semi Tank; 46,000# R/A; Clean, Good Runing Water Truck w/Full Locking Rears; 554,146 Miles; Stk. #5267 - **$41,900**

2000 MACK RD600; 400 HP Mack E7; 8LL Trans.; 24' Length Alum. Body; 2-Way Tailgate w/Coal/Grain Chute & Tarp; 22.5 Tires; Alum./Steel Wheels; 283" WB; Tri-Axle; 20,000# F/A; 46,000# R/A; Good Running Dump Truck w/20,000# Air Lift Axle; Good Rubber; 499,008 Miles; Stk. #5108 - **$39,500**

2005 MACK VISION CX613; 380 HP Mack E7 Diesel; 13-Spd.; Tandem Axle; Engine Brake; 22.5 Tires; Alum./Steel Wheels; 186" WB; 14,000# F/A; 46,000# R/A; Very Clean, Heavy Spec Daycab Tractor w/Low Miles; Air Slide 5th Wheel; 327,852 Miles; Stk. #4933 - **$29,900**

2003 KENWORTH T800; 425 HP CAT C12; Engine Brake; 10-Spd.; Tandem Axle; 4.11 Ratio; 24.5 Tires; Alum. Wheels; 191" WB; 12,000# F/A; 40,000# R/A; Very Clean Daycab Tractor w/Wetline System; Rubber 80%; Stk. #5283 - **$35,000**

2005 FREIGHTLINER ARGOSY; 515 HP Detroit 14L; Engine Rebuilt With Warranty!10-Spd.; 25' Length x 96" Body; 22.5 Tires; All Steel Wheels; 244" WB; Tandem Axle; 12,000# F/A; 40,000# R/A; 36" Flat Top Sleeper; Cleab Cabover Flatbed; 579,071 Miles; Stk. #5129 - **$34,900**

2007 WESTERN STAR 4900SA; 475 HP CAT C15; 18-Spd.; 24.5 Tires; Alum. Wheels; 246" WB; Tandem Axle; 16,000# F/A; 46,000# R/A; Very Clean Truck w/40" Flat Top Sleeper; Tulsa Roughneck Winch; Low Boy Ramps & Full Locking Rears; 488,664 Miles; Stk. #5269 - **$46,900**

2005 PETERBILT 357; 370 HP CAT C11; Allison HD4560P; 20,000# F/A; 46,000# R/A; Hendrickson Susp.; 216" WB; 144" CT; 17 ft. Useable Frame Behind Cab; 5.38 Ratio; Lockers; Front Alum. Floats; 134,000 Miles; Stk. #4893 - **CALL**

1998 FREIGHTLINER FLD120; 470 HP Detroit 12.7L; 8LL Trans.; 20,000# Lift Axle; 19 ft. Alum. Body; 24.5 Tires; Spoke Wheels; 258" WB; 20,000# F/A; 46,000# Full Locking Rears; Rear Double Frame & Tarp; Complete In-Frame Rebuild @ 322K w/Paperwork; 378,222 Miles; Stk. #5261 - **$31,000**

2012 KENWORTH W900B; 600 HP Cummins ISX; 18-Spd.; 4.56 Ratio; Alum. Wheels; 260" WB; Tri-Axle; 16,000# F/A; 69,000# R/A; Big HP Tri-Drive Tractor w/Full Locking Rears and Air Slide 5th Wheel; Engine Rebuilt @ 312,000 Miles; Paperwork Available; 394,202 Miles; Stk. #5237 - **$64,000**
Also: 2011 In Stock; Same Specs; Engine Rebuilt @ 176,000 w/Paperwork

2008 PETERBILT 367 TRI-AXLE DUMP; 430 HP CAT C13 Diesel; 10-Spd.; Tri-Axle; Engine Brake; 19 ft. Benson Heated Alum. Body w/Tarp; 24.5 Tires; Alum. Wheels; 260" WB; 18,740# F/A; 46,000# Full Locking Rear Axle; Clean, Heavy Single Frame; Air Trac Susp.; 533,586 Miles; Stk. #5282 - **$59,900**

2006 PETERBILT 357; 475 HP CAT C15 Diesel; 18-Spd.; Engine Brake; 24.5 Tires; Alum./Steel Wheels; 231" WB; Tandem Axle; 14,350# F/A; 46,000# R/A; Very Clean, Double Frame Truck; Good Rubber; 17'6" Frame Behind Cab; 535,919 Miles; Stk. #4803 - **$56,900**

