Wales Invasive Non-native Species Group
Newsletter

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Invasive Non-native Species (INNS) are plants, animals, fungi and micro-organisms which have been introduced to parts of the world where they would not be naturally found. They have the ability to spread causing damage to the environment, the economy, our health and the way we live. INNS are the second greatest threat after habitat loss and fragmentation. INNS have been estimated to cost the UK economy at least £1.8 billion annually, they mainly affect farming and horticultural sectors but can affect transport, construction, recreation, aquaculture and utilities.

The **Wales Biodiversity Partnership (WBP) Invasive Non-native Species Group** provides a source of expertise on INNS in Wales. The group was established in 2008 and includes a wide range of partners from Welsh Government, Natural Resources Wales, the environmental third sector and other public and private sector organisations. The Group last met on 7 October 2020.

For more info visit the WBP website.

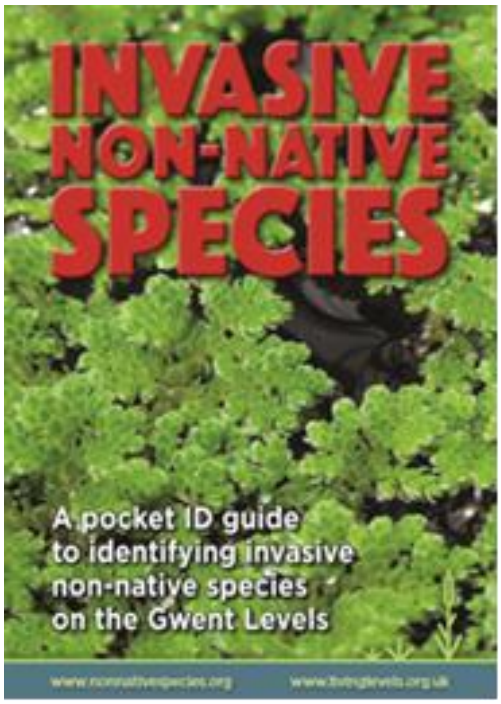
HOT TOPIC

Heritage Lottery Funded Partnership Increasing Awareness of Invasive Non-Native Species in the Gwent Levels

By Kate Rodgers, Living Levels Partnership/Natural Resources Wales

As part of a Living Levels Landscape Partnership (LLLP) Heritage Lottery-Funded Project, a new pocket INNS guide is about to be launched.

The guide is one of the key outputs from the 'Defend the Levels from Alien Invasion' project. This is one of 26 projects that make up the Living Levels Partnership scheme, led by RSPB, which is aiming to ensure a sustainable future for the unique Gwent Levels.



Credit: Living Levels Partnership.

What's the guide for?

INNS are relatively scarce on the Gwent Levels landscape, but due to its interconnected drainage system, which is very important for wildlife, INNS are considered a significant threat. The key to protecting the Gwent Levels is preventing INNS from establishing and where feasible controlling or managing those that are already established.

Awareness and understanding of this issue amongst the public is low and recording limited. This guide will help an individual to identify some of the INNS already found on the Gwent Levels and some possible newcomers for which we should all be on high alert for.

The guide also gives some simple "Do's and Don'ts" actions that will help prevent the spread of INNS.

The 'Gwent Levels INNS Guide' should help people feel more confident to identify non-native species and lead to better recording and management of INNS on the Gwent Levels – protecting this landscape.

It will be available in paper form from Natural Resources Wales and online at www.livinglevels.org.uk/inns/.

MARINE INNS AND BIOSECURITY

NRW's Biosecurity Planning for Pen Llŷn a'r Sarnau Special Area of Conservation

By Chloe Powell Jennings, EMFF Biosecurity Project Officer, Natural Resources Wales.

This biosecurity project involves working with stakeholders to create a marine biosecurity plan for the Pen Llŷn a'r Sarnau Special Area of Conservation (PLAS SAC). The project is funded by the European Maritime and Fisheries Fund and will run to June 2022.

There are three phases to the project:

- Evidence gathering to underpin biosecurity planning for PLAS SAC.
- Develop the biosecurity plan for PLAS SAC to reduce the risk of introductions of new marine INNS and reduce the spread of existing marine INNS to the site and to other areas in Wales
- Implement, monitor the effectiveness and embed the plan.

