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Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

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



**CROPS
COWS &
CRITTERS**
newsletter

**Crops, Cows & Critters
Newsletter**

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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.

DAIRY AND FIELD CROPS WEED SURVEY

The Cornell Weed Ecology lab is conducting a survey on the most common weeds and the most difficult to manage weeds on dairy and field crop farms in New York State. If you grow corn, soy, hay, pasture, or small grains in New York State, please fill a 5-minute survey from the Cornell Weed Ecology Lab.

1. In which county or counties is your farm located?

2. Which of the following best describes your cropping system?

- Conventional
- Organic
- Both
- Other _____

3. For the main crops that you grow please approximate the number of acres:

Crop	Acres
Hay	
Pasture	
Corn	
Soy	
Small grains	

4. Please list the top five most **common** (seen most often) weeds for each crop that you grow:

Crop	Top 5 most common (seen most often) weeds
Hay	1. 2. 3. 4. 5.
Pasture	1. 2. 3. 4. 5.
Corn	1. 2. 3. 4. 5.
Soy	1. 2. 3. 4. 5.
Small grains	1. 2. 3. 4. 5.

5. Please list your top five most **troublesome** (most difficult to control) weeds for each crop you selected:

Crop	Top 5 most troublesome (most difficult to control) weeds
Hay	1. 2. 3. 4. 5.
Pas-ture	1. 2. 3. 4. 5.
Corn	1. 2. 3. 4. 5.
Soy	1. 2. 3. 4. 5.
Small grains	1. 2. 3. 4. 5.

6. Approximately how many acres of forested land do you own?

7. Are you interested in managing invasives in your forest?
Yes / No

8. Would you be willing to have a 15-minute phone conversation with us about your weed management strategies? We are curious which strategies work best (or worst) for you and how the weather is impacting your management. If you are willing, please put your phone number. After the interview we will send you a paper copy of Chuck Mohler's new book, "*Manage Weeds on Your Farm – A Guide to Ecological Strategies*", or an electronic copy if you prefer.

Yes, I am willing. Phone number: _____

If you are interested in the results of this survey please email us at cam369@cornell.edu

If you'd like for your farm's survey to be counted, fill this out, take a picture and send to Katelyn at 716-640-0522.



Or - mail it to CCE@JCC, Attn: Katelyn
525 Falconer Street, PO Box 20
Jamestown, NY 14702.

Dairy Market Watch

January 2022



Prepared by Katelyn Walley-Stoll.

Funded by PRO-DAIRY.

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

Milk Component Prices			Milk Class Prices				Statistical Uniform Price & PPD				
Month	Butterfat	Protein	I (Boston)	II	III	IV	Jamestown, NY		Albany, NY		Albany \$/gal. to farmer
Dec 20	\$1.54	\$3.03	\$23.12	\$14.01	\$15.72	\$13.36	\$16.11	\$0.39	\$16.71	\$0.99	\$1.44
Jan 21	\$1.55	\$3.04	\$18.39	\$14.18	\$16.04	\$13.75	\$14.76	(\$1.28)	\$15.36	(\$0.68)	\$1.32
Feb 21	\$1.44	\$2.98	\$18.79	\$14.00	\$15.75	\$13.19	\$14.65	(\$1.10)	\$15.25	(\$0.50)	\$1.31
Mar 21	\$1.72	\$2.70	\$18.45	\$15.07	\$16.15	\$14.18	\$15.35	(\$0.80)	\$15.95	(\$0.20)	\$1.38
Apr 21	\$1.94	\$2.81	\$18.76	\$15.56	\$17.67	\$15.42	\$16.21	(\$1.46)	\$16.81	(\$0.86)	\$1.45
May 21	\$1.98	\$3.13	\$20.35	\$16.22	\$18.96	\$16.16	\$17.19	(\$1.77)	\$17.79	(\$1.17)	\$1.53
June 21	\$1.96	\$2.53	\$21.54	\$16.66	\$17.21	\$16.35	\$17.35	\$0.14	\$17.95	\$0.74	\$1.55
July 21	\$1.89	\$2.49	\$20.67	\$16.83	\$16.49	\$16.00	\$16.91	\$0.42	\$17.51	\$1.02	\$1.51
Aug 21	\$1.85	\$2.45	\$20.15	\$16.51	\$15.95	\$15.92	\$16.54	\$0.59	\$17.14	\$1.19	\$1.48
Sep 21	\$1.93	\$2.60	\$19.84	\$16.89	\$16.53	\$16.36	\$16.81	\$0.28	\$17.41	\$0.88	\$1.50
Oct 21	\$1.94	\$3.01	\$20.33	\$17.08	\$17.83	\$17.04	\$17.29	(\$0.54)	\$17.89	\$0.06	\$1.54
Nov 21	\$2.15	\$2.75	\$21.23	\$18.40	\$18.03	\$18.79	\$18.39	\$0.36	\$18.99	\$0.96	\$1.64
Dec 21	\$2.29	\$2.59	\$22.42	\$19.84	\$18.36	\$19.88	\$19.34	\$0.98	\$19.94	\$1.58	\$1.74

December Utilization (Northeast): Class I = 31.8%; Class II = 22.6%; Class III = 27.7%; Class IV = 17.9%.

Class I = fluid milk; Class II = soft products, cream, and yogurt; Class III = cheese (American, Italian), evaporated and condensed products; Class IV = butter and milk powder.

Dairy Commodity Markets (Excerpts from USDA Dairy Market News – Volume 89, Report 3, January 21st, 2022)

Dry Products: Most dairy powder markets remain in a bullish status this week, as tight supplies and steady to strong demand are reported. Low/medium heat nonfat dry milk (NDM) prices increased at every price point, while high heat NDM top-end prices breached the \$2 mark in all regions. Dry whole milk prices moved higher again, after last week's large price hikes. Bakers are reportedly gearing up demand ahead of the spring holidays. Dry whey prices moved higher again, as some

Cheese: Milk availability continues to vary for cheese producers from region to region and plant to plant, but current reports do not show a tight milk market, at least right now. Spot milk prices ranged from \$1 to \$.50 under Class, while last year's range during this week was \$8.50 to \$4 under Class. Retail cheese demand has quieted in the Western region, while international demand remains strong. Eastern contacts say retail demand is steady/strong during football's playoff season. Staffing shortages continue to plague plant managers, with plant workers, but also with drivers and office employees. Last week's barrel price bullishness met and lost to bears this week.

Butter: Cream supplies are available to butter makers. However, high freight costs, driver shortages, and inclement weather are reportedly posing some challenges to moving cream. Cream demand is firm, and butter production is active. Some Eastern manufacturers are increasing production and churning seven days a week to bulk up shrinking inventories. Microfixing is active to satisfy good retail print butter demand. Butter inventories are tight, and spot purchasers report salted is still easier to source than unsalted.

Fluid Milk: While milk production varies due to inclement weather in the Midwest to Eastern regions, Class I demand continued to show promise in most areas this week. Western region milk levels are generally steady to higher. In some cases, retail bottling demand was up due to shoppers stocking up ahead of Winter Storm Izzy last weekend and current frigid temperatures covering swaths of the nation. COVID related employee shortages continue to inhibit processing/bottling plants, so in certain cases milk handlers have to find alternate homes for their milk/cream.

