



MONEYPENNY DEVELOPMENT SITE, WREXHAM
INVASIVE SPECIES METHOD STATEMENT
(Report Ref: 4944.001)
January 2015
Version 1.0

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**Money Penny Development Site
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1.0 INTRODUCTION

- 1.1 TEP have undertaken ecological works at the proposed Moneypenny development site and surrounding habitat, across 2014 to inform development proposals. The development works include the construction of a new office building, car park and landscaping of the surrounding area.
- 1.2 An ecological survey of the site was undertaken by Marches Ecology in 2012 and identified both Himalayan balsam *Impatiens glandulifera* and Japanese knotweed *Fallopia japonica* within 100m of the site. A site survey undertaken by TEP in December 2014 confirmed the presence of these species within 100m, however, neither survey identified any invasive species within the development red line boundary.
- 1.3 This document sets out methods to avoid and manage the spread of these species onto the development site to satisfy planning condition 5 which states:

‘No part of the development shall commence until a Biosecurity Risk Assessment has been submitted to and approved in writing by the Local Planning Authority. The assessment shall include appropriate measures to prevent the introduction of Invasive Non Native Species (INNS) during the construction phase, and measures to control the INNS as may be currently present on site. The measures and proposals shall be fully implemented in strict accordance with the details as approved.’

2.0 SITE DESCRIPTION

- 2.1 The proposed Moneypenny development site is approximately 4ha and is located off Croesnewydd Road in Wrexham, Wales. The site currently is composed of a central area of open grassland which is bisected by a hedgerow/tree line running east to west across the site. The south of the site is dominated by arable land.
- 2.2 The site is immediately bounded by woodland to the north, west and south with residential development and Croesnewydd Road to the east. A new access road to the development site is being developed alongside this project. This is a separate development and application but is to be constructed concurrently.
- 2.3 Plates 1, 2 and 3 overleaf show site context, examples of the habitats present on site and the surrounding invasive species.

Plate 1: Moneypenny development site



Plate 2: Moneypenny development site



Plate 3: Himalayan Balsam infestation 100m north of development site



- 2.4 There are large, dense patches of Himalayan balsam located to the north of the development site with two small patches of Japanese knotweed also identified. These invasive species are most likely to have originated from the River Gwenfro which runs to the north of site.
- 2.5 A map showing the approximate location/spread of invasive species is located within Appendix A of this report.

3.0 SITE SURVEY

- 3.1 A detailed walkover survey to look for Schedule 9 (*Wildlife and Countryside Act, as amended 1981*) invasive species was undertaken by Ian Holland (ACIEEM, FISC Level 3) in December 2014. The Moneypenny development site (including a temporary access Road) was subject to a detailed visual assessment as was the area of the new access road being constructed to the north, where invasive species are known to be present. Incidental records had also been gathered during previous surveys undertaken by TEP.
- 3.2 During the site survey identifiable winter features such as dead stems were present indicating the location and spread of Himalayan balsam and Japanese knotweed.

Limitations

- 3.3 The survey for invasive species was undertaken in December, outside the optimum survey period of spring/summer, therefore it is possible that any young/small plants may have died back not leaving any identifiable winter features. In addition, areas of dense inaccessible scrub were present on site and these could conceal small stands of invasive species.

