



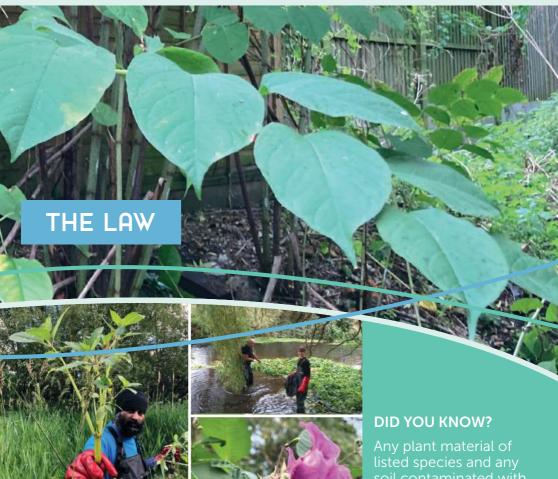
STOP THE SPREAD: CHECK, CLEAN, DRY

Invasive species can be small and hard to spot so are easily spread on damp equipment and clothing.

You can help protect the environment and activities you enjoy by keeping your kit free of invasive plants and animals, whether you're a riverside walker, angler, paddler or boater remember to: **Check** your equipment, and clothing after leaving the water for mud, aquatic animals or plant material. Remove anything you find and leave it at the site.

Clean everything thoroughly as soon as you can, paying attention to areas that are damp or hard to access. Use hot water if possible.

Dry everything for as long as you can before using elsewhere as some invasive plants and animals can survive for over two weeks in damp conditions.



A number of riparian invasive plant species found in the Chilterns are listed under Schedule 9 of the Wildlife and Countryside Act 1981, including:

- Japanese knotweed Himalayan balsam
- Giant hogweed New Zealand pygmyweed
- Water fern Floating pennywort
- Water primrose

It is an offence to plant or otherwise cause to grow in the wild any species on this list.

If invasive species spread to the wild or to a neighbour's property then landowners may be liable. Visit nonnativespecies.org/legislation for further details.

soil contaminated with these plants, is classed as controlled waste.

This material can't be disposed of in normal waste collections, it must be disposed of by a registered waste carrier and can only be sent it to a landfill site which is permitted to take controlled waste.



JAPANESE KNOTWEED

Knotweed can quickly dominate an area, wiping out the natural vegetation. It can cause structural damage and reduce land values.

Knotweed mainly reproduces from its stems and rhizomes – a fragment smaller than a penny can produce a new plant. It can survive drying and composting to produce new plants.

Knotweed is easily spread via rivers and by moving soil contaminated with knotweed material.



Leaves – heart-shaped or shield-shaped and arranged in a zig-zag pattern.

Flowers – are cream or white and carried in clusters (August to October.)

Stems – grow 2 to 3 metres tall. Green with red or purple specks. Stems die back in winter, but remain standing.

Rhizomes – are root-like underground stems that grow up to 7 metres from the plant and 3 metres deep.





Most commonly treated with herbicide by a specialist contractor (a permit from the Environment Agency is required if in or near the river).

Optimum time is mid August – October. Cutting is not recommended due to the risk of causing spread. Grazing does not provide effective long-term control.





HIMALAYAN BALSAM

Himalayan balsam forms dense stands that outcompete native plants. Plants die back in autumn, leaving riverbanks bare and easily eroded.

One plant can produce 2,500 seeds – the explosive seed pods can throw the seeds over

6 metres. Seeds are transported by rivers causing new stands downstream.



Leaves – long (up to 15 cm) and spear-shaped with serrated edges.

Flowers – present from June to October, pink, slipper shaped.

Stems – pinky-red in colour, grows up to 3 metres tall, hollow and jointed.

Seeds – produced between July and October in pods.

TREATMENT

The easiest way to control Himalayan balsam is by pulling up the plants before they set seed. The plants can then be burnt or composted. Do not pull up or compost plants which are flowering, this can help to spread the seeds.

You can mow or cut plants at ground level before flowering in June. Do not cut earlier as this causes vigorous re-growth and more flowering. Himalayan balsam can be grazed by cattle or sheep from April throughout the growing season. Control should be continued until no more growth occurs.









GIANT HOGWEED

Giant hogweed presents a risk to local habitats by outcompeting native plants. It also presents a risk to human health – all parts of the plant, including the hairs on stems and leaves contain toxic sap which can cause severe skin blistering.

It spreads by seeds only and is easy to identify when fully grown by its size.



Leaves – sharply divided leaves with bristles on the underside. Commonly over 50 cm long, can grow up to 3 metres!

Flowers – umbrella shaped flower head with white flowers. Flowerhead up to 80 cm across

Stems – up to 5 metres tall and 5 - 10 cm diameter with purple blotches and sharp bristles.

Seeds – up to 50,000 seeds per plant, each seed is up to 1.5cm long with dark stripes.





Control from April onwards. Smaller infestations may be controlled by digging up individual plants – be sure to to extract or sever the root. Can be treated with herbicide by a specialist contractor (a permit from the Environment Agency is required if in or near the river).

Giant hogweed can be a very dangerous plant and appropriate personal protective equipment (PPE) must be used at all times.



Recording and reporting





If you spot invasive non native plants please record your sighting using the 'INNS Mapper' website or app innsmapper.org

Where the sighting is on public land please also report the problem to the relevant council. In the case of roadside verges this can be done via 'Fix my Street'.

For more detailed information please visit the GB Non Native Species Secretariat website nonnativespecies.org

About us

For more than 25 years the Chilterns Chalk Streams Project has worked to conserve, enhance and raise awareness of this globally important habitat.

Visit **chilternstreams.org/our-work** to find out more.

Contact us

For help and advice on invasive non-native species on Chilterns chalk streams please contact us:

Chilterns Chalk Streams Project

Telephone: 01844 355500 Email: Office@chilterns.org.uk

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