

TACKLING INVASIVE NON-NATIVE PLANT SPECIES

FREQUENTLY ASKED QUESTIONS

1. What is an Invasive Non-Native Species?

Some species have been introduced into the UK deliberately for use in forestry or agriculture, and others have arrived as a result of human activity via the transport of goods, in ships' ballast water or brought in by botanists and explorers. It's currently estimated that Britain has more than 3,000 non-native species. Many are harmless, but occasionally a species will be introduced that can spread, cause unwanted environmental damage and pose a threat to native biodiversity – these are Invasive Non-Native Species (INNS).

2. What INNS are you focusing on? We're currently targeting **Japanese Knotweed**, **American Skunk Cabbage** and **Himalayan Balsam**. It's believed these were introduced as exotic garden plants and, finding our temperate climate favourable, they spread out into the countryside via watercourses and other means. Sale of Himalayan Balsam and Japanese Knotweed is banned and both are listed under Section 9, Wildlife & Countryside Act and categorised as controlled waste. American Skunk Cabbage is found across the UK, in fairly localised areas, but it is spreading.

3. What's the AONB doing? The Wye Valley Area of Outstanding Natural Beauty (AONB) has been active in tackling these INNS in the lower Wye for the past few years through our Sustainable Development Fund (SDF) and through the Lower Wye Catchments Project (formerly the NFM & GI Project). Our INNS work now comes under the umbrella name of WISP – Wye Valley Invasive Species Project.

Currently Japanese knotweed and American Skunk Cabbage treatment are proving manageable in targeted areas within the current level of resources. We've been working very closely with our local communities, tapping into the wealth of local knowledge to map locations of these plants on our geographic information system (GIS) once they've been ground-truthed, and to gain landowner consent for access and treatment. We then share this

information with specialist contractors who carry out the appropriate treatment.

As result of our increasing knowledge of the distribution of the knotweed and skunk cabbage, and by securing further funding we have been able to scale up the treatment from around 60 Japanese knotweed sites and 1 American Skunk Cabbage site in 2019 to working across 15 local communities, treating around 120 Japanese knotweed sites and 14 American Skunk Cabbage sites.



American Skunk Cabbage, Cleddon (Aug 2020)
Wye Valley AONB

Himalayan Balsam is widespread across the wider Wye catchment, necessitating a completely different approach; a catchment-wide, community-led approach, working from the headwaters to the sea to reduce the risk of reinfestation. The AONB boundary stops south of Hereford and we do not have the resource to coordinate at scale, so we are focusing effort effectively at a local sub-catchment scale. Piloting this approach for us is the volunteer group, The Narth & District Footpath Group. In 2019 they mapped the extent of balsam across the White Brook catchment and have been strategically removing balsam, working from the upper catchment downstream. Their work through 2019 is estimated to have removed up to 90% of the balsam at 11 sites. In 2020 the group removed the remaining 10% and they've tackled a new area, removing over 5,500 plants!

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It certainly proves ‘where there is a will, there is a way’ and we are obviously keen to roll out this model in further sub-catchments when Covid-19 restrictions and funding allow.



A Japanese Knotweed stand, Coleford (Aug 2020)
Wye Valley AONB

4. Why only specific areas / Why not our area?

The scope of our work is dictated by funding. For example, Environment Agency funding can only be spent on the English side of the AONB and Welsh Government funding can only be spent, obviously, in Wales. The issues affecting our rivers clearly don't slot neatly into administrative boundaries, but we must abide by funding rules, spend funding as strategically as possible and prioritise work that will bring the best outcomes.

Having said that, if your community is within the lower Wye Valley AONB (downstream of Monmouth) and has any Japanese Knotweed or American Skunk Cabbage present please do get in touch at projects@wyevalleyaonb.org.uk. Your information will help us to continue to increase our knowledge of their extent and help us target resources over the coming years.

