Carver County
Environmental Services
Feedlot Program

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# The Barnyard Buzz

## The Cropland Grazing Exchange

The Minnesota Department of Agriculture (MDA) developed the Cropland Grazing Exchange to connect livestock operators with crop producers who have forage to harvest and would like to increase biodiversity on their land.

Incorporating livestock into a cropping rotation provides benefits to both crop farmers and livestock owners. The benefits of animals grazing on farmland include: improving soil health, reducing tillage/soil erosion, increasing cropland fertility, and reducing pressure on pastures. Livestock grazing on cropland also increases diversity on the landscape and lengthens the grazing season.

The MDA partnered with the USDA Natural Resources Conservation Service and Sustainable Farming Association of Minnesota to develop an interactive map that identifies locations of producers with livestock to graze and farmers with cropland that they want grazed.

The website connects crop farmers and livestock operators to create mutually beneficial relationships, manage resources, and improve soil health. The Cropland Grazing Exchange Map identifies the following options that are available for farmers:

- Residue crop - green points with the letter “R”
- Cover crop - green points with the letter “C”
- Pasture/hay - green points with the letter “P”
- Public wildlife land - green points with the letter “W”
- Livestock - blue points with the letter “L”

After clicking a point, you can access information about the livestock or field operation. Visit www.mda.state.mn.us/cge to access the webpage, create an account, and enter information about available livestock or grazing fields. After an account is created, users can contact other participants via phone or email.

For questions or more information about the Cropland Grazing Exchange Program, please contact Kelly Anderson with the MDA at 320-8080-4424 or kelly.anderson@state.mn.us.

Inside this issue



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## Best management practices for all agricultural herbicides

- Scout fields and match the management approach to the weed problem.
- Consider split or sequential application of herbicides.
- Soil incorporate herbicides for surface water protection.
- Evaluate surface drainage patterns in your field and install filter strips and establish buffer zones for streams, sinkholes, and tile inlets.
- Determine the depth to groundwater in your fields and consider protective practices in vulnerable areas.
- Rotate herbicide sites-of-action.
- Use proper application methods.
- Develop an irrigation water management plan.

# Acetochlor Impairment in Silver Creek

The herbicide acetochlor has been detected in Silver Creek at levels above the state's chronic water quality standard in recent years. As a result, Silver Creek is currently on the Environmental Protection Agency's list of impaired waters and is the only water body impaired for acetochlor in Minnesota at this time.

The higher acetochlor levels have typically occurred during the time between May 3rd and June 4th, which coincides with planting or preemergence application of herbicides on crop fields, along with time of heavy spring rains and storm flows.

Acetochlor has properties that may result in surface water contamination from runoff or erosion. If you use acetochlor products (Tripleflex, SureStart, Warrant, and Harness), you can help us lower levels in Silver Creek. Talk to your agronomist, follow best management practices, and consider using alternative herbicides.

For more information, visit www.mda.state.mn.us and search "acetochlor".

# Best Management Practices for Acetochlor

- Adopt the core best management practices for all agricultural herbicides when applying acetochlor.
- Diversify the use for site of action 15 herbicides or acetochlor-based products and review each product label for groundwater protection.
- Maintain an application setback from surface water, tile inlets, wells, and sinkholes.
- Soil incorporate acetochlor.
- Maintain vegetative filter strips between areas where acetochlor is applied and points where field runoff enters surface water, tile inlets, and sinkholes.
- Reduce acetochlor use by using other weed control methods.
- Adopt conservation tillage practices appropriate for your farm's topography and in southeast Minnesota karst areas.
- Adopt spray drift management and precision application methods.

For more information, visit www.mda.state.mn.us and search "herbicide best management practices to protect water quality".

