

The Project

Non-native plants from around the world have historically been brought into Scotland for botanical garden collections and accidentally imported with other goods. Although many introduced plants don't cope well with the Scottish climate, there are a few, namely Japanese Knotweed, Himalayan Balsam and Giant Hogweed, which have aggressively colonised many areas of Dumfries and Galloway. These species often spread along watercourses, roadsides and hedgerows and have proved very difficult to control. They threaten biodiversity by competing with native plants for light and water, can cause erosion of river banks and, in the case of Giant Hogweed, can cause physical harm. The River Nith Catchment Management Plan has highlighted non-native invasive plants as a management issue in the Nith catchment. The Nith Catchment Management Steering Group have agreed that appropriate action should be taken to help control their further spread.

The main aim of this project is to help landowners and the community to understand the problem of invasive plants and offer advice and practical solutions to encourage sustainable control of these species.

Further Information

- SEPA should be contacted for information on regulatory requirements before transporting or disposing of Japanese Knotweed. Transportation of non-household produced waste must be undertaken by a licensed carrier.
- www.netregs.gov.uk provides advice on disposal of plant material.
- Spraying should only be carried out by suitably qualified personnel.
- Even if eradication of the invasive plant looks to have been achieved, areas need to be re-checked annually for re-growth and treated accordingly.
- Other invasive species causing similar problems to the plants highlighted, or species which may be moving into the area and which landowners should be aware of, include:
 Rhododendron *Rhododendron ponticum*
 Spanish Bluebell *Hyacinthoides hispanica*
 Giant Rhubarb *Gunnera tinctoria*

Himalayan Balsam

Image © Solway Heritage



Japanese Knotweed

Image © Solway Heritage



Giant Hogweed

Image © Geoff Coupe



Japanese Knotweed

Image © Solway Heritage



Himalayan Balsam

Image © Robert Smith



Giant Hogweed

Image © Gerard M



River Nith Catchment Invasives



Japanese Knotweed

Identification

- Stems, green with red or purple specks, growing up to 2-3m tall in dense cane-like clumps.
- Shield or heart-shaped green leaves up to 120mm long, with a flat base.
- Creamy clusters of flowers borne on the tips of most stems from August – October.
- Roots consist of rhizomes which are yellow when cut, can reach 7m from the parent plant and can be up to 3m deep.



Image © KENPIE

Best Methods of Control

- Spraying with a commercial glyphosate-based chemical is effective on Japanese Knotweed. Spraying needs to take place at least twice during the growing season, once the plant is fully in leaf but before flowering. Over a period of 5-7 years the plant will be controlled although eradication is unlikely. The area needs to be checked annually to treat small areas that may have re-sprouted.
- Grazing will suppress growth but cannot completely eradicate the plant.
- Disposal of Japanese Knotweed requires burning on site or being taken to a licensed landfill site.

DO'S AND DON'TS

- Never throw away or fly tip – under the Wildlife and Countryside Act 1981, it is an offence "to plant or otherwise encourage in the wild" the growth of Japanese Knotweed.
- Avoid strimming, flailing, mowing or chipping Japanese Knotweed - pieces of stem as small as a fingernail can grow into new plants.
- Advice must be sought from Scottish Environment Protection Agency (SEPA) before using chemicals in or near water.

Giant Hogweed

Identification

- Stems hollow, green with dark-red or purple blotches and growing up to 5m tall.
- Leaves are dark green in a rosette with a jagged appearance and spiky at the ends. The lower leaves can be up to 1.5m long.
- Flowers are white with several hundred in large umbrella-like flower heads up to 500mm across, appearing from June – July.
- Each flower head produces up to 50,000 seeds that are easily dispersed by water and can remain viable for up to 15 years.



Image © Geoff Coupe

Best Methods of Control

- Spraying with a commercial glyphosate-based chemical is effective on Giant Hogweed. The plant needs to be sprayed once the leaves are fully out but before flowering. Any re-growth can be sprayed later in the season. The plant should be controlled in 2-3 years, but will need future checking for any newly germinating seeds.
- Cutting stems before the plant flowers and sets seed is effective on Giant Hogweed with eradication being achieved in 2 -3 years.
- Giant Hogweed can be disposed of by composting or burning.

DO'S AND DON'TS

- Never throw away or fly tip – under the Wildlife and Countryside Act 1981, it is an offence "to plant or otherwise encourage in the wild" the growth of Giant Hogweed.
- **Giant Hogweed should not be touched without protective clothing as contact with the sap can produce a painful skin condition.**
- Advice must be sought from Scottish Environment Protection Agency (SEPA) before using chemicals in or near water.
- Be careful not to transport seeds to new sites.

Himalayan Balsam

Identification

- Stems are hollow and jointed, sappy and brittle, a pinky-red colour. Plants grow up to 3m tall, being the tallest annual plant in Britain.
- Leaves are spear-shaped, with serrated edges, shiny and dark green with a dark red midrib. They are up to 150mm long and are opposite or in whorls of three.
- Flowers are slipper-shaped on long stalks, are purplish-pink to pale pink and flower from June - October.
- Seeds are white, brown or black, produced from July - October with 4 - 16 per pod and can remain viable in soil for 2 to 3 years.



Image © Robert Smith

Best Methods of Control

- Spraying with a commercial glyphosate-based chemical is effective with Himalayan Balsam being controlled in 2-3 years. The plant should be sprayed when the leaves are fully out but before flowering. Any re-growth can be sprayed later in the season.
- Cutting stems before the plant flowers and sets seed is successful. Eradication can be achieved in 2 -3 years.
- Grazing is an efficient way of removing Himalayan Balsam.
- Himalayan Balsam can be disposed of by leaving the plants to dry out on site or by burning.

DO'S AND DON'TS

- Advice must be sought from Scottish Environment Protection Agency (SEPA) before using chemicals in or near water.
- Take care not to touch plant as the seed pods will explode
- Be careful not to transport seeds to new sites.