

ANNUAL REPORT 2024

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Approved on December 13, 2024.

Cover Photo: Henry, Scotts Bluff County.

Photos that appear on p. 2, 5, 6, 7, 9, 11, 13, 14, 15, 16, 17, and 18 courtesy of *Nebraskaland* Magazine/Nebraska Game and Parks Commission.

Photos that appear on the cover and p. 1, courtesy of Gary Stone, and the photos that appear on p. 3, 4, 5, 8, 9, 10, 12, 13, and 19, courtesy of Shannon Smith.

North Platte River Henry, Scotts Bluff County

What Are Invasive Species?

Invasive species are organisms that live in water or on land **not native** to the region that **cause economic or biological harm** and **can spread to new areas**.

Humans introduce invasive species.







~37,000 invasive species introduced globally.

- Decrease native species populations
- Degrade ecosystems, biodiversity, and habitats
- Reduce crop yields and livestock grazing pastures
- Threaten food security, water availability, and human health
- Costs us \$423 billion annually, increasing 4x/year

Leafy spurge Euphorbia esula

Nebraska's Unique Landscape and Resources

From rolling plains and sand dunes to lush river valleys and wetlands, Nebraska's landscape is a tapestry of diverse grasslands ecoregions that provide recreation, agriculture, wildlife habitat, and a wealth of other natural resources that support our economy, environment, and communities.



23 million acres of rangeland and pastureland



79 thousand miles of rivers with 197 miles designated as wild and scenic



1.3 million acres of publicly accessible lands



Over 6 million migratory birds visit the state each year



Over \$31 billion

generated from agricultural production in 2022

Smith Falls State Park Valentine, Cherry County

Nebraska Invasive Species Council (NISC)

"[The] NISC plays a very important role in conservation by ensuring native habitats stand a fighting chance..."

- Kassie Karssen, U.S. Fish and Wildlife Service Representative

Our Objectives:

- Recommend action to minimize the effects of harmful invasive species on Nebraska's citizens in order to promote the economic and environmental well-being of the state
- Develop and periodically update a statewide adaptive management plan for invasive species
- Serve as a forum for discussion, identification, and understanding of invasive species issues
- Facilitate the communication, cooperation, and coordination of local, state, federal, private, and nongovernmental entities for the prevention, control, and management of invasive species
- Assist with public outreach and awareness of invasive species issues
- Provide information to the Legislature for decision making, planning, and coordination of invasive species management and prevention

Our Mission:

Advise Nebraska's Governor and Legislature on invasive species management strategies to protect the state's resources.



Nebraska National Forest Halsey, Thomas County

NISC By The Numbers

How we served as a forum for discussion. identification, and understanding of invasive species issues for our state this year:

27 members from over 20 organizations, including 2 private landowners.

+ 77 reported invasive species sightings received on our website from 22 counties.

visits to our official website, neinvasives.com.

council meetings held throughout Lincoln with virtual and in-person attendance.



Left to right: Members Blayne Renner, John Thorburn, Steven Jara, Kim Todd, Carson Jones, Trevor Johnson, and Josh Nelson on a Backyard Farmer Garden Tour in Lincoln, October 2024.

Russian Olive Elaeagnus angustifolia

Making a Splash in Aquatic Invasive Species Control

How we **facilitated the communication**, **cooperation**, **and coordination** of local, state, federal, private, and nongovernmental entities for the **prevention**, **control**, **and management** of aquatic invasive species:

miles of Nebraska's rivers and tributaries treated.

waterbodies across Nebraska treated and/or surveyed for aquatic invasive species.



aquatic invasive plants, fish, and invertebrates targeted.

organizations worked together to fund and/or implement treatment strategies.

100%

of hybrid Eurasian watermilfoil eliminated after being treated with aquatic herbicide ProcellaCOR by NGPC AIS staff at Iron Horse Lake in North Platte this summer.

\$460,000+ spent on aquatic invasive species

management, surveying, sampling, mapping, and monitoring.

Silver Carp Hypophthalmichthys molitrix

Keeping Aquatic Invasive Species At Bay

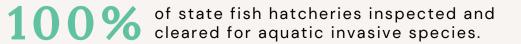
The Nebraska Game and Parks Commission's Aquatic Invasive Species (AIS) Program made waves this boating season, smashing records and keeping Nebraska's waters pristine. From Memorial Day to Labor Day, their nine seasonal inspectors conducted a whopping **8,258 watercraft inspections—the most in state history**.

Using a roving inspection system, the team focused on 38 waterbodies, targeting high-risk areas where aquatic invaders like zebra mussels, could sneak in. Alongside inspecting boats, AIS biologists collected and analyzed over 200 water samples from 69 waterbodies, meticulously checking for zebra mussel larvae. The verdict? **Zero new zebra mussel introductions—a win for Nebraska waters!**

8,258 watercraft inspections over 38 waterbodies across the state.

200 water samples analyzed from 69 waterbodies.

aquatic vegetation surveys conducted.





