

INVASIVE SPECIES IN IOWA

What is an invasive species?

Invasive alien species are plants, animals or other organisms that are introduced to an area outside their original range and cause harm in their new home. Because they have no natural enemies to limit their reproduction, they usually spread rampantly. Invasive alien species are recognized as one of the leading threats to biodiversity and impose enormous costs to agriculture, forestry, fisheries, and other human enterprises, as well as to human health.



Zebra Mussels (USGS)

- The cost to control invasive species and the damages they inflict upon property and natural resources in the U.S. is estimated at **\$137 billion** annually.
- A single agricultural pest, the European corn borer, costs \$1 billion annually in control costs and crop losses

Invasive Species in Iowa: A Quick Look

Iowa has been invaded by a number of harmful exotic plants and animals. Here is a quick look at some of the worst invaders:

Name	Type	Origin	Extent	Damage
Purple loosestrife	Wetland plant	Europe and Asia; introduced as an ornamental and medicinal plant in 1800s	Infests about 475,000 acres in 42 states; found along Mississippi River in Iowa	Displaces native wetland plants; has less food and habitat value for waterfowl and other wildlife
Canada thistle	Plant	Despite the name, this thistle is native to Eurasia.	Found in 40 states; considered noxious in 29	Major weed of pastures, roadsides and fields. Over 100 thistles are “primary noxious weeds” in Iowa
Buckthorn	Tree	Europe; Introduced in 1800s as ornamental shrubs	Found in 27 states in northeast and midwest	Displaces native vegetation and destroys wildlife habitat; also hosts soybean aphid, oat crown rust
Leafy spurge	Plant	Eurasia, first found in Massachusetts in 1827	3 to 5 million acres in 36 states	Sickens cattle, which learn to avoid it; reduces value of range lands for forage
Eurasian watermilfoil	Aquatic plant	Europe; probably entered U.S. as an aquarium plant and spread by boats	Mississippi River and 2 ponds in Iowa; eradicated from several others	Crowds out native plants; forms thick beds of vegetation that interfere with boating, swimming & fishing
European corn borer	Insect	Europe, probably arrived in 1900s in a shipment of corn brooms	All of U.S. east of the Rocky Mountains	Feeding damages leaves, stalks and ears. Estimated to cost \$1 billion annually in U.S.
Zebra mussel	Mollusk	Caspian Sea region of Asia; accidentally released into Lake St. Clair in 1988 in ship ballast water	Found throughout Mississippi R. and Great Lakes; also in Missouri R.	Voracious filter feeders that out-compete native animals; fouls boats & clogs intake pipes at power plants and municipal water sources

Name	Type	Origin	Extent	Damage
Common Carp	Fish	Europe; introduced over 100 years ago as a food fish	Throughout Iowa, adapt well to polluted and sluggish water	Out-compete native fish; increase water turbidity by stirring up sediments.
Dutch elm disease	Fungus	Asia; one strain of the disease arrived in the 1930s in Cleveland, OH on infected elm logs from, a more virulent strain arrived in 1940s	American elm originally ranged in all states east of Rockies- most of this area is infested	Elms were once the nation's most popular urban street tree, have now largely disappeared from both urban and forested landscapes. It is estimated that "Dutch" elm disease has killed over 100 million trees.

What Congress Can Do:

A. Make Prevention Our Top Priority

- Reverse current U.S. policy on the intentional import of live plants and animals, that is, switch from a "dirty" to a "clean" list approach that requires screening for invasiveness before import and which keeps out or limits import of species so as to prevent harm to native species or ecosystems – and make the legislative changes to do so.
- Substantially cut the unintentional introduction of aquatic invaders by overseeing federal standard-setting on the discharge of ballast water in the United States, supporting the development of technology to meet these standards; ensuring that agencies monitor and enforce compliance; and reauthorizing the 1996 National Invasive Species Act in the strongest and most comprehensive form.
- When considering, reviewing, or approving trade agreements, rigorously address invasive species, e.g., by allowing for restriction of imports of non-native species that are invasive elsewhere and by identifying pathways by which inadvertent introductions travel so that they may be interrupted.

B. Make Federal Agencies More Effective

- Use oversight authority to ensure that all federal agencies immediately and strongly implement that part of Executive Order 13112 that asks them to identify and reduce actions that introduce or spread invasive species in the United States or elsewhere.
- Appropriate adequate funds so that federal agencies have the resources to address invasive species problems promptly and comprehensively over the long-term.
- Strengthen the structure and leadership of the National Invasive Species Council and prompt more aggressive implementation of its National Management Plan.
- Oversee the work of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service to ensure that the agency and its Administrator are committed to protecting biological diversity as well as agriculture.
- Evaluate the serious problems with border inspection for pests, weeds, and pathogens, e.g., in staffing and cross-department coordination, exacerbated by moving these functions into the Department of Homeland Security and amend its authorizing legislation if needed.

References:

How to Identify and Manage Dutch Elm Disease. http://na.fs.fed.us/spfo/pubs/howtos/ht_ded/ht_ded.htm#intro
Iowa Department of Natural Resources Nuisance Species Page, <http://www.iowadnr.com/fish/news/exotics/exotics.html>
Iowa State-Listed Noxious Weeds http://plants.usda.gov/cgi_bin/state_noxious.cgi?statefips=19
Buckthorn Control and Soybean Aphid, <http://www.weeds.iastate.edu/mgmt/2001/buckthorn.htm>
Iowa State University's European Corn Borer Page, <http://www.ent.iastate.edu/pest/cornborer/>

*For more information, please contact Aimee Delach at Defenders of Wildlife
202-682-9400 x271 ♦ adelach@defenders.org*