



Invasive Species

□ Invasive plants impact native plant & animal communities by displacing native vegetation and disrupting habitats as they become established and spread over time.⁶

- Japanese Barberry
- Bittersweet Vine
- Mile-a-Minute Vine

A close-up photograph of a dense thicket of Japanese Barberry shrubs. The foliage is a mix of vibrant red, purple, and dark red hues, with some green leaves still visible. The shrubs are covered in small, round berries. The background is a soft, out-of-focus natural setting.

Japanese Barberry

Background¹

- Native to Asia.
- Introduced from Japan - 1875
- Escaped and naturalized as far north as Nova Scotia, south to North Carolina, and west to Montana.

Description¹



- ❑ Dense woody shrub with arching spine-bearing branches.
- ❑ Grows about three feet high.
- ❑ Contains small yellow flowers & red berries.
- ❑ Leaves turn shades of red and orange in the fall.

Habitat²

- ❑ Found in:
 - Old fields
 - Open woods
 - Floodplains
 - Ledges
 - Power lines
 - Roadsides
- ❑ Sun & shade tolerant
- ❑ Drought resistant
- ❑ Grows in a variety of soil types.



Threat³

- ❑ Particular threat to open and second-growth forests.
- ❑ Can eventually grow thick enough to crowd out native plants.
- ❑ Alters soil pH & nitrogen levels.
- ❑ Deer avoid barberry.
- ❑ Birds eat the berries.

Control Options²

- Mechanical Control
- Chemical Control
 - Glyphosate herbicide

Mechanical³

- ❑ Cutting, pulling or digging
- ❑ A hoe, weed wrench, or mattock should be used to uproot the bush and all connected roots.
- ❑ Thick gloves for protection from spines.
- ❑ Fire is thought to kill the plant preventing future establishment.

Chemical⁵

- Glyphosate is less toxic than a number of other herbicides and pesticides.
- Glyphosate is slightly toxic to wild birds.



Bittersweet Vine

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Background

- ❑ Asiatic Bittersweet is native to East Asia
- ❑ Introduced in the 1800s for ornamental use
- ❑ States have planted Bittersweet for highway landscaping and shelter and food for wildlife
- ❑ Commonly found in fields and road edges
- ❑ Has high shade tolerance, so it can be found in forests



Description

- ❑ Woody vine, green elliptical leaves
- ❑ Small flowers sprout red berries when ripe
- ❑ Birds, ruffed grouse, pheasants, and fox squirrels consume these berries
- ❑ Easily confused with the American Bittersweet (*Celastrus scandens*) which has flowers at the tips of the stems as opposed to along the stems

Distribution

- ❑ Birds that eat the berries spread its seeds
- ❑ Used ornamentally-when discarded the vine spreads
- ❑ Spreads due to surface runners
- ❑ Consumption of native plants by animals (deer) allows vines to take over more



Effects

- ❑ Destruction of native plants by means of overgrowth
- ❑ Strangulation of plants (i.e. shrubs)
- ❑ Overgrows meadows
- ❑ Deprives native plants of sunlight due to rapid growth
- ❑ Asiatic Bittersweet has been known to hybridize with American Bittersweet, which may lead to a loss of genetic identity

Effects (cont.)

- ❑ Out-competes and kills trees by girdling the tree-constricts and deforms trunk



