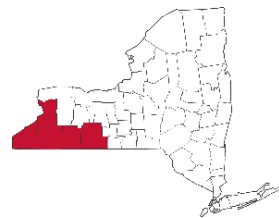




COWS CROPS & CRITTERS



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

Cornell Cooperative Extension | Southwest New York Dairy, Livestock & Field Crops Program



JULY 2026

VOL 7 | ISSUE 7

Photo by: Amy Barkley

Contact Our Specialists

2



Amy Barkley

*Team Leader
Livestock*
716-640-0844
amb544@cornell.edu



Katie Callero

Dairy Management
607-422-6788
krc85@cornell.edu



Katelyn Miller

Field Crops
716-640-2047
km753@cornell.edu



John Pirrung

Research Technician
jap448@cornell.edu



Kelly Torrey

Administrative Assistant
585-268-7644 ext. 10
klb288@cornell.edu

swnyteam@cornell.edu

swnydlfc.cce.cornell.edu@cornell.edu

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 Kelly Torrey.

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 585-268-7644 ext. 10.

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



County Association Executive Directors

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

Cattaraugus County
Kelly McDonald
kmm525@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

County Association Agriculture Educators

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

Kim Oudemool
Cattaraugus County
Natural Resources
Educator
kkr35@cornell.edu
716-699-2377 ext. 106

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

Applications Open for the NYS Agricultural Resiliency Against Tariffs Program

On July 3rd, Governor Hochul announced that \$30M is available to provide payments of \$1,000 - \$25,000 to eligible agricultural producers to help offset rising production costs and market losses that have resulted from federal tariff policies. There are two tracks: 1.) Cow Dairy Farms and 2.) Livestock, Livestock Products, Specialty Crop, Aquaculture Farms. If you are eligible for both tracks, you may apply for both.

Eligibility:

- Applicants must currently run a farm business in NYS
- Applicants must have had at least two-thirds of their 2025 federal gross income in excess of \$30,000 derived from agricultural activities, as defined by New York State Tax Law. If an extension has been filed with the IRS for the applicant's 2025 tax return, at least two-thirds of the applicant's 2024 federal gross income, in excess of \$30,000, must have been derived from agricultural activities as defined by New York State Tax Law.

Applications are due by August 11, 2026. Farmers can apply online here:

<https://agriculture.ny.gov/agricultural-resiliency-against-tariffs-program>

Please note that there are 4 parts to the application that will require an online form, 3 emails back-and-forth with different offices within the NYS Department of Agriculture and Markets, signing of documents before a Notary Public, and signing of documents by a financial certifier (your tax person). Dairy farmers will need to authorize their milk cooperative or processor to release their milk production records. So, start your application early!

Questions can be directed to the Ag Resilience Against Tariff Relief Program Help Desk at 800-554-4501 or by contacting tariffrelief@agriculture.ny.gov

USDA ANNOUNCES OPENING OF ROUND 4 OF THEIR MEAT AND POULTRY PROCESSING EXPANSION PROGRAM

By Amy Barkley, Livestock Specialist, SWNYDLFC Team

3

This is the 4th round of funding for this program, which is open to very small, small, and medium-sized facilities that harvest and process cattle. Eligible applicants must have facilities that are independently owned and operated and have been in business for at least one year. There are two track options to choose from:

Track 1: Processing Expansion Projects

Awards will range from \$50,000 to \$2 million to support a range of activities to increase and diversify processing capacity, including equipment-only purchases over \$250,000, and necessary improvements, upgrades, renovations or retrofits to an existing facility needed to install the equipment. A match requirement of 50 percent of the project cost is required for processing expansion projects.

Track 2: Simplified Equipment-Only Projects

Awards will range from \$10,000 to \$250,000 for projects that only request the cost of equipment and do not include renovation, labor, installation, or certification costs. A match requirement of 25 percent of the project cost is required for simplified equipment-only projects.

The grant deadline is August 7, 2026. For more information, visit: <https://www.rd.usda.gov/programs-services/business-programs/meat-and-poultry-processing-expansion-program-phase-4>

Another, NYS-Specific program for meat and poultry processing facility expansion will be open to applicants soon. We will announce this in our Team's mailed and emailed newsletter as well, but to be put on the direct mailing or call list for this program, reach out to Amy Barkley at 716-640-0844 or amb544@cornell.edu.

IPM Strategies to Protect Corn and Soybean Seed in New York State

- Pollinator Discussion
 - Drone Demonstration
 - NEWA Weather Stations
 - Research Trials
- When:** Thursday, July 23rd
Time: 10:00 AM - 1:00 PM
Where: Zittel's Family Farm
7226 Taylor Road, Hamburg,
NY 14075

Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

Cornell IPM

New York State Integrated
Pest Management

**2.25 DEC credits in 1a,
4, 10, 21 & 2.5 CEU's**

Register: <https://tinyurl.com/IPMFieldDayHamburg>
or call Katelyn Miller at 716-640-2047

Cornell is an equal opportunity employer. For more information visit hr.cornell.edu/eeee.

