

NEBRASKA INVASIVE SPECIES COUNCIL

2020 LEGISLATIVE REPORT



Report Recipients: Governor Pete Ricketts and Members of the Agriculture Committee 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 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 in order 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 the Nebraska Invasive Species Advisory Council as called for in Nebraska Statute 37-1406 (2). Learn more about the Council here: <https://neinvasives.com/nebraska-invasive-species-council>

2020 Nebraska Invasive Species Council Members

Voting Members	
Name	Agency/Affiliation
Arnold Stuthman	Public Interest Member (Agricultural Interest)
Brent Meyer	Nebraska Weed Control Association
Craig Allen	University of Nebraska-Lincoln
John McGill	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
Mitch Coffin	Nebraska Department of Agriculture
Richard Holland	Nebraska Game and Parks Commission
Steven Jara	Nebraska Forest Service of the University of Nebraska
Non-Voting Members	
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-Lincoln, Extension
Jeff Runge	US Fish & Wildlife Service
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
Kristopher Stahr	Nebraska Game and Parks Commission
Lorrie Grueber	City of Lincoln Forester
Patrick Finigan	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

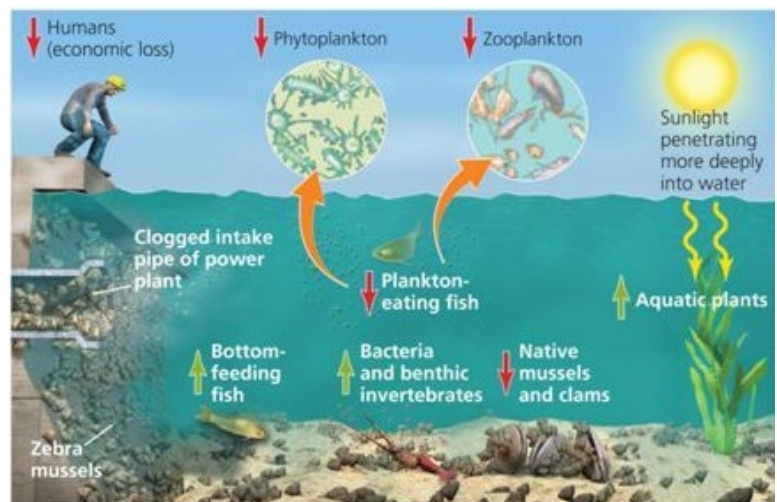
Nebraska Invasive Species Council 2020 Activities

NISC meetings were held monthly in 2020, though meetings didn't occur in April or May due to COVID. The NISC continued activities focused on accomplishing the objectives stated in Nebraska Statute 37-1404. NISC meeting announcements were posted prior to meetings on the Nebraska Invasive Species Program website <https://neinvasives.com/> and emailed to a distribution list. The NISC is charged with conducting outreach to increase awareness of priority invasive species. NISC members disseminated invasive species field guides, outreach materials and brochures to resource agency staff, target audiences and the public to promote early detection and management of invasive species. The public can use the Nebraska Invasive Species Program's website to report invasive species discoveries <https://neinvasives.com>. More than 55 suspected invasive species sightings were received via the website in 2020 and were addressed by NISC members. NISC members attended regional conferences and meetings to learn about and present on invasive species research and management efforts and updated the NISC on pertinent research and management efforts. NISC members presented invasive species identification presentations to various groups including: the Nebraska Lakes Association, the Nebraska Weed Control Association and the Nebraska Nursery and Landscape Association. NISC members and their agencies conducted invasive species surveys throughout the state to assess the range of a variety of species.

Aquatic Invasive Species (AIS) Infestations and Prevention Efforts:

There are a number of AIS that threaten Nebraska's natural resources. Zebra and quagga mussels are particularly devastating to surface water systems as infestations can restrict water movement by clogging infrastructure, in turn creating economic maintenance impacts. Their infestations can also have ecosystem-level impacts to native and desired species.

