Town of Barrington Highway Department PO Box 660 226 Smoke Street Barrington, NH 03825



Phone: (603) 664-0166 Website www.barrington.nh.gov

Herbicide Use Notification

June 13, 2023

Dear Property Owner/Resident,

The Town of Barrington plans to apply herbicides along certain roadside rights-ofway (ROW) during the fall of 2023 to control the spread of Japanese Knotweed. You are receiving this informational notice because there is a significant occurrence of this plant along the roadside near your property. Date Range of Application is July 17 – August 7, 2023.

Japanese Knotweed is a non-native, invasive plant currently found in 42 US states. Knotweed crowds out native plants, affecting the food supply, shelter and other vital factors for wildlife. It impedes site distance along roadways and can damage pavement and other infrastructure. The Town of Barrington is proactively taking action to control this aggressive and damaging plant.

| First Application | |
|--|-------------------|
| Greenhill Road | Hansonville Road |
| Brooks Road | Amy's Lane |
| Mahala Way | Pond Hill Road |
| Second Crown Point Road (two sections) | Daniel Cater Road |
| Ham Road | Canaan Back Road |

The following roadsides will be treated in 2023:

Town of Barrington Highway Department PO Box 660 226 Smoke Street Barrington, NH 03825



Phone: (603) 664-0166 Website www.barrington.nh.gov

The following Herbicides are to be selectively applied to the target plants:

- · Milestone (aminopyralid) EPA #62719-519
- · Roundup Pro Concentrate (glyphosate) EPA #524-529

The Licensed Pesticide Applicator contractor is:

· Keep It Native LLC PO Box 49, Strafford NH 03884

Town of Barrington Contact:

·Marc Moreau, Road Agent 603-948-5203 (cell) 603-664-0166 (office)

Every effort will be made to avoid herbicide application beyond the ROW, unless the property owner provides written permission to the town. Please contact us with any questions or concerns.

Thank You, Marc Moreau

mmoreau@barrington.nh.gov

Japanese knotweed Polygonum cuspidatum / Falopia japonica

Fact Sheet

NH Department of Agriculture, Markets & Food, Division of Plant Industry, 29 Hazen Dr, Concord, NH 03301 (603) 271-3488

Common Name: Japanese knotweed Lat New Hampshire Invasive Species Status: Prohibited (Agr 3800)

Latin Name: *Polygonum cuspidatum / Falopia japonica* Native to: Japan



<u>Description</u>: Perennial reaching 10' in height and width. Bohemian Knotweed (*Polygonum x bohemicum*) is similar. <u>Stems</u>: Greenish, hollow and jointed, similar to bamboo. <u>Leaves</u>: Alternate, broadly ovate, 3-7'' long. <u>Flowers</u>: Small, whitish, forming panicles, August-September. <u>Seeds</u>: Calyx, brown, triangular. <u>Habitat</u>: Found in woodland sites, open spaces, ditches, roadsides, riverbanks. Prefers moist, well-drained soils. <u>Spread</u>: Stem & root fragments, and by seed. <u>Comments</u>: Aggressive, spreads quickly along surface waters and in right-of-ways. <u>Controls</u>: <u>Do not mow</u>, cut stems at base then smother by covering area with heavy-duty fabric/plastic, herbicides also recommended.

General Considerations

Japanese knotweed is a tall upright perennial with a large rhizomatous rooting system and hollow stems. The stems can reach heights of up to 10' (3 m) tall, with some records indicating they can grow to 13' (3.9 m) tall. The stems are glaucous and hollow with nodes / joints, similar to bamboo shoots. The older shoots tend to get woody near the base as they age. Leaves are alternate and broadly ovate with a flat-truncate base. Flowers emerge in late summer as small white to off-white racemes / panicles. Pollination is by insects, primarily by bees. The three-winged seeds (Calyx) were often thought to be sterile; however, a basic germination test showed that 95% of seeds collected from various populations spread

throughout NH were viable, but not seen as a significant vector for its spread. Seedlings often succumb to frost, desiccation, shade, predation and smothering.

