

**STAFF MEETING MINUTES  
LANCASTER COUNTY BOARD OF COMMISSIONERS  
COUNTY-CITY BUILDING  
ROOM 113 - BILL LUXFORD STUDIO  
THURSDAY, OCTOBER 12, 2017  
8:30 A.M.**

Commissioners Present: Todd Wiltgen, Chair; Bill Avery, Vice Chair; Roma Amundson and Jennifer Brinkman

Commissioner Absent: Deb Schorr

Others Present: Kerry Eagan, Chief Administrative Officer; Ann Ames, Deputy Chief Administrative Officer; Dan Nolte, County Clerk; Cori Beattie, Deputy County Clerk; and Kelly Lundgren, County Clerk's Office

*Advance public notice of the Board of Commissioners Staff Meeting was posted on the County-City Building bulletin board and the Lancaster County, Nebraska web site and provided to the media on October 11, 2017.*

The Chair noted the location of the Open Meetings Act and opened the meeting at 8:30 a.m.

**1. APPROVAL OF MINUTES - (A) STAFF MEETING FOR SEPTEMBER 28, 2017;  
AND (B) TRI COUNTY MEETING FOR OCTOBER 5, 2017**

A. Staff Meeting for September 28, 2017

**MOTION:** Brinkman moved and Amundson seconded approval of the minutes.

Brinkman noted a correction to page 5, item 11b. She asked that name Olsen be corrected to reflect Olsson and Associates.

**ROLL CALL:** Brinkman, Amundson and Wiltgen voted yes. Avery and Schorr were absent. Motion carried 3-0.

B. Tri County Meeting for October 5, 2017

**MOTION:** Amundson moved and Wiltgen seconded approval of the minutes. Amundson and Wiltgen voted yes. Brinkman abstained. Avery and Schorr were absent. Motion carried 2-0 with one abstention.

Avery entered the meeting at 8:34 a.m.

**2. ACCELERATED HIRE OF RECORDS SYSTEM SPECIALIST AND DEPUTY  
SHERIFF - Sheriff Terry Wagner**

Terry Wagner, County Sheriff, stated due to two upcoming retirements creating a staff shortage he is requesting to hire a new Records System Specialist in advance of those retirements. This would allow for training and reduce strain on the current staff.

**MOTION:** Amundson moved and Brinkman seconded to authorize the Sheriff to proceed with the accelerated hiring process. Avery, Brinkman, Amundson and Wiltgen voted yes. Schorr was absent. Motion carried 4-0.

Wagner said Sergeant Mike Novacek would be retiring and his last day on the payroll would February 8, 2018. He noted the academy starts on January 2, 2018 and with the Board's approval he would like to issue a letter of intent to a prospective employee. Wagner added the cost of the dual salaries would run from the last week in December to the second week in February.

**MOTION:** Amundson moved and Brinkman seconded to authorize the Sheriff to proceed with the hiring of a deputy sheriff. Brinkman, Amundson, Avery and Wiltgen voted yes. Schorr was absent. Motion carried 4-0.

**3. (A) ROADSIDE MEMORIALS; AND (B) 1 & 6 YEAR ROAD AND BRIDGE PROGRAM – Pam Dingman, County Engineer**

A. Roadside Memorials

Pam Dingman, County Engineer, stated Commissioner Schorr has been receiving a number of complaints from residents regarding the placement of roadside memorials. Dingman discussed how other states and counties handle this issue. She said the memorials are a safety issue on County roads with stopped vehicles and, depending on what is used as an anchor, they can cause damage to vehicles. Dingman proposed a policy whereby the public could purchase an approved sign from the County and have it placed at the site. She stated the memorial sign could remain for three years at which time the sign would be given back to the purchaser. Dingman added the policy could include an option to extend the sign for an additional fee for another three years.

Brinkman requested that there be sufficient time to review the policy prior to it being placed on a Tuesday agenda.

The consensus of the Board was to proceed with developing a policy regarding roadside memorials.

B. 1 & 6 Year Road and Bridge Program

Dingman provided a preview of her presentation for the One and Six-Year Road and Bridge Program public hearing that is scheduled for Tuesday, November 7<sup>th</sup> at 7:00 p.m. (Exhibit A) as well as the Program report (Exhibit B). **Note:** Copies of the report are available at the County Engineer's Office and the County Board Office. Dingman discussed the following items:

- Bridge status
- Amount of overlay needed
- FEMA reimbursement delay
- NEMA Hazardous Mitigation Grants
- Proposed projects

**CHIEF ADMINISTRATIVE OFFICER REPORT**

B. Follow-up on Board of Equalization Property Valuation Process Public Hearing

Kerry Eagan, Chief Administrative Officer, said Brinkman requested this item be added to the agenda to discuss what steps the Board wishes to take following the public hearing.

Brinkman stated she felt there should be a follow up to consider any potential changes in the process or submitting a request for proposal (RFP).

Wiltgen said the comments that were made during the public hearing were things that the Board did not really have any control over.

Amundson said she felt the current process was working well but that communication between the referees and the public could be improved. She also expressed concern about the property data (comps) used by the County Assessor's Office.

Eagan noted the informal protest process with the Assessor's Office is an opportune time for the property owner to discuss their value and any incorrect parcel information with a staff member.

Brinkman added that she was not sure the final meeting for the protest process was that beneficial. She agreed with Eagan that a more aggressive effort be made to promote the informal protest process in January.

Cori Beattie, Deputy County Clerk, said she would contact Tom Kubert, Referee Coordinator, Great Plains Appraisal, about attending a future staff meeting to discuss the process. Wiltgen suggested inviting the County Assessor's Office as well.

**4. TRABERT HALL – Topher Hansen, CenterPointe CEO; and Brad Korell, CenterPointe Board of Directors Chair**

Topher Hansen, CenterPointe CEO, said CenterPointe is currently looking for space to increase not only mental health services but also physical health. He stated CenterPointe would be interested in partnering with Lancaster County and in purchasing Trabert Hall. Hansen said although a great deal of updating would be required, the building does provide space for future growth.

Brad Korell, CenterPointe Board of Directors Chair, stated he has visited with CenterPointe's Executive Committee and there is definite interest in the building as it sits well within their service area. He said The Clark Enersen Partners has been asked to provide remodeling ideas.

Hansen said the County could declare the building surplus and put it up for auction or, pursuant to §23-104.03, it could designate this as a partnership with a non-profit agency that serves the County's interest and dedicate the sale to CenterPointe specifically.

Eagan stated the appraisal was based on the special permit for historic preservation. He said Hansen was correct regarding how the County Board could proceed with the sale. It could declare the property surplus, conduct a public hearing, establish a fair market value and hold a public sale within sixty days of the hearing. Eagan said at that point the Board would be free to negotiate with any party on behalf of the County's best interest. The other option would be not to declare the property surplus and sell it under §23-104.03 which requires the buyer to provide human services. Eagan noted that Lancaster Manor (former County-owned nursing home) was sold under this procedure.

Amundson said there is a critical need for CenterPointe's services and she was supportive of their proposal to purchase the building.

Brinkman stated that she would also be interested in moving forward to see if an agreement can be reached that provides a reasonable price for the building and enables CenterPointe to do renovations.

Avery asked Hansen if he knew what CenterPointe would be prepared to offer for the building. Hansen said he hoped to have a better idea on the renovation costs within a few weeks. He noted that CenterPointe is also working to establish some community partners for the project.

Brinkman asked Eagan if there was a time frame for the sale that needed to be considered. Eagan said there was none at this point.

Avery exited the meeting at 10:01 a.m.

Wiltgen stated it was the Board's consensus not to proceed with the sale of Trabert Hall until CenterPointe has an opportunity to submit a proposal.

Avery returned to the meeting at 10:08 a.m.

**5. COMMUNITY CORRECTIONS PROGRAM MANAGER - Kim Etherton, Community Corrections Director**

Kim Etherton, Community Corrections Director, said in an effort to start moving forward with grant functions she is requesting to open a Program Manager position and temporarily promote one existing staff person without increasing staff. She stated this will be a C22 position.

**MOTION:** Amundson moved and Brinkman seconded to authorize the Community Corrections Director to open the position of Program Manager. Brinkman, Amundson, Avery and Wiltgen voted yes. Schorr was absent. Motion carried 4-0.

**6. BREAK**

The meeting was recessed at 10:13 a.m. and reconvened at 10:24 a.m.

**7. ANNUAL EVALUATION OF BRENT MEYER, LANCASTER COUNTY WEED CONTROL AUTHORITY SUPERINTENDENT**

Brent Meyer, Lancaster County Weed Control Authority Superintendent, provided a power point presentation outlining his job duties, accomplishments and goals (see agenda packet). He also distributed copies of "Thistles of Nebraska" (Exhibit C) and "Sportsman's Guide to Nebraska's Invasive Species" (Exhibit D).

Avery exited the meeting at 10:57 a.m.

Amundson inquired if Meyer had considered using Hewlett Packard Records Manager (HPRM). Meyer said that he would be interested in exploring how HPRM could benefit their recordkeeping.



Brinkman asked for feedback on what the County Board could do to improve communication. Meyer invited the Commissioners to visit the Weed Control Office and to ride along with one of the inspectors. He added he appreciated the County Board's support.

Avery returned to the meeting at 11:07 a.m.

**8. ANNUAL EVALUATION OF JAMES DAVIDSAVER, LINCOLN-LANCASTER COUNTY EMERGENCY MANAGEMENT DIRECTOR**

Jim Davidsaver, Lincoln-Lancaster County Emergency Management Director, provided a power point presentation outlining his job duties, accomplishments and goals (see agenda packet).

In response to Amundson's inquiry if Emergency Management was using HPRM, Davidsaver said they currently are required to use the State's grant management system and he felt it would be redundant to use HPRM.

Ann Ames, Chief Deputy Administrative Officer, suggested that Davidsaver schedule an active shooter drill for the County. Davidsaver offered to contact Captain Jerry Witte, County Sheriff's Office, with regard to scheduling an active shooter exercise.

Brinkman asked for feedback on what the County Board could do to improve communication. Davidsaver stated if the Board has any concerns, he would prefer to know them sooner rather than later.

**9. APPOINTMENT OF KERIN PETERSON AS THE PROJECT MANAGER FOR THE EMERGENCY MANAGEMENT RELOCATION PROJECT – Jim Davidsaver, Lincoln-Lancaster County Emergency Management Director**

Eagan said Kerin Peterson, Facilities & Properties Director, would be the best choice for Project Manager for the Emergency Management relocation project.

The consensus was for Peterson to serve as Project Manager.

Peterson stated she has seen the needs assessment and mechanical studies as well as the drawings provided and feels things are ready to move forward.

**10. ACTION ITEMS**

There were no action items.

**11. CHIEF ADMINISTRATIVE OFFICER REPORT**

- A. Trabert Hall Sale
- B. Follow-Up on Board of Equalization Property Valuation Process Public Hearing

Items 11A-B were moved forward on the agenda.

**12. CHIEF DEPUTY ADMINISTRATIVE OFFICER**

- A. Website Update

Ames stated this item will be held until the October 19<sup>th</sup> meeting. She also requested that Commissioners discontinue using their personal email addresses to receive County emails. Ames said emails regarding County business will be forwarded to [commish@lanaster.ne.gov](mailto:commish@lanaster.ne.gov).

### **13. GENERAL ADMINISTRATIVE ITEMS**

- A. Joint Meeting with Lancaster County Agricultural Society – Thursday, November 16, 2017, 7:30 p.m., Lancaster Event Center (Alternative dates November 14 and 15, 2017)

The joint meeting with the Lancaster County Agricultural Society was scheduled for Wednesday, November 15, 2017. The start time will be confirmed.

- B. City-County Common Meeting Agenda Items (Monday, November 6, 2017, 11:45 a.m.)

Brinkman said potential improvements to the security area into the Justice and Law Enforcement Center have been proposed and Captain Jerry Witte could provide an update.

Wiltgen said he could provide an update on the bridge funding and the interlocal agreement and by-laws for the Justice Council. He also would like to have an update on the Criminal Justice Information System (CJIS).

- C. Employee Expense Reports

Wiltgen said a new detailed claim form will be available. He stated for greater transparency those expense forms submitted by an elected official could also appear as a staff meeting agenda item.

Eagan said he would ask Dave Derbin, Deputy County Attorney, to attend next Thursday's staff meeting to discuss revising the current resolution regarding reimbursement of miscellaneous expenditures.

Brinkman expressed concern with the amount of claims the Board would be required to review.

Amundson suggested trying the process for one year to see if it is going to be too time consuming.

- D. Volunteer Opportunity

This item was held.

### **14. DISCUSSION OF OTHER MEETINGS ATTENDED**

There were no other meetings discussed.

