

Workshop 1b:
Socially responsible grounds management

Speaker: Jon Barton, PBA Consulting
Chaired by: Malcolm Parker
Room: Packwood Room

National Housing Maintenance Forum
www.nhmf.co.uk

Japanese knotweed
Socially Responsible Grounds Management

What is Japanese Knotweed?
What does it look like and why is it a problem?
What is the responsible path to eradication?

Japanese knotweed is not a notifiable weed*

The plant is not cited under any legislation that requires its presence to be notified to either DEFRA (Department for Environment Food and Rural Affairs) or local planning authorities, and neither is it listed under the Weeds Act of 1959.

And some surprises that *are* notifiable...

				
Common ragwort <i>Senecio jacobaea</i>	Spear Thistle <i>Cirsium vulgare</i>	Creeping or Field Thistle <i>Cirsium arvense</i>	Curled Dock <i>Rumex crispus</i>	Broad Leaved Dock <i>Rumex obtusifolius</i>

The responsibility for the control of knotweed usually rests with the landowner or tenant of the land – the Environment Agency or local government are not obliged to control knotweed on behalf of other landowners.

*however, waste containing Japanese knotweed crown and/or rhizome is classed as 'Controlled Waste'.

Japanese knotweed is not harmful to public health

It can be eaten* stir-fried, steamed or boiled, with a taste reminiscent of rhubarb. Knotweed can be made into jam, soup, broth, pies and even ice cream. Knotweed is high in vitamin C.



Knotweed rhizomes and roots are a rich source of Resveratrol, which is used in the treatment of general allergy and inflammation complaints, including: athlete's foot, suppurative dermatitis, favus and gonorrhoea. In tests, knotweed extract has produced anti-tumour effects in mice. Much commercial Resveratrol comes from knotweed.

* Knotweed based dishes cooked and consumed at your own discretion. From what we've tasted so far, they all come into the 'won't be trying that again' category!

Can Japanese knotweed cause structural damage?

YES!

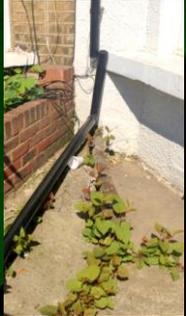
Can Japanese knotweed cause structural damage?



Patios, block paving and concrete are all vulnerable to Japanese knotweed, which will exploit cracks, joints and weak areas. The damage, if left untreated, simply worsens over time as the knotweed rhizome and/or crown grows and expands.



The heavy-duty gravel board of the fence (bottom left) has been displaced by crown growth in the adjacent property.



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Can Japanese knotweed cause structural damage?



Walls, tarmac surfacing and service runs such as drains, are all in the staple diet of Japanese knotweed. Scenarios such as these pictured are widespread and can take hold surprisingly quickly.



Where Japanese knotweed is left to establish, it will even invade buildings by growing under, or even through, foundations and walls.



It must be said that *serious* structural damage caused by Japanese knotweed is relatively uncommon.

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Problems commonly associated with Japanese knotweed

Damage to paving and tarmac	Displacement of native flora and fauna
Damage to walls, foundations, etc (knotweed has been discovered growing under suspended floors with minimal light)	Increased risk of flooding through dead stems washing into river and stream channels
Damage to service runs such as drains	Increased risk of soil erosion and bank instability following removal of established stands in riparian areas
Outbuildings and conservatories affected by knotweed roots invading underpinings	Damage to flood defence structures
Reduction in property and land values	Restriction of access to riverbanks for bank inspection and amenity use
Treatment is often long-term and can prove very expensive, especially where the knotweed has been allowed to establish and spread	Damage to archaeological sites

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Why does Japanese knotweed cause so many problems?

Not a fussy eater!
 Knotweed can grow in a variety of soil types, no matter how poor, with pH values ranging from 4.5 to 7.4.




Hyperactive!
 It is an extremely hardy species, able to successfully colonise the inhospitable environment of bare volcanic gravel and lava fields. It can be found growing up to 2,400m – 2,600m high on Mount Fuji above the tree line.

Hard as nails!
 Growth can be as much as 2 cm per day and heights of 3 metres are regularly achieved in a single season. Rhizomes beneath a single 1 m² stand of knotweed can produce as many as 238 new shoots.

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Why does Japanese knotweed cause so many problems?

Japanese knotweed can be compared to an iceberg - what you see above ground makes up a small proportion of the whole plant.

Knotweed rhizome growth can be very extensive, with rhizomes growing up to 7m laterally from any visible growth.

Rhizomes predominate in the top 0.5m of soil, but can reach 3m deep or more.

Rhizome growth can achieve greater distances if they follow natural (e.g. high bedrock) or man-made (e.g. service ducts) features in the ground.

