

# AG FOCUS



## Farm Safety for Grain by Mike Stanyard

In the past month I have seen plenty of bunk silo safety articles which are a great reminder of how important it is to stay alert and watch out for everyone working around us. Now that most of our corn silage is put under cover, I thought we should switch gears and talk some about safety issues around the grain bins as corn and soybean harvest begins. Below are some great suggestions from a farm safety website, <http://farmsafety.mo.gov/safety-topics/grain/>.

**Never Enter Flowing Grain Bin.** Suffocation is one of the most common causes of death involving grain bins. This occurs when someone enters a bin with flowing grain and is pulled under and covered with grain. Many farmers underestimate the massive force behind flowing grain. Standing on moving grain can be deadly; the grain works like quicksand to create suction that can bury a person in mere seconds. Do not enter bins while grain is loaded or unloaded; wait until the dust clears so you can clearly see your footing before entering. For more safety details see the OSHA fact sheet, Worker Entry into Grain Storage Bins, <https://www.osha.gov/Publications/grainstorageFACTSHEET.pdf>.

**Shut off and Secure Power Sources.** Be sure to turn off and lock out all power equipment associated with the grain, including the augers used to help move grain, when not in operation. Be especially aware of automatic unloading equipment, and keep children away from operating grain augers at all times.

**Avoid Carbon Dioxide.** Grain fermentation produces carbon dioxide, a colorless, odorless gas. Grain bins often have an oxygen-deficient atmosphere. Working in a grain bin where carbon dioxide is present can be very harmful to your health. Once exposed, the carbon dioxide can get in your bloodstream and slow down your breathing, which can cause drowsiness, headaches and even death by suffocation. To reduce the hazard, open all manholes and doors to force air through the bin before working inside.



**Wear Dust Mask.** Even a small amount of spoiled grain can produce millions of tiny mold spores which easily become airborne when disturbed. Airborne mold spores can be inhaled into the lungs through the nose and mouth, causing reactions so severe that sometimes hospitalization is necessary. Farmers working without respiratory protection inside a bin or other grain storage facility where moldy grain is present are especially vulnerable to mold and dust reactions. Always wear a respirator capable of filtering fine dust particles. Avoid unnecessary exposure to mold because your tolerance may be reduced with each repeated exposure. Be sure to wear a mask that fits securely around the mouth and nose to protect you from grain dust and fungus in moldy grain.

**Use Equipment Guards and Shields.** Equipment guards and shields create fewer opportunities for farmers and workers to become entangled in moving equipment parts. Removing equipment guards and not replacing them is a common cause of injury in farmers. When repairing machinery, be sure to replace all guards and shields when finished to reduce injury during loading/unloading processes. It is extremely important to make sure there is a guard on a PTO-driven grain auger.

*(Continued on page 4)*

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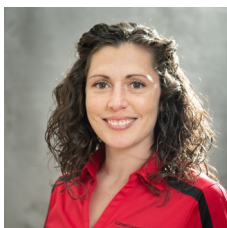
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The blog will feature **Crop Alerts, Dairy Alerts, Bilingual (Spanish) Resources, Upcoming Events** and more from our team members. You can visit the blog at:

<https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/>

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## Farm Safety for Grain

(Continued from page 1)

Some PTO shafts can rotate at 540 revolutions per minute, which can cause severe injury and even death. The power shaft that moves power to the top of the auger can cause the same injuries as a rotating PTO shaft. Always replace damaged or missing PTO and power shaft shields before operation. Intake screens on augers help prevent your hands and feet from getting caught between the auger screw and tube during operation. Today, most new augers are sold with intake screens in place. If you have an older machine that does not have an intake screen, add one, and be sure to replace missing or damaged screens. Many grain augers operate on a belt or chain drive system. These belts and chains have two, or sometimes three, pinch points. A pinch point is where a belt or chain wraps onto a pulley or sprocket. If a finger or clothing item gets caught in a pinch point or the auger, it may result in severe injury, sometimes requiring amputa-

tion. Most of these systems do not come with shields but can be easily fabricated for use.

