



INVASIVE ALIEN SPECIES OF PEI:

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.

HISTORY

Japanese knotweed was originally imported from Japan to North America as an ornamental garden plant. Since its arrival, it has spread throughout Canada. In PEI it can be spotted along trails, in gardens and along roads. Urban areas are especially prone to invasion by Japanese knotweed.

IDENTIFICATION

Japanese knotweed may be confused with giant knotweed, a relative that also grows in PEI. Here are some differences between the two and some distinguishing features of Japanese knotweed that may help you positively identify it:

- Giant knotweed leaves much larger than Japanese knotweed
- Giant knotweed leaves are heart shaped, while Japanese knotweed leaves are straight at the base
- Semi-woody, bamboo-like stem that can be red-purple
- Grows to be 1-2m tall



- Flowers are white-yellow and grow on small, branching, flowering stems
- Bloom July-September
- Leaves are oval with pointed tip and arranged alternately
- Spreads by extensive root system

CONCERN

Japanese knotweed is a very aggressive plant. It forms large stands which can eliminate other plants by crowding and monopolizing light. It can reduce the biodiversity of an area and alter the structure of native plant communities. Japanese knotweed can also damage infrastructure. Its vigorous shoots are known to penetrate pavement, foundations, and most anything else that blocks its path to light. It also creates problems for waterways because it can reduce the width of rivers and streams. It can also increase erosion along riverbanks because when its stems die off in the winter, there is nothing to stabilize the soil of the riparian zone.

HABITAT

Japanese knotweed prefers full sun and moist soil but will tolerate part shade and drought conditions. It grows well in wetlands, riparian zones, lawns, gardens and ditches.





CONTROL

Japanese knotweed is a very difficult weed to control. Chemical methods are unfavorable because of the harmful effect they can have on human health and the environment. Physical removal is preferred, though it can take many years to achieve this way. The most common method is to cover the plants with tarps to deprive them of an energy source, light. Place a large tarp over the patch for the summer months and mow and cut the shoots that sprout around the edges of the tarp. In the spring dig up the roots of the stunted plants. Try to get as much of the root system as possible because even a small piece left in the ground can sprout a new plant. After the digging is done, replace the tarps. This method should be repeated every year. 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 species were removed from to prevent future invasions.

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 Prince Edward Island, please report your sighting to Island Nature Trust by phone or e-mail

Phone: (902) 892-7513

Email: intrust@eastlink.ca

GARDEN ALTERNATIVES

Mountain ash (*Sorbus americana*) is native to PEI. It can grow to be 10m tall. It has compound leaves with many leaflets and produces clusters of white flowers that bloom in May-June. The flowers yield bunches of orange-red berries, which attract many bird species. Mountain ash prefers moist soils and full sun but will tolerate some drought and partial shade.



Pussy willow (*Salix discolor*) is native to PEI. It is a much loved shrub species, because of its attractive, fuzzy, flowering structures that are produced in late winter-early spring. It does best in moist soils and full sun, although it will tolerate part shade.

Red elderberry (*Sambucus racemosa*) is native to PEI. It grows to be 3m tall. It is not fussy and will tolerate almost any soil conditions, though it does prefer part shade. It has beautiful foliage made up of compound leaves with many leaflets. In early summer it produces clusters of small white flowers that occur at the end of stems. The flowers yield bunches of bright red berries. The berries are not edible to humans, but they attract many types of wildlife.



This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de:



Environment
Canada

Environnement
Canada

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