

# INVASIVE SPECIES IN MICHIGAN

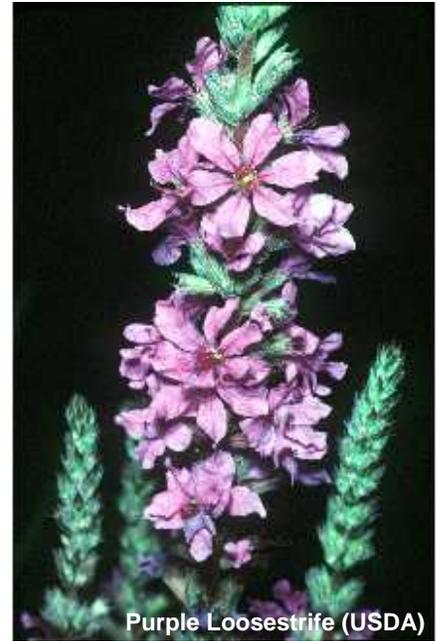
## What is an invasive species?

Invasive alien species are plants, animals, or other organisms that are introduced to a given 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.

- 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.

## Invasive Species in Michigan: A Quick Look

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



Purple Loosestrife (USDA)

Name	Type	Origin	Extent	Damage
Zebra mussel	Mollusk	Caspian Sea region of Asia; accidentally released into Lake St. Clair in 1988 in ship ballast water	Found in Great Lakes, plus 193 other Michigan Lakes	Voracious filter feeders that out-compete native animals; fouls boats & clogs intake pipes at power plants and municipal water sources
Emerald ash borer	Beetle	Asia; discovered near Detroit in 2002, probably entered in solid wood packing material	Now found in 20 counties in MI, spreading to IN, OH & Ontario	In just two years the emerald ash borer has killed over 7 million trees in MI and it is spreading quickly despite quarantine efforts
Dutch elm disease	Fungus	Asia; one strain of the disease arrived in the 1930s in Cleveland, OH on infected elm logs from Europe; 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.
Garlic mustard	Weed	Europe; brought by settlers as a vitamin-rich winter herb	Ranges from Canada, south to Virginia and west to Kansas and Nebraska	Grows earlier in spring than native plants, allowing it to dominate forest understory and crowd out natives
West Nile Virus	Virus	Africa; first discovered in NY in 1999 and has since spread west	First discovered in MI in 2001 and has been found every year since	A mosquito-borne virus, it is spread primarily through birds, but also to mammals like humans causing encephalitis and/or meningitis

Name	Type	Origin	Extent	Damage
Purple loosestrife	Wetland plant	Europe and Asia; introduced in 1800s as ornamental and medicinal plant or ship ballast water	Found throughout Michigan and U.S.	Displaces native wetland plants; has less food and habitat value for waterfowl and other wildlife

## 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:

Emerald Ash Borer Info. <http://www.emeraldashborer.info/>

How to Identify and Manage Dutch Elm Disease. [http://na.fs.fed.us/spfo/pubs/howtos/ht\\_ded/ht\\_ded.htm#intro](http://na.fs.fed.us/spfo/pubs/howtos/ht_ded/ht_ded.htm#intro)

USGS Zebra Mussel Page. <http://nas.er.usgs.gov/taxgroup/mollusks/zebramussel/>

NPS Garlic Mustard Fact Sheet <http://www.nps.gov/plants/alien/fact/alpe1.htm>

Michigan Gov. Emerging Disease Issues <http://www.michigan.gov/emergingdiseases/0,1607,7-186-25805-75072--,00.html>

Michigan Tech. Univ. Purple Loosestrife Quick Guide [http://forest.mtu.edu/research/ces/qg\\_pls.pdf](http://forest.mtu.edu/research/ces/qg_pls.pdf)

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