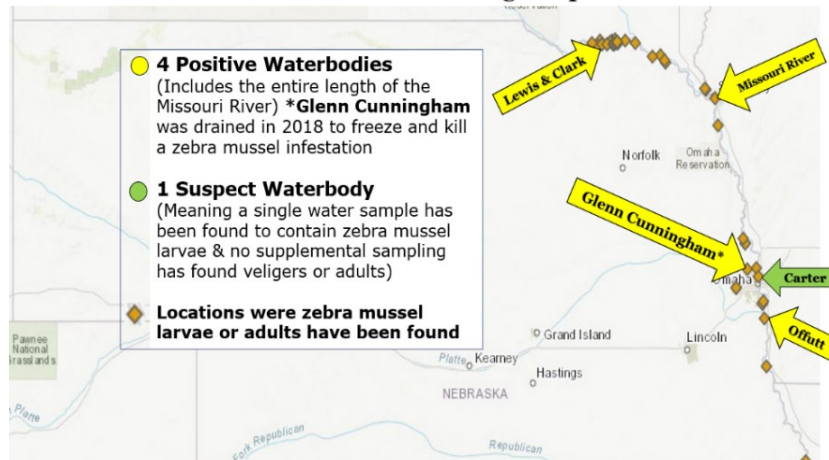
Zebra and quagga mussel sampling was conducted by the Nebraska Game and Parks Commission, Nebraska Public Power District, Bureau of Reclamation and the US Army Corps of Engineers at more than 38 waterbodies in 2020. Zebra mussels were not found in any new waterbodies in 2020 and quagga mussels have not been found in Nebraska to date. Nebraska has one suspect zebra mussel waterbody (which means only a single water sample has been found to have zebra mussel larvae in it) which is Carter Lake in Omaha, NE. The larval zebra mussels were confirmed in October 2020. Nebraska now has 4 zebra mussel positive waterbodies that include: Lewis and Clark Lake (near Yankton, SD), the



(a) Impacts of zebra mussels on members of a Great Lakes nearshore community

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2020 Nebraska Zebra Mussel Range Map



Missouri River, Glenn Cunningham Lake (Omaha, NE) and Offutt Air Force Base Lake (Bellevue, NE). A zebra mussel eradication effort occurred during the winter of 2018 to draw down Glenn Cunningham Lake in Omaha, NE to freeze and kill a new zebra mussel infestation. The reservoir will be closely monitored to determine if the eradication effort was successful.

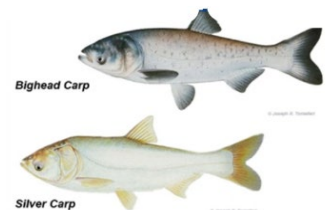
Zebra and quagga mussels can travel on watercrafts, trailers and equipment for up to 2 weeks out of water in the right conditions making them easily transported to infest other waterbodies. Once they are in an open waterbody, there is currently no treatment (other than de-watering the system completely) proven to be successful to eradicate 100% of the population. Prevention is key to protecting our waterbodies from AIS and public outreach is an effective way to teach the public to clean, drain, and dry watercrafts, equipment, and trailers. Many of the agencies in the NISC conduct outreach to increase public knowledge of behaviors to prevent the spread of AIS. NISC members disseminated 25 Boat ramp signs for placement at public and private waterbodies to educate the public on AIS prevention. Over 8,000 AIS prevention cards were disseminated in 2020.



