

# **International Approaches to Japanese Knotweed in the Context of Property Sales**

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# Executive Summary

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## Introduction

Invasive knotweeds are some of the most pernicious invasive plants across the world (Lowe et al., 2004; Hulme et al., 2009). Japanese knotweed (*Reynoutria japonica*) is the most common and problematic knotweed within the UK, having been introduced in the mid-1800s as an ornamental plant (Conolly 1977; Akeroyd 2014; Stace 2019). It spreads mainly by asexual (clonal) dispersal, thus is assisted by disturbances whether anthropogenic (e.g. development) or natural (e.g. flooding). Japanese knotweed is not listed in the EU List of Invasive Alien Species of Union concern since there is insufficient evidence that it meets the listing criteria (Reg. No. 1143/2014, 2014). However, the UK has legislation surrounding Japanese knotweed, and more generally, invasive species (e.g. relating to its release and disposal of waste). In the context of residential property sales, knotweed should be declared during the conveyancing process when a TA6 form<sup>1</sup> is completed. In 2019, the Parliamentary Science and Technology Committee highlighted the disparity between approaches and attitudes toward Japanese knotweed in the built environment in the UK compared to other countries. This study is required to investigate international approaches to Japanese knotweed in the context of property sales and draw conclusions about whether the approach in the UK is disproportionate.

## Aims and objectives

The primary aim of the study is to investigate other countries' approaches to Japanese knotweed in the context of property sales. The key research questions are as follows:

- How does the approach taken across the four administrations of the UK differ?
- In other countries, what are the approaches taken by mortgage lenders to Japanese knotweed in the context of property sales?
- Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?
- Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?
- If so, how could this approach be improved in the four UK administrations?
- Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?
- Alternatively, should additional invasive plants be required to be declared, and if so, which ones?

## Method

The study began with a desk-based review and synthesis of information. This exercise involved looking at the situation in the UK and five case study countries (Germany, Belgium, Netherlands, USA and Canada). The limited amount of evidence available for some of these countries meant that an additional three countries (Australia, South Africa and Switzerland) were investigated (with this selection based upon recommendations from expert consultees). Email consultation was carried out with stakeholders identified from internet research and project team contacts. Stakeholders were sent a tailored set of questions. In total, 104 stakeholders were contacted with 65 replies received (representing a response rate of 62%). Follow-up interviews were held with five contacts to discuss their responses further. Information from the consultation was used to add detail to the responses to the research questions. A scoring system was developed to assess each country against a set of criteria with ratings compared with the prevalence of knotweed in each country. This assessment was

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<sup>1</sup> The TA6 form, which includes questions regarding Japanese knotweed, is used for residential property but not commercial property sales. It is applicable in England and Wales within the Law Society's Conveyancing Quality Scheme. Whilst most conveyancers adopt this scheme, it is not compulsory.

used to assist the project team with making a judgement on whether the UK's approach is disproportionate. Suggestions for change were then developed through the use of typical evaluation criteria (e.g. relevance, effectiveness, efficiency) to identify how the approach could be improved.

### ***Findings***

Within the UK, England and Wales require specific information on Japanese knotweed to be provided for residential property sales, whereas Scotland and Northern Ireland do not. Legal cases including knotweed have only been tested in England and Wales to date. Consultation indicates that knotweed is generally not an issue for property sales in the other countries considered here. In the majority of countries investigated, there is no specific obligation for a seller to report if a property is affected by knotweed and lenders do not consider knotweed when providing a mortgage. The study identified anecdotal examples of property sales falling through due to knotweed in Canada, but overall, those consulted were unaware of lenders changing their approach where properties have knotweed infestations. Homeowners in the majority of countries considered are not specifically asked to declare the presence of knotweed when selling a property (with the exception of British Columbia, Canada)<sup>2</sup>; furthermore, there are no equivalent questions to those regarding knotweed on the TA6 form. However, in several countries, sellers have a duty to declare defects, where a defect is a factor that may affect a property sale (and thus goes beyond structural damage)<sup>3</sup>. The extent to which knotweed is seen as a defect appears to vary. Email responses from stakeholders indicated that in Germany knotweed could cause a legal dispute if not mentioned at the time of sale, but in Belgium the presence of knotweed is not normally seen as essential information that should be provided to the buyer.

### ***Conclusions and suggestions for change***

This report demonstrates that there is a link between the question on Japanese knotweed on the TA6 form and the policies of lenders as informed by advice from the surveyors and valuers upon whom they rely. This link is now backed up by case law as well as the statutory framework. The TA6 question on Japanese knotweed was the result of policies adopted by lending institutions. The continued use of the question is due to current lending policies as reinforced by existing and emerging case law. This in turn informs the advice provided by surveyors and valuers to lending institutions and expert evidence given in court proceedings on matters relating to Japanese knotweed. The evidence collected for this study suggests that the UK approach to knotweed in property sales is not disproportionate given the level of invasion of knotweed and the control measures that may be required where knotweed is present, if only to enable householders to use their gardens and outside space. Discussions with stakeholders even suggested that other countries such as the Netherlands are looking to the UK for best practice in knotweed management<sup>4</sup>. Improvements to the UK approach could however be made. Recent changes to the TA6 form (carried out whilst this study was underway) mean that going forwards, respondents will be asked to answer “yes”, “no” or “not known” to a question on whether the property is affected by Japanese knotweed. The inclusion of a “not known” option caters for situations where the plant is dormant or treatment has occurred, but it cannot be confirmed that the knotweed is controlled, managed or remediated (‘eradicated’). The question therefore aims at reducing litigation. Other changes that could improve the overall approach include ensuring the supply of the TA6 Guidance Notes during the conveyancing process and providing evidence-based, timely and clear risk communication around Japanese knotweed damage to the built environment and effective treatment during property sales discourse. These changes could avoid surprises to buyers late in the process, minimising the risk of sales falling through.

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<sup>2</sup> For some countries with federal systems, laws on property sales are made at the federal, state or province level thus the situation may vary across the country.

<sup>3</sup> A defect in this instance could be the loss of use of the garden or other outside area.

<sup>4</sup> Note that knotweed management in the UK is likely to be influenced by the classification of soil containing knotweed as a controlled waste, in addition to knotweed's potential impacts on properties and their use.

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# 1 Introduction

## 1.1 Background to the study

### 1.1.1 Japanese knotweed and its impacts

Invasive knotweeds are recognised as some of the most pernicious and problematic invasive plants in Europe (Nentwig et al., 2018) and worldwide (Lowe et al., 2004; Hulme et al., 2009). In the UK, species that are legislated against include:

- Japanese knotweed (*Reynoutria japonica* var. *japonica*)
- Dwarf knotweed (*Reynoutria japonica* var. *compacta*)
- Giant knotweed (*Reynoutria sachalinensis*)
- Bohemian (hybrid) knotweed (*Reynoutria* × *bohemica*)

Japanese knotweed is the most common and problematic of these species in the UK, being introduced to Europe in the mid-1800s as an ornamental plant (giant knotweed was also introduced as a forage/fodder crop, whilst Bohemian knotweed hybridised in the non-native range) (Conolly 1977; Akeroyd 2014; Stace 2019). Collectively, these invasive knotweed species and any F2s or backcrosses (hybrids) are referred to as Japanese knotweed *sensu lato* (s.l.; 'in the broad sense') after Bailey & Conolly (2000).

Japanese knotweed spreads mainly by asexual (clonal) dispersal via anthropogenic pathways (e.g. roads and railways) and natural disturbance processes (e.g. disturbance by flooding), hastened by inappropriate control methods (e.g. cutting and flailing of roadside vegetation) and disposal of soil contaminated with knotweed rhizome (Bailey et al., 2009; Akeroyd, 2014; Jones et al., 2018). Japanese knotweed is known to have a negative impact on local ecosystem services and biodiversity, and increases flood risk (see Table 1-1).

Table 1-1: Summary of the environmental impacts of Japanese knotweed	
Impact	Source
Degradation of riparian habitats	Child and Wade, 2000
Creation of dense monodominant stands	Gillies et al., 2016 Michigan Department of Natural Resources, 2012
Impeding access to riparian habitats	Environment Agency, 2013 Gerber et al., 2008 Kidd, 2000 Urgenson, 2006
Negative effects on native plant and invertebrate assemblages in riparian habitats	Gerber et al., 2008 Seeney et al., 2019 Fogelman et al., 2018
Reductions in species richness	Seeney et al., 2019 Fogelman et al., 2018 Aguilera et al., 2010 Hejda et al., 2009 Urgenson, 2006 Kabat et al., 2006 Beerling et al., 1994

Table 1-1: Summary of the environmental impacts of Japanese knotweed	
Impact	Source
Reduction in abundance of native understory herbs, shrubs and juvenile trees in riparian woodlands	Urgenson, 2006
Modifications to nutrient cycles	Urgenson, 2006 Vanderhoeven et al. 2005 Maerz et al., 2005
Impacts on flood defence through impeding water flow and facilitation of riverbank erosion	Environment Agency, 2013 Kidd, 2000 Dawson & Holland, 1999

Attempts have been made to control, manage and eradicate Japanese knotweed using biological, mechanical (physical), and chemical (herbicide) methods or an integrated approach (combinations of the mechanical and chemical control treatments). However, control and management are difficult as:

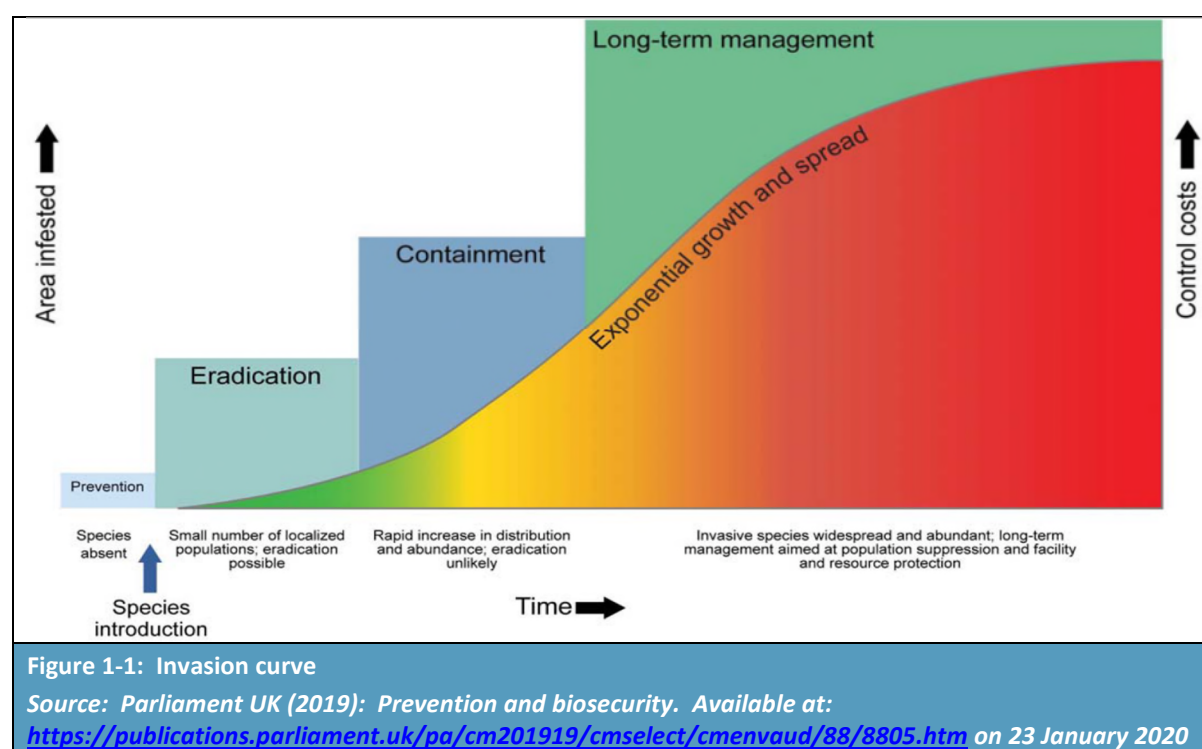
- Depletion of many kilograms of below ground biomass in deep, extensive rhizome (root-like) structures is not possible using physical treatments such as covering (Jones, 2015; Jones et al., 2018) and is uncertain with respect to biocontrol (*Aphalara itadori*)<sup>5</sup>; and
- Invasive knotweed rhizome tissue is resilient to many chemical (herbicide) treatments, which can be understood in the context of ecophysiology in the native range.

Further, while eradication (*“the elimination of every single individual of a species from an area to which recolonization is unlikely to occur”*) (Myers et al. 1998) using physical excavation is possible, it is technically challenging, as new plants can arise from fragments as little as 0.7 g (Brock and Wade, 1992; Barney, 2006). It is accepted that preventing the introduction of invasive non-native species is the most preferable means of management, as it is more cost effective, and environmentally desirable, than measures needed to tackle invasions (Convention on Biological Diversity, nd). For invasive species which have already been introduced into an environment, control costs increase as the invasion spreads. This is illustrated in Figure 1-1 overleaf.

Figure 1-1 shows the invasion process (infestation development) in relation to control costs of an invasive non-native species. After their introduction, invasive alien species spread exponentially with decreasing feasibility of eradication and increasing damaging effects and control costs. Non-native species are only likely to be eradicated in an early stage of detection, in later stages eradication is unlikely, though coordinated, sustainable control and management may remain possible (this is termed ‘maintenance management’) (Panetta, 2015). Prevention (stage 1) through restriction and the control of vectors is the most cost-effective control method of invasive species. Eradication (stage 2: lag time) requires measures to eradicate the invader, which is more expensive than prevention yet expected to be more successful. During the containment period (stage 3: expansion), public awareness usually grows while eradication becomes increasingly difficult and costly. The non-native species grows rapidly with a high rate of dispersal. More intense efforts are required to stop the distribution of invader and control management puts increasingly more emphasis on the prevention of further spread into new areas. Once the invader is fully established (stage 4: persistence), the focus is exclusively on long-term management, including local control and population reduction where possible, protection of the native ecosystem and biodiversity and minimisation of its impact (Geburzi and McCarthy, 2018; Harvey and Mazzotti, 2018; Cornell Cooperative Extension, 2019). As indicated

<sup>5</sup> Results from the UK based CABI project to release psyllid *Aphalara itadori* have focused predominantly on safety to ensure that the psyllid had no negative impacts on native flora and fauna. Further studies are planned within the Netherlands.

above, control costs and political attention depend highly on the invasion stage. Economics of invasive species policy and management emphasises the relationship between the cost of interventions and expected long-term damage declines. Solution approaches to cost-effective and efficient invasion management range from return on investment analysis, cost-benefit analysis to optimal policy design. Invasion management policies have to take into account variables such as the stage of invasion, private stakeholders and uncertainty associated with invasions (i.e., risk assessment) (Epanchin-Niell, 2017). Frequently however, management policies are not informed by evidence-based invasive species control, management and eradication methods, hampering effective planning and deployment of control measures to achieve stated objectives (Kettenring & Adams, 2011).



Epanchin-Niell (2017) elaborates that invasion prevention can be improved through taxes, tariffs, fines and border controls. However, prevention efforts are costly. Alternatively, early detection and monitoring surveillance proves more cost-effective. Active and passive surveillance of invaders is highly recommended for early detections irrespective of the level of invasion, thereby reducing management costs. As the spatial magnitude of the invasion increases, policies shift from focusing on eradication to controlling and slowing the spread, which can have important benefits to stakeholders' adaptation. Private decision-makers can have a significant influence on invasion management. Epanchin-Niell (2017) suggests a cooperative, centralised management approach to invasive species, including bilateral agreements between neighbours. Uncertainty is a key component in invasion management, as both economic and ecological parameters are uncertain (common concepts are the information-gap theory, maximin/minimax approach, etc.).

There is no universal approach to invasion management, as policies will always entail societal trade-offs. Counterproductive policies such as inadequate incentives need to be avoided in invasion management. Policies are selected depending on the infestation stage and the respective cost-effective options. The interdependency of prevention, surveillance and control requires spatial coordination of and collaboration between stakeholders (Epanchin-Niell, 2017).

With increasing Japanese knotweed distribution over time, more properties are likely to be affected by knotweed at the UK national scale. Consequently, the overall risk associated with knotweed to property at the national level increases over time as a function of the overall number of properties affected. On an individual property basis, effective, scale-dependent, evidence-based control, management and/or remediation methods are largely independent of the overall scale of Japanese knotweed invasion at the national level. However, because of factors such as public perception and lender attitudes, more costly (less economically and environmentally sustainable) Japanese knotweed control, management and/or remediation methods (e.g. complete excavation) will be considered, as these may minimise the negative impacts (including potential diminution of property value) of the presence of Japanese knotweed on property.

As a separate issue, it is important to acknowledge that soil containing knotweed is classified as controlled waste. Disposal of such soil can incur considerable expense. The classification of soil contaminated with knotweed is therefore also likely to affect the way in which knotweed is managed.

### 1.1.2 Distribution of Japanese knotweed

Japanese knotweed is not listed in the EU List of Invasive Alien Species of Union concern, since there is insufficient evidence that it meets the listing criteria (Reg. No. 1143/2014, 2014)<sup>6</sup>. Therefore, it is up to Member States to impose individual control measures.

Figure 1-2 overleaf shows the spread of Japanese knotweed in the UK. The species is now present across the UK, although distribution is more restricted in the north of Scotland. Whilst coarse scale distribution maps provide an overview of the current reported extent of Japanese knotweed, they do not accurately represent the relative density of an invasive species at the finer scale and caution should be used when comparing two or more areas/countries. For example, while Japanese knotweed is now present in almost every 10km × 10km grid square of the UK, it is not uniformly distributed: in the map shown overleaf, areas of East Anglia appear to be as affected by Japanese knotweed as South Wales, which is not the case.

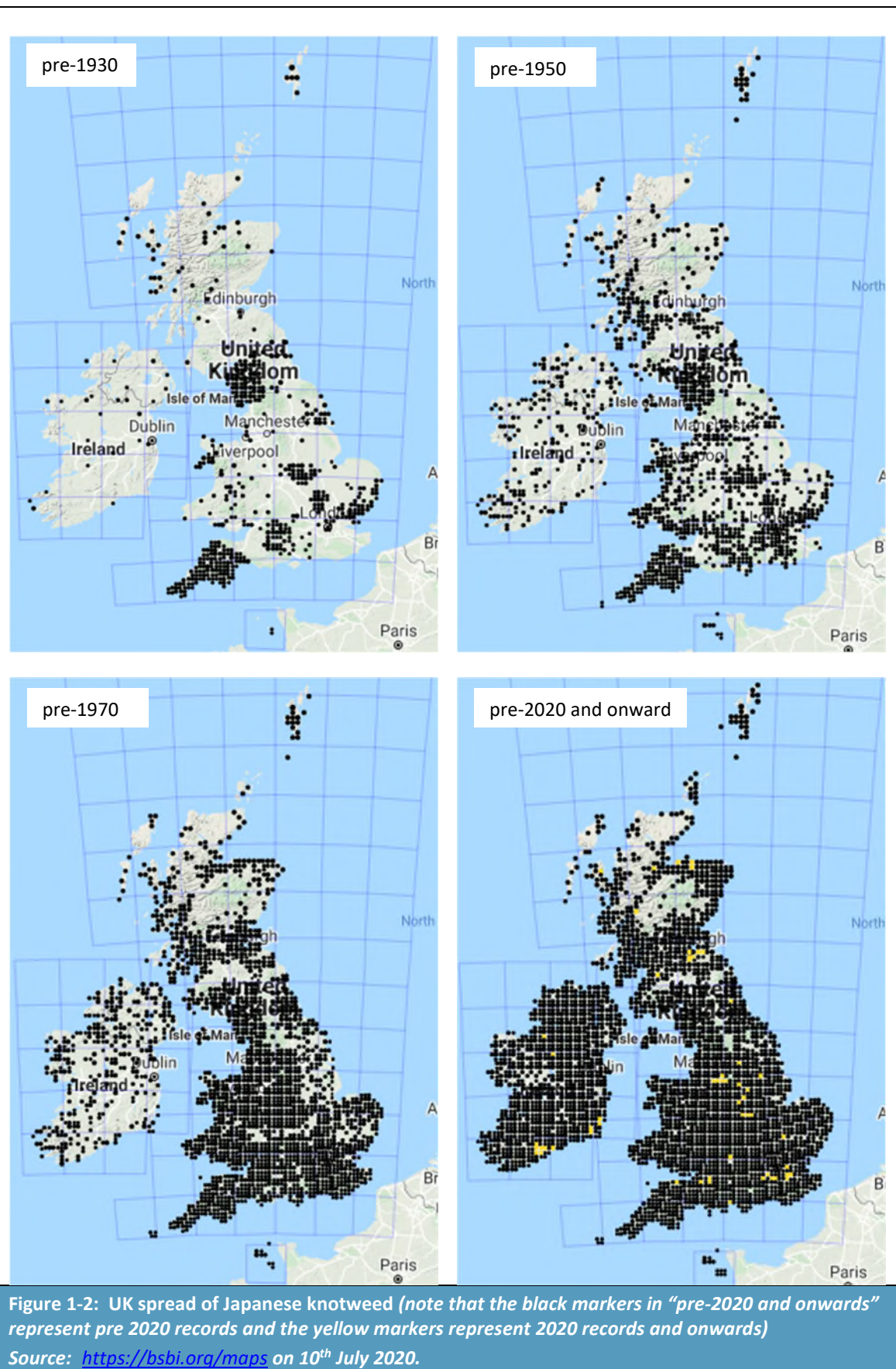
Further to this, the date of species introduction does not necessarily indicate present extent in that country. For example, while Japanese knotweed was introduced to the Netherlands and the UK at a similar time, subsequent processes of establishment and dispersal were not the same:

- UK climatic conditions (particularly in the west) are suited to Japanese knotweed growth;
- The UK industrialised more rapidly around the time of Japanese knotweed introduction;
- Over the past 50 years the UK has reused topsoil more extensively than the Netherlands (the Netherlands has also reclaimed land from the sea i.e. it is not contaminated by Japanese knotweed rhizome); and
- Post war de-industrialisation in the UK focused on remediation of land contaminated with heavy metals hydrocarbons, which spread extensive Japanese knotweed further.

