Cornell Cooperative Extension | Northwest NY Dairy, Livestock and Field Crops Program

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Pricing Corn Silage — Fall 2022 by John J. Hanchar

Summary

- Analysis suggests corn silage price depends on corn silage quantities, alfalfa hay price, the price received by farmers for milk, and corn grain price.
- Analysis for NY suggests that estimated corn silage price is most sensitive to corn silage quantities, alfalfa hay price and corn grain price.
- Price estimates combined with understanding of relevant supply and demand factors from an individual farm business owner's perspective can aid decision making regarding corn silage price. Given recently available alfalfa hay and corn grain prices (April through June, 2022, and August, 2022, respectively), price analysis for NY suggests an estimated corn silage price of about $61 per ton. The fall 2021 estimate was about $57 per ton.

Determining Corn Silage Price

A farm business owner can examine how much corn silage he/she would be willing to supply to a market at a given price. Analysis of the farm business' cost structure for corn silage production combined with consideration of other factors help define the supply relationship. A seller can develop a target based upon the above, but actual market conditions provide no guarantee that a buyer will purchase quantities desired at prices that achieve the producer's target.

Some farm business owners might approach the problem of determining corn silage price from a value in production, or input demand perspective. Amounts of corn grain and corn stover in a ton of corn silage, relevant prices, and corn silage's place in the milk production process are key factors. A buyer can develop a price target based upon the above, but actual market conditions provide no guarantee that a producer will sell the quantity desired at a price that matches the buyer's willingness to pay target.

Although factors in price determination, the two approaches described above in isolation, don't completely determine price and quantity. Supply and demand relationships work simultaneously in markets to determine price and quantity. Empirical price analysis brings supply and demand relationships together to determine price.

Corn Silage Price Analysis

Empirical price analysis suggests that corn silage price is a function of corn silage quantities, alfalfa hay price, the price received by farmers for milk sold, and corn grain price. An ordinary least squares regression model expresses corn silage price as a linear function of the above variables. The statistical analysis used here is fairly basic. However, readers of the original and annual update articles note that the analysis and estimates help farm business owners price corn silage.

Corn Silage Price Estimates – Fall 2022

The ordinary least squares regression model reported in August 2012, updated here to reflect additional data available, and changes in other underlying factors, produced corn silage price estimates for NY. Below, estimated corn silage price is a function of alfalfa hay price and corn grain price with other factors (corn silage production and milk price) fixed at expected levels. Expected corn silage quantity is set at 8,279 tons.

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Inside This Issue

Pricing Corn Silage — Fall 2022

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- estimated corn silage price ($/ton) = -6.63197+ (0.19089 x price of alfalfa hay ($/ton)) + (4.34634 x price of corn for grain ($/bushel))

Suppose

- NY alfalfa hay price is $223 per ton, the three month average of the period April, May, June, 2022. (USDA/ NASS. Agricultural Prices. Washington, DC: National Agricultural Statistics Service. QuickStats website. August 10, 2022 access date.), and
- corn grain price is $5.82 per bushel (Western NY Energy. "Corn Bids." Website. August 10, 2022 access date). Approximate value based upon reported bids for fall 2022.)

Using the estimating equation and the above prices for alfalfa hay and corn grain as expected prices, estimated corn silage price is about $61 per ton. Compare this to last fall's estimate of about $57 per ton. Using an expected corn silage quantity of 7,664 tons, about one standard deviation less than the first value, yields a corn silage price estimate of about $65 per ton. Buyers and sellers use an estimate as a base, typically adjusting for quality and/or costs for harvest, hauling and storage based upon the situation, for example, when pricing standing corn for silage.

Corn silage price estimates combined with understanding of relevant supply and demand factors from the individual farm business owner's perspective, including local conditions, aids decision making regarding corn silage price.

Fall 4th Cutting Management by Jodi Letham

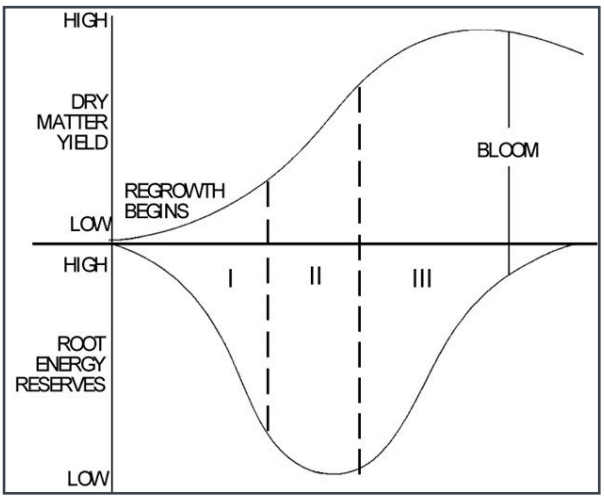
Harvest management of perennial legumes such as alfalfa requires a compromise between quality and persistence. There's no simple rule to follow when making the decision to cut. We experienced extremely hot and dry conditions after 2nd cutting which significantly affected regrowth for 3rd in some parts of our region. Harvest was light for 3rd cutting and many will plan to take a 4th this year.

