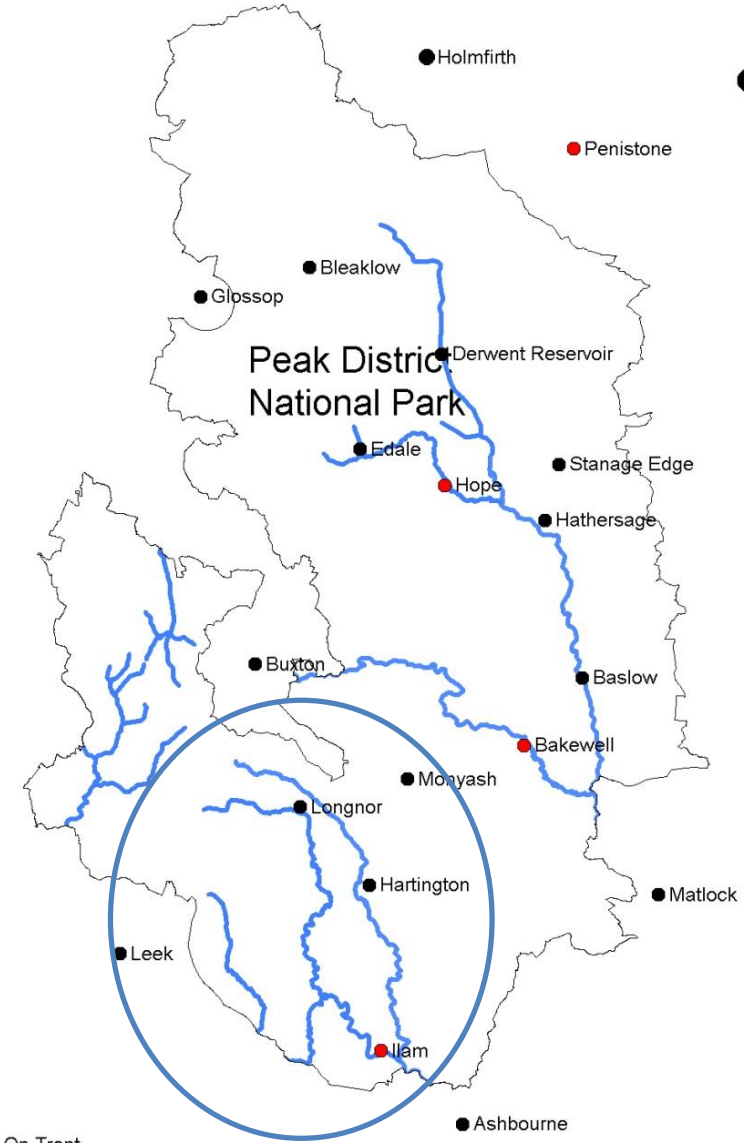
PEAK DISTRICT NATIONAL PARK

Raising Awareness of Non-Native Invasive Species of plants

Upper Dove Non-Native Species Partnership

- **Working in the Upper Dove Catchment since 2009**
- **Taking a strategic approach to controlling Non-Native Invasive Species (plants) – starting upstream and working downward**



All of these plants were introduced during the Victorian age, but have only recently become more numerous as garden escapees. Mainly spread by human activity – accidentally or intentionally, e.g. fly tipping garden waste, seeds / fragments attaching to boots/vehicle tyres, moving contaminated soils, ill-advised seed spreading for bees. Once on watercourse seeds, rhizomes and stem fragments can be easily carried in water and establish elsewhere.

Himalayan Balsam

Japanese Knotweed

Giant Hogweed

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Who is involved?

- Peak District National Park Rangers, Estate Staff, Ecologist
- Landowners & tenants
- Angling clubs and river keepers
- Peak Park Conservation Volunteers
- Residents
- Sustrans Volunteers
- Students
- Derbyshire & Staffordshire Wildlife Trusts
- Members of the public

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Progress so far

- **Mapping occurrence across the National Park (continuing)**
- **Control on 10km river, 15 ha outlying sites**
- **Eradication on outlying sites**
- **Engaging a range of partners**
- **Raising awareness**
- **Himalayan Balsam removal by SWPLP apprentices in July 2020 with over 3000 plants removed, along with contractors removing more.**
- **2016 – 2019: 70 person days removed 30,000 plants**

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Upstream Thinking for Cleaner Water

- Water Environment Grant funding (Environment Agency).
- Project includes moorland restoration, clough and riparian woodland creation, farm water quality measures and measures to control invasive species.
- Includes River Dove (2 WEG funding pots), River Hamps, River Churnet and Meerbrook.
- Work on River Manifold covered by other funds.