**Install Safety Equipment** Grain augers become increasingly dangerous with each hour of use. It is important to continuously review the operator's manual and examine all equipment parts to make sure the auger is in safe operating condition. Before working in bins, be sure to have all equipment in place in case of emergency. This includes full-body harnesses and life lines for easier worker rescue in case of a grain avalanche. This also includes installing rest platforms every 30 feet on vertical ladders on the outside of bins to reduce the risk of falls while climbing the bins. Strategically placing safety decals around the grain bins should alert workers to the possible dangers of flowing grain, crusted-over grain, and carbon dioxide.



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# Climate Resilient Farming: Quantifying Farm Level Economic Benefits and Costs

by John Hanchar<sup>1</sup> and Aaron Ristow<sup>2</sup>

<sup>1</sup>Cornell University/CALS and CCE NWN Dairy Livestock and Field Crops Program

<sup>2</sup>American Farmland Trust

## Summary

- Farm business owners face production, marketing, financial and other risks, and manage risks by implementing risk reducing, risk shifting and/or other strategies.
- Successful adopters of soil health systems note more stable, less variable crop production outcomes compared to past practices.
- Analysis applying reservation price for insurance concepts and historical data for a case study example farm note: a) a lower willingness to pay value for insurance (reservation price for insurance) for the soil health system period compared to the previous cropping program; b) the above suggests that reduced variability with respect to value of crop production outcomes, resiliency is characteristic of the soil health system when compared to the former cropping program.

## Background

The NYS Department of Agriculture and Markets describes the objectives of climate resilient farming as follows.

- to reduce the impact of agriculture on climate change (mitigation)
- to increase the resiliency of New York State farms in the face of a changing climate (adaptation)

< [Soil health system adoption by farm business owners plays a key role in achieving soil health, water quality, air quality and other environmental objectives, notably, climate sustainability objectives. Work to achieve climate sustainability objectives, for example, the dairy industry's "Net Zero Initiative," will draw upon decades of work in the soil health systems area \(Quaassdorff, M. 2021. \*Ag Focus\*. April issue\). Successful adopters of soil health systems from recent American Farmland Trust \(AFT\) Case Study work, including network farm efforts in New York, observe that successful adoption of a soil health system leads to reduced variability in outcomes. AFT soil health case study methods and results effectively quantify economic benefits and costs via before-after analyses -- val-](https://agriculture.ny.gov/soil-and-water/climate-resilient-farming#:~:text=The%20Climate%20Resilient%20Farming%20program%20capitalizes%20on%20the,short%2C%20extreme%20precipitation%20events%20in%20between%20mild%20droughts.></a></p></div><div data-bbox=)

ue of harvested crops over time and cropping program expenses (fertilizer & lime, seeds & plants, spray and other crop expenses, machinery costs, labor). To date, analyses have not reflected the value of achieving reduced variability.

## Quantifying Farm Level Benefits and Costs

Selected methods used to estimate the value of achieving reduced variability at the farm level via successful adoption of soil health systems follow.

- Analysts applied "reservation price for insurance" concepts designed to answer, "What is the most a consumer would be willing to pay for insurance against a loss?" (Frank, R. 1991. *Microeconomics Behavior*.)
- Analysis reflects historical data for a case study example farm.

Measures based upon the farm's annual farm business summary information for the period 1998 through 2019 follow.

- For the 1998 to 2014 period, the before period, the value of harvested crops in real terms (2011 = 100) averaged \$675 per acre annually, ranging from a low of \$398 per acre to a high of \$902 per acre.
- For the soil health system period, the measure averaged about \$751 per acre annually, about 11 percent greater than the average for the before period, ranging from a low of \$663 per acre to a high of \$880 per acre.
- In real terms,
  - the value of harvested crops for the before period was less than or equal to \$675 per acre 8 times over 17 years, about 50 percent of the period's years
  - in comparison, the value of harvested crops for the soil health period was less than or equal to \$675 per acre, the average value for the before period, 1 time over 5 years, 20 percent of the period's years

Suppose the example farm's owners/operators

- wish to manage risks and uncertainties associated with value of crop production variability
- define a loss equal to the actual value of production in real terms minus the coverage target value when value of production is less than a coverage target

*(Continued on page 6)*

## Climate Resilient Farming: Quantifying Farm Level Economic Benefits and Costs

(Continued from page 5)

- feel that when outcomes fall below a coverage target of \$600 per tillable acre per year, roughly one standard deviation below the average for the before period, the business' capacity to achieve financial and other objectives declines

For the 1998 through 2014 period, loss(es) occurred 2 times over 17 years, totaled about negative \$318 per acre, and averaged about negative \$19 per acre per year. In comparison, for the 2015 through 2019 period, loss(es) (as defined above) averaged \$0 per acre per year over 5 years.

