



Mashpee Invasive Species Guide

Mashpee's conservation lands include thousands of acres of open space for habitat protection and public recreation. However, there are biological and human related problems that threaten the protection of Mashpee conservation lands; invasive plant species are one such problem. Invasive plants have the ability to outcompete native plants, decimating native plant populations. In Massachusetts invasive species are the second greatest threat to biodiversity after habitat destruction. Over 200 native Massachusetts plants are being threatened by invasive species. This guide gives descriptions and pictures of common invasive species in Mashpee to aid in identification and removal.

The Difference Between Native, Exotic, and Invasive Plants

Plants in an area can be divided into two main categories: native and exotic. Native plant species are those that are indigenous to an area, meaning they arrived in a region through natural habitat expansion without the aid of humans. Exotic plants are those that have been introduced to an area by humans, either intentionally or unintentionally.

Invasive plants are species that are extremely aggressive and outcompete native species, reducing biodiversity. Invasives can be either native or exotic plants, though they are mostly exotic plants with no strong native competitors in the new area.

In order to be classified as invasive plants have the following characteristics:

- Produces large amounts of seeds
- Has effective methods of dispersal
- Readily established
- Grows quickly
- Strong competitors

**** Removal of invasives is most effective after plants have produced leaves but before they flower. This will reduce spreading seeds. ****

References:

- *Harwich Conservation Commission Trust:*
http://www.harwichconservationtrust.org/pdfs/HCT_PLANT_ID_MGMT_GUIDE.pdf
- *New England Wildflower Society:*
www.newfs.org/protect/invasiv-plant

Plant Information and Pictures Courtesy of Harwich Conservation Trust

Asiatic/Oriental Bittersweet

Celastrus orbiculatus



Type of Plant: perennial, deciduous vine; winds around trees and shrubs.

Height/Size: up to 60 ft long; stems up to 4" diameter.

Leaves: simple; alternate; ovate to circular; up to 4.75" long and 3.25" wide; light green.

Flowers: May-early June; tiny clusters of 3-4, five-petal, greenish-yellow flowers.

Fruit: July-October; green exterior changing to yellow-orange and exposing red fleshy fruit.

Roots: bright orange.

Similar to Native Plants: differs from native bittersweet (*C. scandens*) by having flower clusters all along the stem.

Habitat: roadsides, woods, thickets, fields.



Management:

- ❖ Cut mature vines as close to the roots as possible, every few weeks, *from spring until autumn*.
- ❖ Hand-pull young plants, making sure to remove all roots.

Autumn Olive

Elaeagnus umbellata



Type of Plant: large deciduous shrub or small tree.

Height/Size: up to 20 ft tall.

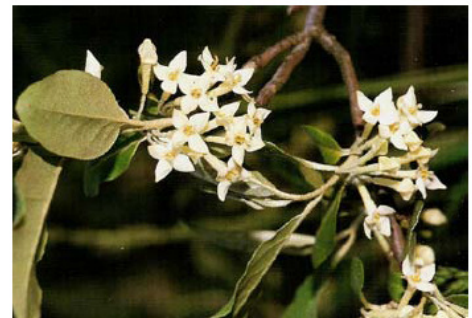
Leaves: simple; alternate; 2-4" long, 1" wide; scaly; green above, *silvery below*.

Bark/Stem: silver-brown stems with light gray bark.

Flowers: late spring-early summer; 0.5" diameter; funnel-shaped; fragrant; silvery white outside and pale yellow inside.

Fruit: abundant; brown and scaly at first, becomes red and fleshy; contains yellow seeds; 0.33".

Habitat: fields, grasslands.



Management:

- ❖ Cut as close to the roots as possible *during the growing season*.
- ❖ Hand-pull young plants, making sure to remove all roots.

Bush/Morrow's Honeysuckle

Lonicera morrowii



Type of Plant: deciduous shrub.

Height/Size: 6-15 ft.

Leaves: simple; opposite; paired; egg-shaped; 1-2.5"; hairy.

Bark/Stem: *shredded bark*; tan.

Flowers: early-late spring; white tubular flowers fading to yellow; white, pink, or yellow corollas; less than 1".

Fruit: green changing to red-orange, fleshy berries.

Similar to Native Plants:

Invasive honeysuckles all have hollow stems, while the native stems are solid.

Habitat: open woodlands, fields, thickets.



Management:

- ❖ Cut mature plants as close to the roots as possible *during the growing season*.
- ❖ Hand-pull when possible, making sure to remove all roots.

Japanese Knotweed or Japanese Bamboo

Polygonum cuspidatum



Type of Plant: herbaceous perennial.

Height/Size: 3-10 ft.