It is suggested that rhizome can remain dormant but viable for up to 20 years.

The human response to knotweed is often unhelpful - attempts to hide, dig up, fly-tip, cut down, self-treat are common, and often discovered only after a property has been purchased.

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How does Japanese knotweed spread?



All Japanese knotweed in the UK and Europe is descended from one female clone. Therefore it does not produce viable seeds.



Reproduction is through vegetative regeneration of rhizomes and fresh stems. Very small fragments of rhizome (0.7g – or the size of a fingernail) can give rise to new plants.

Japanese knotweed thrives on disturbance and has been spread by both natural means and human activity.

Fly-tipping and transportation of soil containing rhizome fragments have been a major cause of spread, particularly in the urban environment.

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What legislation relates to Japanese knotweed?

The **Wildlife and Countryside Act 1981** (and the **Wildlife (Northern Ireland) Order 1985**) states (Part 1, Section 14, Clause 2) that "any person [who] plants or otherwise causes [Japanese knotweed] to grow in the wild... shall be guilty of an offence."



Under the **Environmental Protection Act 1990** and **Environmental Protection (Duty of Care Regulations) 1991** cut knotweed material and soil containing rhizomes must be removed to a licensed landfill site for disposal, accompanied by appropriate Waste Transfer documentation.

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How can you identify Japanese knotweed?



There are six main identifiable parts of Japanese knotweed:

- Rhizome (orange)
- Crown
- Stem (hollow, bamboo-like)
- Petiole (zig-zag)
- Leaf (shield-shape)
- Flower (August - October/November)

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How can you identify Japanese knotweed?



Early growth is spagnum-like. Single leaves grow in a zig-zag pattern along the stem. Mature stems are hollow and easily snapped. Clusters of small white flowers in late summer. Leaves yellow in Autumn before dropping. A snapped rhizome will turn orange.

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Japanese Knotweed in Residential Property

Undertake a review of appropriate control methods - what will be the most suitable course of action?

- Is the impacted property to be sold?
- Is the impacted land to be developed?
- Will independent IBGs be needed?
- Will structural insurance be required?

Find a qualified specialist to assess the requirements

Herbicide treatment: takes years, repeat visits, lower environmental impact, cheaper option

Excavation: higher cost, faster, more disruptive, allows development to progress



The faster you want rid of Japanese knotweed, the higher the cost.

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Japanese Knotweed in Residential Property

Competent Risk Assessment and Knotweed Management Plans

Proximity to:

- Boundaries
- Structures
- Services
- Water Courses

<1M, 1-5M, >5M

Locations and extent:

- Location of property: SSSI, SSI, SAC
- Single, dual, multiple property infestation
- Relationship with survey property: within site, perimeter of site, in neighbouring site but not on boundary
- Number of infestations: Single/Multiple
- Extent of Japanese knotweed infestation as a % of external property area <5%, 5-10%, >10%

Plant physiology:

- Age of knotweed: Young/Mature
- Established/Dense/Peppered
- Evidence of previous treatment
- Evidence of disturbance

Future land use must also be taken into consideration

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Japanese Knotweed in Residential Property

THE PROBLEM - Mortgage lenders are reluctant to lend on property where knotweed has been identified.

Mortgage lenders are knotweed adverse.

Surveyors/Valuers have a professional duty to identify Japanese knotweed.

Vendors have a legal obligation to declare the presence of Japanese knotweed.



PCA RICS Specialist contractor (PCA accredited) Lender Vendor Buyer

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Japanese Knotweed in Residential Property

THE CURRENT SITUATION

The PCA & RICS have created a process for returning Japanese knotweed impacted property back to the market.

Lenders largely accept this process and have developed lending criteria to take knotweed into account.

PCA accredited specialists are geared up to provide vendors with the independent guarantees and insurances needed by lenders.

Vendors are becoming more aware of the implications.



- ✓ Code of Practice
- ✓ Guarantees
- ✓ Escrow funding
- ✓ Trust Mark
- ✓ Regulated specialist contractors



Housing Associations and Japanese Knotweed

HA's need to...

- Protect land asset values
- Avoid knotweed migration to neighbouring properties
- Avoid litigation from neighbours

How ?

- Proactive identification and mapping knotweed
- Unified treatment strategy for all infestations
- Procure treatment packages from PCA accredited specialist
- Raise tenants' and residents' awareness

Result...

- Long term cost savings and reduced cost of management
- Avoidance of repeated litigation cases
- Asset values protected
- Good relationships with residents & neighbours maintained

Effective procurement; use PCA accredited specialists and appoint a Clerk of Works to write a Knotweed Management Plan as endorsed by the EA.

