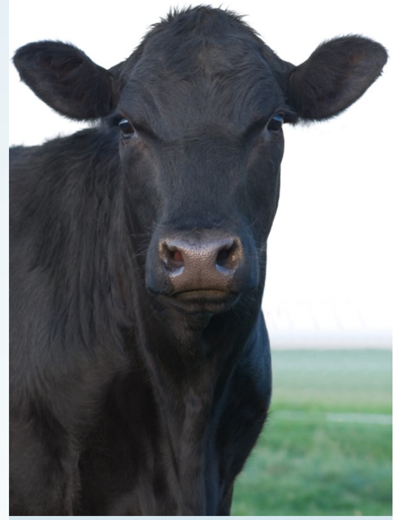
Carver County
Environmental Services
Feedlot Program

Fall 2025
Volume 4, Issue 3



The Barnyard Buzz

Feeding Food Waste to Livestock

Feeding food waste to livestock can be an economical, nutritious, and an environmentally friendly practice. However, it is essential that food waste is properly regulated to prevent the spread of both foreign and domestic livestock diseases.

In 2024, Carver County successfully diverted 22,588 tons of commercial food waste from landfills to livestock feed, demonstrating a strong commitment to sustainable waste management. When food waste cannot be prevented, these food-to-animal operations are an important and effective alternative in managing organics. County staff are actively exploring new ways to expand these efforts and support the agricultural community.

Carver County Environmental Services offers grant funding to support initiatives that reduce waste, launch or enhance recycling programs, and implement organics recycling. Grant funds are available to livestock owners interested in becoming permitted facilities for food-to-animal operations. Eligible producers can receive financial support and guidance from County staff throughout the permitting process.

Building support for these alternative outlets is essential to ensure their long-term success. As part of the Carver County Solid Waste Management Plan, the County is committed to promoting and expanding food-to-animal opportunities.

For more information on available grants and requirements for feeding food waste to livestock, please contact Matt Steele at 952-361-1808 or msteele@carvercountymn.gov.

Inside this issue

Carver County Environmental Services

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Reducing the feed cost of grain for livestock

- Use alternative feeds such as corn gluten feed, distillers byproducts, or small grains.
- Evaluate alternative feeds to optimize feed use and cost.
- Process small grains but avoid over-processing since it will reduce efficiency.
- Feeds that are in high in moisture improve intake but may not lead to increased weight gain.

Distiller grains for beef cattle feed

- Always monitor and adjust sulfur levels in the diet to prevent poor animal performance.
- Distiller grains contain 25% to 35% protein on a dry matter basis.
- Ensure the calcium to phosphorus ratio in the diet does not fall below 2:1.
- Be prepared with appropriate storage for distillers grains, as wet distillers grains require more complex storage solutions.
- Wet and dry distillers grains provide approx. 110% and 95% of the energy value of corn grain.

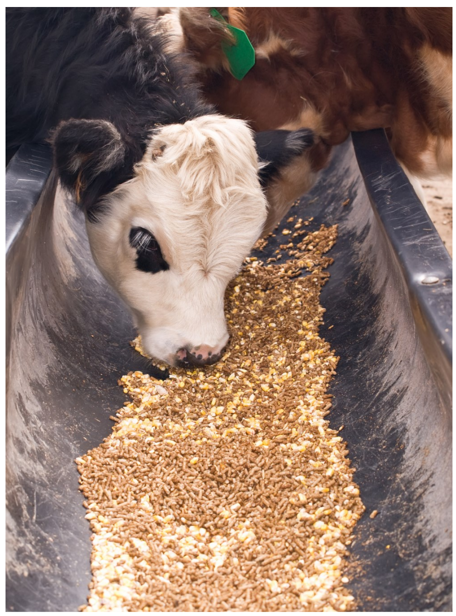
Evaluating Grain Feed for Mold

When feeding grain to cattle, it's important to ensure that mold cannot grow since it can harm cattle production through disease. Mycoses and Mycotoxicoses are the two diseases that result from mold. Mycoses is caused by the mold itself while Mycotoxicoses results from a toxin (mycotoxin) produced by the mold.

Mycoses can affect both animals and humans. In humans, mold spores may lead to respiratory issues such as sneezing, coughing, and shortness of breath. Individuals working with heavily moldy grain should wear masks to reduce the risk of inhaling spores or triggering allergic reactions.

While respiratory problems in cattle due to mold exposure are not well documented, they should still be considered if animals show signs of decreased dry matter intake or labored breathing related to feed. Although molds rarely cause systemic illness in cattle, they have been linked to cases of abortion and blood poisoning.

The mold itself can cause production losses apart from the effects of toxins and can negatively affect lungs, rumen fermentation, reproductive function, nutrient intake, and production.



