

swnyteam@cornell.edu

Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

swnydlfc.cce.cornell.edu

A partnership between Cornell University and the CCE Associations of
Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Counties.



**CROPS
COWS &
CRITTERS**
newsletter

**Crops, Cows & Critters
Newsletter**

Volume 3 · Issue 3 · March 2022

Contact Our Specialists



Katelyn Walley-Stoll

*Team Leader
Farm Business Management*
716-640-0522
kaw249@cornell.edu



Amy Barkley

Livestock and Beginning Farms
716-640-0844
amb544@cornell.edu



Camila Lage

Dairy Management
607-422-6788
cd546@cornell.edu

Announcement Coming Soon -
Our New Field Crops Specialist will Be Starting this
Summer!

County Association Executive Directors

Allegany County
Laura Hunsberger
lkh47@cornell.edu
585-268-7644 ext. 17

Cattaraugus County
Dick Rivers
rer263@cornell.edu
716-699-2377 ext. 122

Chautauqua County
Emily Reynolds
eck47@cornell.edu
716-664-9502 ext. 201

Erie County
Diane Held
dbh24@cornell.edu
716-652-5400

Steuben County
Tess McKinley
tsm223@cornell.edu
607-664-2301

(USPS #101-400)

Cornell Cooperative Extension of Chautauqua County
Subscription included in minimum of \$65 Program Participation fee.
Periodical Postage Paid at Jamestown, NY 14701. "POSTMASTER:
Send address changes to the: Chautauqua County Extension
Connection at 525 Falconer St. JCC Carnahan Center, PO Box 20
Jamestown, NY 14702-0020."

"Cows, Crops, and Critters Newsletter" by the Southwest New
York Dairy, Livestock, and Field Crops Program with Cornell
Cooperative Extension in partnership with Cornell University and
the five county region of Erie, Chautauqua, Cattaraugus,
Allegany, and Steuben and their CCE Associations.

To simplify information, brand names of products may be used in
this publication. No endorsement is intended, nor is criticism
implied of similar products not named. Every effort has been
made to provide correct, complete and up-to-date pesticide
recommendations. Changes occur constantly and human errors
are still possible. These recommendations are not a substitute
for pesticide labeling. Please read the label before applying
pesticides. By law and purpose, Cooperative Extension is
dedicated to serving the people on a non-discriminatory basis.
Newsletter layout and design by Katelyn Walley-Stoll.

County Association Agriculture Educators

Sharon Bachman - Erie County
*Agriculture & Natural
Resources Educator*
sin2@cornell.edu
716-652-5400 ext. 150

Susan Walker - Steuben County
Agriculture Educator
smw272@cornell.edu
607-664-2574

Lynn Bliven - Allegany County
*Ag & Natural Resources
Issue Leader*
lao3@cornell.edu
585-268-7466 ext. 18

Kathleen McCormick - Erie County
Agriculture Educator
km864@cornell.edu
716-652-5400 ext. 146

Lisa Kempisty - Chautauqua County
*Dairy/Livestock
Community Educator*
ljk4@cornell.edu
716-664-9502 ext. 203

Shannon Rinow - Cattaraugus and
Chautauqua Counties
Master Gardener Coordinator
smr336@cornell.edu
716-664-9502 ext. 224

John Whitney - Erie County
Agriculture Educator
jrw44@cornell.edu
716-652-5400 ext. 146

swnydlfc.cce.cornell.edu

Stay connected: Follow us on social media, sign up for our newsletter, visit our website.

Individual articles may be used for educational
purposes with the permission of the author
and proper credit given to the author
and our publication.

**CROPS
COWS &
CRITTERS**
newsletter

For accommodations or accessibility
concerns, please contact our specialists at
least one week prior to the scheduled event.
If you need information provided in a
different format, call 716-640-0522.

Cover Crop Species Selection in Field Crop Systems

Adapted from CCE Agronomy Fact Sheet #116 developed by the Nutrient Management Spear Program Team. Learn more here: <http://nmsp.cals.cornell.edu/publications/factsheets/factsheet116.pdf>

Introduction Inclusion of cover crops in field crop rotations can reduce soil erosion and increase soil health and productivity, suppress weeds, capture nutrients, and increase biodiversity. However, cover crop selection is dependent on field location and planting timing. Selecting appropriate species for a specific farm field is essential for successful establishment and growth of cover crops.

The first step in the selection of a suitable cover crop is identifying its hardiness zone of the location and crop tolerance to cold temperatures. Fields in New York fall into one of four hardiness zones, with most of New York's cropland being listed as hardiness zones 4, 5 or 6 (Figure 1). For a successful cover crop program, farmers will need to select cover crop species that tolerate the temperatures characteristic for the hardiness zone.

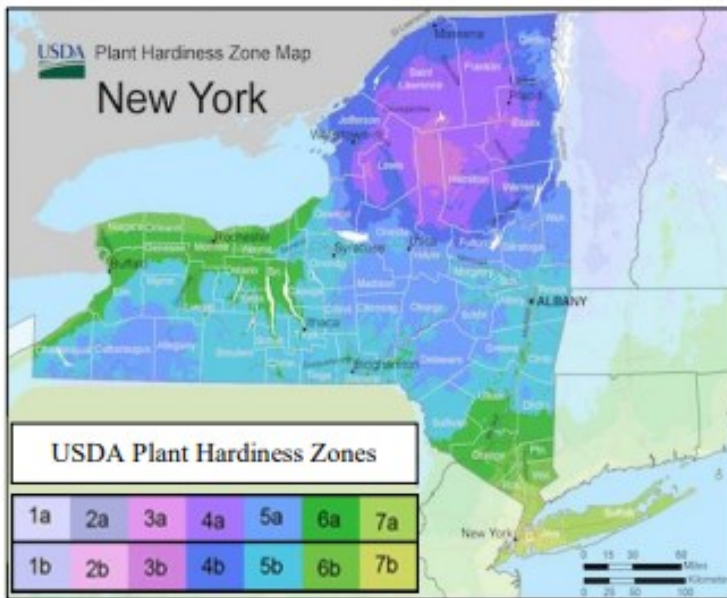


Figure 1: Plant hardiness zones for New York regions (source: [USDA Plant Hardiness Zone Map](#)) are used to classify which plants can survive cold temperatures. New York has hardiness zones 3b to 7b.

Additional information required for species selection includes producer preference for establishment and termination windows, the need to contribute nitrogen (N), prevention of soil erosion, suitability for grazing, soil conditions and soil compaction.

Species commonly considered for use in field crop systems in

New York include cereal rye (*Secale cereale*), annual ryegrass (*Lolium multiflorum*), wheat (*Triticum aestivum*) and triticale (x *Triticosecale*). Cereal rye seed tends to be the cheapest. This cool season annual cereal also has the benefit of reliable establishment in the fall (early September through late October). Annual ryegrass is competitive winter annual cool season grass with relatively cheap seed as well. It can be reliably established through late September. Triticale seed is more expensive and can be established through mid-October. This cross between wheat and rye can also be used as a double crop, harvested for forage late spring.

Cover Crop Explorer

This tool allows users to identify the plant hardiness zone for a specific location and subsequently narrow down species options based on selection criteria. Users can specify cover crop type (broadleaf, brassica, grass, or legume), tolerances for environmental stresses (drought, flooding, excessive heat, etc.), the relative cost of seed, seeding method (frost seeding, aerial seeding, inter-seeding, broadcast or drilling), ease of establishment, the active growing window of the species, rooting depth, potential termination method (tillage, chemical termination, mowing, roller crimping), and the species' weed suppression potential and persistence. The Cover Crop Explorer tool will show a user which cover crop species could be good options to consider and describes the cover crop species in more detail (including planting and growth windows, seeding rates, termination options, etc.).

Species Selector Tool

With this tool a user can obtain a list of possible cover crop species appropriate for a specific field location based on a prioritized list of farmer-identified goals. A user can add the location of the field using the address or by clicking on a built-in map. Selection of a field also generates information on drainage class (derived from USDA's Web Soil Survey), flooding frequency and climate conditions (five-year average weather data from local weather stations).

In Summary

Cover crops can provide environmental and crop production benefits. As not all species are equally suitable for all fields, selection of the right species is important. The Cover Crop Explorer and Cover Crop Species Selector Tools developed by the Northeast Cover Crop Council can help make informed cover crop decisions.

If you'd like assistance with accessing either of these tools online, please feel free to reach out to any of our team members!



Cover crops can be an important tool for mitigating our environmental impact and improving our crop production systems overall.

Calculating Your Cost of Production - Start with Knowing Your Numbers!

By Katelyn Walley-Stoll, Farm Business Management Specialist

Cost of Production is a financial analysis tool for farms of all shapes and sizes to use to improve their decision making capacity and operate their farm business profitably. **Cost of production is calculated by adding the costs associated with a certain farm enterprise (or production area), and dividing that by the total units of production over a designated time frame (usually a year).**

Knowing your cost of production can help determine breakeven prices for profitability, make cost-saving decisions, find the biggest opportunity for return on investment for your farm, benchmark your performance, and more. You could be the best farmer in the world, doing all of the right things, but if you're not bringing in more money than it costs for you to produce what you're selling, you won't be a sustainable business. Being a good farmer doesn't guarantee success - you also have to be a good business manager and financial analysis is an important process.