**If you see a fish kill**

- Call the state emergency number at **800-422-0798** or **651-649-5451**
- Report the waterbody, date, fish species, and number of dead or dying fish to the state duty officer
- If you have questions about fish health, contact the closest DNR area fisheries office or the DNR Fish Health Laboratory at **651-259-5096** or fish.health.laboratory.dnr.state.mn.us

# Fish Kills in Minnesota

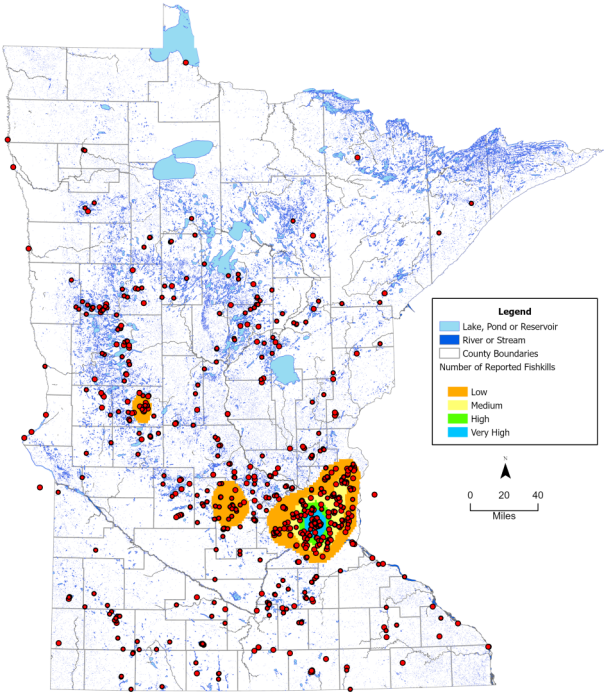
Fish kills occur every year in Minnesota from natural causes such as disease or low dissolved oxygen levels. These natural causes may be exacerbated by chronic environmental conditions such as excess nutrients in lakes, rivers, and streams, and extreme weather. Fish kills can also be caused by discharge or runoff of pollutants from toxic spills, runoff of manure, pesticides or fertilizers, and high-temperature wastewater or stormwater discharges. Minnesota State Statute requires a fish kill of 25 fish or more must be reported.

Four state agencies collaborate and respond appropriately based on the situation and circumstances when a fish kill is reported. The Department of Natural Resources (DNR), Minnesota Pollution Control Agency (MPCA), Minnesota Department of Agriculture (MDA), and Minnesota Department of Health (MDH) will determine the lead agency based on the suspected cause of the kill and discussion among interagency staff.

DNR is the lead agency for fish kills that are typically not urgent and involve winterkill or summerkill, natural causes such as disease, and lakes treated with DNR permitted chemical. The MPCA is the lead agency for acute pollution events such as polluted runoff (co-lead w/MDA), spills or discharges from manure, industrial/municipal wastewater and stormwater, oil/hazardous materials, and other contaminants. MDA is the lead agency for acute pollution events such as polluted runoff and spills or discharges from pesticides of fertilizer. The MDH provides a supporting role to the lead agency if groundwater becomes impacted and determines if a fish consumption advisory is necessary.

For more information on fish kills, please visit www.dnr.state.mn.us and search "fish kills and die offs".

Waterbodies with Reported Fish Kills (2020-2023)




*MN DNR Map of Fish Kills 2020-2023*

## Well water testing

If you own a well, you are responsible for testing its water regularly.

Three types of test kits, provided by RMB labs are available:

**Nitrogen & E. coli test kit**

- Good for yearly testing and day care providers

**Nitrogen, E. coli, arsenic and manganese test kit**

- Good for new homeowners

**Nitrogen, E. coli, arsenic, lead, and manganese test kit**

- Good for those with older homes


Test kit pick up location

- Carver County Government Center - 600 East 4th Street, Chaska, MN 55318

- University of Minnesota Extension - 11360 Highway 212, Cologne, MN 55322

If you have questions, please contact Tim Sundby at 952-361-1816 or tsundby@carvercountymn.gov

# Feedlot Setbacks to Water-Supply Wells

State rules require minimum setbacks from feedlots and manure storage areas to water supply wells for groundwater protection. In addition, many local ordinances are more restrictive than state statutes and identify greater setback distances.

