#### What You Can Do

Japanese knotweed stems are easily cut with clippers or pruning shears. However, just removing the stems above ground doesn't deal with the below-ground rhizomes, and both stems and rhizomes can re-sprout. Depending on what you encounter, there are a few options:

• Cutting and digging can be effective. However, care must be taken to leave the material to dry and die on hot pavement, burn it safely, or thoroughly wrap it in black plastic bags and discarded. The last option is least desirable.

- It's a safe bet that new sprouts will form from rhizomes that weren't caught. Three (or more!) successive cuttings/digs may be needed to starve the plants of the energy stored in the rhizomes.
- Digging can promote soil disturbance and should be done carefully.
- The young plants can be pulled by hand but must be disposed of as above.
- Do NOT mow or weed-whack stands of Japanese knotweed; this will spread the fragments far and wide and only worsen the problem.

• Do NOT attempt to compost the cut material. You'll end up with a lovely stand of knotweed in your compost pile!

The most effective way of dealing with large stands of mature plants is to use herbicide on cut stems. Herbicide use is beyond the scope of this brochure since it requires expertise, training, and in some cases a legal license. Again, cutting will have a noticeable effect, so go ahead and cut and pull, but don't expect it to solve the problem on its own.

The Invasive Species Committee may be able to provide some guidance, possibly help, and would like to know about large infestations in town. To contact the committee, send email to:

## invasive@grotonma.gov

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# **INVASION ALERT!** Japanese Knotweed



Japanese knotweed spilling over a Groton roadside, and a closeup of the hollow bamboo-like stems

Groton has been invaded by a foreign plant: Japanese knotweed (*Fallopia japonica*). This tough, fast growing perennial quickly colonizes riversides, roadsides, and disturbed areas. It forms dense infestations that can completely smother all native growth. Japanese knotweed spreads rapidly via tough underground rhizomes (roots).

The purpose of this flyer is to show you what it is, how to identify it, and what you can do about it.

### Description

Japanese knotweed is a perennial plant with hollow stems, somewhat resembling bamboo with leaves. The leaves are broad and rounded with a truncated base and pointed tips. Knotweed can grow 2-10 feet tall, and drops its leaves in winter.



Japanese knotweed stems in winter (with birch tree)

Japanese knotweed grows quickly, and spreads very rapidly via underground *rhizomes*, or roots. This colonizing ability, combined with the dense shade cast by the thick stands it can form, allows knotweed to effectively crowd out virtually all native understory growth.

Japanese knotweed is also effectively spread by both stem fragments and small "winged" seeds ( $\sim$ 1/4 inch). These seeds are spread by wind, animals, and the movement of soil. Thus, knotweed is a frequent colonizer of disturbed areas such as along roads and trail sides.



This is one tough plant! Knotweed can handle deep shade, poor or salty soil, heat and drought. Like so many invasives, it was introduced as an ornamental in the 1800s. Knotweed once featured in many seed catalogs!

Rhizomes with new sprouts at right

You can find Japanese knotweed from Groton to California, Canada to Louisiana. It has spread coast to coast in only ~150 years, and is also recognized as invasive in Europe.



Close-up of 3-winged seeds

### Identification



Japanese knotweed is upright and woody appearing. The hollow reddish stems have a membrane-covered swelling where the leaves attach (the *nodes*). The leaves are 3-6 inches long and 2-4 inches wide, and alternate on the stem with a strongly "every other" appearance.

In late summer or early fall, clustered spikes of creamy white blossoms appear. Each spike is about 4 inches long.



Japanese knotweed along a Maine road

Since Japanese knotweed is so effective at crowding out native vegetation, it can often cause problems with soil erosion, especially along streams and rivers. This is especially problematic as increased sedimentation can harm numerous aquatic plants and animals: Japanese knotweed's harmful effects are wide-ranging.

An obvious feature of this plant from several feet away is how it forms dense stands like bamboo. Where it appears, it's often the only plant visible. Knotweed can outcompete poison ivy and other common weeds easily.



Close-up of young plant