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<sup>6</sup> It should be noted that not being listed does not indicate an absence of impact. Gallardo et al. (2016) for example, highlights Japanese knotweed as one of the most problematic invasive species in Great Britain, France, Belgium and The Netherlands (see: <https://link.springer.com/content/pdf/10.1007/s10530-015-0986-0.pdf>). Further to this, Shaw et al. (2009) note that it is 'arguably the most troublesome invasive alien plant in Europe and North America (see: <https://www.sciencedirect.com/science/article/pii/S1049964409000371>).





Consequently, though the introduction dates for Japanese knotweed in the UK and the Netherlands are similar, subsequent processes have resulted in the different distribution and density of Japanese knotweed in the respective countries. Hence, the UK is further along the invasion curve than the other countries considered in this study.

The UK has legislation surrounding Japanese knotweed<sup>7</sup>, for example, relating to its spread and disposal. Furthermore, in the context of residential property sales, it is good practice to use a TA6 form during the conveyancing process<sup>8</sup>; this form includes a specific question on knotweed.

### 1.1.3 Rationale for the study

In 2019, the Parliamentary Science and Technology Committee<sup>9</sup> highlighted the disparity between approaches and attitudes toward Japanese knotweed in the UK compared to other countries. Research and learning from the approaches undertaken in other countries toward Japanese knotweed and other destructive plants will enable future approaches to be built upon a sound evidence base and ensure that the impacts of Japanese knotweed in the UK are proportionate to the physical effects of the plant in the built environment. This study is therefore required to investigate international approaches to Japanese knotweed in the context of property sales and draw conclusions about whether the approach adopted in the UK is disproportionate.

## 1.2 Aims and objectives

The primary aim of this research is to investigate other countries' approaches to Japanese knotweed in the context of property sales. The research will draw conclusions about whether the approach adopted in the UK is disproportionate to the threat posed by the plant, and in comparison to approaches adopted by other countries.

The objectives of the research will be to collect evidence to better understand whether it is proportionate to require Japanese knotweed to be declared as part of the property buying process. The key research questions underpinning the study approach are as follows:

- How does the approach taken across the four administrations of the UK differ?
- In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?
- Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?
- Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?
- If so, how could this approach be improved in the four UK administrations? - Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?

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<sup>7</sup> This also includes legislation regarding invasive species more generally. A search for references to 'Japanese Knotweed' in UK legislation since 1993 on [legislation.co.uk](http://legislation.co.uk) returned 42 results which specifically mention Japanese Knotweed (search conducted July 2020).

<sup>8</sup> Note that the questions on the TA6 form are applicable in England and Wales within the Law Society's Conveyancing Quality Scheme. Whilst most conveyancers adopt this scheme, it is not compulsory.

<sup>9</sup> See more information on the Japanese Knotweed and the built environment inquiry at: [www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/japanese-knotweed-17-19/](http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/parliament-2017/japanese-knotweed-17-19/) (accessed on 30<sup>th</sup> July 2020)

- Alternatively, should additional invasive plants be required to be declared, and if so, which ones?

Property information form TA6 is typically used in residential sales (with a separate set of enquiries used in commercial sales), therefore this study will focus on Japanese knotweed in the context of residential property sales.

### **1.3 Structure of the report**

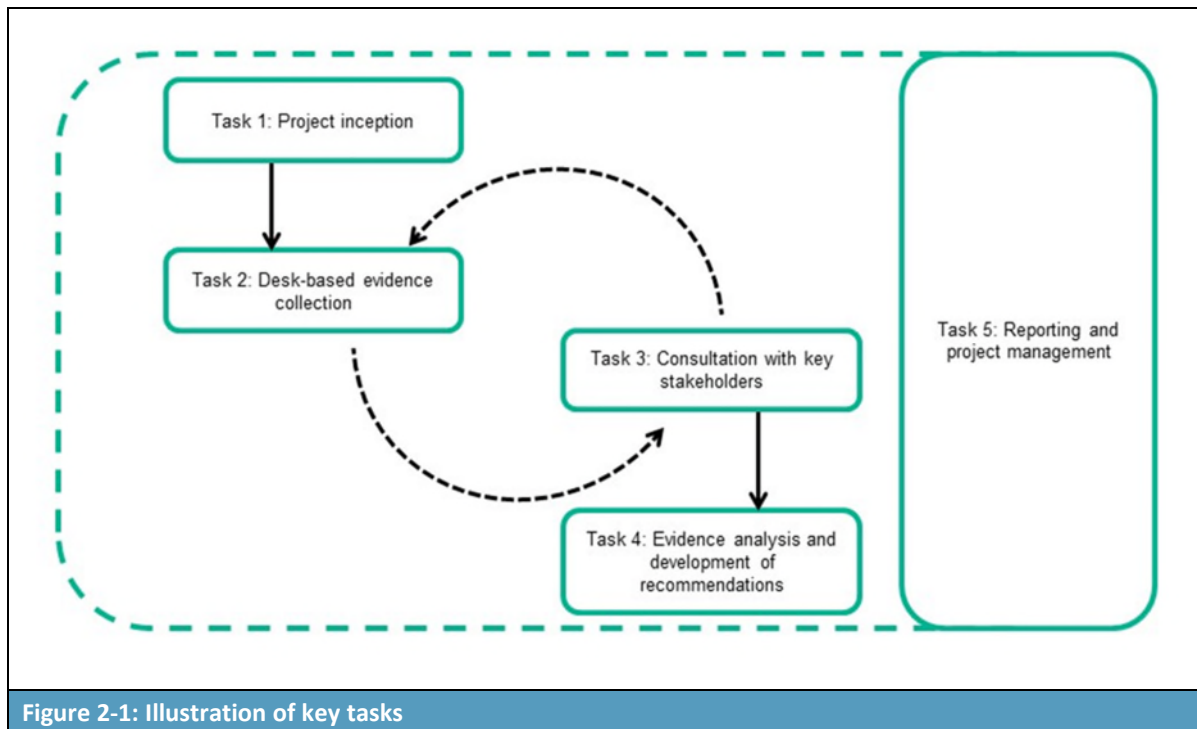
The remainder of this report is structured as follows:

- Section 2 provides further information on the methodology for the study, including the approach taken to analysis of the evidence;
- Section 3 presents information gathered on the approach taken to Japanese knotweed in the context of property sales in the UK;
- Section 4 covers the international approach to Japanese knotweed, drawing on information gathered from the case study countries;
- Section 5 covers other plant species that may be relevant in the context of property sales;
- Section 6 presents the conclusions and suggested changes, with a summary of the answers to the study questions;
- Section 7 includes the references;
- Annex 1 provides supplementary information on lending policies in place at banks and buildings societies;
- Annex 2 presents further information on the approach taken to assessing the level of priority given to Japanese knotweed in the case study countries and the UK; and
- Annex 3 lists relevant legal instruments.

## 2 Methodology

### 2.1 Overview

Our approach consisted of five tasks, which are described in detail below and illustrated in Figure 2-1.



### 2.2 Task 1: Project inception

A project inception meeting was held in November 2019 with Defra, the Steering Group, and representatives from the project team. During this meeting, five case study countries were agreed, being Germany, Belgium, Netherlands, USA and Canada. These countries were selected taking into account information identified at the outset of the study on the prevalence of Japanese knotweed and the Steering Group's knowledge of property sales processes in other countries (with the aim being to select countries where the sales process is somewhat similar to that of the UK).

Initial research under Task 2 yielded less information than expected on the five case study countries. Consequently, three further countries (Australia, South Africa and Switzerland) were investigated following suggestions from stakeholders during the consultation exercise in Task 3. Whilst the inclusion of Australia and South Africa brought in countries with different climatic conditions, it also enabled the investigation of considerably different approaches to knotweed in the context of property sales and more generally.

In total, the study therefore looked at eight countries in addition to the UK. Whilst covering further countries would have provided more evidence, the study timetable and available resources necessitated a case study approach.



## 2.3 Task 2: Desk-based evidence collection

The second task aimed to undertake a desk-based review and synthesis of data (quantitative and qualitative) relating to the following key research questions:

- How does the approach taken across the four administrations of the UK differ?
- In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?
- Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?

Task 2 was divided into evidence collection for the UK (Sub-task 2.1) and for other countries (Sub-task 2.2). Considering the UK, initial information was provided by Defra on the approaches taken to managing Japanese knotweed in the context of property sales. This was reviewed and supplemented by property law and invasive species experts on the project team. For other countries, internet research was undertaken to identify:

- Legislation and guidance relating to Japanese knotweed;
- The property buying/selling process and the extent to which reference is made to Japanese knotweed; and
- Case law examples, where these were available.

The research was carried out in a systematic manner with team members allocated a country and searching for specific terms related to the study questions. The information was recorded in an evidence spreadsheet and has been summarised in this report in Sections 3 (UK Approach) and 4 (International Approach). As noted earlier, whilst research initially focused on the five countries selected at the inception meeting, the limited evidence identified meant that Task 2 was extended to include Australia, South Africa and Switzerland. These countries were selected on the basis of information from stakeholders, which was obtained in Task 3 below. The consultation exercise was additionally extended to cover individuals within these three countries.

## 2.4 Task 3: Consultation with key stakeholders

Consultation was carried out to validate the findings from the desk research in Task 2 and to obtain further information to answer the study questions. The consultation exercise drew on the project team's contacts and previous work experience. Additional stakeholder contacts covering property law, the selling process, surveying, invasive species and biodiversity were identified from internet research.

Stakeholders were initially contacted by email. Each email provided some introductory text on the study and a set of questions tailored to the type of consultee (and country where country specific information had been identified). A subset of respondents was followed up to see if they would be willing to have an interview. These respondents were chosen on the basis of the information they had provided in their initial response, and whether an interview would be likely to provide further clarity and/or additional information on an issue. For each interview, a set of questions was developed to guide the conversation and provide prompts to the interviewer. A semi-structured format was used to ensure relevant information was obtained whilst also providing the interviewer with the flexibility to follow-up on points of interest.

All consultation was recorded in an engagement log, with a summary of this presented in Table 2-1.

Table 2-1: Summary of consultation (to 27 January 2020)			
Country	Email consultation		Interviews
	Number of stakeholders contacted	Number of responses received	
UK	35	18	3
Australia	6	5	-
Belgium	6	4	-
Canada	12	7	-
Germany	10	7	-
Netherlands	9	8	-
South Africa	8	4	-
Switzerland	6	6	1
USA	10	5	1
EU (not counted above)	2	1	-
<b>Totals</b>	<b>104</b>	<b>65</b>	<b>5</b>

## 2.5 Task 4: Evidence analysis and development of suggested changes

### 2.5.1 Using the evidence to answer the research questions

Task 4 covered the analysis of evidence and the identification of suggested changes to the approach to knotweed. Table 2-2 shows how the evidence was analysed to answer the study questions. In summary, the approaches taken across the four administrations of the UK were reviewed with differences (and the impact of any differences) identified. The approaches in other countries (and their indicative impacts) were compared with the current state of play in the UK with regard to Japanese knotweed in the context of property sales and lenders' attitudes. It is important to note that when carrying out the analysis, information from the consultation was used to verify and add to the data gathered from internet research where possible. This ensures the conclusions are robust and reflect the actual situation, rather than relying on the published literature, which may not adequately indicate how people respond to Japanese knotweed when purchasing a property.

Table 2-2: Analysis of the evidence against the study questions	
Study question	Analysis approach
<i>Current approaches</i>	
How does the approach taken across the four administrations of the UK differ?	Data have been identified on similar themes for each administration in the UK (England, Scotland, Wales and Northern Ireland). Comparisons have then been made on these themes to identify similarities and differences
In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?	Evidence gathered from different countries (and wider e.g. EU level) has been collated and reviewed to identify the approaches taken by lenders
Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?	Data from internet research and consultation have been analysed to determine the extent to which Japanese knotweed features in the property purchasing process in the eight countries

Table 2-2: Analysis of the evidence against the study questions	
Study question	Analysis approach
	investigated. The information has been used to produce an indicative order of the countries considered in terms of the extent to which knotweed is taken into account in property sales
Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?	Evidence has been used to assess each country against a set of criteria (covering e.g. owner perspective, lender perspective) and assign ratings (see section on 'Development of scoring system' below for more details). The overall ratings have then been compared with the prevalence of knotweed, to assist with making a judgement on whether the UK approach is disproportionate.
<i>Suggestions for change</i>	
If so, how could this approach be improved in the four UK administrations? - Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?	To consider potential improvements, the information gathered has been considered against criteria typically used in evaluation of policies, namely: relevance, effectiveness, efficiency, coherence, impact and sustainability. Potential changes have then been identified by looking at what could be improved under each of these criteria
Alternatively, should additional invasive plants be required to be declared, and if so, which ones?	Evidence from internet research and consultation with stakeholders has been collated to identify what other species cause concern to property owners. The pros and cons of requiring additional invasive plants to be declared are then considered, with implications draw out from the data collected

Following the identification of suggestions for change, consideration was given to their potential economic, environmental and social impacts.

## 2.5.2 Development of the scoring system

A scoring system was developed to assess the level of priority afforded to Japanese knotweed in the context of property sales across different countries. Eight criteria relating to the response to Japanese knotweed were used in the assessment, as shown in Table 2-3 below.

Table 2-3: Assessment criteria	
Criteria	Description
Legislation	Type of legislation or guidance in place
Control method	Type of control method (formal or informal)
Owner perspective	Extent to which Japanese knotweed is perceived as problematic by owners purchasing property
Lender perspective	Extent to which Japanese knotweed is perceived as problematic by lenders in the context of property sales
Management plans	Type and extent of management plans in place
Media coverage	Type and extent of media coverage of issue in relation to property sales
House sale website advice	Type and extent of advice available to prospective buyers/sellers
Invasive species removal companies	Prevalence of specialist invasive removal companies

Ratings and corresponding values were developed for each criterion, as shown in Table 2-4. The minimum value for each criterion was 0 and the maximum value was 4. More details of how the ratings were defined for each criterion can be found in Annex 2 (Table A2-1).

Table 2-4: Ratings and corresponding values for assessment criteria	
Rating	Value
None	0
Low	1
Moderate	2
High	3
Very high	4

Each country was assessed in turn, using evidence gathered from the desk-based research and stakeholder consultation to assign the rating for each criterion. Note that all criteria were weighted equally, meaning the maximum total score was 32 (i.e. a rating of ‘very high’ for each of the eight criteria).

The values for all criteria were summed, giving a total score for each country. The scores were then grouped into ranges and assigned a level of priority, as shown in Table 2-5 below:

Table 2-5: Score ranges	
Score	Level of priority
0-9	Low
10-19	Medium
20-29	High
30+	Very high

The total score provides an indication of the level of priority afforded to the issue of Japanese knotweed in the context of property sales in a country. For example, a country with a score of 23 is considered to allocate a high level of priority to the issue, conversely, a country with a score of 6 is considered to give a low level of priority to the issue.

This scoring system was used to help consider the study question of whether the UK takes a disproportionate approach to Japanese knotweed in the buying process. Comparisons between the priority levels of different countries and the prevalence of knotweed enable a judgement to be made on the extent to which the approach is proportionate.

## 2.6 Task 5: Reporting

Task 5 covered the production of the final report and also provision of the evidence collected.

## 3 UK Approach

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### 3.1 Overview

Within the four UK administrations it is not an offence to allow Japanese knotweed to grow on your property. However, disposing of waste containing Japanese knotweed in an inappropriate way (i.e. not using properly licensed hauliers and landfill facilities) would be considered an offence. In Northern Ireland and Scotland, allowing Japanese knotweed to spread to a neighbouring property is considered to be a civil matter; however, in England and Wales the Anti-social Behaviour, Crime and Policing Act 2014 allows the police and local authorities to issue a community protection order requiring an individual or company to take action to control Japanese knotweed, and the Wildlife and Countryside Act 1981 gives an 'environmental authority' the power to enter into species control agreements with landowners and, if necessary, to impose species control orders.

Property information forms are used during the conveyancing process, enabling the seller to provide important information regarding the property to the buyer. The forms vary across the four UK administrations. In England and Wales, it is commonplace (but not a legal requirement) to use the Law Society's property information transaction (TA6) form which includes a specific question about Japanese knotweed. It is a legal requirement to complete a Home Report including the Property Questionnaire in Scotland, however this questionnaire does not include a specific question on Japanese knotweed. In Northern Ireland, it is commonplace to use the Replies to Pre-contract Enquiries form published by the Law Society of Northern Ireland; this form does not contain a specific question about Japanese knotweed.

When purchasing with the assistance of a mortgage, mortgage lenders have to ensure that an independent valuation of the property is undertaken. The basic mortgage valuation is for the benefit of the mortgage lender and is designed to give enough information for the lender to decide whether the property is safe to lend on, and up to what amount. Though the borrower may pay for the report, they may not get a copy or even see what the surveyor has written. The Royal Institution of Chartered Surveyors (RICS) states that a buyer would be unwise to rely only on the lender's mortgage valuation, and recommend also commissioning a RICS Home Survey so that the buyer is fully informed of the condition of the property before purchase (RICS, 2020).

Surveyors registered with RICS would be expected to conduct surveys in line with the Red Book guidance<sup>10</sup> and Japanese knotweed information paper (RICS, 2012). Most UK lenders base their Japanese knotweed policies on the risk categories set out in the information paper. A proportion of lenders will not provide a mortgage if Japanese knotweed is present on the property and some will require a guarantee backed treatment plan by a specialist contractor to be put in place. Annex 1 (Table A1-1) provides an overview of current lending policies where properties are affected by Japanese knotweed (with information extracted from Which (2019)).

To date, legal cases regarding Japanese knotweed and properties have only been brought in England and Wales. Most legal cases relating to Japanese knotweed and property are pleaded as misrepresentation, professional negligence and private nuisance.

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<sup>10</sup> RICS Red Book, accessed at: <https://www.rics.org/uk/upholding-professional-standards/sector-standards/valuation/red-book/> on 14<sup>th</sup> April 2020.

## 3.2 England and Wales

### 3.2.1 Legislation and guidance

Table 3-1 outlines the range of legislation and guidance surrounding Japanese knotweed in England and Wales. A list of international and European instruments that address Invasive Alien Species (IAS), and to which the UK is currently signatory, is provided in Annex 3.

Table 3-1: English and Welsh legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
England and Wales	Under Section 14 of the <b>Wildlife and Countryside Act 1981</b> it is an offence to plant Japanese knotweed or cause it to grow in the wild, being listed under Schedule 9 Part II	The Wildlife and Countryside Act 1981  Also see, Defra (2009): Guidance on section 14 of the Wildlife and Countryside Act, 1981
	Japanese knotweed material and soil or plant material containing Japanese knotweed are considered as a 'controlled waste' according to the Duty of Care Regulations (1991) under Part II of the <b>Environmental Protection Act 1990</b> (1990). Therefore, it must be disposed of according to the Environment Agency's regulatory position statement 178 (see cell below). Failure to do so can result in criminal prosecution, an unlimited fine and imprisonment	Part II Section 33 Environmental Protection Act 1990  Environment Agency (2013) The knotweed code of practice: Managing Japanese knotweed on development sites p.6.  Environment Agency (2019) Guidance on the Treatment and disposal of invasive non-native plants: RPS 178, updated 2019
	The guidance document, <b>Treatment and disposal of invasive non-native plants: RPS 178</b> , is a regulatory position statement that applies to the disposal of invasive non-native plant material, and the substrate in which it is rooted, on-site without a permit via burial or burning. Applies to England. Last updated 9 April 2019 and to be reviewed by 30 June 2021	Environment Agency (2019) Guidance on the Treatment and disposal of invasive non-native plants: RPS 178, updated 2019
	Official guidance from the Home Office gives potential to address the problem of invasive species such as Japanese knotweed, including neighbour disputes surrounding its growth, through the <b>Anti-Social Behaviour, Crime and Policing Act 2014</b>	Home Office information note  Part 4 (Community Protection) Section 43

Table 3-1: English and Welsh legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
	Section 23 of the <b>Infrastructure Act 2015</b> amended the Wildlife and Countryside Act 1981 by inserting a new Schedule 9A to introduce a statutory regime of species control agreements and orders to ensure that, in appropriate circumstances, landowners take action on invasive non-native species and formerly resident native species, or permit others to enter the land and carry out those operations, to prevent their establishment and spread	Section 23 (3) of Infrastructure Act 2015
	Under Section 215 of the <b>Town and Country Planning Act 1990</b> , local authorities have the power to require proper maintenance of land. If local authority land is deemed to be adversely affected by the condition of nearby or adjoining land in their area, they can require landowners to treat the land. The Town and Country Planning Act is often used by local planning authorities by way of planning conditions to force developers to treat sites infested with Japanese knotweed. If the issue is not remedied within a notice period, the landowner may be found guilty of an offence and liable to a fine (Section 216)	Section 215 of the Town and Country Planning Act 1990  Section 216 of the Town and Country Planning Act 1990
	<b>The Hazardous Waste Regulations 2005</b> contains provisions regarding the handling and movement of hazardous waste. Untreated knotweed is not classed as a hazardous waste, though knotweed material treated with certain herbicides and soil in which Japanese knotweed is growing can be contaminated, e.g. asbestos or hydrocarbons may be classified as such (EA 2008)	Daventry District Council (nd): Weeds and Invasive Plants

Within England and Wales it is not illegal to allow Japanese knotweed to grow on your property; however, the Wildlife and Countryside Act 1981 makes it an offence to plant Japanese knotweed or cause it to grow in the wild. Both the Town and Country Planning Act 1990 and Infrastructure Act 2015 require landowners to properly maintain land; in particular, the Infrastructure Act 2015 requires the control of invasive non-native species on property and failure to comply is a criminal offence.