Given the before period variability, the farm business owner would be willing to pay at most \$19 per acre per year for fair gamble insurance coverage against a loss, excluding administrative and other risk shifting charges. Analysis for the after period suggests that the farm business would be willing to pay at most \$0 per acre year for insurance coverage against a loss. The lower willingness to pay value (reservation price for insurance) suggests

- a more favorable risk management environment is characteristic of the soil health system when compared

to the former cropping program

- the estimated value of achieving reduced variability via soil health system adoption is \$19 per tillable acre per year calculated here as the difference in reservation price for insurance between the two periods.

### Upcoming Webinars

**October 10, 2022 - Noon (CST)**

"Selection and integration of manure processing technology"

Rebecca Larson, University of Wisconsin-Madison

<https://hoards.com/flex-309-Webinars.html>

**November 14, 2022 - Noon (CST)**

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Mike Hutjens, University of Illinois and

Mike Rankin, Hay & Forage Grower

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## Measuring Forage Inventory by Margaret Quaassdorff

Do you know how much forage you're putting into storage? How does that amount affect your or your nutritionist's feeding plan for the year? Determining your forage inventory will allow you to more accurately design diets throughout the year to contribute to a consistent ration for healthy cows and more predictable milk production. Some bankers also like to see feed listed as an asset on the farm's balance sheet. There are many ways to determine forage inventory in the early days of harvest and storage, and a few ways to double-check after fermentation and at different timepoints throughout the year. Here are a few options:

- Lower tech option: Total the weight of forage by running each truck/wagon over a calibrated drive-over scale. Make sure you subtract the empty weight of each truck or wagon from the load. Make sure to grab sample from multiple loads, especially as you move to different fields. Run dry matters on these samples and multiply to determine dry matter tons.
- Yield monitoring technology on the chopper: If you have inventory tracking technology on your chopper, make sure it stays calibrated. This technology tracks the tonnage of forage going through the chopper, and getting an accurate dry matter depends on calibration. Remember this system cannot account for the amount of forage that may not make it into the wagon/truck or that which can be blown from a truck on its way to the bunk.
- Track your wagon weight with a "smart" scale or sensor: There are a variety of companies now that offer onboard scales that send data right to your smart phone. There are also weigh sensors that are designed to work with air suspension trucks and trailers, or connect to wagon load cells.
- Drone technology: A page from the gravel industry's playbook...a drone flown over and around a pile/bunker can take many images and be stitched together using special software to capture the height, shape and contours of the stored forage. This can provide an accurate cubic volume, but we also need to know or estimate the density of the pile or bunker. Traditional-



Bunk and pile-mapping technology using drones was originally developed for the gravel industry to estimate the size of the piles. It can be used in the dairy industry to determine forage inventory. Photo: M. Quaassdorff / CCE NWNy Team

ly, a density measurement was taken by a person at different locations on the face of a bunk using a drill. This method is unsafe, and doesn't allow you to measure a new unopened pile. Instead, running estimates of a range of plausible densities (14, 16, or 18 pounds per cubic foot) can be used to get close, providing an estimate of as-fed tons. Go a step further and dry a sample to determine dry matter tons. If you are not keen on getting your drone pilot's license or investing in the drone and software technologies, be sure to ask your nutritionist as some companies are providing drone inventory estimation as a value-added service to their customers.

Now that we know what we put in the bunker, pile, bag or silo, we can more accurately predict shrink. Even with proper fermentation, you can expect 2-4% loss of dry matter during the process. Other losses to shrink can occur during facing, transport of feed and mixing. By the time the feed reaches the cow, it is not too uncommon for a dairy to lose up to 25% of the dry matter you paid for while harvesting and storing. Periodical measurements of inventory combined with projections of forage use from your nutritionist will help reduce the chance and worry that it will run out during the year.





