



# Michigan Invasive Plant Council *Newsletter*

P.O. Box 27036, Lansing, Michigan 48909-7036

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## **New! Guide Brings Attention to Control of Invasive Plant and Habitat Protection**

The Department of Environmental Quality's Office of the Great Lakes has released a brochure focusing on the control of Phragmites entitled, "A Landowner's Guide to Phragmites Control."

The invasive, non-native variety of *Phragmites australis*, commonly known as Phragmites, is a perennial wetland grass that can grow up to 15 feet tall. Phragmites tend to create dense stands which degrade wetlands and coastal areas by crowding out native plants and animals, blocking shoreline views, reducing access for swimming, fishing, and hunting, and potentially creating fire hazards from dry plant material.

Phragmites can generally be found growing in coastal and interior wetlands, lake margins, roadside ditches, and other low, wet areas, although it can also be found in dry areas.

The guide was developed as part of a larger cooperative project involving the Saginaw Bay Coastal Initiative, the DEQ, other state and federal agencies, and various stakeholders to address the rapid spread of phragmites in Saginaw Bay and other areas in Michigan. The guide was created to better demonstrate and communicate effective treatment methods and regulatory requirements to the public and resource managers.



*Phragmites australis*

Local, state and federal permits may be required for phragmites control. For state permit information and deadlines for applications, contact the DEQ Environmental Assistance Center at 1-800-662-9278 or email [deq-ead-env-assist@michigan.gov](mailto:deq-ead-env-assist@michigan.gov). *Note: The deadline is August 15 to submitting applications for permits for use of herbicides if the plants are in standing water at the time of treatment or below the ordinary high water mark of the Great Lakes and Lake St. Clair; however, it's never too early to start planning for a spring treatment or treatment next fall.*

Financial assistance for this project was provided, in part, by the DEQ Michigan Coastal Management Program through a grant from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration. For copies of the guide, contact the Office of the Great Lakes at (517) 335-4056 or fax at (517) 335-4053. The guide is also available at the DEQ web site at [www.michigan.gov/deqaquaticinvasives](http://www.michigan.gov/deqaquaticinvasives).

### *inside...*

**Control of  
glossy buckthorn  
(*Rhamnus frangula*)**



# Indiana's "Most Unwanted" Invasive Plant Pests

Whether plants, insects, or pathogens, invasive pests of plants can be devastating, but thanks to a new Purdue University web site, people will now be able to help identify and report these menaces.

The Indiana Cooperative Agricultural Pest Survey (CAPS) program, which is a collaborative effort between Purdue, the U.S. Department of Agriculture's Animal and Plant Health Inspection Service division of Plant Protection and Quarantine, the Indiana Department of Natural Resources, and the Indiana chapter of The Nature Conservancy, recently launched a new web site highlighting Indiana's "most unwanted" invasive plant pests, <http://extension.entm.purdue.edu/CAPS>.

The list is determined yearly by the Indiana CAPS state survey committee and identifies exotic species, invasive species and pests regulated by state or federal laws that could affect Indiana. The list is also used by officials to determine how resources for surveys and outreach and educational programs are best spent to protect Indiana.

People can search the site by the pest's name, the commodity it attacks or by its habitat. The web site reports the pest's known distribution and whether it is currently present in Indiana. Visitors also can learn which invasive plant pests are found in specific Indiana counties.

"This site gives people tools to help identify invasive plant pests and the knowledge to help prevent these species from spreading further," said Christopher Pierce, Indiana CAPS state survey coordinator and Purdue Extension entomology specialist. "We will use this site as an outreach and education tool so people not only know what to look for, but who to contact if they think they've found something."

Another aspect of the site is the ability it gives people to identify suspicious plant pests they find. "If people see something they don't recognize, they can use the site to determine if it is potentially invasive, and if it is, what risks it poses," Pierce said. "The web site also gives instructions on reporting suspi-

cious finds, either by calling the Indiana DNR at 1-866-NO EXOTIC or submitting samples to the Purdue Plant and Pest Diagnostic Laboratory."

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Ag Communications, (765) 494-2722  
Beth Forbes, [forbes@purdue.edu](mailto:forbes@purdue.edu)

Agriculture News Page  
<http://www.ag.purdue.edu/AgComm/public/agnews/>

## Volunteer Opportunities for State Park Stewardship

Want to help restore important natural areas in Southern Michigan state parks and recreation areas? Then join the DNR, Parks and Recreation Division, Stewardship Unit for volunteer workdays at the following parks:

### Monthly workdays are held at:

- Algonac State Park
- Bald Mountain Recreation Area
- Brighton Recreation Area
- Highland Recreation Area
- Island Lake Recreation Area
- Pinckney Recreation Area
- Waterloo Recreation Area

### Occasional workdays are also held at:

- Fort Custer Recreation Area
- Grand Mere State Park
- Seven Lakes State Park
- Sterling State Park
- Warren Dunes State Park
- Warren Woods State Park

Fall activities include invasive shrub removal, native seed collecting and some native planting. For workday details, to plan ahead for October and early November native seed collecting, to get directions and to register, please visit [www.michigan.gov/dnrvolunteers](http://www.michigan.gov/dnrvolunteers); and click on "Calendar of Volunteer Stewardship Workdays" under "Current Volunteer Opportunities". Hope you can join us!