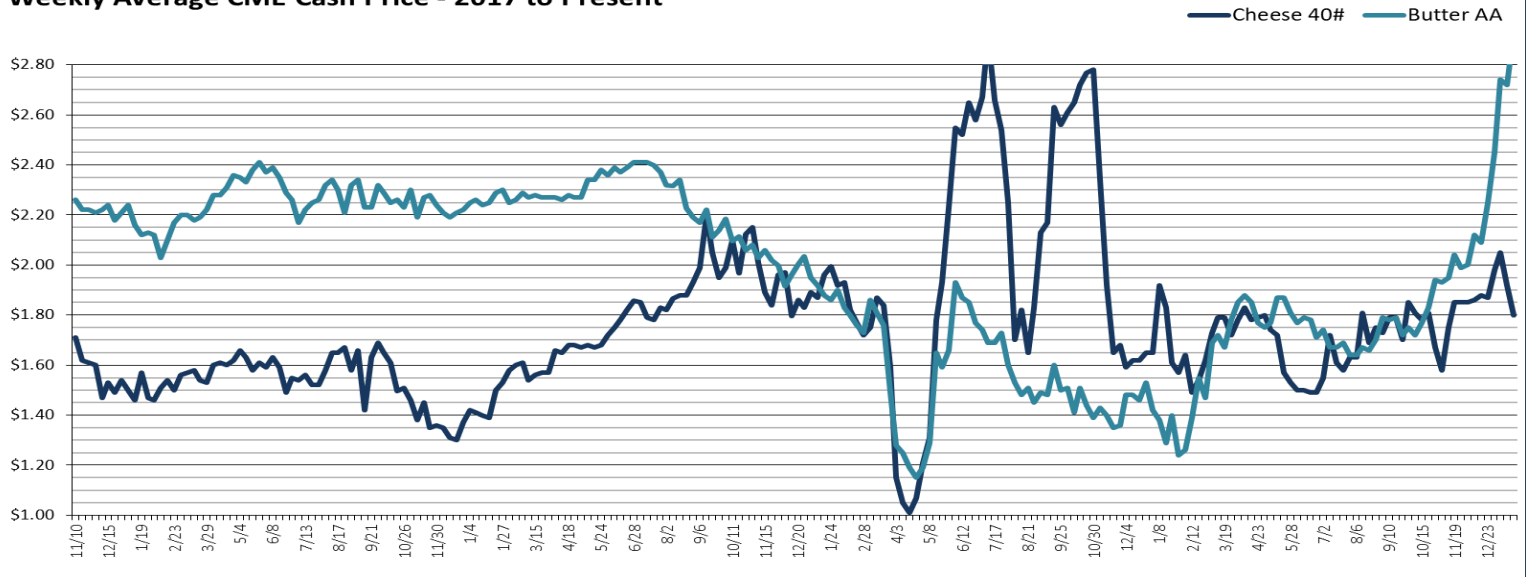
Friday CME Cash Prices					
Dates	12/23	12/31	1/7	1/14	1/21
Butter	\$2.25	\$2.45	\$2.74	\$2.72	\$2.94
Cheese (40# Blocks)	\$1.87	\$1.98	\$1.99	\$1.92	\$1.80

December's Albany \$/gallon paid to farmers was \$1.74. This is a 17% increase from a year ago.



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

Weekly Average CME Cash Price - 2017 to Present



Excerpt from Dairy Situation and Outlook - December 20th, 2021

Bob Cropp, Professor Emeritus, University of Wisconsin - Madison, Division of Extension Agriculture

Milk prices will end the year a little higher than what was forecasted back in November. For the year Class III will average about \$17.10 compared to \$18.25 for 2020. Fluid (beverage) milk sales have been below a year ago. January This decline is attributable to the fact that in 2020 there were more at home meals. But higher milk prices are in response to good butter and cheese sales, strong exports of butter, cheese, whey products and nonfat dry milk/skim milk powder. Dairy export volume January through October on a milk solids equivalent basis was 11% higher than a year ago.

The slowdown in milk production is due to declining milk cow numbers and below average increase in milk per cow. Since peaking in May milk cow numbers had fallen 122,000 by November. Milk per cow was just 0.2% higher in November than a year ago. Declining cow numbers and little increase in milk per cow are attributed to tighter forage supplies in many states and much higher feed costs encouraging producers to increase culling of milk cows.

As of now 2022 is shaping up for much higher milk prices. Milk production is forecasted to increase by less than one percent. Milk cow numbers are expected continue to decline at least through the first half of the year as dairy producers reduce cow numbers in response to tighter margins from higher feed costs, higher cost other inputs and labor shortages.

The economy is expected to continue growth next year but at a slower pace. While fluid milk sales will likely continue a downward trend butter and cheese sales are expected to show continued growth. But there is uncertainty in sales due to inflation that has increased the cost of food, gasoline,

the cost to heat the home and most everything else. That will reduce consumer spending power which could reduce going to restaurants and in store purchases of dairy products. And hopefully COVID and the new variant Omicron does result in more restrictions on restaurants, closing of schools and public events. The world economy is showing continued recovery. World milk production is showing modest growth of less than one percent. This will leave opportunities for U.S. dairy exports. World dairy product prices have increased leaving U.S. dairy products price competitive on the world market. There is some uncertainty as to whether COVID will cause a shut down in restaurants and tourism in some of U.S. export markets reducing their imports of dairy products. Port congestions and related issue also continue to challenge dairy exports.

With modest increase in milk production, continued growth in domestic dairy product sales, and continued growth in dairy exports forecasts are for much higher milk prices in 2022. It will take time for dairy producers to increase milk cow numbers, but with much higher milk prices producers may reduce culling of milk cows and feed more protein and concentrate for higher milk per cow. So, milk production could show some strength by the second half of the year lowering milk prices some. It seems like every year there are surprises that result in milk prices ending up different than forecasted. These higher milk prices are not guaranteed. So dairy producers may wish to use dairy futures and options, the Revenue Protection Program, LGM-Dairy or contracting with their milk buyer to protect their future milk prices. And signing up for the Dairy Margin Protection program at the \$9.50 protected margin levels is strongly encouraged.

Higher feed cost may also reduce an increase in milk per cow. An increase in milk production at this rather low level will support much higher milk prices.



Currently, dairy futures are overly optimistic with Class III in the \$19's all of 2022 and Class IV in the \$20's.

occur at higher levels of solids. Inconsistency of percent solids in milk replacer or whole milk is one of the common reasons why calves develop nutritional scours. Even a 1% change in total solids is enough to cause digestive upset in calves. To ensure consistency, use a scale to weigh out milk replacer powder and water before mixing and to measure the percent solids with a Brix refractometer. Check with your nutritionist for the ideal Brix reading associated with your milk replacer, as they can vary.

Temperature also matters when mixing milk replacer or incorporating additives into whole milk. Incorrect mixing temperatures could cause the mix to separate, leaving expensive and important nutrients in the bottom of the pail. To minimize scours, milk should also be fed at or slightly above calf body temperature, which is 102.5°F.

Other forms of scours

Calves can also experience pathogenic scours caused by bacteria, viruses, or protozoa, which make up about 95% of cases in animals under 3 weeks of age. While all calves encounter pathogens, keeping the exposure as low as possible will help prevent scouring. Bacterial scours is often a result of dirty environments, and includes cases caused by *E. coli*, salmonella, and clostridia. If a calf exhibits watery scours within the first 2 to 4 days of life, it is almost always from an *E. coli* source that got into their mouth, like manure.

Viral causes of scours are often rotavirus and coronavirus,

which affect the calf's digestive system, making it difficult to absorb water or nutrients. These are common at 7 days of age and can be a problem up to 21 days. Protozoal scours is often caused by *Cryptosporidium* or *Coccidia*. Due to its life cycle, *Coccidiosis* typically occurs after 3 weeks of age, and it commonly looks like dark gray scours that stick to the tail. Protozoa can be challenging to manage as they remain in the environment for long time periods. These infections cause severe pain, reduced nutrient absorption, and lasting damage to the intestine.

To prevent pathogenic scours, it is essential to maintain a clean maternity pen, feeding equipment, transportation devices, and calf housing area. Ensuring a calf receives adequate amounts of clean, high-quality colostrum in a timely manner also helps prevent issues with scours in the first few weeks of life.

Reducing overall stress caused by travel, weaning, and so forth is an additional component in scour prevention. Improving scours management is beneficial to the health and welfare of calves. It also benefits the people caring for them. When faced with scours challenges on farm, the first step should be to identify the cause. This is an opportunity to treat properly and effectively, leading to improved antibiotic stewardship and farm profitability. Farms should also work with their veterinarian to decide on proper treatment and prevention, focusing on hydration, nutrition, and cleanliness.