THIS GRANT IS FOR SMALL FACILITIES
THAT HARVEST AND PROCESS BEEF.



REGISTER FOR OUR UPCOMING FIELD
DAY BY VISITING THE LINK OR CALLING
KATELYN MILLER.

NEW WORLD SCREW WORM - UPDATE JULY 13, 2026

By Amy Barkley, Livestock Specialist, SWNYDLFC Team

New World screwworm (NWS) is a fly that produces a flesh-eating maggot that has devastating consequences for the mammals it encounters. The last time this pest had a self-sustaining population in the US was 1966. Since then, we have seen small import outbreaks, but this current outbreak indicates a more serious threat, with multiple species affected across Texas and New Mexico, including cattle, sheep, dogs, and goats.

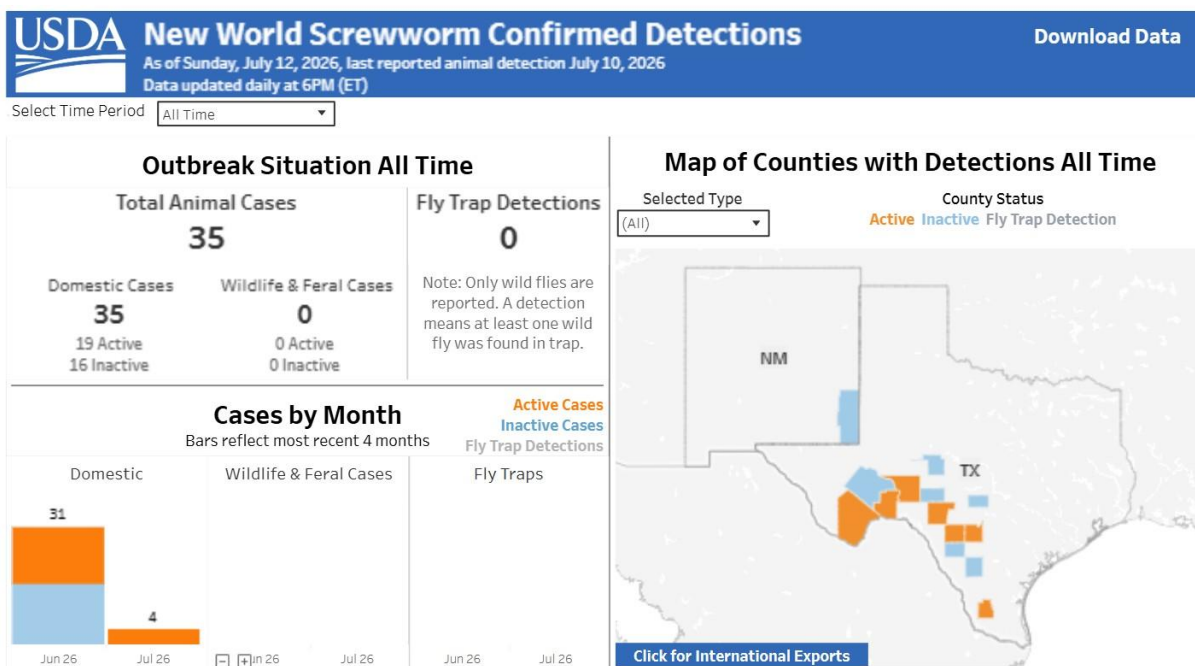
The outbreak started with the first case reported on June 3, 2026. Today, July 13, 2026, the USDA has reported 35 total cases. Nineteen of those cases are active.

There is no approved preventative treatment that can deter the screwworm, but there are emergency treatments that are effective, and if caught early enough, the affected animals can be saved. The best precaution that producers have is to keep their eyes on their animals daily, looking for wounds or soft tissue orifices (ears, eyes, nostrils) where maggots appear to be eating living flesh. Since the time from egg to larvae is only 2 days, the infestation can take hold quickly. While it's unlikely that NWS will naturally migrate up to NYS before it is eradicated from the US again, it could move up this way quickly and sporadically on imported animals. Experts believe that it will die in a typical upstate NY winter.

Eradication measures are ramping up as laboratories in the US, Mexico, and Panama increase production of sterile male flies, which are released into areas with known outbreaks. Because the female screwworm flies will only mate once, if the population of males is overrun by sterile males, it will eventually self-limit to a point of eradicating the pest. These laboratories are remnants of the first eradication effort that began in 1958, and since the eradication in 1966 have worked at low production levels to keep the NWS out of the US and to fight smaller import outbreaks. It's estimated that these labs will be back at full production capacity in early 2027.

If you think you may have NWS on your farm, please reach out to your veterinarian. They can work with you to get the USDA out to test your animals. Unlike some foreign animal diseases, a confirmed positive of NWS does not mean eradication of a herd or flock as a containment method. Individual animals are instead isolated, treated, and euthanized if there is no chance of recovery.

