

Invasive Plants in Pennsylvania Chinese and Japanese Wisteria

Wisteria sinensis and Wisteria floribunda



Photo: Chris Evans, River to River CWMA, www.invasive.org

Background:

Exotic wisterias are popular ornamental landscape plants that can escape from yards into natural areas. They were brought to the U.S. in the early 1800s.

Range:

Chinese wisteria is more widespread than the Japanese species, but both can be found throughout much of the east coast, particularly in the south. Chinese wisteria can be found as far north as New England.



Description:

Wisteria are long-lived, deciduous, woody climbing vines that may reach a height of 60 to 70 feet or more. Chinese wisteria vines are brown-gray in color with fine white hairs, while the Japanese wisteria vines are smooth and brown. Both can attain a diameter of 15 inches or more. The compound leaves alternate along the stem and have many leaflets (Japanese: up to 19, Chinese: up to 13). The flowers are showy, violetblue in color and occur in long drooping clusters.

Habitat:

Wisteria prefers full sun, but established vines can grow and reproduce in partial shade. It is tolerant of a variety of soil types and moisture levels, but prefers loamy, well-drained soils. Infestations are commonly found along forest edges, roadsides and rights-of-way.



Photo: James Miller, USDA FS, www.invasive.org

Biology and Spread:

Most infestations of exotic wisterias appear to be the result of persistent vegetative spread of old plantings, although seed propagation is also possible. Four to six seeds are contained within each fuzzy, flat five-inch-long fruit.



Photo: James Miller & Ted Bodner, Southern Weed Science Society, <u>www.invasive.org</u>

Ecological Threat:

Because of the twining nature of these vines, they can outcompete trees and other vegetation for canopy space. A dense, nearly impenetrable thicket can result, inhibiting normal forest succession.

How to Control this Species:

A combination of methods yields the best results.

Manual

For small infestations, handpull, getting the roots too. Bag and dispose of all plant parts. Any portion of the root remaining in the ground may re-sprout.

For vines in trees, cut the stem, pull out the rooted portion, and leave the vine in the tree. Do not attempt to pull it out as it could cause damage to the tree or fall and injure you.

Look-A-Likes:

American wisteria (*shown below*) has smaller flower clusters and smooth seed pods. The stems are brown to reddish-brown and smooth. The vines twine clockwise around a tree, whereas the exotics twine counterclockwise.



Chemical

For vines climbing up trees or buildings, cut the stem and apply a concentrated systemic herbicide like triclopyr or glyphosate to the cut surface of the rooted portion of the vine.

For large infestations, a foliar herbicide may be the best option, rather than manual or mechanical removal which could disturb too much soil. The ideal time to spray is when the plant has gone dormant in October or November.

Native Alternatives:

There is a native American wisteria (*Wisteria frutescens L Poir.*) that grows from Virginia to Florida. It is not as common in the nursery trade as the exotics. Other native vine alternatives include trumpet creeper (*Campsis radicans*), trumpet honeysuckle (*Lonicera sempervirens*) and crossvine (*Bignonia capreolata*) - shown below.



References:

Plant Conservation Alliance's Least Wanted factsheets: http://www.nps.gov/plants/alien/fact/wist1.htm

Invasive Exotic Plant Tutorial for Land Managers: <u>http://</u> www.dcnr.state.pa.us/forestry/invasivetutorial/wisteria.htm

For More Information:

To learn more about invasive plants in Pennsylvania and the northeast, here are some useful resources:

DCNR Invasive Species Site: <u>http://www.dcnr.state.pa.us/</u> conservationscience/invasivespecies/index.htm

Plant Invaders of Mid-Atlantic Natural Areas, National Park Service: <u>http://www.nps.gov/plants/alien/pubs/midatlantic/</u> <u>midatlantic.pdf</u>