NEBRASKA INVASIVE SPECIES COUNCIL 2021 LEGISLATIVE REPORT



Report Recipients: Governor Pete Ricketts and Members of the Agriculture and Natural Resources Committees of the Nebraska Legislature

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Overview

This report was developed per the requirements outlined in Nebraska Statute 37-1406 (2). Legislative Bill 391 was passed by the Nebraska Unicameral on March 30, 2012 and signed into law by Governor Dave Heineman on April 10, 2012.

Nebraska Statute 37-1403 created the Nebraska Invasive Species Council (NISC) and Nebraska Statute 37-1404 charged it with the following objectives:

- 1. Recommend action to minimize the effects of harmful invasive species on Nebraska's citizens to promote the economic and environmental well-being of the state.
- 2. Develop and periodically update a statewide adaptive management plan for invasive species as described in Section 15 of this act.
- 3. Serve as a forum for discussion, identification, and understanding of invasive species issues.
- 4. Facilitate the communication, cooperation, and coordination of federal, state, local, private, and nongovernmental entities for the prevention, control, and management of invasive species.
- 5. Assist with public outreach and awareness of invasive species issues.
- 6. Provide information to the Legislature for decision-making, planning, and coordination of invasive species management and prevention.

This report provides an evaluation of progress made in the preceding year by NISC as called for in Nebraska Statute 37-1406 (2). Learn more about NISC on its <u>webpage</u>.

Voting Members		
Name	Agency/Affiliation	
Arnold Stuthman	Public Interest Member (Agricultural Interest)	
Brent Meyer	Nebraska Weed Control Association	
Craig Allen	University of Nebraska-Lincoln (UNL)	
Dennis Schroder	Public Interest Member (Agricultural Interest)	
John Thorburn	Nebraska Association of Resources Districts	
Jonathan Nikkila	Public Interest Member	
Justin King	Nebraska Public Power District	
Kevin Pope	Nebraska Coop Fish & Wildlife Research Unit, UNL	
Kim Todd	Public Interest Member	
Kimberly Stuhr	Public Interest Member (Agricultural Interest)	
Kristopher Stahr	Nebraska Game and Parks Commission	
Mitch Coffin	Nebraska Department of Agriculture	
Steven Jara	Nebraska Forest Service of the University of Nebraska	
	Non-Voting Members	
Allison Zach	Nebraska Invasive Species Program, UNL	
Brenda Densmore	US Geological Survey	
Carmen Thomson	National Park Service, Midwest Region	
Chris Helzer	The Nature Conservancy	
Chris Vrtiska	Omaha Public Power District	
Cindy Stuefer-Powell	USDA Animal and Plant Health Inspection Service	
Gary Stone	University of Nebraska, Extension	
Jeff Runge	US Fish & Wildlife Service	
Jennifer Weisbrod	Pesticide Safety Education, UNL Extension	
Jeremy Gehle	Department of Natural Resources	
Joanne Grady	US Fish & Wildlife Service	
Julie Van Meter	Nebraska Department of Agriculture	
Kelsey Jolley	US Army Corps of Engineers	

2021 Nebraska Invasive Species Council Members

Non-Voting Council Members	
Name	Agency/Affiliation
Mike Koenig	Omaha Public Power District
Ritch Nelson	USDA Nebraska Natural Resource Conservation Service
Tom Heatherly	Nebraska Department of Environment and Energy
TJ Walker	Nebraska Game and Parks Commission

Nebraska Invasive Species Council 2021 Activities

The Governor appointed all NISC's voting positions in 2021. NISC also added many new non-voting members. NISC meetings were held virtually and in person in 2021 due to the COVID-19 pandemic. Meeting agenda and attendance details were placed on NISC's <u>webpage</u> and emailed to a distribution list before each meeting. NISC continued activities focused on accomplishing the objectives stated in Nebraska Statute 37-1404.

NISC is charged with conducting outreach to increase awareness and prevention of priority invasive species of concern to Nebraska. NISC members created and disseminated invasive species printed outreach materials and other outreach items to resource agencies' staffs, target audiences, and the public to promote early detection, prevention, and management of invasive species. NISC members developed invasive species ads and outreach materials using the <u>PlayCleanGo</u> outreach campaign to educate the public how to prevent the spread of invasive species while recreating.

NISC members attended local, regional, and international virtual and in-person conferences and meetings to learn about

and present on various invasive species topics. NISC members briefed the Council with updates and updated its website. NISC members also presented to various audiences including Nebraska Lakes Association, Nebraska Weed Control Association, Conservation Nebraska, and Nebraska Game and Parks Commission (NGPC). In 2021, Nebraska Invasive Species Program (NISP) and NGPC recorded presentations given during Nebraska Invasive Species Awareness Week. Those recordings can be accessed here.