For more information about the outbreak, you can visit the USDA's Animal Plant Health Inspection Service Website at <https://www.aphis.usda.gov/animals/animal-health/livestock-and-poultry-disease/current-status/us-confirmed-cases-new-world>



AT THIS TIME OF THIS ARTICLE, THERE ARE NO NEW WORLD SCREW WORM CASES IN NYS.



THERE ARE NO PREVENTATIVE TREATMENTS FOR THIS PEST. MONITORING YOUR ANIMALS IS THE BEST WAY TO KEEP AHEAD OF IT.

Tractor Safety Workshop

We're celebrating the Year of the Woman Farmer with our upcoming Tractor Safety Workshop. This educational program is designed to build the confidence and skills needed to operate and maintain farm equipment safely and responsibly. SG Groat, an experienced tractor safety trainer, will be instructing attendees in tractor functionality, maintenance, and safety.

Rogers & Sons, Inc.
7406 NY-83,
Cherry Creek, NY 14723
August 20-22
Cost: \$30/person

Steuben County
TBD

August 20-22
Cost: \$30/person

This program might be for you if you are interested in learning more about:

- Tractor Functionality
- Tractor Safety
- Basic Maintenance
- Troubleshooting

This program is open to everyone, but for the best learning experience, space is limited at each program location. Register today by visiting <https://tinyurl.com/TractorSafetyWorkshop>.

*Are you interested in
sponsoring this event?
Contact Katelyn Miller at
km753@cornell.edu or
716-640-2047.*

Cornell is an equal opportunity employer. For more information visit hr.cornell.edu/eeee.

**WE HOPE YOU CAN JOIN US FOR OUR
UPCOMING TRACTOR SAFETY
WORKSHOP!**



**FINAL DETAILS ARE STILL BEING
CONFIRMED. CONTACT KATELYN
MILLER FOR MORE INFORMATION.**

A SIDE OF NITROGEN, PLEASE!

By Katelyn Miller, Field Crop & Forage Specialist, SWNYDLFC Team

As we know, nitrogen (N) is a critical nutrient for corn production, but is also one of the most difficult to manage. Application rates must be balanced in a way that meets crop needs in an economical way, while also protecting against environmental losses. One of the best ways to manage this is by using practices such as sidedressing to provide additional N at a time when the plant will have increased uptake requirements.

For the first two weeks after planting, the seed contains enough N reserves to keep the plant alive until photosynthesis can take place. It isn't until V1 to V3 that the roots start taking up N from the surrounding soil, accounting for approximately 5% of the total N needs, or 10-15 lbs. By V6, plants have taken up an estimated 25-30 lbs of N and quickly build biomass. At V9, corn starts developing new leaves every 2-3 days, tassels begin developing rapidly, and brace roots are establishing. Between V6 and V12, which is typically a two-week period, 25% of the total N uptake occurs. This is being allocated to ear development, where the N status will influence kernel number on the ear. V12 and VT account for about 40% of total N uptake, with an additional 20% uptake attributed to reproductive stages R1 through R6.