2007 PETERBILT 335; 315 HP Cummins ISC Diesel; Auto. Trans.; Engine Brake; 26 ft. Length X 96 in. Width; 5.57 Ratio; 22.5 Tires; Alum. Wheels; 274" WB; Tandem Axle; 16,000# F/A; 40,000# R/A; Clean, Southern Truck; Lift Gate; Will Separate Deck From Chassis; 273,710 Miles; Stk. #5274 - **$49,000**

2006 PETERBILT 378; 475 HP CAT C-15 Diesel; 18-Spd. RTLO18118B Trans.; Engine Brake; 22.5 Tires; Alum. Wheels; 172" WB; Tandem Axle; 12,000# F/A; 46,000# Full Locking Rears; Very Clean, Low Mile Tractor w/Air Slide 5th Wheel; 380,024 Miles; Stk. #4553 - **$55,900**

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Maintaining Stored Grain Quality over the Winter

By: Mike Stanyard

Despite an extremely dry year for most of NWNY, many yields were better than expected with good quality. The latest crop report from NASS puts NY corn yields at 133 bushels/acre, 10 bushels less than 2015. Soybeans fared better this year and average yields are estimated at 42 bushel/acre, 1 bushel less than last year.

Grain storage is an important step in protecting your investment and lots of money can be lost in reduced quality when it's time to deliver. Remember, your grain quality is highest the day you put it in the bin. Longer term storage has become an important part of the marketing strategy particularly as current grain prices continue to be low.

Photo source: Mike Stanyard

I have talked about the importance of chemical and cultural control of insect pests prior to harvest in the past but temperature and aeration are also a crucial pest management tool. Dry grain should be cooled to less than 60 degrees F as soon as possible after harvest, and to 20 - 30 degrees F for winter storage. Temperature benchmarks for stored grain:

80°F: The ideal temperature for insect and mold growth.

70°F: Insect reproduction begins to decrease.

50°F: Insects become dormant below this temperature.

40°F: Mold growth prohibited below this temperature.

20-30°F: Grain should be cooled to this range for winter storage.

Stored grain should be cooled by aeration whenever the grain temperature exceeds the average outdoor temperature by 10 to 15 degrees. Expect storage time to approximately double with each 10 degree reduction in temperature. Grain should be cooled to about 25 degrees as outdoor temperatures get colder. Check the condition of stored grain about every two weeks while grain is cooling, then about monthly after grain has cooled for winter storage.

When the fans are off during the winter holding period, they should be covered (with canvas or plywood) to prevent the grain near the ducts from getting too cold during severe winter weather. Large temperature differences result in condensation in the cold grain. Spoiled grain over the aeration ducts or perforated floor is a common problem caused by not covering the fan during extended off periods. Also, look for melting snow on the roof of the bin as a telltale sign of temperature problems.

Accumulation of fine particles, weed seeds, and other foreign material interferes with airflow. Such accumulations are prime locations for increased mold and insect activity, which result in localized heating and grain deterioration. Normally, these fines collect in the center of the bin as the grain flows toward the walls.

Several good management practices can reduce the storage risks incurred through accumulation of foreign material. Screening the grain reduces the amount of foreign material and greatly improves long-term storability. Spreaders are used to more uniformly distribute fines throughout the bin and helps provide more uniform airflow during aeration.

A common practice in bins equipped with center unloading hoppers is to unload some grain from the center "core" to remove some accumulated fines. Fill the bin so it is peaked and unload some of the grain (300 to 1,000 bu, depending on bin size). This removes some of the accumulation and increases airflow in the center if enough grain is unloaded to allow the center core to fill with clean grain.

References: "Management of Stored Grain with Aeration", University of Minnesota, http://www.extension.umn.edu/distribution/cropsystems/DC1327.html.

GMO & Non GMO Crop Production: Expected Profits at the Farm Level

By: John Hanchar

This article uses current terminology where GMO, Genetically Modified Organism, means genetically engineered.

Summary

- Based upon initial analysis using corn for grain as an example, expectations for increased profit explain farmers' decisions to use GMO over Non GMO crops over a range of conditions as means to achieve business objectives.
- Analysis suggests that differences in profit are sensitive to the expected price premium for Non GMO corn, and the yield advantage attributed to GMO production – these vary by farm and locale.
- Due to variability in key factors among farms and areas, decision making benefits from farm level, area specific analysis.

