



JAPANESE KNOTWEED SURVEY

Prepared For: Meath County Council

Address Surveyed: Brews Hill, Navan

Date of Survey: 11th July 2022

Date of Report: 12th July 2022

PRIORITIES

- Survey Purpose
- Introduction to Japanese Knotweed
- Impacts of Japanese Knotweed
- Legal
- Overview of Process
- Mortgage Issues
- Risk Assessment
- Site specific Information
 - Identify main areas of Japanese knotweed which require immediate attention.
 - To ensure the prevention of cross contamination within the site.
 - To prevent future re-infestation from outside site boundaries, as far as is reasonably practicable.
 - To adopt location specific control methods.
 - To recommend the most suitable approach going forward
- Appendices
- References

SURVEY PURPOSE

The purpose of this survey is to provide relevant information in simple terms to help clients understand the specific situation relating to their lands and give guidance on most suitable way forward.

INTRODUCTION TO JAPANESE KNOTWEED

Japanese Knotweed is a tall, vigorous, hardy perennial plant. It is an invasive non-native plant pest and is considered one of the most problematic plant species in the UK and Ireland. The species was introduced to Britain & Ireland in mid-19th century as an ornamental plant for large gardens, prized due to its imposing size and sprays of creamy white flowers. By 1886 it was established in the wild and now it is very widely distributed. As it is not native to the UK and Ireland, it is not exposed here to any of its natural enemies, such as the insects, bacteria and fungi that feed and grow on and in it in its countries of origin (Japan, Korea and North Western China). The absence of these checks in conjunction with its highly invasive and competitive nature has facilitated the invasive spread of Japanese Knotweed throughout England, Wales, Scotland and Ireland.

The plant's well documented rapid growth rate is in relation to upward growth of shoots at the beginning of the growing season. The rate of lateral growth, via extension of its rhizome (underground shoot) system, is not well understood. The rate of spread will be dependent on the density and composition of soil and the presence of built structures. Dense soil will usually limit the spread of the plant. New shoots can emerge from spreading rhizomes. Rhizome extension is generally limited to a 4m radius from visible above ground plants and a depth of 2m. However, extension beyond these limits is possible. A frequently used rule of thumb for estimating potential rhizome growth is 7m outwards and 3m down; however, this is not a statistically robust method for estimating likely rhizome extension. It does, however, provide a useful and reliable 'safe distance'.

Propagation by seed has not been observed in England, Wales, Scotland and Ireland. While viable seed can be produced when Japanese Knotweed hybridizes with other Asiatic Knotweeds and Russian Vine, these seeds rarely germinate, and it is extremely unusual for seedlings to survive. The main method of distribution is the movement of infested soil and materials associated with earthworks. Fragments of rhizome weighing less than 1 grams can produce new plants. Green Japanese knotweed materials usually can be safely composted and / or incinerated on site when enclosed by a root barrier membrane.

IMPACTS OF JAPANESE KNOTWEED

The underground rhizomes of this species can penetrate loose aggregate and grow through existing small cracks, openings or voids in asphalt/concrete. Like many plant species, once established, the underground structures of Japanese Knotweed rhizome can slowly increase in volume over time and ultimately impact built structures (e.g. drains and patios), typically in the form of exacerbating existing weakness or damage. However, Japanese Knotweed is less likely to cause such damage than may commonly be encountered with woody plants.

The species' fast vertical growth rate allows it to outcompete much of the native vegetation in the UK and Ireland.

Other negative impacts include:

- Loss of biodiversity
- Increased flooding risk by impeding river-water flow.
- Increased riverbank erosion.
- Economic loss, primarily associated with control costs in the construction sector.
- Delays to development.
- Aesthetic damage to gardens and landscaping.
- Loss of amenity and recreational space.
- Adverse publicity for landowners.

While acknowledged as disproportionate to the actual impacts caused by Japanese Knotweed, the presence of the species can also result in:

- Financial institutions refusing to provide a mortgage or building insurance.
- Impeding and or preventing property sale.
- Diminution of property value.
- Loss of quiet enjoyment (as per common law).
- Neighborly disputes and, on occasions legal fees.

