

Consider pros and cons of alternative grain storage methods

Intense storms can significantly affect grain storage abilities. Storage capacity could take years to recover from damaged facilities. When considering alternative grain methods, it's crucial to keep some key storage factors in mind.

Grain can be stored in many types of facilities, but all storage options should keep the grain dry and provide adequate aeration to control grain temperature, according to Ken Hellevang, professor emeritus and retired NDSU Extension agricultural engineer.

“Grain must be dry and cool (near the average outdoor temperature) when placed in alternative storage facilities because providing adequate, uniform airflow to dry grain or cool grain coming from a dryer is not feasible,” says Hellevang.

Grain market

June 30, 2025	
Prices at CenDak Co-op (Current crop)	
Esmond	
Spring Wheat	5.53
Soybeans	9.26
Corn	3.46
Hamberg	
Spring Wheat	5.63
Soybeans	9.36
Corn	3.56
Harlow	
Spring Wheat	5.53
Soybeans	9.26
Leeds	
Spring Wheat	5.53
Soybeans	9.36
Feed Barley	2.90
Canola	19.65
Maddock	
Spring Wheat	5.53
Soybeans	9.26
Niles	
Spring Wheat	5.63
Soybeans	9.36
Corn	3.56
Oberon	
Spring Wheat	5.53
Soybeans	9.26
Sheyenne	
Spring Wheat	5.58
Soybeans	9.36
Corn	3.51

MINUTES OF REGULAR MEETING LEEDS SCHOOL BOARD March 12, 2025

A regular meeting of the Leeds School Board was held March 12, 2025. In attendance: Jacobson, Kirkeide, Engstrom, Tufte and Herman; Superintendent Manley; Business Manager Haagenson; Ryan Sand of LEA. Absent: Principal Eberle.

Jacobson called the meeting to order at 7:05 a.m. with the option of stating the Pledge.

Superintendent Report -- Congratulations to the Lady Wildcats for their state championship! Thank you to the community for their support, travel and cheering in Jamestown. Legislative review: per-pupil funding update.

Kirkeide motioned to accept the consent agenda. Seconded by Herman and carried.

GENERAL FUND	
Advanced Business	
Methods	\$1,078.06
Airgas USA, LLC	307.62
Amazon.com	331.42
BC Farmers Press	249.00
Bubach, Christine	30.00
CenDak Cooperative	3,585.72
City of Leeds	489.77
Ecolab Pest Elimination	
Division	148.47
Farmers Union Oil Co.	650.37
Follman, Shelby	30.00
Follman, Stacy	30.00
Gas Stations	233.71
Geller, Bridget	60.00
Haagenson, Beth	30.00
IntegratedEd	1,457.00
Johnson's Plumbing	
Service, Inc.	1,268.35
Kahoot	47.88
Krantz's Floral	140.16
Larson, Breanne	30.00
Manley, Jeffrey	100.00
NASSP	177.49
ND Council of Edu.	
Leaders	300.00
ND State Tax	7.50
ND Telephone Co.	316.02
Nelsen, Kim	30.00
NFHS Learning Center	11.99
North Country Heating & AC	382.50
NE Education Services	
Co-op	2,000.00
Otter Tail Power Co.	5,102.41
Paulson Supply, Inc.	524.75
Paulson, Dustin	420.00
Postmaster	319.80
Radisson Hotel	
Bismarck	205.00
Region IV Music	195.00
Rugby Public Schools	272.00
Sand, Ryan	40.00
School Specialty	756.10
Stein's, Inc.	714.38
Swanson, Matthew	240.00
Taube Museum of Art	152.00
Teachers Pay Teachers	85.20
Technology Learning Cooperative	2,500.00
Time Management	
Systems, Inc.	41.70
UCB Insurance Agency, Inc.	6,642.00
US Foodservice, Inc.	93.50
Vestis	109.90
Walmart Store #1695	134.50
Zoom	319.80
Fund Total	\$32,103.72
FOOD SERVICE FUND	
US Foodservice, Inc.	\$12,490.99
Fund Total	\$12,490.99
STUDENT ACTIVITY FUND	
Amazon.com	\$80.31
Bubach, Christine	40.00
Capital One	246.86
CenDak Cooperative	691.08
CTSO Fiscal Office	900.00
Gerrells Sports Center	2,617.49
Harvey Public School	102.00
Northern Bottling DL	850.20
R and R Entertainment	600.00
Fund Total	\$6,127.94
Tufte motioned to approve the superintendent evaluation. Seconded by Kirkeide and carried.	
Financial audit was reviewed.	

