Non-native Species News

Issue 16, December 2025

Welcome to our Winter 2025 newsletter and thank you to our contributors. View previous issues on the NNSS website.

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News

Update on Yellow-legged hornet (also known as Asian hornet)

Belinda Phillipson, Defra, and Kate Wilson, National Bee Unit (APHA)

The Yellow-Legged Hornet (YLH), also known as Asian hornet, is an invasive non-native species that first arrived in Europe in 2004. Contingency action has been taken against incursions of YLH into Great Britain (GB) since 2016 with the aim of preventing this species becoming established in GB.

In 2023 there was a large increase in the number of YLH nests found in GB. The Animal and Plant Health Agency's National Bee Unit (NBU) located and destroyed 72 nests in 56 locations. In contrast the NBU found and destroyed 24 nests in 2024. The first YLH report was received early in 2025 when a grocer found a hornet on 23rd January in some shallots that had been imported from France. It has been a very busy year and as of 27th November 162 YLH nests have been found. The majority of the nests have been found in the south and south-east. One nest was found in the Isles of Scilly, one in Cheshire, one in North Yorkshire and three in Dorset.

We are very grateful to everyone who has helped raise awareness, monitored for hornets and reported suspect sightings. We would appreciate your continued support in 2026.

Image (right) yellow-legged hornets (credit: Jean Haxaire)

Any suspected sightings should ideally be reported via:

- The free Asian Hornet Watch app for iPhone / Android
- Online reporting form: http://www.brc.ac.uk/risc/alert.php?species=asian_hornet

Sightings can also be reported by email to: alertnonnative@ceh.ac.uk. Free alert posters and ID sheets are available on request to help with awareness raising, contact the NNSS to order copies.

Britain reviews plans to tackle invasive species

Defra

Defra, the Scottish Government and Welsh Government recently ran a public consultation on draft Pathway Action Plans (PAPs) for invasive non-native species (INNS) in Great Britain. The consultation invited views on draft plans targeting the pathways of introduction: recreational boating, angling, horticulture, zoos and aquaria, and pets.

These pathways are considered among the most significant routes by which harmful species enter and spread across the country.

The PAPs form part of the wider **GB INNS Strategy 2023–2030**, which aims to strengthen biosecurity, raise public awareness, and improve coordination across nations.

We received 66 responses from a range of individuals, non-governmental organisations, public bodies, sector trade bodies and membership organisations. Of these responses, 57 were submitted through the Citizen Space portal, 8 by email and 1 by letter.

We welcome the responses received to this consultation and have considered all feedback by those directly and indirectly affected by the topics covered. The response document summarises the consultation responses on the draft GB INNS PAPs. It also outlines the proposed course of

action of the 3 Governments. It will be available to read here: https://www.gov.uk/government/consultations/pathway-action-plans-for-invasive-non-native-species-in-great-britain

We have anonymised and summarised all the comments received on the detail of the PAPs. These anonymised, summarised results will be shared with the PAP working groups for their expert consideration. Once the working groups have looked at the feedback of this consultation, any required revisions based on the responses from the consultation will be made to each of the PAPs.

Once the PAPs have been updated, they will be signed off by the working groups and then the GB INNS Programme Board before final publication, which is expected to be by the end of 2026.

Thank you to everyone who took part in this consultation.

Water companies supporting aquatic biosecurity: phase three of the Aquatic Biosecurity partnership

The Aquatic Biosecurity Partnership

Invasive non-native species (INNS) are a significant and increasing problem for water companies, costing over £7.5 million a year. In 2017, an Aquatic Biosecurity Partnership was formed between government, water companies, and national governing bodies, to improve aquatic biosecurity. The partnership initially ran until 2020 but was extended to 2025 following a successful first phase. Through the partnership, water companies contributed over £1 million to fund a work programme, which was led by the NNSS.

This unique partnership has been a great success. Key achievements during the second phase of the partnership (2020 to 2025) have included:

- **Leading five, six-month, border biosecurity campaigns** to reduce the risk of introduction of new INNS to GB by recreational water users travelling abroad. *Image (right) Check Clean Dry advert at the Port of Tyne.*
- **Distributing over 116,000 *Check, Clean, Dry* materials** with help from partners.
- **Improving biosecurity at aquatic sites across England** including water company assets and sites with priority species.
- **Working with national governing bodies to improve biosecurity at large aquatic sporting competitions** by providing biosecurity / washdown stations at 15 events, developing event biosecurity toolkits, and attending two international competitions to promote biosecurity to participants from GB.

- **Redeveloping the *Be Plant Wise* campaign to prevent the spread of invasive plants** and advertising in 1.8 million copies of Gardeners' World Magazine, attending 11 large horticultural events, and distributing over 16,000 materials.