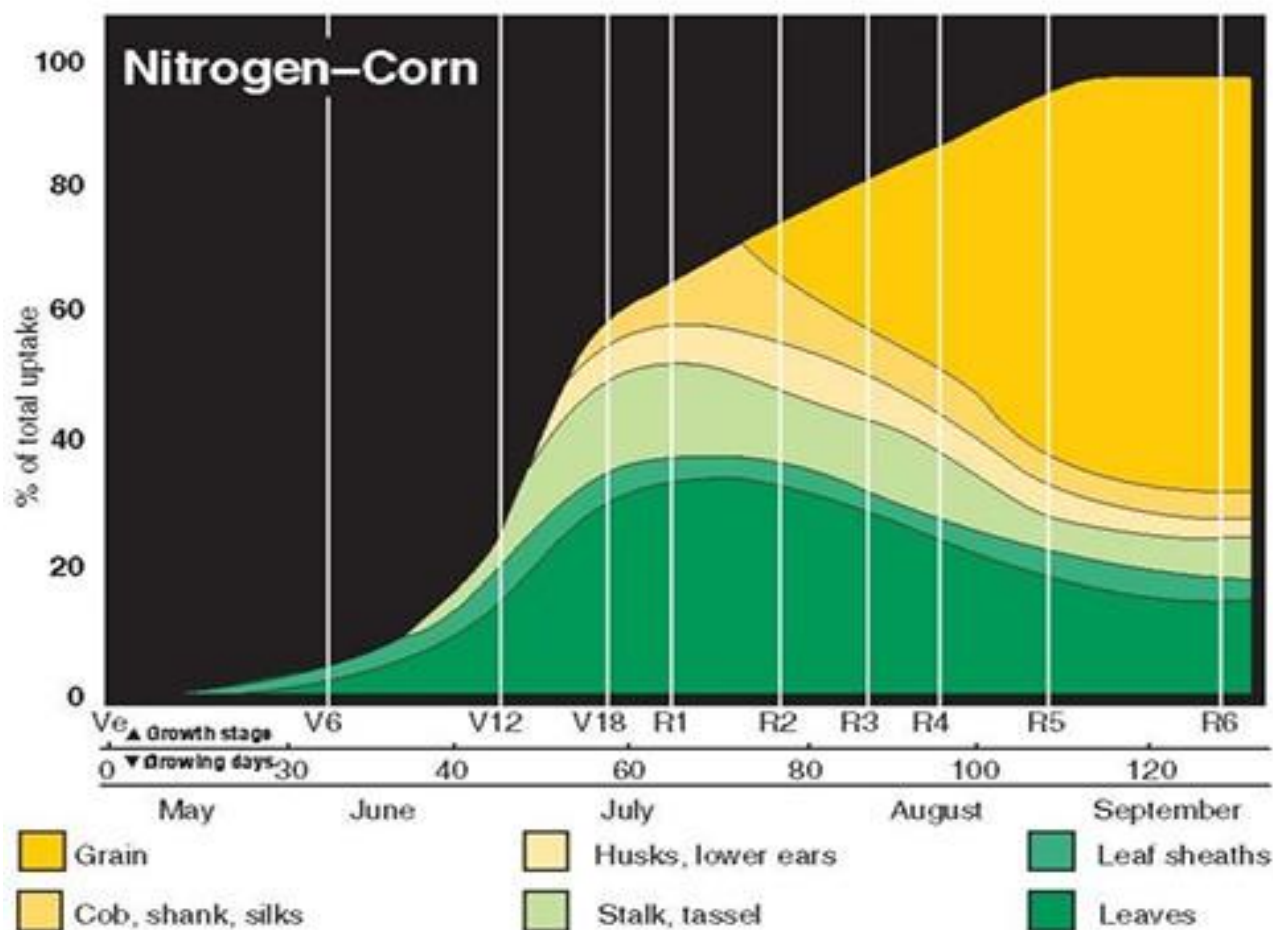


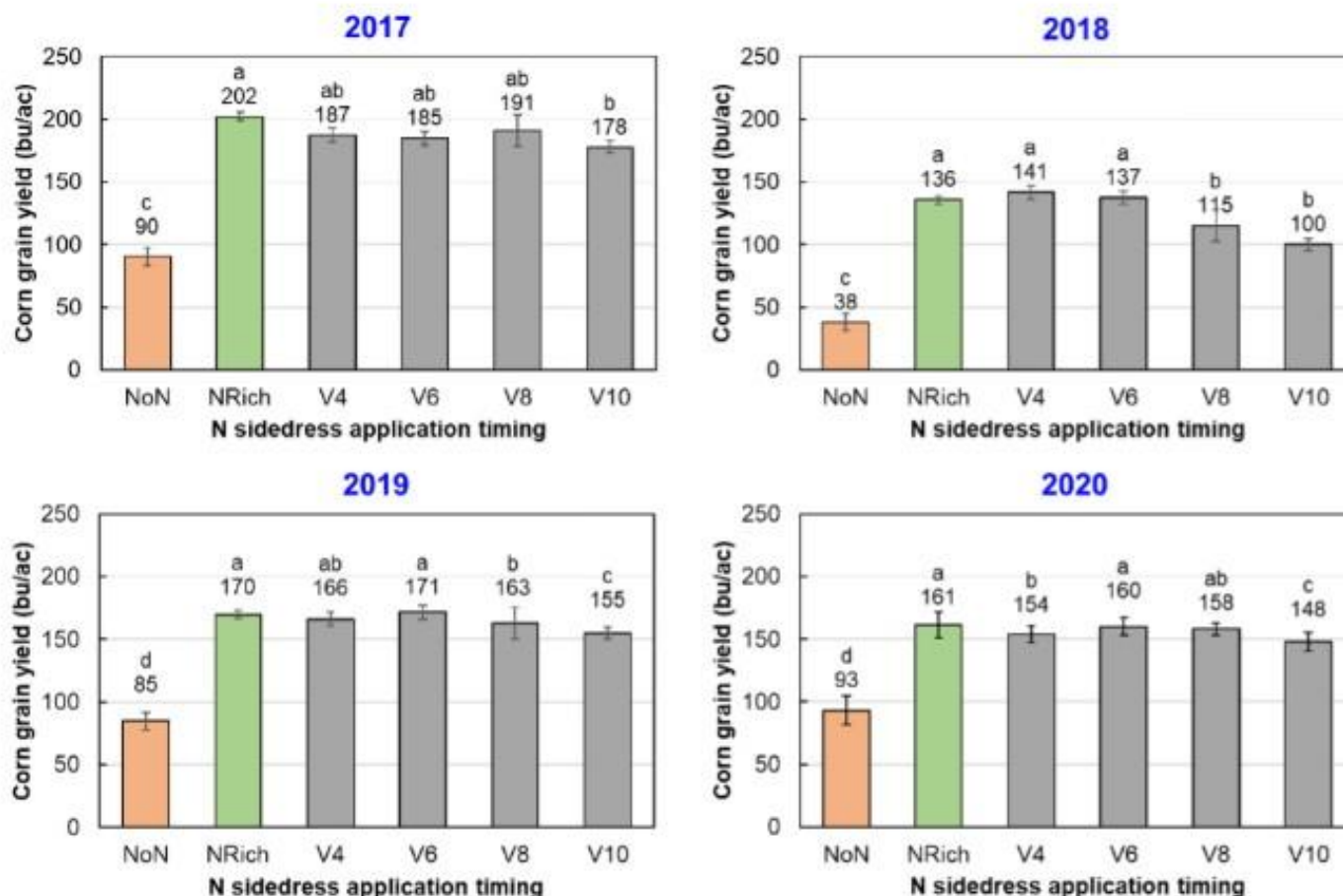
Figure 1: Corn growth stages and relative N uptake. Credit: Iowa State University Extension.

