FACT SHEET

INVASIVE PLANTS

Natural Area Preservation
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CITY OF ANN ARBOR
Natural Area Preservation

INVASIVE PLANTS

What is a non-native species?

Every organism has a home, a particular region where it has existed for thousands of years and evolved in association with specific environmental conditions, with specific plants and animals including parasites and disease causing organisms. "Native" species occur in their natural regions without the direct or indirect activities of humans. A "non-native species" occurs outside that natural range. In North America, many non-native plants were brought over from other continents by European settlers. Plants were brought over for agricultural, medicinal, and ornamental purposes. Many plants were introduced accidentally as well. The introduction of non-native organisms continues to be a problem today due to our increased travel and international trade. Not all non-natives plants or animals become a problem. Many non-native plants represent significant human food sources. However, some of these plants have certain aggressive traits that make them invasive species.

What is an invasive species?

Invasive species are those non-native species that can significantly disrupt natural communities causing environmental or economic harm. In a new environment, invasive plants are released from the natural constraints of their native ranges. They lack the control of herbivores, parasites, diseases, and competition that was present in their native habitats. Invasive plants exhibit both rapid growth and reproduction rates because of abundant seed production, reproduction through vegetative clones, and /or extended growing seasons.

Why are invasive, non-native plants a concern?

Invasive, non-native plants displace native plants and animals, and so disrupt ecological processes, and degrade biological resources. Invasive plants often lack the natural population controls that keep them in check in their native ecosystems. Controls existing in the new ecosystem (herbivores, parasites, diseases and native plants) are not adapted to make use of the non-native invaders. This disparity of population controls, in addition to their rapid growth and reproduction, creates a situation in which the invasive plants are better competitors. They reduce the amount of sunlight, water, nutrients, and space available to native plants, eventually competing with and replacing natives. This represents a loss in habitat and food source for wildlife. Invasive plants have even been shown to alter hydrological patterns and soil chemistry. In the big picture, invasive species reduce biodiversity.

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How do invasive, non-native plants get into natural areas?

Our increasingly global society has transported plants worldwide at an unnaturally fast pace. Once a new species is introduced, either from another continent, or another region of North America, its seeds may be carried by wind, water, animals, or vehicles. Seeds or vegetative structures can be deposited miles from their original site, allowing the species to spread at a rate that it could never accomplish on its own. Unsuspecting homeowners may use invasive, non-native plants in their landscaping. Species may easily spread into natural areas from nearby yards.

What is Natural Area Preservation (NAP) doing about these plants?

With the help of thousands of volunteers, NAP is doing our best to control current populations and prevent the spread of invasive plants in our natural areas. Reintroducing the natural process of fire through prescribed ecological burns is effective in controlling buckthorn, honeysuckle, dame's rocket, and garlic mustard. We also manually remove these species from natural areas. In large populations of herbaceous invasives, we often clip and dispose of the flowering heads to prevent the plants from seeding and decrease the seed bank. Licensed staff apply herbicide to individual buckthorn, honeysuckle, and purple loosestrife plants. NAP has seen great success using these techniques; however there is much more work to do in the 1,200 acres of the Ann Arbor natural areas we protect.

How can you help?

Use native plants in your landscaping. NAP offers a series of four brochures on native plants: trees; shrubs; wildflowers; and vines, ferns grasses, rushes and sedges. These are available for sale to assist you in choosing native plants for your garden. You can also join NAP in the natural areas as a volunteer helping to control invasive, non-native plants. Call 734•794•6627 for a schedule of upcoming Volunteer Stewardship Workdays.

Which plants should you avoid using in landscaping?

Below is a list of non-native, invasive plants we are actively controlling in the natural areas of Ann Arbor; most of them are garden escapees. Also check the invasive plant list on our website for a more thorough list.

Tree and shrub species:
Norway maple *(Acer platanoides)*
tree-of-heaven *(Ailanthus altissima)*
autumn olive *(Elaeagnus umbellata)*
honeysuckle *(Lonicera* spp.*)*
common buckthorn *(Rhamnus cathartica)*
glossy buckthorn *(Rhamnus frangula)*
black locust *(Robinia pseudoacacia)*
multiflora rose *(Rosa multiflora)*

Vine and groundcover species:
Oriental bittersweet *(Celastrus orbiculatus)*
purple winter creeper *(Euonymus fortunei)*
Japanese honeysuckle *(Lonicera japonica)*
myrtle, or periwinkle *(Vinca minor)*

Herbaceous species:
garlic mustard *(Alliaria petiolata)*
bittercress *(Cardamine impatiens)*
spotted knapweed *(Centaurea maculosa)*
Canada thistle *(Cirsium arvense)*
lily-of-the-valley *(Convallaria majalis)*
dame's rocket *(Hesperis matronalis)*
golden archangel *(Lamiastrum galeobdolon)*
common motherwort *(Leonurus cardiaca)*
purple loosestrife *(Lythrum salicaria)*
Japanese knotweed *(Polygonum cuspidatum)*

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