Well water is protected from feedlots by requiring a setback between manure storage areas, confinement barns, and open lots to water-supply wells. Setback distances decrease the likelihood that contamination from a manure release could go into a well.

Wells must be located at the highest practical elevation and should not be located down slope from a contamination source. Setback requirements depend on well construction and the setback distance doubles when wells are uncased or poorly cased (sensitive). Properly cased wells have at least 50 feet of water-tight casing or watertight casing that penetrates at least 10 feet of clay or shale layers.

New animal feedlots with less than 300 animal units or feeding/watering areas within a pasture must maintain a setback of 50 feet from wells. New feedlots that are unroofed with more than 300 animal units or concrete/composite-lined manure storage basins must not be constructed within 100 feet of a well. Earthen-lined liquid manure storage areas must maintain a minimum required setback of 150 feet from a well. Solid manure storage areas not covered with a roof must maintain a 100 foot setback. In addition, the separation distances double if manure storage basins are constructed near sensitive wells.

Existing feedlots cannot add or expand an animal confinement barn or roofed holding areas within 50 feet and unroofed lots within 100 feet of a properly cased well.

*Photo Credit: MDH*

Increased setbacks are required near certain types of public water supply wells. The setback's distance also depend on the proximity and vulnerability of the Drinking Water-Supply Management Area (DWSMA) designated for the public well. The scientifically delineated area surrounding a well that supplies a public water system is called a Wellhead Protection Area. The DWSMA encompasses the wellhead protection area and uses identifiable landmarks as boundaries. It is also the land where effective management of potential sources of pollution is particularly important to prevent contamination of a public water-supply well.

New feedlots or new manure storage areas at existing feedlots must maintain a minimum required setback of 1,000 feet from community, school, or child care center wells without a wellhead protection plan or in a DWSMA with a vulnerable well. A new feedlot or manure storage area outside of a DWSMA with a vulnerable well must maintain a minimum required setback of 200 feet.

To determine which wells and land areas are vulnerable and to identify boundaries of wellhead protection areas and DWSMAs, contact the Minnesota Department of Health (MDH) at 800-818-9318 or visit www.health.state.mn.us/divs/eh/water.

## Agricultural Plastic Recycling program

Thanks to a partnership between Carver County Environmental Services, Revolution Plastics, and the University of Minnesota Extension, local participants recycled a total of **18,000** lbs. of plastics in spring of 2024.

The fall collection will begin on **September 2, 2024** - **October 31, 2024**. For more information, please contact Matt Steele at 952-361-1808 or msteele@carvercountymn.gov.


**Special waste collection**

**Saturday, Sept 14, 2024**
8:00am to 12:00pm
Hollywood Public Works
3480 Co Rd 21
Hollywood Township

For more information, visit www.recyclecarver.org and search "special waste collections."

# Feeding Food Waste to Livestock

Carver County Environmental Services is currently in the process of updating the 2024-2044 Solid Waste Management Plan. The Solid Waste Management Plan establishes the framework for managing Carver County's solid and hazardous waste for the next 20 years and is prepared in accordance with the requirements of the Minnesota Waste Management Act. As part of the plan, the County is exploring new ways to divert food waste to animal operations when it cannot be prevented or donated.

Feeding food waste to livestock can be economical, nutritious, and environmentally friendly. Carver County is looking to collaborate with interested farmers and the Board of Animal Health (BAH) to include them in the food-for-animal program.

There are two types of permits for feeding food waste to livestock. Class A (garbage feeders) contain meat or meat contact and Class B (exempt materials feeders) do not contain any meat or contact with meat. In order to prevent the introduction and spread of foreign and domestic livestock disease, the Minnesota Board of Animal Health regulates feeding food waste that contains animal ingredients and by-products.