### **15. DISCUSSION OF BOARD MEMBER MEETINGS ATTENDED**

- A. Chamber of Commerce Coffee – Wiltgen/Schorr/Amundson

Wiltgen said Dave Rimington, University of Nebraska-Lincoln Athletic Director, was the featured speaker. Updates were given on the County budget, service-based information website and legislative priorities. Lincoln Public Schools also discussed the overcrowding situation.

B. Public Building Commission Chair Meeting with Mayor –

Meeting was cancelled.

C. Lancaster County Board Chair/Vice Chair Meeting with Mayor –

Meeting was cancelled.

D. Public Building Commission – Amundson/Brinkman

Amundson said they discussed the 911 Center, the 575 Building duct repair, remodeling projects for Aging Partners and Information Systems and Linda Wilson's retirement.

Brinkman added that last pay applications were approved for the 605 Building as was the bid for renovation of the Public Defender's building.

E. Lincoln-Lancaster County Board of Health – Avery

Avery stated the primary discussion was on the history and roll of the Board of Health.

F. Lancaster County Crisis Center Advisory Committee – Avery

Avery reported the issue with the locks has not been resolved but the windows have been replaced.

## **16. SCHEDULE OF BOARD MEMBER MEETINGS**

Informational only.

## **17. EMERGENCY ITEMS**

There were no emergency items.

## **18. ADJOURNMENT**

**MOTION:** Brinkman moved and Amundson seconded to adjourn the meeting at 12:45 p.m. Brinkman, Amundson, Avery and Wiltgen voted yes. Schorr was absent. Motion carried 4-0.

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Dan Nolte  
Lancaster County Clerk

# Lancaster County Engineering



Planning Commission Public Hearing  
1 & 6 Year  
Road and Bridge Construction  
10/11/2017



# Lancaster County Engineering



Pam Dingman, PE

Lancaster County Engineer

Lancaster County

402-441-8332

[pdingman@lancaster.ne.gov](mailto:pdingman@lancaster.ne.gov)



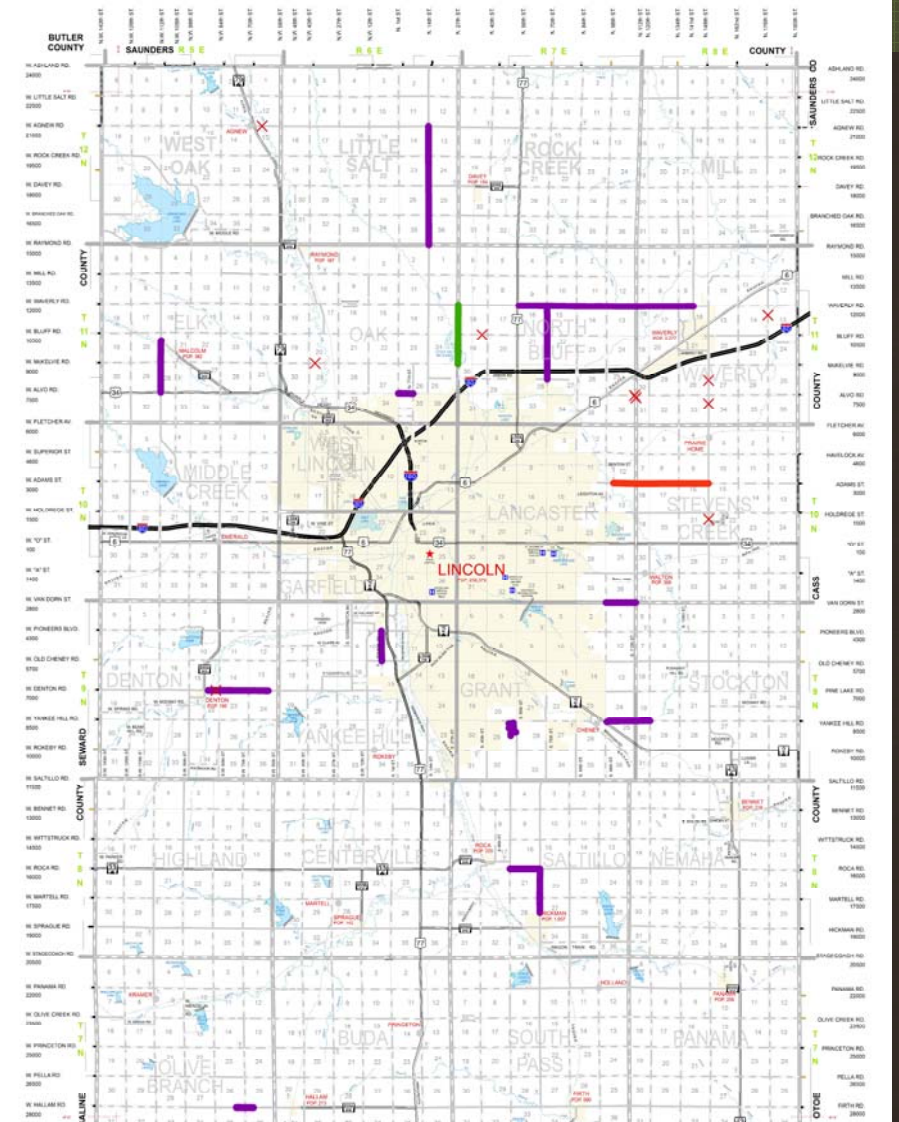
# Lancaster County Engineering

## Completed 2017

PAMELA L. DINGMAN  
COUNTY ENGINEER

**LANCASTER COUNTY, NEBRASKA**  
Completed Roadway Improvements - through 2017

KENNETH D. SCHROEDER  
COUNTY SURVEYOR



# Lancaster County Engineering

## Projects Completed in 2017

### Completed New Pavement

- Adams from 103<sup>rd</sup> to 148<sup>th</sup>

### Completed Overlays

Completed Bridge Maintenance –  
H-66, D-88, H-120

Completed Bridges – G-111, G-144, F-225,  
J-143, H-130, H-128



# Lancaster County Engineering

## Projects Completed in 2017

- Some projects were delayed because not all FEMA money reimbursements have been received
- Two projects that had received NEMA Hazard Mitigation Grants remain unfunded
- Bridge C-91 and West Raymond Road were delayed one year due to NDOT project.



# Lancaster County Engineering

## Projects Completed in 2017







# Lancaster County Engineering

## Projects Proposed for 2018

- Paving – 98<sup>th</sup> Street
- Overlays – Maybe reduced depending on flood reimbursements
- Bridges – C-91, B-147, E-117, and N-19
- Bridges Maintenance – O-175, H-119
- Culverts



# Lancaster County Engineering

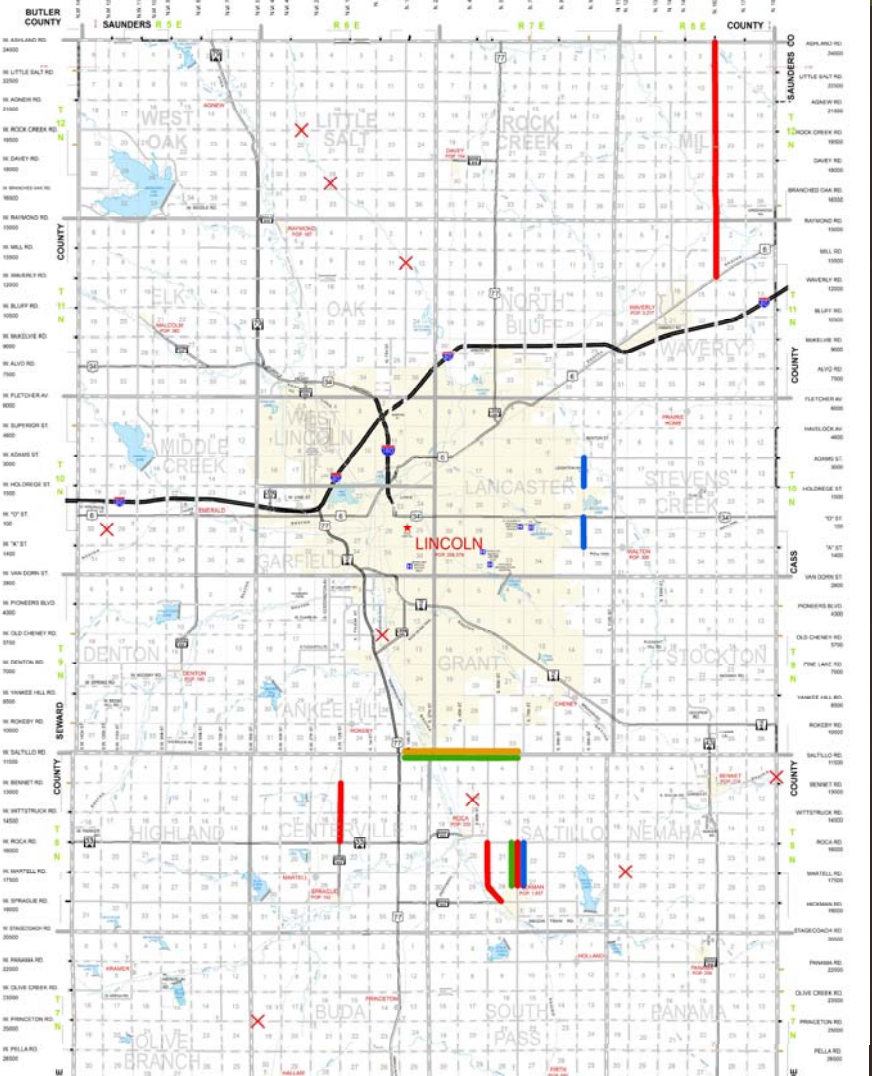
## FY 2019-2023

PAMELA L. DINGMAN  
COUNTY ENGINEER

**LANCASTER COUNTY, NEBRASKA**

KENNETH D. SCHROEDER  
COUNTY SURVEYOR

*Proposed Roadway Improvement Program - Fiscal Year 2019 - 2023*



# Lancaster County Engineering

## Proposed Projects 2019-2024

- Paved Shoulders - Saltillo Road, 68<sup>th</sup> Street
- Pavement – 54<sup>th</sup> Street, 162<sup>nd</sup> Street,  
SW 14<sup>th</sup> Street
- Engineering – 98<sup>th</sup> Street (A to O) and  
(Adams to Holdrege)
- Bridges – F-88
- South and East Beltway



# Lancaster County Engineering

WOULD YOU RATHER:

**PUT YOUR  
PHONE DOWN  
OR PUT YOUR  
CAR IN A DITCH?**

#itsjusteasier

MARYLAND HIGHWAY SAFETY OFFICE

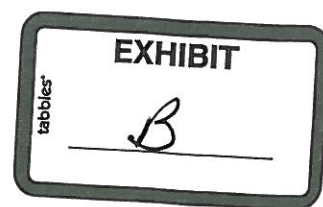


**THE PHONEY**

#dontbeTHATdriver



**TALK  
OR TEXT  
WHILE YOU  
DRIVE  
& YOU WILL  
GET CAUGHT**



# ONE AND SIX-YEAR ROAD AND BRIDGE CONSTRUCTION PROGRAM

FISCAL YEAR 2018



## LANCASTER COUNTY, NEBRASKA

LANCASTER COUNTY ENGINEERING DEPARTMENT

444 CHERRY CREEK ROAD, BLDG. C • LINCOLN, NE 68528

(402) 441-7681

<http://lancaster.ne.gov/engineer>

**ROAD PROJECT CARRIED OVER FROM 2013**

Location	State Functional Classification	Existing Surface	ADT Latest Count	Township	Location from Sections	Length (Miles)	Type of Improvement	Design Standard	Estimated Cost
S 68 <sup>th</sup> Street (Roca Road to City of Hickman)	Other Arterial	Pavement	4982-5251	Saltillo	W-22,27	1.3	Engineering & ROW	ROA-1	\$200,000

**ROAD PROJECT CARRIED OVER FROM 2017**

Location	State Functional Classification	Existing Surface	ADT Latest Count	Township	Location from Sections	Length (Miles)	Type of Improvement	Design Standard	Estimated Cost
Raymond Road (N 14 <sup>th</sup> Street to Village of Raymond)	Other Arterial	Pavement	2448-2841	Little Salt	S-32,33,34,35	4.5	2 <sup>nd</sup> Stage Pavement	NA	\$916,514

**BRIDGE PROJECT CARRIED OVER FROM 2017**

Location	State Functional Classification	ADT Latest Count	Township	Location From Sections	Type of Improvement	Estimated Cost
W Raymond Road (C-91)	Other Arterial	2729	Little Salt	S-34	140' Concrete Slab Bridge	\$1,500,000