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## Getting Ready for Overwintering Livestock by Nancy Glazier

The days are getting shorter, temperatures are cooler, and winter will soon be here (sorry). Not everyone has a barn available or can afford to build one. With some planning and forethought, an acceptable outwintering location can be found on your farm. Plan now to avoid mud and run-off the best you can.

Livestock require food, water, and shelter. When they are out of their thermoneutral zone, they will require additional nutrients for maintenance and growth or production. It can be challenging to put gain on animals in the winter so best to have them in great condition going into winter. If your goal is to have cows at 5.5, heifers at 6.0 during calving season, they need the additional body reserves in the fall to be at that level next spring. Ewes should be at 3.5-4.0 BCS at lambing. Know your hay quality by getting it tested. If poor quality or in short supply, supplementation may be needed.

Not all livestock can tolerate outwintering. Cattle and sheep tend to handle it better in the right location. Like us, livestock are impacted by wind chill factor. Wind breaks, whether hedgerows, stacked hay bales, or a barrier or wall will cut the wind. Guidelines suggest blocking 80% of the wind. This helps prevent animals bunching up right behind the break and keeps the air moving. It is inevitable that we'll get some snowstorms and strong winds. I know farmers sometimes move cattle into the woods a bit farther during the storms.

Rain and mud can be huge stressors for livestock and will depress intake. Mud that is 4-8 inches deep can depress intake 5-15%. Animals will need relief from mud with suitable bedded areas. Ideally livestock sites are on higher locations with good drainage and no risks of runoff. Gravelly knolls work great.

There are options for feeding hay. It can be fed on the ground with waste utilized for bedding. Hay feeders can be used of various types. Some reduce waste, but if left in one place the site can end up a muddy mess. Feeders can be staged in the outwintering area in the late fall/early winter, or if the ground is frozen, they can be moved. If a few paddocks need renovation, these sites may be ideal for the addition of added organic matter.

There are permanent options for feeding. These include concrete, asphalt, stone, or woodchips and can be designed for the size of your herd/flock. They need to be located where they are accessible by equipment. It is also



The cows in this photo have access to a hay feeder plus hay on the ground for feed and bedding. Photo: N. Glazier / CCE NWNV Team

helpful if hay is stacked nearby and/or easily accessible. The pads may need to be scraped periodically to remove mud and manure.

Water is essential since water drives feed intake. This can definitely be a hassle when outwintering if no frost-free waterers are used. Some require no electricity. Hauling is challenging as well. Water from streams or ponds need to be very carefully managed if used.

This is just a short overview of some things to consider. With a little planning, livestock do well outside through winter months.



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# Farm Meetings, Clogged Toilets and the Sacred Cow Kaitlyn Lutz

Farm meetings are boring. It's always the same thing. We want to know more about the bigger picture, what is going on with the farm.

This was feedback from some employees on one of the farms where I go monthly to translate their employee meetings. This farm, whose managers do an excellent job with human resource management and employee communication, decided to listen. So, in this article, I want to share with you what they did to address this issue and get employees excited and engaged in their monthly meetings.

## Don't flush tissues!

How many of you have talked to your employees about putting the toilet paper in the toilet, not the garbage? But wait, don't put tissues, paper towels or anything else down there. Why? Well, Shelley Stein decided to make it really clear with a simple visual experiment.

Step 1: put toilet paper in water

Step 2: put tissue in water

Step 3: observe

Now employees can see that tissues DO NOT break down in septic systems, despite looking like toilet paper. Many farm employees are hands-on learners, so incorporating small demonstrations or trainings in their work environment go a long way.

## The birthing center

Since education is important to the Stein Family, they decided to send cows to the NY State Fair's birthing center. To keep employees in the loop as to why they had cows coming and going and why Tasha would be absent from the farm for 3 days, they explained the birthing center and showed them the livestream video during a meeting. The employees' reactions: "Can we go next year? People in the US really do not know where their milk comes from?"

What a way to get your employees excited about the dairy industry and involved in a larger way!