4.0 BIOSECURITY METHOD STATEMENT

- 4.1 No evidence of invasive species has been identified within the Moneypenny development site. Therefore the primary purpose of this method statement is to ensure that invasive species are not permitted to spread on to the development site.
- 4.2 Information is also provided on how to deal with invasive species should they be identified on site at any time now or in the future.
- 4.3 Any spreading of invasive plant material onto the site is likely to come from the current infestations located to the north of the site (see Appendix A for approximate location).
- 4.4 A proposed access road to the development is located outside the contaminated area. However, if the contaminated area to the north is to be used for vehicular access onto the site at any point during development the vehicles must be thoroughly cleaned to remove contaminated soil, seeds and rhizome material, after passing through this area but prior to entering the site. Tracked vehicles should not be used (if possible) as they are more likely to trap plant material and are more difficult to clean.
- 4.5 A dedicated area for vehicle cleaning should be set up and any waste collected in this area should be removed from site as hazardous waste. Following completion of works this area should be regularly checked for any growth of invasive species (every 6 months for three years) and treated appropriately.
- 4.6 It is also possible that footfall through this area could lead to the spread of invasive species. Therefore, a boot washing facility should also be set up and any contractors entering on foot through the area to the north containing invasives, should clean their footwear prior to entering site.
- 4.7 As there is a small possibility that the dense scrub vegetation on site contains invasive species any machinery used in the clearance process should also be subject to cleaning. This should be completed within the dedicated vehicle cleaning area. The members of staff completing the clearance works should be familiar with the Japanese knotweed and Himalayan balsam ID sheets located within Appendix B and should contact a suitably qualified ecologist if they suspect these species on site.
- 4.8 Some invasive species seeds can remain viable within a seedbank for up to 15 years. Therefore, soil movement across the site should be avoided were possible in order to limit the chances of disturbing and encouraging of invasive species to germinate. The section below details procedures with regard to contaminated soil.
- 4.9 Procedures should be put in place to ensure any imported landscaping materials are free from Japanese knotweed, Himalayan balsam and other invasive species.
- 4.10 Annual monitoring of the site should be undertaken to ensure that invasive species have not spread on to the site. This must be undertaken annually during May/June with the first check undertaken a month after site clearance works which should reveal any new growth of invasive species.
- 4.11 During the works on the adjacent access road (being completed as part of another application) it must be ensured that a minimum 5m boundary is maintained in which

no machinery or soil storage, or dumping can take place in order to reduce the risk of cross site contamination.

- 4.12 It is recommended that discussions are held with the contractor/developer of the new access road to determine their proposed methods of management for invasive species. If the invasive species are not to be removed from this area the installation of a vertical root barrier membrane should be considered which can prevent the spread of invasive species onto site through their root system.

- 4.13 The information sheets located within Appendix B of this report must be displayed within the site cabin and should be made known to each staff member working on site. These information sheets show ID features of Japanese knotweed and Himalayan balsam. If suspected on site at any time works in this area should cease and a suitably qualified ecologist contacted for further information.

Removal methods (if required in the future)

- 4.14 Due to the chance of spread of invasive species lying dormant on site, mitigation measures may be required to remove these species from site.

- 4.15 The Department for Environment, Food and Rural Affairs (DEFRA) provide advice on disposal methods for Schedule 9 species, including Japanese knotweed and Himalayan balsam (<https://www.gov.uk/japanese-knotweed-giant-hogweed-and-other-invasive-plants>). Four methods of control are described including spraying invasive plants with herbicide, pulling/cutting and burning invasive plants, burying invasive plant material on site and disposing of invasive plants and contaminated soil off site.

- 4.16 Burning waste onsite may require a permit and the resulting smoke would pose an unacceptable risk to people in the offices on site and traffic on the surrounding roads so this method of control is unsuitable. Burying invasive plant material on site is not likely to be suitable, as development works will already be completed leaving limited opportunity to dig up areas and bury waste.

- 4.17 Spraying invasive plants with herbicide is a suitable method of control for Japanese knotweed and can be targeted using spot treatment. The application of herbicide on Japanese knotweed should be carried out in late summer after flowering. Guidance provided in the statutory code of practice for plant protection products should be followed and a Control of Substances Hazardous to Health (COSHH) assessment should also be carried out. An advisor certified by BASIS (the registration, standards and certification scheme for pesticides and fertilisers) will be able to advise on the most suitable type of herbicide for the situation and when best to apply it.

- 4.18 Herbicide spraying of Himalayan balsam is not recommended, hand pulling and removing from site is the preferred control measure for this species.

Offsite Disposal of Plant Material and Contaminated Soil

- 4.19 Where onsite disposal of plant material and contaminated soil is not possible or practicable, the remaining option is to remove it to a licensed waste facility. This should be undertaken by a suitably qualified company.