The main requirements to calculate a cost of production are good records, time, and motivation. Records should include incomes by value and production unit, expenses and their allocation towards different farm enterprises, an estimate of the value of management labor and skills, and inventories of assets that include feed, supplies, and animals. Successful farmers set aside our most limiting input - time - to perform financial analysis. Having sound numbers can often save you time at the most critical moments! Finally, motivation to calculate your cost of production, knowing your "why bother" is important to keep in mind throughout the process. The first time through calculating your cost of production can be frustrating, but the end result is rewarding and future calculations will go much more smoothly!

One of the hardest parts of calculating cost of production is allocating expenses by individual enterprises. An enterprise on a farm is a "bucket" of production, or one production area. For farms that only produce and sell one product to similar markets, there will only be one enterprise. For farms that might have multiple enterprises, all of the farm expenses must be allocated accordingly. For example, a farm might operate a tractor for their business that includes beef, hay sales, and egg sales. The use of the tractor (repairs, maintenance, interest on the equipment loan, depreciation) must be allocated in proportion to its use for each enterprise. In the above example, the tractor is primarily used for hay production, but some of that hay is used in the beef cows as home-grown feed. An

allocation might look like 30% beef (for producing the hay they eat), 60% hay sales (for producing the hay), and 10% poultry (for producing the bedding).

An (overly simplified) Example. Use the following case study to try calculating cost of production on your own!

Get-Rich-Sometime Farm is located in rural Western New York. Husband and wife, Jack and Jill, started their farm in 2010 raising a couple of beef cows for their family. They have continued to grow since then and are operating as a farm business raising beef, poultry, goats, market vegetables, and sell some hay to local horse owners. Jack works part-time as a truck driver and does the majority of the summer hay harvest work. Jill works full-time in town and is finding the balance between that job and the growing farm duties unsustainable.

Initially, their "why bother" was to live the rural life and know where their own food comes from. However, with the growth of their farm business and sales over time, they would now like to both be working full-time on the farm. As such, they're working with their really wonderful and funny Extension agent, Katelyn, to go through a Beef Farm Business Summary and analyze their farm's financial performance. Their hope is to create a sustainable growth plan that would let both of them quit their day jobs within the next few years.

Jack and Jill don't have the best record keeping system, but they have been able to find most of the information they needed. They keep an accordion folder where receipts and slips are filed as they come in by vendor. Usually they go through and tally everything up once a year for their taxes. Then, they do a really good job looking at things and tracking them from January to April (new year, new me), but then once the sun starts shining, things get thrown into a box until they can be sorted.

Katelyn's asking Jack and Jill to work on collecting the information they need to determine their Cost of Production for each of their current entities. First, they'd like to focus on the beef production since that was where they got their start. Currently, Jack and Jill sell beef as whole and halves to their local community. In 2021, they sold 10 steers to 15 different customers for a total of \$20,000. Going back through the paperwork from the butcher's, their total hanging weight for those 10 steers was 8,000 pounds.

Next, Katelyn wants to know what the direct expenses were to raise the beef cows. Because of their current record keeping system, they have to go

Controlling your cost of production to improve farm profitability is so much more than "cutting corners". Knowing what your COP is allows you to better manage your financial decision making.

**CROPS
COWS &
CRITTERS**
newsletter

Calculating your Cost of Production is also a way to do a "Breakeven Analysis" in a way - What price do you have to charge/receive to be profitable?

through and “allocate” almost all of their categories that they track. For example, in 2021 the farm claimed \$8,500 in supplies as expenses. However, the category of “supplies” ends up being a catch all for all of the random purchases that they don’t know how to categorize. Jack and Jill went over all of the receipts to pick out the big purchases and get a better sense for how that should be allocated. It’s their best guess that 50% of those supplies were for the Beef enterprise. They’re also putting a new system in place for 2022 using the Cornell Beef Farm Account Book to help better track and break down categories by enterprise.

Other expenses that they’ve calculated are: Purchased grain with a mineral pack (\$5,000), vet visits and vaccines (\$1200), a few young calves that they bought to raise and then sell (\$1,000), sawdust (\$800 and 75% is for beef), breeding costs (\$400), trucking fees (\$250), Beef CheckOff (\$10), and \$700 in fencing supplies.

Expenses that were a little tougher to allocate were mostly equipment and utility based. Especially when thinking about those things used for hay production since their hay goes to the beef cows, the goats, some for the poultry, some for the market garden, and some as outside sales. However, after looking things over and talking with Katelyn, Jack and Jill are confident that the beef portion of these expenses were: Machinery Repair/Maintenance (\$3,000), Gas/Fuel/Oil (\$1,200), Fertilizer/Lime/Spray (\$600), Interest (\$60), Insurance (\$400), Taxes (\$300), Seeds (\$100), and Electricity (\$250).

Now, Katelyn wants them to come up with an opportunity cost. They think that this is dumb because they don’t want to work or invest their money anywhere else. But, after some discussion, they agree to at least include 3% to stay ahead of inflation, especially because neither of them are really taking a “pay check” from the farm - they might just grab some cash out of the farm stand box to pay for groceries, or use some of the goat checks to cover house bills. To make sure this expense is added, they take all of their total expenses related to the beef enterprise, multiply by .03, and add that as an additional expense.

They’re also trying to calculate out the cost of their fixed assets (the land, a barn that the beefers use, the equipment, and a farm truck and trailer). To do this, Katelyn helped them set up a depreciation spreadsheet that’s different than their tax depreciation spreadsheet. They use this to value their true cost of depreciation as \$1,100 based on the assets as they’re used in the beef cows.

Now that they’ve gotten these numbers and are close to calculating their cost of production, Jack and Jill want to know if their \$2.50/lb hanging weight price is at least breaking even with their expenses. If it’s not, they’ll need to keep discussing ways to move forward to help bring Jack and Jill home on the farm!

Type of Expense	Allocation	Total
Supplies		
Purchased Grain	w/a	
Vet/Vaccines	w/a	
Animals Purchased	w/a	
Bedding		
Breeding	w/a	
Trucking		
Marketing		
Grazing Expense	w/a	
Machinery Repair/Maint		
Gas/Fuel/Oil		
Fertilizer/Lime/Spray		
Insurance		
Interest		
Taxes		
Utilities		
Misc.		
TOTAL CASH EXPENSES		
+ Opportunity		
+ Depreciation		

Total Expenses: \$ _____

Divided By

Total UNITS OF PRODUCTION _____

8000 pounds hanging weight

Equals:

\$ _____ / lb of hanging weight

COST OF PRODUCTION

If you’d like to calculate your own farm’s Cost of Production (any type or size of farm) reach out to Katelyn Walley-Stoll by calling or texting 716-640-0522.



How’d you do? What does Jack and Jill’s Cost of Production look like? How should they plan to move forward?

Dairy Market Watch

February 2022



Prepared by Katelyn Walley-Stoll.

Funded by PRO-DAIRY.

An educational newsletter to keep producers informed of changing market factors affecting the dairy industry.

Milk Component Prices			Milk Class Prices				Statistical Uniform Price & PPD				
Month	Butterfat	Protein	I (Boston)	II	III	IV	Jamestown, NY		Albany, NY		Albany \$/gal. to farmer
Jan 21	\$1.55	\$3.04	\$18.39	\$14.18	\$16.04	\$13.75	\$14.76	(\$1.28)	\$15.36	(\$0.68)	\$1.32
Feb 21	\$1.44	\$2.98	\$18.79	\$14.00	\$15.75	\$13.19	\$14.65	(\$1.10)	\$15.25	(\$0.50)	\$1.31
Mar 21	\$1.72	\$2.70	\$18.45	\$15.07	\$16.15	\$14.18	\$15.35	(\$0.80)	\$15.95	(\$0.20)	\$1.38
Apr 21	\$1.94	\$2.81	\$18.76	\$15.56	\$17.67	\$15.42	\$16.21	(\$1.46)	\$16.81	(\$0.86)	\$1.45
May 21	\$1.98	\$3.13	\$20.35	\$16.22	\$18.96	\$16.16	\$17.19	(\$1.77)	\$17.79	(\$1.17)	\$1.53
June 21	\$1.96	\$2.53	\$21.54	\$16.66	\$17.21	\$16.35	\$17.35	\$0.14	\$17.95	\$0.74	\$1.55
July 21	\$1.89	\$2.49	\$20.67	\$16.83	\$16.49	\$16.00	\$16.91	\$0.42	\$17.51	\$1.02	\$1.51
Aug 21	\$1.85	\$2.45	\$20.15	\$16.51	\$15.95	\$15.92	\$16.54	\$0.59	\$17.14	\$1.19	\$1.48
Sep 21	\$1.93	\$2.60	\$19.84	\$16.89	\$16.53	\$16.36	\$16.81	\$0.28	\$17.41	\$0.88	\$1.50
Oct 21	\$1.94	\$3.01	\$20.33	\$17.08	\$17.83	\$17.04	\$17.29	(\$0.54)	\$17.89	\$0.06	\$1.54
Nov 21	\$2.15	\$2.75	\$21.23	\$18.40	\$18.03	\$18.79	\$18.39	\$0.36	\$18.99	\$0.96	\$1.64
Dec 21	\$2.29	\$2.59	\$22.42	\$19.84	\$18.36	\$19.88	\$19.34	\$0.98	\$19.94	\$1.58	\$1.74
Jan 22	\$2.95	\$2.35	\$22.96	\$22.83	\$20.38	\$23.09	\$21.59	\$1.21	\$22.19	\$1.81	\$1.91

January Utilization (Northeast): Class I = 31.4%; Class II = 22.7%; Class III = 28.1%; Class IV = 17.8%.
Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.