In 2020 we are targeting INNS in 15 different communities: Staunton, Coleford, Newland, Redbrook, Penallt, Bigsweir, Maryland, Whitebrook, Cleddon, Llandogo, Hewelsfield Common, Brockweir, The Cot, Tintern, Barbadoes Hill.

5. What's the problem? Yes, they might have striking foliage and pretty flowers, but they pose serious problems for our waterways. The degree of the problems they cause depends on the species, but common to our 3 species is that they spread along watercourses, often aided by flooding to reach new areas, grow fast and outcompete our less vigorous native plants. They then die back leaving the banks denuded of stabilising vegetation. This heightens the risk of bank erosion during peak flood flows, leading to habitat loss, soils washing into waterways, reduced water quality and smothering of aquatic habitats. With our biodiversity in catastrophic decline and flood events increasing in frequency and severity, you can understand why we're taking this so seriously. Also the nectar-rich Himalayan Balsam attracts pollinators in abundance leaving native species at heightened risk of being unpollinated.

And of course, these INNS don't solely impact our ecology, they negatively impact us too. In terms of the public purse, they are exceedingly labour intensive, and cost £billions each year, to remove. Japanese Knotweed can cause structural damage to infrastructure and its presence has to be declared when selling a property due to the cost of removal. There are hidden costs too. For example, the increased sedimentation in rivers increases water companies' costs of treating the water to make it safe for public consumption, and that translates into higher water bills. These species also impact on our own outdoor enjoyment. They often grow so tall and densely along riverbanks – Himalayan Balsam is the largest annual plant in Britain - that they impede visibility of and from the water, altering our landscapes and riverscapes.

6. How do you treat these INNS? We'd much rather chemicals were not used, especially in such sensitive environments, but we're dealing with some very tough contenders and, in the case of Japanese knotweed, nothing else has been found to work as effectively as the professional systemic, broad-spectrum glyphosate-based herbicide Roundup.

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Since these INNS tend to grow in or near water, only suitably qualified people can undertake the treatment. Our contractors are experienced in risk assessment, biosecurity and good working practice. We only employ local contractors who will have a vested interest in the local environment, so we can rest assured they will have due regard.

We follow proven Good Management Guidance for each species, developed by RAPID:

- [American Skunk Cabbage](#)
- [Himalayan Balsam](#)
- [Japanese Knotweed](#)

As an extra layer of quality control, consent must be sought from Natural England or Natural Resources Wales before work takes place on the banks of the Wye, because it is designated as a Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC).

7. Can I deal with these INNS myself?

Japanese Knotweed

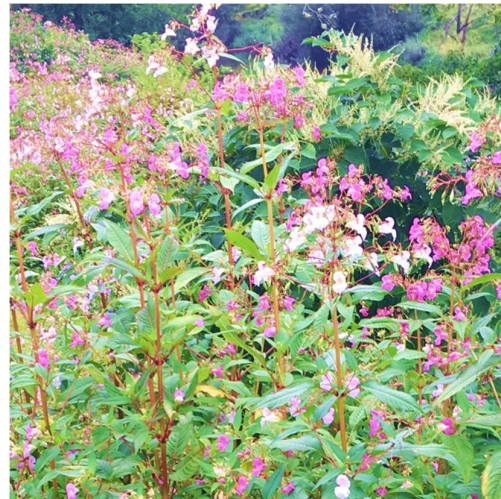
Please do not attempt to cut, strim or mow Japanese knotweed as it increases the risk of spreading the plant and could constitute an offence. Repeatedly cutting with a mower will not kill it, the plant will simply re-grow from the root. Attempts at digging the plant out should also be avoided, the surrounding area will be contaminated with the roots and it only takes a discarded 2cm piece of root to start a new plant. Also disturbance can stimulate the rhizome to grow. Japanese Knotweed is classed as a controlled waste so it is illegal to dispose of it other than at a registered waste site, and it should never be composted.