### 3.2.2 Buying process and approach to Japanese knotweed and other invasive plants

Housing tenure in England and Wales has changed in the last five decades. Significant increases in the number of owner occupiers during the 1980s (see Figure 3-1) was in part due to higher incomes, easier access to mortgages and the introduction of the Right to Buy scheme (introduced by the Housing Act



1980 in England and Wales and the Housing Tenants Rights etc. [Scotland] Act 1980), which saw large numbers of social rented properties sold to renters (Resolution Foundation, 2019).

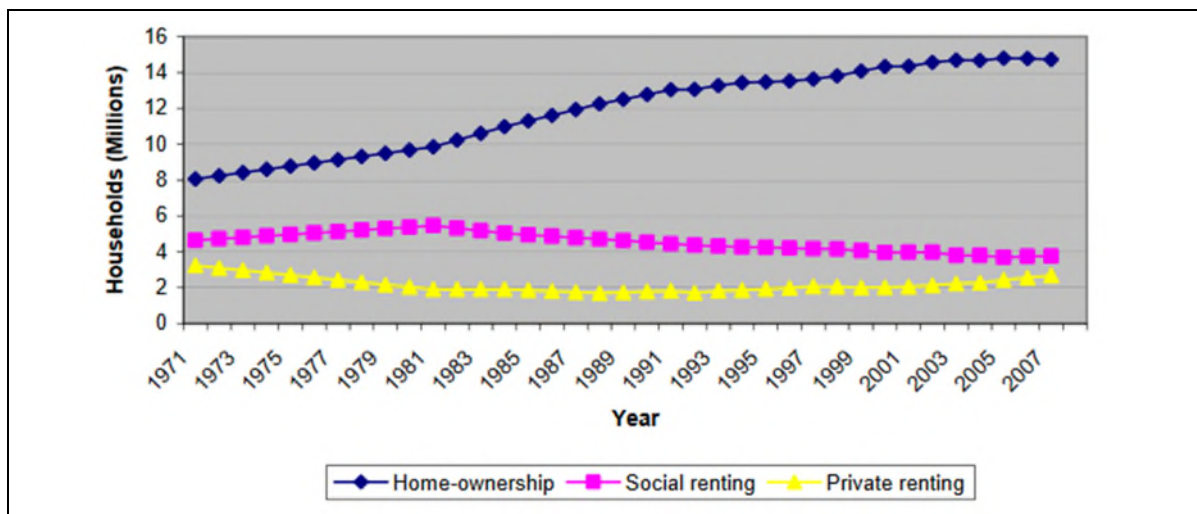


Figure 3-1: Housing tenure trends in England: 1971 to 2007

Source: Shelter (2009)

However, the 2008 financial crisis and subsequent economic downturn caused a shift in this housing tenure trend and a decline in the number of first time buyers in the UK, with a 47% decrease in the number of mortgage loans for first time buyers from 2007 to 2008 (see Figure 3-2).

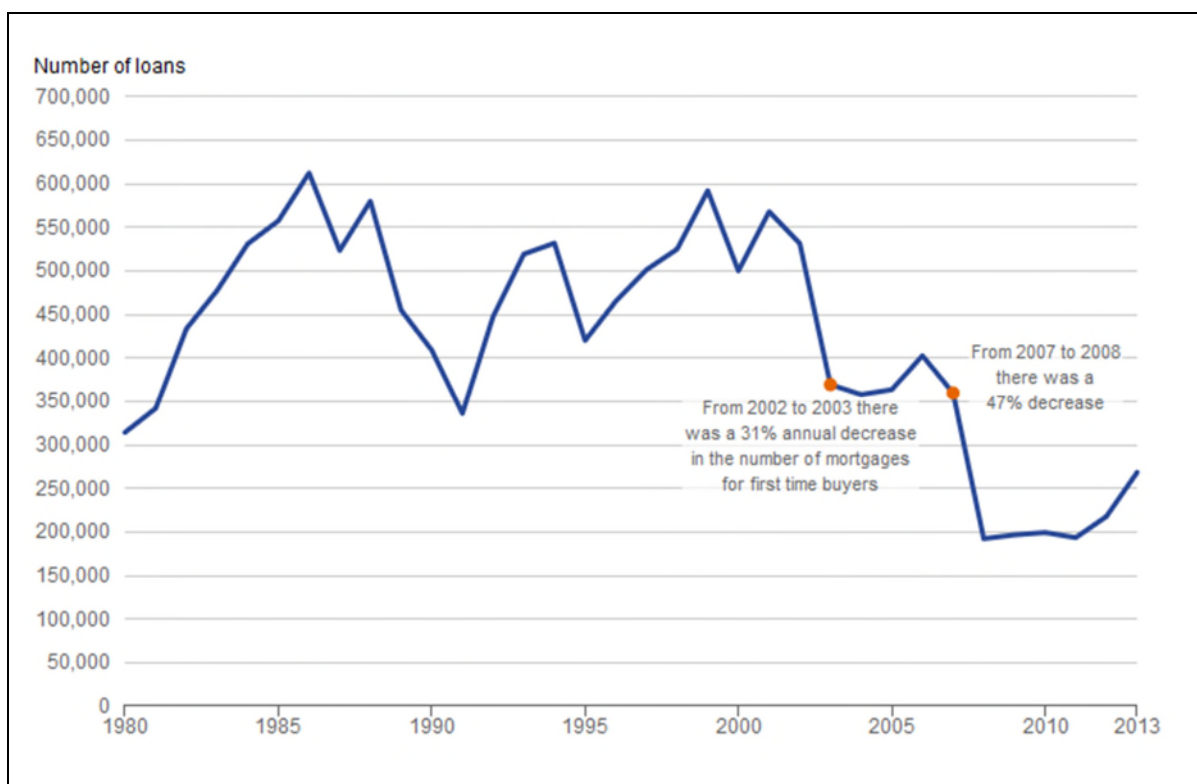
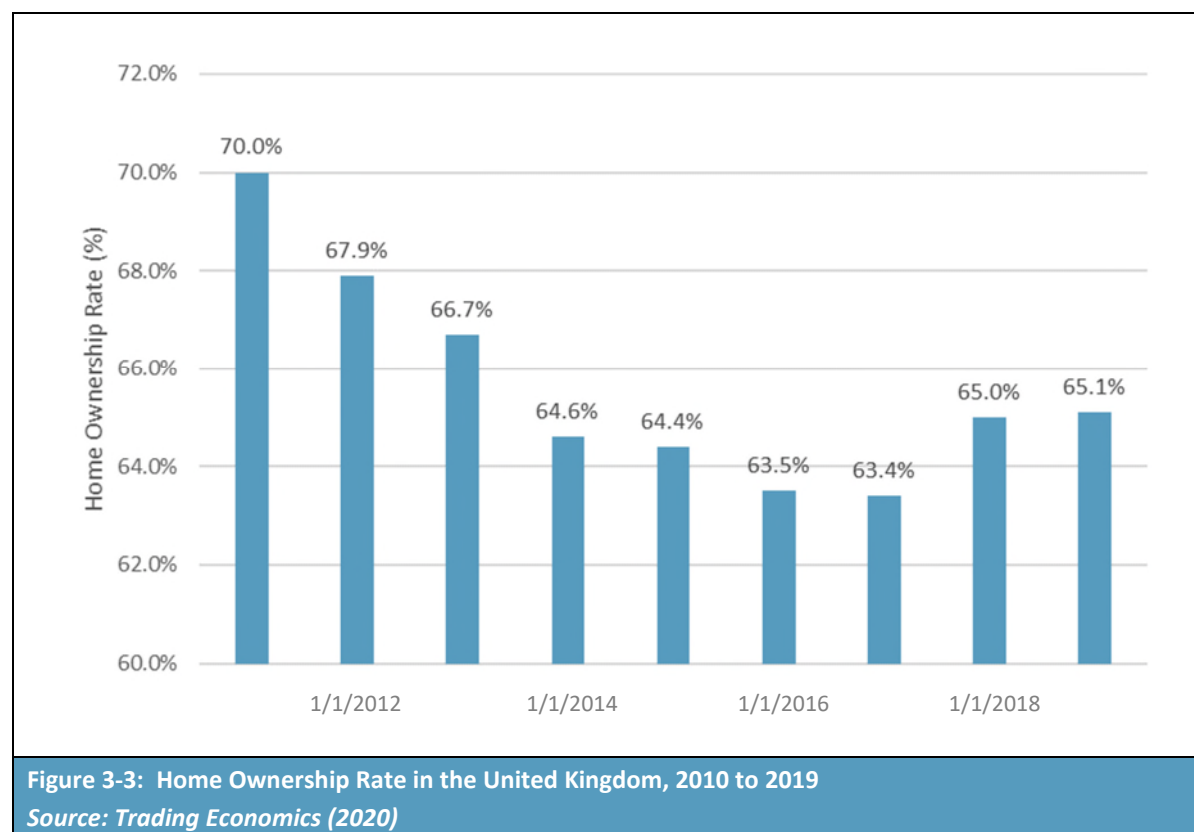


Figure 3-2: Number of mortgage loans for first time buyers, UK, 1980 to 2013

Source: Council of Mortgage Lenders in ONS (2015)



The downward trend now appears to be stabilising; home ownership in the UK had increased to 65.1% in 2018, although still lower than 2010 (70%) (see Figure 3-3). In 2017-18, 64% of all households in England (Ministry of Housing, Communities & Local Government, 2019) were either owned outright or were bought with a mortgage and 70% of properties in Wales were owner occupied in 2017 (Gov.uk, 2020).



For context, tenure status data for all countries considered in this study is presented in Table 3-2 below.

Country	Owner	Owner with mortgage or loan	Owner, no outstanding mortgage or housing loan	Tenant
European Union 28 countries	69.3	26.5	42.8	30.7
Belgium	72.7	43.1	29.6	27.3
Germany	51.5	25.6	25.8	48.5
Netherlands	68.9	60.5	8.3	31.1
Switzerland	42.5	38.3	4.2	57.5
UK	65.1	37.5	27.6	34.9
Australia	66.2	~45	~ 55	32
Canada	67.8 <sup>1</sup> (2016)	60.7 (2016)	-	31.8
US	64 <sup>2</sup> (2018)	63 <sup>3</sup>	37 <sup>4</sup> (2017)	36

Sources: Eurostat (2018), <sup>1</sup>Statistics Canada (2017), <sup>2</sup>NMHC (2018), <sup>3</sup>Fortunly (2019), <sup>4</sup>Bloomberg (2019)

## **Buying process**

Once a prospective buyer has identified a property, a solicitor or licensed conveyancer will be instructed to undertake the conveyancing process on the property. Most solicitors that undertake residential conveyancing will be members of the Law Society's Conveyancing Quality Scheme (CQS). Members of CQS must comply with the Law Society Conveyancing Protocol which requires the use of the most up to date version of the TA6 Property Information Form or such approved equivalent publications as may be notified by the Law Society through periodic updates made on its website. The TA6 form, updated in February 2020<sup>11</sup> (The Law Society, 2020), includes the following statement and question (Enquiry 7.8), and the seller can only answer to the best of their knowledge:

*"Japanese knotweed is an invasive non-native plant that can cause damage to property if left untreated. The plant consists of visible above ground growth and an invisible rhizome (root) below ground in the soil. It can take several years to control and manage through a management and treatment plan and rhizomes may remain alive below the soil even after treatment*

*Is the property affected by Japanese knotweed? [Yes / No / Not known]*

*If Yes, please state whether there is a Japanese knotweed management and treatment plan in place and supply a copy with any insurance cover linked to the plan. [ Yes / No / Not known / Enclosed / To follow]"*

The explanatory guidance notes state the following:

*"The seller should state whether the property is affected by Japanese knotweed. If you are unsure that Japanese knotweed exists above or below ground or whether it has previously been managed on the property, please indicate this as 'Not known'."*

The revised TA6 form makes the property buyer responsible in case the property sellers state 'not known'. Consequently, this requires a surveyor to inspect the house for knotweed.

Solicitors that are not members of CQS and licensed conveyancers may also use the Law Society Conveyancing Protocol. If they do not, then they may still use the TA6 or may use another set of enquiries such as those published by law stationers or they may even use their own 'in-house' form of enquiries. An example of an alternative form of enquiries is Conveyancing 29 (Long) published by Oyez.

The Consumer Protection from Unfair Trading Regulations 2008 were made to implement the Unfair Commercial Practices Directive (2005/29/EC). Estate agents and solicitors in conveyancing transactions must comply with the Consumer Protection from Unfair Trading Regulations 2008 (SI 2008/1277) which prohibit traders from engaging in unfair commercial practices in their dealings with consumers, for example impairing the consumer's ability to make an informed decision, so that they make a decision they would otherwise not have made, or acting in a misleading manner. Sanctions for breach of the regulations include a fine, civil court order, or criminal conviction.

The National Trading Standards Estate Agency Team issued guidance to estate agents in September 2015 which assists agents in complying with the Regulations. The guidance makes it clear that the

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<sup>11</sup> The revised question and updated guidance have been described as 'a very welcome improvement and should reduce some of the uncertainty in potential misrepresentation claims over whether a property is affected by knotweed' (Hardwicke, 2020).

most straightforward information needs to be given to potential buyers such as the number of rooms, and the asking price. Paragraph 5.38 of the guidance specifically deals with Japanese knotweed and provides:

*“For example, if you become aware that Japanese knotweed is growing in the garden of a property you are marketing, perhaps because a buyer pulls out of a sale and tells you, then you cannot ignore the problem. The appropriate action may be to talk to the seller and advise that an expert is brought in who can confirm whether there is a problem. The presence of Japanese knotweed is an example of the type of material information that you would be expected to disclose to prospective buyers once you knew of it.”*

The Law Society has also issued guidance to solicitors in its Consumer Protection Regulations in conveyancing Practice Note. The Guidance sets out the Law Society's initial view of the implications for conveyancing practice of the regulations. The Law Society's initial view of their impact is that:

- A solicitor acting on a sale or letting of property to a person for personal use or private investment, even where the client (seller or landlord) is supplying it in a non-business capacity (such as in the case of residential conveyancing), is caught by the regulations.
- The regulations reduce the application of the principle of *caveat emptor*.
- The regulations could conflict with the duty of client confidentiality.

In the UK, it would appear that Japanese knotweed is considered a material concern in the context of property sales i.e. it affects buying decisions. Therefore, it is possible that the presence of Japanese knotweed, if not given adequate consideration during the buying process, could result in estate agents or solicitors being brought to court under the Consumer Protection from Unfair Trading Regulations 2008. Although this is yet to be tested in courts in the UK, there is potential for cases to be brought.

In addition to the conveyancing process, buyers are advised to commission a house survey using a surveyor to assess the physical condition of the property. Many home buying guides (such as the HomeOwners Alliance: What sort of survey should I have?) recommend using a surveyor who is a member of the Royal Institution of Chartered Surveyors (RICS). In 2012, RICS published an information paper, Japanese knotweed and residential property. The information paper sets out a standardised methodology for assessing the risks and quantifying the costs associated with knotweed on residential property when carrying out valuations and surveys<sup>12</sup>. This will assist surveyors who are engaged to inspect the property and report on its condition. The RICS information paper defines four risk categories, based on:

- Whether knotweed is observed on the property itself or neighbouring property;
- How far the knotweed is from buildings on the property (seven metres is the critical distance); and
- How much damage knotweed has already caused.

When purchasing with the assistance of a mortgage, it is a regulatory requirement for mortgage lenders to ensure that an independent valuation of the property is undertaken. The valuation process can vary from lender to lender and may not always include a detailed physical inspection. However,

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<sup>12</sup> Following the House of Commons Science and Technology Committee evidence session for the inquiry into Japanese knotweed and the built environment, RICS has convened meetings of stakeholders and influencers to update its 2012 assessment framework for Japanese knotweed to ensure that its policies reflect the most up-to-date evidence. It is acknowledged that the new criteria must continue to provide residential mortgage valuers with a straightforward and objective assessment process while reflecting the research findings and the needs of the residential property market

UK Finance has stated that mortgage lenders will expect the presence of knotweed to be noted on a residential valuation report and the Red Book guidance from the Royal Institution of Chartered Surveyors (RICS) requires the valuer to indicate the presence of "invasive vegetation". UK Finance stated that UK lenders would expect valuers to take into consideration and draw attention to any other plants (or trees) that have an impact on the value of a property.

### ***Lenders' attitudes to Japanese knotweed<sup>13</sup>***

In response to the Science and Technology Select Committee inquiry into Japanese knotweed, UK Finance asked a range of its members about their approaches. They found that there was considerable consistency across the market, regardless of size or type of lender. Typically, lenders ask to be informed if Japanese knotweed is present and many will decline to offer a mortgage if it is close to the property (within 7m), or causing damage to physical structures, unless a remediation plan is in place<sup>14</sup>.

Information supplied by Knowledgebank<sup>15</sup> indicates that lenders' attitudes to Japanese knotweed in the UK vary for residential and buy to let mortgages. Tables 3-3 and 3-4 below show that in both cases, a small percentage (3%) of lenders are willing to provide a mortgage on properties with Japanese knotweed present. However, a further 38% of lenders are willing to provide a mortgage if there is Japanese knotweed present, subject to certain conditions. A similar number of lenders declare Japanese unacceptable and are not willing to lend on properties with Japanese knotweed present, (39% for residential mortgages, 40% in the case of buy to let mortgages).

Table 3-3: Lender recommendation for properties affected by Japanese knotweed (residential mortgage)		
Will provide mortgage	Number of lenders	%
Yes	2	3
Yes with conditions	23	38
Yes, by exception	4	6
Refer to lender	8	13
No	24	39
<b>Total: 61</b>		
<i>Source: Data kindly provided by Knowledgebank</i>		
<i>Note: figures may not sum due to rounding</i>		

Table 3-4: Lender recommendation for properties affected by Japanese knotweed (buy to let mortgage)		
Will provide mortgage	Number of lenders	%
Yes	2	3
Yes with conditions	24	38
Yes, by exception	5	8
Refer to lender	7	11
No	25	40

<sup>13</sup> As far as UK Finance is aware, lending policies relating to Japanese knotweed are the same across all UK administrations.

<sup>14</sup> Pers.Comms UK Finance, 21<sup>st</sup> January 2020

<sup>15</sup> Knowledgebank is a Mortgage Criteria Search System for intermediaries, which enables lenders to upload their lending criteria and make this information available to intermediaries – saving them the task of having to contact individual lenders to determine policy details. This information includes lenders' policies on Japanese Knotweed for both residential and buy-to-let mortgages.

Table 3-4: Lender recommendation for properties affected by Japanese knotweed (buy to let mortgage)		
Will provide mortgage	Number of lenders	%
<b>Total: 63</b>		
<i>Source: Data kindly provided by Knowledgebank</i>		
<i>Note: figures may not sum due to rounding</i>		

The conditions attached to mortgage lending in the presence of Japanese knotweed are varied and include criteria such as:

- RICS framework category (with category 1 or 2 being more acceptable than category 3 or 4);
- Distance from property (distances of between 7 and 15 metres from property are acceptable);
- Provision of a treatment plan and guarantees, including use of a specialist contractor; and
- Perceived risk to property and/or future saleability.

Some lenders will consider properties on a case-by-case basis and lend by exception based on the valuer's comments. UK Finance found that lenders generally want a fully costed and funded plan laid out, to be carried out by a professional from a suitable body, with guarantees/insurance in place. Examples of lender criteria under each decision are given in Table 3-5 below.

