

NEBRASKA INVASIVE NEWS NETWORK

FALL 2011

ONLINE REPORTING NOW AVAILABLE!
REPORT YOUR INVASIVE SPECIES SIGHTINGS!

[HTTP://WWW.SNR.UNL.EDU/INVASIVES](http://www.snr.unl.edu/invasives)



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Interested in attending a conference on invasive species?

Nebraska Invasive Species Project Calendar: <http://snr.unl.edu/invasives/events.htm>

National Conference Information: <http://www.invasivespeciesinfo.gov/news/calendar.php>

Missed a Conference? Proceedings here: <http://www.invasivespeciesinfo.gov/news/proceedings.shtml>

SAVE THE DATE! NATIONAL INVASIVE SPECIES AWARENESS WEEK: FEBRUARY 26-MARCH 6



Nebraska Invasive Species Project:
<http://snr.unl.edu/invasives>

Already in motion is planning for the 2012 National Invasive Species Awareness Week: A week of activities, briefings, workshops and events focused on strategizing solutions to address invasive species prevention, detection, monitoring, control, and management issues at local, state, tribal, regional, national and international scales. Activities will include:

- National Invasive Species Council (see www.invasivespecies.gov) holds public meeting
- Grassroots action to prevent and control invasive species – Panel discussions
- Cooperative Weed and Invasive Species Management Areas and Tribal efforts
- Capitol Hill Briefings on aquatic invasive species, including quagga and zebra mussels
- Prevention through Outreach and Awareness – Experts panel on lessons learned

[More Information Available Here](#)

CONFERENCES / EVENTS IN NEBRASKA

[NGPC Legacy Conference](#)

October 4-5, Grand Island, NE

[Missouri River Watershed Coalition Annual Meeting](#)

Oct 11-12, Miles City, MT

[Missouri River Recovery Implementation Committee \(MRRIC\) Meeting](#)

Oct 17-21, Denver, CO

Nature-Palooza at Morrill Hall
Nov 6, Lincoln, NE

[Wyoming Weed and Pest Conference](#)

Nov 8-10, Gillette, WY

[Midwest Fish and Wildlife Conference](#)

Dec 4-7, Des Moines, IA

[North Central Weed Science/ Midwest Invasive Plant Network](#)

Dec 12-15, Milwaukee, WI

Check out what's going on in Nebraska and the region!

SAVE THE DATE!

Nebraska Weed Management Summit
Jan 17-18, Kearney NE

PLEASE REVIEW! LIST OF AQUATIC INVASIVE SPECIES IN NEBRASKA



Check out the new list of invasive plants in Nebraska!

Invasive species collectively constitute one of the gravest threats to the biodiversity of wildlands—conservation areas and other native habitats. Two critical components of managing invasions by non-native species are (1) identifying those species that threaten biodiversity and other ecological func-

tions and values, and (2) prioritizing species for management efforts, which must be based, at least in part, on the ecological impacts imparted by the invasive species. In hopes of meeting these components, the Nebraska Invasive Species Council developed a new framework for iden-

tifying and categorizing invasive species in Nebraska. In turn, a new categorized list was released and welcomes public input and comment.

[View the lists and how they were developed.](#)

PURIST OR PRAGMATIST? IDENTIFYING AND ADDRESSING NON-NATIVE VS. INVASIVE SPECIES IN PRAIRIES.

The Blog, Prairie Ecologist by Chris Helzer (The Nature Conservancy) recently posted information **pertaining to “what makes a species invasive,” and provides some good details. Here’s an excerpt:** “In North America, non-native species are generally defined as species that were not pre-

sent in an ecosystem prior to European settlement. There is plenty of discussion to be had about whether or not that is a useful definition, but there you go. While definitions of invasive species vary, most ecologists use a definition similar to that used by the [National Invasive Species Informational](#)

[Center](#), which has two important parts. First, the species must be non-native to the ecosystem in question. Second, and most importantly, a non-native species must either cause – or be likely to cause – harm to the environment or human health in order to be considered invasive. “

[Read the full blog here](#)



Blog: the Prairie Ecologist, By Chris Helzer

NEBRASKA AQUATIC INVASIVE SPECIES PREVENTION PROGRAM: A SUCCESSFUL FIRST SUMMER



In April 2011 the Nebraska Invasive Species Project was awarded a \$100,000 grant from the Nebraska Environmental Trust to develop an Aquatic Invasive Species Prevention Program and received additional funding from Nebraska Game and Parks Commission to “beef up” our zebra mussel sampling.