Molds require several key conditions to grow and thrive:

Moisture: Molds need moisture to flourish, and relative humidity levels must be over 70% for optimal growth.

Oxygen: Molds also require oxygen to survive. A minimum of 1 to 2 percent O2 is necessary for their growth and reproduction.

Time: Molds don't grow instantly. They need time to develop and spread, making duration a crucial factor in their growth cycle.

Temperature: The ideal temperature varies depending on the mold species. However, extreme temperatures can favor specific molds: High temperatures tend to promote the growth of *Aspergillus* species. Low temperatures favor the growth of *Fusarium* species, which thrive in cooler environments.

Mold can grow on grain in the field, storage, or feed bunk. Weather can affect mold growth in the field and it's important to keep grains dry to prevent mold growth in storage. Molds that infest crops in the field often differ significantly from those that grow in storage or in feed bunks, both in terms of species and growth conditions.

Understanding these key factors helps in controlling and preventing mold growth in various environments.

For more information on mold in grain feed to cattle, visit https://extension.umn.edu and search "Feeding moldy grain to cattle."

Tips for manure application in the fall

- Assess your manure application equipment to avoid leaks on public roads.
- Use proper manure application rates and review your manure management plan.
- Always observe manure application setbacks from water and manure.
- Avoid applying manure before expected rain and reduce application rates if field and weather conditions are not ideal.
- Report a spill to the Minnesota Duty Officer by contacting 1-800-422-0798 and provide your location.

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Nitrogen Management

When applying manure, it's essential to limit application rates so that the total plant-available nitrogen (N) from all nitrogen sources does not surpass the expected nitrogen requirements for non-legume crops or the anticipated nitrogen removal for legume crops. Potential nitrogen sources include:

- Manure applied during the current crop year
- Manure applied during the previous crop year
- Commercial fertilizer
- Irrigation water
- Legumes grown during previous years

Crop nitrogen (N) needs, removal rates, and the amount of N available from manure or legumes should be determined based on the published guidelines from the University of Minnesota (U of M) Extension Service listed below.

Table 1. U of M recommendations for manure application to non-irrigated corn (as of September 2024)

Crop prior to corn	Crop 2 years prior to corn	Maximum plant available N to apply (lbs/acre)
Corn (or other non-legume crop)	Not applicable	195
Corn	Alfalfa (1 year stand)	120
Corn	Alfalfa (> 2 year-old stand)	80
Soybean	Not applicable	150
Alfalfa	Not applicable	80
Alfalfa (> 2 year-old stand)	Not applicable	40

Minnesota's Animal Feedlot Rules allow for deviations above the U of M recommendations in limited situations.

- N deficiencies are measured/observed during the growing season and N can be side-dressed.
- The results of a soil nitrate test suggests additional N is recommended.
- Recommendations from a land grant college in a contiguous state with similar soils and climatic conditions suggest a higher rate of N application.

Allowable deviations from the University of Minnesota's nitrogen (N) application recommendations are not intended to justify routinely applying N at rates exceeding those guidelines. If you believe a deviation is warranted based on specific field conditions or crop needs, you must document your justification as part of your manure land application records. Proper documentation ensures compliance and supports responsible nutrient management practices.

For more information on Nitrogen management, visit https://www.pca.state.mn.us and search "Land application of manure."

Recycling and problem material drop-off sites

Carver County Environmental Center
116 Peavey Circle
Chaska, MN 55318

City of Cologne
304 Louis St W
Cologne, MN 55322

City of Mayer
15300 County Road 30
Mayer, MN 55360

City of Norwood Young America
421 W Railroad St
Norwood Young America, MN 55368

For hours and materials accepted, visit https://www.carvercountymn.gov and search "recycling drop-off sites."

Recapture bags available for pick up:

UMN Extension Carver County Office
11360 Highway 212,
Cologne, MN 55322

Carver County Soil and Water Conservation District
11360 Highway 212, Suite 6
Cologne, MN 55322

Mid County Cooperative
700 Lake Street W
Cologne, MN 55322

Carver County Environmental Center
116 Peavey Circle
Chaska, MN 55318

Carver County Environmental Services
600 East 4th Street
Chaska, MN 55318

2025 Minnesota Nutrition Conference

The University Of Minnesota Extension is hosting the 86th Minnesota Nutrition Conference on September 17th through September 18th, 2025. This premier event will be held at the Mayo Clinic Health System Event Center, located at 1 Civic Center Plaza in Mankato, Minnesota 56001.

This annual conference delivers cutting-edge, research-based insights to support and advance the sustainable production of beef, dairy, poultry, and swine. The event brings together experts, producers, and industry leaders to explore innovative strategies for sustainable livestock production.