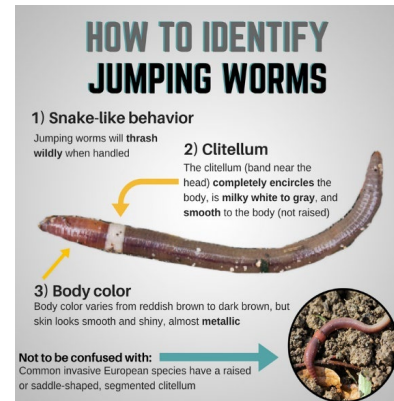
The Nebraska Invasive Species Program has a waterless watercraft clean, drain, dry (CD3) unit at Weigand marina at Lewis and Clark Lake (pictured right). The unit is free for the public to use to clean their watercrafts and equipment to prevent the spread of AIS. Lewis and Clark Lake is infested with zebra mussels and cleaning, draining and drying watercrafts and equipment before launching at another waterbody is key to prevent the spread of AIS. The Nebraska Invasive Species Program is purchasing a trailered CD3 unit that will be placed at high risk waterbodies for free public use. The Nebraska Game and Parks Commission (NGPC) employed 3 AIS technicians that conducted watercraft inspections, decontaminations and outreach to prevent the spread of AIS during the summer of 2020. A total of 915 watercraft inspection were completed. Only 9 of the watercrafts that were inspected in 2020 were not clean, drained and dry which means the majority of boaters were exhibiting AIS prevention behaviors which are vital to prevent the spread of AIS. AIS technicians entered watercraft inspection and decontamination results to the Western Regional Watercraft Inspection and Decontamination (WID) data sharing system to share results of inspections and decontaminations with AIS technicians in other states. 2020 inspection data will be studied to determine the prevalence of AIS prevention behavior among watercraft operators to inform decisions on AIS prevention efforts for 2021.



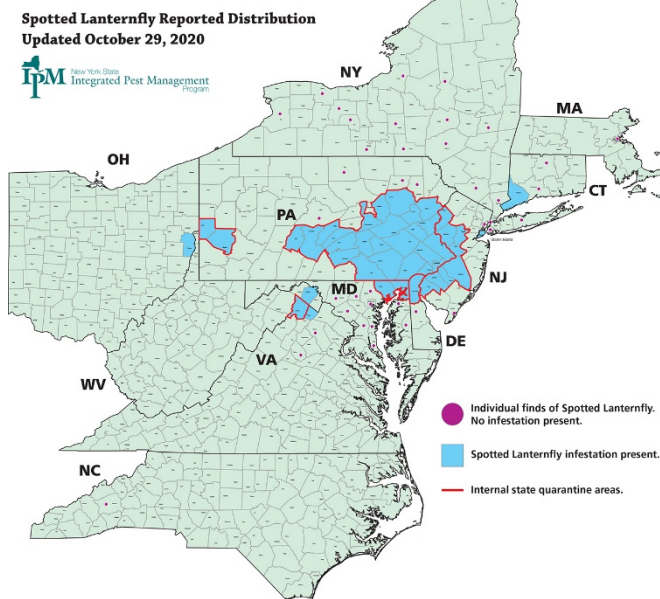
The NGPC Fisheries staff conducted sampling for invasive Asian carp, including silver and bighead carp, to determine their range. A graduate student will be starting in 2021 to conduct an Asian carp sampling project to determine their range in Nebraska. The USGS Water Center conducted a pilot environmental DNA (eDNA) sampling project to detect silver and bighead carp at various stream gauges throughout the state. In summer 2020 the Nebraska Game and Parks Commission hired the full-time Aquatic Invasive Species Program Manager after several years of delays. Kristopher Stahr was selected for the position and began his role on August 31, 2020 and will be the statewide lead for AIS.