Mile a minute

Vine

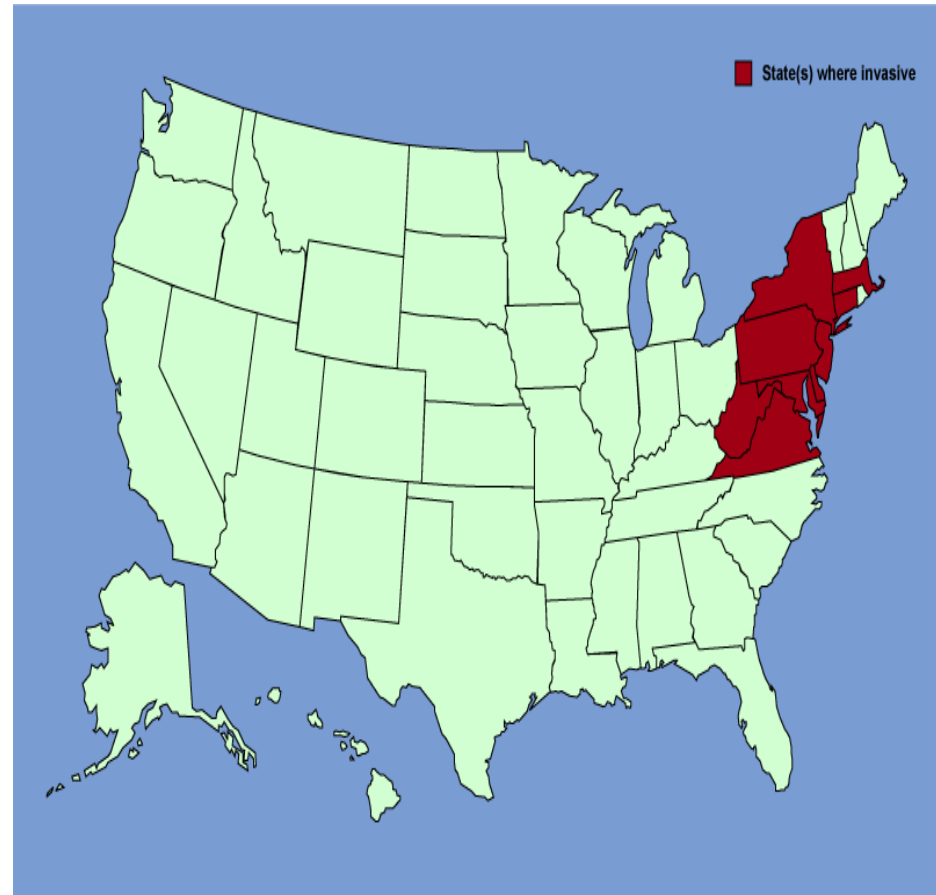
Origin⁷

- India
- Eastern Asia
- China
- Japan
- Phillipines

- Nepal
- Burma
- Manchuria
- Korea
- Taiwan
- Malay Peninsula

Location⁷

Asian vine that invades a variety of habitats in the northeastern U.S.



Habitat⁸

sunny sites

moist soil

Disturbed areas

roadsides

woodland edges

orchards

nurseries

forest clear cuts

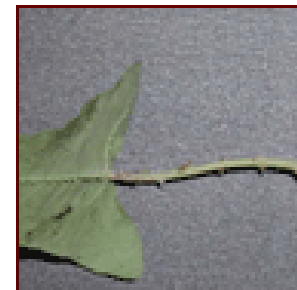
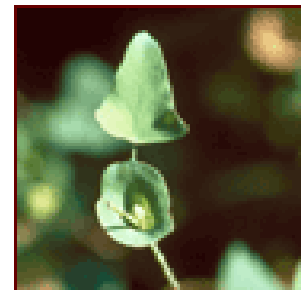
right-of-ways

stream banks

wet meadows

Description⁷

- ❑ Light blue-green leaves are triangular
- ❑ Thin, jointed, highly branched stems are green to reddish-green in color
- ❑ Curving spines are present on the leaf stalks, stems, and underside of leaves along the veins
- ❑ A leaf-like cup of tissue surrounds the stem at the base of the leaf stalk
- ❑ Flowers are inconspicuous
- ❑ blue, berry-like fruits



Control options⁹

The mile-a-minute weevil:

Adult are about 2 mm long
black

may be covered by an orange
film

Effectiveness:

Adult weevils eat small holes
in young leaves

lay eggs on leaves and stems



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