Dairy Commodity Markets (Excerpt from USDA Dairy Market News – Volume 89, Report 8, February 25th, 2022)

Dry Products: Prices for low/medium heat nonfat dry milk are slightly higher at the bottom of the ranges, but steady to lower at the top of the price ranges. Dry buttermilk prices pushed higher as spot loads have been hard to come by. Dry whey prices are mixed. Dry whey inventories are a little more available. Animal feed whey trading is slow, as prices are unchanged.

Cheese: Cheese demand has found some more steadiness/strength in recent weeks. Western contacts say export demand, particularly from Asian markets, has improved as buyers there are ordering for summer/fall deliveries. Cheese production is steady, but stilted by laborer and driver shortages, which continue to obstruct cheese plant managers nationwide. Milk is generally available for the cheese vats.

Butter: Cream is available to Eastern and Central butter makers. There are some reports of short cream supplies this week in the West as inclement weather and driver shortages have delayed some deliveries. Butter output varies somewhat from plant to plant, but production is generally active. The January NASS Cold Storage report indicates a 33 percent drop in year to year inventory levels, and some contacts have relayed tightness in regional inventories while others say supplies are adequate for near term needs. Food service demand is increasing while retail sales are softening. Export demand is reportedly strong.

Fluid Milk: Farm milk production is generally steady to higher across much of the country. Demand for milk supplies into Class I is steady to lower. Contacts say that while retail bottling sales are healthy, some K-12 education institutions are on mid-term breaks. Milk is available for Class II and III processing. Milk is available for Class II and III processing. Logistical hurdles and staffing shortages are prompting some plant managers to schedule cleaning, repairs, and maintenance. Interest in condensed skim loads is a bit subdued this week.

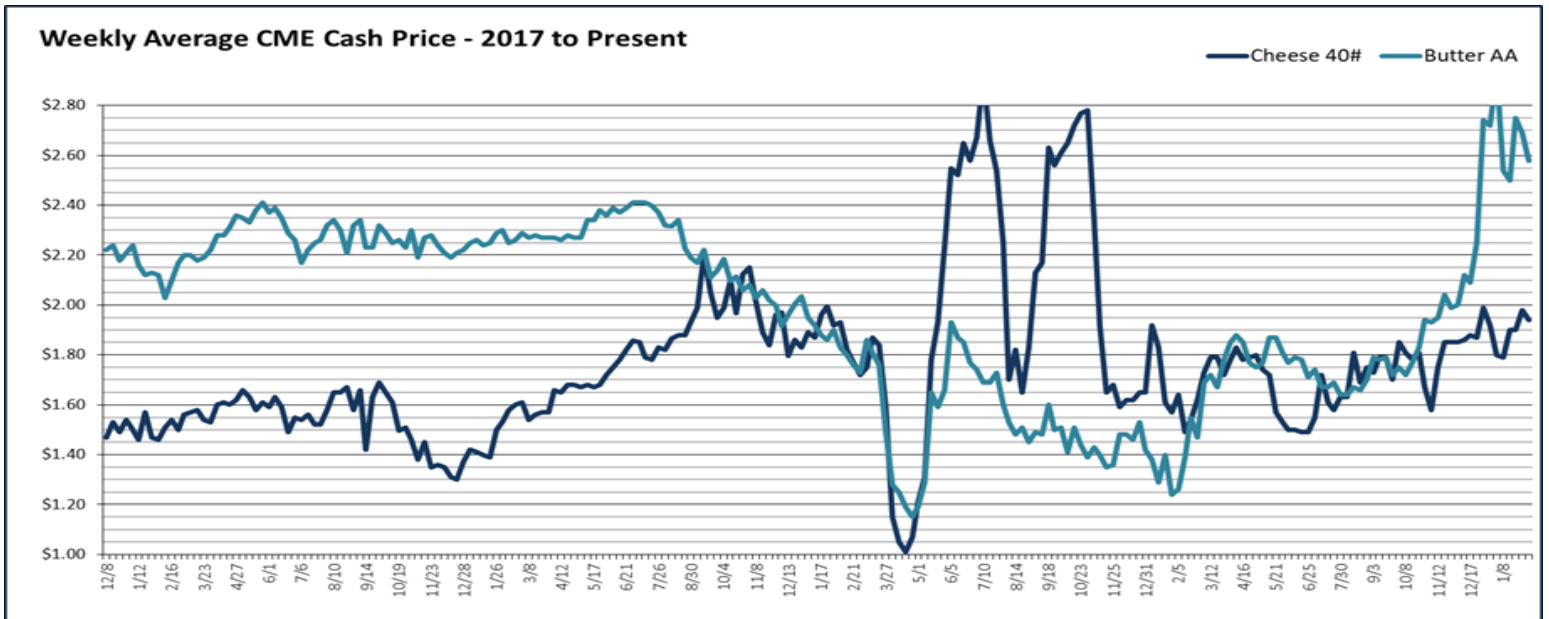
Friday CME Cash Prices					
Dates	1/28	2/4	2/11	2/18	2/25
Butter	\$2.54	\$2.50	\$2.75	\$2.69	\$2.58
Cheese (40# Blocks)	\$1.79	\$1.90	\$1.90	\$1.98	\$1.94

February 2022 Retail Prices (FMMO): U.S. simple average prices are: \$3.88 per gallon for conventional whole milk, \$3.84 per gallon for conventional reduced fat 2% milk, \$4.28 per half gallon organic whole milk, and \$4.28 per half gallon organic reduced fat 2% milk.

January's Albany \$/gallon paid to farmers was \$1.91. This is a 30% increase from a year ago.



For more information on Dairy Business Management and Market Analysis, contact Katelyn Walley-Stoll, Farm Business Management Specialist, at 716-640-0522 or kaw249@cornell.edu.



Brighter Days...and Bigger Checks...Ahead?

A milk market commentary by Katelyn Walley-Stoll, February 28th, 2022

With 20 days until spring, mask mandates being lifted all across the country, and a brighter milk price outlook – things seem to be (finally) headed in the right direction. In the 4th quarter of 2021, we saw milk prices increase. That trend has continued into 2022 with plans to peak later this year. Class III milk should be around \$20.85 in February, up 17% from October’s \$17.83. For Class IV milk, October’s \$17.40 has increased a whopping 37% to an estimated \$23.90 in February. 2022 could bring the highest milk prices we’ve seen since 2014, which brought an all-milk price average of \$23.98.

However, there are also some dark clouds on the horizon – rising costs of production, inflation and increasing interest rates, unavailability of labor, and global unrest stemming from Russia’s invasion of Ukraine – which will all put a damper on our optimistic outlook that comes with every spring season. We’re looking at oil prices around \$100 a barrel, and even higher grain and feed costs (Russia and Ukraine are large exporters of cereal grains). So, while the milk check may be at 2014 prices, it won’t go as far as it once did in terms of farm profitability.

Onto some better news – we’re not increasing milk production as fast as we normally do. This makes the milk market tighten, and coupled with marginally higher domestic product sales, creates a more favorable situation. February 23rd’s Milk Production Report showed a 1.4% decrease from January in total production with a 2,053 pounds of production per cow (down 14 pounds from January 2021). There were also 63,000 less milk cows from one year ago, and 5,000 less than one

month ago, most likely due to rising feed costs and regionally troublesome forage production. Another consequence of these issues are fewer replacement heifers being raised and expected to calve in the next 12 months. So, potentially, this trend will continue through 2022.

One factor to watch in 2022 will be our dairy product exports, which are expected to see some continued growth. Worldwide, major exporters are facing similar weather related challenges and rising production costs. As COVID-19 restrictions lift, however, we do expect to see a rising worldwide demand for dairy products. As we saw with 2021’s whey and milk powder exports to Mexico, China, and Southeast Asia, the US is poised to respond to global demands – pending continued shipping and transportation issues.

