Support Southwest New York Dairy, Livestock & Field Crops Program by Supporting your local Cornell Cooperative Extension Association!

It’s that time of year where your local CCE Association might be seeking sign ups for enrollments, subscriptions, donations, and programs. We’d like to take a moment and highlight how our relationship with our local associations in Allegany, Cattaraugus, Chautauqua, Erie, and Steuben Counties is vital to our program.

SWNYDLFC is a true partnership between Cornell University and the CCE Associations in these five counties: Allegany, Cattaraugus, Chautauqua, Erie, and Steuben. We are funded by our five participating Cornell Cooperative Extension County Associations, federal Smith-Lever capacity funds, and grants and contracts.

So, while our program doesn’t collect any direct enrollment/subscription fees, some of our county associations do! By financially supporting your local county association, you’re showing a commitment to our program and all of the countless wonderful things CCE does in your community.

If you’d like more information about your county association’s efforts, contact your local Executive Director listed right or call Katelyn Walley-Stoll at 716-640-0522. We thank you for your continuous support!

In this issue:
Advisory Committee Invitation ............ 3
Dairy Market Watch ......................... 4
Spotted Lantern Fly ......................... 7
Calves and Cold Weather ................... 8
And More!

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.
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

We’re hiring! Give Katelyn a call to learn more about our Field Crops Management Specialist position and how to apply.

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
eck4@cornell.edu
716-664-9502 ext. 201

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

Ariel Kirk - Steuben County
Agriculture Educator
adk39@cornell.edu · 607-664-2574

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

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

“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.

County Association Agriculture Educators

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

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

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

Amy Barkley - Allegany County
Livestock and Beginning Farms
716-640-0844
amb544@cornell.edu

We 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.

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.

2 - December 2021
Cold Stress and Cattle
By Amy Barkley, Livestock Specialist

Cattle are resilient creatures and are built to handle the snow and cold. However, there are factors that can influence how well these animals adapt, grow, and put on weight during the winter months.

**Temperature:** Cattle have a temperature range where they are most comfortable and productive, which is about 45 - 55 °F for an adult and 55 - 68 55 °F for baby calves. Any lower than this, they will have increased energy needs to maintain production and self. All of the factors below impact how low temperatures affect cattle.

**Wind:** As wind speed increases, the equivalent temperature decreases. The chart to the left by Dr. John Herrick of Iowa State University Extension shows how different wind speeds and temperatures impact the temperatures experienced by cattle.

**Rain:** Hairs on an animal overlap and leave air gaps that allow for heat to stay close to the body. As winter approaches, cattle will grow longer coats for better insulation. If the hair becomes wet, it loses its ability to properly insulate, making the animal more susceptible to chilling.

**Snow:** So long as the hair coat remains dry, snow on the backs of animals doesn’t have a huge impact on their well-being.

**Mud:** Mud is the equivalent to rain in that it mats down the hair and reduces the animal’s ability to insulate herself. Furthermore, The University of Tennessee notes that 4-8 inches of mud in a pen can decrease intake by 4-8% because mud makes it more difficult to move. It also makes the animals susceptible to hoof disease, which can further reduce intake.

**Feed Quality:** Cattle can only eat so much hay - about 3% of their bodyweight. On the coldest days, offer higher quality forage, with a focus on higher energy, to allow them more nutrition per bite.

**Feed Quantity:** Always make sure ample feed is available during the winter months. Keep an eye on the amount of snow covering hay feeders and whether or not baleage is frozen. Cattle can dig through snow and eat frozen baleage, but it forces them to expend more energy.

**Body Condition:** Animals that are in good body condition are more tolerant of lower temperatures than those animals with less muscling or fat.

**Adaptation:** It takes time to grow out a winter hair coat and to ramp up the metabolism to meet winter energy needs. If a severe cold snap or wind event is forecasted, move the animals to shelter to reduce stress and not overwhelm their bodies.

---

**SWNYDLFC Advisory Committee Invitation**

Are you interested in sharing your program ideas and educational needs? Join our program’s Advisory Committee! This group will meet 1-2 times a year to discuss industry challenges and innovations, programming and research needs, and help prioritize our outreach efforts.

If you’d like to learn more about this crucial volunteer opportunity, call Katelyn Walley-Stoll at 716-640-0522.

---

Livestock can manage themselves through the cold best when they are not wet and/or muddy.