Not all impacts are negative; Japanese Knotweed stands in urban environments can provide shelter amongst its dense stems and food for wildlife e.g. an attractive source of nectar late in the season.

LEGAL

This Survey is not attempting to provide an exhaustive list of all legislation that may be relevant to control action, but rather aims to provide a concise explanation of the most relevant aspects of key legislation directly relevant to Japanese Knotweed control (Table 1). All relevant health and safety regulations must be followed at all times.

Essentially, this legislation makes it an offence to plant, or otherwise cause to grow (including allowing to spread) listed species in the wild, and, if transported off site, there is a duty of care with regards to the disposal of any part of the plant that may facilitate establishment in the wild and cause environmental harm.

If charged with committing an offence, it is a defense against prosecution to prove that all reasonable steps were taken and all due diligence exercised in attempting to avoid committing the offence. As such, landowners should be encouraged to have a management plan for the Japanese Knotweed on their property and be able to show that they are following it, e.g. they have hired a PCA approved specialist to manage the plants appropriately.

See Table 1 below and the PCA's Guidance Note on Legislation for additional information.

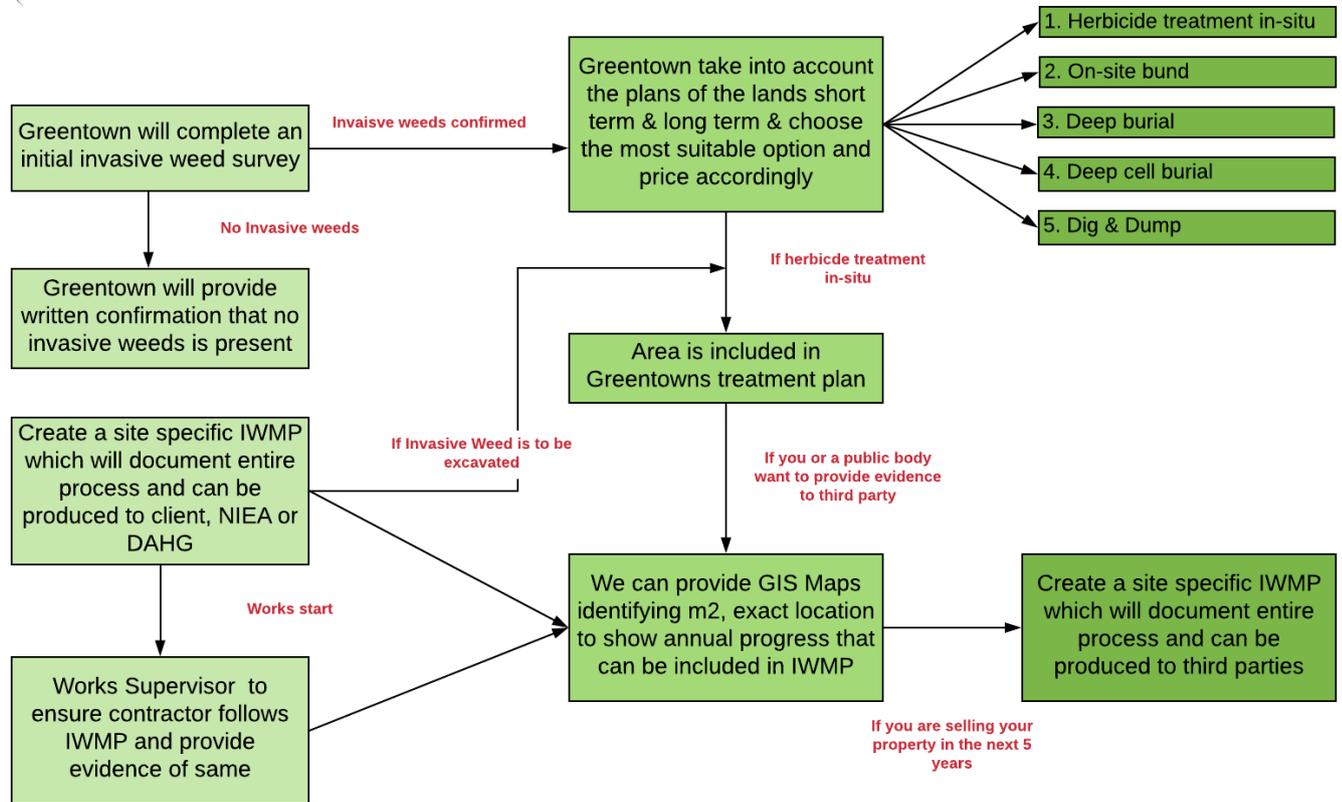
Table 1 Summary of legislation relevant to Japanese Knotweed. Japanese knotweed is classed an invasive species under Schedule 9 of the Wildlife (Northern Ireland) Order 1985 as amended by Section 27 Schedule 1 of the Wildlife and Natural Environment Act (Northern Ireland) 2016. Japanese knotweed is classed an invasive species under European Communities (Birds and Natural Habitats) Regulations 2011 in the republic of Ireland.

