habitat. Invading plants outcompete native species for sunlight, nutrients, and space. They change animal habitat by eliminating native foods, altering cover, and destroying nesting opportunities. Some invaders are so aggressive that they leave no room for our natives.

Invasive plants threaten Maine's natural and working landscapes. Their aggressive growth degrades our recreational experiences. Species like Japanese barberry and multiflora rose can form thorny, impenetrable thickets in forests. Other invasive plants choke waterways, limiting their use. Invaders increase the costs of agriculture and affect forest regeneration. And, these species mar the natural beauty of our regionally distinctive landscape.

Are invasive plants being controlled?

Controlling invasive plants is a challenge. Every year, more and more money is needed to combat them. Vermont has spent millions of dollars trying to clear its waterways of just two invasive plants species, Eurasian milfoil and water chestnut. Florida spends \$30 million every year managing invasive plants. Costs in Maine are creeping up as we work to control invaders in our state and national parks. Maine's Department of Environmental Protection and Department of Inland



Vermont spends millions each year controlling water chestnut, which has not yet invaded Maine.



Garlic mustard is gaining a foothold in Maine forests.

Fisheries and Wildlife now spend over \$1 million each year on management and prevention of infestations of aquatic weeds ... and we are just getting started.

What can you do?

Prevention is the key. Until recently, alien plants have benefited from our slow reaction to their damaging impacts. Invaders that are already widespread, like purple loosestrife, are here to stay. But species that have not reached Maine yet, like porcelain berry and mile-a-minute weed, need to be stopped. The damage invasive plants can do is well documented in other New England states. Learn about invasive plants, and avoid them. Your actions can make a difference. Don't help invaders get around in Maine.

- ▶ When buying plants or moving them from place to place, consider whether they are likely to escape. Plants advertised as fast growing, prolific, and tolerant of many growing conditions are often the ones that become invasive. Maine won't look like Maine anymore if the plants dominating our landscape are all from away.
- Verify that plants you buy for your yard or garden are not invasive. Ask your local garden supplier to stock more native species.

- ► Replace invasive plants in your garden with non-invasive alternatives.
- ▶ When boating, clean your boat thoroughly before transporting it to a different body of water.
- ➤ Volunteer at your local park, refuge or other wildlife area to help remove invasive species. Help educate others about the problem.
- ➤ Learn which plants are problematic in Maine and tell your state representatives that you care about the future of Maine's natural landscape.
- Our natural landscape is precious. Its future depends on the choices we make.



Exposure to the sap of giant hogweed sensitizes the skin to sunlight, and results in swelling, blisters, and eruptions. If you encounter this plant in Maine, please report it to the Maine Department of Agriculture, 207-287-3891.

Where can you find more information?

Maine Natural Areas Program, Department of Conservation

207-287-8044 or http://www.mainenaturalareas.org/docs/program_activities/invasive_plants.php

University of Maine Cooperative Extension

1-800-287-0274 or http://www.umext.maine.edu/publications/homegarden.htm

Maine Department of Environmental Protection

http://www.maine.gov/dep/blwq/topic/invasives/index.htm

Maine Department of Agriculture, Plant Industry Division

http://www.state.me.us/agriculture/pi/index.html

Invasive Profiles

http://www.invasivespecies.gov/profiles/main.shtml

Invasive Plant Atlas of New England (IPANE)

http://invasives.eeb.uconn.edu/ipane/

Invasive Plants Canada

http://www.cws-scf.ec.gc.ca/publications/inv/index_e.cfm

The Nature Conservancy Wildland Invasive Species Team

http://tncweeds.ucdavis.edu

For detailed information about how to identify and manage specific invasive plants, please refer to University of Maine Cooperative Extension's *Maine Invasive Plants Series*, bulletin #2503.

This series of twenty–two 2-pg. bulletins describes invasive exotic plants that present threats to native Maine land and water habitats. Each bulletin provides a color photo and physical description of one invasive species as well as a description of the threat it presents, its preferred habitat and current distribution, and methods of control. Developed by the Maine Natural Areas Program and University of Maine Cooperative Extension.

For a copy of the Cooperative Extension Publications Catalog see the box below.





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Oriental bittersweet choking a tree

Invasive Plants
Threaten
Maine's Natural
Treasures



Bulletin #2536

What's the difference between a "weed" and an "invasive plant"?

A weed is simply a plant growing in a place where it's not wanted. It might be a problem locally, but it generally doesn't spread to become a large-scale problem in natural areas.

An invasive plant is a non-native plant with very high reproductive potential and the ability to establish across long distances (for example, it might produce seeds that can spread by wind or by animals). An invasive plant can become established in natural areas, and disrupt natural communities by outcompeting native plants.

Why are invasive plants suddenly a problem?

The invasive plant problem is not new, but the problem is accelerating. Due to a history of low intensity development and perhaps isolated watersheds, Maine's landscape has not been ravaged to the same degree as most other New England states. However, our good fortune will be short-lived if invasive plants continue to spread unchecked through our state.



Porcelain berry swallows the land in Massachusetts

Where do invasive plants come from?

About two-thirds of known invaders have been imported for ornamental and landscape plantings. These species include many of the Northeast's most troublesome plants: Japanese barberry, oriental bittersweet, Russian olive, Eurasian milfoil, purple loosestrife, and others. Other species have arrived as stowaways: Japanese stilt grass is used in packaging from Japan, and mile-a-minute weed is transported in soil.



Japanese barberry, often used in landscapes, is invading Maine forests.

What problems do invasive plants cause?

Invasive plants outcompete native species and agricultural crops, causing billions of dollars of damage each year. They affect forests, wetlands, lakes, streams, croplands, and pastures, and degrade many of our sensitive natural habitats. They grow rapidly, multiply, and spread to unmanageable levels in short periods of time.

Invasive species are the second greatest threat to global biodiversity, after loss of



Japanese knotweed infests a Kennebec River island.