The event costs $225 for early registration through September 5th, or $275 for standard and on-site registration. The registration cost is reduced to $75 for University of Minnesota students or faculty. The University encourages attendees to register but walk-ins are accepted.

The conference is presented by University of Minnesota Department of Animal Science, University of Minnesota Extension, and sponsorships by the Minnesota Feed Industry. For more information and to register for the event, visit https://twin-cities.umn.edu and search "Minnesota Nutrition Conference".

Fall Agricultural, Marine, and Greenhouse Plastic Recycling Collection

Carver County is hosting the fall agricultural, marine, and greenhouse plastic recycling collection on September 1 through October 31, 2025.

Thanks to a partnership between Carver County Environmental Services and the University of Minnesota Extension, local farmers and participants have recycled over 162,000 pounds of agricultural, marine, and greenhouse plastics since the program began in 2019.

Participants in the program are able to pick up free packs of recapture bags to collect their plastics in. Each recapture bag holds approximately 200 pounds of plastics. Participants are responsible for filling the 8 foot by 10 foot bags with their plastics. Farmers, marinas, and greenhouses are encouraged to participate in this program to reduce the amount of plastic wraps and films that end up in a landfill.

For more information, visit https://www.carvercountymn.gov and search "Agricultural plastic recycling". If you're interested in participating in the program, please contact Matt Steele at 952-361-1808 or msteele@carvercountymn.gov.

Special waste collection

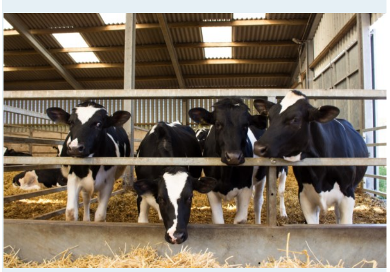
Saturday, Sept 13, 2025
8:00am to 12:00pm
Hollywood Public Works
3480 Co Rd 21
Hollywood Township

For more information, visit https://www.carvercountymn.gov and search "special waste collections."

Mission Statement

"The Carver County Environmental Services Department is committed to protecting the environment through public service, education, and innovation."

The MPCA is a sponsoring agency with a grant supporting a portion of the delegated Carver County feedlot program. Carver County does not claim that MPCA endorses its products or services.



Farm Opportunity Loan Program

The Farm Opportunity Loan Program is intended to help finance the purchase of equipment that adds value to crops or livestock or supports increased on-farm energy production. Eligible loan uses do not include expenses related to seed, fertilizer, fuel, or other operating costs. Additionally, refinancing existing debt is not permitted under this program.

This is a loan participation program offered through the Rural Finance Authority (RFA). Farmers must work with their local lender to access the program. Once a farmer completes an application, the lender will submit a request for RFA participation. The RFA must have a completed Master Participation Agreement on file with the lender in order to proceed.

Eligibility Requirements

Farmer candidate must meet the criteria listed below:

- Be a Minnesota resident or operate as a general partnership, family farm corporation, authorized farm corporation, family farm partnership, or authorized farm partnership;
- Be the principal operator of the farm operation;
- Applicants must demonstrate an ability to repay the loan;
- Have a current feedlot registration our use the loan under this program to meet feedlot registration requirements;

Participating Lenders

While all lending institutions can participate in the program, joining is completely voluntary. Each lender must sign an agreement with the Rural Finance Authority (RFA) and follow certain pre-established rules for farm loans to qualify for RFA participation.

Loan Terms

The RFA may participate in a Farm Opportunity loan covering up to 80% of the project or equipment cost. However, participation is capped at 45% of the loan principal or $100,000 per individual, whichever amount is less. For loans involving a group of four or more individuals, the limit is 45% of the loan principal or $250,000, whichever is less.

Loans are available for a maximum term of ten years. The interest rates and repayment terms for the RFA's portion of the loan may differ from those set by the lender for their retained share. Currently, the RFA's interest rate is 2%, but this rate is subject to annual review and adjustment as needed.

The originating lender retains the remaining balance of the loan. Borrowers must meet the lender's eligibility criteria, and the lender manages the loan's day-to-day operations. Participating lenders may charge either a fixed or adjustable interest rate in line with their normal lending practices and their agreement with the RFA.

Additionally, the RFA offers a 1% interest rate reduction from the standard 5% rate if the loan is used to purchase equipment associated with a safety course. To qualify for this discount, the farmer must complete the relevant equipment safety training and submit proof of completion.

For more information about the program, visit www.mda.state.mn.us and search "Farm opportunity loan program". If you have questions about the program, contact the Rural Finance Authority at 651-201-6004 or RFA.Loans@state.mn.us.