We need your help with a survey on Calf and Heifer Management in SWNY!

The main objective of this survey is to learn more about the current practices adopted in farms regarding calf and heifer management. From this, we will identify opportunities for programming and research that can help improve calf health, performance, and economic success. **This survey will take approximately 15 minutes** to answer. Feel free to skip any questions you wish. You can also stop and resume the study from where you left off. **If you would like to complete the survey on paper, we can send out a printed copy and a prepaid envelope so you can return the answered survey.** Your response will help us move forward on providing updated reliable, science-based information back to dairy farmers, so you can make better decisions to improve your calf and heifer management. If you have any questions or concerns about this survey or the project in general, please feel free to reach out. Your responses will remain confidential.



Start the survey by scanning the QR code or visit:
<https://bit.ly/surveycalves>

To prevent nutritional scours, start with clean milk. If feeding milk replacer, choose one that includes high-quality ingredients and appropriate amounts of lactose.

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If you need more information, or would like a paper copy of our calf and heifer survey, contact Camila Lage at cd546@cornell.edu or 607-422-6788.

The story behind the scours - As originally published in Hoard's Dairyman

By Margaret Quaassdorff, Cornell Cooperative Extension and Alycia Drwencke, University of California - Davis

Determining the true cause of scours can lead to more effective treatment and care of calves

Scours is one of the most common calfhood illnesses, and it remains a widespread issue on farms. According to the Dairy Calf and Heifer Association's Gold Standards, farms should aim for less than 15% of preweaned calves experiencing a case of diarrhea that requires 24 hours or more of treatment. However, nationwide reports show average rates are higher than that, from 21.4% to 29%, highlighting an opportunity for improvement. Farms should work with their veterinarian to determine the best prevention and treatment for scours on an individual farm basis. When looking to improve scours management, it is important to determine the type of scours and prevalence in your herd. Identifying the specific age in days or weeks of a scouring preweaned calf can give you important insight to the type or cause. There are some common routes of exposure that align with age, so pairing this information with troubleshooting can help you identify the common cause of scours on your farm.

Only treat when needed

Minimizing the prevalence of scours can improve profitability by reducing treatment costs, and it sets your herd up for success. Improving the health and welfare of preweaned calves by controlling diseases, like scours, also promotes the well-being of the employees who manage and care for them. Reducing the need to treat scours can also strengthen antibiotic stewardship. Recent work from Cornell Cooperative Extension in northern New York suggests that many cases of scours are not caused by bacteria, but rather nutrition, viruses, or protozoa, making treatments with antibiotics ineffective. For these cases, producers should focus on hydration and supportive care as the best treatment. To prevent any future cases, cleanliness needs to be a top priority, as well as working with your veterinarian to develop proper vaccination protocols.

Watch for nutritional factors

Scours is more than just loose manure. What some may call "nutritional scours" can simply be loose manure related to a higher plane of nutrition and intensive feeding practices. Calves fed a high level (10 or more liters per day) of safe clean, and properly mixed whole milk or milk replacer may exhibit loose manure, but this is not concerning. Nutritional scours becomes a concern when it is caused by an

incorrectly diluted or poorly mixed milk replacer, or from low-quality milk replacer that prevents proper nutrient absorption. This can result in calves with a faster rate of passage or upsets and imbalances in the digestive system, leading to scouring and dehydration.

To prevent nutritional scours, start with clean milk. Whole milk that was improperly pasteurized or cooled will grow high levels of bacteria that can result in scours. If feeding milk replacer, choose one that includes high-quality ingredients and appropriate amounts of lactose.



Lactose, the sugar in milk, is a source of energy, but it also acts as a natural laxative for calves by pulling water into the intestine. Excessive lactose levels in milk replacer cause an acidic gut environment, damage to the intestinal lining, and poor nutrient absorption.

Osmolality is the concentration of dissolved particles in a fluid, or could also be considered the "sugariness and saltiness" of milk. Whole milk is typically 280 to 290 milliosmoles per liter, but some milk replacers can reach 400-plus particles per liter (mOsm/L), which slows passage rate in the abomasum and leads to bloat. Osmolality can also be elevated in whole milk from cows with a mastitis infection or high somatic cell count. Proper mixing of milk replacer and access to clean water can help calves self-regulate and maintain a healthy gut.

Feeding the correct percent solids in milk or milk replacer is also important for avoiding nutritional scours. Cow's milk is naturally around 12.5% solids, with the goal being 12% to 15% when feeding milk replacers. Gut upset may

We should aim for less than 15% of preweaned calves experiencing a case of diarrhea that requires 24 hours or more of treatment.

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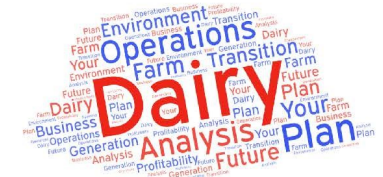
Minimizing the prevalence of scours can improve profitability by reducing treatment costs, and it sets your herd up for success.

Dairy Advancement Program

Dairy Advancement Program

The Dairy Advancement Program through the New York State Department of Agriculture and Markets and the New York State Department of Environmental Conservation is designed to enhance long-term viability of New York dairy farms while maintaining a commitment to environmental stewardship. The program is coordinated through Cornell PRO-DAIRY and delivered to farms in partnership with Cornell Cooperative Extension and agriservice professionals.

Eligible projects assist New York dairy farmers to position their farm for long term economic and environmental sustainability. Funds are used to engage professionals for financial analysis and to create business plans, to design new or remodeled facilities, to develop farmstead environmental plans, including design of practices identified in the farm comprehensive nutrient management plan.



Business Project Funds

With a preference for small to midsize farms, projects will address specific business needs necessary to meet the challenges of today and position the farm for long term viability.

Program funds may be used to engage the services of a dairy industry professional for the following categories:

Funds will cover 80% of eligible costs up to:

- Recordkeeping systems - \$2,500** for implementation and support of a new, or significant update to an existing, record keeping system
- Operational business planning - \$2,500** for a farm's first year of budgeting and planning with an operational focus to assist with analyzing costs and opportunities for improvement of current operations

Advisory Team - \$3,000 for a team of advisors to assist the farm with improvement of specific aspects of dairy business performance

Business planning - \$5,000 for a farm to develop a business plan which may include, but is not limited to business planning and analysis of operation, transition analysis, facility planning and farmstead layout planning

Business planning (cont.) - \$2,500 for continuation of business planning for a farm awarded business planning funds in a subsequent year

Business projects are funded through the NYS Department of Agriculture and Markets

Position Your Farm for Economic and Environmental Sustainability

- ⇒ Benchmark your dairy compared to similar dairies
- ⇒ Analyze operational efficiencies to improve the bottom line
- ⇒ Understand the impact transitioning to the next generation has on the business
- ⇒ Plan the layout of future structures on the farmstead
- ⇒ Plan and budget for environmental improvements on the farm (current and future)
- ⇒ Bring together a team of advisors to assist with improving current operations, addressing management challenges, and improving business effectiveness

Eligibility

- You must be a dairy cattle farm shipping milk in the state of New York
- You must have complete financial records for business planning
- You must complete and submit an application to: prodairy.cals.cornell.edu/dairy-advancement/

Program funds cover 80 percent of a project's cost. The farm is responsible for 20 percent as well as any amount in excess of the value of the award. Awarded funds are disbursed, through Cornell University, directly to the industry professional providing services.

Environmental Project Funds

Program funds may be used to engage the services of a dairy industry professional for the following categories:

Comprehensive Nutrient Management Plan (CNMP) for dairy farms < 300 mature cows

Funds will cover 80% of eligible costs up to:

CNMP - \$6,000 for a certified planner to develop a new Comprehensive Nutrient Management Plan (CNMP)

CNMP - \$4,500 to update an existing CNMP

Engineering Services for Best Management Practices for dairy farms < 700 mature cows

BMP - \$10,000 to design a combination of BMPs identified in the farm CNMP.

