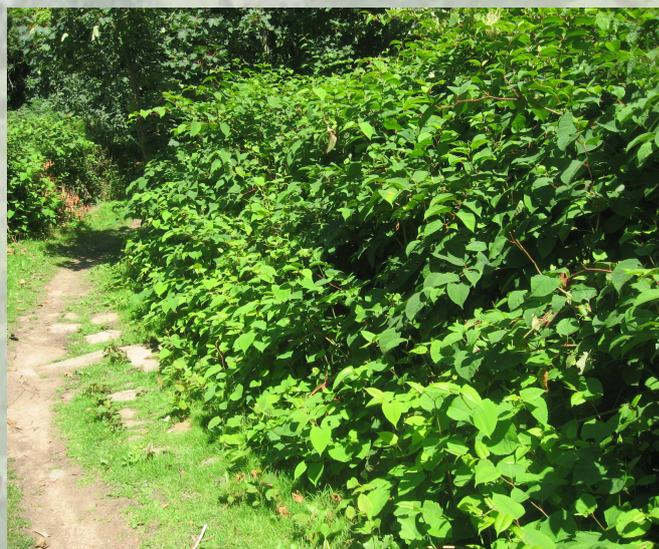


Japanese knotweed

Management Advice

Introduction

Japanese knotweed *Fallopia japonica* is a tall, vigorously growing perennial plant which originates from Japan, and over the last few centuries has been introduced across most of the world. The plant was brought to Europe as an ornamental and fodder plant in the early 19th century, and was first recorded as naturalised in South Wales as early as 1886. Now regarded by some as the most invasive plant in Britain, Japanese knotweed is an aggressive plant which can colonise most habitats including stream banks, woodlands, grasslands, coastal areas, road verges, gardens and waste ground, and it has become widely established throughout the British Isles. It was first recorded in Jersey before 1915, and it has since appeared in many areas around the Island.



This advisory booklet is aimed at raising awareness of this problematic plant, and to advise on its management and control to prevent its spread across the Island. Not only does Japanese knotweed cause problems in the wild, but it can also grow through tarmac, lift paving stones, and damage infrastructure, both on the property where it grows and also on neighbouring properties to where it can easily spread by its rhizomes (underground, creeping stems, capable of producing new plants).

Recognition

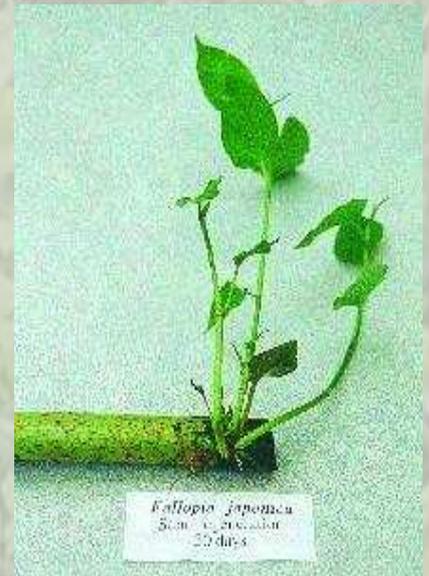
Japanese knotweed is a rapidly growing, tall, rhizomatous, perennial plant which forms dense thickets, through or under which very little else can grow. It is easily recognisable at all stages of its growth, and has characteristic hollow bamboo-like stems which are usually pale green and purple in its mature state. The plant produces small white flowers in late summer, and its leaves are arranged in a zigzag pattern up stem which enables the plant to utilise maximum sunlight.

The plant is not currently (2012) listed as an injurious weed under the Weeds (Jersey) Law 1961 i.e. there is no legal obligation for a landowner or occupier to prevent this plant from spreading. However, it is strongly recommended that this plant is at least controlled wherever it is found, to minimize future spread across the Island.



Problems Caused by Japanese Knotweed

- ◇ Japanese knotweed can re-grow from tiny cut fragments of the plant; maintenance by mowing, strimming or flailing the plant may in fact result in its spread.
- ◇ Japanese knotweed shoots are able to push through asphalt, damaging pavements, car parks, patios, roads and houses etc.
- ◇ Rhizomes are capable of penetrating foundations of walls, land drainage works and lifting interlocking concrete blocks, causing a wide variety of damage with high associated repair costs.
- ◇ Japanese knotweed is a very successful competitor. The foliage forms a dense canopy which restricts the growth of ground flora and the establishment of other plant species.



- ◇ The plant reduces the wildlife value of an area, by reducing the diversity of plant species able to grow.
- ◇ The height and speed which Japanese knotweed can grow restricts visibility on roadsides, and requires several cuts throughout the year to remedy this and comply with branchage regulations.
- ◇ Access to walkers is impeded where the plant grows alongside footpaths
- ◇ In autumn / winter, once the vegetative growth has died back, the bare soil exposed is easily washed away, increasing soil erosion.
- ◇ Even tiny pieces of cut plant material can quickly grow into new plants if the infestation is not cut cleanly and disposed of properly.



Control Options

There are a variety of options available to control the plant, including hand pulling, cutting, chemical treatment, grazing and deep burial. Whichever control method is used, killing the extensive rhizome system is essential if lasting control of Japanese knotweed is to be achieved, and this may mean that the management programme will take a number of years to be effective. It is important to realise that there is no quick solution for the control of Japanese knotweed, and successful control of the plant is achieved largely by chemical application, as there are few alternative ways of killing the rhizome system effectively.