Aquatic Biosecurity Partnership

Funded by water companies

During the second phase, members of the partnership included: Affinity Water, Anglian Water, Northumbrian Water, Severn Trent Water, Southern Water, South East Water, South West Water, Wessex Water, Yorkshire Water, NNSS, Defra, Environment Agency, Angling Trust, British Rowing, Paddle UK, and RYA.

The partnership recently began a third phase (2025 to 2030) and has welcomed three new water companies: South Staffs & Cambridge Water, Thames Water, and United Utilities Water. During this period, water companies will contribute £170,000 a year to support a work plan that builds on previous progress and includes:

- Annual border biosecurity campaigns
- Promoting the *Be Plant Wise* and *Check Clean Dry* campaigns
- Improving biosecurity at aquatic sporting events
- Providing biosecurity training
- Working with neighbouring countries to improve biosecurity in mainland Europe
- Support for the AQUA biosecurity accreditation scheme, led by Bristol Zoological Society.

IUCN consultation on developing a strategy for invasive alien species

IUCN

The IUCN has launched a consultation to gather feedback from its constituents and beyond on the need for an IUCN strategy focused on invasive alien (non-native) species.

- **Who can participate?** All IUCN constituents (e.g. Members, Commissions, Secretariat) and other interested stakeholders are encouraged to contribute their insights and experiences.
- **How to participate?** IUCN are seeking feedback via this online consultation form.
- **What is the consultation timeline?** The consultation will be open until the 19th December 2025.
- **What next?** Once the consultation is closed, IUCN will arrange a webinar in early 2026 to initiate an engagement process with interested parties, both IUCN and non-IUCN, identified through the consultation, to start the strategy development.

For more information, view a news story on the IUCN website: IUCN launches consultation on developing a strategy for invasive alien species - News | IUCN or contact the IUCN Secretariat on invasivespecies@iucn.org.

Forestry Commission calls for woodland owners to look out for forestry pest

Forestry Commission

The eight-toothed spruce bark beetle (*Ips typographus*) poses a serious threat to our spruce trees across Great Britain, which represent 60% of conifer crops with an estimated value of £2.9 billion annually. Classified as a quarantine pest in the UK, evidence show this beetle is arriving through wind-assisted dispersal from continental Europe. It was first identified in the UK in 2018, on Norway spruce in a Kent woodland. The beetles prefer stressed or weakened trees, for example windblown, damaged and recently felled spruce trees. They bore into wood where they attract mates and lay eggs. Woodland owners can play a crucial role by monitoring tree health, removing stressed or fallen spruce, and reporting suspected infestations through TreeAlert.
Signs of beetle presence include 2-3mm exit holes in bark and distinctive linear larval galleries.

Images (left): Ips typographus and (right) signs of beetle presence (credit: Forestry Commission).

Exciting developments in detection technology are enhancing our capabilities to help stop the establishment of *Ips typographus*, from developing prototype traps that could photograph beetles in real-time, potentially revolutionising early detection, to using trained detection dogs that can identify scents and use of drones for surveillance of symptomatic trees requiring investigation.

Successfully, all 13 outbreak sites identified in 2021 have been eradicated through rapid response and continuous three-year monitoring. However, continued vigilance remains essential as further incursions may occur whilst continental beetle populations remain high and warm, dry conditions persist. Collaborative efforts between government agencies, researchers, and woodland owners are vital to protecting Britain's valuable spruce forests from this invasive pest.

Read more in our new blog or watch our video Beat the Beetle.

Communications

Lucy Cornwell, NNSS

The NNSS is always keen to hear how we can help support your comms work on non-native species. Following feedback we received at the Stakeholder Forum, we have added a new calendar with key dates and priorities for awareness raising to our website to help with comms planning: Calendar of non-native species awareness raising priorities (2025/2026).The calendar will be updated monthly, so please get in touch if there is anything you would like us to add.

Invasive Species Week 2026

We are looking forward to next year's Invasive Species Week, taking place from 22 to 28 June 2026! Stay tuned for an update in the new year when we will share the daily themes, in the meantime you can find ideas for activities at: Invasive Species Week » NNSS.

Be Plant Wise

Over the winter, we are reminding gardeners to 'compost with care' to prevent garden and pond plants from becoming invasive. Please help spread the word to gardeners and horticulturalists, the following resources are available to help:

- Be Plant Wise guidance for gardeners and professional horticulturalists
- Be Plant Wise materials, including resources for social media

Thank you!

Thank you to everyone involved in awareness raising this year! With your help, the NNSS has sent out 86,553 awareness-raising materials since 1 January, including:

- 24,560 Check, Clean, Dry materials, including 268 signs
- 12,274 Be Plant Wise materials (more than double the figure from 2024!) including 4,191 guides to gardening without invasive plants
- 42,618 yellow-legged hornet materials.