BMP - \$5,000: for an engineer to design a single best management practice (BMP) identified in the farm CNMP.

BMP - \$3,000: for construction oversight and as built certification of a BMP, \$6,000 for a combination of BMPs

BMP - \$2,500: to evaluate an existing structure (BMP)

SWP3 Plan - \$5,000: for engineering services related to development of a Stormwater Pollution Prevention Plan necessary for construction of an eligible BMP under the State Pollutant Discharge Elimination System (SPDES) Permit

Environmental projects are funded through the NYS DEC Environmental Protection Fund

If you're interested in utilizing Dairy Advancement Program funds for your farm, call Katelyn or Camila!

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Look to purchase Quickbooks or DairyComp? Need to take a look at your farm's financials before a big project? Thinking about succession planning? DAP funds can help!

Dairy Margin Coverage - Foundational Risk Management for Your Milk Production

By Katelyn Walley-Stoll, Farm Business Management Specialist

For dairy farmers, milk production and profitability can be a tricky thing to plan for. It's even trickier when you take into consideration all of the different places where systems can break down, prices can drop, and life (or a more visual term synonymous with manure) happens. Knowing your options for farm risk management, especially dairy price risk management, is important to make sound decisions to help protect your farm financially.

Dairy Margin Coverage (DMC) is one risk management tool dairy producers can use to help protect against low milk prices and/or high feed costs. Enrollment occurs annually, and for 2022 you can sign up between December 13th, 2021 and February 18th, 2022. The 2022 deadline has been extended to **March 25th!**

Super Brief History: If you're new to DMC, you might remember the old MPP (Margin Protection Program) and MILC (Milk Income Loss Contract) programs. DMC is the United States Department of Agriculture (USDA) Farm Service Agency's (FSA) current voluntary program for dairy farm risk management. DMC was authorized in the 2018 Farm Bill. As of December 6th, 2021 there were 2,024 participating farms in NYS (74% of total dairy operations) representing 81% of total milk production. DMC has been a net positive for participating farms in almost every year of its history except 2014.

What's New? There have been some changes to DMC for the 2022 program year. You can read more about those changes in my recent article.

What's it Do? DMC pays participating dairy operations when the difference (margin) between the national milk price and the national average cost of feed falls below a certain, selected level. The margin is calculated using national averages, not farm specific feed costs and milk prices. Farms choose their coverage levels based on their production history.

How is Production History Calculated? Pounds of milk that you can enroll/cover, unless you're a new farmer, is based on your highest milk production in 2011, 2012, and 2013. This is called your "Production History".

What's Supplemental DMC Enrollment? If your milk production has increased from your 2014 "historical milk production" level (above), you can add supplemental coverage. This is only for producers with less than

5 million pounds of production and uses 2019 actual milk production. Payments are retroactive to 2021 and coverage can be selected for 2021 - 2023.

What do I Select? Dairy producers select two different variables to insure. If you lock in your coverage selections for 2022 AND 2023, you can receive a 25% premium discount. These include:

- Coverage Level is the margin price that will "trigger" a payment. You can choose levels from \$4.00 to \$9.50 per cwt in \$0.50 increments. Catastrophic coverage is \$4.00/cwt. The higher you choose the more likely you'll receive a payment, especially in 2022, but your premium due will be higher as well.
- Coverage Percentage is the portion of your production history, in cwt, that you'll cover. You can select to cover 5% to 95% of your production history in 5% increments. Your premium price is on a per cwt basis.

How much does it cost? The minimum catastrophic coverage only costs an annual \$100 administrative fee. For higher coverage levels, you'll also be required to pay additional premiums based on your selected coverage level (Table below).

Is this the right program for me? More often than not, DMC is profitable for farms - and, at the bare minimum - provides some peace of mind to balance out price fluctuations. There is a really handy tool available at dmc.dairymarkets.org where you can put in your farm's specific information and see what historical performance might have been AND estimate future performance at various coverage levels. It's important to note that, at this time, the forecasted 2022 margin is \$9.19 and monthly margins range from \$8.75 to \$9.61.

When do I get Paid? If the milk margin drops below \$9.50, you may be eligible for a payment depending on the coverage level you chose. In 2021, payments were triggered in every month at various levels less than \$9.50.

Am I Eligible? Farms that ship milk in the United States are able to participate. This includes a variety of business models, including partnerships with multiple producers and even beginning farmers. Participating in other risk management programs, like Livestock Gross Margin for Dairy Producers Program and Dairy Revenue Protection Program, does not exclude you from participating in DMC (ie - you can participate in all three!).

Call your local FSA office to get the ball rolling sooner rather than later, especially if you haven't participated before.



They'll help you determine your production history, register, select your coverage level, and select your coverage percentage.

swnyteam@cornell.edu

Cornell Cooperative Extension

Southwest NY Dairy, Livestock and Field Crops Program

swnydlfc.cce.cornell.edu



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

2022 SWNY (Virtual) Field Crops Congress

An eight part virtual series for Field Crops Producers to learn more about the latest research-based recommendations for pest control, weed management, forage production, economic considerations, soil health and fertility, challenges for our 2022 season, and more. Open to all interested Field Crops producers and industry service providers, with DEC, CCE, and FSA credits available.



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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.

Thursday, March 10th, 2022

12:30pm to 1:30pm

Navigating, Valuing, and Negotiating Land Leases

As farm profitability margins tighten, and input prices continue to rise, now's the time to evaluate the role that leased and rented land plays in your crop production – and the effect on your bottom line. Join Farm Business Management Specialist, Katelyn Walley-Stoll, to learn more about the considerations and resources that are available for evaluating and executing your land lease options. Topics of discussion include written lease agreements, "fair" rental rates, and tools for analyzing enterprise opportunities.

Friday, March 11th, 2022

12:30pm to 1:30pm

Getting the Best Bang for Your Fertilizer Buck

Dr. Quirine Ketterings, Cornell Professor and leader of the Nutrient Management Spear Program, and Kirsten Workman of Cornell PRO-DAIRY, will discuss management and evaluation strategies to help optimize fertility without breaking the bank with your fertilizer budget.

Thursday, March 17th, 2022

12noon to 1pm (DEC Credits Pending)

Keeping Hay Fields Productive

Dan Steward of WNY Crop Management Association, will address the challenge of keeping long term pastures and hay fields. Discussion of how to deal with established weeds, while keeping pastures and hayfields viable in this regard will be covered. He will show how to better manage via rotation, fertility and harvest management to help control and eliminate weed growth. Problem weeds typically found in pastures and long-term fields will be identified and covered along with what types of herbicides should be used and timing for best possible effectiveness and animal safety.

Friday, March 18th, 2022

12noon to 2pm (DEC Credits Pending)

Corn Nematode Survey Results: Management Implications?

Mike Stanyard will discuss the results of the corn nematode sampling study from the NWNYS region in 2021. We will look at what plant parasitic nematode species were found and at what levels. Some fields were over threshold and therefore possible nematicide management options will be discussed for 2022. Mike is the Field Crops Specialist and Team Leader with Cornell Cooperative Extension's Northwest New York Dairy, Livestock, and Field Crops Program.

Weed Management in Hay and Pasture

This session will provide a review of cultural and chemical weed control practices for alfalfa or grass, mixed stands, and pasture. It will include practices that give the hay species a competitive edge over weeds and herbicide options for different weed scenarios. Common difficult to control weeds in pasture will be covered as well as improvement of older hay stands with weed invasions. Janice Degni is the Field Crops Specialist and Team Leader with Cornell Cooperative Extension's South Central New York Dairy and Field Crops Program.