Energy Reserves

In the spring and after every harvest, perennial forage legumes grow from food reserves in their taproots and crowns. High energy reserves promote quick regeneration and higher yields. The development of cold hardiness requires substantial energy reserves so that the plant can survive the winter and still grow well in the spring. Energy reserves are the highest while the plant is in full bloom and lowest shortly after cutting, when it's growing rapidly (Figure 1.) The best way to decide when to harvest is by combining plant development stage and calendar date. Seasonal weather variations can alter the relationship between development stage and energy reserves. Summer cuttings (second, third, and fourth) should be made while the crop is in the bud to early bloom stage. Some producers cut alfalfa before it's mature. A cutting interval less than 30 days between cuts might be stressful to the stand since the taproots and crowns can't retain energy. Low energy reserves cause poor regrowth (lower yields) and stand loss, often in one year. Alfalfa's deep and wide root structure helps it survive dry seasons. During drought seasons, alfalfa growth slows and short, stunted plants may blossom. Harvesting alfalfa during difficult times doesn't weaken or reduce stands. If significant late summer or fall regrowth occurs following drought-stressed alfalfa, additional harvest can be performed in the fall with less danger of stand loss.

Fall Cutting Management

Throughout the late summer and early fall, alfalfa plants are preparing for winter by developing cold resistance and storing energy reserves in their roots. Timing of fall harvest may interfere with this process. Harvesting alfalfa at a time that allows only a few weeks of regrowth before frost kill, greatly reduces energy reserves in the roots. Late harvesting also removes stubble, which catches snow and insulates plants from extremely cold air temperatures. Both circumstances increase the risk of alfalfa winter-kill.



Changes that occur in dry-matter yields and root energy reserves during growth periods of an alfalfa crop. Stage 1 is early crop growth, Stage 2 is the crop at 6-8 inches tall, and Stage 3 is at crop maturity. Source: Penn State Extension Agronomy Facts 7 "Cutting Management of Alfalfa, Red Clover, and Birdsfoot Trefoil"

Risks to stand persistence can be minimized by:

1. Taking at least one harvest during the summer at 1/10 bloom or greater.
2. Fall harvesting young stands because young stands are less susceptible than old stands to winter injury.
3. Maintaining high soil fertility levels.
4. Fall harvesting alfalfa varieties that have a good disease resistance and winter hardiness.

Optimum soil fertility levels enhance the storage of energy reserves in alfalfa roots. Maintaining high reserves of energy in the roots as winter begins does improve the ability of alfalfa to overwinter and support good spring growth. Applying fertilizer after the plant goes dormant for the winter does not benefit energy reserve storage. Contact your local extension agent or co-op to discuss fertility needs of your stands after 4th cutting. For additional information visit: https://extension.psu.edu/cutting-management-of-alfalfa-red-clover-and-birdsfoot-trefoil

Upcoming Webinars

September 12, 2022 - Noon (CST)
"Inflammation - Fiend or Foe?"
Barry Bradford, Michigan State University
https://hoards.com/flex-309-Webinars.html

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

Straight From the Horse's Mouth: What are Farm Employees Saying? by Kaitlyn Lutz

Dr. Noa Roman-Muniz is an Associate Professor in the Department of Animal Sciences at Colorado State University. Her research focuses on the intersection of human and animal wellbeing and productivity on dairy farms, which is fitting since she is a veterinarian and a native Spanish speaker. Dr. Noa recently visited us in NY to speak at the Dairy Cattle Welfare Council on employee engagement. She herself was a very engaging speaker and shared a brief recap of some of her research relevant to this topic.

So why was Dr. Roman-Muniz speaking at a welfare conference? As she puts it, "dairy workers are sort of the invisible part of our food production system…but what happens to them not only affects their performance but animal health and wellbeing, animal productivity, consumer health and the sustainability of livestock agriculture. So, they need to become visible, and we need to have them at the table if we really want to effect change."

In this article, I'll share some of the main issues that dairy workers have voiced through focus groups conducted by Dr. Roman-Muniz. I am certain that many of these issues will resonate with you. As you read, I hope that you take a minute to really ruminate on these common issues and how you could make small changes to address them with your staff.

1) **Management shapes workplace culture.** If you don't like the culture of your employees, take a hard look at your farm's management. It isn't easy to be critical of ourselves, but we all have room for improvement! Here are the key characteristics top supervisors have, reported by a focus group of dairy employees (see article in Progressive Dairy):
   a. Accessibility- *be available, especially during night shift*
   b. Fairness- *be transparent about management decisions*
   c. Knowledge- *know the job you're asking your employees to do*
   d. Communication- *supervisors are key to communicating between areas on the dairy*

2) **Relationships and communication with managers are usually described as negative.** Why? This is what employees say:
   a. **Managers don't follow up.** Not addressing concerns in a timely manner and/or not communicating with employees. This is seen as a lack of attention or caring.