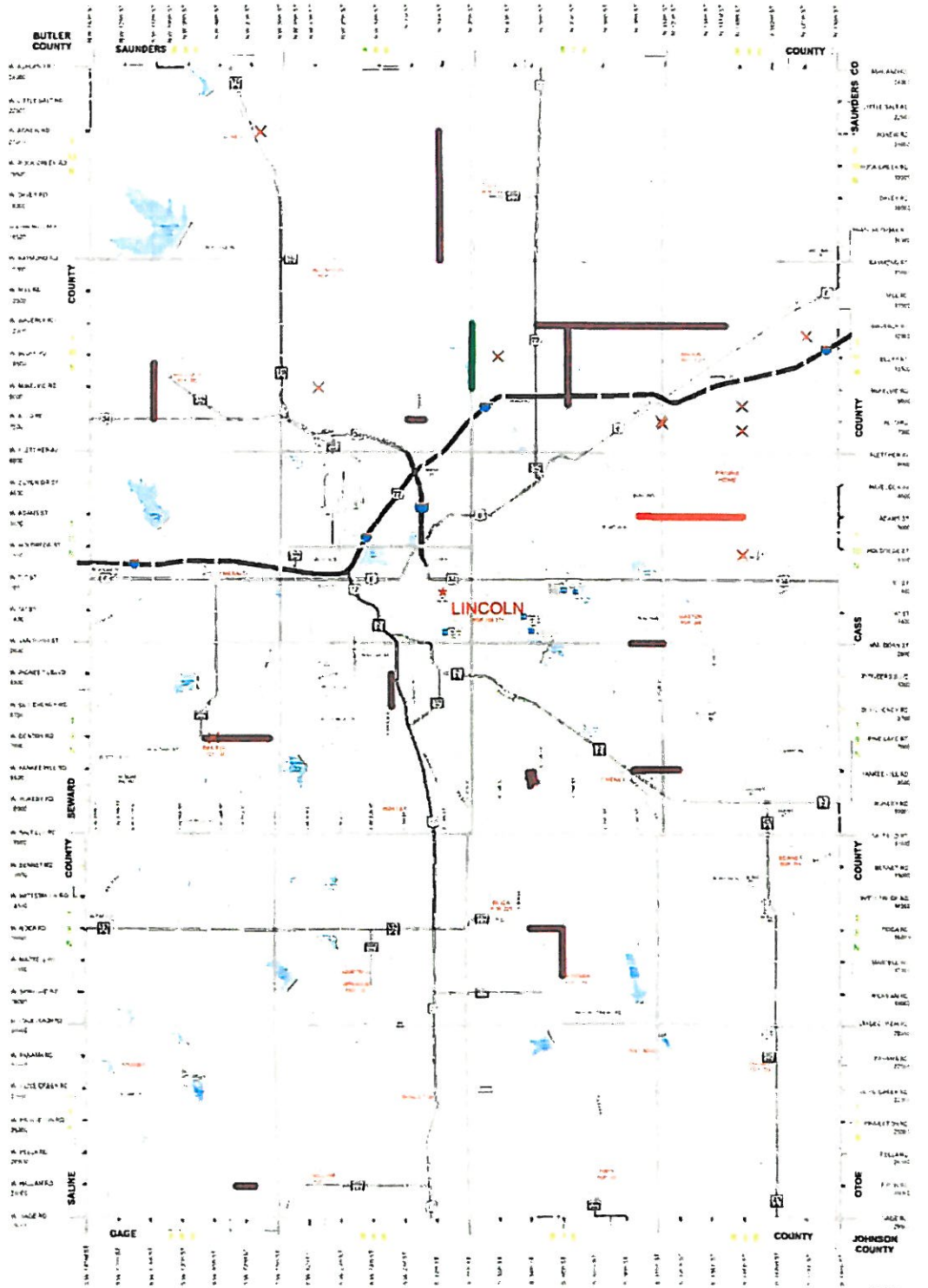


PAMELA L. DINGMAN  
COUNTY ENGINEER

# LANCASTER COUNTY, NEBRASKA

## Completed Roadway Improvements - through 2017

KENNETH D. SCHROEDER  
COUNTY SURVEYOR



- LEGEND**
- Interstate Highway
  - State Highway
  - County Road
  - Local Road
  - Other
  - Proposed
  - Completed
  - Other

- COMPLETED IMPROVEMENTS**
- Interchange
  - Overpass
  - Underpass
  - Other

**SOURCE:**  
Lancaster County Records, Lancaster County Engineering Department  
City Limits for Lincoln, City of Lincoln, Lancaster County Planning Department  
District Bureau, TCR 80 for Data, U.S. Department of Commerce  
Digital Aerial Orthorectification, 30/00, Nebraska State Geospatial Data Consortium  
U.S. G.S. Topographic Quadrangles, U.S. Department of the Interior

**LANCASTER COUNTY ENGINEERING DEPARTMENT**  
444 Cherrycreek Road Bldg. C  
Lincoln, Nebraska 68528  
Tel: 402-441-7681 Fax: 402-441-8692  
www.lancastercountyengineering.com

**LANCASTER COUNTY ENGINEERING DEPARTMENT**

0 1 2 3 Miles  
0 1 2 3 4 Kilometers

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**2017 ROAD PROJECTS COMPLETED OR UNDER CONSTRUCTION**

Location	State Functional Classification	Existing Surface	Township	Location from Sections	Length (Miles)	Type of Improvement	Actual Cost
N 14 <sup>th</sup> Street (Raymond Road to Agnew Road)	Other Arterial	Pavement	Little Salt	W-13,24,25,36	4.0	2 <sup>nd</sup> Stage Pavement	\$779,043
N 27 <sup>th</sup> Street (Waverly Road to McKelvie Road)	Local	Gravel	North Bluff	W-18,19	1.8	Grading & Structures	\$545,629
S 68 <sup>th</sup> Street (Roca Road to City of Hickman)	Other Arterial	Pavement	Saltillo	W-22,27	1.3	2 <sup>nd</sup> Stage Pavement	\$302,775
N 70 <sup>th</sup> Street (Arbor Road to Waverly Road)	Collector	Pavement	North Bluff	W-15,22,27	2.9	2 <sup>nd</sup> Stage Pavement	\$462,898
NW 112 <sup>th</sup> Street (Hwy 34 to Malcolm)	Other Arterial	Pavement	Elk	W-21,28	1.7	2 <sup>nd</sup> Stage Pavement	\$363,501
E Adams Street (Stevens Creek to N. 148 <sup>th</sup> Street)	Other Arterial	Gravel	Lancaster Stevens Creek	S-12 S-7,8,9	3.3	Pavement	\$1,262,404
Alvo Road (N 1 <sup>st</sup> Street to N 7 <sup>th</sup> Street)	Local	Pavement	Oak	S-26	0.5	2 <sup>nd</sup> Stage Pavement	\$185,037
W Denton Road (Village of Denton to SW 60 <sup>th</sup> Street)	Other Arterial	Pavement	Denton	S-13,14,15	2.0	2 <sup>nd</sup> Stage Pavement	\$422,158
Folsom Street (Old Cheney Road to Pioneers Boulevard)	Local	Pavement	Yankee Hill	IN-10	1.0	2 <sup>nd</sup> Stage Pavement	\$229,391
Hallam Road (east and west of SW 72 <sup>nd</sup> Street)	Other Arterial	Pavement	Olive Branch	S-25,26	0.6	2 <sup>nd</sup> Stage Pavement	\$139,968
Kensington Estates (1 <sup>st</sup> Addition)	Local	Pavement	Grant	IN-29	0.9	2 <sup>nd</sup> Stage Pavement	\$210,903
Roca Road (S 54 <sup>th</sup> Street to S 68 <sup>th</sup> Street)	Other Arterial	Pavement	Saltillo	S-16	1.0	2 <sup>nd</sup> Stage Pavement	\$241,596
Van Dorn Street (S 98 <sup>th</sup> Street to S 112 <sup>th</sup> Street)	Other Arterial	Pavement	Lancaster	S-36	1.0	2 <sup>nd</sup> Stage Pavement	\$229,555
Waverly Road (Hwy 77 to N 141 <sup>st</sup> Street)	Other Arterial	Pavement	North Bluff Waverly	S-9,10,11,12 S-7,8,9	5.9	2 <sup>nd</sup> Stage Pavement	\$1,038,302
Yankee Hill Road (S 98 <sup>th</sup> Street to S 120 <sup>th</sup> Street)	Collector	Pavement	Stockton Grant	S-19 S-24	1.5	2 <sup>nd</sup> Stage Pavement	\$339,152
Miscellaneous Railroad Locations	-	Pavement	Varies	Varies	-	Advanced Railroad Pavement Markings	\$1,786
State portion of railroad pavement markings is \$16,074 (90%)						TOTAL	\$6,754,098

**2017 BRIDGE PROJECTS COMPLETED OR UNDER CONSTRUCTION**

Location	State Functional Classification	Township	Location from Sections	Type of Improvement	Actual Cost
N 112th Street (H-66)	Other Arterial	Waverly	W-31	Timber Back Wall Repair Scour Repair	\$119,202
N 148th Street (H-128)	Other Arterial	Waverly	W-27	Concrete Box Culvert	\$185,994
N 148th Street (H-130)	Other Arterial	Waverly	W-34	Concrete Box Culvert	\$214,979
N 148th Street (J-143)	Other Arterial	Stevens Creek	W-22	Concrete Box Culvert	\$314,964
N 176th Street (H-120)	Local	Waverly	W-13	Scour Repair	\$71,508
W Agnew Road (D-88)	Other Arterial	West Oak	S-12	Scour Repair	\$150,496
Alvo Road (G-111)	Local	North Bluff	S-25	Concrete Box Culvert	\$180,992
Bluff Road (G-144)	Local	North Bluff	S-18	Concrete Box Culvert	\$171,975
W Denton Road (N-138)	Other Arterial	Denton	S-15	Bridge Re-Decking	\$424,089
W McKelvie Road (F-225)	Local	Oak	S-20	Concrete Box Culvert	\$148,300
				<b>TOTAL</b>	<b>\$1,982,499</b>



## 2018 ROAD PROJECTS

Location	State Functional Classification	Existing Surface	ADT Latest Count	Township	Location from Sections	Length (Miles)	Type of Improvement	Design Standard	Estimated Cost	
S 54th Street (Saltillo Road to Roca Road)	Local	Pavement	940-1671	Saltillo	W-4,9,10	3.0	2nd Stage Pavement	NA	\$683,000	
S 98th Street (Old Cheney to A Street)	Local	Gravel	188-400	Lancaster Grant	W-36 W-1,12	3.1	Pavement	RUTS	\$1,540,024	
Arbor Road (N 56th Street to N 70th Street)	Local	Pavement	1297	North Bluff	IN-28	1.0	2nd Stage Pavement	NA	\$583,524	
Branched Oak Lake Rec Road	Collector	Pavement	179-671	West Oak	S-18 IN-20-21,27	4.2	2nd Stage Pavement	NA	\$280,600	
Fletcher Avenue (N 7th Street to N 14th Street)	Local	Pavement	6247	Oak	S-35	0.5	2nd Stage Pavement	NA	\$193,129	
W. Fletcher Avenue (NW 126th Street to NW 112th Street)	Local	Pavement	320	Elk	S-32	1.0	2nd Stage Pavement	NA	\$225,000	
Meadow View Subdivision	-	Pavement	NA	Denton	IN-2	0.5	2nd Stage Pavement	NA	\$112,500	
Old Cheney Road (S 148th Street to S 112th Street)	Other Arterial	Pavement	2139-2593	Stockton	S-7,8,9	2.5	2nd Stage Pavement	NA	\$562,500	
W Old Cheney Road (Hwy 77 to SW 12th Street)	Local	Pavement	214-324	Yankee Hill	S-10	1.0	2nd Stage Pavement	NA	\$233,000	
The Preserve at Cross Creek Subdivision (1st, 2nd and 4th Addition)	-	Pavement	NA	Saltillo	IN-16	1.4	2nd Stage Pavement	NA	\$315,000	
Raymond Road (N 14th Street to Village of Raymond)	Other Arterial	Pavement	2448-2841	Little Salt	S-32,33,34,35	4.5	2nd Stage Pavement	NA	\$916,514	
Saltillo Road (SW 12th Street to Hwy 77)	Other Arterial	Pavement	754	Yankee Hill	S-34,35	2.0	2nd Stage Pavement	NA	\$450,000	
Saltillo Road (S 14th Street to S 68th Street)	Other Arterial	Pavement	6299-7937	Yankee Hill Grant	S-36 S-31,32,33	3.8	Engineering Environmental	ROA-1	\$132,523	
W Sprague Road (SW 14th Street to Hwy 77)	Other Arterial	Pavement	715-793	Centerville	S-26,27	2.0	2nd Stage Pavement	NA	\$450,000	
W Sprague Road (SW 114th Street to SW 142nd Street)	Other Arterial	Pavement	1247-1390	Highland	S-29,30	2.0	2nd Stage Pavement	NA	\$450,000	
City portion of Arbor Road is \$448,000 (62%) State portion of Branched Oak Lake Rec Road is \$420,900 (60%). City portion of Fletcher Avenue is \$65,000 (38%) State portion of Saltillo Road is \$723,184 (80%). City portion of Saltillo Road is \$48,723.									TOTAL	\$7,127,314