Questions? Please contact Laurel Malvitz at 248-359-9057 or [malvitzl@michigan.gov](mailto:malvitzl@michigan.gov) for additional information.

# Invasive Plant Species Control and Management

## Buckthorn Species (*Rhamnus spp.*)

### Background

Non-native buckthorn species, especially glossy buckthorn (*Rhamnus frangula*) or common buckthorn (*Rhamnus cathartica*) are common invasive woody shrubs that populate woodlands and wetlands throughout the eastern United States. Glossy buckthorn is often found in fens and low-lying wet areas, while the common buckthorn is more typically found in upland semi-wooded areas and woodland edges. These species were likely introduced during the 1800's from Europe and Asia, and have commonly been cultivated for various horticultural and wildlife reasons due to their aggressive growth patterns in North America.

The most common form of spread for buckthorn species occurs when wildlife eat the fruits and disperse the seeds. Mature buckthorn plants will form dense monotypic thickets 10-15' tall, often excluding all other vegetation.

Management options are typically categorized into Biological, Mechanical, and Chemical. Most often, the ideal treatment strategy utilizes more than one of these techniques in an IVM, or Integrated Vegetation Management approach.

### Biological Control

Few biological controls have proven effective for buckthorn species. Buckthorn may struggle to penetrate dense, established stands of native woody or rhizomatous vegetation. North American insects do not typically feed on buckthorn.

### Mechanical Control

Repeated cutting/mowing of buckthorn species may reduce its vigor in the long term. However, due to the wet conditions typically found near glossy buckthorn, mechanical cutting is often not feasible. This leaves labor-intensive hand removal via chainsaw/brush cutter as the only option. Additionally, cutting without using a follow-up herbicide treatment will often cause plants to re-sprout and produce more viable seed than if the plant had not been disturbed. Mechanical cutting of buckthorn is often completed during the winter months, when frozen ground condi-



*Rhamnus frangula*

tions allow easier site access and maneuverability, and reduce impacts to the wet soils (ruts, etc.).

Digging out the plant can be an effective form of removal, but is only recommended for very small populations due to the extensive time and effort associated with this technique.

Controlled burning may top-kill small buckthorn saplings. However, established stands of buckthorn will typically exclude herbaceous vegetation, effectively eliminating the fuel necessary to carry a fire through the population. Burning also has little effect on larger buckthorn stems (1" + diameter).

### Chemical Control

Chemical control of buckthorn species is typically very effective. Please note that some herbicides may have soil mobility and result in killing of surrounding vegetation. Typical chemical methods are as follows:

#### Foliar Treatment

(completed during the growing season) Hand-wicking or foliar spraying individual plants with 5-25% glyphosate (RoundUp, AquaNeat, Rodeo), 2-4% 2, 4-D, or 5-25% triclopyr (Garlon 3A, Garlon 4)

*Continued next page*

## Basal Treatment

Basal treatment using an oil-based herbicide such as triclopyr (Garlon 4 or Pathfinder) or 2, 4-D at 50%-100% solution sprayed at the basal portion of the trunk.

## Cut-Stump Treatment

Individual plants may be cut to a height of 2"-6," followed by a treatment to the open wound of 25-100% glyphosate or 50-100% triclopyr. Herbicide should be applied to the entire open cut within 1 hour of cutting.

Whenever using pesticides, be sure to follow label directions and obtain all necessary state or local permits and approvals prior to treatment.

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# The City of Chicago Passes Invasive Species Ordinance

## Description

The City of Chicago drafted an ordinance which was passed by City Council that makes it unlawful to possess certain invasive species that appear on a regulated list. The ordinance broadens the City's Snakehead and Asian Carp ordinances passed in 2005 to include a larger regulated list of aquatic invasive species that are invading, or may invade, Lake Michigan and the region's waterways. It establishes penalties for anyone who imports, sells, transports, owns, or otherwise possesses any of the live animal or plant species in a regulated list published by the Commissioner of the Department of Environment in consultation with a panel of scientific experts. It establishes, by regulation, 3 lists: (1) invasive plants, (2) invasive animals, and (3) live transport species, or species that can be transported live but not sold live.