## The sacred cow

A Hindu couple from a local temple had recently come to the farm to perform pre-wedding rituals. Tasha explained to the employees who these visitors were and taught us all a bit about these unique events that revolve around the very animals we all work with day in and day



Tasha Stein Sutherland with a volunteer at the NY State Fair Birthing Center. Photo provided by: Tasha Stein Sutherland

out. Some of these include:

- The husband and wife must be blessed by a cow, individually, the week before the wedding. What does that mean? Well in this case, they needed a cow to accept feed from their hands as an offering. Of course, they went straight to the Jersey pen!
- Cow manure is also considered sacred, and a statue can be made from dried manure. In this case, the wife made a statue of her deceased grandparents to bring their spirits to the celebration. Interestingly, the manure must be directly from a cow before it touches the ground!

The point of sharing this experience with you is to illustrate how we can connect on a different level with our employees. One thing I have heard repeatedly in my new role working with dairy employees with the NWN team is that there is an interest in knowing more about the bigger farm picture and how they fit in. So, for your next employee meeting, challenge yourself to get creative and think outside of the box! It can be as simple as sharing your family's story or dissolving toilet paper in water.



Molding a statue from cow manure honors deceased family members.



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Other people who qualify as farm workers are also people who retired from farm related activities.

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# Biochar Use in Sustainable Agriculture

by Jodi Letham

This article draws heavily from Chapter 11 in *Biochar for Sustainable Agriculture*, page 211-224 cited and referenced here:

Peiris et al., 2019

C. Peiris, S.R. Gunatilake, J.J. Wewalwela, M. Vithange

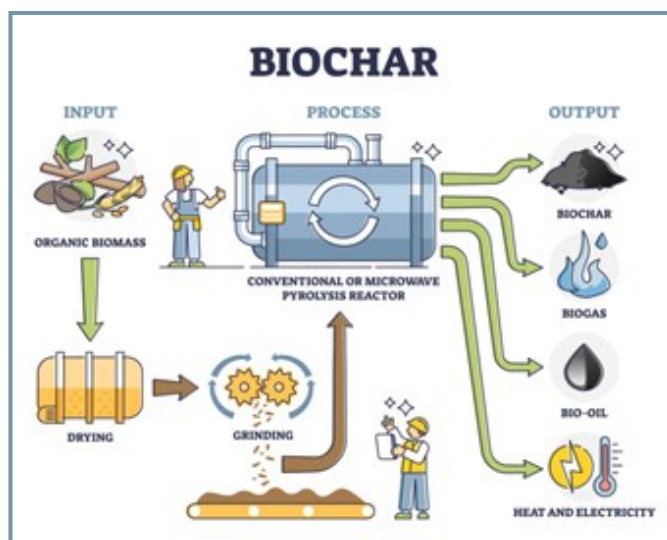
## Biochar for sustainable agriculture

Biochar From Biomass and Waste, Elsevier (2019), pp. 211-224,

<https://doi.org/10.1016/B978-0-12-811729-3.00011-X>

A major focus on soil health has been due in part to achieving sustainable agriculture goals. Sustainable agriculture simply includes practices integrating natural processes in soil and plants such as soil regeneration, nitrogen fixation, nutrient cycling, competition, predation, and parasitism into agriculture activities; eliminating damaging nonrenewable inputs to the environment; and improving farmers knowledge and capabilities (Peiris et al., 2019, p.213). Many farms are concentrating on ecologically friendly, economically profitable, and long-term viable methods for agriculture production. Among these approaches is the recent incorporation of biochar as a soil amendment. Biochar is a renewable, environmentally friendly, low cost material with the potential to increase soil retention and nutrient recycling abilities; increase carbon sequestration; enhance cation exchange capacity (CEC) in soil; act as a reservoir for macro-and micronutrients; stimulate microbial activity and possibly contribute to enzyme dynamics in soil; and reduce nitrous-oxide and methane emissions (Peiris et al., 2019.p.213).

