Japanese knotweed spreads aggressively and forms dense thickets, outcompeting native plants. Once established, it is persistent and challenging to eradicate. Japanese knotweed is a particular threat to riparian areas because it is very tolerant of flooding and quickly populates scoured shores and islands.

**CHARACTERISTICS**

Japanese knotweed, a member of the buckwheat (Polygonaceae) family, is an herbaceous perennial that can reach over 10 feet in height. Leaves are about 6 inches long by 3–4 inches wide, oval-shaped with pointed tips. Greenish-white sprays of flowers bloom in summer and are followed by small winged fruits. Although the winged fruits can disperse over distances, Japanese knotweed spreads primarily by rhizomes, and new plants can sprout from rhizome fragments.

**WHERE FROM**

Originally from Japan, Japanese knotweed was popularized through British garden catalogs in the late 1800s. By 1894, it was reported to be naturalized in the mid-Atlantic region of the U.S., and by 1938, it was recognized as a nuisance for its rampant growth and spread.

**WHERE FOUND**

Japanese knotweed is established in much of the eastern U.S. and covers hundreds of acres of wetlands, streambanks, hillsides and riverbanks in Pennsylvania. Japanese knotweed tolerates an unusually wide variety of locations and conditions. Although it thrives in full sunlight, it can also tolerate moderate shade and high temperatures, dry soil, and salt. It turns brown and dies back after the first frost.

**CHEMICAL METHOD**

A direct application method, known as wet glove application, is best used in areas where Japanese knotweed is present among native species. Place an elbow-length rubber glove over one hand, and then place a cotton glove over it. Squirt a 2% solution of glyphosate (e.g., Roundup or Rodeo) on the cotton glove and rub the knotweed plant between your fingers. Control dense stands of knotweed by mowing the area late in the growing season (August) with a bush hog or weed whacker with brush blade. Allow the plant to regrow to a height of 1-foot, then use a backpack sprayer to conduct a foliar application of a 2% glyphosate solution. A subsequent foliar application of herbicide may be necessary to control seedlings and resprouts. When applying herbicide to foliage, be careful not to overspray so that leaves are dripping. A surfactant (0.5% non-ionic) can be used to aid in the application and penetration of herbicide to leaves.

**MANUAL METHOD**

For small or early infestations, or where herbicide use is impractical, use a digging tool to remove the entire plant, including all roots and runners. Juvenile plants can also be removed by hand, depending on conditions. All plant parts should be bagged and disposed of properly to prevent resprouting.