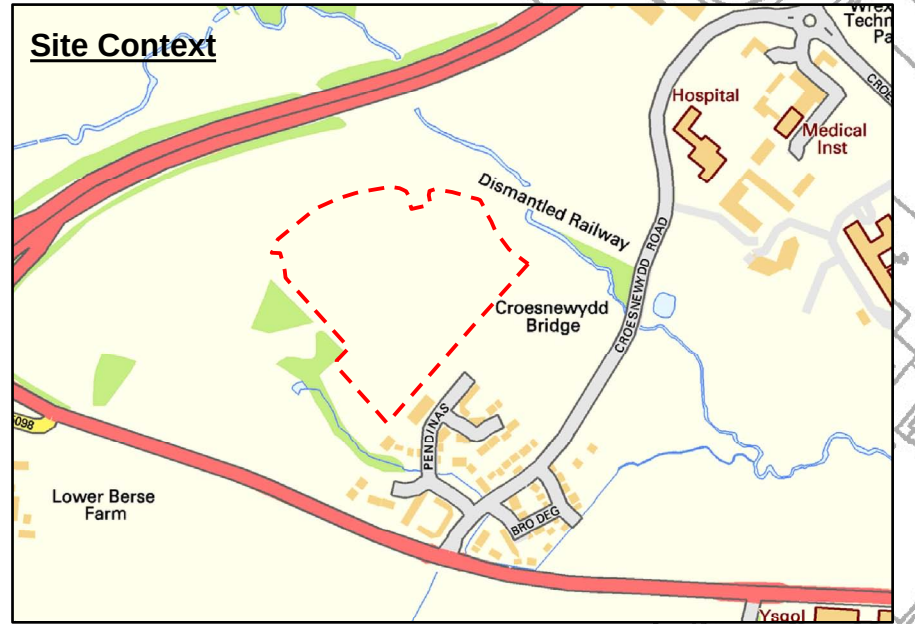
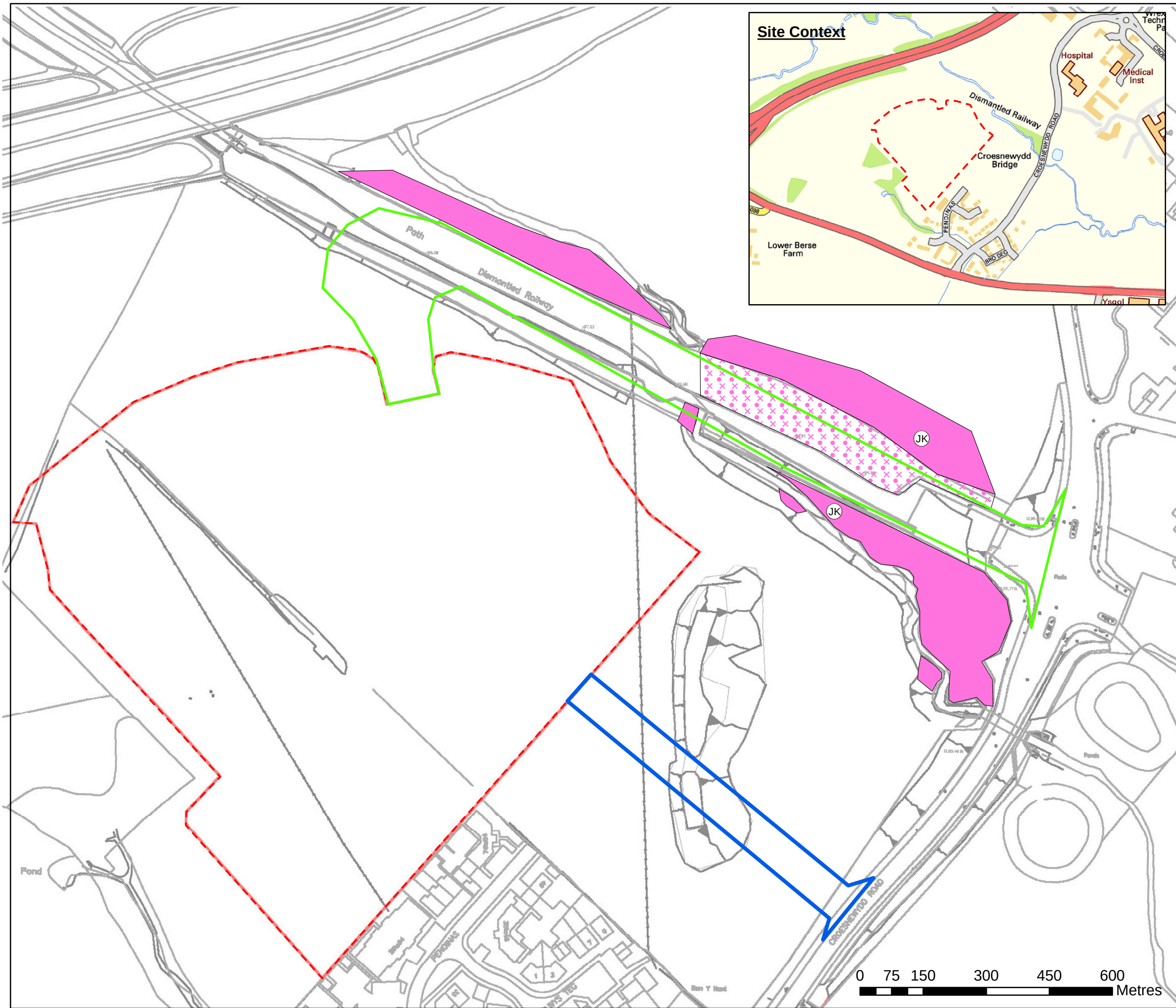
- 4.20 To clear ground contaminated with Himalayan balsam, pulling up Himalayan balsam before the plants flower is the most effective method of control. Do not cut the plants before they flower as this can result in a more bushy plant that produces more flowers. The best time to cut is late May and the plant should be cut below the first node.