Thursday, March 24th, 2022

12noon to 1pm

Factors Influencing Forage Digestibility and Feed Quality

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

Friday, March 25th, 2022

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

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

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

Soybean cyst nematode in NY: Status update and management options

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

Thursday, March 31st, 2022

12noon to 2pm (DEC Credits Pending)

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

This presentation will focus on the evolution of herbicide resistance in agronomic crops with a focus on the current issues facing New York producers including: Palmer amaranth, waterhemp and horseweed. Results from recent studies indicate that all three species are likely resistant to glyphosate and the ALS-inhibiting herbicide chemistries. The presentation will also include information about projected herbicide shortages and their impacts on weed control success. The talk will conclude with discussions about novel technology being investigated in the US for the control of herbicide resistant weeds (electrical weeding, harvest weed seed control) as well as easily implemented strategies on growers own farms, such as combine cleanout. Presented by Lynn Sosnoskie, Assistant Professor for Weed Ecology and Management for Specialty Crops at the School of Integrative Plant Science, Cornell AgriTech.

Seed Corn Maggot in NY Corn and Biological Control of Corn Rootworm

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

Friday, April 1st, 2022

12noon to 2pm (DEC Credits Pending)

Alphabet Soup – GMO Trait Management

The options for pest management traits in genetically engineered crops can be confusing and continues to change. Understanding and managing these traits is critical to responsible and sustainable pest management. This talk will help decipher the list of traits from different companies and for various pest addressing trait stewardship to assure target use and minimize the risk of resistance development. Furthermore, how the use of traits can complement the responsible use of pesticides will be discussed. This presentation will be led by Joe Lawrence, Dairy Forage Systems Specialist with Cornell PRO-DAIRY.

Field Crop Weed Control in 2022

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

THE DETAILS

COST

\$40/farm for access to **any and all** of the virtual sessions. Scholarships available for those who are in need who would like to attend for \$20 or for free. Select the "scholarship" option at payment.

REGISTRATION

Register by visiting tinyurl.com/22FieldCrops or by calling Kelly Bourne, our program's amazing administrative support, at 585-268-7644 ext. 10 or via email klb288@cornell.edu.

PLEASE NOTE we will NOT be recording these sessions. Every effort will be made to connect those who are unable to attend live with the session resources and slides. **In-person viewing options available at one of our local CCE offices upon request.**

DEC AND CCA CREDITS AVAILABLE!

Let us know at registration that you need credits and be prepared to share your Certification Number.

TECH REQUIREMENTS

You will need access to Zoom (phone, tablet, or computer). If you need credits, you'll also need video capabilities.

SPONSORSHIP

We are currently seeking agribusiness support for this series. Contact Katelyn at 716-640-0522 for more information.

IS THIS FOR ME?

This series has options for agricultural producers of all shapes, sizes, and time in business. Choose the options that best suit your interests and needs.

For accommodations and accessibility concerns, please contact Katelyn Walley-Stoll by calling 716-640-0522.

Klebsiella mastitis - More than just another gram-negative

By Paul Virkler, DVM with Quality Milk Production Services, originally published in The Manager.

Klebsiella is becoming a more commonly isolated mastitis-causing organism on dairy farms across the Northeast. We have traditionally thought of the most common gram-negative organism isolated on dairies as *E. coli*, but over the last 20 years, that has changed on some farms. While there is always a range on each farm of how the mastitis presents, we hear from farms about two basic clinical presentations with Klebsiella. One is a very severe clinical mastitis with cows becoming systemically ill and with very poor recovery rates. The second is a less severe clinical mastitis but a number of these cows become chronically infected with an elevated somatic cell count (SCC).

While we are not entirely sure of why Klebsiella has become more prevalent in the Northeast, from research done by Marcos Munoz and colleagues in 2006, we know that the primary source, as it concerns to mastitis risk, of Klebsiella on most dairy farms is from cattle feces. Munoz showed that approximately 80 percent of healthy cows shed Klebsiella in their feces over a period of five months of testing. It is still true that green sawdust can be a source of Klebsiella if a farm is using it, but this is not the primary bedding on most farms.

Given that Klebsiella is present in cattle manure, the primary prevention strategy is how to keep manure away from open teat ends. This sounds easy on paper, but in practical applications on real dairy farms, it is an ongoing battle to get it done. Klebsiella falls into the environmental mastitis category, which means that the primary source of the organism is from the environment. The following section outlines risk factors for Klebsiella that we have observed on dairy farms that we work with.

Risk Factors for *Klebsiella*

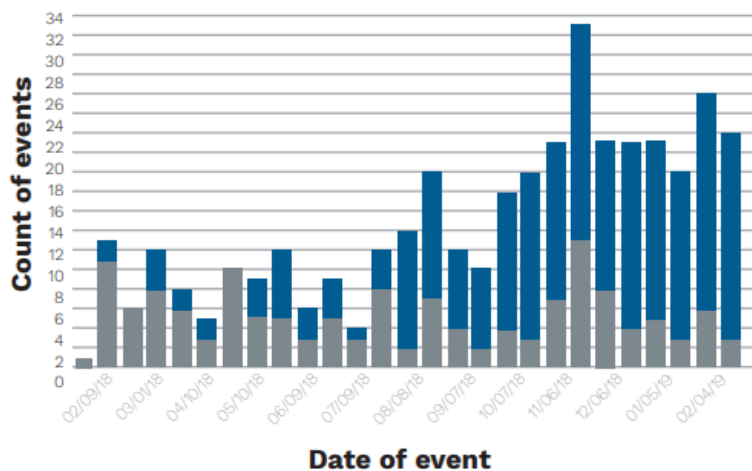
If your farm is using cloth towels, make sure that they are laundered properly and that washing machines do not develop biofilms. We investigated a farm situation in which Klebsiella was isolated from the towels and from swabbing the inside of the washing machine. We recommend that towels are laundered in hot water with detergent and fully dried in a dryer. If drying is not possible or load size is not well controlled, then you may need to consider adding in chlorine in the final rinse cycle of the washing machine.

Teat end cleanliness prior to unit attachment is a critical area to monitor for risk of Klebsiella mastitis. If teats are

still dirty when the teat canal is opened to milk, the risk is greater that Klebsiella could make its way inside the udder. In our experience, unless someone on the farm is monitoring this parameter on a regular basis, milkers are unlikely to consistently get teat ends clean. Also milkers need to be trained that wiping the teat ends requires a different hand motion compared to wiping the teat barrels.

FIGURE 1

An example of how the relationship between *E. coli* (grey bars) and *Klebsiella* (blue bars) changed on one dairy over the course of a year



For herds that are using some type of mechanical brush to clean teats, we recommend that the disinfectant levels running through the brushes are checked on a very frequent basis to avoid a situation of the brush serving as an instrument to pass organisms cow to cow. We also recommend that these brushes are sprayed out on a regular basis to avoid excessive dirt or manure accumulation in them. Brushes should also be changed on schedule to keep the effectiveness of the cleaning process high.

Pre-dip is an important component of controlling Klebsiella mastitis, as we are relying on this to help disinfect the teat prior to unit attachment. We see a large variation in how well pre-dip is applied on individual cows, which of course plays a role in how effective it is. If there is no dip on the teat end or barrel, then it is unlikely to be effective. Pre-dip should be on the teat for a minimum of 30 seconds before it is removed. Also be aware that if your routine incorporates forestripping immediately after pre-dipping, you may be removing a large amount of the pre-dip. In this case, we would recommend re-dipping.

Post-dip is also a crucial component of Klebsiella

If teats are still dirty when the teat canal is opened to milk, the risk is greater that Klebsiella could make its way inside the udder.



Klebsiella prevention tip: If your farm is using cloth towels, make sure that they are laundered properly and that washing machines do not develop biofilms.

mastitis control for a couple of reasons. One is that if teat ends were not cleaned effectively prior to unit attachment, the post-dip can help to disinfect the remaining bacteria on the teat end. Secondly, post-dip can help support good skin condition due to the emollient package that it contains. As outlined below, we do see an association with dry skin and open lesions and Klebsiella incidence.

Preventing short-term changes of the teats during milking is critical as this has been linked to a delayed closure of the teat canal as the cow goes to the stall. Claw vacuum should be set appropriately and all pulsators graphed to ensure they are functioning well. A proper milking routine should be in place to avoid bimodal milk flow or overmilking at the beginning of milking. To avoid overmilking at the end of milking, units should be aligned well, automatic take-offs set appropriately, and the use of manual mode minimized.