---

Interested in getting help with testing your forage? Contact Amy Barkley!
Dairy Market Watch

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

<table>
<thead>
<tr>
<th>Milk Component Prices</th>
<th>Milk Class Prices</th>
<th>Statistical Uniform Price &amp; PPD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Month</strong></td>
<td><strong>Butterfat</strong></td>
<td><strong>I</strong> (Boston)</td>
</tr>
<tr>
<td>Oct 20</td>
<td>$1.64</td>
<td>$5.01</td>
</tr>
<tr>
<td>Nov 20</td>
<td>$1.56</td>
<td>$5.62</td>
</tr>
<tr>
<td>Dec 20</td>
<td>$1.54</td>
<td>$3.03</td>
</tr>
<tr>
<td>Jan 21</td>
<td>$1.55</td>
<td>$3.04</td>
</tr>
<tr>
<td>Feb 21</td>
<td>$1.44</td>
<td>$2.98</td>
</tr>
<tr>
<td>Mar 21</td>
<td>$1.72</td>
<td>$2.70</td>
</tr>
<tr>
<td>Apr 21</td>
<td>$1.94</td>
<td>$2.81</td>
</tr>
<tr>
<td>May 21</td>
<td>$1.98</td>
<td>$3.13</td>
</tr>
<tr>
<td>June 21</td>
<td>$1.96</td>
<td>$2.53</td>
</tr>
<tr>
<td>July 21</td>
<td>$1.89</td>
<td>$2.49</td>
</tr>
<tr>
<td>Aug 21</td>
<td>$1.85</td>
<td>$2.45</td>
</tr>
<tr>
<td>Sep 21</td>
<td>$1.93</td>
<td>$2.60</td>
</tr>
<tr>
<td>Oct 21</td>
<td>$1.94</td>
<td>$3.01</td>
</tr>
</tbody>
</table>

October Utilization (Northeast): Class I = 30.8%; Class II = 26.5%; Class III = 27.3%; Class IV = 15.4%.

**Dry Products**: Low/medium and high heat nonfat dry milk (NDM) prices were steady in the East/Central regions, while the Western mostly series remained stable, but the price range widened by $0.02. Plant managers are focusing their time on condensed skim drying, but there are a number of issues with production/hauling that are holding up smooth processing. Dry whole milk prices are unchanged on quiet trading activity. East and West dry whey prices moved higher on the range. Whey protein concentrate 34% prices also increased, as spot market activity has been more active in recent weeks. Lactose prices moved lower on the top of the price range. Casein trading was slow, but prices were unchanged and remain high from the viewpoint of customers.

**Cheese**: Cheesemakers are receiving more milk as other fluid milk intake plants add day(s) off for the holiday. Spot milk prices ranged from Class III to $2 under Class in the Midwest. Cheese demand is mixed, particularly on the food service side. Hauling and shipping delays continue to hinder cheese sales, both domestic and international. Cheese is generally available for spot purchases. Market tones are akimbo, as there is a relatively large price gap as block prices overshadow barrel prices.

**Butter**: Cream availability is meeting the mixed needs of butter producers. Some Central butter plants are operating near capacity, but some managers in the East are selling cream for now, while multiples are higher, instead of increasing butter output. Spot butter stocks are reportedly snug. Bulk unsalted butter, in particular, is notably tight. Food service orders are steady. Retail sales are active on solid seasonal demand. Reports from Western stakeholders indicate strong purchasing for butter for export to international markets. Some contacts believe these steadily hearty demand tones across sectors will continue into mid-December, if not longer.

**Fluid Milk**: Class I orders were slower, expectedly, during the holiday week during school break. Retail fluid milk orders are expected to be strong into December. Cream is more available during the holiday, but generally cream has tightened up throughout November.

### Friday CME Cash Prices

<table>
<thead>
<tr>
<th>Dates</th>
<th>Butter</th>
<th>Cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/29</td>
<td>$1.94</td>
<td>$1.67</td>
</tr>
<tr>
<td>11/5</td>
<td>$1.93</td>
<td>$1.58</td>
</tr>
<tr>
<td>11/12</td>
<td>$1.95</td>
<td>$1.75</td>
</tr>
<tr>
<td>11/19</td>
<td>$2.04</td>
<td>$1.85</td>
</tr>
<tr>
<td>11/24</td>
<td>$1.99</td>
<td></td>
</tr>
</tbody>
</table>

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.