- 4.21 Japanese knotweed should be dug up. The rhizome system beneath a stand of Japanese knotweed can be over 4 metres deep and could extend for at least 7 metres around the stand. If you are going to dig out the rhizome system you will need to remove all of the plant material to prevent re growth.
- 4.22 Japanese knotweed and Himalayan balsam are classed as hazardous waste.
- 4.23 Waste can only be removed from site by a licensed waste carrier.
- 4.24 Waste must be properly contained during transport to prevent it blowing away and potentially contaminating other sites. This would constitute an offence through causing the spread of a Schedule 9 species.
- 4.25 Material being transported must be recorded on a waste transfer note (WTN).
- 4.26 Waste must be taken to a site that has an environmental permit and is licensed to handle plant material from Schedule 9 species. It is advisable to contact the facility in advance so that it has time to put in place any special measures that may be required.
- 4.27 Records of the transfer of waste, such as WTNs, must be kept for two years and consignment notes, three years.

5.0 SUMMARY

- 5.1 The proposed Moneypenny development site contains no invasive species.
- 5.2 Two species of plant listed as invasive species on Schedule 9 of the *Wildlife and Countryside Act 1981 (as amended)* were identified within 100m of the development site. These species are Himalayan balsam and Japanese knotweed.
- 5.3 The spread of these species onto the development site should be avoided by following the advice provided in sections 4.1 – 4.13.
- 5.4 If at any point in the future these invasive species spread on to the development site mitigation measures must be put in place including the digging up and removal of these species from site.
- 5.5 Removal of waste from the site will entail identifying a waste facility licensed and able to accept Schedule 9 plant material and using a licensed waste carrier to transport it and documentation detailing the transfer of waste must be kept for the specified period.
- 5.6 It is strongly advised that DEFRA's guidance on the disposal of Schedule 9 plant waste material (<https://www.gov.uk/japanese-knotweed-giant-hogweed-and-other-invasive-plants>) is consulted in tandem with this document.

APPENDIX A: INVASIVE SPECIES LOCATION PLAN (G4944.001)



Key

- Moneypenny Development Boundary
- New Access Road
- JK Japanese knotweed
- Dense Himalayan Balsam
- × Scattered Himalayan Balsam
- Temporary Access Road

Please Note

Locations and spread of invasive species are approximate only to give an indication of the infected area

Baseplan provided by client

Contains Ordnance Survey data © Crown copyright and database right 2014



Rev	Description	Dwn	Appvd	Date
		Genesis Centre Birchwood Science Park Warrington WA3 7BH Tel 01925 844004 Fax 01925 844002 email tep@tep.uk.com		
Project: Moneypenny Development Site				
Title: Invasive Species Map				
Map No. G4944.001				
Scale: 1:1,500 @ A3			Date: 13/01/2015	
Drawn: IH		Checked: VG		Approved: VG