Background

Analysis and discussion of GMO and Non GMO crops focuses on health, environmental and other considerations. Perhaps overlooked at times are economic considerations at the farm level where producers consider the demand and supply environment to make decisions regarding use of GMO inputs and related practices. Costs of production, and expected profits underlie what producers are willing to supply at various prices. Decisions are farm, area specific. Understanding production economics at the farm level contributes positively to analysis and discussion of GMO and Non GMO production.

The purpose of this article is to report some initial, illustrative production economics analysis comparing GMO and Non GMO corn for grain.

GMO and Non-GMO Crops: Expected Profits and Sensitivity Analysis

Marginal analysis produced estimates of the expected difference in profit between GMO and Non GMO corn for grain, where the difference in profit equals the difference in the total value of production minus the difference in costs. Factors affecting the difference in value of production are the value of the yield advantage attributed to GMO production, and the value of any price premium received for Non GMO corn for grain. Costs differences are due to seed price differences (GMO seed cost per acre is greater than Non GMO seed cost per acre), and herbicide cost differences, (herbicide cost per acre for GMO production can be less than Non GMO).

Estimates of differences in profit vary by price premium and by GMO yield advantage (Table 1). At this point, analysis is not specific to any farm or locale. If a value in the table is greater than zero, then the expected profit for GMO production is greater than the expected profit for Non GMO production. If a difference in profit is negative, then the expected profit for GMO production is less than the expected profit for Non GMO production.

Expected Price Premium Received for Non GMO Corn for Grain ($ per bu.)	Expected GMO Yield Advantage versus Non GMO, Corn for Grain (bushels per acre)[1]		
	7.66	23.91	40.25
	--- ($ per acre) ---		
0.00	1.00	65.90	131.40
0.20	-27.83	40.59	109.37
0.40	-56.38	15.29	87.33
0.60	-84.93	-10.01	65.30
0.80	-113.49	-35.32	43.26

Table 1. Difference in Expected Profit ($ per acre), GMO versus Non GMO Corn for Grain, by Expected Price Premium Received for Non GMO Corn by Expected GMO Yield Advantage.

[1] Note regarding GMO yield advantage values. The value 7.66 bushels per acre is one standard deviation below the average yield advantage of 23.91 bushels per acre, while the value of 40.25 bushels per acre is one standard deviation above the average. Source for the raw data by year is Schmidt, Jennifer. 2014. GMO versus Non GMO: The Cost of Production. The Foodie Farmer. 29 Dec 2014. <http://thefoodiefarmer.blogspot.com/2014/12/gmo-versus nongmo-cos…>

When no price premium for Non GMO corn for grain is expected, results suggest that GMO production can be expected to generate substantially greater profits for two of the three yield advantages considered, that is, at the average yield advantage and one standard deviation above the average. Based upon expected differences in profit, GMO corn for grain outperforms Non GMO corn for 9 of the 15 premium, yield advantage combinations analyzed -- differences in profit are positive. Note the differences reported for the 7.66 bushel per acre GMO yield advantage column. When the price premium is positive and the GMO yield advantage is 7.66 bushels per acre, Non GMO corn for grain outperforms GMO corn based upon the expected difference in profit – differences in profit are negative.

If you are interested in developing analysis for your farm, please contact me.

2017 Soybean/Small Grains Congress

This year's guest speaker will be Horst Bohner. Horst has been the provincial Soybean Specialist with the Ontario Ministry of Agriculture, Food, and Rural Affairs since 2001. He works closely with producers and researchers to address soybean production issues. His responsibilities include field research validation, improving production techniques, and providing soybean information to Ontario growers. Ontario growers harvested 2.7 million soybean acres this year. To hear Horst give a year-end review of Ontario's soybean season, go to https://www.realagriculture.com/2016/12/soybean-school-what-we-learned-in-2016/.

Come and get all the latest on soybean and small grains production from Cornell researchers, extension, and local industry. Visit with all of your favorite local industry representatives at the Ag. Exhibitor Tradeshow and get answers to all your questions on the latest technology and innovations!