Octoer's Albany Price $/Gallon to the farmer was $1.54 (before hauling, promotion, and balancing). This is slightly higher than last year's $1.41.
Forecasting milk prices far into next year with a high level of certainty is difficult. Milk prices are very sensitive to small or anticipated changes in milk production, domestic sales, or dairy exports. Milk production looks to be bullish for milk prices.

December 2021 - 5
Our two forms of publications feature research-based and timely information from our four specialists, listed to the right, along with local event notifications and Cornell University outreach. This information is provided to participants who range from dairy, livestock, and field crops producers to agricultural suppliers and consultants.

**Weekly Email Update:** Shared with 430+ households who have signed up with our program.

**Monthly Paper Mailer:** To reach our stakeholders and farmers who lack internet access, we send out a monthly mailer where your company’s logo and contact information would be featured with a mailing list of 235 households.

If you sponsor our weekly and monthly publications you reach approximately 700 households.

### Full Color Sponsorship Option and Rates:

<table>
<thead>
<tr>
<th>Length of Plan</th>
<th>Cost</th>
<th>Monthly Paper Mailer</th>
<th>Weekly Email Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Year</td>
<td>$400</td>
<td>12</td>
<td>+ 12 (1/month all year)</td>
</tr>
<tr>
<td>1/2 Year</td>
<td>$225</td>
<td>6</td>
<td>+ 6 (1/month for 6 months)</td>
</tr>
<tr>
<td>1/4 Year</td>
<td>$125</td>
<td>3</td>
<td>+ 3 (1/month for 3 months)</td>
</tr>
<tr>
<td>Email Update Only*</td>
<td>$100</td>
<td>0</td>
<td>12 (1/month all year)</td>
</tr>
</tbody>
</table>

*reach is 1/2 our audience*

There is a 10% discount for payment received by 12/31/2021

⇒ Examples of our past publications can be found by visiting: [https://swnydlfc.cce.cornell.edu/newsletter.php](https://swnydlfc.cce.cornell.edu/newsletter.php)

⇒ Printed sponsorships will appear in a column on the back page in alphabetical order.

⇒ Weekly email update sponsorships will be shown in the same format at the end of the email.

### Keep an Eye Out for Spotted Lanternfly!

Spotted Lanternfly is an invasive inch-long planthopper that can cause extensive damage to crops. While it favors grapes, apples, hops, and hardwoods, it can also be found on other crops. In large enough numbers, this pest can kill off whole orchards, vineyards, and hopyards. It is up to all of us to be vigilant and report the pest to protect industries that are vital to NYS agriculture. This time of year, you can find the egg masses, which look like concrete and are typically affixed to trees/vines, but can be on equipment and vehicles as well.

In the spring, they are in their black, red, and white nymph stages. They shed into their adult form in summer.

If you see this pest, please report it immediately to NYS Ag and Markets.

October’s Albany Price $/Gallon to the farmer was $1.54 (before hauling, promotion, and balancing). This is slightly higher than last year’s $1.41.

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.
Cornell Agricultural Workforce Development is offering two one-hour three-session Onboarding Webinar Series via Zoom that target farm employers and the educators and consultants who support them. Registration is free, but required. The same content will be offered at both series.

The first series will be held from 11:00 AM to 12:00 PM on December 8 and 22, and January 5. Register for this series at tinyurl.com/AWOnboarding2021. The second series will be held from 11:00 AM to 12:00 PM on January 21, and February 4 and 18. Register for this series at tinyurl.com/AWOnboarding2022.

In the webinar series, the Cornell Agricultural Workforce team will share how to use onboarding materials, methods and templates. The series covers how to navigate employment requirements and improve human resource management practices, including enhancing training skills. Each webinar includes a 20-minute presentation, followed by 15 to 20 minute breakout sessions, and finishes with a 15-minute general Q&A session.

Benefits for Farms

- Ensures compliance with basic regulations and policies.
- Provides clarification on work procedures and expectations, which results in better employee performance and safety.
- Establishes a workplace culture based on values, philosophies and traditions.
- Creates connected relationships at work that allow employees to engage and thrive.
- Increases employee commitment and reduces turnover.
- Provides accessible and realistic support for farm onboarding, even when labor and time are in short supply.