In May technicians hired by the UNL Invasive Species Project (Nebraska Cooperative Fish & Wildlife Research Unit) began sampling Zorinsky Lake each week for veligers. Due to the high risk of zebra mussel exposure to nearby

lakes, samples were also collected from Papio and Salt Valley lakes every other week (and at various reservoirs across the state by Nebraska Game and Parks Commission and other collaborating agency staff). To date, samples have been collected from over 40 reservoirs statewide. Analysis by Nebraska Invasive Species Project

staff and the Aquatic Invasive Species lab in Montana **report promising results ...** so far, all samples have come back negative for zebra or quagga mussels. Great news; looks like the infestation was limited to Zorinsky Lake, for now. To help keep zebra mussels (and other unwanted species) out of Nebraska, we also hired staff to spend time at the boat ramps this summer. Located at Lake McConaughy, Harlan County Reservoir and roving around reservoirs in eastern Nebraska, invasive species staff conducted boater surveys, provided information on how to prevent the spread of zebra mussels and provided voluntary boat inspections. In our first summer we surveyed over 3,500 boaters and educated/trained over 12,000 **individuals on Nebraska’s** new Clean, Drain and Dry Protocol. Thanks to this new grant from the Nebraska

Environmental Trust, we were also able to purchase decontamination units—used to decontaminate boats that are at high risk of spreading aquatic invasive species. Boater surveys were conducted to gauge the level of awareness about zebra mussels and to identify areas of the state that receive high out-of-state traffic (nonresident boaters have the potential to carry non-native species into Nebraska).

[Read the full story here](#)



Extensive Zebra Mussel Sampling Around the State
Photo: Karie Decker

AIS Prevention Crew 2011. Stationed at various reservoirs throughout Nebraska, the crew is working to provide information to boaters about how to prevent the spread of zebra mussels and other aquatic invasive species.
Photo: Karie Decker

Weed Science Society of America Launches Free Training Program on the Causes and Management of Herbicide Resistance in Weeds

WSSA is introducing a free training program designed to educate pesticide applicators, growers, agrichemical retailers, farm consultants and other stakeholders on herbicide resistance in weeds -- a costly problem that threatens crop production across the U.S. and around the globe. The training is a peer reviewed, five-module program available as Web-based training, PowerPoint slides or video.

WSSA plans to work with grower organizations, government agencies and others to disseminate the materials, with a special emphasis on reaching growers and agrichemical retailers. WSSA is also exploring continuing education credits for those who complete the courses. **“A significant contributing factor in the evolution of herbicide resistance is the repeated use of a single chemical in the absence of other control methods,”** says John Soteres, Ph.D., a WSSA member and chairman of the global Herbicide Resistance Action Committee. “It is vital

that we have the best possible materials to communicate what we know about resistance and how to manage it in order to preserve crop yields and promote the sustainability of our cropping systems.” Led by Soteres, they spent 18 months pulling together the most current, science-based information available on the causes of herbicide resistance and effective management techniques.

[Find more details here](#)



Florida: No. 1 in world for invasive reptiles

U. FLORIDA (US)—Florida has the world's worst invasive amphibian and reptile problem, with 137 non-native species introduced into the state between 1863 and 2010. "Most people in Florida don't realize when they see an animal if it's native or non-native and, unfortunately, quite a few of them don't belong here and can cause harm," says Kenneth Krysko, herpetology

collection manager at the Florida Museum of Natural History at the University of Florida. "No other area in the world has a problem like we do, and today's laws simply cannot be enforced to stop current trends." Florida law prohibits the release of non-native species without a state permit, but offenders can't be prosecuted unless they are

caught in the act. To date, no one in Florida has been prosecuted for the establishment of a non-indigenous animal.

[Read the Story](#)

[Or the study](#)



Photo: Carl May

USING DRONES FOR INVASIVE SPECIES MONITORING

By Andy Horcher & Rien J.M. Visser
Unmanned aerial vehicles (UAV) are commonly used in the defense and espionage industry. As the technology advances and costs decrease, the deployment of UAVs for natural resource applications becomes more obtainable. The USDA Forest Service, San Dimas Technology and

Development Center, tested a UAV for mapping and monitoring capabilities on research sites near Volcano National Park. The tests proved that 8 cm per pixel resolution mapping is possible with UAVs. However, improvement is needed in areas such as aircraft state data and automated image processing. With improvements the sys-

tem will have full high-resolution, forest mapping abilities. Currently the unit is fully capable of mapping forest edge and stream images, which could be used for SMZ monitoring. This may be particularly useful in the southern states where trespass rights by state inspection officials are limited.