| Key legislation relevant to the management of Japanese Knotweed | | |
|--|---------------------|---|
| Legislation | Region | Relevance |
| Wildlife Order 1985 Statutory Instrument No.477 | Northern Ireland | You must not facilitate the spread of Japanese Knotweed in the wild. |
| European Communities (Birds and Natural Habitats) Regulations 2011 | Republic of Ireland | |
| Waste and Contaminated Land (NI) Order 1997 Waste Management Licensing (NI) Regulations 2003 Waste (Duty of Care) Regulations 2002 | Northern Ireland | Waste containing Japanese Knotweed is classified as 'controlled waste'. As such, you must observe the appropriate duty of care for its proper handling and disposal. |
| Irish Waste Management Acts 1996-2003. Waste Management (Facility Permit and Registration) Regulations | Republic of Ireland | The situation is evolving. The National Parks and Wildlife Service should be contacted. It is likely that you will require a license for transport and disposal and authorisation for onsite waste management |
| Control of Pesticides (Amendment) Regulations (Northern Ireland) 1997 | Northern Ireland | Any person using pesticides must take all reasonable precautions to protect the health of people and wildlife, hold a certificate of competence, only apply pesticides to target areas and, in applicable locations, ensure the amount of pesticide used and the frequency of application are as low as reasonably practicable. Approval from the relevant statutory agency must be obtained prior to use of pesticides in or near water (see section 9.5 for further details). |
| Control of Pesticides (Amendment) Regulations (Northern Ireland) 1997 | Republic of Ireland | |
| EU Invasive Alien Species Regulation 1143/2014 | European Union | 1143/2014 EU - This regulation imposes additional Union wide restrictions on species of animals and plants listed as 'Invasive Alien Species of Union Concern'. Japanese Knotweed is not on this list. |