The productivity of soil amendments depends on biochar's surface charge at operational pH, functionality and morphology, CEC, ash content, etc. (Peiris et al., 2019, p. 213). Biochar's properties depend on feedstock type, pyrolysis circumstances and age. The temperature at which biochar is produced has a crucial role in determining the amount of nutrients it contains. For example, according to Peiris et al., at higher pyrolysis temperatures carbon loss increases, leaving a higher percentage of stable nutrients. However, it's important to know that only a small



Biochar, biogas, bio oil and energy production by conventional or microwave pyrolysis reactor. Illustrated scheme with the process stages. Means of carbon sequestration and climate change mitigation. Image source: iStockphoto.com

portion of the nutrient content in biochar is plant available since the other fraction exists in unmanageable forms (Peiris et al., 2019, p.214). Multiple studies have indicated that newly manufactured biochars have a high bioavailable nutrient content and the ability to release increasing amounts of nitrogen and phosphorus (Peiris et al., 2019, p. 215). Studies have also reported a decline in nutrient values of biochar after 1 year of application, making the unavailability of nutrients for long-term crops a major setback to its direct application (Peiris et al., 2019, p. 215).

More research is needed on the long-term nutrient availability effects of biochar. For anyone interested in current research on biochar uses in agriculture, check out this book and many other peer-reviewed publications cited within it.