The control of Japanese knotweed by non-chemical methods (cutting, pulling, grazing) should, however, always be considered as the first option, although this form of management is often labour intensive and time consuming. A decision on non-chemical or chemical treatment will depend on site conditions, notably the area covered and how well established the plant has become.

Small stands / areas covered by Japanese Knotweed may be controlled by the following methods:

Cutting

How; Use a sickle / scythe or other sharp edged instrument. Do NOT flail or cut with a strimmer with nylon, as this only helps to spread the plant.

When; Once every 2 weeks (at least every 4 weeks) throughout the growing season (March – October)

Duration; For up to 10 years (depending on density of the stand), until no new shoots appear.

Cutting may be a useful treatment to reduce the vigour of Japanese knotweed in combination with other treatments such as herbicide control.

Extreme care must be taken to avoid inadvertently spreading the plant.



Hand Pulling

How; Uproot stems by pulling from the base

When; When stems are mature during June / July. Duration; For at least 5 years

This method is only applicable for small infestations and is ideally suited to new infestations where only a few stems have established.

Grazing

How; Grazing of young shoots by horses, sheep, cattle, donkeys, goats

When; February – July

Duration; Needs to be continuous to suppress growth, since this method will not eradicate the plant

Japanese knotweed is not a poisonous plant. The availability of young shoots for grazing declines after late July as the plants become more woody. Grazing may reduce shoot densities and shoot height but will not eradicate Japanese knotweed, although it may reduce the spread of the plant into un-infested areas.



Chemical Control

Chemical control by qualified operators is the most effective and quickest way of controlling and eradicating Japanese knotweed, especially where large areas of land are infested by it. Properly used, the herbicide 'glyphosate' is currently the most effective chemical for controlling Japanese knotweed.

The herbicide is absorbed through growing leaves and stems where it is translocated throughout the plant and root / rhizome network. Glyphosate is quickly broken down in soil or sediment, but kills virtually all annual and perennial weeds including grasses, so must be used with care to tackle only the target species

For further information on chemical control of Japanese knotweed, please contact the Environment Division on Tel. 441600

Herbicides should only be used by trained personnel.

Disposal of Japanese Knotweed



Disposal of Japanese knotweed

Stem and rhizome material, including cut material, have the potential to regenerate into new plants. Fragments of rhizome as small as 10 mm can produce new plants. It is therefore essential that the plant is not allowed to spread this way, and should therefore be prevented from entering watercourses and ditches, and machines used for cutting must be cleaned thoroughly before leaving the site. Soil contaminated with Japanese rhizomes must also be disposed of properly to prevent this plant from spreading.

There are different options available for disposal;

- ◇ **Burn** the cut stems on site, within the area that they were cut from.
- ◇ **Pile** the cut stems on site, within the area they were cut from. Allow the cut stems to dry out completely and eventually die, and inspect the area regularly for signs of re-growth, and to ensure that the stems are not being blown or washed away or taking root.
- ◇ **Remove** from site and take to the Energy From Waste Plant in tied off plastic sacks, where the bags will be burnt. Japanese knotweed should be separated from other green waste. As the Energy From Waste Plant is not a commercial zone you will need to contact a member of staff in advance of delivery. If you are dumping large quantities, it may have to be given to them over an agreed period of time.

For further information on disposal please call ;

- ◇ Transport & Technical Services Department on: Tel. 445509

If you are concerned that soil from where the Japanese knotweed came from contains roots / rhizomes, then this soil can be dug out and taken to La Collette reclamation site for deep disposal / burial. Staff should be alerted of such loads before arrival.

Summary of Do's and Don'ts

Japanese Knotweed Do's

- ◇ **Do act quickly**
- ◇ **Do ensure that herbicides are used safely and effectively and follow the manufacturers guidelines**
- ◇ **Do dispose of Japanese knotweed responsibly**
- ◇ **Do cooperate with neighbouring landowners to coordinate your Japanese knotweed control programme**
- ◇ **Do cut Japanese knotweed with a sickle, strimmer with blade etc.**



Japanese Knotweed Don'ts

- ◇ **Do not delay, if you find Japanese knotweed on your land then act quickly to eradicate it.**
- ◇ **Do not flail Japanese knotweed or strim it with a strimmer with cord / nylon**
- ◇ **Do not spread Japanese knotweed stem or crown fragments**
- ◇ **Do not chip Japanese knotweed material**
- ◇ **Do not add Japanese knotweed to compost**
- ◇ **Do not move soil that might be contaminated with Japanese knotweed rhizomes (unless taking it to La Collette).**
- ◇ **Do not apply herbicide if rain is imminent or if it is windy**

Further information;

These websites offer further advice about Japanese knotweed and its control;

- ◇ <http://www.knotweed-uk.com/Guidelines.htm>
- ◇ http://www.devon.gov.uk/index/environment/natural_environment/biodiversity/japanese_knotweed.htm
- ◇ <http://www.steminjectionsystems.com/>
- ◇ <https://secure.fera.defra.gov.uk/nonnativespecies/factsheet/factsheet.cfm?speciesId=1495>
- ◇ <http://plantracker.naturelocator.org/>

For further information about Japanese knotweed and its control, please contact the Department of the Environment on tel. 441600