

AG FOCUS



Wheat maturing in Niagara County this week. (Featured in 6/26/24 Crop Alert)
 Photo: M. Stanyard, CCE/NWNY Team.

Enhancing Forage Quality: The 3 C's Approach

Jodi Letham

As temperatures in the NWNYS region range from mid-70s to low 90s with moderate humidity and sufficient rainfall, the focus turns to optimizing forage quality for the upcoming harvest season, whether it's your planned 2024 crop or an alternative. Understanding the impact of chop length on forage quality – be it haylage, corn silage, or other crops – is crucial.

The length of chop significantly influences forage quality in several ways, affecting fermentation, fiber composition, and ultimately, the nutritional value delivered to your herd. This article explores the principles of Chop, Chat, & Chew (3 C's) to help dairy producers make informed decisions that enhance the quality of their forage.

Chop Length and Fermentation

The theoretical length of cut (TLC) recommendations varies for different forage types:

- Alfalfa and grass: 3/8 to 1/2 inch
- Corn silage: 1/2 to 3/4 inch

For corn silage with over 30% dry matter (DM), proper processing is essential to maximize feed utilization by livestock.

Chop Length and Effective Fiber

Longer chop lengths increase physical fiber content, while shorter cuts reduce effective fiber. This impacts rumen function and overall digestion efficiency in dairy cows.

Particle Size Guidelines

Particle size recommendations for corn silage, haylage, and total mixed rations (TMRs) are critical for optimizing dairy cow diets (see Table 1). Ensuring adequate particle size supports proper rumen

Cont. on page 3

This Issue

- **Enhancing Forage Quality: The 3 C's Approach**
 By Jodi Letham 1 & 3
- **Changes to the NYC&SGA Soybean and Corn Yield Contests**
 By Mike Stanyard 5
- **Avian Influenza and the Dairy Sector: Understanding an Important Underlying Concept for Guiding Planning, and Implementation Functions of Risk/Crisis Management**
 By John Hanchar 7
- **Hands-On Calving Training** 8
- **Ventilation and Circulation**
 By Margaret Quaassdorff 9
- **Can This Pasture Be Saved?**
 By Nancy Glazier 11
- **What Keeps Me Up At Night? H5N1.**
 By Kaitlyn Lutz 15
- **UPCOMING EVENTS** 16

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Enhancing Forage Quality: The 3 C's Approach Cont.

rumen function and reduces the risk of sorting behaviors.

Impact on Dairy Nutrition

Proper chop length and particle size contribute to optimal rumen health, maintaining pH levels, and ensuring cows spend sufficient time chewing—a key factor in saliva production and nutrient absorption.

Table 1. Corn Silage, haylage, and TMR particle size recommendations for lactating cows.

Screen	Pore Size (inches)	Particle Size (inches)	Corn Silage	Haylage	TMR
Upper Sieve	0.75	> 0.75	3 to 8	10 to 20	2 to 8
Middle Sieve	0.31	0.31 to 0.75	45 to 65	45 to 75	30 to 50
Lower Sieve	0.16	0.16 to 0.31	20 to 30	30 to 40	10 to 20
Bottom Pan	s	< 0.16	< 10	< 10	30 to 40

By applying the principles of Chop, Chat, & Chew, dairy producers can improve forage quality and enhance overall herd nutrition. Engaging with specialists like Jodi, Field Crops Specialist, provides valuable insights and guidance on optimizing harvest, ensiling, and feed out practices tailored to your farm's needs.

Call to Action

Connect with Jodi to discuss strategies for achieving your forage quality goals through effective harvesting techniques and best practices in ensiling and feeding. Ensure your herd receives the highest quality nutrition with expert guidance and support.

This extension article emphasizes the importance of chop length and particle size in optimizing forage quality for dairy cattle, providing actionable advice, and inviting readers to engage further with a specialist for tailored support.