Table 3-5: Conditions of lending	
Decision	Example explanation
Yes	Category 1 Japanese knotweed is acceptable and we would not require further investigation. Category 2 or 3 Japanese knotweed will be subject to a full retention and only considered acceptable once a suitable management plan has been put in place, with the benefit of a long-term guarantee. The treatment contractor must be a member of the Property Care Association Invasive Weed Control group. Category 4 Japanese knotweed is not acceptable
Yes, with conditions	May be acceptable dependent on distance from property and valuer comments
	As long as there is a treatment plan in place
	Dependent on category (category 4 is not acceptable)
	Must be outside the property curtilage
Yes, by exception	Considered on a case-by-case basis
	Not accepted unless eradicated and guarantees in place
Refer to lender	Subject to surveyor's comments
	Properties with Japanese knotweed on site or within influencing distance (7m) are generally not accepted
	Will not lend where Japanese knotweed is present, and the valuer considers it to present a significant risk to the property &/or future saleability
No	Any property affected by Japanese knotweed will not be accepted
<i>Source: Data kindly provided by Knowledgebank</i>	

Evidence collected indicates UK lenders are primarily basing their Japanese knotweed policies on the information published in 2012 by RICS on Japanese knotweed. Consultation with UK Finance and evidence collected by Which? (Which?, 2019) indicate that if the RICS guidance were to be changed it

is likely that most lender policies would be reviewed, and a full risk assessment of the guidance would be undertaken. In response to the Which? consultation, several mortgage lenders also indicated that their policies may be influenced by additional research and evidence.

### ***Attitudes towards property value***

The common understanding of Japanese knotweed's effect on properties as influenced by the media is estimated to have an average reduction in value of 10% (Inside Conveyancing, 2019; Lewis, W., 2019; Angeloni, C., 2018; Coffey, S., 2018) to 20% (Auction Link, 2019; Zoopla, 2019). However, the RICS guidance (RICS, 2012) suggests Japanese knotweed and its control management can be considered in the valuation process in a similar way to other defects (i.e. the expected cost of treatment and repairs due to knotweed is taken into account when valuing the property). Where knotweed is present but no damage has been caused, the only cost may be that associated with treatment. In such situations, this cost may not necessarily have any impact on the value of the property (RICS, 2012). According to the Newcastle Building Society (Which?, 2019), Japanese knotweed still affects property values due to the market, public perception and lender approach, although it could be treated as a standard defect.

Alternatively, rather than considering any property affected by knotweed unsuitable for mortgage lending, Santo (2017) provides a more structured approach to the valuation of a property infested with Japanese knotweed, shown in Figure 3-4 (overleaf).

The valuer needs to take into account five aspects of a property affected by knotweed (see Santo, 2017):

1. *Impact on the market prior to remediation* (desirability of the property; property type 1-5);
2. *Restrictions on use of property* (impact on ground and gardens; category a-d);
3. *Impact during remediation* (level of disruption and uncertainty causing stress, anxiety, etc.);
4. *Impact of infestation present on adjoining land* (extent of the adjoining infestation, likelihood of spreading onto the property without adequate treatment and prospect of the adjoining owner taking effective action; low, medium, high); and
5. *Post-remediation impact on future saleability* (relative saleability; nil impact to very high impact on future saleability).

<i>Element of assessment</i>	<i>Assessment and calculation</i>	
1) Impact in the market prior to remediation	Property Type 3 (say 2.5% value)	£11,313
2) Restrictions on use of the property	Category (b) (say 1% of value)	£4,525
3) Impact during remediation	Standard allowance (say £250 × 10)	£2,500
4) Impact of infestation present on adjoining land	Medium impact (say 2.5% value)	£11,313
5) Post-remediation impact on future saleability	Medium risk (say 1% value)	£4,525
	Total of contributing elements	£34,175
	Plus: cost of works	£7,500
	Total assessed impact of infestation	£41,675

**Figure 3-4: Worked example from assessment**

Source: Santo, P. (2017): Assessing diminution in value of residential properties affected by Japanese knotweed. *Journal of Building Survey, Appraisal & Valuation*, 6(3), pp.211-221.

Highly desired properties affected by knotweed are in some cases more likely to be purchased than less desirable alternative properties without knotweed infestations. A number of impact categories and characteristics are required to be taken into consideration when undertaking the valuation of a property infested with Japanese knotweed. Hence, the average 10-20% reduction of property values is not an accurate estimation of knotweed's effect on properties.

### 3.2.3 Case law examples

Legislation such as the Anti-Social Behaviour Crime and Policing Act 2014 has opened up a potential route for 'an authorised person' to take action against those that allow Japanese knotweed to spread<sup>16</sup>. The reliance of buyers on surveyors to perform their duties to the required standard during home surveys can lead to cases of professional negligence where Japanese knotweed is not identified; this can also occur if a solicitor does not explain the implications of replying "Not known" to the seller. By replying "Not known", the risk is transferred to the buyer. If a seller is unsure of how to answer a question on the TA6 form, they are advised to seek clarification from their solicitor. To fail to do so and subsequently provide false or misleading information may result in claims of misrepresentation being brought against the seller; there is also potential for issues to arise in the relation to Consumer Protection from Unfair Trading Regulations 2008 if the seller provides misleading information. Stakeholder consultation revealed involvement in a number of cases such as these: both where the presence of knotweed was attributed to problems selling the property, and where the buyer had alleged misrepresentation after discovering knotweed which was not disclosed on the TA6 form. Recent UK common law cases regarding Japanese knotweed are summarised below.

#### ***Flanagan v Wigan Metropolitan Borough Council (unreported, 1995)***

A private landowner whose garden was being invaded by Japanese knotweed from neighbouring Council-owned land brought a case against Wigan Metropolitan Borough Council. The Council was required to comply with an order to treat a 1 metre strip of Japanese knotweed along the boundary of the property with glyphosate for a three-year period. A concrete boundary between the Council-owned land and the private garden was also put in place to prevent further invasion. The Council was

<sup>16</sup> A community protection notice under the Anti-social Behaviour, Crime and Policing Act 2014 is issued by 'an authorised person' which is defined as a constable, the relevant local authority or a person designated by the relevant local authority to issue a notice.



made liable for costs incurred by the claimant (Child & Wade, 2000; Ashfield Japanese knotweed, 2014).

### ***Williams & Waistell v Network Rail Infrastructure (Cardiff, 2017)***

Williams and Waistell are residents of two adjoining semi-detached bungalows in Maesteg in South Wales. The bungalows are adjacent to a Network Rail owned access path and embankment. The claimants first complained to Network Rail about Japanese knotweed potentially affecting their properties in 2013 and the site was treated using herbicide spraying in 2013 and 2016. However, this was subsequently ruled inadequate when set against the recommendations for Japanese knotweed treatment outlined in the 2012–13 RICS UK and PCA guidance.

Williams and Waistell both brought claims against Network Rail for private nuisance on the basis that Japanese knotweed emanating from Network Rail's land had encroached onto both their properties and caused damage. It was found that whilst the Japanese knotweed had not caused any physical damage to the buildings, the owners would suffer a loss of quiet enjoyment of their properties due to a reduction in value (and ongoing concerns and adverse consequences of a devalued property); this amounted to private nuisance. It was also stated that the amenity value of the claimants' properties would be affected due to the stigma of being in close proximity to a property containing Japanese knotweed. It was ruled that the amenity value of a property can include the ability to dispose of it at a proper value; even if the Japanese knotweed was treated, the values of the Williams and Waistells' properties were below the normal market value.

The courts awarded Williams £16,420 and Waistell £14,620 in damages for the cost of a treatment programme and insurance backed-guarantee and the residual diminution in value of their properties after treatment. Williams' award also included miscellaneous loss and general damages and Waistells' included the cost of a Japanese knotweed survey (Courts and Tribunals Judiciary, 2018).

### ***Network Rail Infrastructure v Williams & Waistell [appeal] (High Court, 2018)***

Network Rail appealed the findings of the initial Williams and Waistell case. Network Rail lost the appeal, although on slightly different grounds to the first case. The Court of Appeal upheld the previous ruling but for different reasons. It was found that the claimants could not claim in private nuisance due to the diminution in the properties' market value. The claimants could claim, however, that the encroachment of Japanese knotweed rhizomes diminished the claimants' ability to enjoy the amenity and utility of their respective properties (Courts and Tribunals Judiciary, 2018).

### ***Smith and Another v Line (Truro County Court, 2018)***

In 2002, Mr and Mrs Smith purchased a beachside property from Ms Line; Ms Line retained a section of land next to the property which was used for summer parking and grazing. In 2003 the claimants noticed Japanese knotweed encroaching onto their property from the neighbouring land and complained to Ms Line, Ms Line stated that the Japanese knotweed was in fact encroaching from the claimant's land. In 2013, Mr and Mrs Smith had treated the Japanese knotweed on their land and requested that Ms Line did the same; Ms Line refused and the claimants issued a nuisance claim. Experts concluded in the case that the Japanese knotweed had encroached from Ms Line's property and that the presence of Japanese knotweed had devalued the claimant property by 10%. The judge found that although no physical damage had been caused by the Japanese knotweed, the presence of Japanese knotweed on the defendant's land had interfered with the claimant's enjoyment of their land and Ms Line had failed to comply with her measured duty of care. A *quia timet* injunction was granted and Ms Line was ordered to hire a reputable contractor to treat the Japanese knotweed on her land and pay the claimants' costs (Hardwicke, 2018).



### ***Bristol City Council v MB Estate Limited (Bristol Magistrates Court, 2018)***

In 2007, Bristol City Council served MB Estate Ltd with a Community Protection Notice due to uncontrolled Japanese knotweed growth. The council received several complaints from residents in Horfield regarding a property owned by MB Estate Ltd, where Japanese knotweed was affecting the neighbouring properties. MB Estate Ltd failed to respond to the Council's notice and was subsequently prosecuted using the Anti-Social Behaviour, Crime and Policing Act 2014. MB Estate Ltd were ordered to pay a fine of £18,000, cost and secure a plan with a specialist to resolve the Japanese knotweed issue (LocalGov, 2018; Cleaver Fulton Rankin, 2019).

### ***Davis v Marshalls and Connells (Birmingham County Court, 2018)***

In 2015 Ms Davis purchased a property in Cannock for £115,000, with a mortgage from Aldermore. As part of the mortgage process, Aldermore instructed Mr Salmon from Connells Surveying and Valuation Limited (Connells) to conduct a residential mortgage valuation in December 2014. Soon after moving in the spring of 2015 Ms Davis noticed Japanese knotweed shoots within the boundary of her property and additional shoots and cane material on adjoining land owned by Marshalls (Plumbing and Building Development) Limited (Marshalls). Ms Davis brought a nuisance claim against Marshalls but this was later discontinued. Ms Davis did, however, bring a claim against Connells for professional negligence as the presence of Japanese knotweed was not reported in the residential mortgage valuation report. Ms Davis stated that she would not have purchased the property and Aldermore would not have issued the mortgage had the presence of the Japanese knotweed been identified in the report. Specifically, the claim against Connells alleged that they had been professionally negligent in:

- Failing to inspect the adjoining property where the growth of Japanese knotweed along the boundary was clearly visible, and;
- Failing to identify Japanese knotweed growing on the property itself.

During the case it was found there was nothing to indicate that Japanese knotweed was present on the Claimant's property during the valuation (due to the plant being dormant during winter). It was also found that as the survey was for a valuation report, and not a more detailed Homebuyers report, it was not part of Connells' duty to inspect the adjoining land and therefore there had been no professional negligence; in particular, there is no duty on a surveyor to trespass onto neighbouring private land in order to prepare a residential mortgage valuation. The judge however did provide views on the potential claims that would have been awarded should Connells have been found negligent (i.e. had the Japanese knotweed not been reported in a more detailed Homebuyers report). Ms Davis would have been entitled to £2,245.50 for remediation and residual diminution in value at £6,900 (6% of the unaffected market value of the property of £115,000 of which 3% was for disclosure on re-sale and 3% for "neighbour cooperation" to address the Japanese knotweed) (Howden, 2019).

### ***Ryb v Conway Chartered Surveyors & Ors (unreported, 2019)***

In October 2014 Mr Ryb completed a purchase on a ground floor flat in North London for £1.275 million. Before the completion, Mr Ryb instructed Conway Chartered Surveyors to undertake a level three survey of the property. The report was produced in September 2014 and stated surveyor's opinion "...I have no hesitation in recommending it as a worthwhile investment...". The following year Mr Ryb's gardener found Japanese knotweed growing in the garden and an inspection by Environet UK Ltd confirmed that the plant had been growing for more than three years. The Japanese knotweed was excavated in 2015 but later reappeared in 2017. Due to being partially sighted, Mr Ryb was reliant on the survey to identify any defects including Japanese knotweed and brought a case against Conway

Chartered Surveyors for professional negligence. The judge found in Mr Ryb’s favour owing to several factors, including:

- The survey was carried out in late summer when the Japanese knotweed would have been at its most established. The claimant’s surveyor expert, Philip Santo, stated that the surveyor would have had to push past the knotweed to carry out a thorough survey;
- Despite the report being a level three survey, the surveyor did not take any photographs, measurements or make any notes; and
- The RICS information paper “Japanese knotweed in Residential Property” was published in 2012, however the surveyor was unable show any relevant training that had been undertaken related to Japanese knotweed.

It was assumed that the previous owner was not aware of Japanese knotweed in the garden as there was no mention of Japanese knotweed on the TA6 form and the presence of dead canes indicated that the seller had not tried to hide it. Had the Japanese knotweed been disclosed, it would not have been possible to state that Mr Ryb was reliant on the detailed survey.

The judge used a framework approach to calculate the damages owed, this included: desirability of the property, the extent of the infestation, the likely use for the affected land, the proximity to a built structure and the risk the plant spreading to neighbouring land. Mr Ryb was awarded £50,000 in damages, this included £10,260 for the remediation works and a sum for diminution in value of the property (Hardwicke, 2019; Walker Morris, 2019; Stevens & Bolton, 2019).

Both the Smith v Line and Network Rail Infrastructure Ltd v Williams court cases raise important liability issues in the context of litigating economic loss in private nuisance and environmental harm. The court cases suggest the spreading of knotweed onto the affected properties cannot be considered economic loss in negligence, as the physical harm of the ‘contamination’ does not merely affect the property value as a financial asset. By categorising Japanese knotweed as contamination, the invasive weed becomes an environmental harm that might also be reconceptualised within the common law. Since the nuisance is a violation of the property right, the concept of negligence is not applicable, as it goes beyond economic loss (Wilde, 2019).

## 3.3 Northern Ireland

### 3.3.1 Legislation and guidance

Table 3-6 outlines the range of legislation and guidance surrounding Japanese knotweed in Northern Ireland.

Table 3-6: Northern Ireland legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Northern Ireland	It is an offence to cause Japanese knotweed to ‘grow in the wild’ since it is listed in Schedule 9 Part II of Article 15 of the Wildlife (Northern Ireland) Order 1985	Section 27 schedule 1 of the Wildlife and Natural Environment Act (Northern Ireland) 2011
	In 2013 the Department of Environment published ‘An Invasive Alien Species Strategy’ suggesting the development of local management plans, action plans and best practice management guidance	DAERA (2013): An Invasive Alien Species Strategy for Northern Ireland. p.4

Table 3-6: Northern Ireland legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
	There is currently no legal requirement for a landowner to control or remove existing established areas of Japanese knotweed from their own land. The movement of Japanese knotweed from one property to another is a civil matter between landowners	Invasive Species Ireland, nd.
	The removal and disposal of Japanese knotweed is considered a 'controlled non-hazardous waste' and regulated under the Waste and Contaminated Land (NI) Order 1997 articles 4 (1a) and 4 (1b) and by the Waste Management Licensing (NI) Regulations 2003 schedule 2	Invasive Species Ireland, nd.  Controlled Waste (Duty of Care) Regulations 2002  Waste Management Regulations (NI) 2006 (as amended)

In Northern Ireland, under article 15 of the Wildlife (Northern Ireland) Order 1985, it is an offence to plant or allow Japanese knotweed to grow in the wild. There is no legal obligation to remove or treat Japanese knotweed on your property, nor is it illegal to allow it to spread to a neighbouring property, however this may result in civil liabilities. There is a duty of care under the Waste and Contaminated Land (Northern Ireland) Order 1997 to dispose of waste contaminated with Japanese knotweed in a way that prevents it from causing harm, especially to the environment or to human health; this is most likely to include the use of a licenced waste carrier.

### 3.3.2 Buying process and approach to Japanese knotweed and other invasive plants

Up until 1990, housing tenure in Northern Ireland had been shifting from social renting towards mortgaged ownership; this was in part due to Right-to-Buy policy introduced in 1980 and increased house building initiated by the Macmillan government in the 1960s (NERI, 2018). Since 1990, the shift has been toward outright ownership and private rental; currently<sup>17</sup> 42% of all households in Northern Ireland are owned outright (change from 36% in 2008-09), 28% are owned with a mortgage (change from 33% in 2008-09) and 28% are rented (change from 31% in 2008-09) (Department for Communities, 2019).

Once a prospective buyer has identified a property it is commonplace to instruct a solicitor to complete the conveyancing process on the property. Solicitors undertaking residential conveyancing will use the Replies to Pre-contract Enquiries form published by the Law Society of Northern Ireland. This form does not contain a specific question about Japanese knotweed; however, it does ask the following question (question 13):

*“Is the Property or any part of the Property covered by any kind of Certificate or Warranty?”*

It is possible that this question can be used to highlight past issues with Japanese knotweed, where remediation has been carried out and guarantees have been issued. It would not however, highlight if Japanese knotweed was present and had not been treated or removed.

<sup>17</sup> 2018-19 data

The RICS information paper, Japanese knotweed and residential property, applies to Northern Ireland and therefore if a mortgage valuation survey or Homebuyers survey is carried out, any Japanese knotweed present on the property should be identified.

### 3.3.3 Case law examples

No examples of case law involving Japanese knotweed and property have been identified for Northern Ireland. It is possible, following the outcome of the Bristol City Council v MB Estate Limited, that the Anti-Social Behaviour (Northern Ireland) Order 2004 could possibly be utilised in Northern Ireland to make a similar prosecution in the future.

## 3.4 Scotland

### 3.4.1 Legislation and guidance

Table 3-7 outlines the range of legislation and guidance surrounding Japanese knotweed in Scotland.

Table 3-7: Scottish legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Scotland	Article 14 of the Wildlife and Countryside Act 1981 applies to Scotland however, the Wildlife and Environment Scotland Act (2011) made some amendments. In the amendments there is now a legal presumption against releasing any animals or plants into the wild beyond their native range, instead of giving a list of species. Advice is also given on what reasonable steps might be taken to stop introductions beyond native ranges	<p>Scottish Natural Heritage, Law on non-native species in Scotland.</p> <p>The Scottish Government (2012): Non-Native Species Code of Practice</p>
	There are no laws to force someone to deal with Japanese knotweed on their own land unless it spreads to the wild. The spread of Japanese knotweed from one property to another is a civil matter between landowners	<p>Scottish Natural Heritage, Law on non-native species in Scotland.</p> <p>SEPA Invasive non-native species FAQs</p>
	Japanese knotweed material and soil or plant material containing Japanese knotweed are considered as a 'controlled waste' and must be removed from a site for disposal by a Scottish Environment Protection Agency (SEPA) licenced haulier and disposed of in a permitted landfill	<p>Part II Section 33 Environmental Protection Act 1990</p> <p>Scottish Government- Control of invasive non-native species- Japanese knotweed</p>

It is illegal to plant or otherwise cause to grow, Japanese knotweed in the wild at a location outside its native range. There are no laws that require a property owner to treat Japanese knotweed on their own land; the spreading of Japanese knotweed from one property to another is a civil matter between landowners. Any waste, such as soil or vegetation clippings, containing Japanese knotweed material are considered as a 'controlled waste' and must be removed from a site for disposal by a Scottish Environment Protection Agency (SEPA) licenced haulier and disposed of in a permitted landfill.

### 3.4.2 Buying process and approach to Japanese knotweed and other invasive plants

The housing tenure trend is similar to that seen in England, Wales and Northern Ireland, with social renting declining and private ownership and renting increasing in part due to the Right-to-Buy policy and increased private house building. Annual statistics show that in 2017 62% of properties in Scotland were owner occupied (32% owned outright and 29% owned with a mortgage), 15% were private rented and 22% were social rented (The Scottish Government, 2018).

When selling a house in Scotland, sellers are required to commission a Home Report which consists of a property questionnaire, single survey, and energy report. The Home Report is a legal requirement when marketing a house in Scotland. It was introduced by the Scottish Government in Part 3 of the Housing (Scotland) Act 2006; part 3 came into force in 2008. There are certain types of home that do not need a Home Report. These include:

- Houses that have been on the market since before 1 December 2008;
- New houses that are being sold off-plan or to the first occupier;
- Newly converted homes that have not been used in their converted state yet;
- Right-to-buy homes;
- Dual-use homes used for both residential and non-residential purposes; and
- Seasonal holiday homes that can only be used at certain times of the year.