## 2018 STANDBY ROAD PROJECTS

Location	State Functional Classification	Existing Surface	ADT Latest Count	Township	Location from Sections	Length (Miles)	Type of Improvement	Design Standard	Estimated Cost
N 98th Street (Holdrege Street to Adams Street)	Local	Gravel	376-449	Lancaster	W-13	1.0	ROW	RUTS	\$270,000
East Beltway	Expressway	-	-	Stockton Stevens Creek Waverly	IN-29,20,17,8,5 IN-32,29,20,17,8,5 IN-32,29	13.0	Engineering ROW	DR-2	\$1,650,000
City portion of East Beltway ROW is 50%. City portion of Saltillo Road is \$314,837. State portion of Saltillo Road is \$4,716,673.								TOTAL	\$1,920,000

## 2018 BRIDGE PROJECTS

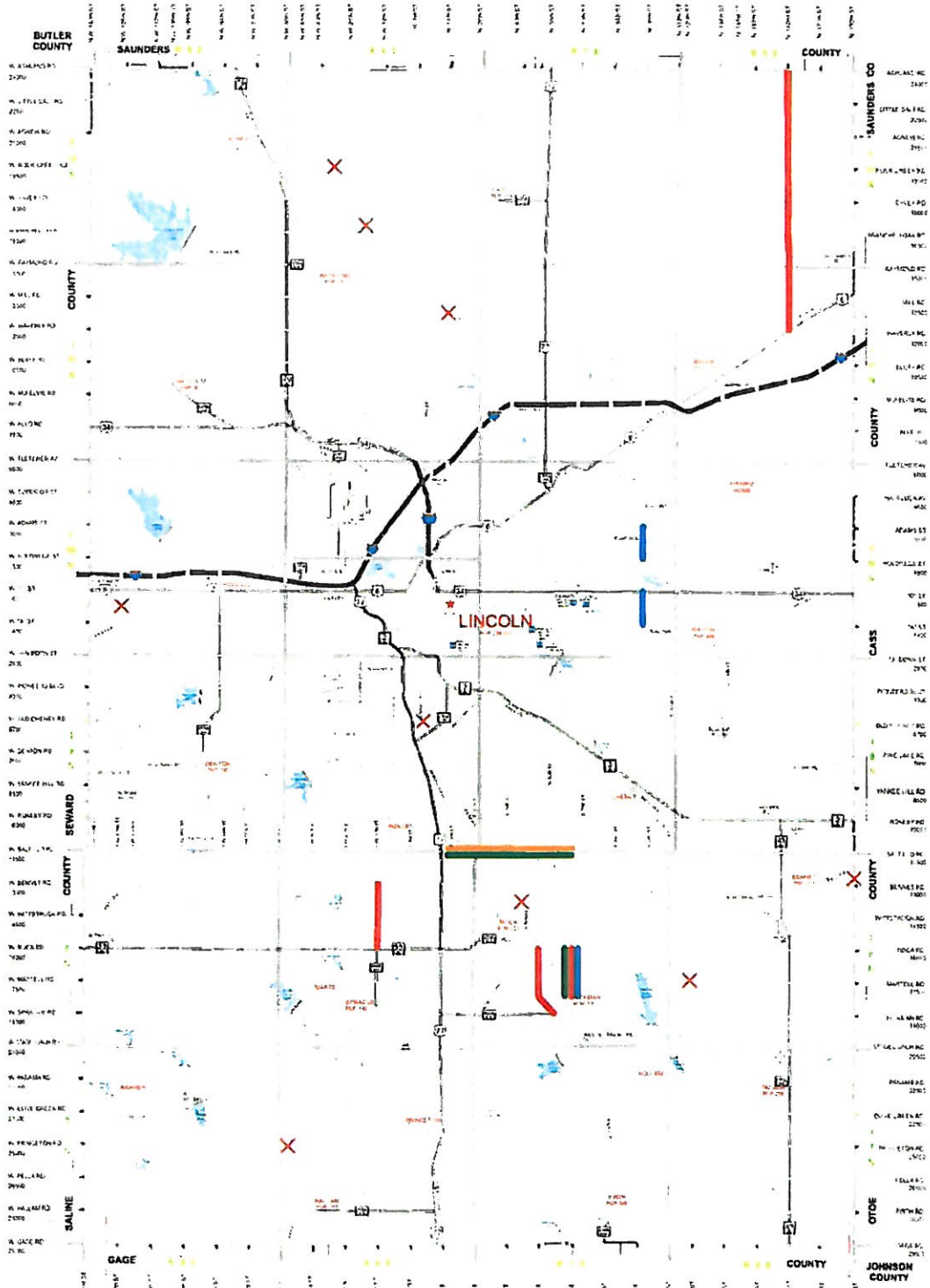
Location	State Functional Classification	ADT Latest Count	Township	Location From Sections	Type of Improvement	Estimated Cost
NW 84 <sup>th</sup> Street (E-117)	Local	72	Elk	W-14	Concrete Box Culvert	\$175,000
SW 91 <sup>st</sup> Street (N-114)	Local	15	Denton	IN-22	Concrete Box Culvert	\$125,000
N 176 <sup>th</sup> Street (H-211)	Local	42	Waverly	W-36	Concrete Box Culvert	\$150,000
N 176 <sup>th</sup> Street (H-119)	Local	64	Waverly	W-13	Scour Repair	\$200,000
N 176 <sup>th</sup> Street (H-115)	Local	41	Waverly	W-25	Concrete Box Culvert	\$37,500
Agnew Road (B-147)	Other Arterial	72	Rock Creek	S-12	Concrete Box Culvert	\$175,000
W Pioneers Boulevard (N-19)	Local	167	Denton	IN-4	Concrete Box Culvert	\$375,000
W Pioneers Boulevard (O-175)	Other Arterial	2885	Yankee Hill	S-2	Scour Repair	\$290,000
Princeton Road (Y-181)	Local	22	Panama	S-16	Concrete Box Culvert	\$43,750
W Raymond Road (C-91)	Other Arterial	2729	Little Salt	S-34	140' Concrete Slab Bridge	\$1,500,000
NEMA Hazard Mitigation Grant will cover 75% of H-115 and Y-181 cost.					Total	\$3,071,250

PAMELA L. DINGMAN  
COUNTY ENGINEER

# LANCASTER COUNTY, NEBRASKA

KENNETH D. SCHROEDER  
COUNTY SURVEYOR

## Proposed Roadway Improvement Program - Fiscal Year 2019 - 2023



- LEGEND**
- Interstate Highway
  - State Highway
  - County Road
  - Local Road
  - Water
  - City Limits
  - County Boundary
  - Proposed Improvement
  - Water
  - City Limits
  - County Boundary

- SOURCE**
- Lancaster County, Nebraska, Lancaster County Engineering Department
  - City Limits for Lincoln, City of Lincoln, Lancaster County Planning Department
  - County Boundary, NEBRASKA, U.S. Department of Commerce
  - USGS, National Hydrography Dataset, U.S. Department of the Interior
  - USGS, Topographic Quadrangle, U.S. Department of the Interior

**LANCASTER COUNTY ENGINEERING DEPARTMENT**  
444 Cherry Creek Road Bldg. C  
Lincoln, Nebraska 68528  
Tel. 402-441-7881 Fax: 402-441-8692  
Web: lancastercountypengr.com

- PROPOSED IMPROVEMENTS**
- Interstate
  - State
  - County
  - Local
  - Water





### 2019-2023 ROAD PROJECTS

Location	State Functional Classification	Existing Surface	ADT Latest Count	Township	Location from Sections	Length (Miles)	Type of Improvement	Design Standard	Estimated Cost
SW 14 <sup>th</sup> Street (Hwy 33 to Bennet Road)	Local	Gravel	341-344	Centerville	W-10,15	2.0	Pavement	ROA-1	\$980,000
S 54 <sup>th</sup> Street (Roca Road to City of Hickman)	Local	Pavement	174-223	Saltillo	W-21,28	2.2	Pavement	ROA-1	\$1,000,000
S 68 <sup>th</sup> Street (Roca Road to City of Hickman)	Other Arterial	Pavement	4982-5251	Saltillo	W-22,27	1.3	Engineering	ROA-1	\$75,000
S 68 <sup>th</sup> Street (Roca Road to City of Hickman)	Other Arterial	Pavement	4982-5251	Saltillo	W-22,27	1.3	Grading Structures Pavement	ROA-1	\$1,500,000
N 98 <sup>th</sup> Street (Adams Street to Holdrege Street)	Local	Gravel	376-449	Lancaster	W-13	1.0	Engineering	RUTS	\$75,000
S 98 <sup>th</sup> Street (A Street to O Street)	-	-	-	Lancaster	W-25	1.0	Engineering	RUTS	\$75,000
N 162 <sup>nd</sup> Street (Hwy 6 to Ashland Road)	Local	Gravel	419	Waverly Mill	W-11,2 W-35,26	8.0	Pavement	ROA-1	\$4,000,000
Saltillo Road (S 14 <sup>th</sup> Street to S 68 <sup>th</sup> Street)	Other Arterial	Pavement	6299-7937	Yankee Hill Grant	S-36 S-31,32,33	3.8	ROW Grading Shoulders Turn Lanes	ROA-1	\$1,000,000
Various Locations	Other Arterial	Pavement	Varies	Varies	Varies	Varies	2 <sup>nd</sup> Stage Pavement	NA	\$11,920,000
City portion of Saltillo Road is \$187,541. State portion of Saltillo Road is \$6,000,000.								TOTAL	\$20,625,000

### 2019-2023 BRIDGE PROJECTS

Location	State Functional Classification	ADT Latest Count	Township	Location from Sections	Type of Improvement	Estimated Cost
N 14th Street (F-88)	Other Arterial	3703	Oak	W-12	125' 3-Span Concrete Slab Bridge	\$1,250,000
NW 19th Street (C-262)	Local	4	Little Salt	IN-28	100' 3-Span Concrete Slab Bridge	\$1,000,000
S 46 <sup>th</sup> Street (S-59)	Local	225	Saltillo	IN-8	Concrete Box Culvert	\$175,000
NW 126th Street (M-178)	Local	38	Middle Creek	W-29	125' 3-Span Concrete Slab Bridge	\$1,250,000
S 190 <sup>th</sup> Street (R-15)	Local	51	Nemaha	E-1	125' 3-Span Concrete Slab Bridge	\$1,250,000
Martell Road (R-210)	Local	36	Nemaha	S-19	Concrete Box Culvert	\$175,000
W Old Cheney Road (O-37)	Local	9938	Yankee Hill	S-11	Scour Repair	\$290,000
W Princeton Road (W-164)	Local	48	Buda	S-18	Concrete Box Culvert	\$175,000
W Rock Creek Road (C-220)	Local	28	Little Salt	S-17	100' 3-Span Concrete Slab Bridge	\$1,000,000
					Total	\$6,565,000



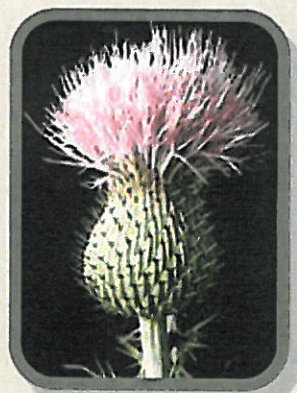
# *Thistles of Nebraska*

*Prepared by*

*Nebraska Weed Control Association*

*and the*

*Nebraska Department of Agriculture*





## Introduction

Thistles have long been a concern to agriculture and to the public in general. Canada thistle has been on the Noxious Weed List since 1873. Landowners and homeowners realize this plant was a serious problem and needed to be controlled. It wasn't until 1959 that the rapid infestation rate of musk thistle brought out the public concern of thistles in Nebraska.

Thistles, in general, get a bad rap whenever the word "thistle" is mentioned. However, all thistles are not bad for the environment or agriculture. There are 10 species identified in the state – 5 of these occurred in North America before settlement by Europeans. The other five are considered "nonnative or introduced" thistles. Humans have been a primary cause for the introduction of these nonnative species. They were brought to this country sometimes on purpose, or in contaminated seed and grain. When this happened, the plant's natural enemies were not introduced at the same time. This allowed the nonnative plants the opportunity to produce large seed banks before action was taken to control these unwanted plants. It will continue to take mankind many years to bring nonnative thistles under control in Nebraska. This will only happen if everyone works together.