Stop Invasive Species In Your Tracks







National Invasive Species Awareness Week (NISAW) Webinar Series

NEBRASKA - Gane 🕞 ParksFebruary 22-26, 2021 10AM CENTRAL TIME ZOOM EVENT- PRE-REGISTRATION REQUIRED



NISC members and their agencies and affiliates conducted invasive species surveys throughout the state to assess the range of a variety of invasive species. Additionally, the public can report suspected invasive species at the <u>NISP website</u>. In 2021, 62 suspected invasive species sightings were received via the website and were addressed by NISC members and other experts.

Terrestrial Invasive Species Infestations, Prevention, and Management Efforts

The spotted lanternfly (SLF) (Lycorma delicatula) was recently confirmed in Kansas see photos to right. SLF can be harmful to grape, apple, hop, peach and other stone fruit production by feeding on sap from stems, leaves, and trunks learn more here. SLF is primarily spread long distances when females lay egg masses on trains, semitrucks, various other vehicles, and products. The Nebraska Department of Agriculture (NDA) has been conducting visual surveys since 2019 to find SLF on Tree-of-Heaven (Ailanthus altissima), an invasive tree species. Many NISC members including the Nebraska USDAs' Animal and Plant Health Inspection Service Plant Protection and Quarantine Program (NE APHIS-PPQ), have conducted outreach to the public and resource agencies to increase early detection efforts. SLF is most visible July to October as an adult, about 1 inch long, gray with black spots, and bright red underwings see photos to right. If you suspect finding a SLF in Nebraska, take a photo of the insect, collect, or kill it, and report it here.

Emerald ash borer (EAB) (Agrilus planipennis) is a small,

invasive insect that damages North American native ash tree species, primarily in its larval stage. Heavy infestations can kill trees learn more <u>here</u>. NISP members conducted outreach to the public and resource agencies' staffs on options for ash tree treatment, removal, and replacement learn more <u>here</u>. NDA and NE APHIS-PPQ also continued trapping and visual surveys throughout the state in 2021. NE APHIS-PPQ has released EAB biocontrol agents in Nebraska since 2019 learn more <u>here</u>.

NE APHIS-PPQ conducts the Japanese Beetle (JB) (*Popillia japonica*) Harmonization Program at the Eppley Airport learn more <u>here</u>. In November 2021, a JB biocontrol (*Ovavesicula popilliae*) was dispersed in the Eppley Airport area. Nebraska has released this biocontrol agent at the Eppley Airfield since 2016 and infected JB have been found in the area.

The NISP received several new reports of jumping worms (*Amynthas* spp.) in 2021, and many NISC agencies provided outreach to the public about them. Individuals are encouraged to report suspected sightings <u>here</u> so their distribution in Nebraska can be determined. Much is unknown about these worms, but research is underway to determine their impacts and management options.





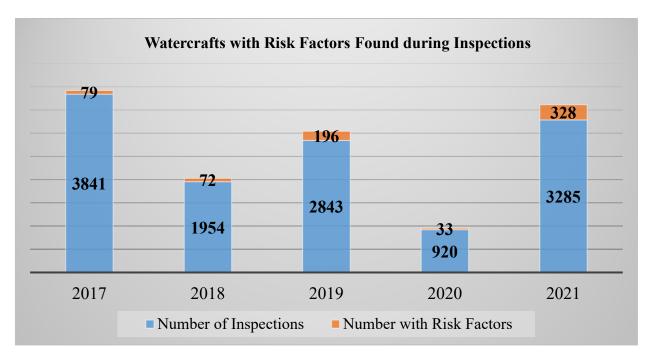


In the early summer of 2021, it was reported that several sites in Nebraska ordered Boxwoods from an online company that may have been invested with the <u>Box Tree Moth</u>. An invasive moth from a Canadian Nursery Source. NE USDA PPQ put out traps and checked them throughout the possible lifecycle(s) of these species, from July to October 2021. No Box Tree Moths were found.

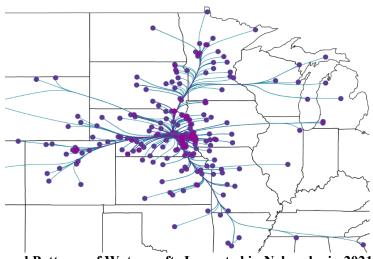
Aquatic Invasive Species Infestations, Prevention and Management Efforts

There are several <u>aquatic invasive species</u> (AIS) that threaten Nebraska's natural resources. Prevention is key to protecting our waterbodies from AIS, and many of the NISC member agencies conducted outreach and field work to increase AIS awareness for early detection of new infestations. 2021 marked the first full year NGPC had a fully staffed AIS Program to increase the capacity for AIS efforts in Nebraska. As the lead agency for AIS, NGPC urges the public to report AIS sights to (402) 471-7602 or <u>ngpc.AIS@nebraska.gov</u>.