OVERVIEW OF PROCESS



Greentown Environmental Invasive Weed Process Overview

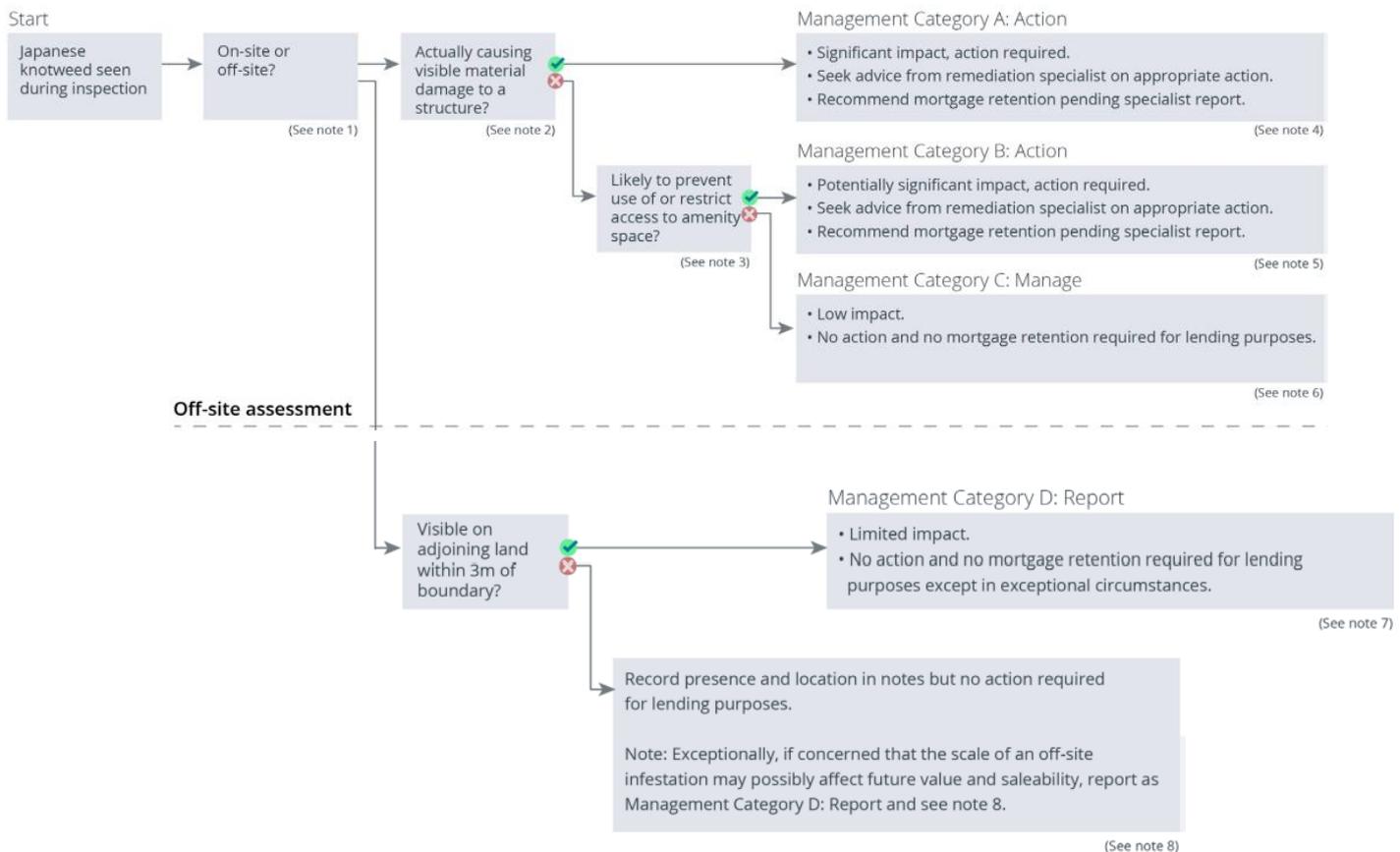


THE KNOTWEED AND MORTGAGE ISSUES

As a consequence of numerous cases having gained nationwide publicity in recent years, the existence of Japanese Knotweed on or close to a property will potentially, have an unfavorable impact on future property sale / purchase and may lead to added unforeseen costs. Unfortunately, there is no one particular solution that will categorically ensure that every lender will endorse a mortgage application. Each UK mortgage lender sets their own policies when assessing applications whereby Knotweed is present on or close to the property for sale. Different lenders take completely different views, some will lend with no concerns and some will not lend even if the affected area is more than 20 meters away from any building. Generally speaking however, the majority of lenders policies would stipulate that at the minimum, a treatment plan be put in place, sometimes it will be stipulated that a Management Plan be provided and in extreme situations it could be asked that the JKMP is supplemented by an Insurance Backed Guarantee (IBG), as a precursor to a mortgage application being considered.

THE RISK ASSESSMENT OF JAPANESE KNOTWEED

On-site assessment



4.6 Accompanying notes

Note 1: On-site or off-site?

- For assessment purposes, any infestation along a boundary, within boundary hedging or affecting boundary walls should be assessed as 'on-site'.
- If Japanese knotweed is seen both on-site and off-site, the assessment should follow each element separately. Report as appropriate in respect of the off-site component and then adopt the highest on-site category outcome for the overall assessment.
- Remediation of any infestation found off-site is unlikely to be the responsibility of, or to be within the control of, the owner or occupier of the subject property.

Note 2: Actually, causing visible material damage to a structure?