[Read more here](#) or [here](#)

Invasive plants found in popular Mississippi River waterfowl area

Buffalo City—The recent discovery of two aggressive invasive plant species in a popular Upper Mississippi River waterfowl area underscores the need for waterfowl hunters to clean their boats and take other steps to avoid accidentally spreading invasive plants and nonnative species that can threaten waterways and future hunting

opportunities, state and federal wildlife officials say. "This is the first time we've found these two species of invasive water plants in Pool 5," said Upper Mississippi River National Wildlife and Fish Refuge Winona District Manager Mary Stefanski. "We are hopeful that none of these plants will survive if we get a cold winter, but we still need

boaters to be vigilant." DNR Water Guards and wardens will be checking boats at popular landings in the area and across the state, educating hunters about the rules and enforcing them. "The waterfowl hunting community is an important partner in the effort to prevent the spread of invasive species in Wisconsin's waterways," says DNR Chief Warden Randy Stark.

[Full story here](#)



Water hyacinth

NEW VIDEOS DEVELOPED FOR INVASIVE SPECIES PREVENTION

A series of new videos are now available to help in education and outreach efforts to prevent the spread of invasive species.

Click on each image to link to the video...



Zebra Mussels In Nebraska



ALIEN WORM INVASION 'THREAT TO FORESTS'



By Mark Kinver, BBC News

Invasive earthworms can alter the carbon and nitrogen cycles in woodland, as well as undermining native plant species, a study suggests. US researchers found that the presence of non-native worms also accelerated the breakdown of forest litter, increasing the risk of soil erosion. The worms are

spread to new areas by horticulture and land disturbance, they add, as well as on vehicles' tyres. The findings have been published in the journal *Human Ecology*. "The presence of earthworms in temperate hardwood forests may accelerate decomposition of forest litter, which potentially reduces habitat for forest-floor animals, (increases) soil ero-

sion... and affects carbon and nitrogen cycles," the researchers from Colgate University, New York, wrote.

[Read the full article](#)

Study Finds that Local Government, Home Owners Are Paying for Damages Caused by Non-native Forest Insects

By Juliann Aukema et. al
Reliable estimates of the impacts and costs of biological invasions are critical to developing credible management, trade and regulatory policies. Worldwide, forests and urban trees provide important ecosystem services as well as economic and social benefits, but are threatened by non-native in-

sects. More than 450 non-native forest insects are established in the United States but estimates of broad-scale economic impacts associated with these species are largely unavailable. A new study found that costs are largely borne by homeowners and municipal governments. Wood- and phloem-boring in-

sects are anticipated to cause the largest economic impacts by annually inducing nearly \$1.7 billion in local government expenditures and approximately \$830 million in lost residential property values. Given observations of new species, there is a 32% chance that another highly destructive borer species will invade the U.S. in the next 10 years.
[Read the story](#) or the [full article](#)



Asian Longhorned Beetle
Photo: USGS

The Nebraska Invasive Species Project

The Nebraska Cooperative Fish & Wildlife Research Unit, along with partners both state-wide and nationally, have joined together to provide information to the public and private sector on invasive species issues. This information includes basic invasive species biology, monitoring and management methods, and actual and potential impacts and risks of invasive species throughout the state.



NEBRASKA INVASIVE SPECIES PROJECT

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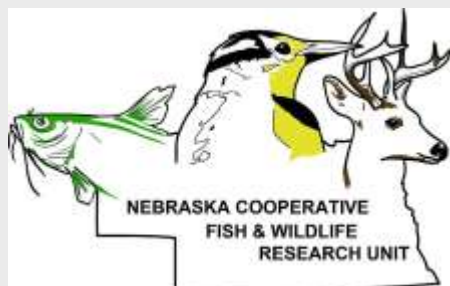
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YOU CAN HELP PREVENT THE SPREAD OF INVASIVES



Gardeners—Plant Native...If you don't know it, don't grow it! Native plants often require less water!

Boaters and Fishermen—

Don't dump your bait buckets into the water supply. Drain and clean your boat and equipment.



Burn it where you buy it!

Never transport firewood—it can harbor harmful insects like the Emerald Ash Borer.

Pet Owners—never release your pets into the wild. They can release exotic diseases and damage habitats.

GET INVOLVED!!!

Stay informed; share your knowledge with others. You are our first line of defense.

The Nebraska Invasive Species Council

The purpose of the *Nebraska Invasive Species Advisory Council* is to coordinate invasive species management and research across the State for the prevention and detection of invasive plant and animal species. Through a coordinated effort, we intend to provide land managers with the information needed to utilize funding and resources more effectively and efficiently. Our goal is to minimize the effects of harmful invasive species on Nebraska's citizens and ensure the economic and environmental well-being of the state.

Nebraska Invasive Species Project:

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