Approximate Allowable Storage Time for Cereal Grains

Moisture Content (%)	--- Grain Temperature (F) ---					
	30	40	50	60	70	80
Approximate Allowable Storage Time (Days)						
14	300+	300+	300+	300+	200	140
15	300+	300+	300+	240	125	70
16	300+	300+	230	120	70	40
17	300+	280	130	75	45	20
18	300+	200	90	50	30	15
19	300+	140	70	35	20	10
20	300+	90	50	25	14	7

- Allowable storage time is the storage period before quality loss is expected to affect grain quality.
- Airflow through the grain permits maintaining the grain temperature but does not extend the allowable storage time beyond that listed in the table.

Structural issues

Grain pushing against walls can damage buildings not built for grain storage. The wall must be anchored securely, and its structural members must be strong enough to transfer the force to the building poles or support structure without breaking or excessive bending.

Before placing grain in a building previously used for grain storage, look for anything out of alignment, such as wall bowing and distortions in the roofline. Bowing or bending indicates that the load on the building exceeded the load for which it was designed and built. This weakens the structure. Also examine connections for separation or movement and add a gusset or splice to reinforce the connection if necessary.

Bag storage

Storing grain in poly bags is a good option, but it does not prevent mold growth in damp grain or insect infestations. Place grain in the bag at recommended storage moisture contents based on grain and outdoor temperatures during

the potential storage period.

Heating will occur if the grain exceeds a safe storage moisture content, and it cannot be aerated to control heating. The average temperature of dry grain will follow the average outdoor temperature.

Grain piles

Grain is frequently stored short-term in outdoor piles. However, precipitation is a severe problem for uncovered grain because grain is very porous. A one-inch rain will increase the moisture content of a one-foot layer of corn by 9%. This typically leads to losing at least a couple of feet of grain on the pile surface, which is a significant loss.

Use a cover to prevent water infiltration. Drainage is critically important to the success of any grain storage. About 25,000 gallons of water will run off an area about 100 by 400 feet during a one-inch rain. This water must flow away from the grain and the area next to it. When determining a location for a pile, examine the entire area to ensure that flooding will not

occur during major rain events.

Grain covers

A combination of restraining straps and suction from the aeration system holds grain covers in place. Provide adequate airflow through the grain to control grain temperature. Place perforated ducts on the grain under the cover to provide a controlled air intake for the aeration system and airflow near the cover to minimize condensation problems under the cover.

Cooling stored grain

Cool grain with aeration to extend the allowable storage time and reduce the potential for insect infestation. Temperatures below about 60 degrees Fahrenheit reduce insect reproduction. Insects are dormant below about 50 degrees, and extended exposure to temperatures below about 30 degrees can kill insects.

Cooling grain as outdoor temperatures drop will reduce moisture migration and the condensation potential near the top of the grain pile. Also, the grain should be cooled because grain moisture content and temperature affect the rate of mold growth and grain deterioration. The allowable storage time approximately doubles with each 10-degree reduction in grain temperature.

Long-term grain storage

Grain has an acceptable storage life before the quality is reduced enough to impact its value. Allowable storage time is cumulative, so consider the amount of storage life remaining when deciding if you can store the grain longer.