APPENDIX B: INVASIVE SPECIES INFORMATION SHEETS

Himalayan Balsam

Species Description

Scientific name: *Impatiens glandulifera*

AKA: Policeman's Helmet, Indian Balsam, Jac y Neidiwr (Welsh)

Native to: West and central Himalayas

Habitat: Found mostly on river banks and in damp woodland, can grow in other damp habitat

A tall, attractive, annual herb with explosive seed heads. Although easy to identify as a mature plant with its pink-purple flowers, fleshy stem and characteristic leaves, the seedlings and last year's dead stems of this annual are more difficult to spot.

Introduced as a garden plant in the early 19th century and first recorded in the wild in 1855. Often favoured by the general public for its aesthetic appeal and is still deliberately planted on occasion. Now widespread in the UK, especially along urban rivers. Spreads solely by seeds, which are small and easily carried by wind or water.

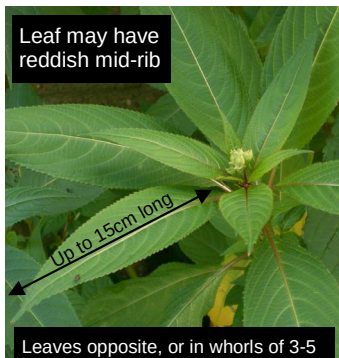
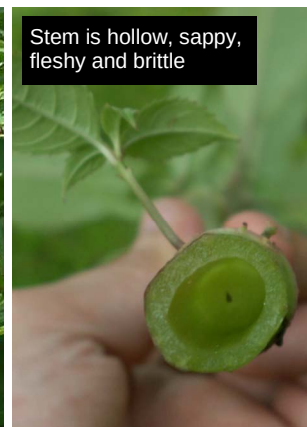
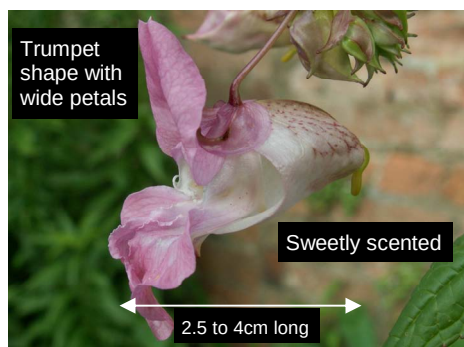
Out-competes native species in ecologically sensitive areas, particularly river banks. Where it grows in dense stands along river banks it can impede flow at times of high rainfall, increasing the likelihood of flooding. Die back of extensive stands over winter can leave river banks bare and exposed to erosion.

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Identification throughout the year

Can be identified at most times of the year: March-June by its seedlings, stem and leaf shape, from July to September by its stem, leaf shape and flowers. More difficult to identify over winter (October to February), look for hay like remains and distinctive root structure.