We have definitely seen a relationship with Klebsiella outbreaks and herds with dry skin and excessive open lesions. You can think of open lesions as cracks or cuts on the teat that then become infected and do not heal up well. (See Figure 1). Although the reasons why some herds have a large issue with this are not entirely clear, we have been able to control the open lesions by adjusting the emollient in the post-dip to higher levels. In other situations, better cow positioning and bedding and stall management has helped to keep the stall beds drier, especially in those herds bedding with manure solids, which seems to help skin condition as well.

Another large risk factor that we have seen associated with Klebsiella is spraying deck manure toward cows that have just exited with higher-pressure hoses. This has the potential to aerosolize all the manure pathogens and send them toward the teats and udders of the cows with open teat ends that have just exited. We have seen farms successfully transition to using short-handled squeegees to move manure in the middle of the group and only using the hose between groups when no cows are present.

Keeping units clean is also essential to controlling fecal contamination of milkers' hands as they are attaching units. We recommend that units are sprayed down between every



An example of multiple open lesions from a herd with an outbreak of Klebsiella.

Cow positioning in the stalls is key in terms of reducing the fecal load, and therefore Klebsiella, in the back onethird of the stall. If cows are routinely positioned too far forward, then there is most likely manure contamination in the back of the stall. If this is the case on your farm, try to determine if this is a bedding level issue or if there is a need for a low brisket board to properly position cows. Also be aware that if you have narrow alleys and overcrowded pens, there most likely is quite a lot of fecal splash into the stalls that is occurring. If you are manually scraping alleys, monitor the technique to make sure that manure is not inadvertently rolling into the stalls as it is pushed to the end.

Lastly, make sure that you monitor the dry-off procedure. Teats need to be clean and dry prior to injecting antibiotics or internal teat sealants. Teats should be cleaned in the order of far teats first and then near teats. Treatment should be performed first on the near teats and last on the far teats. Make sure that the base of the teat is squeezed off when injecting an internal teat sealant so that it stays in the teat cistern. As you can see from the risk factors above, getting a handle on this can be a tough job. Many of these areas need ongoing monitoring to prevent procedural drift, which is what makes controlling Klebsiella a challenge on dairies. The good news is that we have seen many dairies be successful in reducing the incidence of this pathogen on their dairy, so it can be done. Good luck; your cows will thank you.

group and then towed off to prevent excessive water from remaining on the mouthpiece lip.

Controlling the splash of manure onto teats and udders as cows move in the group and to and from the parlor is also critical to controlling Klebsiella. Munoz clearly showed that the dirtier the udders were, the more Klebsiella remained on the teat after prep. Make sure that crossover alleys are not scraped prior to cow movement and that alley scrapers are maintained well so that manure is not left behind next to the stalls or in the middle of the alleys. Establish a consistent pattern among all shifts in the way cows are brought to the parlor. Also holding areas and return lanes may have to be scraped multiple times during milkings if too much manure is accumulating.

Pre-dip is an important component of controlling Klebsiella mastitis, as we are relying on this to help disinfect the teat prior to unit attachment.

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Make sure to avoid overmilking or other practices that can damaged cows skin. There is a relationship between teat lesions and Klebsiella outbreaks.

Poultry Producers: Be on the Lookout for Highly Pathogenic Avian Influenza

By Amy Barkley, Livestock Specialist

Nearly 250 cases of the highly pathogenic Avian Influenza strain have been identified in the U.S. in wild bird populations, but the virus can easily spread to domestic poultry. We saw this recently on February 19th, where the virus jumped into a flock of backyard birds in Suffolk County, NY, which follows 6 other recent outbreaks in backyard and commercial poultry. Keep your eye out for suddenly high mortality and/or general respiratory disease symptoms, and prepared to report any whole flock illness that looks suspicious.

What is Avian Influenza (AI)?

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

Where does it come from?

Waterfowl, both wild and domestic, act as reservoirs of infection. Since the outbreak of 2014-2015, scientists have been monitoring wild bird populations, and waterfowl hunters regularly send their harvested birds in for testing. Wild waterfowl regularly carry low-pathogenic strains of the virus, but it can easily mutate to a highly pathogenic strain, which has recently been identified in over 90 wild birds in Virginia, North Carolina, South Carolina, and Florida and 1 commercial turkey flock in Indiana as of February 8th, 2022.

If it's only been found in wild bird populations in the South, why should I be concerned?

Wild birds follow one of four migratory routes. NYS is located in the Atlantic Flyway, which includes the states with current HPAI findings. It is anticipated that as birds migrate North in the spring that we'll begin to see the cases in wild birds move with them. It also means that there is an increased potential for the virus to establish in poultry flocks along this route.

How does it spread?

HPAI lives in the respiratory and/or intestinal tract of birds. It can be picked up from contact with infected feces, surfaces, or through the air, though ariel transmission from farm to farm is unlikely. It can be transported on infected feed, clothing, or equipment. Once on the farm, the disease is readily passed from bird to bird, infecting an entire flock quickly.



Migratory flyways of U.S. bird species. Most birds will fly along their flyway, but there may be some overlap, which can move disease across the country. Photo from the U.S.

Which flocks are affected?

Flocks of any size, from back yard to commercial, and any species can be affected.



A rooster exhibiting symptoms of HPAI, including hemorrhagic skin that is visible on the featherless head regions. Photo courtesy of Dr. David E. Swayne.

If you'd like assistance in helping develop your biosecurity plan, reach out to Amy Barkley at amb544@cornell.edu or (716) 640-0844

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Any poultry disease resulting in unexplained high mortality should be reported to rule out a highly infectious disease.

Common symptoms:

Any birds can be affected, but birds other than waterfowl react most strongly to the virus. Poultry infected with HPAI may show one or more of the following symptoms:

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

A high level of mortality without any clinical signs is known to be a certain sign of the virus. In some cases, expect 100% of the flock to die within a few days. Regardless of how the disease presents, a large portion of the birds in a flock will be affected. Waterfowl may carry the virus but not show symptoms.

What do I do if I think I have HPAI in my flock?

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

- Your local veterinarian or flock veterinarian
- The State veterinarian serving your county
- The New York State Animal Health Diagnostic Center at (607) 253-3900 or poultryhealth@cornell.edu
- The USDA toll-free at 1-866-536-7593

What can I do to manage for it?

Because there is not a vaccine currently available in the U.S. for this disease, keeping it out through biosecurity is going to be the best course of action. The easy-to-follow biosecurity principles below can go a long way to keeping your birds safe

from disease:

- Establishing an "all-in, all-out" flock-management policy;
- Protecting against exposure to wild birds or water or ground contaminated by wild birds;
- Closing bird areas to nonessential personnel or vehicles;
- Providing employees with clean clothing and disinfection facilities and directions for their use;
- Thoroughly cleaning and disinfecting equipment and vehicles (including tires and undercarriage) when entering or leaving the farm;
- Banning the borrowing or lending of equipment or vehicles;
- Banning visits to other poultry farms, exhibitions, fairs, and sales or swap meets (if visits must occur, direct workers to change footwear and clothing on their return); and
- Banning bringing birds in slaughter channels back to the farm.



This article was compiled with information available on the USDA-APHIS website, at <https://www.aphis.usda.gov>.

POULTRY PRODUCER ALERT:

Highly Pathogenic Avian Influenza (HPAI) is a highly infectious, deadly, reportable disease in the U.S.. In 2014-2015, it resulted in the largest animal U.S. health emergency ever recorded when it killed over 50 million layers, broilers, and turkeys on over 200 farms in 15 states. NYS poultry producers should be on high alert, since this disease has been identified in over 250 wild bird samples in the Eastern U.S. this year, and has been identified in 7 commercial and backyard flocks since February 8th, including a flock in Suffolk County. There is a high likelihood that we'll see this disease increase in prevalence in the coming months.