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Nice Toy Hauler

2016 INTERNATIONAL 4300 TOY HAULER CREW CAB: Cummins 325 HP; Allison Auto. Trans.; 14' Flatbed Set Up For Towing; Single Axle; 25,999# GVW; 226" WB; P/W; PDL; P/M; Hands-Free Capable Bluetooth Radio; 60,351 Miles; Stk. # 6941 - \$76,000



Clean Titan

High HP

2015 MACK TITAN T0713 w/36" SLEEPER: 605 HP Mack MP10; 18-Spd. Manual Transmission; 18K Front Axle; 46K Locking Rears; Air Ride Susp.; 246" WB; Dual Exhaust & Air Cleaners; 3.91 Ratio; Wetline; 274,608 Miles; Stk. # 6957 - \$125,000



6,200 Gal. Alum. Fuel Tanker

2014 PETERBILT 367 FUEL TANK TRUCK: Clean; Cummins ISX 550 HP; 18-Spd. Manual TRI-DRIVE; Double Frame Fuel Tank w/Aluminum 6,200 Gal. Fuel Tank; (5) Compartments; (2) Reels; 20K Front Axle; 69K Full Locking Rears; Air Ride Susp.; 353,819 Miles; Stk. # 6938 - \$95,900



Super Clean Fuel Truck

2007 MACK CTP713 FUEL TANK TRUCK: Mack MP-405M; Allison Auto. Trans.; Clean, Double Frame Fuel Tank w/Aluminum Manufacturing 4,700 Gal Fuel Tank; (5) Compartments; 18K F/A; 46K Rears; Air Ride Susp.; 274" WB; 182" CT; 23'6" Frame Behind Cab; 209,176 Miles; Stk. # 6916 - \$69,900



14K/46K Rears

2014 KENWORTH T880 DAYCAB: 500 HP Paccar MX13; 18-Spd. Manual; 14.6K F/A; 46K Full Locking Rears; Kenworth 8-Bag Air Ride Susp.; 12R22.4 Front Tires; 11R22.5 Rear Tires; 202" WB; 3.91 Ratio; 507,195 Miles; Stk. # 6965 - \$59,900



Low Mile Mixer

2009 INTERNATIONAL PAYSTAR 5600i; Cummins 430 HP; Engine Brake; Allison Automatic Trans.; 20K F/A; 65K Rears; Hendrickson Spring; 244" WB; PTO; Double Frame; Supreme 1400T Tailgate Chute; (2) Mixing Augers; Wide Rear Conveyor; 35,054 Miles; Stk. # 6901 - \$119,500



4,400 Gal. Tanker

2008 PETERBILT 365 TANK TRUCK: Double Frame w/4,400 Gal. Steel Tank; Cummins 410 HP; 13-Spd.; 14.6K F/A; 44K Full Locking Rears on Air Trac Susp.; 228" WB; 156" CT; 21" Frame Behind Cab; PTO; 529,094 Miles; Stk. # 6857 - \$44,900



2000 PETERBILT 357 w/KUHN KNIGHT VT180 VERTICAL FEED MIXER; Truck Scale System; Cummins ISM (Recent In-Frame Overhaul); Allison Auto. (Reman Weller Trans.); 20K F/A; 46K Rears; 397,000 Miles; 6,889 Hours; Stk. # 6829 - \$63,900



Allison Auto.

133,000 Miles

2008 INTERNATIONAL WORKSTAR 7600 DAYCAB: 425 HP Cummins ISM; Allison 4500RDS Auto.; 20K F/A; 46K Locking Rears; Hendrickson Haulmaxx Susp.; 216" WB; 140" CT; 16" Frame Behind Cab; 4.78 Ratio; Wetline; 133,266 Miles; Stk. # 6973 - \$54,500



Reman Detroit

Allison Auto.

2007 WESTERN STAR 6900 CAB & CHASSIS: XD TRI-DRIVE; Double Frame; 490 HP Reman Detroit 14L Engine In 2015; Allison RDS4500 Trans.; 20K F/A; 69K Full Locking Rears; 272" WB; 330" Bridge; 25'6" Frame Behind Cab; Front Engine PTO; 7.17 Ratio; Stk. # 6481 - \$62,500



Heavy Spec Auto.

42,000 Miles

2002 INTERNATIONAL 2574 CAB & CHASSIS: Double Frame; 335+ HP Cummins ISM; Allison 4560P 5-Spd. Auto.; 20K F/A; 46K Full Locking Rears; Hendrickson Spring Susp.; 5.38 Ratio; 252" WB; 20'6" Frame Behind Cab; 174" CT; 42,229 Miles; Stk. # 6929 - \$58,900



Allison Auto.