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<p><b>23.5 Ton Crane</b></p>  <p><b>CAT 6N2</b></p> <p>2007 PETERBILT 367 CRANE TRUCK; 430 HP CAT C13; 8LL Manual Trans.; Double Frame; Telex 814792 23.5 Ton 92' Reach Crane w/4-Outriggers; 36" Bunk; 18" Steel Deck; 20K Front; 40K R/A; Steerable Lift Axle; 21" WB; 105,127 Miles; Sk. # 5938 - \$71,900</p>	<p><b>Clean Water Truck</b></p>  <p><b>Low Miles</b></p> <p>2012 MACK GU813; Mack MP7 395 HP; 13-Spd.; Double Frame Flatbed w/Hab 288P H Pro Knuckleboom Crane w/Renote; 24" Steel Deck; 20K Front Axle; 44K Rears on Camelback Susp.; 20K Rear Mounted Lift Axle; 24" WB; Crane Can Be Removed; 28" Frame Behind Cab; 20" CT; 387,837 Miles; Sk. # 6368 - \$41,100</p>	<p><b>20K/45K Rears</b></p>  <p><b>475 HP</b></p> <p>2007 PETERBILT 357; 475 HP CAT C13; 18-Spd. Manual; Clean Daycab w/Tulsa Winch; 20K F/A; 46K Full Locking Rears; Chalmers; 224" WB; 496,503 Miles; Sk. # 6241 - \$39,900</p>	<p><b>24 ft. Flatbed</b></p>  <p><b>Heavy Spec</b></p> <p>2009 KENWORTH T800 FLATBED; CAT 335 HP; 10-Spd. Manual; Clean Double Frame Flatbed Truck w/Puller P4 1001 Rear Mounted Knuckleboom; 42" Rides; 20K Front Axle; 46K Full Locking Rears on Neway Air Ride; 23" x 96" Aluminum Deck; 4.63 Ratio; 27" WB; 192" CT and 24" Frame Behind Cab; 300" &amp; Knuckleboom Can Be Removed; 278,458 Miles; Sk. # 6308 - \$48,900</p>
<p><b>45K Rears</b></p>  <p><b>CAT 6N2</b></p> <p>2003 KENWORTH T800; 475 HP CAT C13 6N2 Turbo; 8LL Manual Trans.; Clean Daycab w/12,800# Front Axle; 46K Rears On KW 8-Bag Air Ride; 4.11 Ratio; 186" WB; Wetline; 447,898 Miles; Sk. # 5925 - \$49,900</p>	<p><b>(2) Available</b></p>  <p>2004 &amp; 2003 PETERBILT 378 TRI-AXLE DUMP TRUCKS; 475 HP CAT C13 Single Turbo; 13-Spd. Manual; 20K F/A; 44K R/A; Air Trac Susp.; Double Frame; 21" Aluminum Box; AirTrac Tag; 540,000 Miles; Sk. # 6345/6346 - CALL FOR PRICE</p>	<p><b>Dozens of Mack Dumps!!</b></p>  <p>1999 MACK R068S DUMP TRUCK; 400 HP Mack E7; Engine Brake; 8LL Trans.; Rubber Block Susp.; Tri-Axle; 19" Steel Body; 20,000# F/A; 46,000# R/A; 22.5 Tires; 248" WB; Spoke Wheels; EXPORT PRICED!!!; 777,148 Miles; Sk. # 5932 - \$19,900</p>	<p><b>22 ft. Frame</b></p>  <p><b>485 HP</b></p> <p>2006 PETERBILT 367; Cummins ISX 485HP; Allison Auto. Trans.; Clean Single Frame Dump Truck w/15" Steel Body w/3 Sides and 1" Sideboards; Tap; 14,300# F/A; 46K Locking Rears on Air Trac Susp.; 204" WB; Plumbed for Pup Trailer; Engine Had Complete Rebuild (Paperwork Included); 383,992 Miles; Sk. # 6264 - \$62,900</p>
<p><b>5x5 Flatbed</b></p>  <p><b>Low Miles</b></p> <p>2005 PETERBILT 357 5x5; Clean Double Frame 318" Flatbed Truck; CAT 350 HP; 8LL Trans.; 23K F/A; 46K Full Locking Rears; 425/62.5 Tires; Hendrickson Holman Susp.; 5.65 Ratio; 28" WB; 21" CT; 31" Frame Behind Cab; 137,760 Miles; Sk. # 6323 - \$49,900</p>	<p><b>Heavy Spec Long Flatbed</b></p>  <p>2006 KENWORTH T800 FLATBED; CAT 335 HP; Double Frame Flatbed Truck; 20K F/A; 44K Full Locking Rears; 21" x 96" Steel Deck; 5.29 Ratio; 244" WB; Hendrickson Susp.; Flatbed Can Be Removed; 19" Frame Behind Cab; 162" CT; 12,584 Hours; 137,760 Miles; Sk. # 6323 - \$49,900</p>	<p><b>Heavy Spec Chassis</b></p>  <p>2006 PETERBILT 367 CAB &amp; CHASSIS; Cummins 370 HP; Engine Brakes; 8LL Manual Trans.; Quad-Axle w/Double Frame; 18K F/A; 46K Full Locking Rears; (2) 11K Steerable Lift Aides; Air Trac Susp.; 22" Frame Behind Cab; 212" CT; 302,500 Miles; Sk. # 5831 - \$45,900</p>	<p><b>Allison Auto. Dump</b></p>  <p>2008 PETERBILT 367; Cummins ISX 485HP; Allison Auto. Trans.; Clean Single Frame Dump Truck w/15" Steel Body w/3 Sides and 1" Sideboards; Tap; 14,300# F/A; 46K Locking Rears on Air Trac Susp.; 204" WB; Plumbed for Pup Trailer; Engine Had Complete Rebuild (Paperwork Included); 383,992 Miles; Sk. # 6264 - \$62,900</p>
<p><b>Heavy Spec Dump Truck</b></p>  <p>2008 PETERBILT 340 DUMP TRUCK; Pacor P30 330 HP; 13-Spd. Manual; Double Frame; 19" Heated Steel Body; 20K Front Axle; 20K Lift; 46K Full Locking Rears; 24" WB; Tarp; 5.25 Ratio; Air-Trac Suspension; Hitch and Plumbed for Pup Trailer; 214,387 Miles; Sk. # 6332 - \$49,900</p>	<p><b>Attn. Farmers!! Feed Mixer</b></p>  <p>2007 MACK CTP713; 370 HP Mack MP7; Clean, Low Hour Double Framed Feed Mixer Truck w/Supreme Int'l. Inc. 1400T Feed Mixer; Digi-Star E23400 Scale System; Allison Auto. Trans.; 20K F/A; 46,400# R/A; Camelback Susp.; 254" WB; 198" CT; 24" Frame; 79,280 Miles; Sk. # 6363 - \$164,900</p>	<p><b>2010 Western Star 4900</b></p>  <p>2010 WESTERN STAR 4900; Detroit Diesel Series 60 14.0L 495 HP; 18-Spd. Manual; Clean Fuel Tanker Truck w/5,500 Gal. Hainnits Steel Tank &amp; Pump; 245" WB; 14,700# Front Axle; 44K Full Locking Rears on AirTrac Susp.; 3.90 Ratio; We Will Separate Tank from the Chassis; 20" Frame Behind Muller; 158" CT; 223,505 Miles; Sk. # 6394 - \$50,900</p>	<p><b>6x6 Crane</b></p>  <p>2007 MACK CTP713; Mack MP7 370 HP; 10-Spd.; Clean Cab &amp; Chassis; 18K Front Axle; 46K Locking Rears; Air Ride Susp.; 27" WB; 192" CT; 21" Frame Behind Cab; 118,186 Miles; Sk. # 6393 - \$47,250</p>
<p><b>Kuhn Feed Mixer</b></p>  <p>2012 KENWORTH T400 FEED MIXER; 330 HP Pacor P30; Allison Auto. Trans.; Clean Double Frame Feed Mixer Truck w/Holman Proved 70110 Feed Mixer; Digi-Star E23800 Scale System; 18K F/A; 46K Locking Rears; Hendrickson HVI Susp.; 24" WB; 175" CT; 23" Frame; 7,171 Hours; 59,926 Miles; Sk. # 6364 - \$59,900</p>	<p><b>Tri-Drive Crane</b></p>  <p>2006 WESTERN STAR 4900 TANDEM TRI-DRIVE CRANE; 530 HP CAT C13; Double Frame; Tri-Drive; Twin Truck w/Tare Storage TM7571 Crane w/Willow; 32.5 Ton Capacity; 71' Reach; 36" Bunk; (4) Outriggers; 38K F/A; 57K Triple Locking Rears; RHM Wheel 40" Bridge Measurement; 4.96 Ratio; 32.5 Ton Lift Hook; 221,495 Miles; Sk. # 6361 - \$72,900</p>	<p><b>Heavy Spec Chassis</b></p>  <p>2004 KENWORTH W900; 335 HP CAT C10 Engine; 8LL Trans.; Cab &amp; Chassis; 20K F/A; 46K Full Locking Rears; 252" WB; 21" Frame Behind Cab; 150" CT; 4.89 Ratio; Holman Susp.; 118,703 Miles; Sk. # 6075 - \$29,900</p>	<p><b>118,700 Miles</b></p>  <p>2001 INTERNATIONAL 6600 6x6 CRANE; 435 HP Cummins N14; 10-Spd. Manual; Double Frame; Pflman Hydra-Lift HL1580 7-Ton 65' Crane; 4-Outriggers; 20x36" Flatbed; 20K F/A; 46K R/A; Hendrickson HVI Susp.; 244" WB; 184" CT; 25.3" Frame Behind Cab; 158,174 Miles; Sk. # 6299 - \$49,900</p>