It’s important to look ahead to 2022 and take our very optimistic milk forecasts with a grain of salt (or maybe even a very large dash of salt). There are a lot of things that could “go wrong”, and I think that looking ahead with a slightly skeptical view might not be a bad thing. It’s challenging to guess where this year will take us, especially with rapidly rising input costs, unpredictable weather, and global unrest. Using risk management tools (including Dairy Margin Coverage, Dairy Revenue Production, Livestock Gross Margin for Dairy, Milk Price Contracting, Hedging, Lean operating concepts, and more) will help mitigate the effects of a volatile milk prices.

In December, dairy exports on a milk-fat basis totaled 865 million pounds, an increase of 101 million pounds from December of 2020. US is forecasted to export 11 billion pounds of product in 2022 (milk fat basis).



USDA is forecasting an average of \$19.65 Class III price, \$20.90 Class IV price, and an all-milk price of \$23.55.

Calving assistance guidelines: Determining if the Cow/Heifer Needs Your Help

Animal Health Diagnostic Center - Cornell University

Four decisions dramatically affect the outcome of delivery. They are:

1. **Frequency of observation** - Recommended frequency of observation is every 1-2 hours. The ability to perform this is based on staffing at your dairy. Once a cow/heifer in stage 2 of labor the frequency of observation should increase to every 30 minutes. It is important to see if the dam is making progress in that time or not.
2. **Knowing when to intervene** - To make decisions about when to intervene it is important to know the normal range of time it takes for each stage of labor. All personnel should know the guidelines for intervention and understand why those guidelines are in place. The guidelines below are based on the stage of labor.



- **Stage 1** - Usually lasts 2-6 hours. If you do not notice any progression to stage 2 after 4 hours the cow/heifer should be examined to determine if there is a problem. Low blood calcium (milk fever), uterine torsion, or a calf in breech presentation can prevent the cow from going into Stage 2 of labor.
 - **Stage 2** - Intervention is needed if any of the following occur: If the water sac has been visible for 2 hours and you have not seen any progression (the cow is not trying). If the cow has been trying for over 30 minutes and making no progress. If the cow has quit trying for more than a 15-20 minute period of time after a period of progress. Rest periods normally should not last longer than 5-10 minutes. If the cow or calf is showing signs of stress or fatigue like a swollen tongue in the calf, yellow staining (meconium) of the fetus, or severe bleeding from the rectum of the cow. If you suspect that the calf is in an abnormal presentation, position, or posture.
 - **Stage 3** - If the fetal membranes have not been passed within 12 hours after calving, intervention may be necessary. If they are retained, treatment may be indicated. In no instance should the membranes be manually removed. This may be detrimental to the cow's future reproductive performance. It may be beneficial to cut the membranes close to the vulva in order to decrease the opportunity for contaminants (dirt, bacteria) to obtain entrance into the reproductive tract of the cow. Be sure to consult with your veterinarian about proper treatment of retained fetal membranes in your dairy cows. It is important to realize that early intervention provides the greatest benefit for calf survivability and future reproductive performance of the cow.
3. **Determine if the calf can be delivered by forced extraction (pulling).** Once you have decided to intervene you should palpate the calf and the

Four decisions dramatically affect the outcome of delivery includes: 1) Frequency of observation, 2) Knowing when to intervene,

**CROPS
COWS &
CRITTERS**
newsletter

3) Determine if the calf can be pulled and
4) Determine when to call for professional assistance

birth canal: 1) to determine if the calf is alive or not and 2) to see if it can be delivered through the birth canal of the cow. If the birth canal is abnormal it is time to call for professional help. If the cervix is not fully dilated the cow should be given more time for dilation or checked for other signs of milk fever.

- If the calf's head is too large to fit through the birth canal forced extraction should not be performed.
- Studies have shown that calves delivered by c-section after forced extraction has failed have a decreased chance of survival compared to calves delivered by c-section alone. Therefore the decision to perform a c-section should be made as early as possible and the decision to pull the calf should be based on a realistic assessment of the likelihood of success.
- If the decision is made to pull the calf, you should know when to keep pulling and when to quit.
- Be sure to always correct any mal-positions prior to forced extraction.
- For a forwards (anterior) presented calf, the head and shoulders must be able to pass the pelvic canal or the calf cannot be delivered. The shoulders of the calf are through the pelvis of the cow when the knees (carpi) of the calf are at the vulva. If you cannot get both knees to the vulva, the calf cannot be pulled without damage to the calf or cow. 6) For a backwards (posterior) calf, if the hocks are one hand width beyond (outside) the vulva, the hips should be through the birth canal and you should be able to deliver the calf.

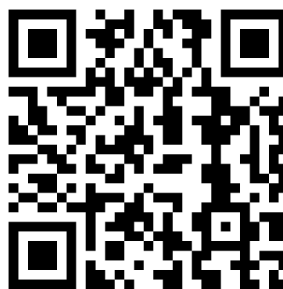
4. When to call for professional assistance.

Professional assistance may not always mean a veterinarian, it may just be someone with more experience than yourself. Call for assistance if: 1) You cannot assess the problem.; 2) You know what you are dealing with but you do not know how to correct it; 3) You have been trying to correct the problem for 30 minutes and have not made any progress.

ETAPAS DEL PARTO: ¿CUÁNDO LA VACA/NOVILLA NECESITA DE SU AYUDA?
Etapas del parto

- 1. Preparación: La cervix y el canal de parto comienzan a dilatarse**
En esta etapa, que dura de 2-4 horas, la vaca puede mostrar signos de molestia al patear su vientro y volverse inquieta. Algunos signos clínicos en esta etapa son: cola levantada, vulva hinchada, vocalización, ubre llena y secreción de mucosidad. Examine la vaca/novilla en caso de no notar ninguna progresión a la siguiente etapa después de 4 horas.
- 2. Parto: La cervix está completamente dilatada y el becerro entra en el canal de nacimiento:**
A partir de una cervix totalmente dilatada, se evidencia la aparición de las membranas (bolsa de agua), y las contracciones abdominales son obvias. Unos minutos más tarde (15-20 min) la pierna del ternero se hace visible. Esta etapa dura de 1-2 horas en las vacas y de 2-4 horas en las novillas. (Aprenda cuándo intervenir en la página 2).
- 3. Etapa de expulsión de las membranas fatales**
Por lo general, ocurre de 8 a 12 horas después del parto, y si demora más de 24 horas, se considera placenta retenida. Los factores de riesgo son la distocia, los gemelos, la inducción, la hipocalcemia (fiebre de la leche) y las gestaciones anormalmente largas o cortas.

Did you like this article? You can download the infographics of this article available in English and Spanish by accessing <https://swnydlfc.cce.cornell.edu/> or by scanning the QR code.



Five High-impact Actions Can Reduce Injuries - Hoard's Dairyman Intel

By John Shutske,
University of Wisconsin-Madison

With spring just around the corner, and a reminder that the risk for severe injury being almost seven-times greater on farms than all other types of businesses, here are some important, high-impact things that our research shows will reduce risk.

1. Spend time formulating a workplace safety and health policy. A policy is a starting point for a more comprehensive safety "program." The policy spells out your farm's values, expectations, and specific practices that you want to prioritize. Ideally, a safety policy, whether for a small family farm or large operation with 20 or 30 employees, is developed with input from all who are covered by it.

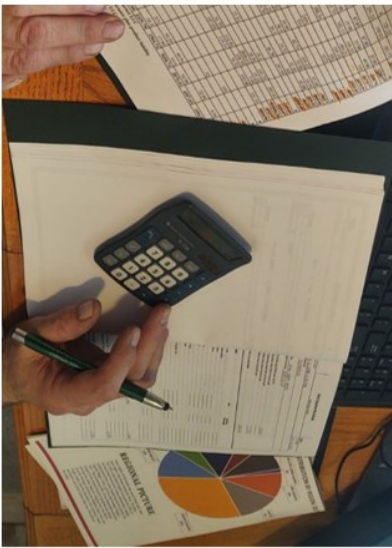
2. Upgrade marking and lights on ALL highway-operated farm equipment. Most often, when people think about farm injuries . . . we are hesitant to say 'accidents' because these incidents are highly preventable . . . they think of tractor rollovers, power take-off (PTO) entanglements, and other traumatic scenes. But our ongoing research shows that many deaths associated with farms happen on the highway. And, unfortunately, this is an issue that also is of broader public concern. Become familiar with state and federal regulations and standards. New federal laws require upgraded lighting and marking that is more stringent than most state regulations. Areas to focus on include a bright, clearly visible, clean slow-moving vehicle (SMV) emblem, flashing amber lights

Safety continued on page 13...

What type of dairy farming content would you like to see in our next newsletter?



Contact Camila Lage at cd546@cornell.edu or 607-422-6788 for content suggestions or questions.