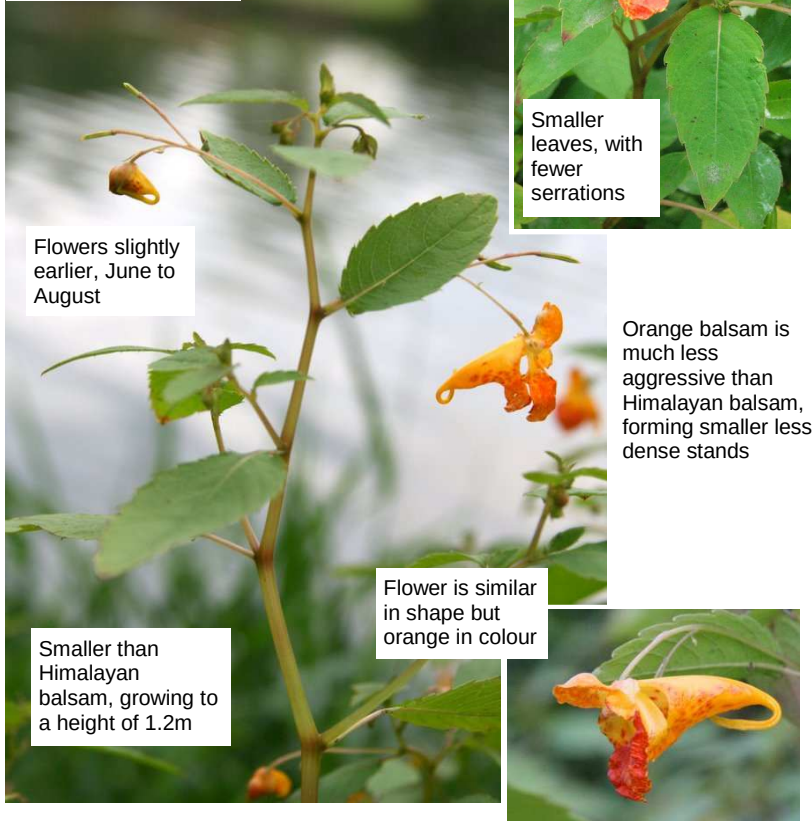
Hay like remains in winter



Root structure in winter

Similar Species

Orange Balsam Non-Native (*Impatiens capensis*)



Flowers slightly earlier, June to August

Smaller leaves, with fewer serrations

Orange balsam is much less aggressive than Himalayan balsam, forming smaller less dense stands

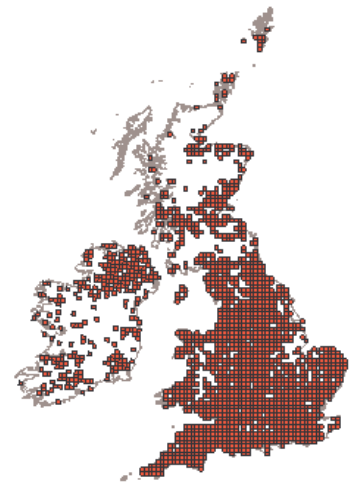
Flower is similar in shape but orange in colour

Smaller than Himalayan balsam, growing to a height of 1.2m

Distribution

Widespread and common across the whole of the UK. Primarily on riverbanks and in other damp areas.

Source: NBN Gateway. Check website for current distribution



References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) "The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora". A & C Black
- Preston, C D, Pearman, D A and Dines, T A (editors) (2002) "New Atlas of the British and Irish Flora". Oxford University Press
- Stace, C (1999) "Field Flora of the British Isles". Cambridge University Press

Japanese Knotweed

Species Description

Scientific name: *Fallopia japonica*

AKA: Japanese Bamboo, Pysen saethwr (Welsh), *Polygonum cuspidatum*, *Reynoutria japonica*

Native to: Japan, Taiwan, northern China

Habitat: Common in urban areas, particularly on waste land, railways, road sides and river banks

Tall herbaceous perennial with bamboo like stems. Often grows into dense thickets. Characteristic leaves and stems, persistence of last year's dead canes and distinctive rhizome (underground root-like stems) enables year round identification.

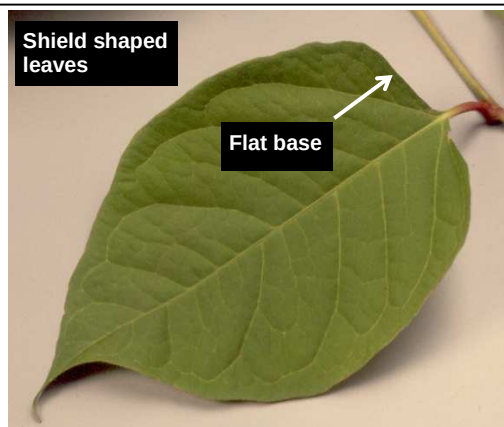
Introduced in the early 19th century as an ornamental plant. Now common and wide-spread across the UK. Spreads rapidly in the wild by natural means and as a result of spread by humans. Spread is solely by vegetative means, either fragments of rhizome or stem. Does not produce seed in the UK. Negative impacts include outcompeting native flora, contributing to river bank erosion and increasing the likelihood of flooding. Can also cause significant delays and cost to development as well as structural damage (it can grow through asphalt and some other surfaces).