There is no explicit mention of Japanese knotweed in the questionnaire, however questions 8 and 13 may cover any Japanese knotweed control plans relevant to the property or damage caused by Japanese knotweed:

*Q8. "Has there been any storm, flood, fire or other structural damage to your property while you have owned it? If you have answered yes, is the damage the subject of any outstanding insurance claim?"*

*Q13. "As far as you are aware, has treatment of dry rot, wet rot, damp or any other specialist work ever been carried out to your property? If yes, do you have any guarantees relating to this work?"*

The RICS information paper, Japanese knotweed and residential property, applies to single surveys carried out in Scotland and therefore any Japanese knotweed present should be noted in this Home Report.

### 3.4.3 Case law examples

No examples of case law involving Japanese knotweed and properties have been identified for Scotland.

## 4 International Approach

### 4.1 Overview

The following section provides an overview of legislation and guidance, buying process and case laws surrounding Japanese knotweed in a selection of other countries. Further details of international and European instruments that address Invasive Alien Species (IAS) are provided in Annex 3.

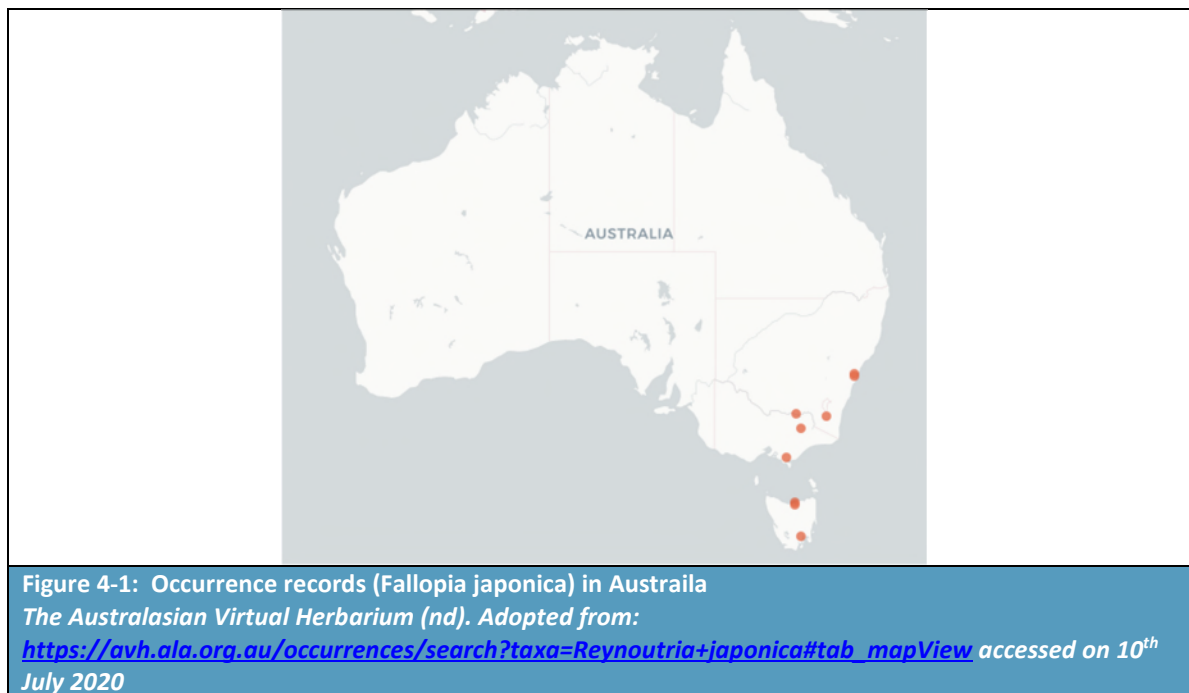
### 4.2 Australia

#### 4.2.1 Legislation and guidance

Table 4-1 outlines the range of legislation and guidance surrounding Japanese knotweed in Australia.

Table 4-1: Australian legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Tasmania	Import or sale is prohibited. Measures for population reduction, eradication or restriction in an area may be required	Weed Management Act 1999. Available at: <a href="https://www.legislation.tas.gov.au/view/html/inforce/current/act-1999-105#GS56@Gs1@EN">https://www.legislation.tas.gov.au/view/html/inforce/current/act-1999-105#GS56@Gs1@EN</a> Queensland Government (2016): Fact Sheet Index. Available at: <a href="https://keyserver.lucidcentral.org/weeds/data/media/Html/fallopia_japonica.htm">https://keyserver.lucidcentral.org/weeds/data/media/Html/fallopia_japonica.htm</a>
Victoria	Japanese knotweed is a State prohibited weed and declared a noxious weed in Victoria  Under the <i>Catchment and Land Protection Act 1994</i> it is an offence to buy, sell, display or transport a State prohibited weed within Victoria	Catchment and Land Protection Act 1994. Available at: <a href="http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/protecting-victoria/legislation-policy-and-permits/noxious-weed-and-pest-animal-management-your-legal-roles-and-responsibilities">http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/protecting-victoria/legislation-policy-and-permits/noxious-weed-and-pest-animal-management-your-legal-roles-and-responsibilities</a>  Agriculture Victoria (2018): Knotweed - <i>Fallopia japonica</i> , <i>Fallopia sachalinensis</i> , <i>Fallopia x bohemica</i> . Available at: <a href="http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/state-prohibited-weeds/knotweed">http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/state-prohibited-weeds/knotweed</a>
Western Australia	Japanese knotweed is a C1 prohibited plant species in Western Australia under the Western Australian Organism List (WAOL)	Western Australia Organism List (nd): Available at: <a href="https://www.agric.wa.gov.au/organisms?search_string=japanese+knotweed&amp;=Search">https://www.agric.wa.gov.au/organisms?search_string=japanese+knotweed&amp;=Search</a>

Japanese knotweed is not widely naturalised in Australia. Its presence is currently limited to Victoria, Tasmania and some parts of New South Wales (NSW) (see Figure 4-1). In Tasmania, Japanese knotweed is mainly present in the North and South with most infestations in gardens (Tasmanian Government, 2019). Land management including weed management is predominantly dealt with at a jurisdictional (Territory/State) level.



In Tasmania, the import, distribution, purchase and sale of Japanese knotweed is prohibited under the Weed Management Act 1999. The Statutory Weed Management Plan provides support for the implementation of measures for population reduction, eradication or restriction. Tasmania is divided into Zone A and B municipalities focusing on eradication and containment respectively. Little or no Japanese knotweed has spread in Zone A municipalities, whereas problematic infestations with little resources for control methods are present in Zone B municipalities. The central Zone B management approach is the prevention of further knotweed expansions to Zone A areas (Tasmanian Government, 2011). However, one consultee indicated that Japanese knotweed is relatively uncommon in Tasmania.

Japanese knotweed is a State prohibited weed and declared a noxious weed in Victoria. This category suggests that the plant poses a significant weed risk, however, it is not yet present or only present in small numbers that can still be eradicated<sup>18</sup>. Agriculture Victoria removes the weed at no cost to the landowner. Landowners are not encouraged to remove the weed themselves but to immediately contact Agriculture Victoria (Agriculture Victoria, 2018a). However, similar to Tasmania and other parts of Australia, Japanese knotweed is relatively uncommon in Victoria<sup>19</sup>.

Japanese knotweed is a C1 prohibited plant species in Western Australia under the Western Australian Organism List (WAOL). This plant is not known to be present in the state of Western Australia (Queensland Government, 2016).

The internet research indicated that NSW has no legislation on Japanese knotweed in place.

<sup>18</sup> Pers. Comm., January 2020

<sup>19</sup> Pers. Comm., January 2020



## 4.2.2 Buying process and approach to Japanese knotweed and other invasive plants

After finding a suitable loan, having it approved and choosing a property, property buyers are encouraged to get building inspections. These can include building, pest and electrical inspections. Based on the outcome of the inspection, the potential buyer makes an offer. Once this has been approved, the paperwork including the contract can be finalised (Mata, M., 2018).

Although weed management differs at jurisdictional level, stakeholder engagement for this study suggests that property sellers do not have to declare Japanese knotweed in Tasmania or Victoria. One respondent indicated that it would be the buyer's responsibility to inspect the property for Japanese knotweed in Tasmania.

In Victoria, landowners are required to control Regionally Controlled or Regionally Prohibited noxious weeds. If the property is for sale, a land management notice on the property issued by Agriculture Victoria is included in the sale documents (Agriculture Victoria, 2018b). Agriculture Victoria manages all infestations of Japanese knotweed in Victoria, including the treatment and monitoring of all infestations both on public and private land, on behalf of the land manager. To date, the infestations that they have managed have been small plants intentionally planted in gardens that have not spread into buildings/structures<sup>20</sup>. Correspondingly, one consultee indicated that they anticipate effective weed management for eradication in Victoria, hence do not presume an effect on property values.

Respondents to the survey undertaken for this study were not aware of any impacts on property values and sales in the context of Japanese knotweed, in either Tasmania or Victoria. However, the eradication of knotweed is considered a high priority in Tasmania. Indeed, one consultee understood the plant to be of potential influence on property values in the future. Another respondent from Tasmania indicated that lenders might change their approach only in case of an extensive infestation. Unlike in Victoria, landowners are financially responsible for the removal of Japanese knotweed in Tasmania. Under Tasmanian legislation, the Government can require property owners to undertake control measures. Alternatively, the Government can initiate control measures themselves, at the expenses of the landowner<sup>21</sup>.

## 4.2.3 Case law examples

Neither the internet research nor the survey responses indicated any case law examples regarding Japanese knotweed in the context of property sales in Australia.

## 4.3 Belgium

### 4.3.1 Legislation and guidance

Table 4-2 outlines the range of legislation and guidance surrounding Japanese knotweed in Belgium.

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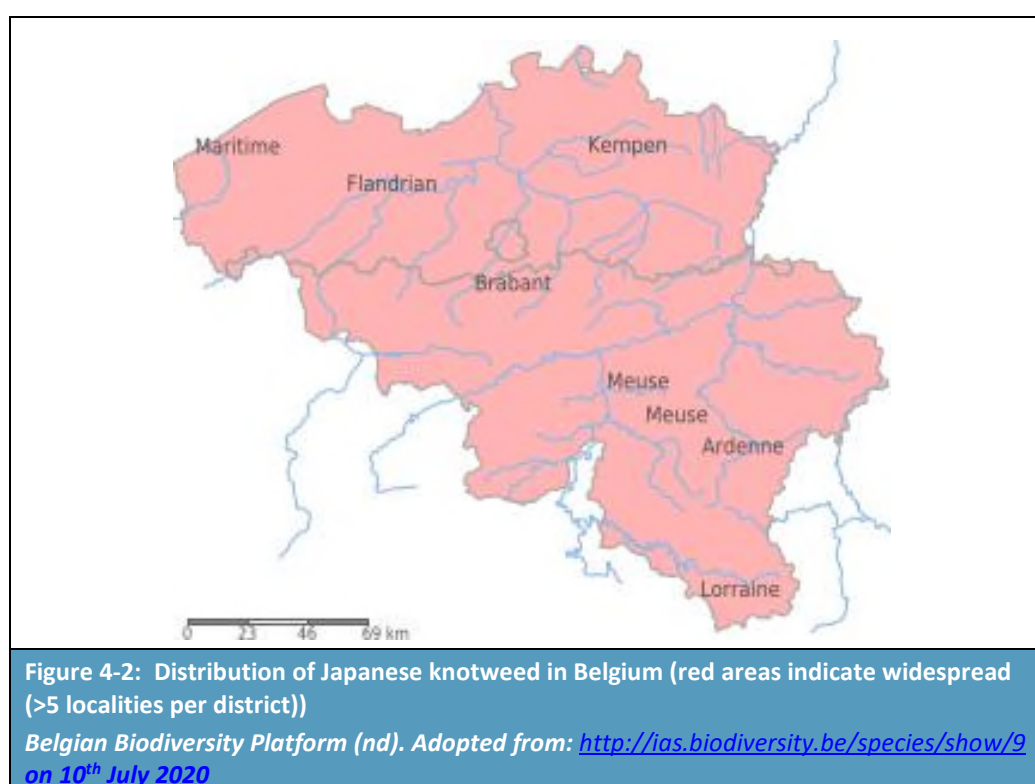
<sup>20</sup> Pers. Comm., January 2020

<sup>21</sup> Pers. Comm., January 2020



Table 4-2: Belgian legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Belgium	EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species; does not include Japanese knotweed	<p>EU 2014 EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species. Available at: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN</a></p> <p>List of Invasive Alien Species of Union concern. Available at: <a href="https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm">https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm</a></p>

Invasive species are regulated under EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species in Belgium (European Commission, 2014). The regulation prohibits the introduction, transport, keeping and breeding of particular species. However, *Reynoutria japonica* is not listed on the EU List of Invasive Alien Species of Union concern and is not further restricted in Belgium. The following figure illustrate that knotweed has spread across Belgium.



The Belgium Forum on Invasive Species (BFIS) is the national node of the IUCN Invasive Species Specialist Group and lists Japanese knotweed on Harmonia, its information system dedicated to alien species threatening native biodiversity in Belgium and neighbouring areas. At a regional level (i.e. Wallonia, Brussels), there is management on the ground of particularly problematic invasive species such as Japanese knotweed (Brussels Environment, nd). Guidance documents, produced by the Brussels Capital Region and the Nature Department of the Walloon Region, provide a description of Japanese knotweed, its origin and distribution across Europe (including a distribution map for

Wallonia), methods for identifying the plant, its biology and life history traits, its detrimental impacts, and some (incomplete) population control measures (Convention on Biological Diversity, 2007).

### 4.3.2 Buying process and approach to Japanese knotweed and other invasive plants

Property sellers do not have to declare if their property is affected by Japanese knotweed or other invasive plants<sup>22</sup>. The presence of Japanese knotweed might be qualified as a visible or hidden defect<sup>23</sup> depending on the visibility of it or its roots. If the defect was visible at the time of the sale, the seller cannot be held liable. In principle, the seller is not liable for hidden defects either, unless he was aware of them upon signing of the sale deed<sup>24</sup>. However, it can be burdensome for the buyer to prove that the seller was aware of a hidden defect such as Japanese knotweed<sup>25</sup>. It is not common practice for buyers and sellers to investigate whether Japanese knotweed is present<sup>26</sup>.

According to a Belgian lawyer, Japanese knotweed is likely to affect property values in the future. However, they indicated that it will be one of many factors that determine the price; it depends on the part of the property concerned (i.e. the garden or the walls) and given that most people are unaware of Japanese knotweed, the impact in the short term (next five years) will be small. The way Japanese knotweed affects property prices could also depend on the kind of property<sup>27</sup>. According to one response, lenders do not take Japanese knotweed into account when considering their approach to a property as the problem is not sufficiently known by the sector. However, another respondent suggested that Japanese knotweed could be taken into account<sup>28</sup> if there is a risk of value reduction and depending on the situation<sup>29</sup>.

Article 1648 of the Civil Code stipulates that a claim based on a defect, which gives ground for an annulment of sale, must be filed by the buyer within a short period of time, according to the nature of the defect and the customs of the place where the sale is concluded. The buyer must examine the goods at the time of the delivery of the goods or shortly thereafter (Lydian, 2018).

Sale agreements usually contain a provision that the seller shall not be liable for any visible or hidden defects in the property, except to the extent that the seller was aware of the hidden defects. Liability for an untrue or misleading statement can be established but the burden of proof is high, especially if the seller made no contractual guarantees and has disclosed all the information in their possession. The sale can be declared null and void if the buyer establishes the deceit, or error, of the seller. If the seller acted in bad faith (possibly during the pre-contractual phase), the buyer may claim compensation (ICLG, 2019).

### 4.3.3 Case law examples

All those surveyed were unaware of any legal cases involving Japanese knotweed in property sales. However, the Court of First Instance of Antwerp has ruled that in the event of a defect that only gradually manifests itself, such as the formation of a fungus, the short (admissibility) period of the

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<sup>22</sup> Pers. Comm., January 2020

<sup>23</sup> Defect in this instance refers to an issue that may affect a property sale; it does not solely refer to structural damage

<sup>24</sup> Pers. Comm., January 2020 from a Belgian law firm

<sup>25</sup> Pers. Comm., January 2020 from a Belgian law firm

<sup>26</sup> Pers. Comm., January 2020

<sup>27</sup> Pers. Comm., January 2020 from a Belgian law firm

<sup>28</sup> Pers. Comm., January 2020 from a Belgian law firm

<sup>29</sup> Pers. Comm., January 2020 from a Belgian law firm

liability claim against the seller for hidden defects only starts upon its discovery (Court of First Instance of Antwerp (Antwerp section) 16 February 2016, T. Aann, 2017, issue 3, 267) (Lydian, 2018).

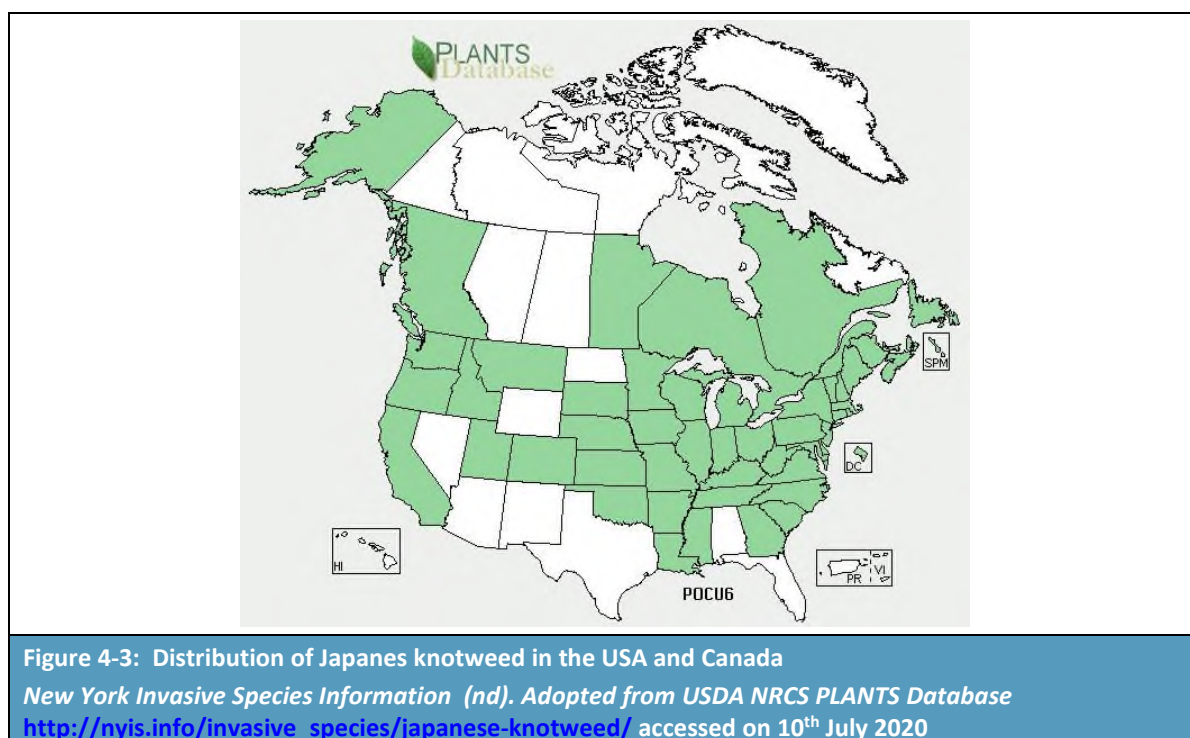
## 4.4 Canada

### 4.4.1 Legislation and guidance

Table 4-3 outlines the range of legislation and guidance surrounding Japanese knotweed in Canada.