As part of the evidence gathering phase, two evidence reports have been produced. The Marine Biological Association report looks at the impact of 16 INNS on Marine Protected Area features, fisheries and aquaculture and the marine consultancy ABPmer report provides a marine INNS pathways heatmap assessment for Wales.

The invasive Carpet Sea Squirt, Didemnum vexillum taken from a boat hull in Holyhead. *Credit: Natural Resources Wales*

A large part of this phase involves stakeholder engagement. The project has been working on alternative methods of stakeholder engagement since we were unable to hold our first workshop in May. This has involved working with the PLAS SAC officer to send out information and questionnaires to various stakeholders in the area. The Welsh Fishermens Association (WFA) have also been contracted to distribute questionnaires to fishers in PLAS SAC and to gain feedback on potential biosecurity actions. The hope is that these questionnaires will lead to one-to-one meetings with fishers. The WFA have also reviewed the recently published reports and we have since discussed how we can improve on the data that we currently hold in PLAS SAC. An online INNS identification workshop was held for the Wildlife Trust volunteers and the project officer is also looking at the possibility of holding an online workshop if feedback is that one would be useful.

A stack of invasive American slipper limpets, Crepidula fornicata from Swansea bay. *Credit: Chloe Powell Jennings.*

Stakeholder engagement is ongoing alongside the second phase of the project, developing the biosecurity plan. This phase involves monitoring, management and awareness raising actions. The project officer is currently working on pathway action plans and species action plans using the information captured in the evidence gathering phase. Other recent work includes creating GIS layers highlighting the potential impact of INNS on various habitat features, creating distribution maps, looking at INNS data flow and reporting as well as an eco-moorings pilot project in Porthdinllaen. The project is currently in discussion with the Marine Biological Association regarding adapting their marine INNS ID guide to provide a guide more suited to Wales. The project also hopes to have marine INNS added to the Marine Management Organisation Catch Recording app as a voluntary addition for fishers to record.

American lobster, Homarus americanus. *Credit: Crown copyright.*

Please contact the project officer, Chloe at chloe.powelljennings@cyfoethnaturiolcymru.gov.uk for more information or visit http://www.penllynarsarnau.co.uk/projectsPlas.html?lang=pages&id=21.

MARINE INNS AND BIOSECURITY

The challenge of tracking marine non-native species

By Paul Brazier, Senior Marine Environmental Assessment Officer, NRW.

Intertidal habitats are monitored by Natural Resources Wales as part of the annual monitoring surveys, to provide data to meet the reporting requirements of the Habitats Directive and the Water Framework Directive. Monitoring of specific features and to specific objectives is best completed with very targeted surveys, to collect precise data to confirm the condition or quality of the habitats. Records of non-native species within quadrats or cores are very unlikely and are fairly rare due to the small sample size. By example, in 2010, the first record of the red alga *Caulacanthus okamurae* (originally assigned as *Feldmannophycus okamurae*) pom-pom weed was found in quadrats at South Hook Point, Milford Haven. These records reflected the much wider, rapid spread, with locally high abundance, across south west Wales (Pembrokeshire, Carmarthen and Ceredigion) that had started at least 5 years previously (2005 is the first record).

A similar story is revealed with a chance finding of the red alga *Agarophyton* (*Gracilaria*) *vermiculophylla* rough agar seaweed at a number of locations in the Dwyryd estuary in 2017. This species has never been recorded within the formal samples, but has been observed whilst travelling between sampling stations. A survey in 2019 revealed the presence of dense stands of the alga in the Mawddach estuary and it was also confirmed in the Malltraeth estuary on west Anglesey. It is highly likely that the *Agarophyton* has been in the estuaries of north and mid Wales for a number of years previously, and its distribution is probably considerably greater than has been recorded so far.

There is no formal method of seeking out and recording widely dispersed (although in both of these cases, locally highly abundant and impacting on the biological community) non-native species, other than ad-hoc records made using on-line Apps or the Local Record Centres. Citizen Science projects and casual records become very important as our eyes on the ground, for early warning of these invaders.