Wheat and Soybean Diseases

Back to the BMP's of Spraying: Getting Ready for Dicamba Resistant Soybeans

The Economics of Increasing Soybean Yields

NY Soybean Yield Contest Winners - How did they do it!

Cornell Small Grain Variety Trial Summaries

Malting Barley Update

Soybean Insect and Weed Pest Management

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Registration starts at 8:30 a.m.
Presentations begin at 10:00 a.m. and program ends at 3:00 p.m.

February 8, Quality Inn & Suites (formerly Clarion Hotel), Batavia
February 9, Holiday Inn, Waterloo

Please make reservations by contacting:
Cathy Wallace: 585-343-3040 x138 or cfw6@cornell.edu

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$50, for those not enrolled in the NWNY Team through your local county extension office.
(If you do not receive Ag Focus, the monthly team newsletter, you are not enrolled.)

$35 for those enrolled in the NWNY Team.

Training Resource Corner: Safety

By: Libby Eiholzer

Why it's important: We all know why an emphasis on farm safety is important: at the end of the day we want everybody to be safe and healthy. That includes farm owners, employees, contractors, service providers, visitors, and anybody else who might stop by the farm. While we all have a certain amount of common sense to rely on, it's important to make safety a priority at your farm. One way to create a culture of safety is to provide regular safety training. This type of training doesn't have to be time-consuming or boring. It can take as little as 10-20 minutes to conduct a training session on how to use a fire extinguisher or an emergency eye wash station.

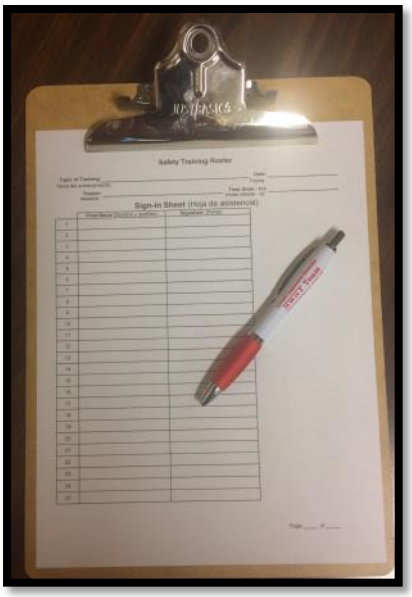

Photo source: Libby Eiholzer

* Important Note for Farms Subject to OSHA Regulation* (Farms with 11 or more non-family employees): Whenever you train your employees on safety, make sure to document it. For every training, prepare a sheet with the names of the attendees and the person who conducted the training, the date, time, and topics covered. Save these sheets in a folder or notebook in order to maintain a record of all your trainings.

Key Resources:

- **New York Center for Agricultural Medicine and Health (NYCAMH):**

http://www.nycamh.com/programs/farmsafetytrainings/

I have been collaborating with NYCAMH to provide training to farms in our team's 10-county region for the past few years. This training is generally free to the farm (NYCAMH receives a limited amount grant funding to cover the cost of training). It's a great idea to schedule annual training- you can contact Libby or NYCAMH directly to set this up. Other resources include Spanish/English safety posters that you can download from the website and a catalog of PPE and retrofit PTO shields that you can buy: all good resources for keeping your employees safe and healthy.

- **Ohio State University Extension :**
  - English Safety Videos: http://agsafety.osu.edu/programs/farm-sos-strategies-safety
  - Bilingual Tailgate Training Modules: http://agsafety.osu.edu/programs/cfaes-osha/tailgate-safety-traininig-employees

These two links are just a small part of the Ohio State University's Agricultural Safety & Health Program. In addition to the videos and training modules they also have safety posters, factsheets, and more.

- **Bobcat:**

https://www.youtube.com/playlist?list=PLD26EEC73C0577516

Bobcat offers several training videos on skid steer safety in English and Spanish. CAT has English safety training videos available online (https://www.youtube.com/playlist?list=PLo9oS-alFy222MVAtox7Pgi3fj_GJ8x8x), and Spanish videos on DVD available from your retailer.

- **University of Wisconsin Extension:** https://www.youtube.com/playlist?list=PLvRncdTWMI7_R4a-uAtAR8qPi4nN-piSI

This YouTube playlist offers training videos in Spanish on skid steer, loader and tractor operation.