HOW TO VALUE YOUR BUSINESS, PLANNING FOR THE FUTURE

4 WEEK WEBINAR SERIES

- Valuation of assets, customer base
- Understanding Cash Flow, Marketing and Customer Communications
- Benefit of an exit strategy, identification of a successor, working with professionals
- Financial planning for the future, asset transfer, checklist

When:
Thursdays in April - 5:30-7:30 pm

Where:
Online via Zoom

Contact:
Lynn Bliven at 585-268-7644 ext. 18 or
lao3@cornell.edu

Register online by April 1st:
[https://reg.cce.cornell.edu/
Value_Your_Business_202](https://reg.cce.cornell.edu/Value_Your_Business_202)

FEEDING AND MANAGING COWS IN AUTOMATIC MILKING SYSTEMS

Please join MSU Extension and the Cornell Cooperative Extension SWNY Dairy Team for our talk with MSc. James Salfer and Dr. Gregory Penner on management and feeding strategies for a successful AMS operation .

Webinar Live

April 6, 2022

12:00 - 1:30 PM (ET)

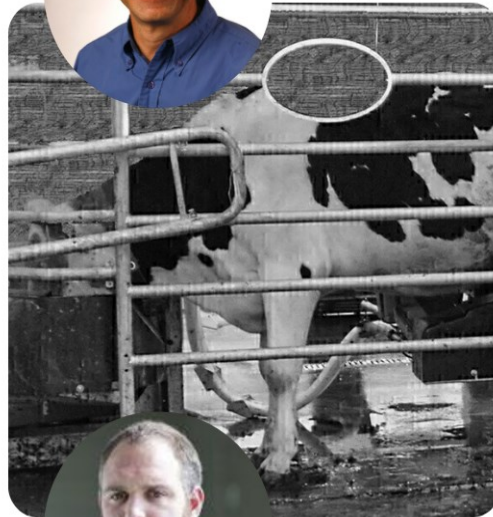


Register here:
[www.events.anr.msu.edu
/nutritionAMS](http://www.events.anr.msu.edu/nutritionAMS)



James Salfer

Extension professor
University of
Minnesota



Gregory Penner

Professor Ruminant
Nutritional
Physiology University
of Saskatchewan

Managing and Feeding Cows in Automatic Milking Systems Webinar Announced

By Camila Lage, Dairy Management Specialist with the SWNY Dairy, Livestock, and Field Crops Program

The adoption of AMS (Automatic Milking Systems, or “Robots”) is increasing worldwide, mainly due to increased labor costs and interest in improving technology use. The success of AMS management relies heavily on feed management. In the context of high feed prices, there need to be strategies that can maximize cow traffic, production, and health at the lowest possible cost. Are you managing cows on AMS or thinking about adopting this technology? So this webinar might be for you!

WHEN: April 6th, 2022, 12:00 PM – 1:30 PM (EST)

REGISTRATION: scan the QR code. You can also contact Camila Lage at cd546@cornell.edu or 607-422-6788 for registration.

Cornell Cooperative Extension
Southwest NY Dairy, Livestock and Field Crops Program

MICHIGAN STATE UNIVERSITY | Extension

The adoption of AMS (Automatic Milking Systems, or “Robots”) is increasing worldwide, mainly due to increased labor costs and interest in improving technology use.

**CROPS
COWS &
CRITTERS**
newsletter

The How to Value Your Business Series is for any and all agricultural processors. Katelyn Walley-Stoll will be presenting during one of the session!

BEEF X DAIRY WORKSHOP

INCREASING THE RESILIENCE OF
NEW YORK'S BEEF AND DAIRY
FARMS

AGENDA

WELCOME: DINNER



ECONOMICS ASPECTS OF ADOPTING BEEF X DAIRY ON YOUR HERD

KATELYN WALLEY-STOLL - CCE
SWNY BUSINESS MANAGEMENT
SPECIALIST



MAKE THE MOST OUT OF BEEF X DAIRY IN YOUR DAIRY HERD

KAREN WHEATLEY - SELECT SIRES

HANDS-ON ACTIVITY: WHICH BULL WOULD
YOU SELECT FOR THIS COW?

BREAK



SETTING UP YOUR CALF TO SUCCESS

CAMILA LAGE - CCE
DAIRY MANAGEMENT SPECIALIST



ASSURING THE MARKET VALUE OF YOUR BEEF ON DAIRY CALF

SAM VANSTROM- LOCAL USDA
AGENT



MARKETING BEEF CROSSES

AMY BARKLEY - CCE
SWNY LIVESTOCK AND BEGINNING
FARM SPECIALIST

ROUNDTABLE FOR QUESTIONS AND SOFT CLOSE



ABOUT OUR WORKSHOP

The use of beef semen in dairy cows is a strategy that can provide benefits across multiple supply chains. Join us in this workshop to learn how you can make more out of your beef x dairy!

WEDNESDAY, 5:00-7:30 PM
27TH APRIL, 2022

**HOWARD COMMUNITY CENTER, 7481 HOPKINS
RD, AVOCA, NY 14809**

**REGISTRATION REQUIRED (\$30/PERSON
INCLUDES DINNER AND PRINTED MATERIAL).
SCHOLARSHIPS AVAILABLE UPON REQUEST**

You can register here
<https://tinyurl.com/beefxdairy2022> or by
contacting Amy Barkley or Camila Lage

✉ amb544@cornell.edu
716-640-0844

✉ cd546@cornell.edu
607-422-6788

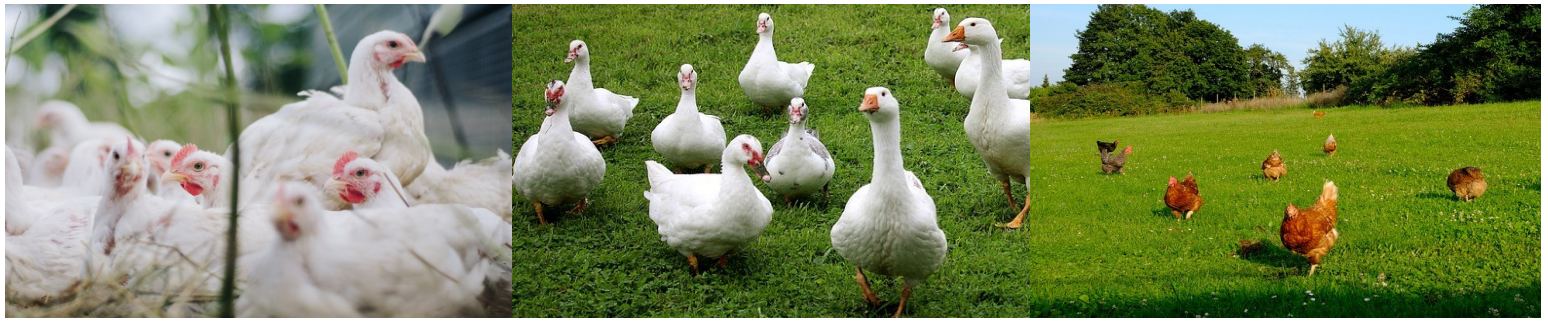
THIS WORKSHOP IS SUPPORTED BY:



Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

Cornell Cooperative Extension's Southwest New York Dairy, Livestock, and Field Crops Program is a partnership between Cornell University and the Cornell Cooperative Extension Associations in these five counties: Allegany, Cattaraugus, Chautauqua, Erie, and Steuben. Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.



Prevention of Highly Pathogenic Avian Influenza (HPAI) in Pastured Poultry

By Amy Barkley, Livestock Specialist, CCE SWNY Dairy, Livestock, and Field Crops Program

Background: Avian Influenza is a highly contagious poultry virus that has the potential to cause large financial losses to the U.S. poultry industry. A highly pathogenic strain (HPAI), H5N1, last hit the U.S. in 2014-2015, and was considered the nation's largest animal health emergency. Over 200 cases of the disease were found in commercial flocks, backyard flocks, and wild birds. More than 50 million birds were affected and subsequently died or were euthanized on more than 200 farms in 15 states.

Waterfowl, both wild and domestic, act as carriers, which can spread the virus to other wild bird and domestic poultry populations. Since the outbreak of 2014-2015, scientists have been monitoring wild bird populations, and waterfowl hunters send their harvested birds in for testing. Wild waterfowl regularly carry low-pathogenic strains of the virus, but it can easily mutate to a highly pathogenic strain, as we've seen this year. This highly pathogenic strain has entered domestic flocks of poultry, resulting in 37 cases across 16 states, including 3 in New York, as of 3/17/22.

Symptoms of HPAI: Birds infected with HPAI may show one or more of the following symptoms:

- Sudden death without clinical signs
- Lack of energy and appetite
- Decreased egg production, soft-shelled/misshapen eggs
- Swelling of head, comb, eyelid, wattles, and hocks
- Purple discoloration of wattles, comb, and legs
- Nasal discharge, coughing, and sneezing
- Discoordination
- Diarrhea

A high level of mortality without any clinical signs is known to be a sure sign of the virus. In some cases, expect 100% of the flock to die within a few days. Regardless of how the disease presents, a large portion of the birds in a flock will be affected.

