

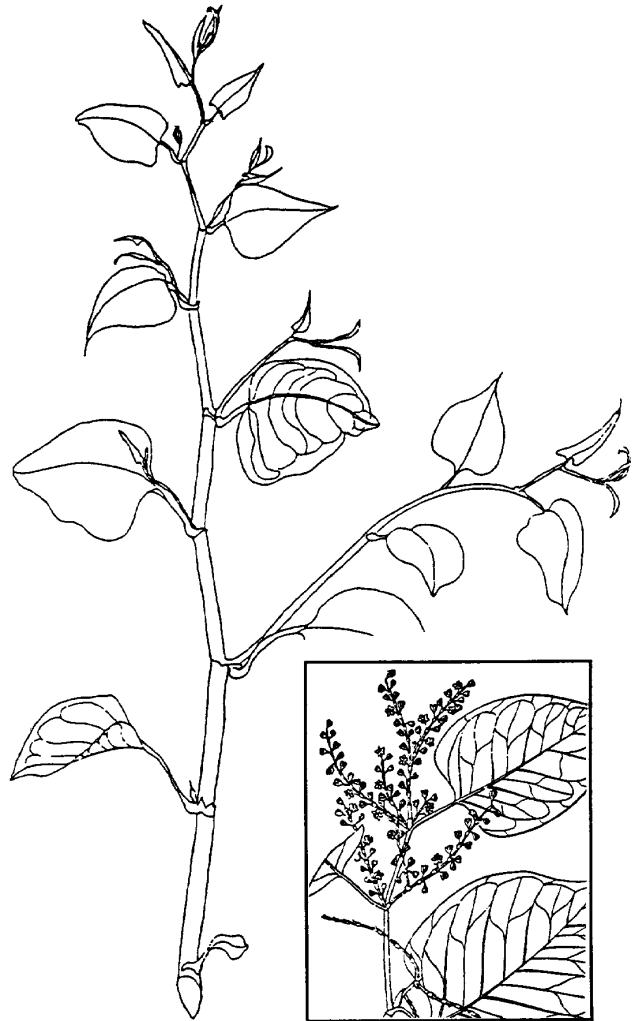
Vermont Invasive Exotic Plant Fact Sheet

Japanese Knotweed *Fallopia japonica* (Houtt.) Decraene (formerly *Polygonum cuspidatum* Sieb. & Zucc.) Smartweed Family Vermont Class B Noxious Weed

Description: Japanese knotweed is a fast-growing, herbaceous perennial that grows 3 to 6 feet (1-2 meters) high and forms large, dense patches where it invades. The stout, hollow bamboo-like stems and the large (3 to 6 inches (7.5-15 cm) long), broadly ovate leaves are distinctive. Tiny white or greenish-white flowers develop in August and September and grow in numerous linear clusters that form a mass of white over the plant when in full flower. The plant is insect pollinated and seeds are wind dispersed. However, in the U.S. and European countries, seeds are not the primary means of reproduction. Dispersal and spread of Japanese knotweed is largely by rhizome (a thickened underground stem) growth and transport of rhizome fragments. Rhizomes may reach 45 to 50 feet (14-15 meters) in length.

Habitat: This plant occurs in a wide variety of habitats, many soil types, and a range of moisture conditions. It is most commonly found in areas with full sunlight and where the soil has been disturbed. It is often seen along river and stream banks where human disruption flooding scour (natural process, not necessarily bad) or ice allows for its establishment. It is also seen near roadways and spreading from yards into open areas.

Threats: Japanese knotweed's early spring emergence and dense growth prevent other species from becoming established, which reduces species diversity and wildlife habitat. Large stretches of knotweed along rivers and streams in Vermont are substantially affecting many of the state's usually diverse riparian corridors.



Inset shows flowers

(Main illustration by Dott Emmett, courtesy of Blackwell Scientific, Inc.; inset illustration from "An Illustrated Flora of the Northern United States and Canada", 1913, Dover Publications)

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Japanese Knotweed Smartweed Family (*Polygonaceae*)

Distribution: Japanese knotweed is a native of Japan. It was introduced as an ornamental into the United Kingdom in 1825 and into the United States in the late 1800s. The species has escaped from cultivation and has naturalized throughout eastern North America as far north as Nova Scotia and Newfoundland and as far south as North Carolina. It is also found in the coastal areas of Oregon and Washington and in much of the Midwest. Japanese knotweed is an invasive plant in Vermont, especially along river and stream banks.

Control: Choice of methods depends on size of the infestation. A small patch can be controlled by smothering the plants with black plastic topped with materials such as old corrugated tin or layers of cardboard and stones. This works best on places where the materials can be tended for two growing seasons, such as in a yard. In natural areas, small patches can be cut at least three times per growing season, and this should continue until the rhizomes dieback (can take up to five summers). Alternatively the stems can be cut in August when nutrients are being translocated to the rhizomes, and a solution containing 25% glyphosate should be dripped into the cut stem.

References:

- Brunelle, H. and B. Lapin. 1996. *Invasive Plant Information Sheet: Japanese knotweed*. The Nature Conservancy of Connecticut, Middletown, Connecticut.
- Gleason, Henry A. 1968. *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*. Hafner Publishing Co., Inc., New York.
- Sieger, Leslie. 1992. *Element Stewardship Abstract for Polygonum cuspidatum*. The Nature Conservancy, Arlington, Virginia.



For more information about Vermont's invasive exotic plant species or if you would like to know how you can help, please contact:

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