      Tips: *Here is a guide to Creating Positive Workplaces from Cornell's Farmworker Program. On page 98, find a tool to use for employees to communicate when something is broken in their house as well as when they can expect it to be fixed. Also, use a whiteboard to communicate and make a habit of reading it daily. WhatsApp groups are also commonly used by foreign-born ag workers and are a great way to communicate with a group of employees, send photos, and relay tasks. Set reminders for yourself!*

   b. **Inconsistent training.** Only 2% of Latino/a workers have experience working with dairy cows when they start their first job on a dairy in the USA (Rovai, 2022). Dr. Roman- Muniz explains that there is a perception by many producers that if from a rural area, foreign-born employees likely know how to milk cows. This is simply not true, and employees are asking for more consistent and quality training.

      Tip: *check out the recently updated guide to dairy training resources on our website or contact Kaitlyn to assist with in-person bilingual trainings.*

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A supervisor drying off cows along side his employees. Photo: K Lutz / CCE NWNY Team

Straight From the Horse's Mouth: What are Farm Employees Saying?

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c. **There is a lot of work pressure, a lack of communication and clarity and a high sense of pride and perfectionism.** Employees voiced wanting to do things perfectly, but time is the constraint. One quote shared by a participant was "Sometimes one feels a lot of pressure…One is so rushed that we don't do our jobs with perfection. We do it rushing." With a tight labor market and overtime constraints we will see labor efficiency only becoming more important.

Tip: *Check out these videos by Pro-Dairy on what Lean Management is and some examples of its application on Dairy Farms in the Northeast.*

Lastly, employees voiced ideas for improving on-farm communication during the study mentioned above. Their first suggestion was consistent farm meetings. They saw this as an opportunity for staff working in different areas of the dairy to come together and update each other on what they were seeing. I don't see a lot of farms doing this, but think it is a great idea! How about quarterly meetings where the crop team and the milkers and the calf caretakers are all together to learn how their jobs influence one another. What a great opportunity for professional development and generation of new ideas!

When conducting meetings, employees warned against using a bilingual employee as the interpreter, stating that this person has all the power to leave out or misconstrue information to their personal advantage. This leads to frustration and mistrust in some circumstances. They advised using an unbiased interpreter. ***Tip:*** *consider setting a meeting schedule and sticking to it. If you need help setting up effective meetings and agendas or are looking for interpretation, reach out to Kaitlyn!*

To hear more about the intersection of human and animal wellbeing on dairy farms, join us at the Operations Managers Conference this winter. Dr. Roman-Muniz will be speaking and I, for one, am looking forward to it!

The Inaugural NY Corn & Soybean Association NY Corn Yield Tour by Mike Stanyard

Every August for three days the Pro Farmer Crop Tour occurs across six states in the Midwest. Teams of trained scouts and volunteers travel pre-determined routes in each state and take corn and soybean yield estimates which are reported at the end of each day. At the end of the tour, their primary goal is to provide the industry with potential corn and soybean yield data on a regional and state basis prior to harvest. To follow this year's tour, see their website, www.profarmer.com.

New York is not a major corn producing state so we are obviously not on their radar. But wouldn't it be nice if we had an idea of what our potential yields are each year! Well, the NY Corn and Soybean Growers Association (NYC&SGA) organized the very first NY Corn Yield Tour that happened on August 10 in ten counties in NWNY (see map). I was able to help coordinate the event which was handy since it incorporated all nine of our partner counties that we work with.

Prior to the tour, ten farms in each county, who were NYC&SGA members, were contacted and asked to identify one cornfield that accurately reflected the current conditions on their farm. Ten scout teams were put together and each one traveled out to a different county. Each team included an NYC&SGA board member and 2 to 3 local agribusiness reps. We even had one of our CCE Executive Directors on a team. Most of the teams met at Catalpa Farm in Canandaigua that morning to go over sampling protocols, get supplies and ask any last-minute questions.

At each stop, teams were able to collect field data such as the number of ears in 30 foot of row, length of grain on the ear and number of kernels around the ear to come up with a potential yield estimate for each field. Everyone thought it was a great experience. The teams enjoyed getting out in the corn and visiting with producers. All the farms thought the "Corn Tour" was a fantastic idea. All the teams met up back in Canandaigua at the end of the day to turn in all of our yield data and give feedback on the process.

The next day, August 11, was the annual NYC&SGA Annual Summer Crop Tour back at Catalpa Farms in Canandaigua. Along with top-notch presentations and field tours, I presented the "Results of the First NY Corn Yield Tour" to 200 attendees. Despite the dry field conditions we have experienced up to that point, yield potentials were still pretty good. Each county average yield is summarized in the chart below and you can see which areas have had more rainfall than others. You can really see it if you compare Wayne versus Seneca county. The lower half of Seneca was classified as D1 moderate drought at the time. The potential is still pretty good in NWNY and it now depends what temperature and moisture conditions we get from here on out. It would be great to follow up with the participating farms and see how our estimates compare to actual harvested yields.

