# What are Invasive Plants and Insects?

An invasive species is an organism that causes **ecological or economic harm** in a new environment where it is not native.

Invasive plants and insects are among the greatest threats to the natural environments of Massachusetts. Nonnatives can spread after being introduced accidentally through global trade or on purpose for landscape use.



Pulling a new patch of an invasive plant to prevent establishment. (U.S. Fish & Wildlife Service)

Invasive species can out-compete, displace, or kill native species, dramatically altering ecosystem structure and function. Once established, invasive plants and insects are difficult to control and harder to eradicate. With few natural enemies, invasive species pose an increasing threat to the lands you enjoy.

#### **Methods of Control**

Once you have learned which invasive species should not be on your property, search reputable sources for the safest and most effective control practices you are willing to implement.

<u>Mechanical control</u> includes cutting, mowing, pulling by hand or with extraction tools, hoeing and cultivation.

<u>Chemical control</u> includes targeted and careful use of herbicides and insecticides by following label directions and state regulations.

**Biological control** includes intentional manipulation of natural enemies by humans for the purpose of controlling pests. This is usually implemented by state programs on very high priority invasive species, though some biological control agents may be available to landowners.

#### Learn More

Lists of Invasive plant and insect species in Massachusetts: https://www.massnrc.org/mipag/ https://massnrc.org/pests/index.htm

**Fact sheets** for identification, control, etc. https://www.maine.gov/dacf/mnap/features/ invasive\_plants/invsheets.htm (Although this website is from ME, that state has many of the same invasive species as MA.)

Images: www.invasive.org/images.cfm

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## Invasive Plant & Insect Species

What You Need to Know



Japanese knotweed overwhelming the Deerfield River shoreline. (Photo by: Leslie Mehrhoff U. of CT Bugwood.org)

Invasive plants and insects can destroy local and regional ecosystems, including their suitability as wildlife habitat.

They can also reduce property values.



### What <u>vou</u> can do to stop the spread of invasive species

#### Learn to Identify

Proper identification will help you detect invasives and distinguish them from beneficial or harmless look-alikes.

#### Prevent

Preventing establishment is the most effective way to avoid a costly and labor-intensive problem.

- Don't move firewood within or outside of the state so insect hitchhikers are not transported.
- Clean seeds and soil off footwear, recreational gear, and tools after using them elsewhere.
- Clean, drain, and dry watercraft after use.
- Plant, seed, or mulch bare disturbed soil to help prevent invasive seed germination.

#### **Detect Early and Respond Rapidly**

Detecting and removing invasive plants when they first arrive can prevent a long-lived and widespread infestation. Once plants become established, seeds can disperse long distances and survive for years in the soil.

#### Manage Established Populations

Manage plants using recommended methods for your species. Cutting off flowers or seedheads can buy time. If pulling or digging, remove all roots. Persistence over many years is necessary, but each year you will see improvement!

#### Help Protect the Places you Love

Pitch in to help with invasives control events at special places in your area. Take action on your own land.



A Sampling of Invasive Plant Species

Found in Shelburne

Japanese knotweed

Plant: Shrub. Hollow thin walled, bamboolike stems up to 10 ft. tall.

Leaves: Broad, tapered toothless leaves ~6 in. long, heart or shovel shaped along top. Flowers: Sprays of small white flowers. Fruits: <1/2 in. seed with papery "wings." Risk: Forms dense stands that smother and exclude trees, shrubs, and wildlife habitat.



Japanese barberry

Plant: Spiny deciduous shrub typically 3-6 ft. Leaves: ~1 in. long, spatula shaped, or narrow ovals, turning red or burgundy in autumn. **Flowers:** Abundant pale yellow flowers along the entire length of the stem in clusters of 2-4. Fruits: Bright red oblong berries. **Risk:** Thornes make it painful to walk through. Displaces native plants. Promotes tick habitat.



Multiflora rose Plant: Deciduous shrub with long flexible stems and stout thorns. Leaves: Toothed with 7 leaflets. Flowers: White in clusters. Fruit: Red, semi-dry in clusters. **Risk:** Painful to walk through. Forms dense thickets in fields and along waterways. Excludes other plants and wildlife.



Oriental bittersweet

Plant: Deciduous woody vine, can grow up to 60 ft. long.

Leaves: Wide or narrow, 2-4 in. long, tapered and toothed. Yellow in autumn. Fruits: Yellow-orange capsules that split open to reveal the fleshy red berry. Risk: Can smother, strangle, and weigh down trees and shrubs until they break.