



Briefing Note Invasive Non-Native Species

Landscape Management May 2021 10-15% of non-native species established in the UK cause significant adverse impacts, such as disrupting habitats and ecosystems, as well as imposing serious harm to human health.

Proactive landscape management is vital in combating this and TEP has provided information on how management plans can help in the control and eradication of invasive non-native species. We've also included the species which are most commonly found in the UK, an overview of the legislative context, the control measures available, management considerations and potential constraints, as well as details of how contractor warranties and guarantees function.

What Are Invasive Non-Native Species?



Invasive Non-Native (plant) Species (INNS) are defined as those included on Part II of Schedule 9 to the Wildlife & Countryside Act 1981, and/ or Schedule 2 of the Invasive Alien Species (Enforcement and Permitting) (Amendment) Order 2019 and/or listed as an Invasive Alien Species of Union concern under Regulation (EU) 1143/2014.

Japanese Knotweed

Why Do We Need To Manage Invasive Non-Native Species?

10-15% of non native species established in Great Britain cause significant adverse impacts. Aquatic species tend to be more invasive than terrestrial ones. Impacts include:



Environmental

Disrupting habitats and ecosystems and outcompeting native species. The ecological impact of some INNS is well known, but many other impacts are less visible.



Economic

According to a 2010 <u>research</u> by the Centre for Agriculture and Bioscience International (CABI), the cost of INNS in Great Britain is at least £1.7 billion per year. Much of this cost is borne by the agriculture and horticulture sector, but many other sectors, including transport, construction, aquaculture, recreation and utilities, are also affected. According to a 2019 parliament <u>research paper</u>, Japanese knotweed alone is estimated to cost the British economy around £166 million per year.



Social

Some species cause problems to human health or are a nuisance to landowners. INNS plants clog water bodies preventing access for navigation and angling. Some significant threats to human health are posed by species not yet in Great Britain but that could establish in the future. For example, ragweed which has substantially increased hay fever suffering across many European countries.

The Three Highest Profile Invasive Non-Native Species

Giant Hogweed

Extreme care must be taken with giant hogweed. Contact with any part of this plant must be avoided, as even a small amount of sap can cause blistering of the skin following exposure to sunlight. The sap of giant hogweed can remain present for 48 hours after cutting. Grazing animals are at risk of poisoning and this is exacerbated in animals with no pigmentation or bare skin.

Prevalence - plants commonly occur along streams, rivers and canals, in waste land, road verges and railway embankments. Prolific seed production and vigorous growth results in large-scale changes in vegetation and obstruction of access to river banks. It can also expose the banks, resulting in soil erosion.

Spread - spreads by seed only via both the air and watercourses.

Himalayan Balsam

Prevalence - Himalayan balsam is widespread throughout the UK, being particularly prevalent along riverbanks, where it can form dense monocultures. When plants die back in the winter, they can leave banks exposed and susceptible to erosion and flooding.

Spread - this is a result of the plants' ready ability to spread along watercourses via its explosive seed capsules, which can fire seeds up to 6m away.

Japanese Knotweed

Prevalence - extremely dominant plant which displaces native species and thrives in damp soils. However, it can be found in most urban habitats particularly brownfield sites, railway embankments and watercourse banks. The underground rhizome systems have a lateral spread of up to 7m and a vertical depth of up to 3m. This exacerbates flooding and bank erosion along rivers and streams when water levels are high.

Spread - Japanese knotweed propagates from rhizomes, rhizome fragments, crown fragments and stem fragments.



Giant Hogweed



Himalayan Balsam



Japanese Knotweed

Legislative Context

Under the Wildlife and Countryside Act (1981) as amended, it is an offence to establish, or otherwise cause species listed on Part II Schedule 9 of the Act to grow in the wild (including via moving contaminated soil or plant cuttings). Liability may also extend to situations where a landowner has knowingly permitted the spread of INNS onto neighbouring land.