46K Rears

2013 PETERBILT 367 DAYCAB: Very Clean; 390 HP Cummins ISX; Allison Auto. Trans.; 212" WB; 20K F/A; 46K Full Locking Rears; Wetline; Air Trac Susp.; 18,400 lb. Chassis Weight; 15" Frame Behind Cab; 130" CT; 213,229 Miles; Stk. # 6768 - \$74,900



2015 WESTERN STAR 4900SB TRI-DRIVE DUMP TRUCK: Double Frame; 560 HP Detroit DD16; 18-Spd. Manual; 20" Tub Style Steel body; 20K F/A; 57K Full Locking Rears; Plumbed For Pup Trailer; AirLineR Susp.; 355,813 Miles; Stk. # 6780 - \$91,900



2014 PETERBILT 367 DOUBLE FRAME SLEEPER TRUCK: 48" Flat Top Sleeper; 550 HP Cummins ISX Engine; 18-Spd. Manual; 14.32K F/A; 46K Full Locking Rears; Neway Susp.; 232" WB; 436,000 Miles; Stk. # 6794 & 6795 - \$51,900 EACH



Clean Garbage Trucks!

(2) 2007 INTERNATIONAL 7400 REFUSE TRUCK: Hell 20-Yd. Rear Load Packer; DT466 260 HP; Allison Automatic Trans.; 12,350 lb. F/A; 46K Rears; Hendrickson HN Susp.; Double Frame; 198" WB; 130" CT; 14'6" Frame Behind Cab If Packer Removed; 5.57 Ratio; 105,000/91,000 Miles; Stk. # 6953/6954 - \$34,900



Tri-Drive Vac Truck

2015 FREIGHTLINER 114SD TRI-DRIVE VAC TRUCK with Vac-Con System; 470 HP Detroit DD13; Eaton Fuller Auto. Boiler; Dumping Tank; Fresh Water Tanks; Dynablast 420,000 BTU Torrier; Telescopic Boom w/8" Suction Hose; 20K F/A; 69K Locking Rears; AirLineR Susp.; 4.56 Ratio; 160,524 Miles; Stk. # 6917 - \$129,900



44,000# Rears

Qty. (3)

(2) 2007 MACK CHN613 DAY CAB TRACTOR: Low Mileage; 380/410 HP Mack AC; 13-Spd. Manual; 14K F/A; 44K Rears On Camelback Susp.; 210" WB; Wetline; 63K/45K/53K Miles; Stk. # 6873/6872/6895 - \$42,900



Low Mile/Hr. Packer

2012 MACK LEU613 PACKER: Double Frame; Labrie Side Load Packer; 20K F/A; 46K Rears; Haulmaxx Susp.; Allison Auto. Trans.; LH/RH Side Drives; 212" WB; 180" CT; 20'6" Frame Behind Cab if the Packer is Removed. ***HP Can Be Increased to 395-425 with Software Flash*** 59,375 Miles/13,276 Hours - \$48,850



Long Heavy Spec

Allison Auto.

2009 MACK GRANITE GU813 CAB & CHASSIS: Double Frame; Mack 395 HP; Allison Auto.; 20K F/A; 46K R/A; Air Ride Susp.; 280" WB; 20'6" Frame Behind Muffler; 174" Frame Behind Muffler To Center of Trunnion; 169,543 Miles; Stk. # 6550 - \$56,900



24 ft. Alum. Box

2004 STERLING L9500 DUMP TRUCK: Double Frame; Mercedes 460LA 18-Spd. Manual; 24" Alfab Alum. Body w/60" Sides and 6" Sideboards; Tarp; 20K F/A; 46K Locking Rears; Hendrickson HN Susp.; (4) 11K Steerable Lift Axles; 425/65R22.5 Front; 11R24.5 Drive Tires; 310" WB; 246" CVT; 24'6" Frame Behind Cab; 383,000 Miles; Stk. # 6931 - \$69,900



Heavy Spec Chassis

NO RUST

2007 STERLING L9500 CAB & CHASSIS: Clean; Double Frame; 385 HP CAT C13; Allison Auto.; 20K F/A; 46K R/A; Hendrickson Spring Susp.; 248" WB; 184" CT; 21" Frame Behind Cab (Muffler Takes Up 14"); 276,986 Miles; Stk. # 6914 - \$49,500



25,000 Miles

Allison Auto. Crane

425 HP

2009 INTERNATIONAL 5600i w/National 600E Crane; Cummins 425 HP; Allison Auto.; Full Lockers; 20K F/A; 46K Rears; Air Ride Susp.; 250" WB; PTO; Double Frame; 20-Ton Capacity Crane; 27 ft. - 66 ft. Section Boom; 25,576 Miles; 2,168 Hours; Stk. # 6915 - \$93,900



THE BEAST. SIZE DOES MATTER!