Leaves: simple; alternate; egg-shaped; 3-6" long; 2-4.75" wide.

Bark/Stem: hollow, bamboo-like stem; green and red-colored.

Flowers: August-September; numerous greenish-white.

Fruit: 0.25-0.4" long.

Habitat: thickets, edges, woods, roadsides.



Management:

- ❖ Small plants can be hand-pulled, but **be sure to remove all roots** (any left in the ground may re-sprout).
- ❖ In mature plants, cut stalks at least three times a season.
- ❖ **This plant is notorious for sprouting from fragments, dispose of cuttings carefully.**

Multiflora Rose

Rosa multiflora



Type of Plant: perennial shrub.

Height/Size: up to 15 ft tall.

Leaves: compound (5-11 leaflets); alternate; serrated; 1-1.5" long; smooth and dark above, pale and hairy underneath.

Bark/Stem: red-green & thorny.

Flowers: May-June; clusters of five-petal white flowers; 0.75-1.5".

Fruit: mid to late summer; red; spherical; 0.25-0.3" diameter.

Similar to Native Plants:

distinguished from other roses by feathery margin on stipules (a narrow green leaf-like structure at the base of each leaf stalk).

Habitat: transitional fields, thickets.



Management:

- ❖ Cut as close to the roots as possible *during the growing season*.
- ❖ May be hand-pulled (if comfortable) while using proper protection (watch out for thorns!).

Other notable invasive plant species found on Cape Cod:



Phragmites

Phragmites australis
Hollow grass; reed
Wetland.

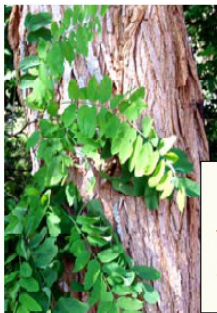
Purple Loosestrife

Lythrum salicaria
Wetland perennial herb



English Ivy

Hedera helix
Climbing vine
Disturbed
woods, fields,
edges.



Black Locust

Robinia pseudoacacia
Deciduous tree
Woods, grasslands.



Japanese Barberry

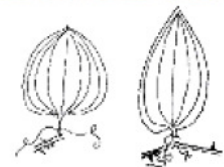
Berberis thunbergii
Deciduous shrub
Woods, fields, wetlands.

The following two species are ecologically valuable native plants in their natural state. Management is only necessary when these plants encroach on trails or scenic areas.

Green Briar:
Bull Briar & Cat Briar
Smilax rotundifolia & *Smilax glauca*



Type of Plant: Climbing vine
Height/Size: varies
Leaves: simple; alternate; 2-4" long; green above, whitish beneath; *S. rotundifolia* has round leaves, *S. glauca* are narrower.
Bark/Stem: slender green stem with sharp thorns.
Flowers: late spring-early summer; small greenish-yellow.
Fruit: September-winter; clustered dark blue-black berries; 0.33" diameter.
Habitat: woods and thickets.



S. rotundifolia

S. glauca

Management:

- ❖ Cut as close to the roots as possible (watch out for thorns!).
- ❖ May be hand-pulled (if comfortable) while using proper protection.

Poison Ivy
Toxicodendron radicans

All parts of this plant are toxic to touch. Promptly wash exposed areas with soap and water.



Type of Plant: perennial shrub, ground cover, or climbing vine
Height/Size: 6-18" high as ground cover; up to 150' vine.
Leaves: alternate; compound with 3 leaflets; 7-10" long; ovate; toothed irregularly; shiny above, pale below; bright red in autumn.
Bark/stems: varies from glossy green to brown; roots on vine stem may appear hairy; mature stems up to 4" diameter or more.
Flowers: June-July; clusters of small, 5-petal, yellow-green flowers
Fruit: late summer-winter; 0.25"; gray-white; waxy



Management:

Always wear protective gloves and clothing when dealing with poison ivy. Wash all clothing and tools that have come in contact with any parts of the plant. Winter management may reduce risk of exposure.

- ❖ Cut as close to the roots as possible.
- ❖ May be hand-pulled (if comfortable) while using proper protection.

CAPE COD INVASIVE PLANT KEY

Asiatic/Oriental Bittersweet – *Celastrus orbiculatus*



Fruit



Vine and leaves

Autumn Olive – *Elaeagnus umbellata*



Flowers



Leaves

Japanese Knotweed – *Polygonum cuspidatum*



Bush Honeysuckle – *Lonicera morrowii*



Multiflora Rose – *Rosa multiflora*



**Native plants
requiring
management
on a case-by-
case basis**

Green Briar - *Smilax glauca*



Poison Ivy - *Toxicodendron radicans*