Table 4-3: Canadian legislation and guidance surrounding Japanese knotweed		
Country	Legislation	Reference
Canada	The Weed Control Act requires land occupiers to control the spread of provincial and/or regional noxious weeds. The council of the municipality may, subject to the approval of the Minister, designate additional plants as local weeds through a by-law made in accordance with section 10 of the Weed Control Act. These local weeds are deemed to be noxious weeds in the area where the by-law applies Japanese knotweed is listed by Alberta and British Columbia (BC) as a provincial noxious weed under Schedule A of the Weed Control Act. It is not listed in other provinces	Weed Control Act, Chapter 487. Available at: <a href="http://www.bclaws.ca/civix/document/id/complete/statreg/96487_01#section2">http://www.bclaws.ca/civix/document/id/complete/statreg/96487_01#section2</a> Weed Control Act: Weed Control Regulation - British Columbia. Available at: <a href="http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_66_85">http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/10_66_85</a> Weed Control Act: Weed Control Regulation - Alberta. Available at: <a href="http://www.qp.alberta.ca/documents/Regs/2010_019.pdf">http://www.qp.alberta.ca/documents/Regs/2010_019.pdf</a>
	Section 47 of the Forest and Range Practices Act (FRPA) in British Columbia requires forest and range managers to specify and implement measures that prevent the introduction or spread of invasive plants	Forest and Range Practices Act- British Columbia. Available at: <a href="https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act">https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/legislation-regulation/forest-range-practices-act</a> Forest and Range Practices Act, Invasive plants regulation for the purposes of section 47 for British Columbia. Available at: <a href="http://www.bclaws.ca/civix/document/id/lc/statreg/18_2004">http://www.bclaws.ca/civix/document/id/lc/statreg/18_2004</a>
	Community Charter, Spheres of Concurrent Jurisdiction- Environment and Wildlife Regulation, Section 2 (1) (b) (iii) “municipalities may regulate, prohibit and impose requirements in relation to control and eradication of alien invasive species” The list of invasive plants in the Regulation includes Japanese and giant knotweeds	British Columbia (2004a)- Community Charter, Spheres of concurrent jurisdiction - Environment and wildlife regulation. Available at: <a href="http://www.bclaws.ca/civix/document/id/complete/statreg/144_2004">http://www.bclaws.ca/civix/document/id/complete/statreg/144_2004</a>
	A municipality can pass a property standards by-law under the Building Code Act to address the presence of weeds deemed noxious or a threat to the environment or human health and safety. A municipality can also regulate Japanese knotweed due to concerns for flooding and infrastructure damage	Anderson H (2012): Invasive Japanese knotweed ( <i>Fallopia japonica</i> (Houtt.)) Best Management Practices in Ontario. Ontario Invasive Plant Council, Peterborough, ON. Available at: <a href="https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/06/OIPC_BMP_JapaneseKnotweed.pdf">https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/06/OIPC_BMP_JapaneseKnotweed.pdf</a>

Japanese knotweed is listed by Alberta and British Columbia (BC) as a provincial noxious weed under Schedule A of the Weed Control Act; under this Act land occupiers are required to control the spread of provincial and/or regional noxious weeds. Under the Building Code Act, a municipality can pass a property standards by-law to address the presence of weeds deemed noxious or a threat to the environment. The following figure provides an indication of the distribution of knotweed across Canada and the USA.



#### 4.4.2 Buying process and approach to Japanese knotweed and other invasive plants

After building a budget and investigating mortgage options, property buyers choose an estate agent and a lawyer. When a suitable property is found, the buyers make an offer. Afterwards, a New Home Warranty for brand new houses or a home inspection for resale properties is recommended. Home inspections are voluntary; however, the offer to purchase the property can be conditional on the result of the inspection. Hence, major defects can decrease the property value. Lastly, the deal is finalised including the approval of the mortgage (Genworth, 2013).

Recommendations for home inspection include looking for details outside such as standing water, cracks, rot, broken or missing shingles and good condition of the outside foundation (Total Home Inspection, nd). It is an ethical duty to declare invasive plant infestations in property disclosure statements. Covenants cover many properties in Canada regulating property management including knotweeds.

Consultation undertaken for this study indicated that under the BC Weed Control Act, property owners are mandated to control noxious weeds including Japanese knotweed. Consequently, and as part of the Property disclosure statement, property sellers have a duty to be forthcoming about invasive species, as they could be considered a latent defect that could be litigated<sup>30</sup>. However, a consultee pointed out that this varies from one province to another. Furthermore, the consultee was

<sup>30</sup> Pers. Comm., January 2020

unsure whether knotweed qualifies as a latent defect, as it is the impact of the plant's infestation rather than its presence that classifies as a defect.

Two consultees stated that Japanese knotweed's damaging impact on properties is likely to affect property values. One consultee mentioned they anecdotally heard of buyers not purchasing a property due to knotweed. With an increasing awareness of both Japanese knotweed and of legal rights and litigation, declining property values are becoming more noticeable. This is supported by a report published by the House of Commons (House of Commons, 2019), which mentions a negative impact from Japanese knotweed upon property transactions in Montreal, Canada. However, another consultee was not aware of any cases where Japanese knotweed affected property values. A respondent from Québec did not consider knotweed to be affecting property values in Canada. In general, invasive plants such as Japanese knotweed get more media attention during summer (in their growth phase); however, the respondent considered their impact and control insignificant.

All those surveyed were unaware of any change in approaches by lenders to properties with knotweed infestations, although some could see a potential for this. However, one consultee indicated that as a mortgage loan insurer, the value of the property is crucial for the risk analysis when issuing mortgage loan insurance. Consequently, the lender must review all information obtained and disclose any known deficiencies, concerns or unique characteristics entailing a transaction-specific risk to the mortgage loan insurer. These include invasive species such as true dry rot, blue-green algae and Japanese knotweed. The marketability of a property is case-specific, hence why a mortgage loan lender might inquire a third party to investigate the property's known deficiencies and their potential consequence for the property's future value.

#### 4.4.3 Case law examples

All those consulted were unaware of any case laws involving Japanese knotweed in property sales.

### 4.5 Germany

#### 4.5.1 Legislation and guidance

Table 4-4 outlines the range of legislation and guidance surrounding Japanese knotweed in Germany.

Table 4-4: German legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Germany	EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species; does not include Japanese knotweed	<p>EU 2014 EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species. Available at: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN</a></p> <p>List of Invasive Alien Species of Union concern. Available at: <a href="https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm">https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm</a></p>

Table 4-4: German legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
	<p>§40 on non-native species in the Federal Nature Conservation Act</p> <ul style="list-style-type: none"> <li>• Implement measures to counteract danger to ecosystems</li> <li>• Regional and national authorities</li> </ul>	<p>Federal Nature Conservation Act. Available at: <a href="https://www.gesetze-im-internet.de/bnatschg_2009/BJNR254210009.html">https://www.gesetze-im-internet.de/bnatschg_2009/BJNR254210009.html</a></p>

Invasive species are regulated under EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species in Germany (European Commission, 2014). The regulation prohibits the introduction, transport, keeping and breeding of particular species. However, *Reynoutria japonica* is not listed on the EU List of Invasive Alien Species of Union concern and is not further restricted in Germany. According to the Federal Nature Conservation Act § 40 Distribution of flora and fauna (Federal Ministry of Justice and Consumer Protection, 2009), invasive species must not be introduced or distributed without authorisation. The authorisation can be refused if the species imposes a threat to native ecosystems. Furthermore, non-native invasive species are surveyed and can be removed by German authorities.

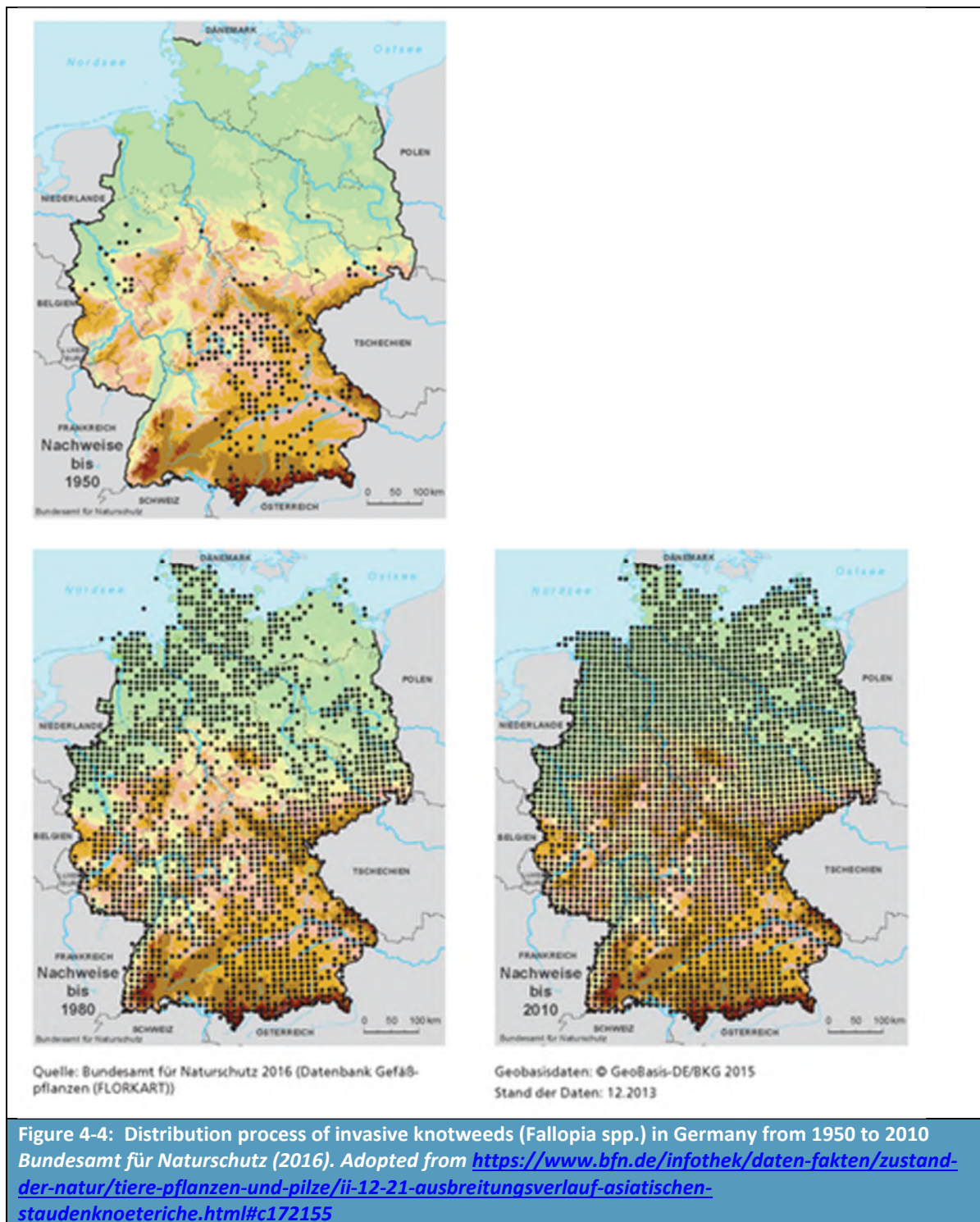
Japanese knotweed is available as a garden plant in DIY stores in Germany because of its extraordinary resistance and rapid growth. However, the Central Association for Horticulture recommends not sowing the plant. In Germany, only the application is prohibited under the Federal Nature Conservation Act. However, Japanese knotweed may be planted in ornamental or allotment gardens. The Federal Nature Conservation Act only protects nature and landscape but not properties<sup>31</sup>.

Figure 4-4 (overleaf) shows the distribution of invasive knotweeds in Germany, showing how it has spread since 1950.

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<sup>31</sup> Pers. Comm., January 2020





#### 4.5.2 Buying process and approach to Japanese knotweed and other invasive plants

Once the buyer has determined a budget and found a suitable property, they arrange a property viewing. The viewing is intended to gather detailed information about the property. A second viewing and an inspection of the land register are common. Afterwards, the property price is negotiated. At this point, the buyer considers financing options and, if a mortgage is required, arranges an



appointment with a bank. Subsequently, a notary contract is signed, which guarantees security for both buyer and seller. After signing the contract, the buyer makes the payment or requests the bank to do so. Furthermore, the estate agent and notary receive their payments. Lastly, the land register is updated.

Property sellers have a duty to declare defects such as moisture damage, pest infestation (such as domestic hive beetle or dry rot), harmful building materials and potential hazard from nature and neighbour (such as flooding risk, problematic neighbour) (Wiegard, D., 2019; Immobilien Scout, nd). Undeclared defects have to be compensated for up to 10 years after the sale, in particular, if the buyer would not have signed the contract if they had been aware of the defects. If sellers are unaware of problems (some only appear years after the purchase) and they are not further defined in the contract (i.e. they do not affect the property price) they are not liable (Deutsche Presse-Agentur dpa, 2018).

According to the German Civil Code addressing Defects and Warranties (§ 437 BGB) (Federal Ministry of Justice and Consumer Protection, 2013), the buyer has the right to payment reduction, rescission of the contract, demand compensation, performance substitution or compensation for wasted expenses. The notary is responsible for warning the buyer concerning recognised defects (§ 19 BNotO) (Hertel, C. & Wicke, H., 2005). One consultee indicated that the question of whether the infestation of Japanese knotweed represents a defect depends on the future use of the property by the buyer. If a property is sold as a building plot or for private use as a garden, there should be a material defect if the infestation of the plant has advanced to such an extent that soil removal must take place in order to be able to carry out landscaping. The contamination of a building site or garden plot to the extent that it requires soil replacement or other measures to remove the contaminations is a material defect in accordance with § 434 section 1 p. 1 no. 1 and 2 BGB (German Civil Code). Thus, a defect is interpreted as being wider than physical damage to a built structure.

A German lawyer suggested that property sellers should indicate that the property is affected by Japanese knotweed or other invasive species since there is a risk that the property's soil must be replaced to remove invasive species. The lawyer further stated that as far as the property owner is aware of invasive species infestations on the property, they should indicate this in the property purchase agreement when selling the property. In principle, properties are sold with the exclusion of any guarantee in regards to recognisable defects. For hidden defects, however, the property owner is liable to the buyer even with a comprehensive disclaimer of warranty in the land purchase contract, if they are aware of the infestation of invasive plants that may require soil replacement. Awareness of such a defect or even gross negligence means that the seller cannot rely on the exclusion of warranty in the purchase contract. In conclusion, the property owner should indicate the presence of Japanese knotweed or other invasive species in the sales contract to be on the safe side.

A consultee indicated that Japanese knotweed might affect property values in the future if the species were to be legally considered an invasive species (e.g. by listing on the EU List of Invasive Alien Species of Union concern of EU Regulation 1143/2014). The German lawyer, on the other hand, does not expect that Japanese knotweed will affect property values in the future since property values are influenced by demand. Defects of individual properties are not included in the standard land values that the respective federal state for building land, garden land and other lands publishes annually. In principle, defects do not affect property values (standard land value)<sup>32</sup>.

One consultee stated that lenders would not change their approach where a property is affected by Japanese knotweed in Germany. However, they suggested that in South Africa and Switzerland, for instance, they do. The lawyer responded that "the individual property value, including the infestation of knotweed and the need for soil replacement, could be of decisive importance for the amount of

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<sup>32</sup> Pers. Comm., January 2020

the mortgage value (mortgage-backed loan). The typical value of a property (standard land value) is reduced by the effort required for soil replacement and for the removal of the knotweed. The mortgage lending limit for mortgage-backed loans (with mortgages secured by land charges, mortgages or pension debts) is calculated at approximately 60% of the property value for workers applying for loans. In other cases, the mortgage lending value can be calculated at 80% of the property value. It should be obvious that costs associated with the remedial of defects have an impact on the amount of the property value and thus on the mortgage lending value.” However, another respondent was not aware of any disclosure requirements for Japanese knotweed related to lending within the banking industry.

The consultation demonstrated that Japanese knotweed does not affect property sales in Germany, although this could change in the future.

### **4.5.3 Case law examples**

The survey responses and internet research did not provide evidence of case law regarding Japanese knotweed and property sales. The German lawyer was not aware of any legal cases involving Japanese knotweed or other invasive species and could not find any indications of such in search directories regarding defects in accordance with § 434 BGB (German Civil Code).

## **4.6 Netherlands**

### **4.6.1 Legislation and guidance**

Table 4-5 outlines the range of legislation and guidance surrounding Japanese knotweed in the Netherlands.

Invasive species are regulated under the EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species in the Netherlands (EU, 2014). The regulation prohibits the introduction, transport, keeping and breeding of particular species. However, *Reynoutria japonica* is not listed on the EU List of Invasive Alien Species of Union concern and is not further restricted in the Netherlands.

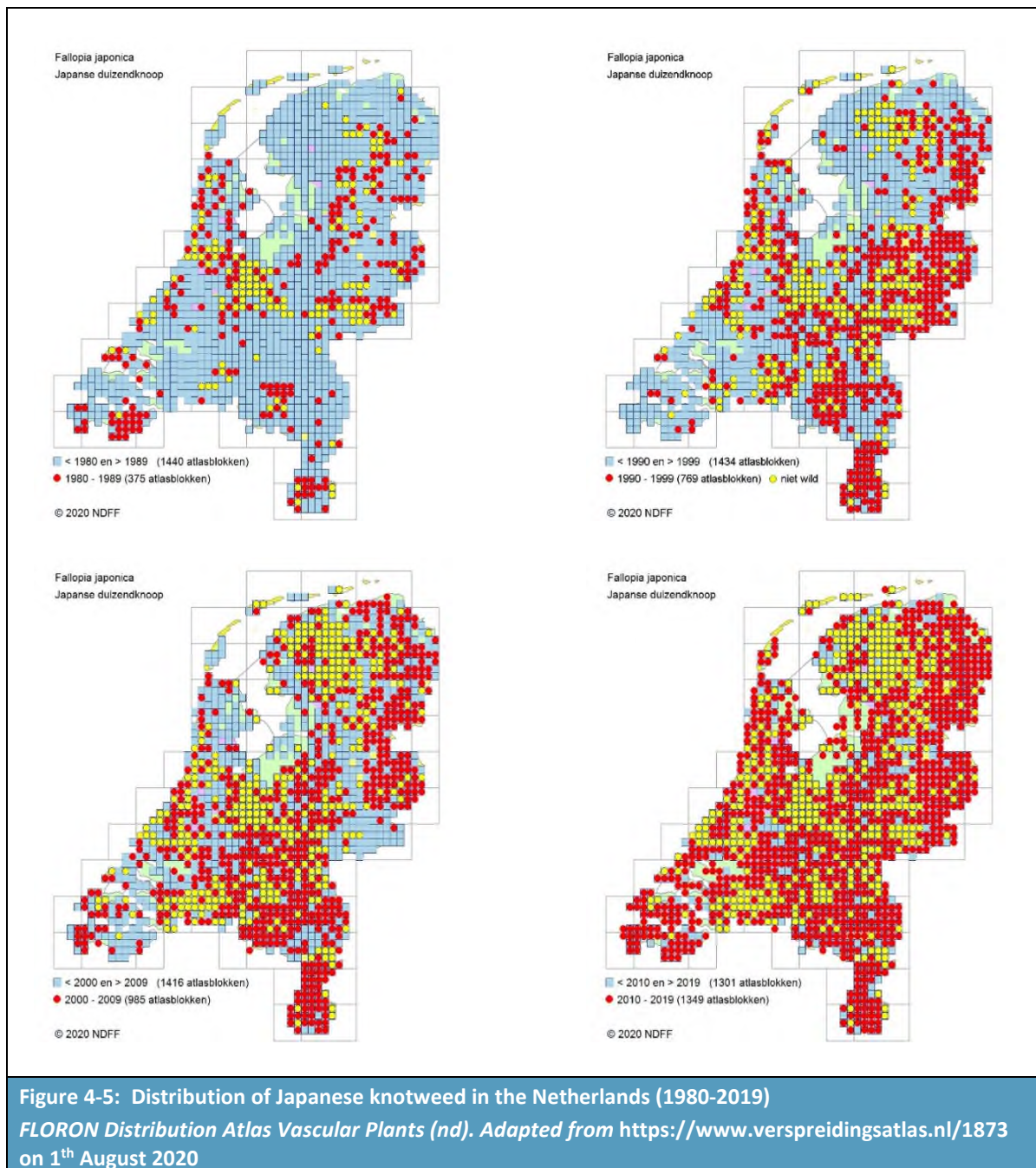
Table 4-5: Dutch legislation and guidance surrounding Japanese knotweed		
Administration	Legislation	Reference
Netherlands	EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species; does not include Japanese knotweed	EU 2014 EU Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species. Available at: <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1143&amp;from=EN</a>  List of Invasive Alien Species of Union concern. Available at: <a href="https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm">https://ec.europa.eu/environment/nature/invasivealien/list/index_en.htm</a>
	The 2017 Nature Conservancy Act ( <i>Natuurbeschermingswet</i> ) regulates the protection of plant and animal species. It is prohibited to keep, grow, breed, transport, import or trade in harmful exotic plant or animal species; however, the species are taken from the List of Invasive Alien Species of Union concern, which does not include Japanese knotweed	2017 Nature Conservancy Act. Available at: <a href="https://business.gov.nl/regulation/all-in-one-permit-protection-plant-animal-species/">https://business.gov.nl/regulation/all-in-one-permit-protection-plant-animal-species/</a>  Union List. Available at: <a href="https://www.nvwa.nl/onderwerpen/invasieve-exoten/unielijst-invasieve-exoten">https://www.nvwa.nl/onderwerpen/invasieve-exoten/unielijst-invasieve-exoten</a>

Since Japanese knotweed is not included in the EU List of Invasive Alien Species of Union concern, Japanese knotweed is not controlled by the regulations on harmful exotic plant species in the 2017 Nature Conservancy Act. However, stakeholder consultation revealed that there is a sense of urgency regarding Japanese knotweed among professionals working in the green environment, and there is heightened media attention over the summer months, with some municipalities providing information about Japanese knotweed on their websites for their inhabitants. The national protocol for dealing with Japanese knotweed (launched in November 2019) offers tools to prevent the spread of the species, in response to the negative effect the species has on biodiversity and the economy<sup>33</sup>. This is a voluntary code of conduct. The protocol consists of 13 information sheets (general information, location specific advice, tips for common activities), with further specifications for mowing and earthwork activities due to become available in spring 2020. A decision tree presents step by step guidance to prevent the establishment of Japanese knotweed and provides support in choosing the right control options for places where Japanese knotweed occurs.