Selling Eggs? Here's What you Need to Know

By Amy Barkley, Livestock Specialist

The daylight patterns are on the uphill swing, meaning that our poultry are once again dutifully beginning to produce an abundance of nutritious eggs. As eggs are prepared for sale, there are some safety considerations and state regulations that need to be kept in mind. All of the information expressed below is pertinent to flock owners of fewer than 3,000 hens. Flock owners with more than 3,000 hens will need to follow additional federal guidelines in regards to food safety and labeling requirements.

Food Safety in the Coop

Keeping a clean and sanitary coop can go a long way to maintaining egg wholesomeness. The bacterial contamination of an egg is directly related to the dirt on the shell surface. Dirt is classified as feces, bedding, blood, dirt, broken egg contents, or fly spots. Essentially, dirt is anything on the surface of an egg which should not be there. Training hens to nest boxes and ensuring that those nest boxes stay clean is one way to improve egg sanitation.

Mislaid eggs are those that are laid anywhere outside of the nest box. Most commonly, these eggs are found on the coop floor or in nests hidden in secluded areas in the barn or around the farm. Eggs that are laid on the barn floor are usually more contaminated than those laid in the nest, simply because of innately dirty nature of the hen house floor. It's been recommended by many food safety scientists not to consume those eggs that were laid on the floor unless you cook them until the yolks and whites are firm. Eggs laid in secluded nests pose more of a quality and safety risk, since they can be many days old, can come from hens with unknown medical history, may or may not be heavily contaminated with bacteria or molds, and may or may not be fertile. With these unknowns, it is advised to discard all eggs that are found in nests created outside of nest boxes.

Keep in mind that any eggs which are cracked/leaking, rotten, or developing embryos may not be sold for human consumption.

Egg Collection

Eggs should be collected every 48 hours, at minimum, and ideally every day. Following collection, the eggs should be immediately refrigerated at temperatures at or below 45°F to reduce bacterial growth, maintain egg quality, and to halt embryonic development if the egg is fertile. Eggs can be kept in the fridge unwashed for up to 3 weeks before washing.

To Wash or Not to Wash?

Are you seeing an increased number of cracks in your egg shells? Reducing supplemental feeds outside of a complete layer ration and adding oyster shell can help. You should see results within 2 weeks.

There is no legal direction in NYS in regards to if eggs should or shouldn't be washed if a farm has fewer than 3,000 hens. This decision is up to the discretion of the flock owner, bearing in mind that eggs for sale must be free of any adhering dirt under the law. There are pros and cons to washing: washing removes the natural protective protein coating of the egg, often called the "cuticle" or "bloom", but also removes adhering dirt and some stains. A recent study by the USDA-ARS (United States Department of Agriculture - Agriculture Research Service) indicated that washed, refrigerated eggs maintained similar quality to unwashed refrigerated eggs, which is contrary to previous beliefs that unwashed eggs maintain their freshness longer.

Washing eggs properly is essential for food safety, and incorrect washing of eggs can actually lead to increased interior contamination of the egg. Eggs should be washed in water that is at least 20 degrees higher than the ambient temperature of the egg, since washing in water colder than the egg allows bacteria on the shell surface to be pulled into the egg through contraction of the white and yolk caused by the temperature difference.

A good washing technique is as follows: 1.) Apply a light stream of water to the egg and gently remove debris with a cloth, dish scrubber, or brush that has been dipped in an egg wash solution or dish soap. 2.) Rinse the egg of the cleaning solution. 3.) Allow the egg to air dry. Never soak eggs at any time, as this allows for bacteria to penetrate the shell through the egg's natural pores.

Some farmers opt to wash dirty eggs and simply pack the clean ones. This is an acceptable practice. That said, any eggs which are excessively dirty, regardless of where they were collected, are considered heavily contaminated with bacteria and should not be sold.

Packing Eggs

Dry eggs are to be packed into clean egg cartons. Packing eggs large end up keeps the air cell exposed, maintaining better freshness of the eggs over time. It is highly recommended that eggs be packed into new cartons for food safety reasons, but old cartons can be reused if they're clean. It is not recommended that eggs be packed into cartons from store-purchased eggs unless absolutely necessary. If they must be packed in these cartons, all identifying features on that carton (store name and/or branding information, packing code/date information, grade, size, and nutrition claims) must be obliterated with black

Eggs need to be maintained at 45°F during transport through sale. This means transporting in coolers or refrigerated units.

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permanent marker or opaque paint. It is illegal to sell eggs in cartons with identifying features or claims that are not the farm's own, and this includes all of the items listed above.

What Not to Put on the Carton:

Claims of nutrition or certifications outside those of a standard egg cannot be made on the carton. Wording such as "healthier" or "fresher" aren't allowed. Furthermore, neither are claims of increased nutritional profiles, even if the eggs are from pastured hens. It's commonly regarded that pasture-raised hens' eggs may have higher levels of omega-3s, carotenoids, and fat-soluble vitamins, but the only way these claims would be allowed on the carton is if the eggs were tested regularly at a certified laboratory to determine nutrient composition. This is often cost-prohibitive for small producers.

Refrigeration Requirements

Egg producers in NYS, regardless of size, must refrigerate their eggs within 48 hours of lay and maintain that refrigeration through the time that the eggs are sold, with the exception of when the eggs are removed from refrigeration for washing. This includes keeping eggs cold through the transportation chain when travelling to and selling at farmer's markets as well as selling eggs from coolers on the roadside. Ice packs or cold packs are necessary to use in units without electrical refrigeration and need to be refreshed to keep the temperature at or below 45°F.

Carton Labeling

To sell eggs in NY State, all cartons must have the following legal labeling requirements:

- The word "Eggs" in 3/8" or larger type.
- If selling eggs from other poultry, identify the species before "eggs" in 3/8" or larger type.
- Grade should not be placed on the carton, since this is a USDA-monitored service. You can use the word "ungraded".
- If sizing eggs, use a AMS certifiable scale to check weights.
- Count (6 eggs, 12 eggs (dozen), or 18 eggs).
- The words "Produced and Packed by" followed by the farm name (or farmer name) and full address.
- One of the following statements: "KEEP REFRIGERATED", "Keep refrigerated at or below 45°F", or "Store at or below 45°F".
- The safe handling instructions statement, outlined by a black square. The statement reads: "**SAFE HANDLING INSTRUCTIONS:** To prevent illness from bacteria: keep eggs refrigerated, cook eggs until yolks are firm, and cook foods containing eggs thoroughly"

While not required, inventory management can be maintained by adding the following to the label:

- The date the eggs were washed and packed
- "Use by" date - max of 66 days from the date of lay or 45 days from the date of washing.

The Pros and Cons of Seeding Pastures or Hayfields with Big Box Store Mixes

Have you noticed that prices have skyrocketed for pasture seed mixes? There is also very little seed available. Both are a result of last year's drought in Oregon, where much of our pasture seed comes from. This wasn't in the plan! What do we do now? While it can be tempting, my advice is to not source seed from a big box or garden supply store. Why not, you ask? Let's break it down into pros and cons.

Pros:

You may be able to get seed this year. If the seed mixes in the stores are sourced from regions other than Oregon, there's a chance that the store shelves may be stocked, and you may be able to get something in the ground.

Cons:

What's in the seed mix? Many contractor mixes are made up of fescue, bluegrass, and ryegrass. Some strains of these grasses are palatable, but others may not be. Some may produce well, others may not. Some of the fescues may have potential toxicity issues as well, since

these varieties aren't selected for grazing.

Nutritional composition is highly variable. The grasses selected for these mixes are based on establishment aggression, vegetation density, growth pattern, and color. They haven't been selected for any of the features which make them good livestock feed such as fiber digestibility, palatability, and protein content.

Disease resistance packages are unknown. There is a chance that turfgrasses in a contractor-type mix are not bred to be resistant to the diseases that affect stands of hay and pasture in our region. Diseases like rust, blights, leaf spots, wilts, etc. may gain a foothold in a pasture or hayfield with non-resistant species.