2000 OSHKOSH: Detroit Diesel V8 500 HP Turbo Diesel Engine; Engine Brake; Automatic Trans.; 86,000 lb. GVWR; Two 55,000 lb. Winches; Aux. Winch; 8x8; Rear Wheel Steer; Exhaust Brake; Air Ride Susp.; PTO; Fifth Wheel Ramp Plates; Central Tire Inflation System; Stk. # 6696 - \$69,900



30 ft. Allison Chassis

2014 PETERBILT 365 CHASSIS: Paccar MX13 455 HP; Allison Automatic Trans.; Double Frame; 20K F/A; 46K Rears; Hendrickson Haulmaxx Susp.; 278" WB; 208" CT; 30" Frame; Pintle Hook/Plumbed For Pup Trailer; 295,209 Miles; Stk. # 6952 - \$72,900

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TRUCK 'N TRAILER - 'TNT' - June 14, 2024 - PAGE 3

Changes to the NYC&SGA Soybean and Corn Yield Contests

Mike Stanyard

The NY Corn & Soybean Growers Association has made some changes to the annual NY Yield Contests. The first is that there will only be a NY Soybean Contest. There will not be a NY Corn Contest. I would encourage those with some good-looking corn this year to enter the National Corn Contest. We have plenty of NY growers who enter each year and have even placed on the national level.

NY Soybean Contest

There will also be some changes to the soybean contest this year. There will not be entries in four maturity groups (0,1,2,3), only two groups (1 & 2). There have been very few group 0 and 3 entries and for agronomic and economic purposes, we get our best yields from group 1 and 2 soybeans. Instead of just one winner from each group, there will now be awards for 1st, 2nd and 3rd place in each group in each region. There will still be five regions (West, Finger Lakes, Central, North, and East) and the same prizes for the top 3 yields in the state. To enter the Soybean Contest, go to <https://nycsga.memberclicks.net/2024yieldcontest#!/>. All entries will be online, and the **Final Deadline is August 14.**

As a reminder, the overall NY soybean champ wins an all-expense trip for two to the 2025 Commodity Classic which will be in Denver Colorado. Just to get everyone thinking about yields, here are the NY soybean winners since we started the contest in 2011. I would love to see us get over the 100-bushel plateau again!

National Corn Contest

The National Corn Contest is run by the National Corn Growers Association (NCGA). Many NY growers enter this contest each year. For NY growers, there are six different classes you can enter based on tillage (Conventional Non-Irrigated & Irrigated, No-till Non-Irrigated & Irrigated, Strip-till Non-Irrigated & Irrigated). In addition to the main contest, NCGA will put all NY state harvest results together to determine NY winners in each class. You must be a member of the NCGA to enter and it is \$110 per hybrid entered online at <https://ncga.com/get-involved/national-corn-blue-contest>.

Final Entry Deadline is August 14.

Many of the rules are different than our traditional state corn contest and they can be found at <https://dt-176nijwh14e.cloudfront.net/file/674/Entry%20and%20Harvest%20Rules%202024.pdf>.

NCGA has a new interactive Results Tool on their website. It enables you to easily look at each state winners in each of the classes. Go to <https://ncga.com/modules/contest/screen/state/NY> and it will take you right to the 2023 NY winners. Click on each name to see their yield. You can click on any state to the far right to see their results.

NY Soybean Contest Champions

2011	Pit Farms Inc.	Wayne	Finger Lakes	67.08
2012	Myron Brady	Livingston	West	85.02
2013	Brad Macauley	Livingston	West	77.21
2014	John Mizro	Cayuga	Finger Lakes	83.30
2015	Kevin Witkop	Orleans	West	78.10
2016	Pit Farms Inc.	Wayne	Finger Lakes	87.41
2017	John Zittel	Erie	West	78.00
2018	John Zittel	Erie	West	87.99
2019	Root Brothers	Orleans	West	80.56
2020	Pit Farms Inc.	Wayne	Finger Lakes	91.22
2021	Robert Thompson	Seneca	Finger Lakes	82.61
2022	Scott Swartz	Rensselaer	East	100.12
2023	Jake Dates	Wayne	Finger Lakes	83.79





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Avian Influenza and the Dairy Sector: Understanding an Important Underlying Concept for Guiding Planning, and Implementation Functions of Risk/Crisis Management

John Hanchar

Two suggested resources for greater detail on this topic follow.

1. Ramanujan, Krishna. 2024. "Experts provide facts about avian influenza for dairy producers." *Cornell Chronicle*. Article, 2024-May-06. Ithaca, New York: Cornell University. cunews@cornell.edu.