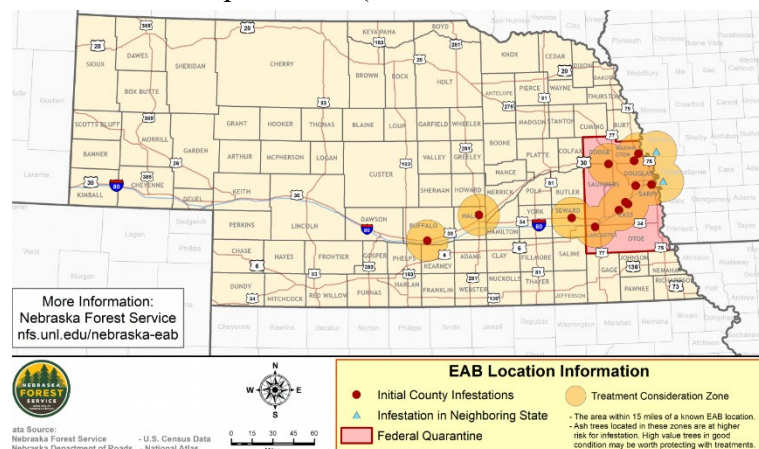
Terrestrial Invasive Species Infestations and Prevention Efforts: The NISC discussed Asian jumping worm (*Amyntas* species and *Metaphire* species) which were identified for the first time in Nebraska via public reports in 2019. People are encouraged to report a finding of these worms at: <https://neinvasives.com/report-a-sighting>. The Asian jumping worm looks very similar to the European earthworm, however it has snake like movements. It can cause ecosystem level impacts as Asian jumping worms outcompete, outnumber and out-consume other worms in the landscape. Much research is underway to answer the following questions: what products or practices can be used to kill Asian jumping worms and how do they impact prairie systems.



The spotted lanternfly (which has not been found in Nebraska) continued to infest more states and counties in the mid-Atlantic US (see map). This insect is a planthopper and has over 65 host plant species it can cause harm to. These plants include commodities: various fruit trees, grapes and hops as well as many other tree species including maple and black walnut. The spotted lanternfly damages plants by feeding on sap from stems, leaves, and trunks. The sugary secretions (excrement) created by this insect may coat the host plant, later leading to the growth of sooty mold. Host plants have been described as giving off a fermented odor when this insect is present and this can compromise the plant and its fruits. This insect is primarily spread long distances when females lay egg masses on vehicles or products that are then moved to other states. The Nebraska Department of Agriculture is conducting surveys for early detection and rapid response if the insect is found in Nebraska. Report any findings of this insect here: <https://neinvasives.com/report-a-sighting>. NISC members will continue outreach to the public and resource agency staff in 2021.



Emerald ash borer, also called EAB, is a small insect whose larvae damage native ash tree species and over time can kill the tree. It was found for the first time in central Nebraska in Hall and Buffalo counties. The US Department of Agriculture maintains a federal EAB quarantine (denoted in red on the map) which restricts the movement of any ash tree material to outside of the quarantine area. If you have questions regarding these restrictions contact the Nebraska Department of Agriculture for certification and requirements. NISC members conducted outreach to the public and resource agency staff on options for replanting, removal and treatment options for ash trees. NDA also continued trapping and visual surveys around the state in 2020.



Invasive Plant Infestations and Prevention Efforts:

NISC discussed the reports of unsolicited seed purportedly sent from China, Uzbekistan and Kyrgyzstan to U.S. citizens in virtually all states. Residents in the UK and Canada also received unsolicited seeds. The U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) is working closely with the Department of Homeland Security's Customs and Border Protection, other federal agencies and State departments of agriculture to investigate the situation. The main concern is for the potential for these seeds to introduce pests, diseases or Federal Noxious Weeds that could harm U.S. agriculture. If you receive unsolicited seeds do not plant them or throw them away. Report them to the Nebraska USDA PPQ office at (402) 434-2333.

The NISC had many meeting presentations and conversations regarding invasive plant species in 2020 and management and research efforts to control them. The NISC will provide comments at their December 2020 meeting to update the Nebraska Weed Watch List which is used to monitor the acres of various invasive or problematic plant species by county weed authorities throughout the state. The NISC distributed invasive plant identification guides to the public and resource agency staff to increase early detection for new infestations. You can learn more about invasive plants of concern in Nebraska here: <https://neinvasives.com/plants>.

Nebraska Invasive Species Advisory Council Legislative Recommendations:

The NISC recommends continuation of the council with no modifications. This recommendation is due to the success of the 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. The NISC will continue to engage new members and partners to meet the NISC's objectives. The NISC will continue to keep the Governor and the appropriate legislative committee(s) apprised of any invasive species issues that arises that warrant attention. Please contact Allison Zach with any questions or concerns regarding invasive species.