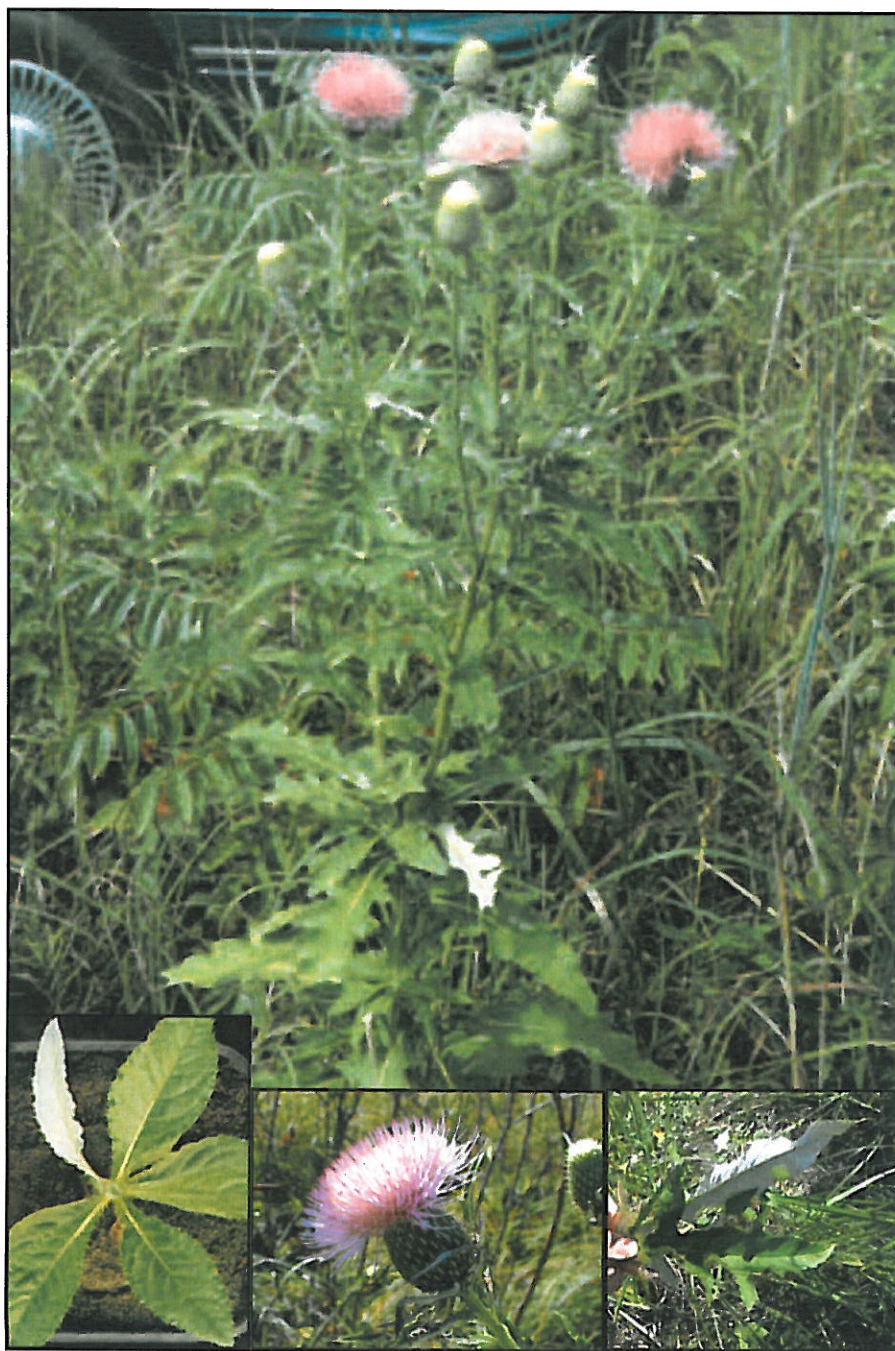
Control methods vary from one thistle to another. Some may be controlled by mechanical methods and others may require herbicide applications. Several control measures should be used at the same time to improve results. Proper pasture management is the most cost effective and productive of all control measures. This method can be time consuming and may take several years before results are noticed. This involves improved grass stands and rotational grazing to ensure healthy forage for livestock. Proper pasture management also improves water quality and wildlife habitat. Biological control is another tool, but it should never be the only control measure utilized. It needs to be incorporated with other control measures to ensure success. Herbicides have been used for many years. They can be effective, but application timing is critical to receive optimum control.

Most thistles can be found almost anywhere throughout the state. This guide has been developed in association with the Nebraska Weed Control Association and the Nebraska Department of Agriculture to aid in the identification of the 10 thistles in Nebraska. It is divided into two sections: The first being "Native Thistles" (*blue pages*) and the second being "Nonnative Thistles (*tan pages*). " Only by proper identification can one effectively control thistles in Nebraska.

## References

*Weeds of the Great Plains*, Nebraska Department of Agriculture





## Thistles of Nebraska

### Tall Thistle *Cirsium altissimum* (L.) Hill

#### *Native*

**Common Name:** Tall Thistle (roadside thistle)

**Growth Form:** Forb

**Life Span:** Biennial

**Origin:** Native

**Flowering Dates:** July-September

**Reproduction:** Seeds

**Height:** 4-5 ft.

**Flower:** Dark to light purple (infrequently white) disk florets

**Leaves:** Upper-leaf surface is bright green and hairless (usually) and the lower surface is densely white tomentose.

**Underground:** Taproot, fleshy

**Where Found:** Eastern and central Great Plains, and it does not occur in the northwestern or southwestern portions of the region. It grows in open lowlands, ditch banks, roadsides, and waste areas.

**Uses and Values:** Tall thistle is an important butterfly plant, and its seeds are eaten by songbirds.

**Poisoning:** None

**Other:** Tall thistle is sometimes confused with field thistle which grows in the extreme eastern Great Plains. Field thistle has more deeply pinnatifid stem leaves with linear-lanceolate lobes. Tall thistle may be confused with the earlier flowering musk thistle.



## Thistles of Nebraska

### Platte Thistle *Cirsium canescens* Nutt.

#### *Native*

**Common Name:** Platte thistle (prairie thistle)

**Growth Form:** Forb

**Life Span:** Perennial

**Origin:** Native

**Flowering Dates:** May-July

**Reproduction:** Seeds

**Height:** 1.3-2.6 ft.

**Flower:** Yellowish-white to rarely pale lavender disk florets

**Leaves:** Both leaf surfaces are covered with hair. Seedling leaves are entire while later leaves become more deeply lobed.

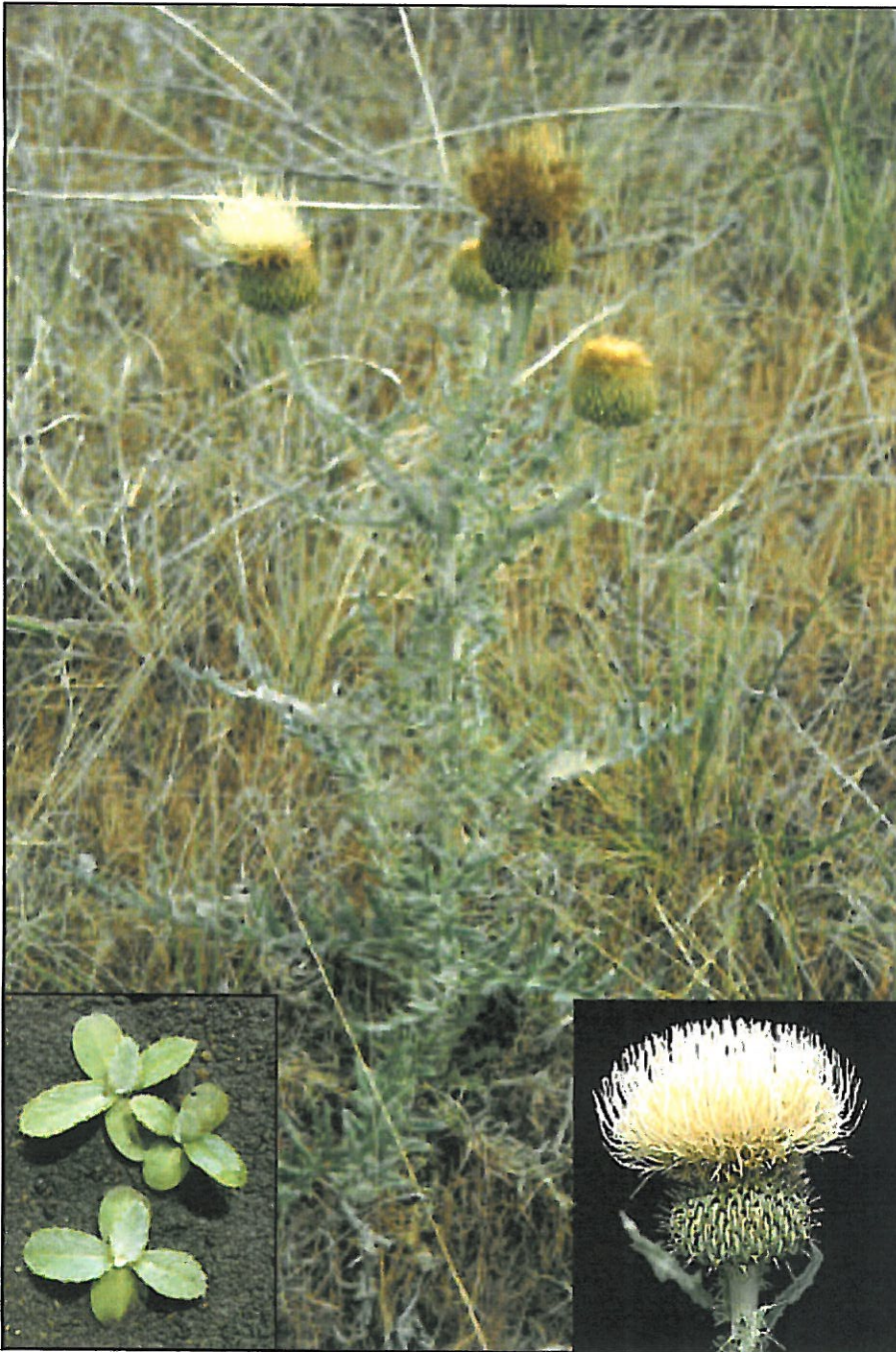
**Underground:** Taproot, deep, slender to stout

**Where Found:** Platte thistle is most common on sandy and gravelly soils of pastures, rangeland, waste areas, roadsides, and disturbed sites.

**Uses and Values:** Platte thistle is a butterfly plant, and its seeds are eaten by songbirds. Its foliage is not eaten by livestock, deer, or pronghorn.

**Poisoning:** None

**Other:** Platte thistle is generally not considered to be a problem weed, but sometimes it is mistaken for the more weedy species of thistles.