Keeping your birds safe: While most biosecurity protocols during outbreaks of HPAI include keeping

birds indoors and under solid cover, this is not an option for many who raise their poultry either on open pasture or in semi-covered mobile coops. However, the guidelines below can be incorporated into biosecurity plans to help keep your birds safe.

- Protecting against exposure to wild birds or water or ground contaminated by wild birds.
- Make common-sense decisions about where pastured and free range poultry are housed. Fields or other open areas that are frequented by wild birds, especially waterfowl, are going to be a higher risk than those areas that aren't.
- ponds/lakes or other water sources that wild birds frequent.
- Keep feed and water inside to limit wild bird and rodent access. Rodents don't become infected but can carry contamination on their bodies. Wild birds have the potential to both be infected and transport the virus on their bodies.
- Closing bird areas to nonessential personnel or vehicles to limit the number of people potentially bringing disease onto the property.
- Providing bird caretakers with clean clothing and disinfection facilities and directions for their use. Clean and sanitized shoes are especially important. If this can't be done, boot covers are helpful.
- Purchasing poultry from an NPIP (National Poultry Improvement Plan) source. Parent flocks on these farms are routinely tested for diseases, including Avian Influenza, and these farms have biosecurity plans in place. The full list of NPIP participant hatcheries and farms by state can be found at <http://www.poultryimprovement.org/statesContent.cfm>
- Establishing an "all-in, all-out" flock management policy, if possible. This means that all birds on a property should be the same age, with no new birds being brought in until the first set is out. If this isn't possible, birds

For updates on positive cases in wild bird and domestic poultry, you can visit the USDA-APHIS web page at www.aphis.usda.gov

**CROPS
COWS &
CRITTERS**
newsletter

All types of domestic poultry can be affected by HPAI, including chickens, ducks, turkeys, ratites, and game birds.

- of differing ages should be kept separate.
- Keeping birds of different ages separate. Chicks and older birds are more susceptible to becoming ill than young adults. When visiting pens with birds of different ages, it's best to visit the youngest birds first, moving then to the oldest birds, then to young adults, then to any birds that may be sick. Footwear should be cleaned after completing the round of care and before visiting the more susceptible groups again.
- Thoroughly cleaning and disinfecting equipment and vehicles, including tires and undercarriage, when entering or leaving the farm. Banning the borrowing or lending of equipment or vehicles. If this must be done, equipment and vehicles should be thoroughly cleaned and disinfected, using one of the many disinfectants that can be used against HPAI (<https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza>).
- Banning visits to other poultry farms, exhibitions, fairs, and sales or swap meets. If visits must occur, direct poultry caretakers to change footwear and clothing on their return.
- Banning bringing birds in from slaughter channels (auctions, live bird markets, processing facilities) back to the farm.

What do if I think I have the disease on my property?

Report it! If a large number of your birds are sick or dying, it's important to report it immediately so that we can stop the spread to any other flocks. You can call:

**NYS Department of Agriculture & Markets:
518-457-3502**

**USDA (United States Department of Agriculture):
866-536-7593**

**Your local Cornell Cooperative Extension Office
<https://cals.cornell.edu/cornell-cooperative-extension/local-offices>**

For more information, please contact the NYS Department of Ag and Markets at: 518-457-3502

DEFEND THE FLOCK

Take a look at your farm's biosecurity plan to see if there might be places where your farm could be at risk for HPAI.

**CROPS
COWS &
CRITTERS**
newsletter

Do you want help registering on any of our upcoming events? Please feel free to reach Camila Lage at 607-422-6788 or cd546@cornell.edu.

that are bright and visible at all times (even in daylight hours), and turn signals. Deaths associated with farms happen on the highway. And, unfortunately, this is an issue that also is of broader public concern. Become familiar with state and federal regulations and standards. New federal laws require upgraded lighting and marking that is more stringent than most state regulations. Areas to focus on include a bright, clearly visible, clean slow-moving vehicle (SMV) emblem, flashing amber lights that are bright and visible at all times (even in daylight hours), and turn signals.

3. Communicate often with your employees about safety. My research during pandemic times has shown that workers care about their health. And they notice the actions or inactions that relate to their safety and well-being. This includes informal training, farm "newsletters" that can be sent out by email or text message, and regular conversations.

4. Make personal protective equipment readily accessible. So many expensive farm injuries involve hazards that can affect a worker's eyes, lungs, feet, and hands. Quality personal protective equipment (PPE) puts a barrier between the hazard and worker. For hazards where PPE is required, you should be providing it for your workforce — but more importantly, it is important to be clear and consistent with your expectations on the use, care, storage, and so forth of PPE.

5. Be thoughtful and strategic on scheduling. Of all the farm injury studies that I have helped lead in the last 30 years, "hours worked per week" is a clear risk factor. Excessively long hours do dramatically increase injury risk. It's a difficult issue with the labor shortage we face. But know that days off or even partial days and purposeful "breaks" during a workday serve to reduce fatigue and will reduce safety risks.

Profitable Meat Marketing Workshop

Wednesday, April 6th, 6:00pm - 8:30pm

Jamestown Community College, Room 120

Carnahan Building, 241 James Avenue, Jamestown, NY



Cornell
Meat
Price
Calculator



New York State
Beef Farm
Business Summary

You are raising and selling local meat, but are you making a profit? There are tools that can help with that! Join Matt LeRoux and Katelyn Walley-Stoll to learn about how to figure out your cost of production, and use the NEW Cornell Meat Pricing Calculator to develop prices that deliver a profit in every channel. In this presentation you'll also learn improved marketing techniques to reach target customers and about MeatSuite.com

Cost to register is \$10, which includes dinner

Register at: [https://www.tinyurl.com/](https://www.tinyurl.com/ProfitableMeatMarketingSWNY)

[ProfitableMeatMarketingSWNY](https://www.tinyurl.com/ProfitableMeatMarketingSWNY) or by contacting Amy Barkley at amb544@cornell.edu or (716) 640-0844.

Not close to Jamestown, but want to take this course? No problem! Matt LeRoux will be speaking on MeatSuite and the Cornell Meat Pricing Calculator in Lockport on April 7th and Corning on May 9th! Details for the contacts and location of these courses is below:

Niagara County:

Thursday, April 7, 6:00-8:00 PM

CCE-Niagara County 4H Training Center
4487 Lake Ave., Lockport, NY

Register by contacting Amanda Henning at
716-433-8839 or app27@cornell.edu

Steuben County:

Monday, May 9, 5:00-6:45 PM

Southeast Steuben County Library
300 Nasser Civic Center Plaza Suite 101, Corning,
NY

Register at: <https://secure.qgiv.com/for/pmm> or
contact Susan Walker at 607-664-2300 or
smw272@cornell.edu



Forage and Pasture Management Workshop

Saturday, April 23, 2022

9:30am - 3:30pm

Pioneer High School

12125 Countyline Rd, Yorkshire



The registration fee is \$40 per person, which includes lunch and printed materials

Registration is required by April 8th.

To Register: Use this link: [https://reg.cce.cornell.edu/](https://reg.cce.cornell.edu/Forage_Management_Workshop_202)
[Forage Management Workshop 202](https://reg.cce.cornell.edu/Forage_Management_Workshop_202) or Contact Lynn Bliven at
lao3@cornell.edu or (585) 268-7644 ext 18

Keynote: Getting the Most out of Your Pastures and Hayfields without Breaking the Bank Dan Steward, WNY Crop Management

Following the keynote, students may select to attend any of the 3 classes below. All 3 classes don't need to fall within the same track.

Pasture Track:

Setting up a Grazing System
Handling Livestock Safely
Equine Pasture Management

Stored Forage Track:

Stored Forage Economics
Making Quality Hay and Balage Panel
Analyzing Forage Reports to Match Livestock Needs

Equipment Track:

Selecting and Purchasing Used Equipment
Tractor and Equipment Maintenance
Tractor Safety

Are you interested in completing a Beef Farm Business Summary for your farm? Contact Katelyn Walley-Stoll! This free tool calculates your cost of production, profitability, and more.

**CROPS
COWS &
CRITTERS**
newsletter

The Forage and Pasture Management Workshop will have both indoor and outdoor classes - remember to dress accordingly!

Dealing with Lice on our Ruminant Species

By Amy Barkley, Livestock Specialist

There are a few parasites that producers will interact with over the course of keeping stock. One of those is the humble louse. Lice are small, about the size of a pinhead, and can be hard to spot unless either a.) you're looking for them or b.) they're in such large numbers that they are causing discomfort to the animal. There are two types of lice: those which consume dead skin (chewing lice) and those which consume blood (sucking lice). Animals with heavy infestations may not gain well, lose weight, drop in milk production, present with anemia, and/or have areas of hair rubbed off where they are trying to scratch the always present itch. Of course, chewing lice don't cause anemia because they don't suck blood, but they do result in discomfort. The economic threshold for treatment is achieved once 10 lice or more per square inch are counted on any one animal in the herd or flock.