SOUTH WEST PEAK
LANDSCAPE AT A CROSSROADS

HERITAGE FUND

The European Agricultural Fund for Rural Development:
Europe investing in rural areas

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Upstream Thinking for Cleaner Water

Funding for invasive species work includes:

- **Surveying and Mapping**
- **Training (first aid training and brush cutter)**
- **Staff time**
- **Volunteer supervision**
- **Contractor time**
- **Awareness raising events**

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Himalayan Balsam

Identification features (summer):

Stem: Pinky-red, up to 2.5 metres tall. Hollow, sappy and brittle.

Leaves: Dark green, spear-shaped with serrated edges. Up to 150 mm long. Opposite or in whorls of three.

Flowers: Purplish-pink to pale pink. Slipper shaped, on long stalks. June - October.

Seedpods: Seed capsule 2.5cm long and explode when ripe. One plant can produce 500 seeds.

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Japanese Knotweed

Identification features (summer):

Stem: Green stem with purple blotches, up to 3 metres. Regular nodes (like bamboo).

Leaves: Green shield shaped leaves, with a flat base. Alternate along the stem, forming a zig-zag pattern.

Flowers: Clusters of small creamy-white flowers at the points where the leaves join the stem. Flowers between August and October.

Seed: Not applicable (spreads by root rhizomes and stem fragments).

Giant Hogweed

Identification features (summer):

Stem: Green stem with purple speckles, up to 5 metres. Sharp bristles usually present.

Leaves: Sharply divided serrated leaves with bristles on the underside. Up to 3 metres wide.

Flowers: Umbrella shaped flower head with clusters of white flowers. Umbellifer can be 80cm wide. Flowers between August and October.

Seed: Oval seeds 1.5cm long, with visible oil ducts. One plant can produce up to 50,000 seeds.

Problems

All of these plants:

- **Out-compete our native vegetation**
- **Are listed under Schedule 9 of the Wildlife and Countryside Act (1981), making it an offence to plant or allow the species to grow in the wild**
- **In summer they can impede flow and cause flooding**
- **Die off in the winter months, causing excessive bank erosion**

Japanese knotweed can:

- **Cause structural damage**
- **Invalidate property insurance**

Giant hogweed sap:

- **Removes skin's natural protection to UV light and causes severe burns**

Mechanisms for control

Himalayan balsam:

- Doesn't respond well to herbicide treatment
- Best removal method is pulling before seed pods form – place plants in small piles to compost down and check regularly to ensure no regrowth
- Brushcutting/slashing- best to cut below nodes
- Need to pull/cut before seeding
- Need to return to site – ideally on a monthly basis
- Grazing – risk of poaching to river banks
- Biological control using rust species being trialled

Mechanisms for control

Japanese knotweed:

- Pulling/cutting is not advised as the pant spreads easily from stem fragments
- Digging up is not advised as the soil is classified as contaminated waste
- Best method is stem injecting with chemical in autumn (August-October), takes 3-5 years to control
- Can be foliar sprayed in spring/autumn (Environment Agency consent required next to a watercourse), takes 5-10 years to control

Mechanisms for control

Giant hogweed:

- Wear protective clothing to protect skin from contact
- Foliar spray before the plant seeds
- Best method is foliar spray (April –May)
- Can take over 10 years to control a site if the plant has been able to set seed
- Cutting only provides temporary control – plant will grow the following season. Must be done before it flowers
- If flowering/seeding can bag the head, but this must then be treated as contaminated waste
- Digging up

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Biosecurity

CHECK

Check your equipment, boat, and clothing after leaving the water for mud, aquatic animals or plant material. Remove anything you find and leave it at the site.

CLEAN

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

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.

What next?

- Continue action plan for 2021 & 2022 focusing on management plan for Himalayan Balsam control
- Create a leaflet for Japanese knotweed
- Get the message out there!
- Eradicate invasive species from the Peak District? (very long term!)