2. Walding, Alison. 2021. *The Precautionary Principle*. Factsheet, September 2021. Ann Arbor, Michigan: University of Michigan/ School of Public Health/Lifestage Environmental Exposures and Disease Center. <http://mleead.umich.edu/Coec_Fact_Sheets.php>

Summary

- Decision makers responsible for planning, and implementing responses to address public, environmental, animal, and other health risks/crises depend upon a variety of methods. Ideally, methods for making management decisions are grounded in research-based knowledge.
- Discussions among stakeholders that reflect points of agreement, and disagreement contribute positively to the successful planning, and implementation of responses.
- Discussion is of greatest value when participants: possess understanding of the framework used to plan and implement; understand that methods, including tools, might vary depending upon the scenario – for example, dependence upon the "precautionary principle" when little to no research based knowledge is available for planning, and implementation of a response.

Background

Recall recent responses to; a) the COVID-19 pandemic; b) unacceptable drinking water quality that threatens public health; c) avian flu threats to public, and animal health. The agricultural community is again facing risks to public, and animal health attributed to an infectious disease, avian influenza. In the first article listed above, Krishna Ramanujan, Cornell University, reports on a May 2024 webinar where Cornell experts provided facts about avian influenza for dairy producers, and agricultural community stakeholders. Key information included the following.

- "While a strain of highly pathogenic avian influenza virus has been detected in dairy cattle in nine states – not including New York State – the commercial milk supply continues to be safe, according to a panel of Cornell, New York state and dairy industry experts."
- "Pasteurization of milk and cooking meat to proper internal temperatures inactivates the strain of avian influenza, called H5N1, according to experts in the College of Agriculture and Life Sciences (CALS), the College of Veterinary Medicine (CVM), the New York State Department of Agriculture and Markets (NYSDAM) and the National Milk Producers Association ..."
- Science backed information, for example, sampling activities, will continue to contribute positively to successful risk/crisis management efforts linked to avian influenza.

Research based knowledge is key to identifying and implementing the best or set of best responses. If science-based information is available, then responses are more effectively explained as being acceptable choices. However, if research-based knowledge is limited, or not available, risk management thought offers guidelines in the form of the "precautionary principle." Discussion among stakeholders is important. Disagreement, and agreement on aspects of the response should be expected and addressed. Understanding the framework used for risk/crisis management, including the use of different methods under different conditions increases the value of discussion.

Precautionary Principle

Description. Although the following early description of the principle relates to protecting the environment, the principle is now applied to risks/crises related to public, environmental, animal, and other ecosystem aspects of health. The following provides a description for the "precautionary principle." "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Characteristics. The principle reflects "An ounce of prevention is worth a pound of cure," and "Better safe than sorry" ways of thinking.

The principle is grounded in managing risks, and uncertainty methods where the set of possible responses, strategies include; avoid; retain; reduce; self-insure; and shift.

The precautionary principle is increasingly recognized as a foundation for decision making to protect human health and the environment. Below are its five key elements:

1. Taking anticipatory action to prevent harm in the face of scientific uncertainty.
2. Exploring alternatives, including the alternative of "no action."
3. Considering the full cost of environmental and health impacts over time.
4. Increasing public participation in decision making.
5. Shifting the responsibility for providing evidence to the proponents of an activity.

As a tool, the principle helps decision makers assess whether an action, or decision should be taken when research-based knowledge regarding expected harmful effects on the environment, or on the health of people are limited or not yet available. Application of the principle is designed to prevent exposure, worsening conditions, in contrast to trying to clean up, or address the negative health effects of an environmental exposure, or health risk aftereffects have occurred.

Examples. The New York City Watershed Agricultural Council's Approach to Whole Farm Planning is guided by the "precautionary principle." Efforts to manage risks/crises related to infectious diseases, often, especially during initial stages due to the lack of research-based knowledge, adopt the "precautionary principle" as a guide.

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Ventilation and Circulation

Margaret Quaassdorff

At the end of June, we held a workshop at a tiestall dairy in Yates County, where the focus was ventilation and circulation for the purpose of increasing cow comfort and reducing heat stress. If cows are comfortable, they will choose to keep to their regular schedule of eating, resting and ruminating. When heat-stressed, their time budget is thrown off with increased standing time leading to adverse health effects. In addition, research from Dr. Jimena Laporta's lab at UW-Madison shows that heat stress can affect the weight and health of calves born to those heat stressed cows, as well as the granddaughters of those cows. We know that reducing heat stress in the summertime leads to better milk production and a decreased probability of lameness in the fall months.