“Keep in mind that airflow through the grain permits grain temperature to be maintained, but it does not extend the allowable storage time,” says Hellevang.

More information on alternative storage methods can be found at ndsu.ag/altgrainstorage. For more information about dealing with damage from summer storms, visit ndsu.ag/summerstorms25.

Systems, Inc.	41.70	Methods	\$1,078.06
Twotrees Technologies	1,199.04	Airgas USA, LLC	307.62
Vestis	109.90	Altru Health System	95.00
Walmart Store #1695	630.67	Amazon.com	281.41
Fund Total	\$55,337.19	Braun, Susan	286.61
FOOD SERVICE FUND			
US Foodservice, Inc.	\$25,474.17	CenDak Cooperative	2,205.84
Fund Total	\$25,474.17	City of Leeds	201.54
STUDENT ACTIVITY FUND			
Amazon.com	\$425.23	Decorated Wearables	255.92
Back 40 Bar and Grill	34.57	Ecolab Pest Elimination	
Barendt, Malayna	42.74	Division	148.47
Bubach, Christine	82.96	Engstrom, Kimberly	60.08
Capital One	229.61	Exxon Express	53.53
Cendak Cooperative	387.55	FCCLA	283.00
Dockside Entertain.	875.00	Fessenden-Bowdon	
Herman, Nicole	650.00	School District #25	30.00
Jostens, Inc.	193.25	Follman, Stacy	400.00
Kitzmann, Leah	150.00	Food	77.88
Northern Bottling DL	71.80	Gerrells	8.00
Walmart Store #1695	38.57	Hobart Sales & Service	1,250.37
Worsham, Julie	38.60	IntegratEd	1,457.00
Fund Total	3,219.88	Johnson's Plumbing	
Tufte motioned to approve the hiring of Madelyn Severson and Jarrel McGarvey for 2025-26 openings, seconded by Kirkeide and carried.			
Per NDCC 15.1-09-08, Tufte motioned to approve the election ballot for June 10, 2025, seconded by Herman and carried.			
Cell phone bill was discussed for 2025-26 school year.			

EXECUTIVE SESSION

Per NDCC 44-04-19.1(9), Herman motioned to go into executive session for negotiation strategy at 7:47 a.m., seconded by Kirkeide and carried.

RECONVENE OPEN MEETING

Tufte motioned to adjourn the executive session at 8:19 a.m., seconded by Engstrom and carried.

The next scheduled meeting is May 21, 2025 at 7 a.m.

The meeting adjourned at 8:20 a.m.

Becky Haagenson Business Manager

MINUTES OF REGULAR MEETING LEEDS SCHOOL BOARD May 21, 2025

A regular meeting of the Leeds School Board was held May 21, 2025. In attendance: Jacobson, Engstrom, Tufte, Kirkeide and Herman; Superintendent Manley; Business Manager Haagenson; Principal Eberle; Renae Strand (LEA); visitor Sheri Stueberg.

Jacobson called the meeting to order at 7 a.m. with the option of stating the Pledge.

Principal/IAD Report -- Review of spring sports and activities; one applicant for JV VB and one applicant for JV BBB; last day of school is the 23rd, graduation on the 26th; Title 1 report; school improvement requests and Choice Ready update; FastBridge Testing review; MTSS review; ND State Assessment; piloting a new reading program.

Superintendent Report -- EOY field trip to Dockside; Cogna and state reporting; 2025-26 budget; updating gym banners and signage.

Tufte motioned to approve the consent sgenda. Seconded by Kirkeide and carried.

GENERAL FUND	
Advanced Business	
Amazon.com	\$80.31
Bubach, Christine	40.00
Capital One	246.86
CenDak Cooperative	691.08
CTSO Fiscal Office	900.00
Gerrells Sports Center	2,617.49
Harvey Public School	102.00
Northern Bottling DL	850.20
R and R Entertainment	600.00
Fund Total	\$6,127.94
Tufte motioned to approve the superintendent evaluation. Seconded by Kirkeide and carried.	
Financial audit was reviewed.	

