## **Aquatic Invasive Species Quick Guide**

Japanese Knotweed (Fallopia japonica Houtt. Ronse Decr.)

**Description**: Japanese knotweed is a large, non-native shrub that grows up to 12 feet tall. It has hollow, woody stems (canes). Leaves are alternate, and widely lance-shaped to heart-shaped. Tiny, white flowers are produced in short, erect spikes that originate from the leaf axils. This species prefers full sun exposure, and grows aggressively in riparian areas, but can also grow in upland habitats. Rhizomes are dark brown and knotty, with an orange core. This plant has been nominated to be included in the list of 100 "World's Worst" invasive species. It has been known to damage foundations and sprout through asphalt.

**North American Distribution**: Documented in at least 41 U.S. states and 5 Canadian provinces.



Japanese knotweed has large, heart-shaped leaves and spikes of white flowers that originate from the leaf axils.



Golden Sands

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Stems are hollow, but solid at the nodes.

**Dispersal Vectors**: Japanese knotweed is native to Japan, and was introduced to North America as an ornamental plant, usually planted as "living fences" to generate privacy. It has occasionally been planted by beekeepers for its abundant flowers. Japanese knotweed primarily spreads by rhizomes. Fragments of rhizomes or stems can sprout new plants. Many populations along streams are started by fragments drifting in from upstream. Seeds have fairly high viability, but seedlings often die soon after germinating.

**Ecological Impacts**: This species forms dense stands that exclude native vegetation. This loss of diversity results in a loss of usable habitat for wildlife. A study found up to ten times as many plant species outside of Japanese knotweed patches, compared to within the patches. It also noted a 50% decrease in invertebrate diversity within a Japanese knotweed patch. Patches on streambanks can increase erosion as the plant dies back in fall and exposes large amounts of soil.

**Control Options**: Manual removal of Japanese knotweed is very difficult, due to its large network of rhizomes. These rhizomes can be several meters deep, making removal by digging nearly impossible. Repeated mowing or pulling of shoots can eventually exhaust the plant's underground energy supply, but this may take two years or more.

Systemic herbicides like glyphosate can control this species. It can be sprayed on the foliage, but take care to minimize chemical overspray, which will kill native vegetation. Cut stems once in early summer so plants re-grow shorter for fall treatment with less overspray. Stems can also be cut near the ground in fall, and a small volume of herbicide can be poured into the cut stem. A combination of manual removal and herbicide application tends to be the most effective control strategy. Always follow label directions. A WDNR permit is required when near water.



Dense patches of Japanese knotweed can exclude all other vegetation.

An effective biological control agent is not known at this time.

## Additional Information:

Wisconsin Department of Natural Resources and University of Wisconsin Extension. Japanese knotweed. Informational brochure. http://clean-water.uwex.edu/pubs/pdf/knotweed.pdf

Global Invasive Species Database. Polygonum cuspidatum.

http://www.issg.org/database/species/ecology.asp?si=91&fr=1&sts=sss&lang=EN

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