For the workshop, we invited Cornell PRO-DAIRY Agricultural Engineer, Tim Terry and Cow Welfare Specialist, Lindsay Ferlito, to discuss the important differences between Ventilation and Circulation. To demonstrate these concepts, we fogged the host's tiestall barn to measure the facility's ability to properly move air to create a more ideal environment for the cows inside. First, we used minute-long smoke sticks and allowed the smoke to enter at the inlet end of the barn. We then calculated the time it took for the smoke to dissipate at two different fan speeds. We also took note of the areas where smoke gathered in the barn (dead areas) and the wind speed at cow level throughout the barn. Here are some key take-aways from the program.

Ventilation

- Air exchange
- Sufficient incoming velocity to cause mixing of fresh and stale air
- Sufficient incoming volume so it is only slightly stale air leaving the barn
- Fresh air must be able to come in so stale air can exit...you can't ventilate a closed system

Circulation

- Movement of air within a structure
- Often associated with cow cooling
- Velocity at cow level should be 440 feet per minute (fpm) or 5 mph. There is little economic or animal benefit over 440 fpm.

- Low head room barns usually dictate use of basket circulation fans
- Do not circulate over calves or freshening pens to avoid pathogen spread- fresh air only

Tips for maximizing both ventilation and circulation

- Regularly (at least annually) clean fans, louvers, inlets, grilles, etc.
- Check condition and tension of belts, idler pulleys and replace as necessary
- Clean thermostats and other sensors
- Maintain areas around the outside of the barn, especially at fans and inlets (i.e. cut back tall weeds that restrict air flow) and avoid storing large items near fans and inlets
- Spot check barn temperatures and air speeds at cow level

	Winter	Spring / Fall	Summer
Air Changes/ Hour (ACH)	6	20-30	40-60
Mature Cows (cfm / head)	100-250	500	1000

If you are interested in having your own barn fogged to see how your ventilation and circulation measure up, do not hesitate to reach out.

Yates County Shop Talks will pick up again in the Fall. If you are a dairy farmer in Yates County, please let us know what topics you might want to cover next.



Tim Terry of Cornell PRO-DAIRY measures wind speed in a tiestall barn in Yates County during a barn fogging demonstration to measure ventilation and circulation. Photo by Melissa Keller.

2024

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Event Highlights:

- **Beef on Dairy Opportunities:** Discover the potential benefits of incorporating beef genetics into your dairy operations, creating additional revenue streams and improving carcass quality. Learn about market trends, breeding strategies, and value-added opportunities that can enhance profitability for both beef and dairy producers.
- **Cattle Handling Demonstrations:** Led by internationally renowned experts Curt Pate and Ron Gill, our cattle handling demonstrations will provide invaluable insights into effective stockmanship techniques, enhancing animal welfare and productivity on your farm.
- **Grazing Workshop:** Join Sarah Flack, a grazing expert, to explore rotational grazing techniques, pasture management, and soil health improvement practices tailored to beef and dairy producers' unique needs in the Northeast.
- **Consumer Insights Workshop:** Gain valuable insights into consumer perceptions of animal welfare and how they influence purchasing decisions. Explore how the BQA program aligns with consumer expectations, offering solutions to their concerns and strengthening trust in beef and dairy products.
- **BQA Transportation Opportunity:** Participate in a unique opportunity to learn about Beef Quality Assurance Transportation. Walk around a truck and trailer to learn pre-trip procedures, ensuring the safety and comfort of livestock during transit.

Take advantage of this opportunity to network with experts, fellow producers, and stakeholders and take your beef and dairy operations to new heights. Register now to secure your spot at this exciting event!

Can This Pasture Be Saved?

Nancy Glazier

This is a question I often get. If you have an old pasture or are just getting started with grazing an old hay field, a few slow steps to improvement may meet your needs. The best approach is to begin with a soil test. Results will show pH and fertility. If the field has been idle for a long time, the fertility may be low. Remember, the goal is to save the pasture and not plow. If the test results recommend lime, apply no more than two tons in one application. When the field is not tilled, it will take additional time for the lime to do its job. Many beginners are looking for low input; there's no excuse for overfertilization. Apply what the pasture needs. It is much more environmentally friendly as well.

A solid perimeter fence is critical. Think about the size of the animal doing the grazing, and the location of the pasture. Lower and more strands of wires are needed for smaller animals. If you don't know what you are doing or don't have the time, hire it done.

Water. Whether the water comes from a well, municipal supply, or water wagon, water is essential. Ideally, water should be in every paddock, but that's not always practical. Livestock can return to a central water trough with either a permanent or temporary laneway.