Dreissena polymorpha

Wiping Out Terrestrial Invasive Species

How we **facilitated the communication**, **cooperation**, **and coordination** of local, state, federal, private, and nongovernmental entities for the **prevention**, **control**, **and management** of terrestrial invasive species:

\$1.7+ million

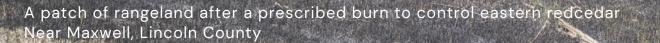
spent on terrestrial invasive species monitoring, mapping, management, surveying, and control.

123 invasive species management projects completed.

120K+ acres treated on public/private lands to manage or prevent terrestrial invasive species.

> terrestrial invasive species targeted through chemical, mechanical, and biocontrol treatment methods.

organizations collaborated to fund and/or control invasive species.





Four new plants

added to Nebraska Department of Agriculture's (NDA) prohibited noxious weed seed list, including ventenata (shown above with coordinator Shannon Smith in Missoula, MT.)

Eastern Redcedar Juniperus virginiana

Tackling Invasive Plants on Public Lands

In 2024, Nebraska Game and Parks Commission (NGPC) made significant strides in managing invasive species on Wildlife Management Areas (WMAs) across the state. **Crews completed around 180 projects, treating 75,000 acres in at least 68 counties**. Their tools? Everything from prescribed burns and herbicides to mowing, grazing, and mechanical tree removal.

The primary culprits? Eastern redcedar, Russian olive, smooth brome, common reed, and other invaders threatening wetlands and grasslands.

With a team of 75, **efforts were fueled by \$2.4 million in grants, cash matches, and partnerships** like Pheasants Forever, which contributed \$50,000 through the "Habitat Share" program. Despite challenges, including funding gaps, NGPC's innovative strategies are keeping Nebraska's WMAs healthier and more sustainable for wildlife and people alike.



An area affected by both common reed and eastern redcedar invasion.

The Cost of Cedars on Our Rangelands

Eastern redcedar is spreading across the Great Plains, replacing grasslands with dense tree cover that **displaces wildlife**, **reduces streamflow**, **increases wildfire risk**, **and cuts rangeland productivity by up to 75%**. Restoring rangeland is costly, with **removal averaging \$150 per acre in the Sandhills—\$150,000 for just 1,000 acres**—and even higher in heavily invaded areas like southwestern Nebraska.

Ponderosa pine (*Pinus Ponderosa*) forest in Nebraska National Forest Halsey, Thomas County

Focusing on Community Forest Health

Nebraska is home to nearly 1.3 million acres of timberland, and our diverse woodlands produce over 1 million tons of wood annually. The Nebraska Forest Service is taking critical steps to safeguard Nebraska's rural and urban forests against the growing threat of invasive species. Outreach programs educated communities about pests like the emerald ash borer (EAB) and pine engraver beetles, while direct actions in Sioux and Dawes counties led to the inventory of 5,500 acres and treatment of 350 acres of invasive plants.

The U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) also **released EAB biocontrols at key locations throughout the state**, including Mormon Island State Recreation Area near Grand Island, AG Park in Columbus, and Black Elk Park in Blair.

Efforts like these are equipping communities to manage these threats, but continued action is essential to preserve forest health and resilience.

Prevent EAB in Our Trees

EAB has destroyed millions of ash trees, causing massive damage to landscapes and forests, with financial losses in the millions. To help prevent its spread, avoid moving ash tree materials, firewood from any hardwood species, and follow quarantine regulations.



Emerald ash borer next to its tracks. Photo courtesy of Troy Kimoto, Canadian Food Inspection Agency, Bugwood.org



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ALL & A MARK IMAL Making Invasive Species Known

How we assisted with public outreach and awareness of invasive species issues this year:

education and outreach events participated in.

37K+ participants interacted with.

materials disturbed on invasive species education.

2025-2027 Adaptive Management Plan

The NISC submitted their latest Adaptive Management Plan in October to the Legislature with three goals and 11 objectives to focus on over the next three years.

FOR MORE INFORMATION: **OUTDOORNEBRASKA.GOV**

Member Kris Stahr (far right) with NGPC discussing aquatic invasive species awareness and prevention for KOLN 10/11 News' Pure Nebraska program in Lincoln, June 2024.

NITE DASKA

Musk Thistle Carduus nutans

Educating Others On Invasive Species Control

With 3,700 acres of Platte River Prairies and 56,000 acres at the Niobrara Valley Preserve under their care, The Nature Conservancy (TNC) empowered land managers and advisors through specialized prairie plant identification and habitat workshops this summer. **Over four sessions, 140 participants**, including representatives from Pheasants Forever, Natural Resource Conservation Service, Nebraska Game and Parks Commission, and the National Audubon Society, gained valuable skills to identify native and invasive plant species as well as tips for how to control them.

TNC is actively managing invasive plant populations across 70,000 acres of their lands in Nebraska. By combining hands-on training with large-scale land management, they're protecting vital ecosystems and ensuring these landscapes remain rich habitats for generations to come.



TNC's Chris Helzer showing participants invasive intermediate wheatgrass at the habitat workshop at Platte River Prairies in Wood River, August 2024.