The rooting system, which is composed of numerous intertwined rhizomes that can grow up to 3" (8 cm) in diameter, is the primary reproductive propagule that enables it to quickly spread to new locations. The rhizomes have the potential to spread laterally 23 to 65 feet (7-20 m) away from the crown. Most also have a deep taproot. Based on the extensive rooting system, the majority (2/3) of Japanese knotweed plants occurs below ground. The greatest advantage of having this type of rhizomatous rooting system enables the plant emerges in the spring earlier than most native plants. It also helps to ensure the plant will rebound if damage to the shoots occurs. In addition, perennating buds found on the root crown and along the rhizomes will also react to shoot damage, i.e. mowing/cutting, by sending up additional shoots along the root. This typically results in radial/clonal spread of the plant and increases its shoot density.

The movement of soil containing living and viable root/rhizome fragments is a violation unless the material shall be treated in a manner to render the propagules inert and non-viable. Root fragments as small as ½" (12.7 mm) have the ability to regenerate into a new plant creating adventitious roots and shoots within a short period of time. The larger the root fragment the greater its ability to survive. Regeneration has occurred as deep as 20" (50 cm).

Anecdotal evidence of seed germination by the NH Department of Agriculture, Markets & Food, Division of Plant Industry, indicates 95% germination rate from seeds collected throughout the state. This suggests that seed germination may be a factor in the plants ability to spread. However, field observations indicate that this is typically not a significant method of dispersal.

| Polygonum cuspidatum / Falopia japonica | |
|---|---------------------------------------|
| Japanese knotweed | |
| Plant Type | Herbaceous - Perennial |
| Habitat Type | Road sides, disturbed sites, riparian |
| | habitats, wetlands |
| USDA Hardiness Zone | 3-7 |
| Rooting Structure | Rhizomes have a diameter of 3 inches |
| | (8 cm) and may spread 23 to 65 leet |
| | central taproot |
| Environmental Impacts | Increase the risk of stream bank |
| Littlionineneur impaces | erosion. Loss of native species |
| | diversity. |
| Wildlife Impacts | Impedes the movement of wildlife |
| Leaf arrangement | Alternate and broadly ovate |
| NWI Ranking | UPL-FACU |
| Soil Type | Not limited by soil type |
| Soil pH Range | Can tolerate 3.5 |
| Light Requirements | Prefers full sun, but grows in light |
| | shade |
| Growing Season | April - October |
| Growth Rate | Fast |
| Mature Height | 13 feet (4 m) tall |
| Life Span | ? |
| Reproductive Age | First growing season |
| Flowering Period | August to September |
| Flower Type | Dioecious |
| Pollination | Insects - bees |
| Seed Set | September - October |
| Seed Per Plant | 50,000 to 150,000 per stem |
| Scarification Required | No |
| Cold Stratification | Yes |
| Seed Longevity | 4-6 years |
| Seed Germination Rate | 82% |
| Seedling Density | ? |
| Other Propagules | Root fragments |
| Dispersal Vectors | Wind, erosion, roadside mowing, |
| | construction projects, movement of |
| | contaminated soil, dumping |

Control Options

See the following control guide: <u>Control Methods for</u> <u>Japanese knotweed</u>

Sources

Mehrhoff, L., 2001. Invasive Plant Atlas of New England, Catalog of Species, *Alliaria petiolata:* <u>http://www.eddmaps.org/ipane/ipanespecies/herbs/Pol</u> <u>ygonum cuspidatum.htm</u>

USDA Forest Service invasive species website: <u>http://www.fs.fed.us/database/feis/plants/forb/polspp/</u> <u>all.html</u>

Invasives.org: http://www.invasive.org/browse/subinfo.cfm?sub=3414