Before you try any knotweed control method please do contact us to find out if we can add it to our schedule of treatment. If we can then the best course of action is to let it grow and flower so that it can be treated with maximum effect.

American skunk cabbage

You can reduce the risk of spread of your American skunk cabbage by cutting the yellow flowers off in the spring before it sets seed, and if you only have a few plants and are meticulous

in digging out all the rhizome, then you can eradicate it yourself. Care is needed to collect all plant matter and it must be destroyed through burning, drying out (away from watercourses) or secure composting. It's not yet categorised as a controlled waste but there are campaigns to change that. Where the spread is extensive then specialist treatment with a herbicide will be needed.



In full flower - Himalayan Balsam with Japanese Knotweed behind, Llandogo (Aug 2020)
Wye Valley AONB

Himalayan Balsam

Himalayan balsam can be gently pulled up by hand with its roots intact. Ideally it should be done *before* it flowers - the seeds are categorised as a controlled waste. You can compost it as long as there are no flowers and seeds present. Regular trimming or slashing of balsam is also effective in weakening the plants and it will eventually die off. If the balsam is flowering, then it must be either burnt on site or taken to a registered waste centre.

8. You've treated this before. Why isn't it working? When it comes to Japanese Knotweed there is no quick solution and it may take between 2 to 5 treatments over as many years until complete dieback and destruction of the rhizome is achieved. Some sites in Tintern are now on their 3rd year of treatment.

We're trialling treatment for American Skunk Cabbage and will continue to monitor for regrowth to see if modifications are needed to

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improve success rate. However, because the adult plants have been allowed to go to seed at many sites for many years, it's likely we'll see skunk cabbage along our watercourses for a number of years to come – a large seed bank can build up in the soil and can remain viable for around 8-9 years, so control is a lengthy and ongoing process. Thankfully the plant is slow growing and only plants of 3 years+ produce flowers and seeds.

Himalayan balsam seeds are viable in the soil for up to 2 years, plus seeds are readily transported via water, animals and humans, so reinfestation is a distinct possibility. This is why, once a community has it under control it's important to keep on top of it.

9. When will it be treated / how will we know it's been treated? Chemical control is best carried out on a calm, cool, dry day. For the riverside reaches around Tintern and up to Bigsweir, spraying must also be avoided during the spring tides. For these reasons we can't give a specific date or time for treatment and we need to be able to keep it flexible. We use the social media to keep communities informed of pending and current treatment and will keep landowners informed via email and phone as much as we can.

Our contractors operate discretely and are in and out of a site as quickly as possible. The Roundup is harmless once it has dried on the leaves however its likely you won't see die-back for a number of weeks.

10. How will you ensure Covid-19 guidance is followed when visiting private premises? The requirements when using glyphosate are more strict than Covid-19 guidance - full Personal Protective Equipment (PPE) must be worn and treatment is carried out when the site is clear of people and animals.

11. Will we ever be rid of these INNS? There's still a lack of coordination around INNS at national level, indeed some invasive species are still for sale and haven't yet been listed under Section 9, despite calls from experts. Funding for tackling INNS is piecemeal, but especially

with the declaration of a climate emergency and the obvious need for resources to be targeted at nature recovery, we remain hopeful this will change.

To help to inform and assist those who are setting up regional or national level strategies we sharing our records with our government agencies, county councils and we input our records onto *iRecord* which synchronises with South East Wales Biodiversity Records Centre (SEWBRc) and LERC Wales.



Himalayan Balsam flowers and the explosive seed pods
GB NNSS

And on the positive side, for as long as they're present and we can secure the funding, the Wye Valley AONB Unit will continue to strategically tackle these invasives in the lower Wye. Our partner the Wye and Usk Foundation has successfully eradicated Giant Hogweed from the Wye; a fantastic achievement. Japanese Knotweed is getting less year on year, we've identified and have treated skunk cabbage across two sub-catchments now, and we're looking at broadening our community work around Himalayan Balsam, because we all know we stand the best chance of stopping the spread if we work together.