We developed the regulated list with an advisory group composed of experts in the field of aquatic invasive species, including the Illinois Natural History Survey, Illinois-Indiana Sea Grant, Wisconsin Sea Grant, University of Notre Dame, U.S. Fish and Wildlife Service, the Shedd Aquarium, and the Chicago Botanic Garden. The scientific community will be engaged annually to discuss additions to the regulated list which is currently limited to aquatic species, but could expand to terrestrial species.

While drafting the ordinance, and after its passage and the regulation's public comment period, we reached out to over 60 businesses and associations that might be affected by the ordinance including aquarium shops, garden centers, bait shops, and live food sellers.

## Background

Aquatic species that are not native to our area are invading Lake Michigan and regional waterways, causing irreparable harm and millions of dollars of damage.

Invasive plants, if established can:

- displace native plants, which are important sources of food and shelter for wildlife;
- change ecological processes, such as oxygen production because invasive plants can affect water chemistry and flow;
- block drainage pipes;

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- impede navigation; and
- hinder commercial and recreational fishing.

Invasive animals, if established can:

- make waters unusable for recreation;
- reduce natural biodiversity;
- degrade ecosystem functions;
- damage commercial and recreational equipment; and
- increase the operating costs of industrial processes such as drinking water plants.

This ordinance is part of a multi-faceted aquatic invasive species initiative in the City of Chicago. In addition to creating and enforcing the former Asian Carp and Snakehead ordinances, the city has collaborated with Illinois Natural History Survey and the Habitattitude campaign to raise awareness about invasive species including proper disposal, advocated for legislation such as the Great Lakes Asian Carp Barrier Act, co-hosted an Aquatic Invasive Species Summit with the U.S. Fish and Wildlife Service, and met annually with area fisherman and boaters.

## Results

The Invasive Species ordinance passed City Council on May 9, 2007. The public comment period for the invasive species ordinance rules and regulations ended on June 27, 2007, and the ordinance is now enforceable. A flyer, which includes a list of the currently regulated species, was produced for the public that is available by calling us or visiting our web site (see below).

## Contacts

City of Chicago  
Department of Environment  
Chicago, IL 60602  
312-746-7606

Joyce Coffee, 312-742-0151

Web site: [www.cityofchicago.org/Environment](http://www.cityofchicago.org/Environment) Go to "Water" under Initiatives and Programs, then go to "Aquatic Invasive Species"

## Michigan Invasive Plant Council

### Mission

*To protect Michigan from the threat of invasive plants.*

### Objectives

- Develop, maintain, and publish a council-reviewed invasive plant species list
- Raise public awareness about the spread and impact of invasive plants
- Facilitate the exchange of information concerning management, control, inventory, and monitoring of invasive plants.
- Provide a forum for all interested parties to discuss issues relating to invasive plants.
- Serve as an educational, advisory, and technical support council for all aspects of invasive plants and related issues.
- Prevent future introductions of new invasive plants.
- Adopt guiding principles set forth in the management plan by the National Invasive Species Council Executive Order 13112 February 3, 1999.

*Look for MIPC's new website to be up and running soon!* [www.invasiveplantsmi.org](http://www.invasiveplantsmi.org)

## Michigan Invasive Plant Council

### 2007 Board of Directors and their Affiliations

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Doug Pearsall, The Nature Conservancy  
Bob Schutzki, Michigan State University  
Wendy Wiegand, Wiegands Nursery

## MIPC Membership Form

The Michigan Invasive Plant Council welcomes those people interested in working on invasive plant concerns in the state of Michigan. Please make your check payable to 'Michigan Invasive Plant Council' and send it along with this form to:

MIPC - Membership  
P. O. Box 27036  
Lansing, MI 48909-7036

Type Membership	Individual Membership Categories	Institutional Membership Categories
New _____	General \$25 _____ Contributing \$50 _____	General \$100 _____ Contributing \$500 _____
Renewal _____	Donor \$100-\$500 _____ Patron \$1,000 _____	Donor \$1,000-\$10,000 _____ Patron \$10,000 or more _____