Japanese Knotweed is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England, Wales and Scotland. As such it is an offence to plant or otherwise cause Japanese knotweed to grow in the wild. Under the Environmental Protection Act 1990, Japanese Knotweed is classified as controlled waste.

For details of legislation go to www.nonnativespecies.org/legislation.



Key ID Features



Identification throughout the year

Spring



Summer

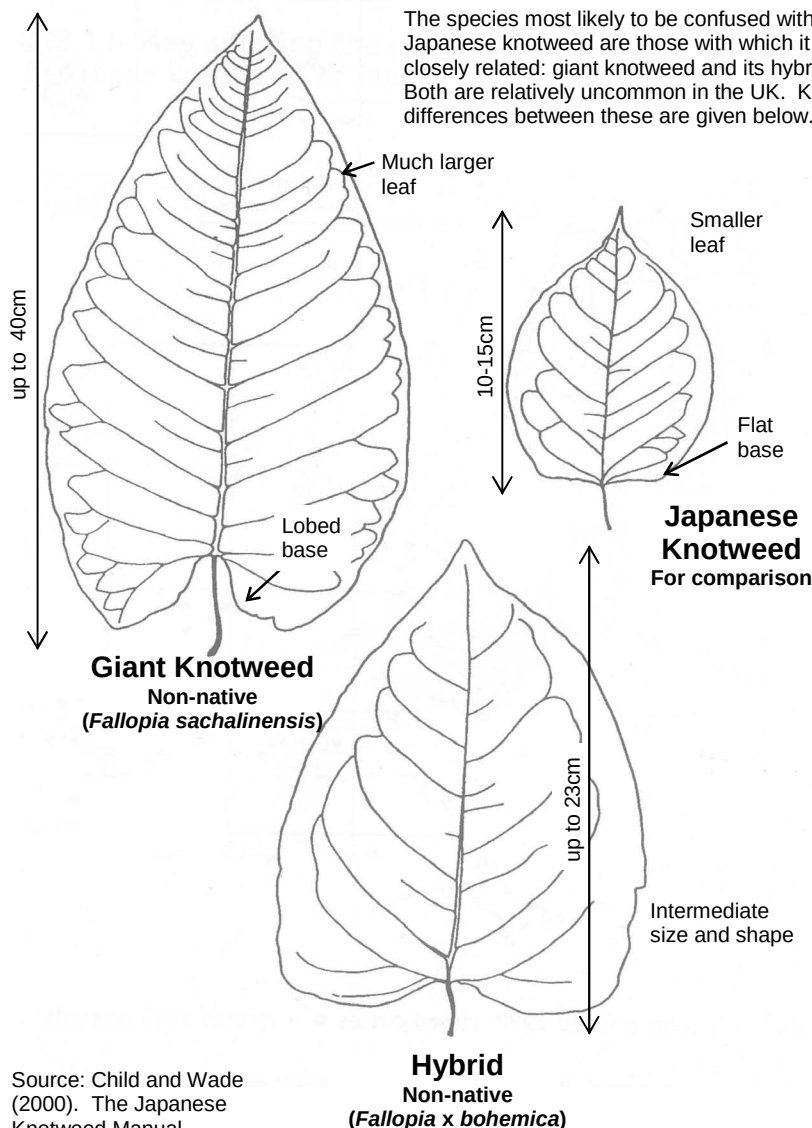


Winter



Similar Species

The species most likely to be confused with Japanese knotweed are those with which it is closely related: giant knotweed and its hybrid. Both are relatively uncommon in the UK. Key differences between these are given below.

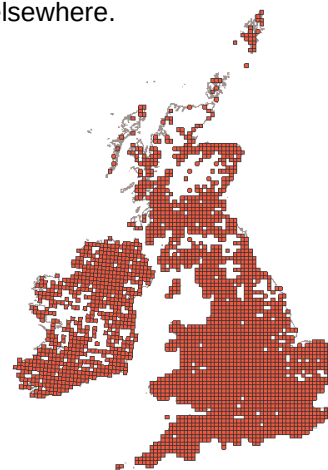


Source: Child and Wade (2000). The Japanese Knotweed Manual

Distribution

Widespread and common across the UK. Notably extensive infestations are found in the south-west of England, south Wales and Greater London, however similarly extensive populations can also be found elsewhere.