Once an infestation is identified, the first bit of good news is that it's relatively easy to treat, but takes dedication on behalf of the stockowner. The second bit of good news is that lice are obligate parasites. This means that they can't live without their hosts. If your favorite cow leaves some lice when she scratches against a pen support, those lice will die in the environment unless they find another cow to call home. While producers get the relief of not needing to treat the barn, they do need to aggressively treat all the animals of the affected species on the farm. This is because lice easily transfer from animal to animal, so if one animal is infested, consider that they all have lice to varying degrees.

When treating, we need to think of the louse's biology. These critters take about 1-2 weeks to hatch from eggs. That means that one treatment of insecticide, depending on the label's treatment timelines, may not be enough if that insecticide is only active for a week. For this reason, it's important to treat multiple times, in strict accordance with the label's scheme for lice. Remember that chewing and sucking lice may need different treatment strategies; chewing lice are not susceptible to systemic insecticides because they don't consume treated blood!

Once the lice are controlled, you'll need to check 10-30 individuals in the herd for signs of nits (eggs attached to the hair) and/or adult lice every 2-4 weeks. If either of these are seen at a rate of 10 nits or lice per inch, you'll need to repeat the whole herd treatment. There is a chance they'll come back once eradicated, but vigilance and repeated treatments will keep them controlled. It's also a good idea to isolate and treat any new animals you buy in (if you do) for that 4-6 week period before introducing them to the herd as a precaution.



Sucking lice infestation. Photo from University of Wisconsin.

A poster for an alpaca shearing day event. It features a photograph of three alpacas (one brown, two white) in a grassy field. The text on the poster includes: "Registration Required", "TUES., APRIL 5TH 6:30 - 7:30 PM ZOOM", "PREPARE FOR SHEARING DAY (ALPACA EDITION)", "Questions? Comments? Contact Dana at (607)391-2664 dmh353@cornell.edu", and "Cornell Cooperative Extension Livestock Program Work Team".

*Registration Required

TUES., APRIL 5TH
6:30 - 7:30 PM
ZOOM

PREPARE FOR
SHEARING DAY
(ALPACA EDITION)

Questions? Comments?
Contact Dana at
(607)391-2664
dmh353@cornell.edu

Cornell Cooperative Extension
Livestock Program Work Team

Wondering what it takes to shear alpaca? Have you sheared alpaca before, but are wondering what you can do to streamline the day?

We'll hear from Jody Hatch whose involvement in the alpaca industry spans 20+ years, previously owning and operating Salmon River Alpacas including management and logistics of the family's shearing service. Jody will provide an overview for 'Shearing day success, less stress', including pre shearing day prep, expectations of owners and shearers, and shearing day management and logistics. She will share simple tips in a systemized approach that can be easily applied to your shearing day festivities.

To learn more and register visit <https://tinyurl.com/alpacashearing-2022> or contact Dana M. Havas at dmh353@cornell.edu or (607)391-2664.

Treating for lice can be relatively easy, but it does require follow through and active treatments.

**CROPS
COWS &
CRITTERS**
newsletter

Cattle, sheep, and goats are all susceptible to lice. Check your animals regularly and treat infestations once they reach 10 lice per square inch.

When is the right time to castrate bulls?

By Jeff Robe, Oklahoma Quality Beef Network Coordinator

The practice of castrating animals goes back to ancient times. Egyptian farmers found castrating bovine bulls made the animal much easier to handle. It's doubtful the Egyptians were concerned about the value-added components of their animals. But today, adding value to market cattle is the name of the game and castration is a key component to any preconditioning program that can greatly influence market price premiums or discounts, especially in older bull calves.

Castrating bull calves has become common practice in U.S. beef herds. In 2017, the USDA-APHIS NAHMS Beef Cow Calf study indicated that 62% of commercial cow-calf herds used castration methods in their management practices. Castration has provided economic benefits to both the cow-calf producer and feedlot operators through increased market prices and meat quality. Castration also decreases unwanted pregnancy and increases the safety of workers and other animals.

There is a perceived notion that intact bulls have an advantage in body weight gains during the preweaning period and post weaning weights than calves castrated at or near birth. However, numerous studies have shown the weaning weights are similar for bulls and steers (approx. 600 lbs.). Advantages in calf weight gain due to testosterone production are presumably realized at a time following average weaning dates closer to puberty.

The timing of castration can influence weight gain and stress management. Studies examining how timing of castration effects average daily gains (ADG) in cattle castrated either in early life (birth to 2 mo.) or those castrated at weaning or post-weaning (6-10 mo.) demonstrated higher ADG during the post-weaning period in the early castrated calves (approx. 0.30 lbs/day greater) than those castrated at or after. The period calves experience weight loss post-castration increases with age as does risk of disease susceptibility. The stress experienced is also related to the time of castration as the level of discomfort and trauma increases with the size of testicles. Calves castrated at 5 ½ months of age or later experienced a greater duration of stress than those castrated at birth or at branding.

Bull calves entering the stocker or feedlot segments of the industry have numerous health and performance factors associated with late life castration such as increased risk or morbidity and mortality, sick treatments and decreased ADG. Therefore, price discounts for bull calves being sold at market can be substantial when compared to steers marketed in the same weight class. Lighter weight bulls (300-400 lbs.) are viewed as less risky, and discounts are generally minimal if any. As the weight of a bull increases, so does the risk. Discounts can average \$6-12/cwt or \$30-60 per head.

A herd management practice that dates to ancient times and still used today has clearly proven beneficial. Utilizing the practice and with a timing that makes sense may be the difference between dollars made or dollars lost.

NYCAMH Holding Respirator Fit Testing Clinics in NWN from April 7th – May 13th

These clinics meet Worker Protection Standard (WPS) requirements for pesticide handlers, including certified private and commercial applicators. They include medical evaluations, respirator fit tests, and WPS - compliant trainings on how to properly inspect, put on, take off, fit, seal, check, use clean, maintain, and store respirators. To schedule an appointment, growers should contact NYCAMH directly at 800-343-7527 or FitTest@bassett.org.

Clinic dates and locations:

April 7th - Orleans County
April 8th - Niagara County
May 12th - Ontario County
May 13th - Yates County

Properly fitting respirators enhance worker safety when working with pesticides and in other potentially dangerous situations on the farm.

**CROPS
COWS &
CRITTERS**
newsletter

Work with your veterinarian to add a clostridial vaccine to your health care regimen to help reduce the chance of tetanus at castration time.

Tips for Successful Frost Seeding

By Amy Barkley, Livestock and Beginning Farm Specialist

Frost seeding is a low input and low disturbance method of improving pastures and hayfields. If potential pitfalls are addressed prior to seed getting on the ground, it can result in a more productive stand. Below are some tips to help you have the best success with frost seeding.

Which pastures and hayfields are the best candidates for frost seeding? The best pastures and hayfields are those which have an appropriate pH for the seed you're planting in addition to reduced vegetative matter cover. The year prior to frost seeding, the resident forage should have been grazed or mowed lower to allow for reduced resident forage vigor in the spring, thereby reducing competition with the new seedlings once they germinate. Pastures or hayfields with bare spots are also great candidates. Bare areas have limited innate competition, and seeding them will increase that field's overall yield.

What kind of seed should I use? Legumes (clovers, birdsfoot trefoil) are the best for frost seeding because they can survive low temperatures and naturally work their way through cracks in the snow, ice, and soil profile because of their round shape and relatively higher density. The larger, flatter, lighter seed of grasses doesn't work as well because it will be more prone to stay on the soil surface... that is, if it doesn't blow away! That said, some producers find that they can successfully frost seed timothy, orchard grass, and tall fescue.

Seeding Rate: You'll want to aim for a higher rate than what's listed on the seed bag because not all of the seed is being applied directly to the soil and incorporated. There is loss associated with this type of seeding. According to numbers published by Penn State University, Pasture renovation frost seeding rates for red clover are 4-8 pounds/acre, yellow clover is 5-10 pounds/acre, white and ladino clover is 2-3 pounds/acre, and trefoil is applied at a rate of 4-6 pounds per acre.

Timing: As the name suggests, frost seeding is best done in late winter or early spring when the frost is leaving the soil. While frost seeding with snow on the ground is attractive because you can see where you've gone over the field, keep in mind that we're trying to plant a very small seed that has to make it all the way down to the soil without cold damage, being consumed by wildlife, or being blown away by wind. If you do choose to frost seed when there is snow on the ground, make sure that you can see the ground

poking through the bed of snow to give the seed it's best chance.

How does soil type impact frost seeding success? The good news for farmers in most of WNY is that our soils are prime for frost seeding. Heavier clay and silt-loam soils hold more water by nature, and therefore have a much more dramatic freeze-thaw cycle. This opens cracks in the soil to get the seed in good contact with soil. These soils are more successfully frost seeded when compared to soils that are sandier in texture.