**Farmer Recommended**

- Participate. It makes the process better for both employer and employee. It improves compliance, safety, performance, and morale.
- It helps keep hiring organized and gives a sense of professionalism.
- It organized and standardized our system of. We are now more in compliance than ever.
- This made me so much more confident as I go through the new hire process with employees. I got major bonus points on my FARM evaluation for the new employee training with my google classroom that I have set up!

For more information about this series or your farm’s onboarding process, contact Katelyn Walley-Stoll at kaw249@cornell.edu or 716-640-0522.

---

**Cornell Cooperative Extension**

**FARMER TAX SCHOOL**

An educational series from Cornell Cooperative Extension Farm Business Management Specialists offering courses designed to inform and empower farm managers to better understand their tax obligations, management strategies, and improve farm profitability.

**Tax Management for Beginning and Small Farm Businesses**

*Tuesday, January 18th*

7pm - 9pm

$10/farm

A one-night virtual meeting for beginning and part-time farmers that provides useful tax information enabling participants to make better tax decisions for their business. Federal and state income taxes will be covered. Tax regulations specific to NYS will be covered as well.

**Farm Specific Tax Code Benefits**

*Tuesday, January 25th*

7pm - 9pm

$10/farm

For farm businesses of all shapes and sizes, tune in to learn more about the tax advantages available for farms. This workshop will include information for the current tax season.

For more information about this series or your farm’s onboarding process, contact Katelyn Walley-Stoll at kaw249@cornell.edu or 716-640-0522.
We're starting to approach the dreaded cold, winter months which means we're due for another reminder about how cold stress can impact young calves. Every year we remind folks about the importance of preparing for cold stress so that calf performance isn't hindered, but that's because every year we are learning more about the negative impacts it can have.

First, it is important to recognize why calves are especially susceptible to cold stress. Calves are born with very little fat reserves so naturally they have very little to work with if they need to burn fat to generate metabolic heat and stay warm. They also have low surface to mass ratio and poor insulation which makes heat loss a high risk for young calves. Lastly, they do not have a functioning rumen in their early life, so they are unable to produce heat through fermentation the way adult cows do. Combined, these reasons make it increasingly important for dairy calf managers to provide an environment that protects young calves from cold stress.

Secondly, it is important to understand when cold stress can occur. When the temperature starts to drop below the calves' thermoneutral zone, they must use additional energy to maintain their body temperature. For newborn calves up until they are about 4 weeks old, this thermoneutral zone is between 50-77°F, and for 4-week-old calves until weaning the thermoneutral zone is 32-77°F (this suggests that older calves are slightly more tolerant to cooler temperatures). Third, it is important to understand what you, as a calf manager, can do to help calves through periods of cold stress. The number one strategy and hopefully your overall goal regardless of weather, is to keep calves healthy.

Healthy calves are naturally going to be more resilient to cold stress because they are active and eager to consume their meals. Activity will generate body heat and consumption of warm milk will help keep the calf warm. If a calf is sick, it's likely that she won't be active and that she won't consume her meals as eagerly, or at all. It is recommended to put sick calves in a warm room or put heat lamps on them during periods of cold stress because they are at higher risk of hypothermia. Related, if you have dystocia calves (calves born to difficult calvings), their ability to thermoregulate can be up to 36% lower than nondystocia calves. These further highlights the importance of paying closer attention to dystocia calves. Providing additional nutrition can also help combat the negative consequences of cold stress. One of these consequences is that calves use the energy supplied from milk to maintain body temperature rather than for growth. Providing additional calories can help calves maintain thermoneutrality while also putting on weight. Be cautious when increasing nutrition though! You don't want to increase the solids content too much by adding extra milk replacer powder, and you don't necessarily want to feed more fluid milk in each meal. Instead, it is recommended to add an extra meal when possible during the cold months. From a housing perspective, make sure calves have plenty of dry bedding. One easy way to assess if calves have sufficient bedding is to the kneel test. If you kneel in their bedding and your knees get wet, it's not sufficient - add more or change it entirely! Lastly, give calves a calf coat or calf blanket. It's a very easy solution that truly does make a difference for calves.