Watercraft inspections and AIS outreach have been conducted annually in Nebraska since 2010 to prevent the spread of AIS and learn about boater behaviors. A total of 3,285 watercraft inspections were completed in 2021 by technicians employed by NGPC and NISP. Annual watercraft inspections have found very high compliance with Clean, Drain, and Dry procedures, which are key to preventing the spread of AIS in Nebraska. The graph below shows the number of watercrafts inspected annually and the number that were considered high risk. Risk factors included water on board, organisms or vegetation attached, or a dirty vessel. Risk factors increase the likelihood of a watercraft moving an AIS. The high compliance rates among watercraft users in Nebraska reflect the resources and time spent conducting outreach and watercraft inspections by NISC members, including U.S. Fish and Wildlife Service, NGPC, U.S. Army Corps of Engineers, Nebraska Public Power District, NISP, U.S. Bureau of Reclamation, and other agencies. Watercraft inspection and AIS outreach have effectively changed boater behaviors and prevented the spread of AIS into more Nebraska waterbodies learn more here.



NGPC and NISP AIS technicians have entered watercraft inspection and decontamination findings into the Watercraft Inspection and Decontamination (WID) data sharing system since 2019. The system is used by watercraft inspectors and state and federal agencies and organizations internationally to conduct risk assessments and increase AIS prevention. See photo to right created from Nebraska's 2021 WID data. Learn more here.



Travel Patterns of Watercrafts Inspected in Nebraska in 2021

Zebra and quagga mussels (*Dreissena* spp.) are particularly devastating to surface water systems and can have ecosystem-level impacts to native species. NISC members U.S. Fish and Wildlife Service, USDA APHIS, NGPC, NISP, and other agencies coordinated in response to zebra

mussels being confirmed in containers with moss balls in March 2021. Moss balls were sold at pet stores and retailers across the United States and online to put them in freshwater fish tanks and water gardens. NGPC AIS staff subsequently found infested products photo to right and inspected all pet stores in the state. NGPC Law Enforcement staff confiscated infested products and transferred them to Federal Law Enforcement. U.S. Fish and Wildlife Service and USDA APHIS have made new policy and increased security at international ports to ensure zebra mussels and other AIS are not distributed with imported plant materials. Learn more here.



Moss Ball with a Zebra Mussel

Zebra and quagga mussel sampling was conducted by the NGPC, Nebraska and Omaha Public Power Districts, U.S. Bureau of Reclamation, and U.S. Army Corps of Engineers at more than 40 waterbodies in 2021. Zebra mussels were not found in any new waterbodies and Nebraska currently has 3 infested waterbodies which is far fewer than many surrounding states learn more here. Quagga mussels have not been confirmed in Nebraska to date. Finally, the NGPC Fisheries staff and University of Nebraska-Lincoln graduate students conducted sampling for invasive silver and bighead carp (*Hypophthalmichthys* spp.) to verify their ranges in Nebraska learn more <u>here</u>.

Invasive Plant Infestations, Prevention, and Management Efforts

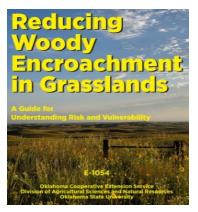
NGPC conducted the first known systematic aquatic vegetation surveys on Nebraska waterbodies by any State entity in 2021. Eurasian Watermilfoil (*Myriophyllum (M.) spicatum*) an invasive plant that forms dense mats, was confirmed in 15 new waterbodies and the majority of those appeared to be Eurasian Watermilfoil hybrid (*M. spicatum* \times *M. sibiricum*) which can be more aggressive and herbicide resistant learn more <u>here</u>. NGPC is working with Montana State University to conduct genetic analyses to confirm Hybrid Watermilfoil infestations and

informfuture management efforts. A new infestation of Brittle Naiad (*Najas minor*) was found in Kramer Lake, while Water Lettuce (*Pistia stratiotes*) and Water Hyacinth (*Eichhornia crassipes*) infestations were found in Wilber Reservoir. NGPC is working to develop vegetation management plans for infested waterbodies. Contact <u>ngpc.AIS@nebraska.gov</u> with questions.

In 2021, NISC had many meeting presentations and conversations regarding invasive plant species, their control, and research efforts to manage them. NISC plant experts met in fall 2021 to make updates to the Weed Watch List and it can be found <u>here</u>. It is used by county weed authorities throughout the state to monitor the range of various invasive or problematic plant species. NISC members created and distributed invasive plant outreach materials to the public and resource agencies' staffs to increase early detection of new infestations. A new <u>woody</u> <u>species management guide</u> was authored by University of Nebraska-Lincoln researchers Dirac Twidwell and Dillon Fogarty and Oklahoma State University to educate land managers and property owners on management techniques for problematic and invasive plant species photo to the right.



Boat Propeller with Eurasian Watermilfoil



Nebraska Invasive Species Council Legislative Recommendations

NISC recommends continuation of the council with no modifications. This recommendation is due to the success of NISC in coordinating invasive species management, research, and prevention efforts and providing training and outreach materials to resource staff and the public. These efforts help in early detection and rapid response to contain new invasive species infestations. NISC will continue to engage new members and partners. Furthermore, NISC will continue to keep the Governor and appropriate legislative committee(s) apprised of any invasive species issues that arise and warrant attention. Please contact <u>Allison Zach</u>, NISC Coordinator, with any questions or concerns regarding invasive species.