Scout teams getting ready for the corn tour. Photo: Colleen Klein, NYC&SGA

NYC&SGA and I would love to continue to make the corn tour an annual event. We ended up sampling 109 fields that day and it would be great to sample more with more teams maybe over multiple days. I will also work with my CCE field crop counterparts in other regions to see if they can organize similar corn tours for their regions. It would be great to get a better perspective of yields in the whole state. There is also talk of including soybeans to the tour in the future.

County	Fields Sampled	Range in Yield	Average Yield
Niagara	**10**	**164 - 227**	**197.70**
Orleans	**17**	**150 - 269**	**189.72**
Genesee	**10**	**153 - 255**	**198.57**
Wyoming	**11**	**143 - 249**	**197.50**
Livingston	**11**	**156 - 228**	**187.25**
Monroe	**10**	**177 - 241**	**201.81**
Ontario	**10**	**153 - 244**	**207.50**
Wayne	**10**	**216 - 253**	**235.03**
Seneca	**10**	**120 - 203**	**163.17**
Cayuga	**10**	**165 - 223**	**195.24**
Region	**109**	**120 - 269**	**197.35**

Blizzards not Lizards by Margaret Quaassdorff

Once a year extension agents from around the country gather for the annual National Association of Agricultural County Agents Professional Improvement Conference and Annual Meeting (NACAA AM/PIC). The conference offers extension programming seminars, networking opportunities, and a chance to recognize our colleagues for the outstanding work that they do. This year's location was West Palm Beach, Florida. I was lucky enough to attend this educational opportunity and bring back some great ideas to share with farmers across our Northwest NY region.

Six extension professionals from New York attended the conference and took advantage of the multiple ways to get involved in the organization. Mary Kate MacKenzie of the SCNYDFC Team won an esteemed Early Career Achievement Award for her strong program on farm business record keeping and analysis. Katelyn Walley-Stoll from the SWDLFC Team and I won state and regional awards for Communications and Program Development. Julie Kikkert of the Cornell Vegetable Program presented a high-quality poster, Steve Hadcock of the CAAHP served as the Northeast Region President, and Beth Claypoole from CCE-Wayne County served as our Northeast NACAA Regional Director.

Some of the best parts of this conference are the built-in tours of local farms and agriculture businesses. Florida's extension agents wanted to make sure that we all left knowing that Florida is not all palm beaches and warm waters. On our way to the farms, I enjoyed Florida's beautiful scenery of grasslands, forests, orchards, and everglades. I even tried "swamp cabbage", which are delicious palm hearts cooked with bacon and seasoning, during a dinner presentation at the UF/FAS Extension office in Seminole County, Florida. I had a chance to ride around thousand-acre cattle ranches and learn about extension projects concerning native predator pressure (Florida panthers, alligators, vultures and bears, oh my!). I saw (and tasted) sugar mountains taller than a coach bus, learned about groves of citrus trees and how their byproducts are upcycled, and toured sprawling open-air dairies focused on cow comfort and efficiency technology.

I want to go into a little more detail about what I learned from a few dairies in Southern Florida. This little segment is the first in a mini-series I would like to call, "Dairy Works Here", where I give you the scoop on unique aspects of successful dairies I've toured around the country and the world.

Six extension professionals from New York attended this year's NACAA AM/PIC in West Palm Beach, FL. From L to R: Katelyn Walley-Stoll, SWNYDLFC; Mary Kate MacKenzie, SCNYDFC; Julie Kikkert, CVP; Beth Claypoole, CCE Wayne County; Steve Hadcock, CAAHP; Margaret Quaassdorff, NWNYDLFC.

Dairy Works Here: Okeechobee, FL

One dairy we visited in Florida has a milk market that works a little differently than ours in that they sell on fluid milk basis, and do not have the option to earn premiums for components. In this type of market and for this farm, Holsteins were the breed of choice for their higher milk production (~80lbs/cow) versus Jerseys. This 2200-cow dairy site kept all its heifers born on the farm and bred its cows using a high percentage of conventional semen to try to keep conception and pregnancy rates up. They admitted that the hottest months of the year gave them difficulty in managing reproduction on the farm due to heat stress. An interesting feature of the dairy was that they set up their feed center with many small bunkers in order to prevent spoilage by feeding more quickly through the narrow face. Corn and high-quality forage do not grow well on the ground owned by the dairy close to the farm, so this dairy hauls chopped corn silage 70 miles to fill the bunks each year, making their feed cost exceptionally high. One advantage to dairying in Florida is the availability of lost cost feed by-products such as citrus pulp. Citrus pulp provides cows with digestible fiber and some sugar, so it is great to mix in with the diet to make up for some of the forage chal-

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Blizzards not Lizards

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Open-air barns containing fans house cows on a Florida dairy. A flush system uses recycled water to clean the alleys and walkways. Photo by M. Quaassdorff / CCE NWNY Team

lenges. This particular dairy was also working on a new partnership with an energy company that is building a digester on their farm, and will pay them for manure contributed to the system. The farm was hopeful that this will be a good partnership, and another income source for the dairy as well as a good place to dispose of excess manure not needed as fertilizer on their landbase.