MINUTES OF REGULAR MEETING MADDOCK CITY COUNCIL June 17, 2025

A regular meeting of the Maddock City Council was held June 17, 2025. Mayor Sarah Dove called the meeting to order at 7 p.m. at city hall. Present for roll call were council members Bradley Hermanson, Jamie Wentz, Dusty Pierson and Teresa Dosch. Also in attendance were Jamie Green, Keith Winsor, Rachel Markestad, Cathy Faleide, Paul Backstrom, Tom Anderson and Kari Bergman.

A motion was made by Dosch, seconded by Hermanson, to approve the minutes of the May 13, 2025 regular meeting with a correction noted to the name of a council member referenced in a motion. All voting yes, the motion carried.

A motion was made by Wentz, seconded by Hermanson, to add the topic of fluoride in drinking water to the agenda. All voting yes, the motion carried.

A motion was made by Wentz, seconded by Hermanson, to approve the following bills. All voting yes, the motion carried.

Wages	\$6,729.69
Farmers Union	
Insurance	12,293.00
AE2S	208.96
BC Farmers Press	168.00
BC Sheriff's Dept.	600.00
Black Mountain	
Software	525.00
CenDak	535.94
Double M Sanitation	6,000.00
Farmers Union	
Insurance	6.00
GF Utility Billing	26.00
Johnson Ag Resources	198.28
Maddock Opera House	200.00
Mid-Land Excavating, Inc.	1,298.17
MRES	200.00
ND Sewage Pump & Lift Station	666.58
ND Dept. of Environ.	20.39
Northern Plains Elec.	4,794.47
Northstar Erosion Control, Inc.	850.00
One Call Concepts	50.00
Priscilla Backstrom	986.00
Quill	435.42
US Post Office	100.00
Valli	25.00
Van Diest Supply Co., Inc.	4,236.00
Vesti's	106.60
Visa	1,003.53
Western Area Power Admin.	5,588.85
US Post Office	1,752.00
ND Rural Water Systems Assn.	370.00
NDPERS	2,317.26
Northern Plains Elec.	18,836.10
ND Telephone Co.	422.51

The council discussed monthly summer projects with Keith Winsor and Jamie Green. They were directed to provide completed project updates to the council members on a monthly basis.

Jamie Green's Report -- Speed bumps were installed. He informed the council that it costs the city approximately \$250 per application when spraying for mosquitoes.

Keith Winsor's Report -- He reported the baseball diamond needs more lighting. He informed the council that the circulating pump at the water tower needs to be replaced.

Pam Lee's Report -- Updated the council on the Energy Efficiency Grant.

Keith Winsor received a Certificate of Achievement from the ND Department of Environmental Quality in recognition of compliance with the Safe Drinking Water Act.

A household previously notified multiple times to install a water meter for remote meter reading was hand-delivered a final notice on June 13, 2025, stating the installation deadline was June 17, 2025 to avoid service disconnection. No appointment was made. The council voted to disconnect water service with a roll call vote: Hermanson -- aye, Wentz -- aye, Pierson -- aye, Dosch -- nay. The motion passed with three ayes and one nay.

Co-chairmen Rachel Markestad and Cathy Faleide, representatives of the 125th Maddock celebration committee, were present to request the city's assistance in helping to organize and support funding, services, policing and camping accommodations for the upcoming celebration.

Cathy Faleide, representing the tree committee, reported that the two grant applications submitted by the committee have been approved.

Representatives from the school board and park board, including Paul Backstrom, Tom Anderson and Kari Bergman, attended the meeting to discuss the proposed sale of the baseball diamond property. The school board is offering to sell the property to the city for one dollar (\$1), contingent upon the city assuming responsibility for demolishing the old concession stand after the school removes its contents. The school board will arrange and pay for a property survey before the transfer. Mayor Dove will negotiate the terms with school Superintendent Ben Allmaras and report back to the council at the next meeting.

