

Invasive Species Management Guide

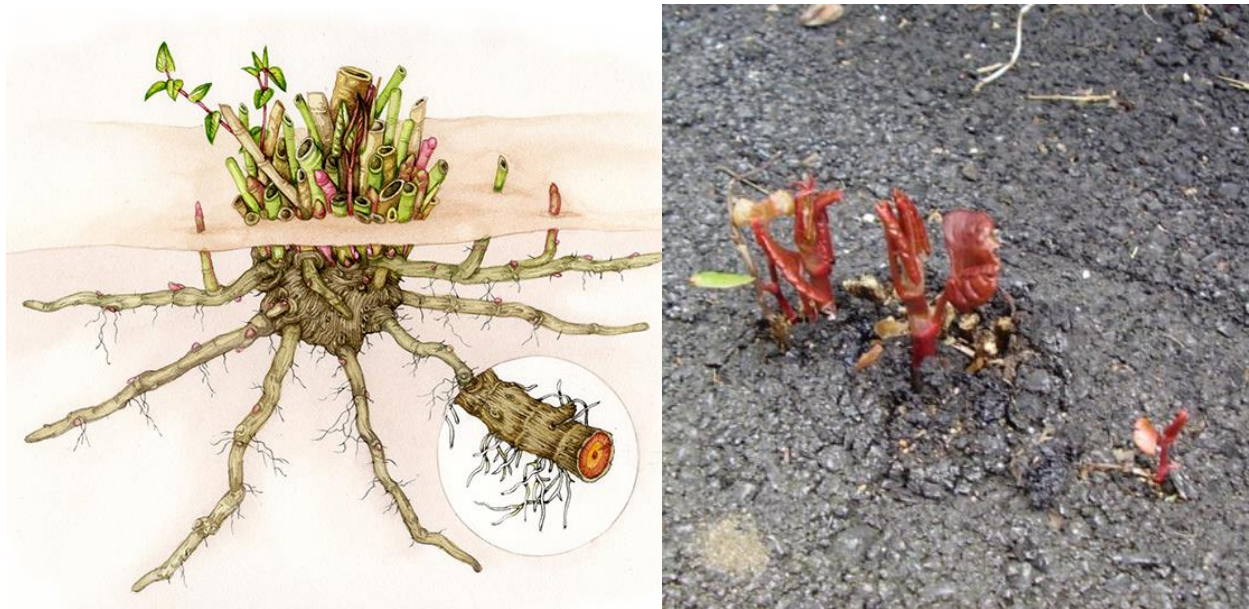
Japanese Knotweed

Japanese knotweed (*Polygonum cuspidatum*) Japanese knotweed is an aggressive alien species introduced from Japan as an ornamental in the late 1800s. A member of the buckwheat family, this pervasive plant thrives on disturbed ground, especially in moist places, and will grow almost anywhere, squeezing out native species throughout Rhode Island, upsetting the normal ecological balance. The plant is extremely resilient and tough. It can go dormant for up to five years; roots may be several feet deep; it can grow through two inches of asphalt and may even damage buildings. It is also difficult to eradicate. Japanese knotweed is easy to identify. It usually grows in dense stands, some over six feet tall. It is semi-woody when mature, and resembles bamboo. The leaves are heart-shaped. The creamy white flowers appear in late summer in panicles (the one redeeming feature of this plant is that pollinators love those flowers). It spreads by vegetative cuttings, rhizomes, and to a lesser extent, by seed.



Creamy white flowers in panicles

Semi-mature stalks



Knotweed rhizomes spread widely and can even punch through asphalt

Control

Mechanical Control

Mechanical control is a multi-year project. Mowing is not effective because new plants can grow from fragments of the mowed plant. The plants can be covered with heavy plastic, which must be kept in place for five years. Plants can be dug up by the roots and rhizomes, but some plant material will usually be left behind, making mechanical control a multi-year project. Dug plants can be left to dry, so long as they are not in contact with soil. Dug plants can also be bagged in black bags, left in the direct sun to “solarize,” and then disposed of. If left unchecked, knotweed will spread indefinitely.

Chemical Control

Herbicide application is probably the most effective and labor-efficient measure for eradication. According to some thinking, the plants should be cut in late spring (and the plant material removed) to reduce plant vitality. Others suggest forgoing the spring cutting as it may stimulate rhizome growth. In either event, in late summer or early fall, the plants should receive a thorough foliar spray with a glyphosate or triclopyr mixture. The spraying must be done after the flowers have finished blooming, as the flowers attract a variety of bees and other pollinators. Foliar treatment is reported to be up to 95% effective because, in the fall, nutrients are returning to the root structures, and the herbicide will reach underground parts of the plant. Repeat spraying in the following year may be required.