In summary, between V6 and VT, corn will take up about 65% of its total N needs for the growing season. So, when is the optimal time to apply additional N by sidedressing? Research done by the NMSP team indicates that the optimum time is between V4 to V6, compared to the same rates applied at V8 to V10 corn. Sidedressing at 180 lbs of N per acre at V4 and V6 resulted in yields that averaged 97% of the Nrich treatment, whereas the delayed application of that rate resulted in 95% (V8) and 87% (V10) of the Nrich treatment, and 96% (V8) and 89% (V10) of the yield obtained at the V6 application.

BETWEEN V6 AND VT, CORN WILL TAKE UP ABOUT 65% OF ITS TOTAL N NEEDS FOR THE SEASON.



RESEARCH INDICATES THAT THE OPTIMUM TIME TO APPLY SIDEDRESS N IS BETWEEN V4 AND V6.



Caption: Corn grain yield as impacted by timing of sidedressing (NoN = starter only; NRich = 300 lbs N per acre at planting; V4, V6, V8, and V10 = sidedressing of 180 lbs N per acre at the designated growth stage). The trials were conducted on continuous corn fields without a recent manure history at the Musgrave Research Farm in Aurora, NY). The values above each bar indicate the mean yield. Yield are not statistically different if followed by the same letter (a, b, etc.). Photo sourced from Nutrient Management Spear Program.

For every ton of corn silage produced per acre, it's expected that approximately 7 pounds of N will be taken up. For grain, it is estimated that 1 pound of N will be removed for every bushel produced. Recommended application rates depend on many cropping factors.

- N application rate pre-plant or at planting
- Soil type
- Soil N supply
- Crop rotation
- Yield potential and goals
- Manure history
- Weather

N availability is impacted largely by soil moisture. This spring, our soils remained cool and wet, resulting in accelerated losses through denitrification and leaching. Continued weather forecasts will play a role in determining rates and timing of the application of additional N. If using urea, some rain is needed after application but avoid applying before heavy rainfall periods. N availability is also impacted by droughty conditions, reducing availability. When planning applications, both moisture extremes should be considered to help determine rates and select appropriate fertilizer management such as stabilizers.

While the plant needs a small percentage of N early in its growth to support a strong root system, the later vegetative stages have the highest uptake. Splitting N applications allows for high nutrient use efficiency, applying the nutrient when it's needed in the highest quantity.

Resources:

<http://nmsp.cals.cornell.edu/publications/factsheets/factsheet98.pdf>

<https://blogs.cornell.edu/whatscroppingup/2021/07/26/too-late-to-sidedress-nitrogen-%E2%88%92-summary-of-4-years-of-data/>

SPLITTING N APPLICATIONS ALLOWS FOR HIGH NUTRIENT USE EFFICIENCY, APPLYING THE NUTRIENT WHEN IT'S NEEDED IN THE HIGHEST QUANTITY.



CONTINUED WEATHER FORECASTS WILL PLAY A ROLE IN DETERMINING RATES AND APPLICATION TIMING.

SO, YOU WANT TO START A FARMSTAND: UNDERSTANDING PRODUCT RULES AND LICENSING REQUIREMENTS

8

By Amy Barkley and Kate McDonald Polakiewicz, SWNYDLFC Team

Welcome back to our series of articles about starting farm stands in NYS. Did our last article help you decide that you want to move forward with a stand? If so, let's dive deeper into some common questions regarding what items you can sell in a stand, as well as any regulatory requirements necessary for the legality and safety of the products.