In summary, once the excitement of finding grass seed at a big box or home improvement store passes and the cards are laid on the table, the cons list certainly outweighs the pros.

Even if this turf seed is applied to your pasture for a quick green-up this spring, you'll likely lose money in the long run. ..

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...from reduced quality, production, and the ultimate need to redo the pastures sooner than you would have had to if you'd purchased a quality seed mix from a reputable farm seed dealer.

March 15 Last Day to Complete Enrollment for 2021 Agriculture Risk Coverage, Price Loss Coverage Programs

USDA Farm Service Agency Press Release

Agricultural producers who have not yet enrolled in the Agriculture Risk Coverage (ARC) or Price Loss Coverage (PLC) programs for 2021 must do so by March 15. Producers who have not yet signed a 2021 enrollment contract or who want to make an election change should contact their local USDA Farm Service Agency (FSA) office to make an appointment. Program enrollment for 2021 is required in order to participate in the programs, but elections for the 2021 crop year are optional and otherwise remain the same as elections made for 2020.

ARC and PLC provide income support to farmers from substantial drops in crop prices or revenues and are vital economic safety nets for most American farms.

Although 1,033,310 contracts have been completed to date, this represents less than 59% of the more than 1.7 million contracts anticipated by the Agency. By enrolling soon, producers can beat the rush as the deadline nears.

Producers who do not complete enrollment by close of business local time on Monday, March 15 will not be enrolled in ARC or PLC for the 2021 crop year and will be ineligible to receive a payment should one trigger for an eligible crop.

ARC and PLC contracts can be emailed, faxed or physically signed and mailed back to FSA. Producers with level 2 eauthentication access can electronically sign contracts. Service Center staff can also work with producers to sign and securely transmit contracts electronically through two commercially available tools: Box and OneSpan. You can learn more about these solutions at farmers.gov/mydocs. Producers may also make arrangements to drop off signed contracts at the FSA county office. Please call ahead for local mailing or drop off information and options for submitting signed contracts electronically.

Producers are eligible to enroll farms with base acres for the following commodities: barley, canola, large and small chickpeas, corn, crambe, flaxseed, grain sorghum, lentils, mustard seed, oats, peanuts, dry peas, rapeseed, long grain rice, medium- and short-grain rice, safflower seed, seed cotton, sesame, soybeans, sunflower seed and wheat.

Yield Data and Web-Based Decision Tools Available

FSA recently updated the [annual and benchmark yields](#) for ARC/PLC program years 2019, 2020 and 2021. This data is useful to producers in choosing to participate in either ARC or PLC.

For added assistance with ARC and PLC decisions, USDA partnered with the University of Illinois and Texas A&M University to offer web-based decision tools to assist producers in making informed, educated decisions using crop data specific to their respective farming operations. Tools include:

- [Gardner-farmdoc Payment Calculator](#), the University of Illinois tool that offers farmers the ability to run payment estimate modeling for their farms and counties for ARC-County and PLC.
- [ARC and PLC Decision Tool](#), the Texas A&M tool that allow producers to analyze payment yield updates and expected payments for 2019 and 2020. Producers who have used the tool in the past should see their username and much of their farm data will already be available in the system.

Crop Insurance Considerations

Producers are reminded that enrolling in ARC or PLC programs can impact eligibility for some crop insurance products. Producers who elect and enroll in PLC also have the option of purchasing Supplemental Coverage Option (SCO) through their Approved Insurance Provider. Producers of covered commodities who elect ARC are ineligible for SCO on their planted acres.

Unlike SCO, RMA's Enhanced Coverage Option (ECO) is unaffected by participating in ARC for the same crop, on the same acres. You may elect ECO regardless of your farm program election.

Upland cotton farmers who choose to enroll seed cotton base acres in ARC or PLC are ineligible for the stacked income protection plan (STAX) on their planted cotton acres.

More Information

For more information on ARC and PLC including web-based decision tools, visit farmers.gov/arc-plc.

The deadline to enroll in most FSA risk management products is March 15th.

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There are a couple of decision making tools available to you where you can enter your farm's data and see what a potential gain might be given current premiums, and probability for payments.

Hardware Disease of Cattle

by Dr. Bonnard L. Moseley, University of Missouri College of Veterinary Medicine



Hardware disease is produced by a sharp object that pierces the stomach wall and gains access to the heart. A sharp object, such as a nail or piece of wire, may perforate into the heart sac. The object lies originally in a chamber of the stomach known as the reticulum. The reticulum "catches" all heavy objects that are ingested; feed and lighter material pass back into the rumen. When muscles contract, the "hardware" may be forced through the wall of the reticulum, diaphragm and heart sac. Hardware disease is a common term used for traumatic gastritis and traumatic reticulitis. From 55 to 75 percent of the cattle slaughtered in the eastern United States have been found to have hardware in the reticulum. However, no damage or perforations of the reticulum was evident.

Hardware may be present and yet produce no damage to the digestive system. Baling twine has replaced baling wire to a great extent, decreasing the noted frequency of hardware disease. During pregnancy, the rumen and reticulum are displaced forward. At the time of calving, forceful abdominal movement may cause the initial perforation or movement of the hardware into the heart. Older cattle are more often affected with the condition than young ones.

Clinical Symptoms and Diagnosis

You may notice that the cow has a poor appetite, is somewhat depressed, and is reluctant to move. Cattle seem to have indigestion and show signs of pain when defecating. If perforation of the heart has occurred, fluid, due to infection, may accumulate around the heart and produce abnormal heart sounds. The brisket may be quite flabby due to a large amount of fluid in it. The cow may also be bloated. These symptoms may subside or disappear within one to seven days, but may reoccur shortly afterwards.

If the cow is slaughtered and the reticulum and heart carefully examined, it may be possible to find a nail or wire protruding through the wall of the reticulum into the heart. However, the hardware may have been completely digested over a period of months and thus not be present. Sometimes abscesses or adhesions may be present between the reticulum and diaphragm, indicating a perforation had been present. Normally, the reticulum and diaphragm are not bound to one another.

Treatment

If hardware disease is diagnosed by a veterinarian, and the animal has little or no value other than for market prices, slaughter may be recommended. If the animal is for breeding purposes or is a dairy cow, several treatments may be beneficial. Elevating the forelimbs 6 to 8 inches with a platform may stop forward movement of the nail or wire from the reticulum. This is a slow process; the limbs should be constantly elevated for 10 to 20 days. Antibiotics will help limit the spread of infection. If the animal is quite valuable, rumenotomy may be recommended. This procedure involves a surgical approach to the interior of the reticulum. A surgical incision is made alongside the last rib, then the hand is extended behind the ribs to the junction of the reticulum and diaphragm. Foreign objects, adhesions, etc., may be palpated. If a foreign object is palpated, an incision is made into the ruminal wall. The object is then removed manually from the reticulum.

Prognosis

Prognosis is the prediction of the final outcome of the disease. The prognosis in hardware disease varies with the amount of infection present, how long the condition has been present, and the individual animal. The attending veterinarian considers several factors before making a final prognosis. As a general rule, 60 to 75 percent of affected animals can be returned to useful function if the disease is detected and treated early in its course.

Prevention

Using magnets in the reticulum has become a popular preventive routine for hardware disease, especially in the dairy breeds. The magnet is administered much like a large bolus or pill, with a stomach tube or balling gun.

The magnet simply keeps foreign metallic objects adhered together in a ball, reducing the chances of penetrating the reticulum. Of course, the best preventive measure is keeping feed bunks, pastures, cow lots, etc., free of potentially hazardous objects.

REMINDER: March 1st is the deadline to file or renew your Ag Value Assessments! Call Katelyn with questions (716-640-0522).

Grazing cattle in pastures that were formerly vineyards or feeding cattle hay from pastures that were formerly vineyards can increase the risk of hardware disease.

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Magnets are cheap insurance to help bind metal and limit its chances of puncturing the reticulum.

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