Dairies in Florida try to keep cows as cool as possible using open barns, shade cloth, fans and sprinklers. It is also common to see cows wading udder deep into cooling ponds. Despite teat ends being exposed to pond water, mastitis is not as big of a problem as you might expect. What can be a problem is alligators. If there is a standing body of water in Florida, it is safe to assume it contains alligators. Most alligators know to leave large cows alone, and prefer to eat fish, turtles and small mammals, but a cow with an injury or smaller heifers could be at risk. In the dairy industry, we always talk about heat stress and its negative effects on cow welfare and production. In research, we try to learn about cow preferences when it comes to cooling. Though not an official study, the photo of cows standing in a pond with a decent sized alligator is enough for me to assume that cooling is important enough to cows to take the risk. After seeing plentiful alligators and a multitude of other dangerous reptiles inhabiting the same areas as working farms, though it pains me to even say it, I am grateful for the Western New York winters. Katelyn and I even came up with a new slogan for NY farming, "Blizzards not Lizards".

If you would like to learn more about the dairies I visited, or see more photos from the trip, please let me know. I would be happy to share!

Cows stand in water (a means of cooling in the Florida heat) alongside a decent-sized alligator. Photo courtesy of NACAA AM/PIC Facebook page.

Monkeypox: CDC Guidance for Farm Worker Housing

Cornell Cooperative Extension AGRICULTURAL WORKFORCE DEVELOPMENT

COVID has been tough, and the last thing any of us need is a new disease. Unfortunately, Monkeypox is circulating in the population. The U.S. Centers for Disease Control and Prevention (CDC) has posted guidance about Monkeypox to their website. CDC indicates the disease is spread through close contact, including: direct contact with a rash, respiratory secretions, and through contact with shared fabrics like clothing, bedding, or towels. For these reasons, CDC gives particular guidance for congregate housing settings, which would include farm worker housing in many cases. Employers who operate farm worker housing should review CDC guidance on issues such as: communications with employees, responding to cases, identification of cases, handwashing, cleaning and disinfection, and personal protective equipment. This is particularly important as new workers arrive for fall harvest and housing population densities increase.

Please take steps now, such as communication and increased sanitation measures, to prevent the spread of Monkeypox among the farm workforce. Guidance in Spanish can also be found in the CDC website here: https://www.cdc.gov/spanish/monkeypox/index.html.

Swine Brucellosis Update by Nancy Glazier

In 2016 Brucellosis was diagnosed in a human who contracted it while assisting with swine farrowing on the family's farm in Schoharie County. The patient's symptoms were chronic tiredness, intermittent fever, joint pain, and respiratory distress. Antibiotic treatment lasted for weeks, and symptoms returned several months after treatment concluded. The individual tested positive for Brucella suis biotype 1.

The farm raised swine under transitional or outdoor-access production with no known contact with feral hogs, but a breeding animal was purchased from an unknowingly infected farm. Of the 50 herds in 13 states investigated, 9 brucellosis-infected herds were found, all were transitional with six infected herds in NY. The US is free of brucellosis in *commercial* herds. Definition of commercial is confinement of pigs to barns with limited exposure to wildlife. Transitional farms have pigs outdoors and potentially accessible to infected feral hogs.

The bacterial infection in swine causes reproductive issues: infertility, abortion, stillborn or weak piglets, testicular swelling, and reluctance to mate. There may also be signs of lameness with painful, swollen joints. It may be transmitted through breeding or ingestion of urine or placentas, aborted fetuses, or uterine fluids.

A follow up study was recently completed to survey the prevalence of brucellosis in herds with outdoor access. The veterinarian team from Cornell vet college, USDA-Animal Plant Health Inspection Service, and NYS Ag & Markets was also interested in evaluating biosecurity practices.

There were no pigs found to be infected with B. suis, though participation numbers were low. Only 24 of the 218 farms contacted agreed to participate. This included a survey and blood samples taken from multiple pigs on the farms. An online tool (BioCheckgent.com) was used to help calculate each farm's biosecurity score. Scores were low, due to a lack of closed herds.

At this time, brucellosis risk is low in NYS. There are risks from other diseases though, including Pseudorabies. Ways to step up with on-farm practices include:

- Keep feral hogs away from domestic hogs with secure fencing, even double fencing.
- Avoid sharing breeding boars between herds. Have the boar tested for brucellosis before using for breeding.
- Purchase only tested animals or animals from validated -free herds (herds that undergo routine testing for brucellosis).
- Isolate newly purchased animals for 30 days and consider retesting them for brucellosis before using them for breeding or mixing them with the rest of the herd. Don't borrow or lend disease to your neighbor.
- Avoid sharing equipment that comes in contact with animals. Thoroughly clean and disinfect all equipment that is shared.
- Practice good herd hygiene. DO NOT feed aborted fetuses and placenta to other pigs or dogs.
- Keep equipment clean, including transport trailers, chutes, and other tools for handling swine.
- Thoroughly clean feed and water troughs before reusing with another group of animals.
- Practice good manure management and remove manure as each group cycles through or sooner if needed.