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## October 2022

**Beef Quality Assurance (BQA) Training** - October 8, 2022 from 10:00am - 2:00pm at HLW Acres in Attica, NY. Topics covered include herd health management, nutrition, behavior, and handling. Producers attending the training will become Level 2 certified. **Cost: \$5 per farm**, includes a meal provided by HLW Acres. **Questions Contact:** Nancy Glazier, CCE NWNy Team, call or text, 585-315-7746, [nig3@cornell.edu](mailto:nig3@cornell.edu). Pre-Register online by October 6, 2022, at: [nwnyteam.cce.cornell.edu](https://nwnyteam.cce.cornell.edu).

**Fall Update on Highly Pathogenic Avian Influenza Outbreak** - October 12, 2022 from 7:00pm to 8:00pm held via Zoom. Registration is required by visiting: <https://www.tinyurl.com/HPAIFall22>. Questions? Contact Nancy Glazier, [nig3@cornell.edu](mailto:nig3@cornell.edu) or 585-315-7746.

## November 2022

**Feeder School - One Day On-Farm Training for Dairy Feeders** - November 10, 2022 from 10:00am - 3:00pm in Wyoming County. Offered in both English and Spanish. Cost is \$50 per person. See page 11 for details. Register online at: <https://nwnyteam.cce.cornell.edu/events.php>

**Feeder School - One Day On-Farm Training for Dairy Feeders** - November 11, 2022 from 10:00am - 3:00pm in Ontario County. Offered in both English and Spanish. Cost is \$50 per person. See page 11 for details. Register online at: <https://nwnyteam.cce.cornell.edu/events.php>



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