You can view all awareness raising materials available from the NNSS here.

Your views on the newsletter

We are looking for views on the newsletter – whether you find it useful and how it could be improved. Please send any feedback on the newsletter, or any other comms queries, to nnss@apha.gov.uk.

Update from Non-native Species Inspectorate

Paul Sims, Non-native Species Inspectorate

NNSI involvement in Water Primrose eradication, Norfolk

Water Primrose is an invasive aquatic plant that forms dense mats, shading out native species and altering water chemistry. It is banned from sale in Great Britain, and a programme of eradication is being carried out using a variety of strategies at different sites.

In Norfolk, at a privately owned, but publicly accessible pond, water primrose was first identified in 2019. As part of the national eradication programme, previous attempts to engage with the landowner had been made but were unsuccessful. The Non-Native Species Inspectorate (NNSI), took the lead and working alongside the Environment Agency (EA) and Norfolk County Council, contacted the landowner and coordinated management actions throughout 2025.

Eradicating Water Primrose using herbicides often requires multiple follow up treatments, as it regenerates from fragments which survive in sediment. Seed can also remain viable for at least four years. Typical management plans for Water Primrose therefore span five years or more. Management prescriptions often combine herbicide treatments and manual removal, followed by monitoring for four years after the initial work.

At the private site in Norfolk, during 2025, the NNSI carried out:

- Initial survey confirmed WP presence in water and margins (June).
- Mechanical raking of stems to reduce biomass (July).
- Herbicide treatment with triclopyr Blaster Pro, with off-label agreement (August)
- Follow-up treatment with glyphosate (September).
- Survey confirmed treated plants appeared dead (October).

NNSI staff treating water primrose in Norfolk (credit NNSI)

Significant progress was made in reducing the extent of Water Primrose at this site during 2025, but complete eradication has not yet been achieved. The treatments applied were effective in killing most plants, but regrowth is expected in 2026 due to the species' ability to regenerate from small fragments, and seeds which can remain viable for at least four years. Complete eradication depends on continued management, with annual herbicide applications and manual removal carried out as necessary, supported by regular monitoring to prevent recolonisation.

For more information on Water Primrose, visit the alert page. Sightings should be reported to iRecord: https://irecord.org.uk/enter-non-native-records. Contact the NNSI: NNSI@apha.gov.uk.

Update from APHA Local Action Group Coordinator

Ben Francis, Animal and Plant Health Agency

Since the last update, I have been working on the following:

LAG Toolkit

I have been working with WaREN, NatureScot, and the National Biodiversity Data Centre in Ireland to produce updated versions of WaREN's LAG toolkit, for England, Ireland, Scotland, and Wales. The new toolkits will be used to help new LAGs and community groups get started by providing basic information specific to each administration. I will be able to share a draft update at the NNSS LAG workshop and look forward to hearing your feedback then. Your group can also use the more comprehensive LAG Toolkit that I developed previously and other useful documents developed by LAGs, view these on the LAG section of the NNSS website.

Facilitating regional meetings

I held a Midlands Regional INNS meeting in October with Severn Trent Water. I will be hosting another Midlands Regional INNS meeting in March with the National Forest Company and Forestry Commission on 04 March. Please be in touch with me if you can make this meeting to secure your place. I will be arranging regional meetings in the North West and East of England in 2026. If you are working in these areas and would like to attend these meetings please be in touch with me.

Network Rail

I have linked even more LAGs with Network Rail staff in their areas to continue the joint collaboration. Please be in touch with me if you would like assistance with this. I am eager to hear about other issues you are having with significant landowners or organisations; please be in touch with me.

Improving biosecurity

Since 2023, I have been helping to deliver an action from the Boating and Angling Pathway Actions Plans, by working with landowners to install Check Clean Dry signs and implement other biosecurity recommendations at sites where priority species have been found. Since the last newsletter update in September, I have contacted more local authorities to recommend where signage can be installed and signs have been supplied by NNSS. If there are any areas with recreation (e.g. angling, canoe, kayak, rowing, paddle board, sailing) which you think would benefit

from Check Clean Dry signage, free awareness raising materials can be requested from the NNSS: nnss@apha.gov.uk.

LAG workshop
I will be attending the LAG workshop to talk about biosecurity and support for Local Action Groups. If you are joining, I look forward to meeting there. If you cannot make it, please be in touch with me to discuss how I can support your LAG in 2026.

Contact details: ben.francis@apha.gov.uk.

Updates from non-native species projects

OneSTOP Living Lab tests technologies for detecting invasive alien species

Helen Bayliss and Katharina Dehnen-Schmutz, Coventry University

Five Living Labs have been established across Europe as part of the EU-funded OneSTOP: OneBiosecurity Systems and Technology for People, Places and Pathways project. These Living Labs, in Belgium, Finland, Portugal, Romania and the UK, provide real-world innovation ecosystems comprising a range of stakeholders with an interest in invasive species detection and management, working together to test technologies and innovations within their local region.