"The increasing abundance and density of deciduous woody plants (native and nonnative) is going to be a second 'green wave' that will affect both agriculture and conservation interests in grasslands. [We need to] build awareness of the spread before it reaches the state we're in with eastern redcedar and begin learning more about how to manage shrubbier grasslands for production and biodiversity."

- Chris Helzer, The Nature Conservancy Representative

Sharing Success to Protect Nebraska's Waterways

In October, NISC Coordinator Shannon Smith and Chairperson Brent Meyer represented Nebraska at the 32nd Annual North American Invasive Species Management Association (NAISMA) Conference in Missoula, Montana. The sold-out event drew 459 attendees from across the globe to celebrate collaboration and partnerships.

The Nebraska Weed Control Association (NWCA) sponsored the event, sharing efforts to manage noxious weeds. **Meyer highlighted Nebraska's \$3 million annual investment in managing invasive vegetation along 80,000 miles of waterways**. These efforts have improved water flow, supported wildlife, protected infrastructure, and ensured compliance with water-sharing agreements between Nebraska, Colorado, and Kansas—all thanks to strong partnerships and proactive management.

Without Clear Waterways

Common reed (Phragmites australis), also known as phragmites, a noxious weed in Nebraska, threatens wetlands and waterways by forming dense, towering clusters that outcompete native plants and block water flow. Its deep roots choke canals and disrupt rivers, endangering ecosystems and water movement. Active management is essential to control its spread and protect these vital resources. Common Reed Phragmites australis



Left to right: NWCA members Mike Reed, Greg Shuck, Scott Erthum, Brent Meyer (front), Josh Nelson, Todd Boller (front) and Rob Schultz at their NAISMA booth.

Moving Forward to Protect Our Resources

The NISC is committed to protecting its ecosystems and economy from the harmful impacts of invasive species. To achieve this, we will focus on three priority actions: **improving statewide coordination**, advising **legislation**, and enhancing public outreach.

Strengthen Statewide Communication and Coordination

Goal:

Promote effective communication and collaboration across local, state, and federal organizations to prevent, detect, and manage invasive species.

Actions:

- Identify key personnel and create a network for rapid response.
- Maintain a database of regulations to address gaps in current invasive species policies.
- Host public meetings to share advancements and strategies in invasive species management.

American Bullfrog Lithobates catesbeianus

Advocate for Legislative Action

Goal:

Provide the Legislature with data and recommendations to support informed decision-making and resource allocation for invasive species management.

Actions:

- Deliver annual reports on progress and policy needs.
- Maintain a list of experts to guide legislative efforts.
- Invite policymakers to council meetings and educational sessions.

Educate the Public and Stakeholders

Goal:

Raise awareness and equip stakeholders with knowledge and resources to prevent and control invasive species.

Actions:

- Create and share watch lists of harmful invasive species.
- Promote local and statewide prevention programs.
- Keep online resources updated and address gaps in funding and information.

By working together—government agencies, private organizations, and the public—we can limit the spread of harmful invasive species and protect Nebraska's future.

Our Voting Members (Governor-Appointed)

Steven Jara

Nebraska Forest Service of the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources

Trevor Johnson Nebraska Department of Agriculture

Justin King Nebraska Public Power District

Brent Meyer, Council Chairperson Nebraska Weed Control Association Jonathan Nikkila Public Interests Member At Large

Dennis Schroeder Agricultural Landowner Interests Member At Large

Dr. Jonathan Spurgeon Nebraska Cooperative Fish and Wildlife Research Unit of the University of Nebraska-Lincoln

Kristopher Stahr Nebraska Game and Parks Commission **Kimberly Stuhr** Agricultural Landowner Interests Member At Large

John Thorburn Nebraska Association of Resources Districts

Kim Todd Public Interests Member At Large

Smooth Brome Bromus inermis

Our Non-Voting, Ex Officio Members

Travis Connot Midwest Region of the National Park Service of the United States Department of the Interior

Chris Helzer The Nature Conservancy Nebraska Field Office

Justin Krahulik United States Geological Survey

Ritch Nelson Natural Resources Conservation Service of the United States Department of Agriculture

David Nielsen Animal and Plant Health Inspection Service of the United States Department of Agriculture

Common Mullein Verbascum thapsus

Our Advisory Support Members:

Dr. Natalia Bjorklund Nebraska Department of Agriculture

Jeremy Gehle Nebraska Department of Natural Resources

Lorri Grueber City of Lincoln

Carson Jones Nebraska Department of Transportation

Kassie Karssen United States Fish and Wildlife Service

Mitch Renteria United States Fish and Wildlife Service **Bret Schoner** United States Army Corps of Engineers

Shannon Smith, Coordinator Nebraska Invasive Species Council

Gary Stone University of Nebraska Extension

James Thiele Omaha Public Power District

T.J. Walker Nebraska Game and Parks Commission

Jennifer Weisbrod University of Nebraska-Lincoln

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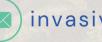
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NEBRASKA INVASIVE SPECIES COUNCIL

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