Some regulations exist concerning the use of plant protection products for Japanese knotweed. Whilst the use of glyphosate is prohibited in the non-agricultural sector, there is an exemption for knotweed. One consultee indicated that the Netherlands mainly looks to the UK as an example of how to deal with Japanese knotweed.

The distribution of knotweed within the Netherlands is shown in Figure 4-5 overleaf.

<sup>33</sup> Fight against knotweed: Why fight? Available at <https://bestrijdingduizendknoop.nl/bestrijding/waarom-bestrijden/> on 16<sup>th</sup> January 2020



#### 4.6.2 Buying process and approach to Japanese knotweed and other invasive plants

The approach taken to Japanese knotweed in property sales is similar to that used for other invasive plants. If the seller has knowledge of an invasive plant that is a serious problem with regard to normal usage of the property<sup>34</sup> or the property has been damaged by the plant and this is not visible by inspection by the buyer<sup>35</sup>, then the seller should mention this to the buyer before the sale is concluded. Otherwise, the seller is liable to the buyer<sup>36</sup>. In addition, if the buyer signs a standardised

<sup>34</sup> Pers. Comm., January 2020 from a Dutch law firm

<sup>35</sup> Pers. Comm., January 2020 from a university professor

<sup>36</sup> Pers. Comm., January 2020 from a Dutch law firm

NVM purchase agreement, the seller is not liable to the buyer if Japanese knotweed is discovered after completion<sup>37</sup>.

The seller has an obligation to inform the buyer about (hidden) defects, any charges and limitations of the property. The seller can be liable to the buyer if the requirements of the expected property are not met and on the grounds of an error and/or deception if he was aware of this shortcoming at the time of the sale.

Guarantees can be issued which exclude risks for the buyer or seller. If the wording of the agreement is not clear, then the contract may be interpreted as to what the parties intended. Guarantees cannot exclude the buyer's obligations to investigate. Based on these investigations, guarantees are drawn up (ICLG, 2019). It is common to include an environmental investigation in connection with real estate transactions<sup>38</sup>.

The standardised NVM purchase agreement is the best-known and most-used contract for residential properties in the Netherlands (AMS, 2020). It states that immovable property that is transferred to the buyer is in the state in which it is at the completion of the contract, with all the associated rights and claims, visible and invisible defects. The starting point is that the buyer accepts the property in its state at the transfer of ownership (ICLG, 2019).

The seller has a duty to disclose any defects present at the time of the conclusion of the sale. Article 6.1 of the NVM purchase contract excludes seller liability for hidden defects. However, Article 6.1 cannot always be relied upon since Article 6.3, that references article 7:17 of the Dutch Civil Code, states that the seller is liable for the repair of hidden defects which prevent the ordinary use of the property at the transfer of ownership and were unknown and unapparent to the buyer (Ploeger et al., 2005). This is evaluated on a case-by-case basis.

For ordinary use despite hidden defects, the Supreme Court stated that ordinary use must be taken as a starting point. The seller cannot escape liability for compensation by not experiencing problems, not having lived in the house and not being at fault. The burden of proof lies on the buyer to show that the seller was aware of the hidden defects (Blenheim, 2019). One consultee indicated that if legal action is taken, it is mainly based on civilian law which states you cannot cause nuisance or damage to other people's properties.

A consultee described a few cases concerning buyers of new-build houses (or planned houses) that have held the project developer and/or the municipality responsible for any damage caused by the presence of Japanese knotweed. These sites have been remediated. However, the consultee stressed that these are rare incidents and certainly not considered 'business as usual'.

Lenders are unlikely to change their approach where a property is affected by invasive species unless there is structural damage. One consultee was of the opinion that the image that has been created is exaggerated and damage that has been caused as a result of Japanese knotweed infestation in the Netherlands will be limited to small constructions such as garden walls, sheds or pavements. They acknowledged that in the private sector it would be helpful if potential purchasers of older/historic houses were made aware of knotweed growing into walls or groundwork. However, in their opinion, it would be disproportionate for the presence/absence of knotweed to be included in the procedure for determining the size/suitability of a mortgage.

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<sup>37</sup> Pers. Comm., January 2020 from a university professor

<sup>38</sup> Survey responses from Stibbe Real Estate Group



A Dutch mortgage association indicated that their member banks do not have any policies regarding plants and buildings. However, a Dutch university professor indicated that real estate, property and land development companies are becoming increasingly worried by Japanese knotweed. In particular, concerning future claims or eradication obligations if the species is targeted for regulation.

It is difficult to predict whether Japanese knotweed is likely to affect property values in the future according to a Dutch law firm<sup>39</sup>. A university professor indicated that in urban areas especially, other pressures on the property market will be of much greater importance such as a lack of affordable housing and a lack of new projects to offset the expected rise in population<sup>40</sup>. However, according to an environmental consultant specialising in Japanese knotweed, they have observed a growing sense of urgency with regards to knotweed in the Netherlands especially among professionals working in the green environment sector. In addition, during the summer, there is a lot of media attention and some municipalities have a page on their website with information on knotweed for their constituents. They stated that the main reason why there is not any specific legislation on knotweed is due to it not being on the EU List of Invasive Alien Species of Union concern.

Buyers and sellers do not frequently investigate whether Japanese knotweed is present according to a Dutch lawyer. Although, other lawyers from a Dutch real estate firm stated that it is common to conduct environmental investigations with technical advisors in connection with real estate transactions<sup>41</sup>. If Japanese knotweed gradually manifests itself, at present the seller is not liable to the buyer, although this might change in the future according to one university professor. Finally, the launch of the Dutch code of conduct on Japanese knotweed in November 2019 is notable. However, the code is on a voluntary basis and would require the species to be added to the EU List of Invasive Alien Species of Union concern for further legislation and control measures to develop.

### **4.6.3 Case law examples**

Internet research and consultation did not provide evidence of case law regarding Japanese knotweed and property sales.

## **4.7 South Africa**

### **4.7.1 Legislation and guidance**

Table 4-6 outlines the range of legislation and guidance surrounding Japanese knotweed in South Africa.

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<sup>39</sup> Pers. Comm., January 2020 from a Dutch law firm

<sup>40</sup> Pers. Comm., January 2020 from a university professor

<sup>41</sup> Pers. Comm., January 2020 from a Dutch real estate firm

**Table 4-6: South African legislation and guidance surrounding Japanese knotweed**

Administration	Legislation	Reference
South Africa	<p>List of Prohibited Alien Species: Japanese knotweed is prohibited under Section 67 of the Biodiversity Act (No 10, 2004), although this Act also identifies that Japanese knotweed is not yet present in South Africa.</p> <p>National Environmental Management Biodiversity Act (NEMBA), 2004; Alien and Invasive Species Regulations, 2014 to protect the country's natural ecosystems, sustainability and ecological integration.</p> <p>Category 1a: Listed Invasive Species that must be combated and eradicated (does not include Japanese knotweed)</p> <p>Chapter 7, Regulation 29.</p> <p>Subsection 3 - "The seller of any immovable property must, prior to the conclusion of the relevant sale agreement, notify the purchaser of that property in writing of the presence of listed invasive species on that property". – i.e. the seller must disclose alien and list invasive species under the Act (Property24, 2014).</p> <p>Subsection 1 - "If a permit-holder sells a specimen of an alien (which means a species that is not indigenous i.e. occurring naturally in a free state in nature in the Republic of South Africa) or listed invasive species (means any species whose establishment and spread is outside of its natural distribution range and is harmful to our natural ecosystems), or sells the property on which a specimen of an alien or listed invasive species is under the permit-holders control, the new owner of such specimen or such property must apply for a permit in terms of Chapter 7 of the Act."</p>	<p>Department of Environmental Affairs and Tourism (2009): LIST 2: List of Prohibited Alien Species in Terms of Section 67. Available at: <a href="https://www.environment.gov.za/sites/default/files/gazetted_notices/nemba_alienspecies_g32090gen349_0.pdf">https://www.environment.gov.za/sites/default/files/gazetted_notices/nemba_alienspecies_g32090gen349_0.pdf</a></p> <p>Department of Environmental Affairs National Environmental Management: Biodiversity Act, 2004 (Act No. 10 Of 2004) Alien and Invasive Species Lists, 2016. Available at: <a href="https://www.environment.co.za/wp-content/uploads/2017/03/nemba10of2004_alienandinvasive_specieslists2016.pdf">https://www.environment.co.za/wp-content/uploads/2017/03/nemba10of2004_alienandinvasive_specieslists2016.pdf</a></p>

The National Environmental Management Biodiversity Act (NEMBA) is a regulatory approach to dealing with invasive species in the context of property sales. Through the property transfer, the flora/fauna become responsibility of the new owner. However, the seller must notify the buyer of any invasive species that are present. Officials from the Department of Environmental Affairs are authorised to enter a property, monitor, assist, control or eradicate identified invasive alien species under the regulation (Phatshoane Henney Attorneys, 2014). Noncompliance with the Regulations can result in a fine of R5 million (approximately £260,000 at the time of writing this report) for a first offence and up to R10 million (approximately £525,000) and/or a period of imprisonment of up to 10 years for the second offence (Chapter 9 , Art. 102 of the NEMBA) (Government Gazette, 2004; Phatshoane Henney Attorneys, 2014).



Japanese knotweed is listed on the List of Prohibited Alien Species (Department of Environmental Affairs and Tourism, 2009) : *“Prohibited Alien species in terms of Section 67 of the Biodiversity Act (No 10, 2004), defined as Alien species that are not yet in South Africa, that are known to be invasive and should not be imported into South Africa<sup>42</sup>”*. In other words, Japanese knotweed is currently not known to be present in South Africa. Furthermore, it implies *“an alien species listed by notice by the Minister, in respect of which a permit may not be issued as contemplated in section 67(1) of the Act”* (Department of Environmental Affairs, 2014).

#### **4.7.2 Buying process and approach to Japanese knotweed and other invasive plants**

Following an assessment of their credit record, a buyer finds a real estate agent and a suitable property. Afterwards the buyer signs an offer to purchase and arranges a home inspection. Lastly, the property buyer applies for a home loan and finally closes the deal (ooba home loans, 2019).

Under Regulation 29 (Alien and Invasive Species Regulations), the estate agent can require the property seller to disclose whether they are aware of any invasive species on their properties or whether they are authorised to hold them. In cases where invasive species (with or without permit) are present on the property, a copy of the confirmation thereof must be given to the potential buyer. In the offer to purchase, the buyer must acknowledge they have been made aware of invasives on the property (Phatshoane Henney Attorneys, 2014).

One respondent indicated that other invasive species such as Australian wattle, eucalyptus (gums) and pine have led to many legal cases involving invasive species in property sales. Furthermore, invasive species affect property values frequently and, in connection with this, lenders change their approach where a property is affected by invasive species.

#### **4.7.3 Case law examples**

Internet research and consultation did not provide evidence of case law regarding Japanese knotweed and property sales.

However, there are instances of prosecution under the National Environmental Management: Biodiversity Act (NEMBA), resulting in the eradication of other invasive plant species such as Syringa, Bugweed and Castor-oil plant. The case highlights the duties of landowners set out in the environmental legislation, including the obligations to report listed invasive species occurring in their properties to the competent authority (DEA), to take steps to control listed invasive species, to prevent spreading of listed invasive species and to take all required steps to prevent or minimise harm to biodiversity (see Kogelberg Botanical Society, 2020).

### **4.8 Switzerland**

#### **4.8.1 Legislation and guidance**

Table 4-7 outlines the range of legislation and guidance surrounding Japanese knotweed in Switzerland.

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<sup>42</sup> “If a Prohibited Alien species does occur in South Africa it is automatically listed as a 'Species that requires compulsory control' unless listed otherwise.”

**Table 4-7: Swiss legislation and guidance surrounding Japanese knotweed**

Administration	Legislation	Reference
Switzerland	The revised Release Ordinance (FrSV) has been in force since October 2008. Alien organisms are defined in the Regulation. Furthermore, it regulates the handling of alien organisms in the environment. In particular, animals and plants, communities and habitats are to be protected against harmful effects from the handling of alien organisms in the environment	Ordinance on the handling of organisms in the environment (Freisetzungsverordnung - FrSV). Available at: <a href="https://www.admin.ch/opc/en/classified-compilation/20062651/index.html">https://www.admin.ch/opc/en/classified-compilation/20062651/index.html</a> <a href="https://www.infoflora.ch/en/neophytes/lists.html">https://www.infoflora.ch/en/neophytes/lists.html</a>
	Proposed amendment of the Environment Protection Law (May 2019) Art.29 (4) Property, plant or object owners that are or could be affected by invasive alien organisms must monitor, isolate, treat or destroy them in cooperation with the responsible authorities or tolerate these measures	Proposed amendment of the Environmental Protection Law (May 2019) Article 29 (4) Special precautions against invasive alien organisms. Available at: <a href="https://www.news.admin.ch/news/message/attachments/56927.pdf">https://www.news.admin.ch/news/message/attachments/56927.pdf</a> <a href="https://www.news.admin.ch/news/message/attachments/56928.pdf">https://www.news.admin.ch/news/message/attachments/56928.pdf</a>

In Switzerland, the direct release of knotweed into the environment is prohibited. The plant is on a blacklist, which lists invasive neophytes in Switzerland that damage biodiversity, health and/or the economy. The occurrence and spread of these species must be prevented (Swiss Commission for the Conservation of Wild Plants, 2007) (see Figure 4-6 overleaf for the distribution of knotweed).

According to the Release Ordinance (FrSV) Art. 15 para. 3, soil excavation, which is contaminated with invasive alien organisms according to Annex 2, may only be used at the extraction site. The costs incurred are compensated by the polluter (polluter pays principle, USG<sup>43</sup> Art. 59 & FrSV Art. 53). The disposal of the waste includes its recycling or storage as well as the preliminary stages of collection, transport, intermediate storage and treatment (Art. 7 para. 6bis USG). The recycling includes all waste fractions that are not definitely deposited. The recultivation of material removal points such as gravel pits with excavation is also considered as recovery (USG Art. 7 para. 6 to & Art. 30d letter a) (The Federal Council, 2018).

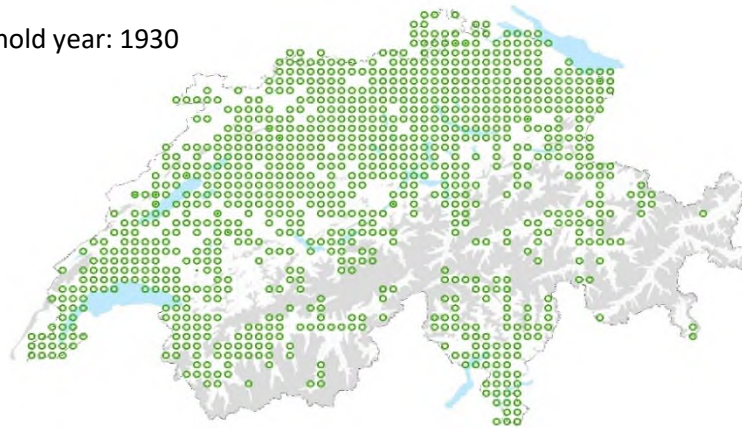
With the revised Environmental Protection Law<sup>44</sup>, the cantons could force private individuals to implement control measures in the future. Property owners would then have a duty to ensure that invasive plants can no longer spread. Control measures would be at the cost of the property owner (Knellwolf, 2019). Initially, costs of around CHF 90 million (approximately £71.2 million at the time of writing this report) per year are expected, of which around two thirds will be incurred by the cantons<sup>45</sup> (The Federal Council, 2019). The Swiss Federal Office for the Environment expects private landowners to spend CHF 25 million (approximately £21 million) annually. However, these costs will gradually decrease after successful implementation of control and management programmes. Noncompliance can result in a fine and/or a period of imprisonment of up to 3 years (Wittwer, 2019). The proposed amendment has been criticised particularly by the Swiss Homeowner Association and forest owners, as those liable are not necessarily the polluters (Schuller, 2019). One consultation revealed that, if the revision of the Environmental Protection Law succeeds at all, it will take up to several years.

<sup>43</sup> Environmental Protection Act

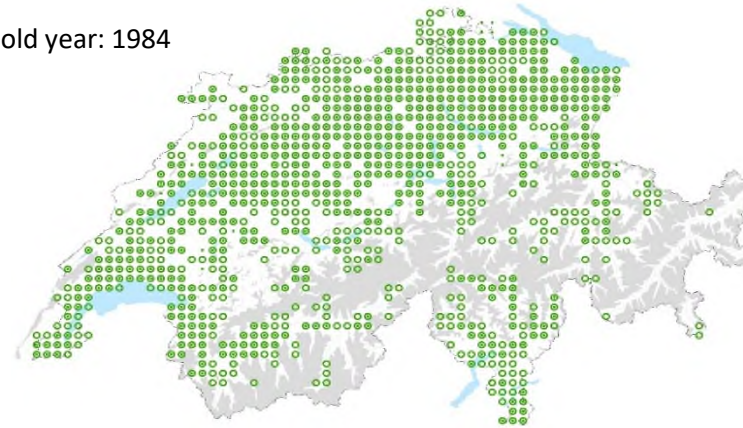
<sup>44</sup> Currently under review

<sup>45</sup> Japanese knotweed predominantly affects public land, as most infestations are near waterbodies.

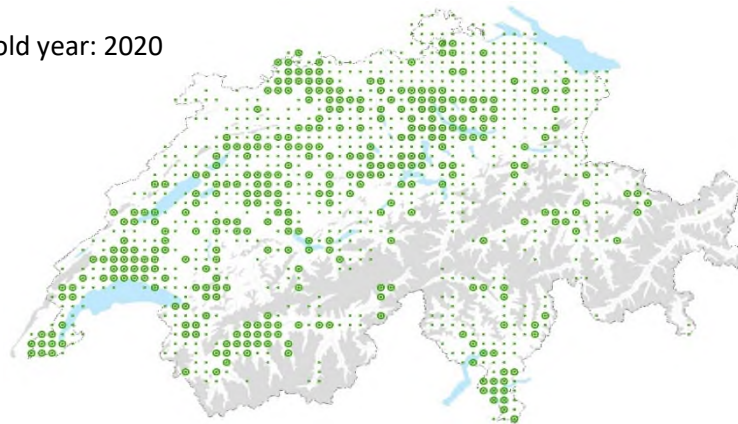
Threshold year: 1930



Threshold year: 1984



Threshold year: 2020



- Before threshold year
- After threshold year
- Before and after threshold year

Figure 4-6: Distribution map of *Reynoutria japonica* aggr. in Switzerland from 1930 to 2020

*info flora* (2016). Adopted from <https://www.infoflora.ch/en/flora/reynoutria-japonica-aggr.html#map> accessed on 10<sup>th</sup> July 2020

## 4.8.2 Buying process and approach to Japanese knotweed and other invasive plants

After planning financing and finding a property, a potential buyer views the desired property including the land register. Once both parties agree, the notary writes the contract and the transaction is completed (Hausinfo, 2019).

Property owners do not have a duty to declare Japanese knotweed. However, *Ambrosia* must be reported in Switzerland (this was negated by one respondent stating that the new Plant Protection Ordinance will no longer include *Ambrosia*). Other plants must also be reported in some cantons, including Giant hogweed and Tanners Sumac tree. However, the reporting requirement is a general obligation, hence independent from property sales<sup>46</sup>. Importantly, this has mainly affected agricultural legislation rather than housing. The revised Environmental Protection Law was aimed to address neophytes directly. One consultee indicated that a legal requirement to declare knotweed or other invasives during a transaction would not be ideal, as the Swiss population values voluntary principles. Hence, informing on a voluntary base would be an adequate approach, where the responsibility should be with the property seller.

In the context of building projects, any Japanese knotweed present on the land must be declared as part of the building application. In the canton of Zurich, if land contaminated with knotweed is being built on, a Contaminated Sites Consultant must be involved to ensure the adequate disposal of the contaminated material. This has an impact on the cost of a construction project because excavation contaminated with Japanese knotweed must be disposed of at high costs. Municipalities/cantons can impose requirements on construction projects to guarantee the disposal and control of invasive neophytes during the construction project. If an excavation with contaminated soil is not handled appropriately and Japanese knotweed spreads as a result of this, the responsible party is liable in this case. The legal requirements for construction works are already relatively strict and are increasingly stringent<sup>47</sup>.

One consultee indicated that Japanese knotweed might affect property values in the form of a price reduction equivalent to the amount of the control costs. However, another respondent does not believe that knotweed will affect property values, primarily because Japanese knotweed is not very widespread in settlement areas, nor in Switzerland more generally. Another respondent indicated that, except for individual cases, Japanese knotweed should not be relevant to property values. The revised Environmental Protection Law might change the effect on property sales; in particular if the infestation is significant and it legally requires the treatment of invasives on private properties. However, the respondent perceives this potential change as a long-term issue, since it will take both property owners and mortgage lenders several years to notice the (financial) impacts of invasives. Furthermore, the cost of an entire soil excavation is not likely to be significant in relation to the overall cost of Swiss properties.