- Is Japanese knotweed causing visible material damage to any significant structure (a living space, conservatory or any ancillary permanent structure such as a garage, outbuilding or store) or associated structures such as paths, retaining walls, boundary walls and so on?

- As far as possible, determine whether the Japanese knotweed is the direct cause of actual damage (e.g. pushing over a boundary wall) or simply located where damage was already present (e.g. due to neglect, disrepair or deterioration for reasons other than Japanese knotweed).
- If Japanese knotweed is simply present in an area of pre-existing damage and not the direct cause of the damage, the assessment decision response should be 'no'.

Note 3: Likely to prevent use of or restrict access to amenity space?

- For the purposes of this guidance note, amenity space is regarded primarily as open areas intended for recreation, leisure or convenience within the boundaries of a property. Typically, lawns, patios, paths, driveways, hardstandings, etc. are included in this definition.
- Areas of garden planting may or may not be adversely affected by the presence of Japanese knotweed, depending on the size of the plot or the nature and character of the planting. If Japanese knotweed is present but not adversely affecting amenity space, there may be no significant impact on the property.
- Considering the number and sizes of individual stands of Japanese knotweed (as described in section 3.8), and their relation to the size of the plot, may assist in reaching a decision on this point.
- At properties with larger plots or, for example, on country estates, even relatively large areas of Japanese knotweed may not be regarded as unacceptable if the plant is not adversely affecting amenity space.
- The process of undertaking remediation work itself is likely to adversely affect the usability of that amenity space for the duration of the remediation process, for example while herbicidal treatment is carried out over a period of years, or during the course of excavation and reinstatement works.

Note 4: Management Category A: Action

- When visible damage has been caused, it is anticipated that most lenders will require, as a condition of a mortgage advance and subject to a retention, an inspection by a remediation specialist who is a member of a recognized trade body and the completion of any recommended works under a Japanese Knotweed Management Plan, with the benefit of an insurance-backed guarantee.
- The value of a property is likely to be affected when an infestation is assessed at this category. Valuers should take account of all relevant factors, including current market conditions, when considering the impact of an infestation on value at this category (see section 7).

Note 5: Management Category B: Action

- When Japanese knotweed is likely to prevent use of or restrict access to amenity space, it is anticipated that most lenders will require, as a condition of a mortgage advance and subject to a retention, an inspection by a remediation specialist who is a member of a recognized trade body and the completion of any recommended works under a Japanese Knotweed Management Plan, with the benefit of an insurance-backed guarantee.

- The value of a property may be affected when an infestation is assessed at this category. Valuers should take account of all relevant factors, including current market conditions, when considering the impact of an infestation on value at this category (see section 7).

Note 6: Management Category C: Manage

- An assessment at this level indicates that an infestation is:
 - not causing damage to significant structures within a site and
 - not likely to prevent use of or restrict access to amenity space.

It can therefore be considered as having a low impact on the property.

- Lenders routinely accept the normal risks posed by large trees and other plants. In the same way, there ought to be no requirement that borrowers should carry out remediation work as a condition of a mortgage advance at this category, so a mortgage retention ought not to be imposed.
- When reporting to clients other than lenders, the valuer or surveyor should recommend an inspection by a remediation specialist who is a member of a recognized trade body so the property owner can be advised about future management and control. This is particularly relevant if the growth is within 3m of a boundary (see section 5.3).
- There may be some impact on the value of a property when an infestation is at this level, but this will usually be modest and more likely to be a reflection of the cost of any remediation rather than any direct effect on the use of the property itself. Valuers should take account of all relevant factors, including current market conditions, when considering the impact of an infestation on value at this category (see section 7).

Note 7: Management Category D: Report

- An assessment at this level indicates that an infestation has not been seen within the subject site. The situation should be reported to the lender or client, but remedial action on land beyond the subject property is not within the control of the property owner.
- Proximity to the boundary means there is a possibility that there may be future spread from the off-site infestation onto the subject site. The likelihood of any possible spread will largely depend on the extent of the adjoining infestation. If an infestation on neighboring land is limited, there may be relatively little prospect of spread but if the adjoining infestation is extensive, the probability of spread may be greater.
- In some circumstances, it may be appropriate for advice to be sought from a remediation specialist about the merit of taking defensive measures against possible future encroachment.
- In most cases, there is likely to be limited impact on value unless a severe adjoining infestation makes expensive defensive measures desirable (see section 7).

