

US EPA ARCHIVE DOCUMENT



## Plants to Avoid—Invasive Exotic Plant Species

Many of the plants we use in landscaping today did not originate from this country. They were introduced either deliberately for their beauty or food value, or unintentionally in seed, soil or ballast water. Most of these “exotic” plants stay where they are planted and do not invade natural areas. However, some exotics have become invasive. And because no natural controls exist here, they take over and threaten native plant communities, degrade fish

and wildlife habitat, restrict recreational activity and reduce agricultural yields.

A good example of an exotic invasive plant is Purple Loosestrife. It is an herbaceous plant that lives in wetlands, shorelines and roadside ditches and has a pretty purple spike that blooms in mid-summer.

Dense stands of purple loosestrife have colonized many wetlands, replacing native food and cover plants that wildlife species depend on.

According to the U.S. EPA, wetlands infested with purple loosestrife lose as much as 50% of their original plant populations. This limits the variety of food and cover available to birds and other wildlife, causing them to move or disappear from a region altogether.

So how do you determine if a plant is invasive? Follow these three easy steps:

### Step 1. Use Native Species

If you want to make sure the plants you are using don't end up taking over the adjacent woods or wetland, just use native plant species. Although some natives are aggressive and will colonize your garden quickly, at some point natural controls



will keep the plant in check if it moves into the wild.

### Step 2. Ask Yourself These Questions

The Maryland Native Plant Society evaluates exotic plants for a garden this way:

- Does the exotic plant naturalize or self-sow? If the plant spreads its seeds far by wind or water, don't plant it. Purple loosestrife

spreads through wetlands this way.

- Is the exotic plant a wildlife food plant? If yes, then wildlife will spread the seed around, and it is not a good choice. Autumn olive was originally planted for wildlife.
- Is the exotic plant a rapidly spreading ground-cover? If so, don't plant it next to naturalized areas. An example of this is a woodland floor covered with English Ivy or

Myrtle.

- Is the exotic plant low maintenance, cold-hardy, tolerant of extreme water conditions, shade tolerant and pest-free? We generally think of these as positive traits in landscape plants! But it also means this exotic has no natural controls in Springfield Township and should not be used. Crown vetch is a good example of this type of exotic.

### The “Do No Harm” Philosophy

When deciding which plants to add to your garden, hold fast to the “Do No Harm” philosophy. This idea says that whatever type of plant you choose, native or non-native, make sure that plant will stay where it's put, and will not overtake your adjoining woodland or wetland. Most native species have natural forces at work to check their spread. Non-natives, being out of their natural range, don't. Therefore, our choice of species becomes the “natural force” that keeps the non-natives in check.



### Step 2. Ask Yourself These Questions (Cont.)

- Does the exotic plant have the ability to kill or suppress growth of surrounding plants by shading them out, chemically poisoning them, or out-competing them for food and water? If so, you don't want this plant in your garden! The shade and roots of Norway maples make it very difficult for any other plant (including grass) to grow beneath it.

Plants with the above characteristics are not only problems for natural areas, but are problems for gardeners who have to work hard to control them in their yards.

### Step 3. Don't Use These Plants

The following is a list of some of the non-native plants known to create problems in Southeast Michigan and which you should **not** use in your landscape. The number of problem plants continues to grow, so be sure to use the guidelines above in making selections for non-natives.

#### Trees:

- Norway Maple**  
(*Acer platanoides*)
- Amur Maple**  
(*Acer ginnala*)
- Tree of Heaven**  
(*Ailanthus altissima*)
- European Alder**  
(*Alnus glutinosa*)
- Goldenraintree**  
(*Koeleruteria paniculata*)
- Amur Cork Tree**  
(*Phellodendron amurense*)
- White Poplar**  
(*Populus alba*)
- Black Locust**  
(*Robinia pseudocacia*)
- Siberian Elm**  
(*Ulmus pumila*)

#### Shrubs and Vines:

- Porcelainberry**  
(*Ampelopsis brevipedunculata*)
- Japanese barberry**  
(*Berberis thunbergii*)
- Common barberry**  
(*Berberis vulgaris*)
- Butterfly Bush**  
(*Budlia davidii*)
- Oriental Bittersweet**  
(*Celastrus orbiculatus*)
- Cotoneaster**  
(*Cononeaster microphyllus*)  
(*Cotoneaster pannosus*)  
(*Cotoneaster lacteus*)
- Autumn Olive**  
(*Eleagnus umbellata*)
- Russian Olive**  
(*Eleagnus angustifolia*)
- Burningbush**  
(*Euonymus alatus*)
- Wintercreeper**  
(*Euonymus fortunei*)
- English Ivy**  
(*Hedra helix*)
- Privet**  
(*Ligustrum vulgare*)
- Japanese Honeysuckle**  
(*Lonicera japonica*)
- Amur Honeysuckle**  
(*Lonicera maackii*)

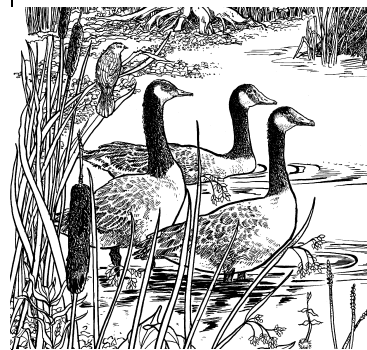
- Morrow Honeysuckle**  
(*Lonicera morrowi*)
- Tartarian Honeysuckle**  
(*Lonicera tatarica*)
- Common Buckthorn**  
(*Rhamnus cathartica*)
- Glossy Buckthorn**  
(*Rhamnus frangula*)
- Multiflora Rose**  
(*Rosa multiflora*)
- Japanese Spiraea**  
(*Spiraea japonica*)
- Japanese Yew**  
(*Taxus cuspidata*)
- Guelder Rose**  
(*Viburnum opulus var. opulus*)

#### Grasses and Grass-Like Plants:

- Chinese Silver Grass**  
(*Miscanthus sinensis*)
- Giant Reed**  
(*Phragmites communis*)
- Reed Canary Grass**  
(*Phalaris arundinacea*)

#### Flowers and Groundcovers:

- Garlic Mustard**  
(*Alliaria officinalis*)
- Spotted Knapweed**  
(*Centaurea maculosa*)
- Crown Vetch**  
(*Coronilla varia*)
- Foxglove**  
(*Digitalis purpurea*)
- Japanese Knotweed**  
(*Fallopia japonica*)
- Dame's Rocket**  
(*Hesperis matronalis*)
- Purple Loosestrife**  
(*Lythrum salicaria*)
- Pachysandra**  
(*Pachysandra terminalis*)
- Myrtle, or Periwinkle**  
(*Vinca minor*)



Canada Geese are native, but can sometimes seem invasive!