- **Upper Midwest Agricultural Safety and Health Center:**

http://umash.umn.edu/stockmanship/

UMASH defines dairy stockmanship as "a practice which promotes positive animal handling…important for both animal and worker safety." Their website provides a number of posters with reminders on how to safely move cows. There are also four videos available: Using Predictable Animal Behavior to Increase Milk Production, How a Cow Uses Her Senses, Working with the Pressure Zone, and Moving Cows More Effectively. Both the posters and videos are in English and Spanish.

- **AgriSafe Network:** http://www.agrisafe.org/

This website hosts monthly webinars on relevant safety topics. They have a series of videos in English about the proper use of PPE, including respirators.

Forage Congress

February 28, 10:00 a.m. - 3:30 p.m.

Genesee River Restaurant, 134 N. Main St., Mt. Morris

"Building Your Whole Farm Plan from the Ground Up"

Precision Feeding & the Economics of High Forage Diets

Low Lignin Alfalfa Varieties

Double Cropping Panel

Bag vs. Bunk - Pros & Cons

RESERVATIONS MUST BE RECEIVED BY:

FEBRUARY 21, 2017

Contact: Cathy Wallace: cfw6@cornell.edu or cfw6@cornell.edu

$50, for those not enrolled in the NWNY Team

$35, for those enrolled in the NWNY Team

Are your workers protected from respiratory hazards?

Melissa Horsman, PPE Project Coordinator, explains proper respirator fit & demonstrates how to do a seal check.

You may need respiratory protection if you or your employees:

- ❖clean barns or animal confinement areas
- ❖mix footbath chemicals
- ❖apply pesticides, fertilizers or other crop chemicals
- ❖work with silos, grain or silage

Masks and respirators must be selected to match each respiratory hazard, and must fit the face properly. OSHA requires a fit test be performed with the same make, model, style, and size of respirator before it is used. NYCAMH provides on-farm training and fit testing services for workers to learn how to use, clean and store a respirator properly. We handle OSHA medical clearance and paperwork requirements for $25 per person. We also sell low-cost personal protective equipment (PPE) and offer free technical assistance for selection of respiratory protection, as well as on-farm safety and emergency response training for workers. Please call 1-800-343-7527 or email info@nycamh.com for more information.

2017 Pesticide Training & Recertification Series

Mondays, Jan. 30, Feb. 6, 13, 20, 7:00 - 9:30 pm

Exam Monday, Feb. 27, 6:30 - 11:00 pm

CCE - Ontario County

480 North Main Street, Canandaigua

Anyone interested in obtaining a pesticide certification and meets the DEC (Dept. of Environmental Conservation) experience/education requirements **OR** current applicators seeking pesticide recertification credits should attend. 2.5 recertification core credits will be available for each class. $175.00 for certification which includes the training manuals and all 4 classes. Does not include the $100.00 exam fee. Recertification is $25.00 per class.

Registration:

Nancy Anderson: 585-394-3977 427 or 436

Registration form is available on the website:

www.cceontario.org

Wednesday Webinars in Spanish Dairy Cow Management

Calving Assistance Management

January 25, 12:30 - 1:00 p.m.

Reproduction Management

February 22, 12:30 - 1:00 p.m.

Reproduction Management

March 29, 12:30 - 1:00 p.m.

Reproduction Management

April 26, 12:30 - 1:00 p.m.

These webinars will be presented entirely in Spanish. No registration needed. Just go to the website: https://prodairy.cals.cornell.edu/production-management/dairy-webinars/spanish-webinars at the time of the webinar and click "Join Webinar". Recordings will be posted to the website afterwards.

Upcoming Webinars:

A Repro Update

January 9,

Presented by:

Jeff Stevenson, Kansas State University

http://hoards.com/flex-309-Webinars.html

Technology Tuesday Series:

Feed Management in Robotic Milking Herds

January 10, 8:30 - 10:30 a.m.

Presented by:

Mat Haan, Penn State Extension

http://extension.psu.edu/animals/dairy/courses/technology-tuesday-series

Cattle Marketing

January 12, 12:00 p.m.

Presented by:

Lowell Midla, MS, VMD, Merck Animal Health

http://nationaldairyfarm.com/merck-training-materials

The Sixth Element - Part 2

By Timothy X. Terry
Regional Dairy Strategic Planning Specialist

The Supply

You have several choices for the types of piping to get water out to the waterer: Copper, galvanized, PVC, HDPE, and PEX. Copper is great in the milkhouse and utility room but may not be the most cost effective for a barn watering system. Galvanized pipe is strong, but requires threading dies and fittings, is prone to rust at the fittings, and susceptible to hard water deposits.