## Thistles of Nebraska

### Flodman Thistle *Cirsium flodmanii* (Rydb.) Arthur

#### *Native*

**Common Name:** Flodman thistle

**Growth Form:** Forb

**Life Span:** Biennial (or short-lived perennial)

**Origin:** Native

**Flowering Dates:** July-September

**Reproduction:** Rhizomes and Seeds

**Height:** 1-3.3 ft.

**Flower:** Deep purple to sometimes pink (rarely white) disk florets.

**Leaves:** Upper surfaces of leaves are green, and the lower surfaces are gray.

**Underground:** Rhizomes with numerous buds

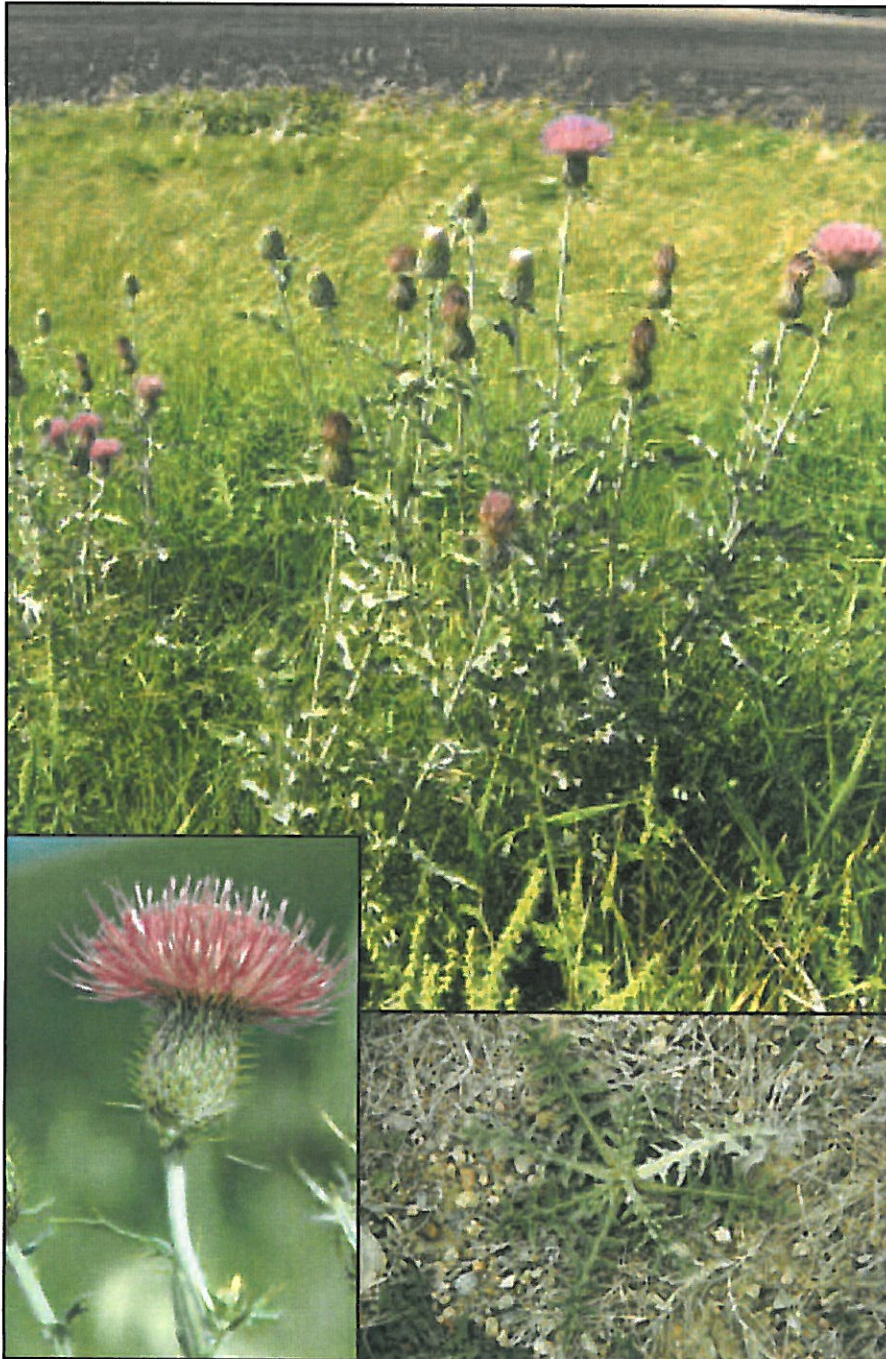
**Where Found:** Central and northern Great Plains on moist to dry open sites on pastures, rangeland, and disturbed sites.

**Uses and Values:** Flodman thistle has no forage value for cattle or wildlife. Horses occasionally eat the flowers. Butterflies visit the flowers, and the seeds are eaten by several species of songbirds.

**Poisoning:** None

**Historical:** Lakota Native Americans peeled and ate the stems. Roots of the rosettes were eaten raw or cooked.

**Other:** Flodman thistle is not as aggressive as Canada thistle. It does not withstand cultivation. Only rarely is it considered to be a problem weed.





## Thistles of Nebraska

### Yellowspine Thistle *Cirsium ochrocentrum* A. Gray

#### *Native*

**Common Name:** Yellowspine thistle

**Growth Form:** Forb

**Life Span:** Biennial (short-lived perennial)

**Origin:** Native

**Flowering Dates:** July-August

**Reproduction:** Seeds and rarely from tuberous rootstocks

**Height:** 1.3-4.9 ft.

**Flower:** Purple to pink or rose (rarely white) disk florets

**Leaves:** Leaf margins are toothed and tipped with yellow spines.

**Underground:** Taproot, slender to stout, rarely branching at its tip; rarely with tuberous rootstocks

**Where Found:** Central and southern Great Plains, scattered northward, in dry sandy or gravelly soils in pastures, rangeland, roadsides, and open disturbed areas.

**Uses and Values:** The spines make yellowspine thistle unpalatable to livestock. It is a butterfly plant, and its seeds are eaten by songbirds.

**Poisoning:** None

**Historical:** Some Native Americans boiled the flowers of yellowspine thistle in water and applied the liquid to burns and skin sores.

**Other:** Yellowspine thistle is not a serious weed and seldom occurs in large enough and dense enough stands to require control.





## Thistles of Nebraska

### Wavyleaf Thistle *Cirsium undulatum* (Nutt.) Spreng.

#### *Native*

**Common Name:** Wavyleaf thistle (gray thistle)

**Growth Form:** Forb

**Life Span:** Perennial

**Origin:** Native

**Flowering Dates:** June-July

**Reproduction:** Seeds and root buds

**Height:** 1.3-3.3 ft.

**Flower:** Purple to pinkish-purple or white disk florets

**Leaves:** Lower surfaces of the leaves are lighter in color than the upper surfaces, and the margins are wavy.

**Underground:** Taproot, simple, deep

**Where Found:** Throughout the Great Plains on abused rangeland, prairies, pastures, meadows, and disturbed sites. Wavyleaf thistle grows in a broad range of soil textures.

**Uses and Values:** Wavyleaf thistle has little or no forage value. Horses may eat the flowering heads, and songbirds eat the seeds. It is visited by butterflies. Wavyleaf thistle is sometimes grown as an ornamental. The flowering heads are used in fresh flower arrangements, and the fruiting heads are used in dry floral arrangements.

**Poisoning:** None

**Historical:** Some Native Americans made a tea from the roots and drank it to treat diabetes and stomachache.

**Other:** Wavyleaf thistle is not a serious weed





## Thistles of Nebraska

### Plumeless Thistle *Carduus acanthoides* L.

#### **Nonnative — Nebraska Noxious Weed**

**Common Name:** Plumeless thistle (spiny plumeless thistle)

**Growth Form:** Forb

**Life Span:** Biennial (or winter annual)

**Origin:** Eurasia

**Flowering Dates:** June-August

**Reproduction:** Seeds

**Height:** 3-4 ft.

**Flower:** Purple, rarely white or yellow, disk florets

**Leaves:** Deeply serrate to nearly the midrib.

**Stems:** Spiny-winged peduncles under the heads of plumeless thistle is a characteristic separating it from the similar musk thistle.

**Underground:** Taproot, stout, fleshy

**Where Found:** Primarily in the east central Great Plains and scattered farther west. It grows in pastures, rangeland, and non-cropped areas.

**Uses and Values:** Plumeless thistle is an important plant for butterflies. Its seeds are eaten by numerous species of songbirds.

**Poisoning:** Plumeless thistle may accumulate nitrates, but it is unpalatable to livestock.

**Other:** Plumeless thistle is an aggressive weed and is similar to the closely related musk thistle. Plumeless thistle is a noxious weed in many states. It rarely flowers during its first year of growth.





## Thistles of Nebraska

### Musk Thistle *Carduus nutans* L.

#### **Nonnative — Nebraska Noxious Weed**

**Common Name:** Musk thistle (nodding thistle, nodding plumeless thistle)

**Growth Form:** Forb

**Life Span:** Biennial (occasionally annual)

**Origin:** Eurasia

**Flowering Dates:** May-August

**Reproduction:** Seeds

**Height:** 1.6-9.8 ft.

**Flower:** Rose purple to white disk florets developing from the outer edge to the center.

**Leaves:** Margins deeply serrate to pinnately lobed (lobes often white), surfaces without hair, veins extending past margins as spines.

**Underground:** Taproot, fleshy, stout

**Where Found:** Widespread throughout the Great Plains. It grows in pastures, rangeland, open woodlands and fertile lowlands.

**Uses and Values:** Musk thistle seeds are eaten by songbirds.

**Poisoning:** None

**Historical:** In Eurasia, dried flowers have been used to curdle milk.

The pith of second-year plants and roots of first-year plants are occasionally boiled and eaten.

**Other:** Musk thistle is classified as a noxious weed throughout the region. Seeds may mature in heads after control. Therefore, control by hand or with herbicides must be done before heading, or heads must be collected by hand and burned. Seeds germinate in the fall or spring forming a rosette of leaves.





Thistles of Nebraska

**Canada Thistle** *Cirsium arvense* (L.) Scop.

**Nonnative — Nebraska Noxious Weed**

**Common Name:** Canada thistle (creeping thistle, Californian thistle, field thistle)

**Growth Form:** Forb

**Life Span:** Perennial

**Origin:** Eurasia and North Africa

**Flowering Dates:** June-August

**Reproduction:** Rhizomes and Seeds

**Height:** 1-3.9 ft.

**Flower:** Pink to purple (rarely white) disk florets

**Leaves:** Leaf margins are shallowly to pinnately lobed to entire with short spines on the margins.

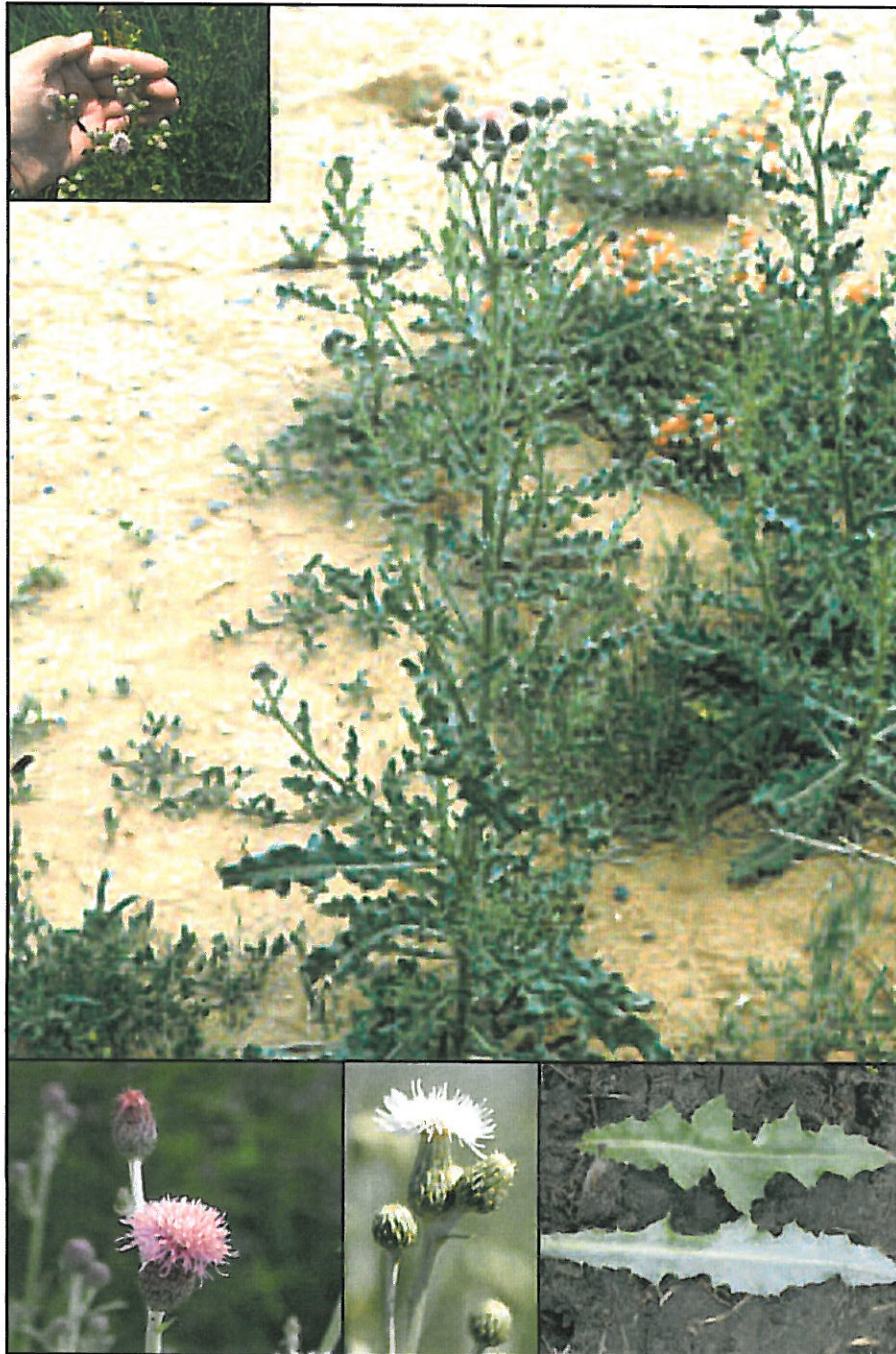
**Underground:** Rhizomes, fleshy, extensive, creeping

**Where Found:** Central and northern Great Plains on rangeland, pastures, cropland, ditch banks, roadsides, mud flats, stream and lake banks, and disturbed sites. Canada thistle can be especially abundant in deep and moist soil.

**Uses and Values:** Canada thistle seeds are eaten by songbirds. . It sometimes furnishes nesting cover for rails and shorebirds.

**Poisoning:** Canada thistle has been reported to accumulate toxic levels of nitrates.

**Other:** Canada thistle is an aggressive weed and is classified as a noxious weed throughout the Great Plains. This species is dioecious (*staminate and pistillate flowers on different plants*), thus large patches may not produce any seed. However, the patches may continue to become larger because of the creeping root system.





