

Japanese Knotweed *Fallopia japonica*

What are invasive species?

Invasive species are species that are introduced to an area outside of their native range. They can be introduced intentionally or unintentionally.

Why are invasive species a problem?

Once they establish, invasive plants can reproduce quickly because they have no natural predators or pathogens to keep them in check, and they often become the dominant species in an ecosystem. This can have devastating effects on the environment. Invasive species can displace native plants by monopolizing space, light, water and other resources needed for growth. They can completely alter native plant communities and drastically lower biodiversity. Invasive species can also adversely affect the economy and human health, and interfere with recreational activities.

CONCERN

Japanese knotweed stems resemble bamboo, which it is commonly called. This plant forms thick stands, creating a dense canopy cover that quickly shades out native species. Its underground rhizomes spread easily and are constantly expanding the size of the stand. Japanese knotweed also releases chemicals into the soil that can inhibit the growth and germination of a variety of native plant species.

CONTROL METHODS



Japanese Knotweed roots

PULLING OR DIGGING

Pulling or digging is not a recommended control method for Japanese knotweed. Its extensive root system is a very difficult to entirely remove, and even small pieces of rhizome left behind (as small as 0.7 grams) can regenerate into new plants.

CUTTING

Cutting is not an effective method of control for Japanese knotweed. Cutting the vegetation immediately results in reduced aboveground growth, however within weeks the plant is able to regrow to approximately the same biomass as before the cutting. Cutting the plants stops photosynthesis thereby reducing the amount of food stored in the root system. The plant uses food already stored in the roots to grow and this reduces the size of the roots and rhizomes. Depleting the plant stored food should eventually kill the plant but it is uncertain how long this would take.



A cut Japanese Knotweed plant with a new spring shoot

COVERING

Covering infested sites with thick, opaque, impermeable materials, such as plastic sheets or tarps is a common control method for Japanese knotweed, as it is not shade tolerant. Covering is inexpensive and not labour intensive. By installing a barrier that completely restricts plants from exposure to light, targeted individuals are not capable of natural growth.

It is recommended that thick, strong, opaque plastic sheets or thick fabric made of non-degradable material be used to cover patches that have been cut down to ground level.



COVERING (Continued)

The material used to cover sites should be firmly held down with heavy weights or covered with about 8" of soil, seeded to grass and mowed. The covering material should be significantly larger than the size of the stand. Covering the stand stresses the plants and may force them to produce long lateral rhizomes that can reach well beyond the covering material. As a result, the edges of the stand should be monitored and all shoots removed.



How can you help?

Here are a few things you can do to help stop the introduction and spread of alien invasive species:

- Learn more about invasive species in PEI, including how to identify species of concern
- Choose native species whenever possible
- Carefully inspect and clean clothing, gear, animals, and vehicles before visiting a new natural area
- Never dump garden or pond waste in a natural area
- When disposing of invasive species, they should be placed in a clear or dark plastic bag and taken to Island Waste Management for incineration
- Report a sighting

How to report:

If you think you have seen this invasive species on PEI, please report your sighting to the PEI Invasive Species Council at:

www.peiinvasives.com

or email

peiinvasives@gmail.com

CHEMICAL CONTROL

The Prince Edward Island Invasive Species Council does not recommend chemical control as a management technique. If a chemical control is used, product labels should be strictly followed and considerations for possible environmental damage should be taken into account. Herbicide use is prohibited around wetland environments in PEI.

DISPOSAL

Plants removed from a site should be transported in plastic bags to a waste management facility for incineration. In addition, it is important that native species be planted where invasive plants were removed to prevent future invasions. Due to the volume of its root system, Japanese knotweed can persist for many years, even under intense management. It is important that the site be monitored for many years to prevent further spread.

GARDEN ALTERNATIVES

There are many native plant alternatives available for Japanese Knotweed. Please refer to the Invasive Alien Species of PEI: Japanese Knotweed fact sheet for more information on garden alternatives.

PREVENTION

The most effective and cost efficient way to avoid infestations of invasive species is to learn about potential invaders and be on the look out for them before they get a chance to establish. To learn more about how you can get involved in preventing invasives in PEI, contact the PEI Invasive Species Spotter's Network at: peiinvasives@gmail.com.

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