Legislation and Research

Invasive non-native (alien) species: rules in England and Wales

The EU Regulation (1143/2014) on Invasive Alien Species has been retained in domestic law and the same rules will still apply now we have left the EU. Guidance on the 66 listed species is available on the GOV.UK website.

Amimals: https://www.gov.uk/guidance/invasive-non-native-alien-animal-species-rules-in-england-and-wales

Plants: https://www.gov.uk/guidance/invasive-non-native-alien-plant-species-rules-in-england-and-wales

People's perception of Rhododendron ponticum on the landscape

You are being invited to be a part of this study created by a final-year Biology student at Bath Spa University.

This survey aims to gather people's perception of Rhododendron ponticum on the landscape.

Participating in this study is entirely voluntary, and your response will be anonymous and non-traceable. You can stop and exit at any point regardless of the reason. If you are happy with this, please continue to People's perception of Rhododendron ponticum on the landscape (onlinesurveys.ac.uk)..

This quick survey will take approximately 3 minutes.

WALES RESILIENT ECOLOGICAL NETWORK (WAREN) PROJECT UPDATE

By Adrian Lloyd Jones, Living Landscapes Manager, North Wales Wildlife Trust.

Funded by the Welsh Government's ENRaW scheme and Dwr Cymru, the WaREN project seeks to unify Wales in its approach to tackling INNS. Due to the impact of the Coronavirus pandemic, phase 1 of WaREN project was amended and extended until end February 2021. To date, the project has listed priority INNS, identified key stakeholders, interviewed and mapped Local Action Groups (LAG) across Wales and has produced a scoping report on what will be required in the future. It will also be running workshops with funding bodies to help ensure grants for INNS projects are readily available in the future. The project has also secured Welsh Government SMS funding for WaREN Phase 2, which will expand and build on the collaborative network identified so far through implementing a pan-Wales INNS Framework. It will also develop and implement strategic tools to improve decision making, communication and co-ordination for addressing INNS. This will include online toolkits, training programmes, surgeries, a knowledge sharing forum and information on funding opportunities. It will also develop an INNS prevention and biosecurity strategy for Wales and explore with Welsh Government and others the potential to develop INNS management as an integral element of sustainable land management outcomes for farm businesses through future sustainable farming schemes. WaREN Phase 2 will begin in April 2021 and run until April 2023. If you are involved in INNS work and have not yet been contacted by the project, please contact Project Officer Tara Daniels on T.Daniels@welshwildlife.org.

Tackling INNS in the Dee catchment. *Credit: Graham Davies.*

Our River Wellbeing Project update

Funded by the Welsh Government's Sustainable Management Scheme (SMS) this project has been tackling INNS within the Dee Catchment by training and working with volunteers, local groups, local authorities and contractors, and has developed a Volunteer River Guardian scheme to help support INNS action into the future. It also delivers biosecurity training and has piloted novel survey and control techniques. It offers training in range of skills including INNS awareness and biosecurity training, safe herbicide usage, power-tool use and has trained over 60 volunteers so far. It has directly controlled over 20km (cumulatively) of Himalayan balsam, is tackling Japanese knotweed in over 20 sites and coordinates volunteer action across the entire catchment. Two experimental sites have been inoculated with Himalayan rust fungus and eDNA sampling is being used to detect native and non-native crayfish at locations across North Wales. Five biosecurity boot-brush stations with information panels are to be installed in 2021 at key visitor locations, with more to be installed at water-sports centres this year in collaboration with Canoe Wales. This project runs until April 2022. For further information please contact Adrian.Jones@northwaleswildlifetrust.org.uk.

Pulling Himalayan Balsam. *Credit: Graham Davies.*

North Wales Resilient Ecosystem Pilot Project (NWREPP)

Funded by the Welsh Government's ENRaW scheme, NWREPP will continue INNS management throughout the Dee Catchment and support INNS actions in North Wales and pan-Wales. It aims to promote an INNS campaign working alongside the WaREN Project. It will also train a 'Biosecurity Citizen Army' for North Wales and promote green prescribing and links to natural resources. It also aims to create an 'Angling for Action' initiative to help promote recruitment of anglers as a resource for tackling INNS. It will also pilot a Citizen Science approach to enable better horizon scanning for novel aquatic INNS through an eDNA project and pilot conservation grazing to combat INNS within riparian zones. For further information please contact Adrian.Jones@northwaleswildlifetrust.org.uk.