Keep yourself safe, too. Wear protective clothing such as coveralls or barrier aprons and rubber boots when working with swine.

- Thoroughly clean and disinfect your boots and apron when you are finished and wash your coveralls.
- Be very careful when handling aborted fetuses or placentas or when assisting with farrowing.
- Wear rubber gloves, safety goggles and a mask to cover your nose and mouth.
- Wash thoroughly with soap and water immediately afterward, paying particular attention to any areas where birth products have accidentally touched your skin or soaked through your clothing.
- During cooking/food prep, avoid eating undercooked meat; and wash your hands thoroughly after handling raw meat.

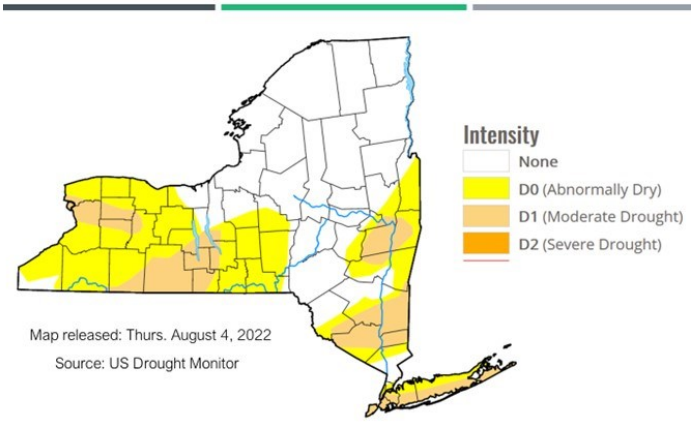
The full article, *Brucella suis and farm biosecurity: assessing risk in pigs raised outdoors in New York State*, can be found here: https://doi.org/10.2460/javma.21.08.0399.

Outdoor production is a growing practice, but biosecurity measures still need to be implemented. *Photo: N. Glazier / CCE NWNY Team*

Estimating Potential Corn Yield in NWNY Affected by Drought

by Jodi Letham

There may be a considerable amount of variation in yields based on the duration and intensity of the drought that has occurred across the NWNY region. The effects of drought stress are at their worst when they come within two weeks either before or after silking. Much of the region entered into an abnormally dry (D0) or moderate drought (D1) situation in early August. During the New York Corn and Soybean Grower Association Summer Crop Tour the NWNY region hosted a Pro Farmer Crop Tour to provide producers with accurate growing season information about potential corn yields for the upcoming harvest season.



Our field observations were:

- Pollination Issues
- Drought symptoms
- Firing from the bottom
- Possible nitrogen deficiency
- Lots of small plants with no ears
- Ear tips not filled out
- Spider mites!
- Bird and deer damage

Positive field observations:

- No visible disease
- Very clean - no weeds
- Ears filled out

Despite the variability across the region the yield potentials are still there. The Pro Farmer Crop Tour yields ranged from 120-269 bushel per acre, with the lowest yield potential being recorded in Seneca county and the highest yield potential recorded in Wayne county. A truthful depiction of locations deficient in moisture.

Corn has a remarkable capacity to recover from drought stress. However, if corn has tasseled, leaves stop unrolling at night, and plants begin to dry down, there's a potential for yield loss. As the crop dries down, the forage quality will fall as the plants use stored carbohydrates to survive. If half the leaves are dead or dying, consider harvesting it for silage. Delaying harvest reduces yield, quality, and a second-crop potential. In these circumstances, moisture testing is crucial since corn is frequently wetter than it appears to be. Harvest should probably be postponed if the forage is exceptionally wet (> than 75-80%), since this will cause seepage and a reduction in the quality of the silage.

Determining Corn Silage Price

Corn silage price estimations along with understanding of important supply and demand aspects from the farm business owner's perspective, such as local conditions, can improve decision making about corn silage.