Before jumping into individual product categories, it's important to clear up one of the most common misconceptions about farm stands: that opening one requires extensive permitting. Walk-up structures don't need permits but should comply with township setbacks from the road and other property boundaries. Walk-in structures may require permitting from your town if over a specific square footage in addition to adhering to road and property setback requirements. If you are unsure if your farm stand requires a permit, it's best to reach out to your town or look through the town code to ensure you're in compliance prior to purchasing or building the structure.

When shifting our view to products offered, many require specific adherence to state rules and regulations. Each product class will need to be evaluated to determine which licenses, certifications, inspections, labeling requirements, or food safety rules apply. Below are some common products that are on farm stands across the region, and the regulations and rules that govern them.

VEGETABLES, FRUITS AND HERBS

When selling whole, raw produce, there are no regulations to follow other than best production practices. If you sell more than \$25,000 worth of produce annually, you will need to comply with the FDA's FSMA Food Safety Rule, as of April 6, 2026.

For those who want to cut, dehydrate, freeze dry, can, or otherwise process their fruit, vegetables, or herbs, you will need a 20C license to do so in order to ensure food safety compliance. The only exception to this is jams and jellies made with 100% high acid fruit as their only fresh ingredient; these can be processed with a NYS Ag and Markets Home Processing Exemption.

EGGS

While eggs don't have to be washed under state law, they do have to be free of large stains and any adhering debris, making washing required for most eggs. All eggs must be kept under refrigeration at temperatures of 45°F and below. This is best achieved by placing the eggs in a refrigerator; ice packs in coolers do not usually provide enough cooling power to keep temperatures in a food safe range.

It's best practice to pack eggs in new cartons. If using used clean cartons, they should have all identifying information obliterated. All egg cartons must have the farm name, address, contents (type of eggs, number) on the package. Adding best by or use by dates is optional but can assist with inventory management.

RED MEAT: PORK, BEEF, LAMB AND GOAT

To sell individual cuts of meat, it must be processed in a USDA facility, with the cuts individually packed and labeled for resale. Meat should stay frozen at temperatures below freezing, and ideally below 0°F. You are permitted to sell cuts by weight or by package. If selling cuts by weight, they need to be weighted on a scale that's been approved and inspected by NYS Ag and Markets Department of Weights and Measures. Packages need to be labeled with identifying information including farm name, address, and processing facility information.

POULTRY

You can sell fresh whole birds or traditional cuts of poultry from a farm stand that you own by processing under the 1,000 bird exemption or sending the poultry to be processed at a 5A Small Enterprise exempted facility. Poultry must be packaged and labeled as per the requirements under each processing method. While cuts of poultry such as breasts, wings, legs, quarters, and soup bones can be sold in addition to whole poultry, further processing poultry into ground, seasoned, broth, or dried value-added items can only be done in a commercial kitchen under a 20C license.

Fresh chicken should be kept at or below 40°F, and must be frozen within 4 days following processing. Frozen chicken should be kept below freezing, ideally targeting 0°F. Poultry can be sold by weight or by the package. If selling by weight, the same certified scale requirement that impacts red meat applies here.

FRESH, WHOLE AGRICULTURAL PRODUCTS HAVE THE LAST AMOUNT OF REGULATORY OVERSIGHT.



CHECK WITH YOUR TOWN CODE TO SEE IF YOU NEED A PERMIT FOR YOUR FARM STAND OR STORE.

DAIRY PRODUCTS

Producers looking to sell milk or other dairy products like cheese, yogurt, ice cream, or butter, require licensure in NYS. This applies to both pasteurized and raw milk, with raw milk requirements being more stringent. If you're selling dairy products purchased from another farm or facility, that processing facility needs to be licensed. Food safe best management practices need to be followed for refrigeration monitoring during transportation and storage.

HONEY AND MAPLE

These two products can be processed on-farm when creating single ingredient products. Single ingredient products include transformations of these raw products into value-added items. For example, honey can be packed and sold raw, filtered, whipped, and bottled. Maple can be bottled, made into candy or sugar, or whipped.

There are some exemptions where added ingredients don't require a 20C license for processing, such as shelf stable additions that do not add moisture. But, once you add high moisture additives, it increases the risk to the product's safety and therefore requires a license. Farms looking to repack maple/honey or their products from another producer also require a 20C license.

BAKED GOODS

Baked goods have enjoyed a boom in popularity in recent years. There are two classes of products to keep in mind: those which require a 20C license and those which require a NYS Department of Ag and Markets Home Processor Exemption. Proper testing and labeling should be followed for items that require it, and that requirement is based on the license type, where products processed under a 20C license are more stringently monitored than those processed under a home processing exemption.

Generally, a home processor exemption allows you to make baked goods that do not have meat, cheese, or low-acid additions. These baked goods don't require refrigeration to remain food safe. Items include: bread, bagels, cinnamon rolls, biscuits, muffins, doughnuts, cookies, baklava, biscotti, cakes, cake pops, cupcakes, brownies, double crushed fruit pies, scones, granola, popcorn, fudge, pizzelle, sugared confections, pretzels, crackers, and vegetable/potato chips.