The Invasive Species (Enforcement and Permitting) Order came into force on 1st October 2019 and introduced an enforcement regime for the EU Regulation (1143/2014) including civil and criminal penalties for the unlawful introduction of INNS. The Order imposes criminal penalties for the most serious breaches of the Regulations and for ancillary offences such as making false statements, attempts to commit offences and obstruction. Where criminal sanctions are not appropriate, civil sanctions allow a proportionate response to minor breaches; these sanctions include monetary penalties, compliance, restoration and stop notices, enforcement and third-party undertakings. The Order gives an enforcement officer (either police or local authority) the power to enter premises without a warrant where there are grounds for suspicion that INNS are being kept on those premises.

Under the EU Regulation (1143/2014) on Invasive Alien (Non-Native) Species, it is an offence to

import, transport, sell, grow cultivate or release into the environment a plant listed as a 'species of concern'. Penalties for this offence can include a fine or two-year custodial sentence. Additionally, there is a duty of care on the landowner to ensure that responsibilities concerning species identified as a 'species of concern' under the published European Commission Implementing Regulation 2017/1263 are understood, and the Regulation also sets out a clear framework for dealing with these species in a coordinated manner across the continent.

The Great Britain Invasive Non-Native Species Strategy, published by The Department for Environment, Food and Rural Affairs (DEFRA) originally in 2008 and updated in 2015, sets out key aims and actions to deliver a coordinated approach for addressing the threats posed by INNS. It provides a strategic framework within, which the actions to manage invasive non-native species should be coordinated in the UK. The strategy places a strong emphasis on:

- Surveillance and early detection;
- Assessing risk;
- Taking preventative measures to stop spread; •
- Implementing effective management with follow up monitoring; and
- Rapid response to deal with regrowth or a newly found invasive species.

Biosecurity

Biosecurity is defined as ensuring that good practices are in place to reduce and minimise the risk of spreading invasive non-native species as a result of interference. Good biosecurity practices are always essential, even if INNS are not always apparent.

Biosecurity should be considered at the earliest stage when planning any site work, from surveying an area to treating or removing INNS, as well as any other works on site. Some biosecurity measures can be as simple and as quick as making sure footwear is clean.



lapanese Knotwee

Criteria for Determining Management Methodology

Ecological Constraints Social Factors Legal Factors Public Health and Safety Logistical Constraints Management Timescales Previous Management



INNS Management Plans

Best practice requires management plans to be in place, outlining the control measures, responsibilities and record of actions undertaken for every site containing INNS.

These documents are not intended to be lengthy or onerous but would provide a clear record of decision making and proactive approach taken in determining comprehensive management of INNS associated with a site. The Plan should be prepared in full accordance with up to date legislation and reviewed annually to identify any site changes, which need to be reflected in the management approach e.g. site is suddenly moving forward for development.

The Plan would primarily comprise the findings from a site survey and provide a summary of factors influencing management. An outline of the management strategy for managing INNS on the site would be provided, along with setting out a mechanism for how the success of the plan will be monitored, reviewed and updated.





Management Options



Manual Physical Cutting Hand Excavation Hand Pulling



Mechanical Excavation, Burial Off-site Disposal Vertical Root Barrier Installation



Herbicide Foliar Application Weed Wiping **Stem Injection**

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Available Seminars

Invasive Species and Biosecurity

An overview of commonly encountered invasive plant species in the UK and methods of control. As well as an introduction to biosecurity measures to site works to reduce spread of animal and plant diseases.

Insurance Backed Warranties

Contractors can provide an insurance backed warranty, typically for 5 or 10 years. This warranty provides additional comfort should the organisation that undertook the works be unable to meet its obligations e.g. due to insolvency of the company. In this instance the Insurer would pick up the liabilities of the Company for the works, including future treatment of infestation regrowth in areas covered by the warranty.

TEP Services

TEP's Landscape Management team is experienced in advising on the management of invasive nonnative species and can provide the following services:

- Training (plant identification, biosecurity and best practice)
- Site Surveys
- Management Plan Production
- Contract Procurement
- Client Advice
- Clerk of Works Services (*site supervision*)
- Letters of Confirmation of Works Successfully Completed
- Follow-up Reporting

Get in Touch

If you would like to learn more about your duties as a landowner to manage invasive species, please get in touch to arrange a free consultation.

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