County	Fields Sampled	Range in Yield	Average Yield for Corn Grain Bu/Acre	Average Yield for Corn Silage Ton/acre
Niagara	10	164 - 227	197.70	21.97
Orleans	17	150 - 269	189.72	21.08
Genesee	10	153 - 255	198.57	22.06
Wyoming	11	143 - 249	197.50	21.94
Livingston	11	156 - 228	187.25	20.81
Monroe	10	177 - 241	201.81	22.42
Ontario	10	153 - 244	207.50	23.06
Wayne	10	216 - 253	235.03	26.11
Seneca	10	120 - 203	163.17	18.13
Cayuga	10	165 - 223	195.24	21.69
Region	109	120 - 269	197.35	21.93

Corn Yield Potential Estimates across 10 counties in NWNY.
Source: M. Stanyard / CCE NWNY Team

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2013 PETERBILT 348 VACUUM TRUCK; Paccar PX8 350 HP; 10-Spd. Manual; Clean, Double Frame w/2,940 Gallon Tank; Air-Trac Suspension; 20K Front Axle; 46K Full Locking Rears; 4.30 Ratio; 256" WB; Vacuum System Can Be Removed. 2076" Frame Behind Cab; 186" CT; 97,334 Miles; Stk. # 6325 - **$46,900**

2009 WESTERN STAR 4900; Detroit Diesel 490 HP; Jakes; Allison 4500 Auto. Trans. w/PTO; Double Frame Cab & Chassis; 20K F/A; 69K Triple Locking Rears; Neway Air Ride; 312" WB; 360" Bridge measurement; 31' Frame Behind Cab; 61,745 Miles; Stk. # 6353 - **$59,900**

2013 KENWORTH T800; Cummins ISX 600 HP; 18-Spd. Manual; Double Frame; 244" WB; 20K Front Axle; 46K Full Locking Rears on Hendrickson Air Ride Suspension; 3.73 Ratio; 2-Spd. Auxiliary Transmission; 164" CT; 176" Frame Behind Cab; 545,546 Miles; Stk. # 6321 - **$54,900**

2011 PETERBILT 37 TANK TRUCK; CAT 475 HP; 18-Spd. Manual; 20K F/A; 46K R/A; 19K Steerable Tag; 265" WB; 175" CT; 4,200 Gal. Tank w/Fruitland Pump; WILL SELL JUST CHASSIS; 326K Miles; Stk. #5963 - **$61,900**

2007 PETERBILT 357 CRANE TRUCK; 430 HP CAT C13; 8LL Manual Trans.; Double Frame; Terex RT4792 23.5 Ton/ 92' Reach Crane w/4-Outriggers; 36" Bunk; 18' Steel Deck; 20K Front; 40K R/A; Steerable Lift Axle; 216" WB; 105,127 Miles; Stk. #6298 - **$71,900**

2012 MACK GU813; Mack MP7 395 HP; 13-Spd.; Double Frame Flatbed w/Hab 2882P Hi Pro Knuckleboom Crane w/Remote; 24' Steel Deck; 20K Front Axle; 44K Rears on Camelback Susp.; 20K Rear Mounted Lift Axle; 246" WB; Crane Can Be Removed; 28' Frame Behind Cab; 200" CT; 387,637 Miles; Stk. # 6388 - **CALL**

2011 KENWORTH T800 WATER TANKER TRUCK; Cummins 425 HP; w/9,226 Gallon Advance Steel Tank and Pump; 250" WB; 16K Front Axle; 46K Full Locking Rears on Hendrickson Air Ride; 4.30 Ratio; We Will Separate the Tank from the Chassis; 21' Frame Behind Cab; 172" CT; 48,978 Miles; Stk. # 6354 - **$58,000**

2007 PETERBILT 357; 475 HP CAT C15; 18-Spd Manual; Clean Daycab w/Tulsa Winch; 20K F/A; 46K Full Locking Rears; Chalmers Susp.; 224" WB; 496,503 Miles; Stk. #6241 - **$39,900**

2003 KENWORTH T800; 475 HP CAT C15 6NZ 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; Stk. #5925 - **$49,900**

2004 & 2003 PETERBILT 378 TRI-AXLE DUMP TRUCKS; 475 HP CAT C15 Single Turbo; 18-Spd. Manual; 20K F/A; 44K R/A; Air Trac Susp.; Double Frame; 21' Aluminum Box; Airlift Tag; 540,000 Miles; Stk. #6345/6346 - **CALL FOR PRICE**

1999 MACK RD688S 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; Stk. #5902 - **$19,500**

2009 KENWORTH T800 FLATBED; CAT 335 HP; 10-Spd. Manual; Clean Double Frame Flatbed Truck w/Palfinger PK11001 Rear Mounted Knuckleboom; 42" Forks; 20K Front Axle; 44K Full Locking Rears on Neway Air Ride; 23' x 96" Aluminum Deck; 4.63 Ratio; 270" WB; 192" CT and 28' Frame Behind Cab; Flatbed & Knuckleboom Can Be Removed; 278,458 Miles; Stk. # 6308 - **$48,900**

2005 PETERBILT 357 6x6; Clean Double Frame 348" Flatbed Truck; CAT 350 HP; 8LL Trans.; 23K F/A; 46K Full Locking Rears; 425/65R22.5 Tires; Hendrickson Haulmaax Susp.; 5.65 Ratio; 288" WB; 210" CT; 30" Frame Behind Cab; Will Separate Bed From Chassis; 174,181 Miles; Stk. #5701 - **$49,900**

2005 KENWORTH T800 FLATBED; CAT 335 HP; Double Frame Flatbed Truck; 20K F/A; 44K Full Locking Rears; 21'6" 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; Stk. # 6323 - **$49,500**