Clip it. This simulates grazing, which encourages grass regrowth and tillering. Done at the right stage of weed development, it may prevent or reduce weed seed production, depending on the species and life cycles of the weeds present. For example, the best time to clip goldenrod is right before flowering. The pasture may need to be clipped several times during the season. It is also an important step after the pasture is grazed; it will reduce the weeds the livestock won't eat.

Soil coverage. How much forage is grass and clover, how much is weeds? How much bare soil is there? Frost-seeding may be an option during late winter. Good seed-to-soil contact is critical; clip or overgraze the pasture in the fall and frost-seed in March. The freeze-thaw cycle will work the seeds down into the soil. Most clovers frost-seed well; talk [to your seed supplier for recommendations or](#)

contact me.

Rotation is essential for pasture improvement, the shorter residency period the better for forage production. Paddocks can be set up with temporary fencing, such as polywire and step-in posts. When livestock graze for more than a few days, they will go back and graze the nice, soft regrowth. Ideally, cattle should be moved daily, but that's not always practical. Move them to a new paddock as often as possible, to fit your schedule. I recommend grazing a paddock no more than 3 days. Give them a big enough paddock to graze for the period without a lot of wasted forage. With sufficient temporary fencing, paddocks can be set up in advance when you have the time, then just moving the livestock when needed. Pasture rest is important, make sure adequate regrowth is there before regrazing.

Outwintering livestock on pasture is a great way to improve fertility. Hay feeders should be moved regularly. If feeding large bales, move livestock after they finish a bale. The wasted hay and manure will improve the soil.

It will take a few years for the pasture to come back to full potential. Until that time, livestock numbers on the pasture will need to be reduced. You will find with a short rotation and patience you can have a great pasture with a low investment.



With some patience and management, an old pasture can be brought back into production. Photo by Nancy Glazier

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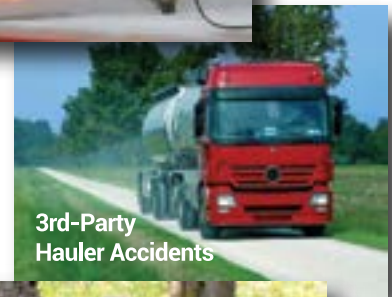
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NWNY BMR Male Sterile Sorghum Field Day

AUGUST 28TH, 2024

9AM - 1PM

E. Groveland Rd., Geneseo NY

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[HTTPS://NWNYTEAM.CCE.
CORNELL.EDU/EVENTS.PHP](https://nwnyteam.cce.cornell.edu/events.php)

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Every Friday
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1:00 pm to
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- July **19th** **Hypocalcemia** Daniela Gonzalez DVM, MPS
- July **26th** **Mastitis** Paula Ospina DVM, MPH, PhD
- August **2nd** **Ketosis** Gustavo Schuenemann DVM, MS, PhD
- August **9th** **Displaced abomasum** Kaitlyn Lutz VMD
- August **16th** **Metritis** Clara Rial DVM, PhD
- August **23rd** **Retained placenta** Adrian Barragan DVM, MS, PhD
- August **30th** **Indigestion** Francisco Somaré DVM, MSc

What Keeps Me Up At Night? H5N1.

Kaitlyn Lutz

The real answer is a seven-month-old baby; however, something that is on my mind frequently is the H5N1 virus circulating in dairy cattle in the United States. During a few conversations with dairy farmers in our region, I heard a lack of concern about the virus. I can understand this for a few reasons:

1. The clinical signs that cows show is very general and common.
2. There is a low death rate.
3. The symptoms that people display have been mild so far.

However, “things are not always as they seem; the first appearance deceives many...” as the famous quote says. Let’s look at the above points one by one:

1. We are told that lactating cows go off feed, drop in milk production, have colostrum-like milk plus or minus a fever and abnormal manure. Sounds like a cow drying herself off early from a late-lactation DA, right? Except that in some cases over 40% of the herd is affected resulting in a 20% drop in feed intake and milk production across the herd. University of Michigan wrote up a case summary from a dairy herd affected by H5N1, which gives us more details into the severity of disease the virus can cause. The cows showed a 4-5-degree spike in body temperature, a severe drop in water intake to between 5-10 gallons per cow per day, decreased rumination, and several late-term abortions. The herd-level SCC doubled during the outbreak and the number of cows needing treatment increased by six-fold. The total cost of the outbreak was estimated between \$30,000-\$40,000 for this 500-head herd. You can read the full case report [here](#).