Does soil fertility matter when frost seeding? Fertility for legumes that are frost seeded follow the same rules of legumes that are planted any other time of the year. Clovers do best in a pH of 6 – 7, while trefoil does well in soils down to a pH of 5.5. Soils that has a pH outside of these ranges are going to result in reduced seedling vigor and quicker stand depletion.

By following these tips, whether you're a first time or seasoned frost seeder, you can experience the benefits of frost seeding. Questions on frost seeding? Contact Amy Barkley at (716) 640-0844 or amb544@cornell.edu



Self-Paced On-Farm Poultry Processing Course through Cornell Small Farms

Looking to process poultry this year and unsure of where to start? Is your insurance company requiring that you take a poultry processing course for them to cover your pastured poultry enterprise? If so, this course may be for you. In it, you will learn farm food safety, regulations, how to process, and packing & storage.

Ask Amy Barkley for more information!

The best time to frost seed is now when the days are warm, but the nights are below freezing!

**CROPS
COWS &
CRITTERS**
newsletter

Remember that frost seeding rates are higher than other field renovation seeding rates, so you'll need to plan accordingly.

Offering 8 DEC Credits
And 11.5 CEU's Total!

A partnership between Cornell University and the CCE Associations in these five counties: Allegany, Cattaraugus, Chautauqua, Erie, and Steuben.

2022 SWNY (Virtual) Field Crops Congress

Thursday, March 24th, 2022

12noon to 1pm (1 Crop Mngmt. CEU)

Factors Influencing Forage Digestibility and Feed Quality

Advancements in measurements of forage fiber digestibility and a growing understanding of field and management factors that affect digestibility offer the opportunity to improve our management and utilization of forages in dairy rations. This talk will cover factors, from crop type to weather, that affect forage digestibility and overall quality as well as considerations for harvest, storage and feedout management to optimize the use of forages in a feeding program. Led by PRO-DAIRY's Joe Lawrence.

Friday, March 25th, 2022

12noon to 2pm (2 DEC Credits in 1a, 21, 23 & 2 IPM CEU)

Field Crop Disease update: corn tar spot, mycotoxins, and more...

Gary Bergstrom will provide an update on the diagnosis and management of field crop diseases in New York including two new corn diseases (tar spot and bacterial leaf streak), corn mycotoxins, soybean cyst nematode, and latest options for disease management in corn, soybean, and small grains. Presented by Gary Bergstrom, Professor, School of Integrative Plant Science Pathology and PlantMicrobe Biology Section.

Soybean cyst nematode in NY: Status update and mngmt. options

Soybean cyst nematode (SCN) is the most damaging pest of soybeans globally, and we are just beginning to identify its expansion into dry bean crops. In this presentation I will discuss SCN damage to crops, the latest statewide survey results, and the latest management options. Presented by Erik Smith, Area Field Crop Specialist with Cornell Cooperative Extension's Central New York Dairy, Livestock, and Field Crops program.

Thursday, March 31st, 2022

12noon to 2pm (1.75 DEC Credits in 1a, 21, 23 & 2 IPM CEU)

Herbicide Resistant Weeds in Agronomic Crops, Herbicide Shortages, and Novel Weed Control Strategies

This presentation will focus on the evolution of herbicide resistance in agronomic crops with a focus on the current issues facing New York producers including: Palmer amaranth, waterhemp and horseweed. Presented by Lynn Sosnoskie, Assistant Professor for Weed Ecology and Management for Specialty Crops at the School of Integrative Plant Science, Cornell AgriTech.

Seed Corn Maggot in Corn and Biological Control of Corn Rootworm

This talk will explore two topics. The first topic addresses the need for seed treatments to prevent stand losses from Seed Corn Maggot and the second topic addresses the use of persistent biocontrol nematodes (entomopathogenic) to control corn rootworm. A single application results in multi-year pest suppression. Presented by Elson Shields, Professor of Entomology at Cornell University.

Friday, April 1st, 2022

12noon to 2pm (1.75 DEC Credits in 1a, 21, 23 & 2 IPM CEU)

Alphabet Soup – GMO Trait Management

The options for pest management traits in genetically engineered crops can be confusing and continues to change. Understanding and managing these traits is critical to responsible and sustainable pest management. This presentation will be led by Joe Lawrence, Dairy Forage Systems Specialist with Cornell PRO-DAIRY.

Field Crop Weed Control in 2022

Limited availability of certain herbicides will likely change the herbicide programs used to control problematic weeds of field crops in NY. Putting together a sound weed management program in 2022 will be discussed. Up-to-date information about the status of herbicide resistant weeds in New York, including effective herbicide resistant weed control strategies and how to prepare for and manage resistant weeds on your farm. Presented by Mike Hunter, Field Crops Specialist with Cornell Cooperative Extension's North Country Regional Agriculture Team.

If you'd like to participate in any of our remaining SWNY (Virtual) Field Crops Congress presentations, we're taking registrations on a rolling basis.



Questions about the topics or getting your DEC credits? Call Katelyn at 716-640-0522!

Want to register over the phone? Call Kelly at 585-268-7644.

It's Time To Rate Your Recordkeeping System!

Take this quick self-assessment from Farm Business Management Specialists Mary Kate MacKenzie and Katelyn Walley-Stoll to see how your current system works for you.

Question 1: On my farm, records of individual income and expense transactions are:

- A. Regularly entered into an accounting system before going into organized storage (3 Points).
- B. Organized, stores in a specific location, easy to find (2 Points).
- C. Disorganized, stored in multiple locations, hard to find (1 Point).

Question 3: Who is responsible for record keeping on your farm?

- A. One person is responsible, and that person sets clear expectations for other team members (3 Points).
- B. Multiple people share responsibility, and their roles are not clearly defined (2 Points).
- C. Nobody (1 Point).

Question 2: Which statement best describes the accounting system used to enter and track financial data on your farm?

- A. We regularly enter financial transactions into a digital accounting program (QuickBooks, CenterPoint) (4 Points).
- B. We regularly enter financial transactions using a simple accounting tool (Cornell Farm Account Book, Excel Spreadsheet) (3 Points).
- C. We use checking account statements as the primary record of financial transactions (digital shoebox) (2 points).
- D. We collect paper receipts, and hand them over to an off-farm consultant at the end of the year (shoebox method) (1 Point).

Question 4: Which statement best describes the income tax situation on your farm?

- A. The farm completes income tax returns on a timely basis (3 Points).
- B. We are still working on last year's taxes (2 Points).
- C. Our farm is more than a year behind on filing income taxes (1 Point).

Question 5: Our farm generates and uses financial statements to analyze the business:

- A. Regularly, on an annual basis (3 Points).
- B. Only when the bank makes us (2 Points).
- C. Not at all (1 Point).

15 - 16 Points: Rock Solid!

You have reliable numbers to support detailed financial analysis. You can plan and make decisions with confidence.

10 - 14 Points: Adequate

You have a basic system in place which satisfies the IRS and your banker, and helps with decision making.

5 - 9 Points: Poor.

Your record keeping system is inadequate. It may be costly in terms of stress, labor, and missed opportunities.

For more information about assessing your current record keeping system, contact Katelyn Walley-Stoll.

**CROPS
COWS &
CRITTERS**
newsletter

What's your recordkeeping score? Not as good as you'd like it to be? That's okay! We've got the resources you need.

The Chautauqua County Extension Connection (USPS#101-400) is published monthly by Cornell Cooperative Extension of Chautauqua County, JCC Carnahan Center 525 Falconer Street, PO Box 20 Jamestown, NY 14702-9608.

Periodical Postage Paid at Jamestown, NY 14701.

Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program



FREE WEBINAR FOR FARMERS & LANDOWNERS

NAVIGATING, VALUING, AND NEGOTIATING LAND LEASES

As the cost of owning land rises, and farm profitability tightens, now's the time to evaluate the role that leased and rented land plays on our local farms - and our bottom lines.

Join Farm Business Management Specialist, Katelyn Walley-Stoll, to learn more about the considerations and resources that are available for evaluating and executing your land lease options. Topics of discussion include written lease agreements, determining "fair" rental rates, and communication strategies.

Free to attend, but registration is required by 4/5.

PRESENTED VIRTUALLY VIA ZOOM.
REGISTER & RECEIVE A RECORDING,
EVEN IF YOU CAN'T ATTEND LIVE.



MONDAY, APRIL 4TH, 2022
7PM - 8:30PM

register: tinyurl.com/LandLease22

Cornell Cooperative Extension is an employee and educator recognized for valuing AA/EEO Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities. For accommodations and accessibility concerns, please contact Katelyn Walley-Stoll by calling 716-640-0522.

Country Crossroads Feed and Seed

Darleen Krisher-Meehan

Andover, NY

607-478-8858

countrycrossroadsfeedandseeds.com



Joe Foster

Eden, NY

716-992-3830

Call for all of your fertilizer & seed needs



Don Wild

Box 7, Great Valley, NY 14741

716-969-4386

King's Agri Seeds - WNY, Forage Mgt. Ser.

Thank you to our Newsletter Sponsors!