Feedlot producers that feed food waste to livestock are required to obtain a permit from the Board of Animal Health. The Board performs routine inspections of permitted facilities to ensure:

- Food waste containing meat or has come into contact with meat is processed by cooking to at least 212 degrees Fahrenheit for at least 30 minutes.
- Processed and unprocessed food waste is separated and stored appropriately.
- Pests are kept away from unprocessed food waste.
- Feeding areas and trucks are cleaned and sanitized as needed.
- Trucks used for hauling food waste over public roads are leak-proof.
- Records are maintained pertaining to the feeding of food waste to livestock and the purchase and sale of livestock.
- All livestock on the farm appear healthy.
- Unconsumed food waste and dead livestock are disposed of properly.

If you have questions or are interested in feeding food waste to your livestock, please contact Matt Steele at 952-361-1808 or msteele@carvercountymn.gov.

**Minnesota avian influenza hotline**

- Call **1-833-454-0156**
- Press 1 to report a sick domestic bird
- Press 2 to report sick or dead raptors or waterfowl, and groups of five or more dead wild birds to the Department of Natural Resources
- You may also go to www.bah.state.mn.us/report-sick-birds to report sick poultry

## Highly Pathogenic Avian Influenza Response

On March 29, 2024, the United States Department of Agriculture (USDA) confirmed the presence of Highly Pathogenic Avian Influenza (HPAI) in dairy cows in multiple states. Feedlot producers with dairy herds are strongly encouraged to enhance biosecurity measures in their secure milk supply plan. Dairy cattle that tested positive for HPAI have recovered after being isolated with few to no fatalities reported.

HPAI detection in cattle has occurred in seven counties including; Morrison, Benton, Kandiyohi, Lincoln, and Sibley. In addition, a herd of goats in Stevens County has also detected positive for the virus.

Dairy producers should follow the recommended practices listed below to increase biosecurity at their facility:

- Separate all incoming animals for 21-30 days and screen for signs of disease before allowing them into the heard.
- Milk all of the imported cows last.
- Create a line of separation and specific access points where staff or visitors cross the line.
- Identify a clean/dirty line at entries of the parlor and barn(s) where staff or visitors can change into barn-specific footwear or clothing and clean and disinfect. This is especially significant for staff that travel between locations.
- Report clinical signs or suspected illnesses to your veterinarian immediately.
- Know the source of your feed and keep vermin away from stored feed. Be sure to keep feed covered or contained and clean up any feed spills immediately.
- Provide clean water to livestock and keep wildlife away from troughs.

For more information, visit www.bah.state.mn.us and search “HPAI”.

## New Exhibition Requirements for Lactating Dairy Cattle

Effective June 18, 2024, the Board of Animal Health (BAH) implemented a requirement that lactating dairy cows in Minnesota are required to have a negative test for avian influenza (H5N1) and a Certificate of Veterinary Inspection (CVI) for all exhibitions in Minnesota. Below are testing requirements identified by BAH:

- Negative tests must be performed at a laboratory that is in the National Animal Health Laboratory Network (NAHLN).
- Samples must be collected within 7 days or less prior to the exhibition.
- Livestock can move intrastate with negative results for 10 days from the date of collection.
- If an animal is going to multiple events, all locations must be identified on the CVI.
- The CVI can be the record of a negative test if the test information is identified on the document.

The restrictions will be in place through the end of 2024. For more information, visit www.mda.state.mn.us and search “H5N1 and dairy cattle”.

**Possible changes to National Pollutant Discharge Elimination System (NPDES) and State Disposal System (SDS) general permits**

Feedlots with 1,000 animal units or more and gap sites (sites that meet large Concentrated Animal Feeding Operation threshold) are required to operate under a NPDES or SDS Permit.

The current general NPDES & SDS Permits cycle is 2021-2026 and the new permits will go into effect on February 1, 2026.

The following requirements for the updated permits are being discussed:

- **Planting cover crops**
- **Incorporating perennial crops into rotations**
- **Moving from fall to spring manure application**
- **Incorporation of manure in floodplains**
- **Increased land application requirements in areas with vulnerable groundwater resources**

# 10 Things to Improve Feedlot Performance

In order to strive for successful livestock at your feedlot, it's important to reduce stress in every opportunity possible. The University of Minnesota Extension recommends the following to improve feedlot performance.