## Thistles of Nebraska

### **Bull Thistle** *Cirsium vulgare* (Savi) Tenore

#### **Nonnative**

**Common Name:** Bull thistle (common thistle, spear thistle)

**Growth Form:** Forb

**Life Span:** Biennial

**Origin:** Eurasia

**Flowering Dates:** July-September

**Reproduction:** Seeds

**Height:** 1.6-6.5 ft.

**Flower:** Dark purple to rose or pinkish-purple (rarely white) disk florets

**Leaves:** Margins toothed and tipped with spines.

**Underground:** Taproot, fleshy

**Where Found:** Throughout the region, except in the southwestern Great Plains, on rangeland, pastures, meadows, old fields, gardens, and disturbed sites.

**Uses and Values:** Livestock may eat the flowers, and songbirds eat the seeds.

**Poisoning:** None

**Other:** Bull Thistle is an aggressive weed, but it will not withstand cultivation.

**\* Noxious Weed:** Rock County, NE.







## Thistles of Nebraska

### Scotch Thistle *Onopordum acanthium* L.

#### *Nonnative*

**Common Name:** Scotch thistle (cotton thistle, heraldic thistle, Scotch cottonthistle)

**Growth Form:** Forb

**Life Span:** Biennial (rarely an annual)

**Origin:** Eurasia

**Flowering Dates:** June-August

**Reproduction:** Seeds

**Height:** 1.6-10 ft.

**Flower:** Purple to violet or reddish to pinkish-white disk florets

**Leaves:** Coarsely lobed, winged, surfaces sparsely to densely tomentose giving a bluish- or grayish-green appearance to the leaves.

**Underground:** Taproot, stout, fleshy

**Where Found:** Scattered in the west central Great Plains in feed yards, pastures, rangeland, ravines, around ponds, roadsides, disturbed sites, railroad rights-of-way, and waste places.

**Uses and Values:** Scotch thistle plants are frequently visited by butterflies.

**Poisoning:** None

**Other:** Scotch thistle is the least recognized thistle in the Great Plains. It is not widely distributed and tends to be a problem only in localized areas. It is a strong competitor and can crowd out desirable forage plants. It may be so abundant that it forms stands so dense that livestock cannot walk through the infested areas.

\* **Noxious Weed:** Banner, Cheyenne, Dawes, Morrill, Sioux and Sheridan Counties in Nebraska



EXHIBIT  
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# Sportsman's Guide

*to Nebraska's Invasive Species*

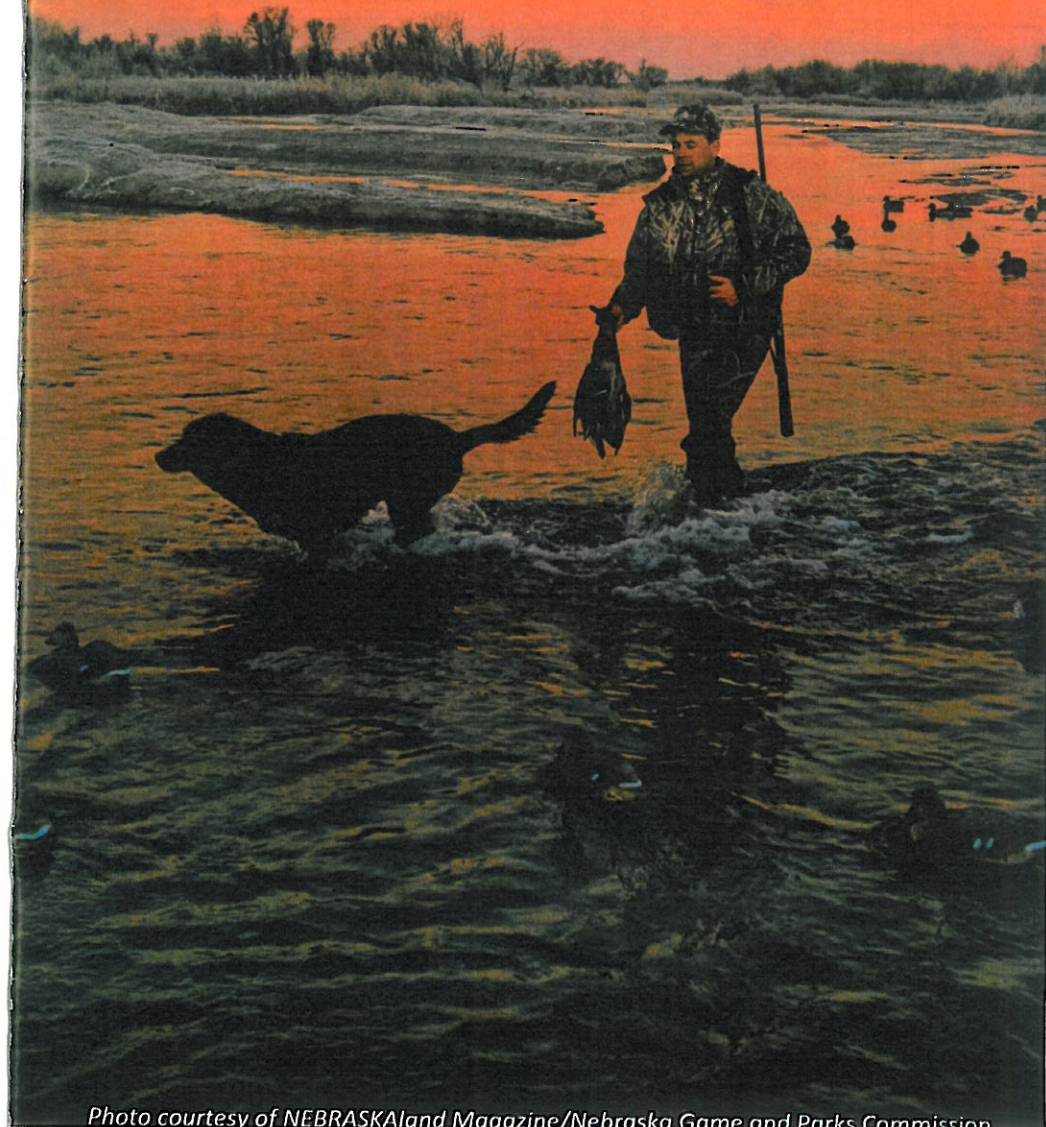
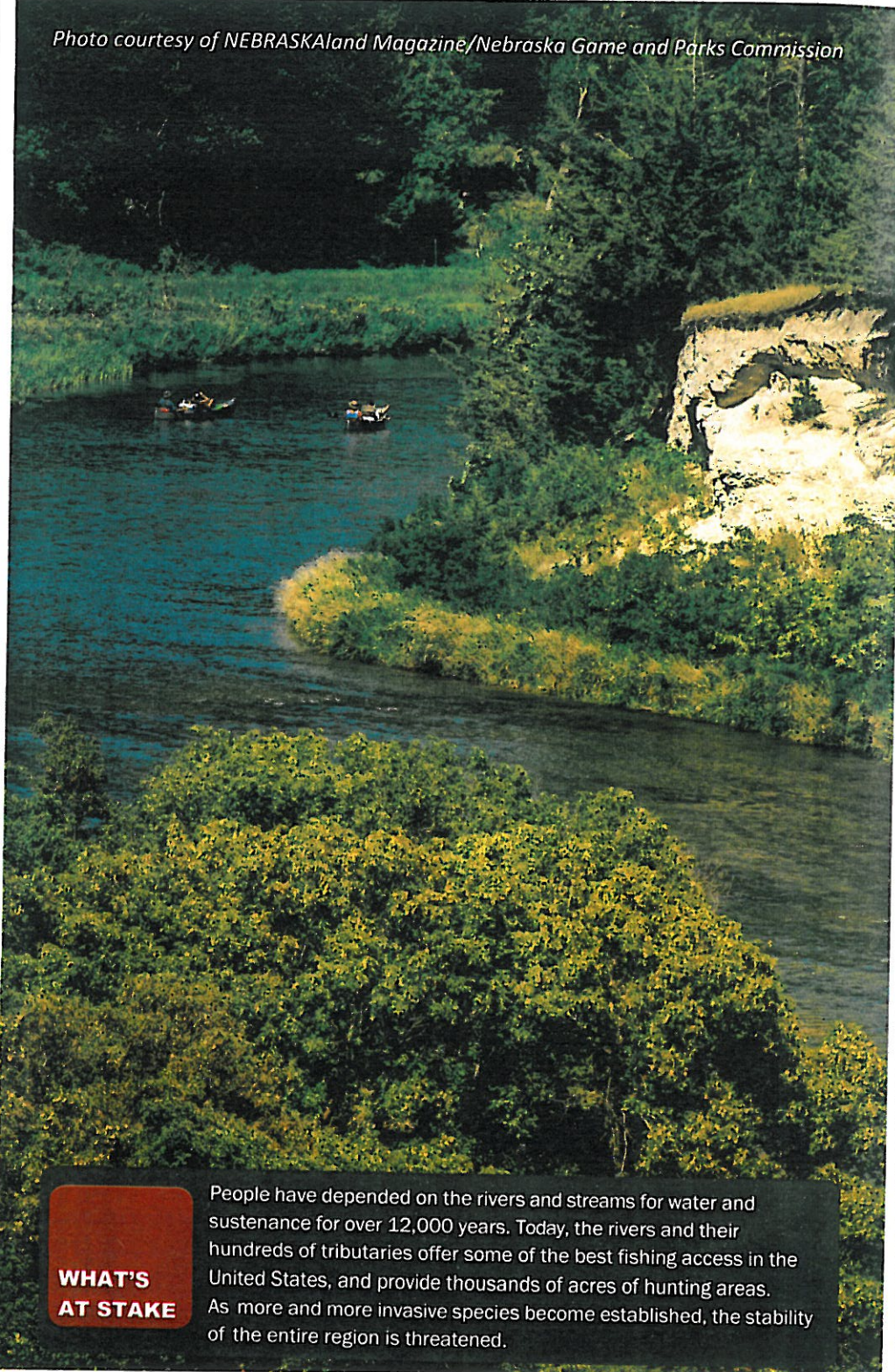


Photo courtesy of NEBRASKAland Magazine/Nebraska Game and Parks Commission



Photo courtesy of NEBRASKAland Magazine/Nebraska Game and Parks Commission



### WHAT'S AT STAKE

People have depended on the rivers and streams for water and sustenance for over 12,000 years. Today, the rivers and their hundreds of tributaries offer some of the best fishing access in the United States, and provide thousands of acres of hunting areas. As more and more invasive species become established, the stability of the entire region is threatened.

## SPORTSMEN: Americas Original Conservationists

Hunting and fishing are two of the oldest human traditions. For tens of thousands of years, hunting and fishing were essential for human survival. The sportsmen of today hunt and fish for a variety of reasons. For some, hunting and fishing are family traditions that have been passed down over generations. Others are drawn to these sports for the sense of adventure they provide. No matter the reason, hunting and fishing are important activities because they allow people to enjoy nature and feel connected to the land around them.

### Sportsmen and Conservation

In the late 1800s, many factors led to a decline in wildlife populations, such as overhunting and habitat loss. Sportsmen saw what was happening and agreed that wildlife and habitat were worth saving. They began to fight for laws and regulations to protect wildlife. The outcomes of their efforts included limits on the numbers and types of animals and birds that could be killed, regulated hunting seasons, and protected habitat areas.

Sportsmen continue to be a driving force behind conservation efforts. Hunters and anglers help fund state wildlife conservation efforts through the purchase of hunting and fishing licenses, tags, and stamps. Federal excise taxes on ammunition and hunting and fishing equipment are used to support state wildlife management programs and purchase lands that can be used by all sportsmen. As a result, tens of millions of acres of wildlife habitat have been conserved throughout the United States, ensuring the survival of hunting and fishing traditions for future generations.

Today, wildlife faces another threat: invasive species. Sportsmen must follow in the steps of past generations and take a stand against this increasing threat. The future of hunting and fishing depends on you.



LIBRARY OF CONGRESS

Theodore Roosevelt, an avid hunter and conservationist, placed more than 200 million acres of American lands under federal protection during his presidency.



ALDO LEOPOLD FOUNDATION

Aldo Leopold was an ecologist, author, conservationist, and hunter who developed and promoted new methods of wildlife management.

**“Of all the questions which can come before this nation, short of the actual preservation of its existence in a great war, there is none which compares in importance with the great central task of leaving this land even a better land for our descendants than it is for us.” — Theodore Roosevelt (1910)**



# TAKE A STAND:

## Help Prevent the Spread of Invasive Species

### TIP #1 BE AWARE

Get to know what invasive species are a problem in the areas where you hunt and fish. Keep your eye out for changes in your favorite hunting and fishing spots. If you see a plant that wasn't there last season, identify it and do a little research. If you think the plant is invasive, report it. (see Tip #3)



AMY COLLETT

A truck drives down a road infested with invasive spotted knapweed. When you drive, hike, or boat through an area infested with invasive species, you're likely to spread that species into new areas.