In conclusion, there are a lot of things that we can complain about that winter brings to the table, but poor performing, or sick calves doesn't have to be one of them!
2021 Small Grains Performance Trails Now Available

This year’s results, as well as results from previous years, are now available for NYS producers. The report includes Medina (soft white) and Erie (soft red) as the most recent varieties, in addition to 145 other varieties of soft white winter wheat, red winter wheat, winter malting barley, winter rye, spring oats, and spring malting barley. The data include grain yield, test weight, lodge score, head date, winter survival, height, pre-harvest sprouting, disease incidence, and DON concentration.

For a copy of the trial report, contact Amy Barkley at amb544@cornell.edu or 716-640-0844.

End of the Year Farm Business Management Reminder - GO COUNT YOUR INVENTORIES!

Don’t you just hate when your lender asks for an updated Income Statement or Balance Sheet in the middle of May….and you have no idea what your supplies, forage, and animal inventories were at the beginning of that year? OR - You’re really interested in benchmarking your farm’s financial performance and your friendly, local Farm Business Management Specialist (psst - Katelyn Walley-Stoll) asks for these numbers? Do yourself a favor and head out now to count your inventories.

Vaccine Handling and Storage

By Bob LeValley, Oklahoma Beef Quality Assurance Coordinator

The highest quality vaccine that producers purchase may be of little value if not handled and stored properly. Even experienced producers may overlook key principles when preparing and administering vaccines and other animal health products. Product storage and handling is important to ensure that the efficacy of the products is not compromised.

Modified live vaccines must be reconstituted with a sterile diluent prior to administration. It is generally recommended that these products be used within an hour of reconstitution. The products are routinely used with a good response when administered and handled according to label directions. The processing speed in a stocker operation is often considerably faster than a cow/calf operation. Cow/calf processing facilities are often in area that are not well sheltered from the weather. This stresses the need to exercise caution when handling and administering modified live products. Common handling techniques can render MLV products ineffective and even reduce the effectiveness of killed vaccines and other products.

It is always a good practice to purchase vaccines from a reputable distributor. A vaccine will have less than normal effectiveness if it has ever been stored improperly. Improper storage includes freezing, and/or exposure to heat or sunlight. Maintaining a high level of efficacy is critical to establishing immunity in a majority of vaccinated cattle. Vaccines should be stored in a dependable refrigerator that maintains a temperature (typically 35-45°F) as directed by the product label. Chute side vaccine coolers work well for holding the vaccines during processing. These coolers have slots for holding syringes after they are loaded, and vaccines are placed inside the cooler to maintain temperature. Vaccine coolers can be purchased ready to put to use, or can easily be constructed by converting small coolers to this intended purpose. Instructions for constructing an inexpensive vaccine cooler are available by clicking the link on the “Chute Side Vaccine Cooler” at the beefextension.okstate.edu website.

It is also important to maintain a record of lot/serial numbers of products in the event of a recall or other situations that may arise. A quick and easy method of recording the lot and serial numbers while working cattle is to simply take a photo of the information on the vial label with a cell phone camera. It can be transferred later to more permanent records. Products that are out of date should be properly discarded. Through proper record keeping, storage and handling, animal health products will be an effective piece of a comprehensive cattle health program.

For more information on solar leasing, contact Amy Barkley for a copy of the most recent newsletter articles on the topic.
Upcoming Events

<table>
<thead>
<tr>
<th>Date, Time, Location</th>
<th>Topic</th>
<th>Learn More...</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 14th, 2021 12:30pm - 1pm Online via Zoom</td>
<td>Transition Cow Tuesdays: Evaluating Transition Management</td>
<td>Contact Camila Lage</td>
</tr>
<tr>
<td>January 10th, 2022 1pm - 2pm Online Webinar</td>
<td>Hoard’s Dairy Webinars: The dairy situation and outlook for 2022</td>
<td>Contact Camila Lage</td>
</tr>
<tr>
<td>January 18th, 2022 7pm - 9pm Online via Zoom</td>
<td>Tax Management for Beginning and Small Farm Businesses</td>
<td>Contact Katelyn Walley-Stoll</td>
</tr>
<tr>
<td>January 25th, 2022 7pm - 9pm Online via Zoom</td>
<td>Farm Specific Tax Code Benefits</td>
<td>Contact Katelyn Walley-Stoll</td>
</tr>
</tbody>
</table>

Merry Christmas and Happy Holidays from the SWNY Dairy, Livestock & Field Crops Team!

Stay warm and safe this holiday season.

As a friendly reminder, our specialists will be out of the office from December 24th - December 31st.

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