- **Set appropriate expectations** - Set your expectations for each group appropriate to their risk and the historical performance of your feedlot. Keeping records is the best way to find your feedlot performance and can help you set realistic expectations. It will also help you to know your breakeven price when buying a group.
- **Cattle source -** Cattle that are purchased from multiple sources being comingled, unvaccinated, and traveled far distances are classified as high-risk. Success with high-risk cattle is very difficult and it's recommended that cattle come from one source that have been together for at least 45 days, traveled a short distance, and have been vaccinated for at least 3 weeks.
- **Bunk space -** It's recommended for new cattle to have 18 inches of bunk space per head.
- **Pen space -** An animal indoors is recommended to have 40 square feet per head. Facilities that don't meet this recommendation may be adding stress to the herd.

- **Nutrition -** Feed cattle at the same time every day and be sure that the feed has consistent ingredients and is mixed appropriately. Work with a nutritionist to be as efficient as possible.
- **Husbandry -** Keep cattle clean and dry for high-performance and look for the amount of tag (manure and mud) stuck to their hair .
- **Water -** Feedlots should have 1 inch of linear water space per head in a pen, and portable stock tanks are good to utilize during the summer.
- **Ventilation** - It's important to properly ventilate confinement buildings for cattle to move unwanted pathogens out of the airway and keep them healthy.
- **Vaccine protocol -** Vaccines play an important role in the health of cattle and it's important to vaccinate at the correct time. Ask your veterinarian about delayed vaccine protocols for incoming animals.
- **Money -** If you spend too much money on a new group of cattle in the beginning, your margin may be small or non-existent. It's important to have realistic expectations, know your system, and mitigate your risk whenever possible.

For more information about reducing animal stress at your feedlot, please visit www.extension.umn.edu and search "feedlot performance".

**Duty officer reporting**

- Call **1-800-422-0798** or **651-649-5451**
- Operator's contact Info
- Location, date, and time of spill
- Type and amount of material released
- Surface water or field tile that may be affected
- Steps that were taken after the spill and what needs to be done yet

## 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.***

# Managing Manure in Wet Weather Conditions

With all of the rain this spring, it can be difficult for farmers to find fields to apply manure and keep liquid manure storage areas from reaching freeboard or over-flowing. It is important for feedlot operators to plan ahead to be prepared and measures should be used to prevent a manure storage basin overflow. Below are some helpful practices recommended by the Minnesota Pollution Control Agency for managing manure during adverse weather conditions.

- Land-apply manure on fields that have dried sufficiently.
- Stockpile solid manure until field conditions improve.
- Pump manure storage basins before winter and land apply the remaining manure in spring to avoid overflow.
- Look around the area and talk to neighboring farmers for other available fields or approved manure storage space.
- Fill manure spreader tankers less than capacity to access wet fields.
- Reduce the impact of manure applied to wet soil by avoiding steep slopes, staying 300 feet from sensitive features, and perform tillage along contours.
- Avoid flood or floodway zones.
- Apply manure at an application rate that is low enough to avoid runoff or ponding.
- Check with Carver County to be in compliance with county ordinances.
- If your manure storage area overflows, report the discharge to the state duty officer at **1-800-422-0798** and take immediate action to reduce environmental impact. Recommended practices include:
    - ◊ Creating temporary berms to stop the discharge.
    - ◊ Temporarily plugging culverts, tile intakes, or any other conduits to prevent manure inflow.
    - ◊ Soak up liquid with absorbent material such as hay, straw, or wood shavings.
- Do not modify or construct your basin without approval from your county feedlot officer or the Minnesota Pollution Control Agency.
- Do not store manure in unpermitted basins or storage structures.

If you are concerned about manure encroaching to the top of your manure storage area, please contact Matt Steele at 952-361-1808 or msteele@carvercountymn.gov. Additional information is available on the MPCA website at www.pca.state.mn.us and search "land application of manure".