PVC is rigid, although long radius curves with smaller diameters are possible, preformed fittings are required in order to make directional changes.

HDPE (High Density Polyethylene) is the black pipe that usually comes in 250' rolls. Specify minimum 160 psi. Bends to a tighter radius than PVC. Uses barbed fittings and band clamps. Easily replaced in a sleeved pipeline.

PEX (cross linked polyethylene). Relatively new, but functionally similar to HDPE. It can tolerate stresses (i.e.-freezing) without bursting like HDPE. Kinks and freeze blisters are easily corrected with a blow dryer or heat gun. Requires specialized tools in order to make connections. May not be as readily available as HDPE.

Waterers typically require a supply volume of 3 – 5 gallons per minute. That roughly translates into a ¾" diameter pipe to each waterer. So now you see why a single ¾" or 1" pipe supplying all the waterers on one side of the barn (Daisy Chaining) can't possibly work.

So how big of a supply line do you need? It's simple to figure out if you keep in mind these rules of thumb: #1. If you increase the diameter of the pipe 50% you double the capacity; #2. If you double the diameter you quadruple (4X) the capacity (all other things being equal). For example, starting at the waterer furthest from the source (#4 Fig. 2) you know you need at least a ¾" pipe (blue lines). Working back towards the source there is a second

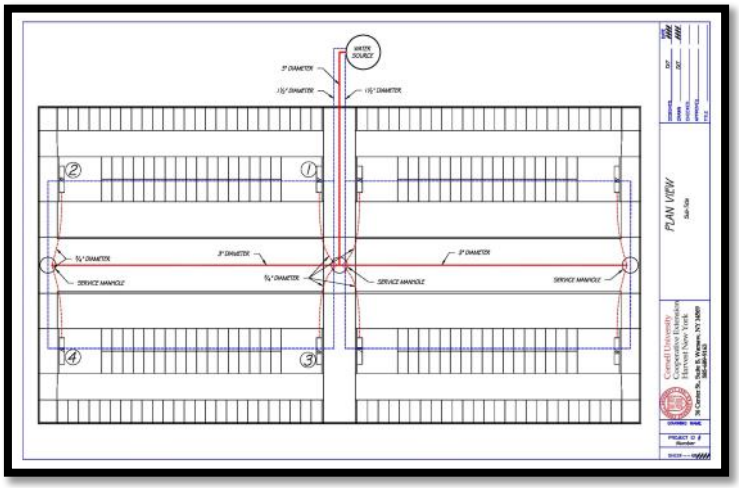

Figure 2- Watering System Layout

waterer (#3), so using rule of thumb #1: ¾"+ (50% of ¾") = $1^{1}/8$" diameter needed. However, $1^{1}/8$" is an odd size and generally you move up to the next size pipe, but, in this case, a 1" diameter pipe should be sufficient. Continuing back you have two more waterers (1 & 2) so using rule #1: 1" + (50% of 1") = 1½" diameter – a standard pipe size, or using rule #2 (4 waterers total): ¾" x 2 = 1½". Funny how that works out, huh? So to supply the entire side of the barn you would need at least a 1½" pipe coming from the source. Optionally, you could step down the pipe size to 1" between the first and third waterers. However, if you were to maintain the 1½" pipe all the way around the barn it would provide additional flexibility and a factor of safety. Should one of the mains fail, you could still supply water from the other direction; you would just need to have strategically placed valves during installation. One more important design feature – each waterer must have its own shut-off valve. That way if something happens to an individual waterer you don't have to shut down the entire system while you make repairs.

Similarly, in stall barns, you ALWAYS want to loop the water system. You may also want to consider installing several valves and unions in the loop to make isolating and servicing small sections easier.

In an intensive grazing situation consider how many waterers you're likely to have on any one line and size accordingly. Long runs (>1000') and/or changes in elevation (>33') may require some engineering due to friction and head losses in those situations.