The UK Living Lab comprises of representatives from organisations working with invasive species across Coventry, Solihull and Warwickshire. We have started testing an AMI camera trap for automated monitoring of insects, developed by Aarhus University and UKCEH, which uses AI to identify night-flying insects attracted to a screen with a UV lure.

The AMI trap has been tested at a local country park with expertise in moth trapping and identification. We have also trialled two BiotaTrace airDNA samplers from Platform Kinetic to capture airborne DNA and are looking forward to receiving initial lab results from consortium partners UKCEH.

Image (left) Attendees at the second UK Living Lab meeting in November with the AMI trap and airDNA sampler (credit: Coventry University).

The Living Lab has contributed to other aspects of the OneSTOP project by providing locally relevant species suggestions, both for a public questionnaire on perceptions of invasive species conducted across the five Living Lab countries, and for modelling potential distributions of species of local concern under future climate scenarios.

In 2026, the Living Lab will test the AMI trap, airDNA samplers and a vehicle-mounted camera system that uses AI to identify invasive plants and roadkill (CamAlien) on species and sites across

the region. We will also engage gardeners to expand the Plant Alert project (www.plantalert.org) across Europe and use citizen science bioblitz events to monitor for invasive invertebrates, for which gardens are often the first point of entry.

For more information on the OneSTOP project, including the Living Labs and technologies, please visit www.onestop-project.eu/.

Investigating risks and mitigation of translocating Invasive Non-Native Species via Raw Water Transfers (Phase 1)

Dr Paul Stebbing, APEM Ltd

Raw Water Transfers (RWTs) are already a critical component of the UK's water supply infrastructure, facilitating the movement of untreated water between catchments to ensure water supply resilience.

The UK water industry faces significant challenges to maintain water supplies in the face of climate change, which is driving increasing reliance on new and existing RWTs.

However, RWTs present a risk of unintentionally transferring Invasive Non-Native Species (INNS), and the volumes of water transferred, alongside the complexity of associated infrastructure, make mitigating the risk of INNS spread via RWTs a significant challenge. Taken together, this highlights the urgent need for INNS pathway mitigation.

Until recently, the role of RWTs as a pathway for INNS introduction had not been widely investigated. Over the last five years, UK water companies have been conducting investigations to understand the risk of INNS being transferred via RWTs and options to mitigate this risk.

Installation of mitigation measures at RWTs may present significant engineering challenges, therefore better understanding of the pathway risks and mitigation measure efficacy is needed to ensure that cost-effective solutions can be confidently implemented. Through UKWIR, the UK water industry is taking a coordinated and collaborative approach to improve understanding of the risk of INNS movement by RWTs, and how this can be most effectively managed.

Image (right) The outflow of a small raw water transfer (credit APEM Ltd)

Building on our extensive experience working on RWTs, APEM's dedicated INNS Team, with support from Prof Alison Dunn at the University of Leeds, are currently delivering a project for UKWIR to better assess and mitigate the risk of INNS movement via RWTs. We aim to understand how RWT risk can be more accurately assessed, define the best mitigation measures to reduce risk, and advise how the efficacy of mitigation measures can be most effectively measured.

The first phase of the project will be completed in December 2026.

Mann Dam Cleckheaton

Ian Doyle, Angling Trust

Mann Dam is a small pool that adjoins the river Spen which is a feeder to the river Calder. The pools are divided into two by a viaduct. The top half of the pools are heavily infested with floating pennywort that is, at this stage, bordering impossible to remove due to its entanglement into the Reedmace (*Typha)* beds, making access difficult if not impossible.

To separate the two waters and reduce the further movement of pennywort to below the viaduct a boom was installed. This was carried out with the help of the Environment Agency. Its addition will prevent Pennywort ingress into the river Spen via an outfall from the lower pool as part of a catchment-based approach. This has proved successful and as such arrangements were made for a removal day. On board were a fantastic bunch of volunteers of all ages:

- Friends of Mann Dam, who not only rolled up their sleeves to help but brought tea and cake to ease the day (and very nice cake at that)
- Paddle UK
- Angling Trust
- Environment Agency
- Spen anglers

Images (left) volunteers gathered for the removal day and (right) removing floating pennywort from the water (credit: Angling Trust).

Overall, we moved several tonnes of pennywort leaving some minor fragments to be picked up by local volunteers. Whilst on site we removed a large amount of Himalayan Balsam and did a litter pick. All in all it was a great day presenting a positive pennywort free future for Mann Dam.

Contact the NNSS

You can contact us at: nnss@apha.gov.uk, or visit www.nonnativespecies.org.