2005 PETERBILT 357 CAB & CHASSIS; Cummins 370 HP; Engine Brakes; 8LL Manual Trans.; Quad-Axle w/Double Frame; 18K F/A; 44K Full Locking Rears; (2) 11K Steerable Lift Axles; Air Trac Susp.; 22' Frame Behind Cab; 212" CT; 302,500 Miles; Stk. #5831 - **$43,500**

2008 PETERBILT 367; Cummins ISX 485HP; Allison Auto. Trans.; Clean Single Frame Dump Truck w/15' Steel Body w/3' Sides and 1' Sideboards; Tarp; 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; Stk. #6264 - **$62,900**

2008 PETERBILT 340 DUMP TRUCK; Paccar PX8 330 HP; 13-Spd. Manual; Double Frame; 19' Heated Steel Body; 20K Front Axle; 20K Lift; 46K Full Locking Rears; 246" WB; Tarp; 5.25 Ratio; Air-Trac Suspension; Hitch and Plumbed for Pup Trailer; 214,987 Miles; Stk. # 6342 - **$49,900**

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 EZ3400 Scale System; Allison Auto. Trans.; 20K F/A; 46,400# R/A; Camelback Susp.; 264" WB; 198" CT; 24'6" frame; 79,280 Miles; Stk. # 6363 - **$104,900**

2010 WESTERN STAR 4900FA; Detroit Diesel Series 60 14.0L 485 HP; 18-Spd. Manual; Clean Fuel Tanker Truck w/3,550 Gal. Hannin's Steel Tank & Pump; 245" WB; 14,700# Front Axle; 44K Full Locking Rears on AirLiner Susp.; 3.90 Ratio; We Will Separate Tank from the Chassis; 20' Frame Behind Muffler; 158" CT; 223,505 Miles; Stk. # 6384 - **$53,900**

2007 MACK CTP713; Mack MP7 370 HP; 10-Spd.; Clean Cab & Chassis; 18K Front Axle; 46K Locking Rears; Air Ride Susp.; 270" WB; 172" CT; 21' Frame Behind Cab; 118,186 Miles; Stk. # 6369 - **$47,250**

2012 KENWORTH T400 FEED MIXER; 330 HP Paccar PX-8; Allison Auto. Trans.; Clean Double Frame Feed Mixer Truck w/Kuhn Knight Profeed 7011D Feed Mixer; Digi-Star EZ3600 Scale System; 18K F/A; 46K Locking Rears; Hendrickson HN Susp.; 244" WB; 176" CT; 23'3" Frame; 7.17 Ratio; 59,926 Miles; Stk. # 6364 - **$79,900**

2006 WESTERN STAR 4900 TANDEM TRI-DRIVE CRANE; 550 HP CAT C15; Double Frame; Tri-Drive, Twin Steer Truck w/Terex Stinger TM7571 Crane w/House; 37.5 Ton Capacity; 71' Reach; 36" Bunk; (4) Stabilizers; 36K F/A; 57K Triple Locking Rears; Fifth Wheel; 408" Bridge Measurement; 4.56 Ratio; 32.5 Ton Lift Block; 221,495 Miles; Stk. #6361 - **$72,900**

2004 KENWORTH W900; 335 HP CAT C10 Engine; 8LL Trans.; Cab & Chassis; 20K F/A; 46K Full Locking Rears; 252" WB; 21' Frame Behind Cab; 150" CT; 4.89 Ratio; Haulmaax Susp.; 118,703 Miles; Stk. #6075 - **$29,900**

2001 INTERNATIONAL 5600i 6x6 CRANE; 435 HP Cummins N14; 10-Spd. Manual; Double Frame; Pitman Hydra-Lift HL1580 7-Ton/ 65' Crane; 4-Outriggers; 20'x8'6" Flatbed; 20K F/A; 46K R/A; Hendrickson HN Susp.; 244" WB; 184" CT; 25'3" Frame Behind Cab; 158,174 Miles; Stk. #6299 - **$49,900**

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>> **UPCOMING EVENTS** <<

September 2022

Pasture Walk in Niagara County - September 8, 2022 from 6:00pm - 8:00pm at Al-Noor Farm in Ransomville, NY. This will be a great opportunity to learn about goats and grazing. Free event but pre-registration is required. Call CCE Niagara at: 716-433-8839 or email djf18@cornell.edu by September 6th. A meal will be provided by the farm.

Pasture Walk in Niagara County - September 30, 2022 from 6:00pm - 8:00pm at Binksberry Hollow, 4250 Chestnut Rd., Wilson, NY. Focus will be on Silvopasture for pigs and meat chickens on pasture. The walk will finish with a tour of the slaughtering facilities and education facility where customers are shown how to cook and utilize food from the farm. Free event but space is limited and pre-registration is required. Call CCE Niagara at: 716-433-8839 or email dif18@cornell.edu by September 29th. A dinner will be provided by the farm.