12. What can I do? You can help us to tackle INNS and stop the spread by:

- 1. Informing yourself** – get familiar with these species and keep a look out when you're

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out and about in the lower Wye valley - useful info sources below.

2. **Be Bio-Security Aware** – it’s easy to spread these species, so do take great care not to spread their seeds or plant material, e.g. if moving from a balsam-infested area to an area that’s free from it, brush off your shoes as those seeds can easily catch a lift on the treads.
3. **Raising awareness** within your local community about INNS and WISP.
4. **Reporting it** – if you spot any INNS in the lower Wye Valley do email us your sightings at projects@wyevalleyaonb.org.uk. If you see Japanese knotweed along a road or in a park report it to us and to your local council (via the Monmouthshire App (under ‘grasses, trees & hedges’), or the Forest of

Dean DC or Gloucestershire CC website reporting pages). If you see it on Forestry England, Woodland Trust or Natural Resources Wales estate do report it directly to them.

5. **Getting active** - if you’ve been inspired by The Narth & District Footpath Group’s initiative and you have some spare time to get active outside, there are a few things you can look into. The Wye Valley AONB has its own Volunteer Group, which, once Covid-19 restrictions allow, will be out and about – you’d be very welcome to join us. Your local community might also have a volunteer group you could join or, if you don’t have one, how about setting one up yourself? There’s support and resources available – do get in touch.

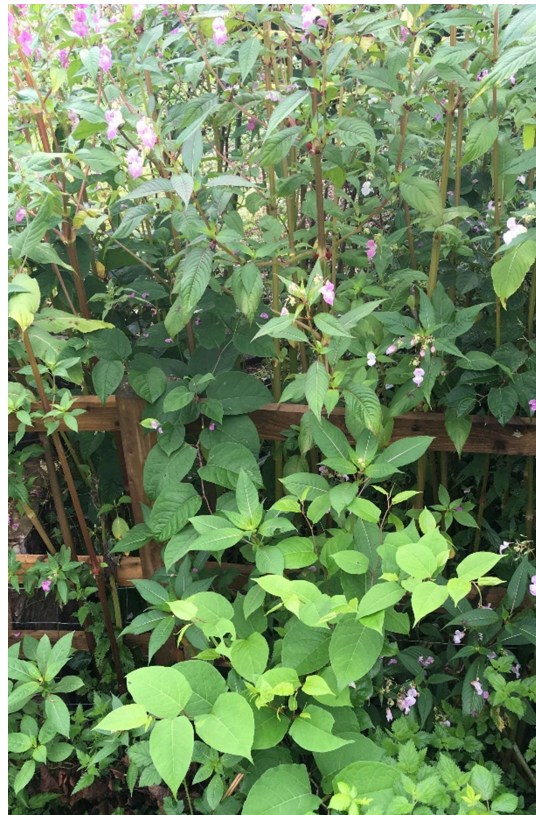
13. Where can I find more information?

Contact Nickie, the Wye Valley AONB’s Lower Wye Project Officer: projects@wyevalleyaonb.org.uk

Contact Ellie, the Wye Valley AONB’s Nature Recovery Officer: naturerecovery@wyevalleyaonb.org.uk

Useful websites:

- Wye Valley AONB: <https://www.wyevalleyaonb.org.uk/>
- WUF: <https://www.wyeuskfoundation.org/>
- GB Invasive Species Secretariat: <http://www.nonnativespecies.org/home/index.cfm>
- <https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/japanese-knotweed>
- <https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/himalayan-balsam>
- <https://www.plantlife.org.uk/uk/discover-wild-plants-nature/plant-fungi-species/american-skunk-cabbage>



Himalayan Balsam with young Japanese Knotweed, Llandogo (Aug 2020)
Wye Valley AONB



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