The council held a discussion regarding a complaint about the basketball court lights remaining on throughout the night at the city park. Council members spoke with Tom Anderson and Kari Bergman of the park board about installing timers on the court lights. They indicated that they would contact an electrician to arrange for the installation.

The council members each gave a portfolio report.

A motion was made by Hermanson, seconded by Dosch, to approve the second reading of Ordinance 11.0301 -- Keeping Chickens within City Limits. All voting yes, the motion carried.

ARTICLE 3 -- Chickens

11.0301 Purpose

The purpose of this ordinance is to allow the keeping of domestic hens for personal, non-commercial use while ensuring the health, safety and welfare of residents and minimizing potential nuisances. The keeping of chickens should not impact neighboring properties.

11.0302 Definitions

- Chicken: A domesticated bird of

the species Gallus gallus domesticus.

- Hen: A female chicken.
- Rooster: A male chicken.
- Coop: A fully enclosed structure used to house hens.
- Run: A fenced outdoor area attached to the coop allowing hens to roam safely.
- Owner: Any person keeping or harboring hens.

11.0303 Permitted Use

(a) Up to four (4) hens may be kept on any residential property within city limits.

(b) Roosters are strictly prohibited within city limits due to noise concerns.

(c) Hens shall be kept for personal use only; commercial use (e.g., egg sales) is prohibited.

(d) No slaughtering is allowed within city limits.

11.0304 Permit Requirements

(a) Residents must obtain a chicken-keeping permit from the city auditor prior to acquiring hens.

(b) Permit applications must include:

- Site plan showing location of coop and run in relation to property lines and neighboring structures
- Description of coop/run design and materials
- A signed agreement to comply with all terms of this ordinance

(c) An initial application fee of \$20 is due at the time of application.

(d) Permits are valid for one (1) calendar year and must be renewed annually in May during the pet clinic. Renewal fee: \$15.

(e) Permits are non-transferable between property owners or locations.

11.0305 Coop and Run Requirements

(a) Coops and runs must be located only in the rear yard and must be at least:

- 10 feet from the property line
- 25 feet from any neighboring residence

(b) Chickens shall not be kept inside the residence or garage

(c) The coop must:

- Be predator-proof, weatherproof, and well-ventilated
- Provide at least 4 square feet of space per hen inside the coop
- Be kept in good repair and sanitary condition at all times

(c) The run must:

- Provide at least 10 square feet per hen
- Be fully enclosed to prevent escape and deter predators

11.0306 Sanitation and Waste Disposal

(a) The coop and surrounding area must be cleaned regularly to prevent odors, pests, and accumulation of waste.

(b) Chicken excrement shall be removed at least weekly and either:

- Composted properly, or
- Doubled in sealed bags and disposed of with household waste

(c) Owners shall use odor-control methods such as carbon-based bedding (e.g., straw, wood shavings).

(d) Water and feed must be kept in spill-proof containers and stored securely to avoid attracting pests.

11.0307 Chickens Running at Large

(a) Hens shall be confined at all times within the permitted coop and run.

(b) Chickens found at large:

- Are declared a public nuisance and may be impounded by the city
- If not claimed within 48 hours, or if repeated violations occur, birds may be rehomed or humanely euthanized at the city's discretion

• May result in the issuance of citations or permit revocation

(c) Owners are responsible for all costs associated with retrieval or disposal of chickens at large. The amount will not exceed \$50 per bird.

11.0308 Penalty

Any person who violates the provisions of this article for which a specific penalty is not otherwise provided shall be guilty of an infraction for which the maximum penalty is a fine of five hundred dollars (\$500). The owner of any animal impounded pursuant to the provisions of this article shall pay all costs and charges assessed for such impoundment before such animal may be released to the owner.