There are very specific lists of items that require 20C licensure. Broadly, these are items that are not food safe at room temperature or have a history of causing foodborne illness in the past. These include: anything using cheese, meat, or uncooked dairy/eggs; any additives that are not high acid (I'm looking at you, jalapeno cheese bread); blended items, chocolate dips or tempered chocolates; beverages/tonics; and raw nuts.

CANNED GOODS

Canned or bottled goods require a 20C license, with the exception of jams, jellies, and marmalades that are made with high acid fruits only. Pepper jellies and flower jellies are not considered high acid. Pickles or other jarred acidified vegetables requires the 20C license, as does any fruit or vegetable that is jarred and non-acidified. Items like canned fruits, applesauce, pickled eggs, and fruit juice all fall into this category. Again, proper testing and labeling are required for items outside of the high acid fruit-based jams, jellies, and marmalades.

COSMETICS

Cosmetics are regulated by the Federal Food, Drug, and Cosmetic Act, which covers all products except for soap. Wash-off cosmetics like soaps or scrubs are lower risk than those that are applied to remain on the body like lip balms or tallow balms. Additional insurance may be required to cover these products. It's important to list all ingredients and formulate products carefully to avoid skin irritation.

PLANT SALES

These sales include vegetable seedling sales and the sales of shrubs, trees, cuttings, and anything else that could be planted in the ground. If you are producing any plant material intended for sale, a NYS Department of Ag and Markets Nursery Grower's License is required. This will also allow you to purchase and resell plants and plant material. A NYS Department of Ag and Markets Nursery Dealer's License is required if your intent is only to purchase and resell plant material rather than growing it yourself. The only exemptions to needing a license are if you are selling house plants and cut flowers.

A NOTE ON RESELLING

As a farm stand owner, you can either produce your own products or purchase them in for resale. If you're looking to purchase products in, it's up to you to do your homework and make sure that the regulatory requirements of producing those products are met by the wholesalers.

**PURCHASING PRODUCT LIABILITY
INSURANCE FOR YOUR FARM PRODUCTS
IS ALWAYS RECOMMENDED.**



**YOU CAN AUGMENT YOUR FARM STAND
OFFERINGS WITH THOSE FROM YOUR
FARMER NEIGHBORS.**

A NOTE ON SALES TAX

Sales tax is collected on non-food items, including, but not limited to: cut flowers; plants (seedlings, house plants, trees, shrubs); cosmetics (balms, lotions, body oils, shampoos); fiber creations (regardless of fiber type); crafts; and pet treats. Raw foods and ready-to-eat food items don't have tax collected on them. These include, but are not limited to: fresh fruits and vegetables; meat; eggs; baked goods; jams/jellies/canned goods.

For the sake of length, these are summaries of requirements for each of these product classes, rather than the nitty gritty requirements for each. If you have further questions about a specific product class, please reach out to Amy Barkley (amb544@cornell.edu or 716-640-0844) for more information.

Support your local farm stand!



SALES TAX, IF COLLECTED, MUST BE REPORTED QUARTERLY.



HAVE A PRODUCT REGULATION YOU HAVE QUESTIONS ABOUT? REACH OUT TO AMY!

This year's American Dairy Science Association (ADSA) conference was held in Milwaukee, Wisconsin, and I was really looking forward to seeing the latest research while also catching up with former colleagues. I also had the opportunity to celebrate two of my mentors as they received well-deserved awards! This was my fourth ADSA conference, and for the first time I decided to participate in the annual 5K run. It was a great experience running along Milwaukee's lakefront, with beautiful views throughout the course. The run was a great way to challenge myself, and I found that many of this year's presentations also challenged the status quo in dairy management. Sadly I can't cover all the exciting presentations I attended in one article so I decided to include three of my favorite takeaways.

1. Researchers are continuing to better understand subclinical hypocalcemia.

Dr. Clair Seely, University of New Hampshire, and Dr. Laura Hernandez, University of Wisconsin-Madison, gave excellent presentations diving into the world of subclinical hypocalcemia (SCH). SCH is diagnosed by measuring a cow's blood calcium levels at 4 days in milk. Cows diagnosed with SCH have maladapted to lactation and research from both of their labs have identified long-term effects to a cow's lactation that persisted after cows returned to normal blood calcium status. When cows begin to lactate they have a huge demand for calcium to support milk production. While many diets include dietary calcium to help meet those requirements, the cow can't rely on dietary calcium alone until later in lactation which leaves them to draw upon calcium from the bone. Current research continues to support the use of negative DCAD diets before calving, and cows managed appropriately with a negative DCAD diet often do not require supplemental calcium immediately after calving. While we have made significant progress in preventing clinical milk fever, there is still much to learn about supporting cows experiencing subclinical hypocalcemia.

