

Knotweed

Background

Knotweed is a hardy herbaceous rhizomatous perennial plant. It was introduced to Britain as an ornamental garden plant in the mid-nineteenth century. However its highly invasive nature has led it to become widespread in the wild, causing serious problems to native habitats as well as causing structural damage.

Legislation: The Wildlife and Countryside Act 1981 provides the primary controls on the release of non-native species into the wild in Great Britain. **It is an offence under section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. This includes invasive knotweeds**

There are three species of invasive knotweed in Britain

Japanese knotweed - *Fallopia japonica*

Giant knotweed - *Fallopia sachalinensis*

Hybrid knotweed - *Fallopia x bohemica*

The most common of which is Japanese knotweed

Identification

Japanese knotweed



In the spring new growth is similar to asparagus shoots. However stems of the plant grow quickly and can reach to 2-3m tall in one season. The stems are bamboo or cane-like green in colour, with red or purple specks and form very dense

clumps. The leaves are shield or heart-shaped, with a flat base and grow up to 120mm long. The plant produces clusters of creamy flowers between August – October which are borne on the tips of most stems. The plant

spreads via underground of rhizomes, which are yellow, when cut. The rhizome system can reach 7m from the parent plant and can be found up to 3m deep. New plants can grow from a piece of rhizome the size of a little finger nail and the crown, located at the base of the stem will also produce new plants.

Giant Knotweed - Similar in general appearance and growth pattern to Japanese knotweed Giant knotweed is identified by its size. Leaves are between 150 – 400mm long and 100 – 220mm wide with a dock like shape. The stout hollow bamboo like stalks can grow up to 5m in height.

Hybrid Knotweed - As the name suggests this is a cross species between the two previous species and so has a similar appearance to both of the above but tend to fall size wise between the two with leaves up to 230mm long by 190mm wide.

Chemical control

Please note the use of any herbicides must be done in accordance with the instructions supplied with the chemical. If you are unsure please contact the supplier or a licensed spraying contractor. Further spraying near to a watercourse is restricted and requires written permission from SEPA.

Chemical control is a most effective method to kill the plant. Spraying should start as soon as the plant is in full leaf, the most effective time to apply a herbicide is from June to September (or until the first frosts cause leaf fall) and should continue throughout the growing season on a monthly basis. Spraying both the top and underside of leaves improves control.

In late autumn, following a summer spray regime, the stems can be cut and a herbicide applied via the injection method as outlined below.

- Knotweed stems are cut with loppers, just below the first node, usually about 8 to 10cms above ground level.
- 5 to 10mls of the herbicide is applied down the hollow stem, using a spot gun applicator. With larger patches, a dye can be added to ensure each stem is treated.

Note: Any cut growth must be stacked on site, preferably on polythene and later burnt. Cut material can be disposed of at a landfill site licensed to accept knotweed, however great care must be taken during transport that no plant material can escape and therefore it is recommended that the material is dealt with on site. Further knotweed crowns should never be composted nor removed from a site without a waste license. Plant material from knotweed must NEVER be disposed of in a wheelie bin with household or garden waste.

Chemical control usually takes three to five years to totally eradicate knotweed. Therefore any plants should be regarded as infective within that period, or whilst re-growth still occurs during spring. Rhizome can remain dormant for a considerable period after re-growth has apparently stopped, and therefore the viability of any rhizomes left in the soil would need to be ascertained prior to disturbance.

Herbicides

A variety of herbicides can be used, however the final choice will be dependent on the habitat that is to be sprayed. **In particular if the plant is growing adjacent to a watercourse, in which case it is advised that only a glyphosate based herbicide such as “Round - up” is used.**

Further, if working adjacent to a water course, the Scottish Environment Protection Agency (Stirling office 01786 452595) **must** be informed of any proposed works **prior** to any spraying works **and** in the case of any spillage into either the water or soil adjacent to the watercourse.

If a spillage does occur it must be soaked up immediately using dry sand or soil, bagged and removed off site for appropriate disposal.

The herbicide should be applied during favourable weather i.e. not windy to prevent drift and not raining to prevent wash off.

The herbicide should be applied directly to the plants, using either a sprayer with a coarse/large droplet size or more directly using a weed wiper.

The herbicide must be stored and mixed away from any watercourse.

Further information can be obtained from Audrey Morrison by either phoning on 01786 462824 or by email morrisona@stirling.gov.uk.