**Amount enclosed:** \_\_\_\_\_

Name \_\_\_\_\_ Phone (Work) \_\_\_\_\_

Affiliation \_\_\_\_\_ Phone (Home) \_\_\_\_\_

Address \_\_\_\_\_ Fax \_\_\_\_\_

\_\_\_\_\_ E-mail \_\_\_\_\_

\_\_\_\_\_ Areas of interest \_\_\_\_\_

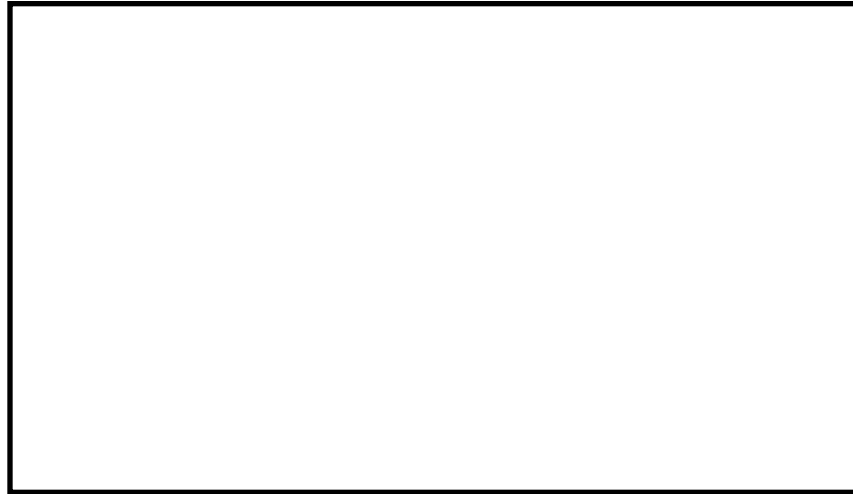
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_



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### Useful Web Sites of Interest

Biological Control: A Guide to Natural  
Enemies in North America  
[www.nysaes.cornell.edu/ent/biontrol.html](http://www.nysaes.cornell.edu/ent/biontrol.html)

Ecological Society of America  
[www.esa.org](http://www.esa.org)

Garlic Mustard Research at Michigan State  
University  
[www.ipm.msu.edu/garlicRes.htm](http://www.ipm.msu.edu/garlicRes.htm)

Garlic Mustard Web Site  
[www.ipm.msu.edu/garlicmustard.htm](http://www.ipm.msu.edu/garlicmustard.htm)

Global Invasive Species Database  
[www.issg.org/database/welcome/](http://www.issg.org/database/welcome/)

INVADERS database system - Noxious weed  
listings for all states and southern Canada  
[www.invader.dbs.umt.edu/Noxious\\_Weeds/](http://www.invader.dbs.umt.edu/Noxious_Weeds/)

Invasive and Noxious Weeds/USDA Plants  
[www.plants.usda.gov/java/noxiousDriver](http://www.plants.usda.gov/java/noxiousDriver)

Invasive Plant Association of Wisconsin  
[www.ipaw.org/](http://www.ipaw.org/)

Invasive Plants of Ohio  
[www.dnr.state.oh.us/tabid/2005/default.aspx](http://www.dnr.state.oh.us/tabid/2005/default.aspx)

Invasive Plants of the Eastern United States  
[www.invasive.org/eastern/](http://www.invasive.org/eastern/)

Invasive Plant Species Assessment Work  
Group (Indiana)  
[www.invasivespecies.IN.gov](http://www.invasivespecies.IN.gov)

Michigan Botanical Club  
[www.michbotclub.org/](http://www.michbotclub.org/)

Michigan Lake and Stream Associations  
[www.mlswa.org](http://www.mlswa.org)

Michigan Natural Areas Council  
[www.cyberspace.org~mnac/](http://www.cyberspace.org~mnac/)

Michigan Nursery and Landscape Association  
[www.mnla.org/](http://www.mnla.org/)

Midwest Invasive Plant Network  
[www.mipn.org](http://www.mipn.org)

National Conference on Ecosystem  
Restoration  
[www.conference.ifas.ufl.edu/NCER2007](http://www.conference.ifas.ufl.edu/NCER2007)

National Invasive Species Information Center  
[www.invasivespeciesinfo.gov/](http://www.invasivespeciesinfo.gov/)

Natural Resource Conservation Service Plants  
Database  
[www.nrcs.usda.gov/](http://www.nrcs.usda.gov/)

North American Weed Management  
Association  
[www.nawma.org/](http://www.nawma.org/)

Plants Database/USDA Plants  
[www.plants.usda.gov/](http://www.plants.usda.gov/)

The Nature Conservancy  
[www.nature.org/](http://www.nature.org/)

The Nature Conservancy Weed Control  
Handbook  
[www.tncweeds.ucdavis.edu/handbook.html](http://www.tncweeds.ucdavis.edu/handbook.html)

The Nature Conservancy Global Invasive  
Species Initiative Page  
[www.tncweeds.ucdavis.edu/](http://www.tncweeds.ucdavis.edu/)

USDA APHIS PPQ Federal Noxious Weed  
Program  
[www.aphis.usda.gov/ppq/weeds/](http://www.aphis.usda.gov/ppq/weeds/)

Weed Feeders (biological control agents)  
[www.nysaes.cornell.edu/ent/biocontrol/weed-feeders/wdfdrtoc.html](http://www.nysaes.cornell.edu/ent/biocontrol/weed-feeders/wdfdrtoc.html)

Weed Science Society of America  
[www.wssa.net](http://www.wssa.net)

Wildflower Association of Michigan  
[www.wildflowersmich.org/](http://www.wildflowersmich.org/)