As an alternative in the freestall, you could install a single 3" main (red lines, Fig.2) and then tee off of the main with individual valves and ¾" pipes to each waterer. The service manholes provide easy access to the valves and a shorter section of pipe to replace should the need arise. The 3" diameter pipe is oversized for its present installation, however, in this configuration it would be very easy to extend the supply pipe to service the next expansion. A 3" pipe should supply 16 waterers so potentially you could double the size of this facility without any retrofitting of the water supply system.

As a further alternative you could use the 3" line to build a system with virtually no moving parts using Archimedes' principles of hydrostatics. In order to work there must be a reservoir (large tank) set up at a specified elevation. The 3" pipe is plumbed into the bottom of the reservoir and then branches out to each of the waterers. (These waterers are usually cast-in-place concrete vats.) A riser from the main line feeds up into the bottom of the waterers, and the water level is determined by the elevation of the water in the reservoir. Since water always seeks its own level, if cows begin drinking heavily from one waterer (i.e. - parlor exit, barnyard entrance) more water can be supplied very quickly from the reservoir or a nearby waterer. Unfortunately, this system requires a laser level and can be tricky to set up.

Cooperative Extension Association of Livingston
NWNY Dairy, Livestock & Field Crops Team
3 Murray Hill Drive
Mount Morris, NY 14510

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JANUARY 2017

Save the Date...

10 ***NYCO Meeting: Alternative Crops & Weed Control***, 10:00 a.m. - 2:00 p.m., Jordan Hall, Geneva Exp. Station, 614 W. N. Street, Geneva. No RSVPs or cost to attend. Participants are asked to bring a dish to pass for potluck lunch. For more information contact: Fay Benson at 607-745-3807 or afb3@cornell.edu

11 ***WNY Corn Congress***, 10:00 a.m. - 3:00 p.m., Quality Inn & Suites (formerly Clarion), 8250 Park Road, Batavia

12 ***Finger Lakes Corn Congress***, 10:00 a.m. - 3:00 pm, Holiday Inn, 2468 NYS Route 414, Waterloo

20-21 ***New York Beef Producers Association Annual Meeting, Winter Conference & Awards Banquet***, The Theme: "Healthy Cows, Profitable Producers, Happy Consumers", 8:00 a.m. - 5:00 p.m., Doubletree Hotel, 6301 State Route 298, E. Syracuse. For more information contact Brenda Bippert: 716-902-4305 or nybeefproducers@aol.com

23 ***Pesticide Worker Protection Standards Update***, 1:00 p.m. - 2:30 p.m., CCE-Ontario Co., 480 N. Main St., Canandaigua. NYSDEC Region 8 Pesticide Control Specialist, Chris Wainwright will update participants on the new revisions and how they will affect your farm operation. $15.00 per person. Registration: Nancy Anderson: 585-394-3977 x 427 or www.cceontario.org

26 ***NY Corn & Soybean Growers Assn. Annual Meeting***, 9:00 a.m. - 3:00 p.m., Holiday Inn, Liverpool. For more information contact: Colleen Klein at 585-689-2321

28 ***NY Pork Producers Annual Meeting***, Registration: 8:00 a.m., Program starts: 8:45 a.m., Holiday Inn Buffalo Airport, 4600 Genesee St., Cheektowaga. To pre-register: www.newyorkpork.org. For questions, contact: Krista: 716-697-3031 or info@newyorkpork.org

31 ***The Academy for Dairy Executives***, 2nd Session, Country Inn & Suites, 130 North Main Street, Mount Morris

FEBRUARY 2017

1 ***The Academy for Dairy Executives***, 2nd Session, Country Inn & Suites, 130 North Main Street, Mount Morris

8 ***WNY Soybean/Small Grains Congress***, 10:00 a.m. - 3:00 p.m., Quality Inn & Suites (formerly Clarion), 8250 Park Road, Batavia

9 ***Finger Lakes Soybean/Small Grains Congress***, 10:00 a.m. - 3:00 p.m., Holiday Inn, 2468 NYS Route 414, Waterloo

14 ***NYCO Meeting: Mid Scale Poultry Production***, 10:00 a.m. - 2:00 p.m., Jordan Hall, Geneva Exp. Station, 614 W. N. Street, Geneva. No RSVPs or cost to attend. Participants are asked to bring a dish to pass for potluck lunch. For more information contact: Fay Benson at 607-745-3807 or afb3@cornell.edu

28 ***Forage Congress***, Genesee River Restaurant & Reception Center, 134 N. Main St., Mount Morris. See page 12 for more details