- In certain situations, there may possibly be implications for remediation and, rarely, perhaps even potential legal action. This could increase the impact on value, but only in exceptional circumstances would an infestation at this category be expected to be made the subject of a mortgage advance condition.
- Irrespective of the extent of an adjoining infestation, and if discussion or negotiation are not successful, there is no practical way for a property owner to impose remedial measures on an adjoining owner without taking legal action of some sort. Consequently, it is not appropriate for lenders to require remediation of an infestation on adjoining land as a condition of a mortgage advance because it is effectively beyond the control of the mortgagee/property owner to impose this.
- Even when an adjoining owner is willing to undertake remediation, it may not be possible to ensure that work is carried out by an approved contractor or with the benefit of an insurance-backed guarantee (typical lender requirements). Additionally, remediation undertaken by statutory bodies or local authorities may be carried out by their own contractors, which are unlikely to meet this requirement in any event.

Note 8: Record presence and location in notes but no action required for

lending purposes

- No specific action is required when reporting for lending purposes if the visible infestation

is off-site and more than 3m from the boundary, but the surveyor or valuer should make an appropriate record in the site notes.

- Recording the apparent number and sizes of individual stands of Japanese knotweed (as described in section 3.8) may assist with this process.
- Exceptionally, if there are concerns about infestation further than 3m from the boundary possibly affecting future value and saleability, assess as Management Category D: Report, and follow note 7 (see section 4.4).
- Reporting or advice to clients for purposes other than lending will depend on the specific instructions relating to the inspection and, if appropriate, the survey level (see section 5.4).

SITE SPECIFIC INFORMATION

Meath County council commissioned Greentown Environmental Ltd for the survey of lands at Brews Hill Navan. The survey site can be viewed below.



Dineka Maguire consultant and certified surveyor of Japanese knotweed, conducted a survey on lands of Brew hill on 11th of July. The outcome of the survey confirmed there was Japanese knotweed located throughout the site. Some of the photos are seen below in the appendix. The site has been cleared in recently months which could be a potential for why the Japanese knotweed has spread throughout the site and the maturity of the Japanese knotweed is different across the site.

The most mature stand is located in the top left of the site in very close proximity to the neighboring property. Before further work could continue, I would advise surveying the property next door to make sure no Japanese knotweed has encroached into the neighboring property. If Japanese knotweed is evident in the neighboring property this infestation must be dealt with accordingly.

Due to works being conducted onsite in the near future it is advised that a certified surveyor of Japanese knotweed would oversee the works being carried out and that the spread of Japanese knotweed does not cross the 3rd party boundary of the site. Appropriate protocols must be conducted to stop the spread of Japanese knotweed. These include:

- Wash down area for equipment taken onto site
- Limited persons onsite
- Shoe covers
- Supervision of works undertaken
- All soil to be left onsite.

From the survey conducted and the scope of the works which are for development of housing on the site the only option for treatment and removal of Japanese knotweed is to remove the infestation to landfill. The closest landfill to the site is IMS, Hollywood Great Nags Head, Hollywood Great, Naul Village, Co. Dublin, A41 YE92. Other things to consider during this process include:

- Waste transfer license (required from NPWS)
- Haulage to landfill (These haulage lorries need covers provided).
- Excavator and dumper.
- Wash down area



Blue – 3rd party boundary

Yellow – Large infestation of Japanese knotweed.

APPENDICES

Below shows images of Japanese knotweed evident at Brews Hill. Red highlights Japanese knotweed areas.



REFERENCES

- Property Care Association Code of Practice for the Management of Japanese Knotweed – (*April 2018*)
- Royal Institute of Chartered Surveyors (RICS)
- Best Practice Management Guidelines Japanese knotweed *Fallopia japonica*. Prepared for NIEA and NPWS as part of Invasive Species Ireland. Kelly, J., Maguire, C.M. and Cosgrove, P.J. (2008).

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