PARTNER PROJECTS: BRECON BEACONS NATIONAL PARK AUTHORITY

Beating back the alien invasion in the Brecon Beacons National Park

By Beverley Lewis, Invasive Non-Native Species Co-ordinator, Brecon Beacons National Park Authority.

Despite an awkward start to the 2020 INNS control work programme, the invasives team at the Brecon Beacons National Park Authority had a very successful season in tackling Japanese knotweed (Fallopia Japonica).

Surveys of the River Usk Special Area of Conservation & Special Site of Scientific Interest (SAC & SSSI) in 2018 & 2019 revealed some nasty infestations of Japanese knotweed lurking on both banks of the river in and around the county town of Brecon (Aberhonddu), 71 records of Japanese knotweed to be precise! Being in the upper reaches of the Usk catchment the Brecon area was a clear target for control. Working with the ethos of 'source to sea' in mind and controlling these infestations in the upper Usk catchment would limit the potential for invasive plant material being washed downstream and infesting new areas.

In 2020, we were grateful to be awarded a grant from the Welsh Government's 'Local Places for Nature' fund. This was for the control of an invasive non-native species, helping the restoration and enhancement of freshwater habitat on the River Usk SAC & SSSI, benefitting biodiversity and people's enjoyment of the river.

The grant enabled us to employ a specialist contractor to herbicide treat the Japanese knotweed along an 11km stretch of river centered on the town of Brecon. We had an extremely positive response from all 25 landowners along this stretch of the river many of whom were unaware of the problems Japanese knotweed pose or even that there were invasive species in the area.

The glorious summer weather was not to last all the way into Japanese knotweed control season alas but despite this and also the moving feast that was Covid 19 restrictions the contractors were able to spray in September & October 2020 treating all 71 knotweed sites and even finding a few new ones too!

A follow up survey in autumn was not able to be carried out in full due to flooding and further lockdowns, however those sites that were able to be reached on a walk from home by the INNS staff showed a good die back rate of the plant.

The spring and summer seasons of 2021 will show us the effectiveness of the 2020 treatment, the hope being that a high kill rate will enable follow up treatments to be far less time consuming and costly, fingers crossed! We hope to find further funding for these follow-up treatments in 2021 & 2022 and thereafter a much less intensive monitoring programme can be carried out periodically.

Contractors tackling Japanese knotweed on the banks of the River Usk, near Brecon, September 2020. *Credit: David Jermyn, BBNPA.*

The INNS team would like to take this opportunity to thank the funder (Local Places for Nature), Natural Resources Wales (for help with permissions), the contractor (Phlorum) and most especially the 25 landowners who without exception were all pleased to work with us on this project. Roll on 2021!

For further information please contact: Beverley Lewis on Beverley.Lewis@beacons-npa.gov.uk, or 07854 997 508.

TRAINING & EVENTS

Events

This year **Invasive Species Week** will return from the 24th – 30th May 2021. Due to uncertainty around future social distancing restrictions there will be a greater focus on online activities this year. The GB NNSS and other organisations involved will be hosting webinars, virtual training sessions, invasive species surveys and lots more throughout the week. If you or your organisation would like to be involved, please contact nnss@apha.gov.uk.

Daily Themes

Monday – general introduction to invasive non-native species – links to wider environmental issues including climate change.

Tuesday – aquatic environment (freshwater, riparian, and marine).

Wednesday – woodlands and the countryside.

Thursday – urban (including at home, and pet escapes).

Friday – small islands and global perspective (looking at examples of impacts and differences across the British Irish Council administrations, and the UK Overseas Territories).

Saturday and Sunday – volunteering (coordinated events / activities that the public can take part in including volunteering, invasive species surveys, training sessions and webinars etc, depending on restrictions at the time).

Find out more at:
http://nonnativespecies.org/invasivespeciesweek.

Training

Suggestions for safe lockdown activities are on the GB Invasive Non-native Species website:
https://www.nonnativespecies.org/home/index.cfm

Free online training:
https://www.nonnativespecies.org/index.cfm?sectionid=123

CONTACT US

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