Invasive Plant Species in Chester, CT

Common Name: Japanese Knotweed
Scientific Name: Fallopia japonica (syn. Polygonum cuspidatum)
Origin: East Asia

General Information: Introduced in the late 1800s as an ornamental and to stabilize streambeds, Japanese Knotweed is an herbaceous perennial and it is extremely invasive. In our area it thrives in wetlands and can tolerate adverse conditions, including full shade, high heat, salinity, drought, and even flooding. Knotweed's ability to reproduce through its root system, rhizomes, makes it very successful in invading natural habitats where it shades out native plants. Each above ground and below ground plant fragment can become another plant, which makes removal very challenging.

Identification: Japanese Knotweed grows 3-10 feet high forming dense thickets. The leaves are broad and triangular with pointed tips and clusters of tiny white flowers that bloom during August and September. The stem is smooth, jointed and hollow with many red and purple nodes. In early spring young shoots emerge and are more red than green in color. Japanese Knotweed is sometimes confused with another invasive species: bamboo. One difference is that bamboo stems are much woodier while knotweed stems are herbaceous and therefore wet when freshly cut.

Japanese Knotweed leaves and flowers in late summer.

Photo credit: Dave Jackson, PennState Extension

Japanese Knotweed flowers up close – in late summer clusters emerge that are 3-4 inches long and consist of dozens of small, white, 5 petaled flowers.
Photo credit: Dave Jackson, PennState Extension

Japanese Knotweed mature hollow stem in late summer (left) and **young shoot** emerging in early spring (right). Photo credit: Dave Jackson, PennState Extension

Local Example: One easily accessible place to see Japanese Knotweed in Chester is behind the parking lot on Water Street.

Control: Due to the aggressive growth rate of Japanese Knotweed, springtime is the perfect time to start manually removing when the shoots are young and small. To manually remove: pull the young shoots in the spring and then cut down any stems repeatedly at least a few times each season. Then repeat this yearly thereafter. All plant parts should be bagged and thrown away to prevent re-establishment because any remaining fragments will re-sprout. For this reason, mowing is never advised.

Japanese knotweed reproduces very easily through its extensive underground root system called rhizomes. Each and every cut piece of root has the ability to grow another knotweed plant. Even after multiple removal attempts by pulling shoots and cutting stems Japanese Knotweed thickets will most likely persist. Therefore, cutting the stems in combination with an herbicide application is the most effective approach. The best recommendation is to cut down all the stems in late June and then wait at least eight weeks after cutting to treat the re-sprouting plants with glyphosate herbicide. This eight week waiting period is very important as it coincides with the growing habit of knotweed and will support the herbicide in being able to reach the underground root system. The herbicide application should not occur until August or September. Please note to use aquatic-labeled glyphosate if using in or near water. Again, to summarize, remove as many shoots as possible, repeatedly, in the spring. Then cut down stalks in late June. Allow the knotweed to regrow for at least eight weeks. After August 1st, spray knotweed with ROUNDUP [glyphosate (41%)] @ 2.5 fl. oz./gal.

Knotweed infestations result in decreased biodiversity in both plant and animal communities. Japanese knotweed thickets degrade water quality and are even strong enough to damage roads and bridge foundations.

References:

Penn State Extension -
https://extension.psu.edu/japanese-knotweed

UCONN, University of Connecticut –
https://cipwg.uconn.edu/japanese-knotweed/