Source: NBN Gateway. Check website for current distribution



References and further reading:

- Blamey, M, Fitter, R and Fitter, A (2003) "The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora." A & C Black
- Child, L E and Wade, P M (2000) "The Japanese Knotweed Manual". Packard
- Environment Agency (2006) "The Japanese Knotweed Code of Practice". Environment Agency
- Preston, C D, Pearman, D A and Dines, T A (editors) (2002) "New Atlas of the British and Irish Flora". Oxford University Press
- Stace, C (1999) "Field Flora of the British Isles". Cambridge University Press

APPENDIX C: RELEVANT LEGISLATION

LEGISLATION

Legislation that has a direct impact on the management of invasive species includes:

- Wildlife & Countryside Act 1981;
- The Environmental Protection Act 1990;
- Hazardous Waste Regulations 2005;
- Control of Pesticides Regulations 1986;
- Waste Management Licensing Regulations 1994; and
- Environmental Protection (Duty of Care) Regulations 1991.

The following information outlines legislation which has a bearing on the management of Japanese knotweed as identified within the Environment Agencies Knotweed Code of Practice.

Wildlife & Countryside Act 1981 (WCA1981)

WCA 1981 states that if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence. Japanese knotweed is one of the plants listed in the Schedule. Anyone convicted of an offence under Section 14 of the WCA 1981 may face a fine of £5,000 and/or 6 months imprisonment, or 2 years and/or unlimited fine or indictment.

Control of Pesticides Regulations (CoPR) 1986

CoPR 1986 require any person who uses a pesticide to take all reasonable precautions to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water. For application of pesticides in or near water approval from the Environment Agency should be sought before use.

Environmental Protection Act 1990 (EPA 1990)

EPA 1990 contains a number of legal provisions concerning 'controlled waste', which is set out in Part II. Any Japanese knotweed contaminated soil or plant material that you discard, intend to discard or are required to discard is likely to be classified as controlled waste. The most relevant provisions are in sections 33 & 34.

Section 33 (1a) and (1b) create offences to do with the deposit, treating, keeping or disposing of controlled waste without a license. Exemptions from licensing are available in some circumstances, and are set out in Schedule 3 to the Waste Management Licensing Regulations 1994 as amended which makes it an offence to keep, treat or dispose of controlled waste in a manner likely to cause pollution of the environment or harm to human health. Anyone convicted is subject to a maximum fine £20,000 and/or 6 months imprisonment and if prosecuted under the Crown court, this escalates to an unlimited fine and/or a maximum of two years imprisonment.

Section 34 places duties on any person who imports, produces, carries, keeps, treats or disposes of controlled waste. Waste must be handled responsibly and in accordance with the law at all stages between its production and final recovery or disposal. Waste must be transferred to an authorised person i.e. either a registered carrier or exempted from registration by the Controlled Waste (Registration of Carriers and Seizure of Vehicle Regulations 1991). A waste transfer note must be completed and signed giving a written description of the waste, which is sufficient to enable the receiver of the waste to handle it in

accordance with their own duty of care. The provisions concerning waste transfer notes are set out in the Environmental Protection (Duty of Care) Regulations 1991(as amended). Failure to comply with these provisions is an offence, with a penalty of a fine not exceeding £5000 up to an unlimited fine in Crown court.

Hazardous Waste Regulations 2005 (HWR 2005)

HWR 2005 contains provisions about the handling and movement of hazardous waste. Consignment notes must be completed when any hazardous waste is transferred, which include details about the hazardous properties and any special handling requirements. If a consignment note is completed, a waste transfer note is not necessary. Material containing knotweed that has been treated with herbicide may be classified as hazardous waste.

Waste Management Licensing Regulations (WMLR 1994)

WMLR state that failure to use a licensed operative could leave you liable to prosecution. The 'waste relevant objectives' are described in paragraph 4 of Schedule 4. These objectives require that waste is recovered or disposed of "without endangering human health and without using processes or methods which could harm the environment and in particular without risk to risk to water, air, soil, plants or animals; or causing nuisance though noise or odours; or diversely affecting the countryside or places of special interest".