2. Although the reported cattle death rate is low, the cull rate due to chronically affected animals or those with secondary complications like abortion or nonreturn to production can be high. In the above case report, they anticipated culling 10% of the affected animals (or 20 out of 500). In speaking with a manager of a large herd affected in Texas, their cull rate due to H5N1 was significant enough to severely impact their total milk shipped per day.

3. There are a few reasons that this virus is very different from other viruses that cause disease outbreaks within the dairy industry. Firstly, Influenza A viruses (like H5N1), have been the cause of multiple pandemics, such as the Spanish Flu in 1917. They are primed to cause such widespread illness in humans because they are constantly changing their genetic makeup.

This can happen slowly, which is called antigenic drift, or quickly, which is called antigenic shift. Antigenic drift creates small changes in the virus such that our immune systems can still offer some protection against the new variation. The quick antigenic shift happens when multiple viruses combine genes and create a mutation that is much more unique and thus less likely for us to have cross-protective immunity. So, although the disease is mild currently, limiting the number of humans infected by H5N1 is essential to decrease the risk of the virus mutating into a much more highly transmissible and dangerous influenza.

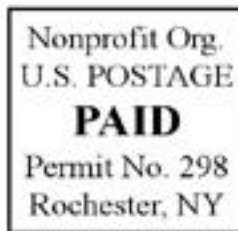
I will end with a quote from a herdsman I recently spoke with whose farm was part of the initial outbreak in March. In no uncertain terms he said, “This is not like any other disease I’ve seen before. You definitely do not want this in your herd.”

Please contact me if you’d like to set up a meeting to share this information with your Spanish speaking employees.



Photo Credit: <https://pennstatehealthnews.org/2024/07/the-medical-minute-why-experts-are-watching-the-h5n1-bird-flu-so-closely/>

Cornell Cooperative Extension of Livingston County
NWNy Dairy, Livestock & Field Crops Team
3 Murray Hill Drive
Mount Morris, NY 14510



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UPCOMING EVENTS

August 7

Hands-On Calving Workshop
Yates County

Available in Spanish upon request

1PM - 4PM : Skyline Auction Center
Benton, NY : \$40

Registration:

[https://nwnyteam.cce.cornell.edu/
events.php](https://nwnyteam.cce.cornell.edu/events.php)

August 8

Hands-On Calving Workshop
Genesee County

Available in English & Spanish

1PM - 4PM : Genesee County Fair-
grounds Batavia, NY : \$40

Registration:

[https://nwnyteam.cce.cornell.edu/
events.php](https://nwnyteam.cce.cornell.edu/events.php)

August 13

Agritourism Workshops
Monthly
Cut Flower Agritourism Operations

12PM - 1PM : ZOOM : Free

Registration:

[https://cornell.zoom.us/webinar/
register/WN_-GtWRfPSgakN-
DObc-AsHg#/registration](https://cornell.zoom.us/webinar/register/WN_-GtWRfPSgakN-DObc-AsHg#/registration)

August 14

Hands-On Calving Workshop
Livingston County

Available in English & Spanish

1PM - 4PM : Noblehurst Field House
Pavilion, NY : \$40

Registration:

[https://nwnyteam.cce.cornell.edu/
events.php](https://nwnyteam.cce.cornell.edu/events.php)

August 15

Hands-On Calving Workshop
Orleans County

Available in English & Spanish

1PM - 4PM : Orleans County CCE
Albion, NY : \$40

Registration:

[https://nwnyteam.cce.cornell.edu/
events.php](https://nwnyteam.cce.cornell.edu/events.php)

August 22

Cornell Cow Convos Podcast
Episode 12

Release for Listening

Registration:

[https://soundcloud.com/user-
301921459-118136586/sets/cor-
nell-dairy-convos](https://soundcloud.com/user-301921459-118136586/sets/cornell-dairy-convos)

August 28

NWNy BMR Male Sterile
Sorghum Field Day

9AM - 1PM : E. Groveland Rd.

Registration:

[https://cornell.zoom.us/webinar/
register/WN_-GtWRfPSgakN-
DObc-AsHg#/registration](https://cornell.zoom.us/webinar/register/WN_-GtWRfPSgakN-DObc-AsHg#/registration)

September 10

Agritourism Workshops
Monthly
Handling Difficult Customers

12PM - 1PM : ZOOM : Free

Registration:

[https://cornell.zoom.us/webinar/
register/WN_-GtWRfPSgakN-
DObc-AsHg#/registration](https://cornell.zoom.us/webinar/register/WN_-GtWRfPSgakN-DObc-AsHg#/registration)

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