### TIP #2 AVOID INFESTED AREAS

One of the biggest factors in the spread of invasive species is human activity. If possible, avoid driving, walking, and boating through areas that are infested with invasive species. Find a different route and don't forget to report your sighting.

### TIP #3 REPORT SIGHTINGS

Before your next hunting or fishing trip, download the free EDDMapS West invasive species reporting app for Android and iPhone. If you spot an invasive species when you're in the field or on the river, use the app to report it. It's fast and easy, and can make a big difference. Reports are instantly sent to the appropriate authorities for verification. Visit [apps.bugwood.org/apps/mrwc](https://apps.bugwood.org/apps/mrwc) to download the app.

### TIP #4 BUY WEED-FREE

The next time you plan to pack up your horses and mules and head into the backcountry, begin feeding your animals certified weed-free forage products at least three days before and throughout your trip. In fact, many public lands require the use of certified weed-free hay, straw, and grain. For a list of certified weed-free forage suppliers, visit your state Department of Agriculture's website.



### TIP #5 DON'T MOVE FIREWOOD

Invasive insects and diseases kill many millions of trees every year. These invaders are easily transported to new areas in firewood and aren't always visible to the naked eye. To help protect our nation's forests and trees, always buy your firewood as close as possible to where you will burn it.

### TIP #6 WHEN USING LIVE BAIT, ACT RESPONSIBLY

Follow these simple guidelines to avoid spreading invasive species when using live bait: Buy your bait from a licensed dealer. Dispose of unused bait by throwing it in a trash can at the launch site. Observe restrictions on using live bait; it's illegal in some water bodies. And remember - *never* release fish, bait, or plants into a body of water that they didn't come from.

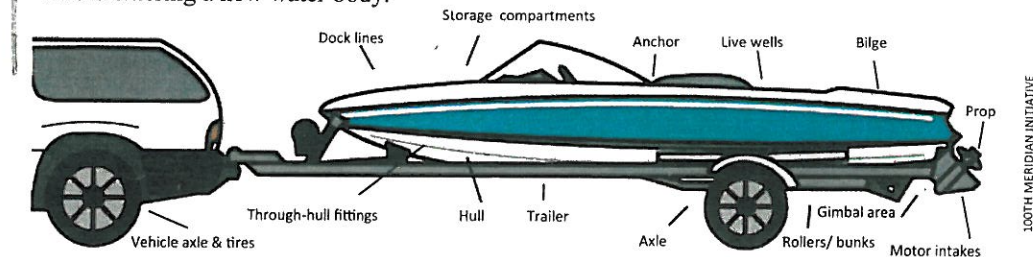
### TIP #7 INSPECT, DRAIN, DRY

Before leaving a body of water, take a few minutes to ensure that you don't spread invasive species.

**INSPECT:** Thoroughly check waders, boots, fishing gear, lures, decoys, boats, trailers, dogs, clothes and anything else that came into contact with water. Remove and dispose of all plant parts, mud, and seeds in a trash can at the access point. If you have access to a power sprayer, hose everything down with the hottest water possible.

**DRAIN:** Remove water from motors, live wells, bait buckets, waders, boots, and any other item that may have collected water.

**DRY:** Dry all equipment in direct sunlight before entering a new water body.



SOUTH MERIDIAN INITIATIVE

Invasive species can go unnoticed in many parts of your vehicle, boat, and trailer. Make sure to do a thorough inspection before transporting.



USDA FOREST SERVICE

Boat inspections are free, quick, and go a long way toward protecting our nation's lakes and rivers from invasive species.

### TIP #8 STOP FOR INSPECTION

Watercraft inspection stations and checkpoints exist to keep lakes and rivers free from invasive species. When you come across an inspection station, cooperate. The inspection won't take more than a few minutes of your time and you can rest assured that your boat and trailer are free of invasive species.

### TIP #9 SPREAD THE WORD

Tell your friends and family about the problems invasive species pose to wildlife and fish habitat and let them know what they can do to help. History has shown that sportsmen will take action when our nation's ecosystems are in danger.



{GET TO KNOW}

# Upland Invaders

Help protect wildlife habitat  
from invasive species



**Common Teasel**

This invader has sharp spines that can injure wildlife and humans. It grows up to 6 feet tall and forms dense patches that destroy wildlife habitat.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Cutleaf Teasel**

This invader has sharp spines that can injure wildlife and humans. It grows up to 8 feet tall and forms dense patches that destroy wildlife habitat.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Houndstongue**

Houndstongue is known for its velcro-like seeds, which stick to clothing and animal fur. It has velvety leaves and purple flowers, and grows up to 4 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Sericea Lespedeza**

This invader out-competes native grasses reducing livestock carrying capacity. It grows up to 6 1/2 feet tall and forms dense patches that reduce wildlife habitat.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Sulfur Cinquefoil**

This invader out-competes native grasses reducing livestock carrying capacity. It grows up to 3 feet tall and forms dense patches that destroy wildlife habitat.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Medusahead**

Named for its twisted, spiky heads, this invasive grass can injure wildlife that try to eat it. From a distance, it looks yellowish-green and shiny.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Saltcedar**

Saltcedar is an invasive tree or shrub that degrades wildlife habitat. It grows up to 20 feet tall and has scale-like leaves and tiny pale pink flowers.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Purple Loosestrife**

Purple loosestrife rapidly takes over wetland areas, destroying wildlife and waterfowl habitat. It has wrinkled purple flowers and grows from 6 to 10 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Phragmites**

This invader forms dense stands that eliminate wildlife habitat. It has large, feathery flower heads and its thick, cane-like stems can reach up to 20 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Reed Canarygrass**

This invader forms dense infestations that reduce biological diversity in wetlands. It grows up to 6 feet tall and its flowers can be green, purple, or brown.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Yellow Flag Iris**

Although beautiful to look at, all parts of this invader are poisonous. It has large yellow flowers, long fan-like leaves, and grows up to 4 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Flowering Rush**

Triangular stems are the best way to identify this invader, which doesn't always flower. It grows up to 5 feet tall along shorelines, but can also grow underwater.

**IF YOU SEE IT** Report it with the EDDMapS West app.

### Prevention Tips

→ Before leaving an area, remove all visible seeds and plant parts from clothing, shoes, dogs, packs, equipment, and truck and ATV tire treads and undercarriages. → Avoid driving and hiking through areas infested with invasive plants. → If you spot an invasive species, report it!

COMMON & CUTLEAF TEASEL: BRENT MEYER/LANCASTER COUNTY, NE; HOUNDSTONGUE: KRISTI PAUL/SHERIDAN COUNTY, NE; SERICEA LESPEDEZA: DAN TENAGLIA/MISSOURIPLANTS.COM/BUGWOOD.ORG; SULFUR CINQUEFOIL: BRENT MEYER/LANCASTER COUNTY, NE; MEDUSAHEAD: STEVE DEWEY/UTAH STATE U./BUGWOOD.ORG

{GET TO KNOW}

# Wetland Invaders

Help protect fish and wildlife  
habitat from invasive species



**Saltcedar**

Saltcedar is an invasive tree or shrub that degrades wildlife habitat. It grows up to 20 feet tall and has scale-like leaves and tiny pale pink flowers.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Purple Loosestrife**

Purple loosestrife rapidly takes over wetland areas, destroying wildlife and waterfowl habitat. It has wrinkled purple flowers and grows from 6 to 10 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Phragmites**

This invader forms dense stands that eliminate wildlife habitat. It has large, feathery flower heads and its thick, cane-like stems can reach up to 20 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Reed Canarygrass**

This invader forms dense infestations that reduce biological diversity in wetlands. It grows up to 6 feet tall and its flowers can be green, purple, or brown.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Yellow Flag Iris**

Although beautiful to look at, all parts of this invader are poisonous. It has large yellow flowers, long fan-like leaves, and grows up to 4 feet tall.

**IF YOU SEE IT** Report it with the EDDMapS West app.



**Flowering Rush**

Triangular stems are the best way to identify this invader, which doesn't always flower. It grows up to 5 feet tall along shorelines, but can also grow underwater.

**IF YOU SEE IT** Report it with the EDDMapS West app.

### Prevention Tips

→ Inspect, drain, and dry boots, waders, clothing, decoys, equipment, boats, and trailers before transporting. → Never release fish or bait into a body of water that it didn't come from. → Observe boat inspection stations. → If you spot an invasive species, report it!

SALT CEDAR: MISSOURI RIVER WATERSHED COALITION; PURPLE LOOSESTRIFE: JOHN BYRD/MISSISSIPPI STATE U.; PHRAGMITES: JOSEPH DITOMASO/U. OF CALIFORNIA-DAVIS; REED CANARYGRASS: LESLIE MEHRHOFF/U. OF CONNECTICUT; YELLOW FLAG IRIS: NANCY LOWENSTEIN/AUBURN U.; FLOWERING RUSH: LESLIE MEHRHOFF/U. OF CONNECTICUT. ALL PHOTOS COURTESY OF BUGWOOD.ORG



{GET TO KNOW}

# Aquatic Invaders

Help protect fish and wildlife habitat from invasive species



### Zebra & Quagga Mussels

These tiny mussels form large, cluster-like colonies on water pipes, boating equipment, and other hard surfaces. They cause serious damage to aquatic ecosystems.

**IF YOU SEE IT** Report it at [www.neinvasives.com](http://www.neinvasives.com)



### Rock Snot (Didymo)

This invasive algae forms thick mats that damage fish and insect habitat. It can be brown, grey, or white, and its texture resembles wet toilet paper.

**IF YOU SEE IT** Report it at [www.neinvasives.com](http://www.neinvasives.com)



### Asian Carp

Due to their large size, huge appetite, and ability to reproduce rapidly, Asian carp (including: black, grass, common, and silver carp) pose serious threats to native fish species.

**IF YOU SEE IT** Report it at [www.neinvasives.com](http://www.neinvasives.com)



### Hydrilla

Hydrilla forms dense, floating mats that reduce water flow and damage fish habitat. It grows primarily underwater and has numerous feathery green leaves.

**IF YOU SEE IT** Report it with the EDDMapS West app.



### New Zealand Mudsnail

Despite its tiny size, this invader can reproduce rapidly, crowding out the native species that fish and wildlife depend on for food and shelter.

**IF YOU SEE IT** Report it at [www.neinvasives.com](http://www.neinvasives.com)



### Eurasian Watermilfoil

Much like hydrilla, this invader forms dense, floating mats that alter water quality and destroy fish habitat. It has long, floating stems with thread-like leaves.

**IF YOU SEE IT** Report it with the EDDMapS West app.

#### Prevention Tips

→ Inspect, drain, and dry waders, boots, fishing equipment, decoys, bait buckets, boat, and trailer before transporting. → Never release fish or bait into a body of water that it didn't come from. → Always dispose of live bait properly. → If you see an invasive species, report it!

**ZEBRA & QUAGGA MUSSELS:** US FISH & WILDLIFE SERVICE; **ROCK SNOT:** TIM DALEY/PENNSYLVANIA DEPT. OF ENVIRONMENTAL PROTECTION; **ASIAN CARP:** AUBURN U.; **EURASIAN WATERMILFOIL:** ALISON FOX/U. OF FLORIDA/BUGWOOD.ORG; **NEW ZEALAND MUDSNAIL:** PAUL CHIN/SAN FRANCISCO CHRONICLE; **HYDRILLA:** LESLIE MEHRHOFF/U. OF CONNECTICUT/BUGWOOD.ORG.

## RIDE. CLEAN. GO.

Stop Invasive Species In Your Tracks.



### Help Prevent The Spread Of Invasive Plants And Animals

- Arrive with clean gear.
- Burn local or certified firewood.
- Use local or weed-free hay.
- Stay on the trails.
- Before leaving, remove mud and seeds.



STOP INVASIVE SPECIES IN YOUR TRACKS.  
[PlayCleanGo.org](http://PlayCleanGo.org)

### Web Resources

Play Clean Go  
[www.playcleango.org](http://www.playcleango.org)

Nebraska Weed Control Association  
[www.neweed.org](http://www.neweed.org)

Nebraska Invasive Species Program  
[www.neinvasives.com](http://www.neinvasives.com)

North American Invasive Species Management Assn  
[www.naisma.org](http://www.naisma.org)

Center for Invasive Species Management  
[www.weedcenter.org](http://www.weedcenter.org)

Center for Invasive Species and Ecosystem Health  
[www.invasive.org](http://www.invasive.org)

100th Meridian Initiative  
[www.100thmeridian.org](http://www.100thmeridian.org)

Aquatic Nuisance Species Task Force  
[www.anstaskforce.gov](http://www.anstaskforce.gov)

## Sportsman's Guide

to Invasive Species

Produced by the Center for Invasive Species Management (Montana State University) and the Missouri River Watershed Coalition.

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STOP INVASIVE SPECIES IN YOUR TRACKS.

[PlayCleanGo.org](http://PlayCleanGo.org)



Photo courtesy of NEBRASKAland Magazine/Nebraska Game and Parks Commission



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