2. Genetics have dramatically changed milk components, but biology still has the final say.

The Lactation Biology Symposium highlighted just how far genetic selection has brought us in improving milk component production. Dr. Kevin Harvatine, Penn State University, covered just how far we have come in improving milk fat and explored what progress we could potentially make with milk protein. Genetics have played a big part in milk fat progress specifically. The 2025 Net Merit equation weighs milk fat 2x more than milk protein. Yet Dr. Harvatine mentioned that it's likely future genetic gains in milk fat may begin to slow as many of the major SNPs (genetic fragments) associated with milk fat production have already been identified and fixed within the Holstein population, meaning future improvements are likely to come in smaller increments. Milk protein remains much more complex than milk fat as nutritional factors only account for about 3 to 3.5% of the protein concentration, with the rest influenced by milk yield and other biological factors. Interestingly, even when researchers doubled the expression of one protein-related gene, cows did not increase milk protein concentration above 3.2. Instead, they simply changed the composition of the proteins being produced. Increasing overall milk yield continues to be one of the biggest drivers of increased fat and protein yield.

3. Maybe we should stop thinking about the transition cow and start thinking about the transition pair.

This was probably my favorite idea from the Calf Nutrition Symposium. Rather than focusing only on the transition cow, Dr. Sabine Mann, Cornell University, encouraged us to think about the transition pair, recognizing that management decisions before calving directly influence calf health long before birth. For example, Dr. Adrian Barragan, Penn State University, found that dams that were over conditioned or had shorter dry periods tended to have calves with a greater incidence of pneumonia. Dr. Melissa Cantor, Penn State University, talked about the value of extended colostrum feeding and utilization of the nutrient rich milk that moms naturally provide for their calf. Colostrum is much more than just IgG's, and it is important that calves receive sufficient colostrum to reach excellent transfer of passive immunity (at least 25 g/L IgG) as it has lifelong benefits for the calf. It is important to remember calves have biological limits when it comes to the volume of colostrum they can comfortably consume at once. A study from Dr. Mann tube-fed calves different volumes of colostrum and discovered that calves tube-fed colostrum at 12% of their body weight experienced more signs of discomfort, including colic behavior and increased vocalizations.

Although these presentations covered very different topics, they all shared a common theme: the more we learn about dairy cows, the more we realize that management decisions are interconnected. Whether supporting calcium metabolism after calving, understanding the biological limits of genetics, or recognizing how maternal management influences calf health, research continues to challenge us to think a little differently about the cows we manage every day.

SUBCLINICAL HYPOCALCEMIA IS IDENTIFIED AS LOW BLOOD CALCIUM IN COWS AT 4 DAYS IN MILK.



EXCELLENT TRANSFER OF PASSIVE IMMUNITY IS CALF SERUM IGG CONCENTRATIONS ABOVE 25 G/L IGG.



SWNY Dairy, Livestock
& Field Crops Program
5435 County Rd 48
Belmont, NY 14813



FEED & SEED, LLC

"We plant the seeds to your success"

Feed | Seed | Lime | Fertilizer | Farm Supplies

3186 CR 61 | Andover NY | 607-478-8858

94 Front St | Addison NY | 607-359-2424



**ERNST
SEEDS**

EST. 1964

www.ernstseed.com

800-873-3321

sales@ernstseed.com



FARM CREDIT EAST

Patrick Coates

607-793-9729

Patrick.Coates@farmcrediteast.com



**Contact Us
to Request
a Catalog!**

Natural & Organic Fertilizers | Livestock Nutrition
Feed Supplements | Agronomy Consulting

The Fertrell Company

PO Box 265, Bainbridge, PA 17502

800-347-1566 • www.fertrell.com



GROWMARK FS, LLC

Bradley Griffith

716-664-3294 or 716-499-4826

bgriffith@growmarkfs.com

**Fertilizer, Crop Protection,
Seed and Custom
Application**



Kevin Fath

Manager, Farm Relationships & Procurement

kevin.fath@us.lactalis.com



- Custom Fertilizer
Blending &
Application
- Corn, Soybean &
Hay Crop Seeds

716-992-3830

8659 Depot Street
Eden, NY 14057



Providing free and confidential consulting
for NYS farmers and agribusiness
professionals.

Contact us today!

1-800-547-3276

www.nyfarmnet.org

Pavlock and Son's Construction

Pole Buildings
New Home Construction
Light Excavation
Additions
Kitchen Remodel



DANIEL PAVLOCK
716-664-0669
DNPAVL@aol.com



Protect what you grow and who you're growing for

Cliff Love, CCA

607-345-9985

cliff.love@vmagritech.com

NY Based Fungicide Company



**WILD ACRES
FAMILY FARM**

Don Wild

Box 7, Great Valley, NY 14741

716-969-4386

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

Want to go green?

You can opt to receive the newsletter via email
instead of a paper version. You'll receive the
SAME version as the paper copy.



Questions?
Contact Kelly

585.268.7644 ext. 10
KLB288@cornell.edu



THANK YOU FOR BEING OUR SPONSOR!