Given the current minor infestation in Switzerland, two respondents did not consider Japanese knotweed of high relevance to mortgages. However, one consultee stated that this is subject to change, depending on whether the degree of infestation, the legal basis, or the extent of lender awareness changes. Another respondent mentioned that although the costs for the treatment of invasive plants on a property are high, they are relatively small compared to the overall costs of a construction project and, as such, are not decisive. Since construction is very costly in Switzerland, the specialist removal of excavation is not critical. Notably, the problem is more relevant along

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<sup>46</sup> Pers. Comm., January 2020

<sup>47</sup> Pers. Comm., January 2020

waterbodies, where Japanese knotweed is common. Since these areas are not allowed to be built on and are mostly maintained by the public sector, property sales and lenders are not considered in this context. Water zones are regularly inspected for knotweed (every one to two years), so as to control infestations when they are still small and easily controllable<sup>48</sup>.

According to a consultee, the public awareness of Japanese knotweed is low. Japanese knotweed is mainly discussed amongst experts, government bodies, etc., however, due to its limited distribution, it is not widely publicised by the expert community. Knotweed is rarely mentioned in the media, however other invasive species do receive more attention. Most recording originates from damages to the agriculture sector. According to one consultee, public awareness and sensitisation are increasing as a result of strict construction requirements. Notably, the public and experts do not question/oppose the strict requirements for dealing with knotweed.

One consultee indicated that Switzerland, in particular Zurich, expects to eradicate Japanese knotweed entirely within 100 years. They were of the opinion that stringent construction requirements and soil excavations are of high significance when controlling new knotweed infestations. In general, the respondent views construction/excavations as the most cost-effective and efficient method to control and eliminate knotweed before it can expand. This has resulted in a drastic decrease of Japanese knotweed's distribution in Zurich. The respondent did not consider the UK's approach to Japanese knotweed disproportionate, as this depends on the magnitude of the invasion. Importantly, they referred to the UK to justify their strict invasion control, with the intention of a cost-effective elimination of Japanese knotweed before it reaches a similar magnitude.

### **4.8.3 Case law examples**

Internet research and consultation did not provide evidence of case law regarding Japanese knotweed in the context of property sales. One consultee highlighted that disputes with neighbours, including cases of spreading knotweed, would be handled as a civil law case, and so would not be made publicly available. The respondent further explained that they frequently facilitate dialogue between involved parties and suggest a joint solution in case of inappropriate handling or spreading of Japanese knotweed.

## **4.9 United States of America**

### **4.9.1 Legislation and guidance**

At least 47 states legally list noxious or invasive species, prohibiting their sale, distribution and transport, unless authorised by permit (National Conference of State Legislatures, 2016). Japanese knotweed is mostly present in the northeast of the United States, however, it can be found in most U.S. states (Childs, 2019). Table 4-8 outlines the range of legislation and guidance surrounding Japanese knotweed in the United States of America, with Figure 4-7 illustrating its distribution.

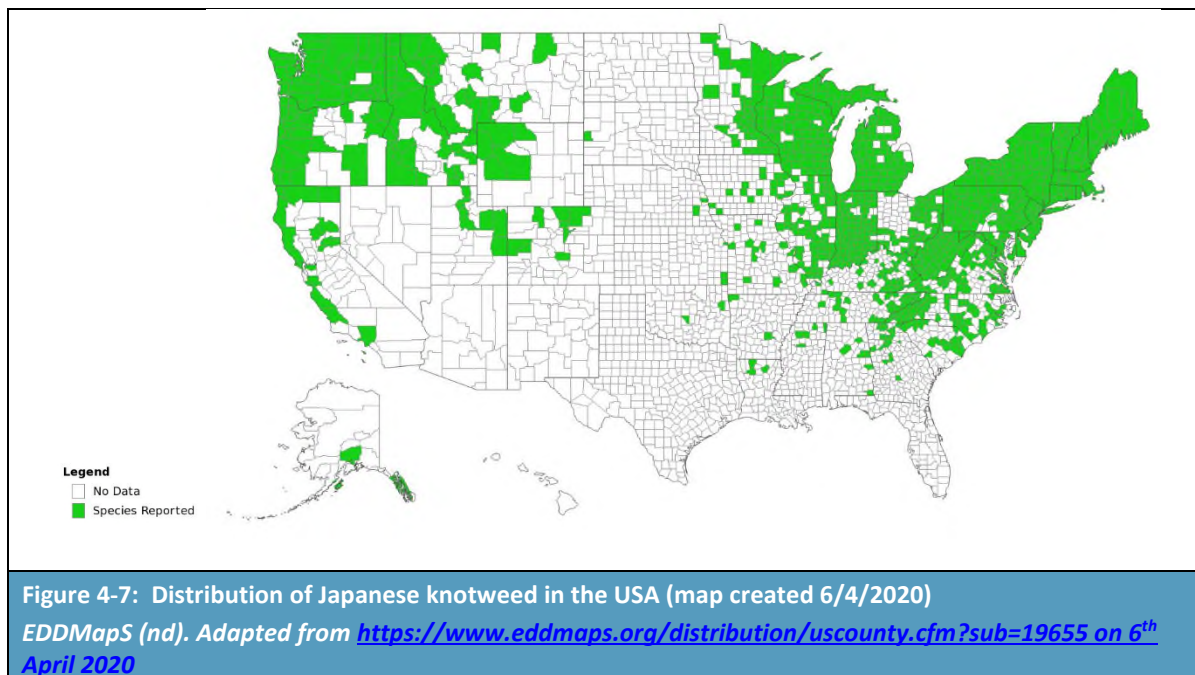
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<sup>48</sup> Pers. Comm., January 2020



**Table 4-8: US legislation and guidance surrounding Japanese knotweed**

Administration	Legislation	Reference
Michigan	Japanese knotweed is legally prohibited in Michigan. It is illegal to possess or introduce this species without a permit from the Michigan Department of Agriculture, and Rural Development except to have it identified or in conjunction with control efforts	Michigan Department of Natural Resources (2012): Japanese knotweed. Available at: <a href="https://www.michigan.gov/documents/dnr/knotweed_BCP_372280_7.pdf">https://www.michigan.gov/documents/dnr/knotweed_BCP_372280_7.pdf</a>
Minnesota	Specially Regulated Plants shall be handled, controlled or eradicated according to specified regulations (2019 Noxious Weed List) Any person, corporation, business or other retail entity distributing Japanese and/or giant knotweeds for sale within the state must have information directly affixed to the plant or container packaging that it is being sold with, indicating that it is inadvisable to plant this species within 100 feet of a water body or its designated flood plain, as defined by Minnesota Statute 103F.111, Subdivision 4	Minnesota Department of Agriculture (2019): Noxious Weed List. Available at: <a href="https://www.mda.state.mn.us/sites/default/files/2019-01/2019%20MN%20Noxious%20Weed%20List%20Fact%20SheetADAV2.pdf">https://www.mda.state.mn.us/sites/default/files/2019-01/2019%20MN%20Noxious%20Weed%20List%20Fact%20SheetADAV2.pdf</a> on 14 December 2020 Minnesota Department of Agriculture (n.d.): Japanese knotweed. Available at: <a href="https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist/knotweed">https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist/knotweed</a> on 14 December 2020
Alabama	Class C* noxious weed	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
California	B** list (noxious weeds)	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
Connecticut	Invasive, banned	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
Massachusetts	Prohibited	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
Oregon	"B" designated weed Quarantine	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
Vermont	Class B noxious weed	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
Washington	Class B noxious weed Noxious weed seed and plant Quarantine	Natural Resources Conservation Service (n.d.): Japanese knotweed. Available at: <a href="https://plants.usda.gov/core/profile?symbol=POCU6">https://plants.usda.gov/core/profile?symbol=POCU6</a> on 14 December 2020
*C: widespread or are of special interest to the agricultural industry		
**B: non-native species whose distribution is limited to portions of the state		



#### 4.9.2 Buying process and approach to Japanese knotweed and other invasive plants

After assessing what the buyer can afford, they get prequalified and preapproved for credit for a mortgage. The real estate agent assists in choosing a suitable property. The buyers make an offer and arrange a home inspection. Together with a mortgage banker, the buyer selects a loan and has the property appraised by a third party. After coordinating and submitting the paperwork, the estate transaction can be finalised.

Currently, property sellers do not have any disclosure requirements regarding invasive species in the U.S.<sup>49</sup>. One respondent to the survey undertaken for this study stated they do not expect their state to ever make it a legal requirement to disclose Japanese knotweed. Another consultee mentioned that a few western U.S. states regulate noxious weeds, requiring landowners to control weeds on their property. In case of noncompliance, the weed is being removed by the county at the property owner's expense.

A potential buyer is given 60 days of due diligence before signing the contract. Within that timeframe, the buyer can inspect the property or hire a professional inspector to determine any defects that could affect the property value (Auction, 2019). One consultee stated that *"if real estate buyers (especially investment buyers) were made aware of expensive invasive issues during due diligence, it could become a negotiating point between seller and buyer, but in most cases, buyers are not made aware of the issues."* Similar to property buyers, U.S. lenders would change their approach to providing mortgages if they were aware of the property impact of Japanese knotweed. Inspections such as real estate appraisals could, besides latent effects such as termites, asbestos, etc., include damaging invasives in the assessment, which they currently do not specifically do<sup>50</sup>. A standardised due diligence

<sup>49</sup> Pers. Comm. (January 2020) and internet research

<sup>50</sup> Pers.Comms, January 2020



process including consideration of invasive species combined with education of the public could be a suitable approach to Japanese knotweed in the context of property sales (Nespeca, M., 2009).

One respondent indicated that, in their opinion, the responsibility should lie with the property buyer. Rather than employing a regulatory approach to disclosing Japanese knotweed, property buyers' awareness of invasives ought to improve. This would motivate buyers to get home inspections with focus on invasive species on the property. The consultee argued U.S. Americans have strong property rights and would not tolerate a lack thereof, hence why a legislative approach might not be suitable.

According to the National Conference of State Legislatures, invasive species have a potential to negatively affect property values, particularly agricultural land (National Conference of State Legislatures, 2016). Notably, one study suggests that milfoil has a significant effect on property sales price, equivalent to a 19% decline in mean property values (Olden, J. D., & Tamayo, M., 2014). One respondent indicated they were aware of running bamboo (e.g. *Phyllostachys spp.*) affecting property values.

Survey respondents agreed that Japanese knotweed affects property values and will increasingly do so in the future. One consultee indicated that they receive between three to five emails and calls per year regarding Japanese knotweed. In general, knotweed is becoming more widespread. Hence, public awareness is increasing which in return affects property values. Besides a Statewide Invasive Species Management programme, the New Hampshire Department of Agriculture, for instance, steers an active education and awareness programme to educate the public about Japanese knotweed and other invasives.

The Minnesota Noxious Weed Advisory Committee (NWAC) conducted a survey (MDA, 2018) in 2018 to gather information about the public's perception and knowledge of knotweeds in Minnesota and potential responses to a change in regulation of knotweeds. The survey response and additional research influenced the NWAC to recommend knotweeds to be listed on the Minnesota Noxious Weed List. Their previous status 'Specially Regulated' was changed to 'Prohibited-Control' and came into effect on 1<sup>st</sup> January, 2020 (Minnesota Department of Agriculture, 2018).

One consultee pointed out that knotweeds do not cause the same magnitude of problems in the U.S. compared to the UK, as they were not utilised in landscape plantings as much. Two respondents indicated while knotweed is a socioeconomic and environmental issue, the U.S. has problems with many other invasive species. One consultee considers Japanese knotweed one of the ten most problematic invasive plants in the U.S.

### **4.9.3 Case law examples**

The survey responses and internet research did not suggest any case law examples. However, according to one consultee landowners' awareness is increasing. Another survey response indicated the potential for legal cases involving newly built properties that were contaminated with knotweed through its introduction during landscaping.

## 5 Other Plant Species

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### 5.1 Overview

In general, plants are known to cause damage to structures by three mechanisms: indirect damage (e.g. via subsidence or heave), direct damage by physical impact (e.g. from falling trees) and direct damage by physical pressure (e.g. from growth through cracks). It is accepted that the prolific rhizome (root-like structures) and shoot growth of Japanese knotweed can exploit cracks in structures, damaging foundations, walls, pavements, tarmacked surfaces and drainage works (Aguilera et al., 2010; NNSS, 2019). Furthermore, Japanese knotweed is difficult to control and manage using herbicides, requiring a multiyear programme of treatment. This contrasts with many other plants, where complete kill (eradication) can be achieved in timeframes of less than one year. Complete physical excavation of all Japanese knotweed rhizome from a property can be difficult to undertake and is an order of magnitude more costly than herbicide-based control (Jones et al., 2018; House of Commons Science and Technology Committee, 2019).

However, previous research has suggested that there is no evidence to support the claim that Japanese knotweed causes structural damage in excess of the norm for other plants (Fennell et al, 2018). This section therefore examines evidence relating to damage caused by other plant species, to enable comparison with Japanese knotweed.

### 5.2 Oak, Willow, Poplar, Lime and Pine Trees

Oak, willow and poplar trees grow 20-40m (Woodland Trust, n.d. (a)), 25m (Woodland Trust, n.d. (b)) and up to 30m (Woodland Trust, n.d. (c)) tall respectively. Pine and lime trees grow 29m (Brickers Insurance, 2015) and 25-30m in height (Tree2mydoor, 2017). While the trees are of high importance for biodiversity and wildlife, close to properties they have caused neighbour disputes and property damage such as cracks. Particularly shrinkable clay subsoils have a key influence on structural root damage, as the trees grow their roots extensively looking for water in dry conditions (Association of British Insurers, n.d.).

The case law example *Khan & Khan v. Harrow LBC & Kane [2013] EWHC 2687 (TCC)* (England and Wales High Court, 2013) demonstrated the impact on foreseeability in tree root nuisance claims through structural root damage. The neighbouring parties were in dispute over an oak tree and a cypress hedge growing on Kane's property that caused damage to Khan's house. Although Mrs Kane claimed she had no knowledge of the risk of damage being caused by the plant roots, the judgement concluded that the tree root subsidence damage was reasonably foreseeable, thus made Mrs Kane liable for the damage caused. However, this only concerned the cypress hedge, which should have been removed before the damage to Mr and Mrs Khan's property was being caused (BLM, 2017).

Reasonable foreseeability suggests that the owner knew or should have been aware of the damage caused by interference with a neighbour's property. However, the owner is not liable if there is an uncertain chance. Consequently, the owner of the tree, i.e. the land the tree grows on, is responsible for damages caused under the law of nuisance (In Brief, 2016). This implies that the owner has a duty to prevent or minimise risk of damage caused by root encroachment.

Usually, neighbouring parties consult a specialist to confirm the expenses and remedial work that needs to be undertaken. The affected property owners can make a claim relating to the damage caused through root subsidence, including the cost of remediation and value depreciation of the property (Wilson Browne, 2018).

Apart from subsidence interference, trees can also cause issues such as decreased light levels and overhanging branches (Wyre Council, 2011). The Association of British Insurers has published recommendations for safe distances for individual tree species to ensure no subsidence or other potential problems (Association of British Insurers, n.d.). Notably, tree growth varies and ‘safe’ distances fluctuate. Hence, an arborist should be consulted in any case (Brickers Insurance, 2015).

### 5.3 English and Common Ivy

The two native subspecies of ivy (*Hedera helix* ssp. *helix* and *Hedera helix* ssp. *hibernica*) inhabit environments throughout the UK. Only ssp. *helix* climbs, whereas subspecies *hibernica* spreads across the ground (Woodland Trust, n.d. (d)). Subspecies *helix* sticks with its climbing stems to surfaces such as buildings and fences, where the self-clinging climber may cause damage to properties through its aerial roots (RHS, n.d.).

Ivy growth also has advantages, such as keeping the surface dry, however, it should be controlled to reduce the risk to properties (Brickers Insurance, 2015). In case of rapid ivy growth from a neighbouring property, the property owners should be advised to remove the ivy from the adjacent property (Law on the Web, n.d.). Both chemical and nonchemical treatments are possible (RHS, n.d.).

### 5.4 Buddleia

Buddleia (*Buddleja davidii*), also referred to as Buddleja or Butterfly bush, is an invasive non-native shrub introduced as an ornamental plant to the UK from central and western China in 1896 (Miller, 1984). Buddleia has spread rapidly via highly-dispersible seeds throughout the UK in the past 30 years, with its distribution increasing by 83% since 1984 (Tallent-Halsell & Watt, 2009). In the introduced range, dense Buddleia growth shades out native flora (increasing erosion risk in riparian areas), alters natural succession in riparian settings in the US and New Zealand and disrupts terrestrial food webs and pollination services (Starr et al., 2003; Ream 2006; Invasive Species Specialist Group, 2010). There remains some debate as to whether Buddleia is beneficial for native pollinators as no published peer-reviewed research supports this contention.

Buddleia thrives in calcareous alkaline soils (e.g. lime mortar, limestone quarries) and once established, grows rapidly, damaging structures as the roots penetrate mortar and displace brickwork (Miller, 1984). Buddleia can exploit other gaps in hard surfaces and where growth is left unchecked, the woody trunk can displace paving, masonry, roofing and more substantial structures. Williams et al. (2010) estimate the annual cost of managing Buddleia at the UK-level as £961,000 per annum; it is likely that that this is a significant underestimate. Informal forums indicate that Buddleia causes neighbourhood disputes and control issues (see for example Money Saving Expert, 2018; Garden Law 2010). It is therefore somewhat surprising that Buddleia is not listed under Section 9, Schedule 14 of the Wildlife and Countryside Act (1981) (no offences apply) (Gupta, 2014) and remains available for purchase in UK garden centres (Suttons, 2020).

In contrast with Japanese knotweed, Buddleia can be eradicated at the local scale using a range of mechanical (physical) methods (e.g. cutting, excavation) and a range of herbicides are effective for killing this plant (DiTomaso & Kyser, 2013). However, physical methods are less environmentally and economically sustainable, particularly when management is undertaken at large spatial scales.

### 5.5 Himalayan balsam

Himalayan balsam (*Impatiens glandulifera*), correctly named Indian balsam (Stace 2019) is an invasive non-native annual plant introduced to the UK from the western Himalayas as a horticultural

introduction in 1839. It is the tallest annual plant in Europe, reaching up to 3 metres tall in full growth and produces up to 2,500 buoyant seeds per plant that are shed up to 5 metres from the plant via explosive dispersal; consequently, spread throughout the UK has been rapid (particularly along watercourses) (Beerling & Perrins 1993). Rapid, dense growth of balsam shades out native flora and alters terrestrial and freshwater food webs and pollination services (Seeney et al., 2019). In the winter months when balsam dies back, riverbanks are left bare of vegetation and are subject to greater erosion, while associated watercourse(s) receive altered sediment load: these processes may alter flood risk locally (Greenwood et al., 2018). Due to extensive growth of balsam, angling and other recreational activities may also be negatively impacted by the presence of this plant along watercourses.

Himalayan balsam is listed under Section 9, Schedule 14 of the Wildlife and Countryside Act (1981) and it is therefore an offence to plant or otherwise cause this species to grow in the wild in the UK. The species is also governed by Sections 33 and 34 of the Environmental Protection Act (1990), whereby it is classified as controlled waste when it is taken away from its site of origin and must therefore be accompanied by the appropriate waste transfer documentation.

Williams et al. (2010) estimate the annual cost of managing Himalayan balsam at the UK-level at c.£1,000,000. In most circumstances, management of balsam is undertaken to mitigate negative ecological and recreational impacts as it does not create significant direct impacts in the built environment (it is shallow rooting and growth is not lignified (woody)). However, it is not inconceivable that its presence may increase the local risk of flooding, which could result in indirect damage to nearby property during, or after a flood event.

In contrast with Japanese knotweed, Himalayan balsam can be eradicated at the local scale using a range of mechanical (physical) methods (e.g. cutting, excavation); various herbicides are also effective for killing this plant (only glyphosate-based herbicides are effective against knotweed) (Beerling & Perrins 1993; CEH 2004; EA 2010). Physical methods are, however, less environmentally and economically sustainable, especially when managing Himalayan balsam across large spatial scales. Successful biological control using grazing livestock has been reported (EA 2010), though the rust fungus *Puccinia komarovii* var. *glanduliferae* remains ineffective at present.

## 5.6 Giant hogweed

Giant hogweed (*Heracleum mantegazzianum*) is a perennial monocarpic (flowers once) species that is among the tallest herbs in Europe, reaching 1.5 to 5.5 metres tall in full growth. Originating in southwest Asia (Caucasus Mountains) this plant was a horticultural introduction to Britain in 1893, which rapidly spread along watercourses, colonising damp ground and wasteland. Rapid spread is explicable with reference to seed production: a single plant may produce 20,000-100,000 seeds which are dispersed up to 5 metres from the parent plant. Dense riparian colonies of Giant hogweed shade out native flora and may increase riverbank erosion risk during the winter months (Tiley et al. 1996; Caffrey, 2001).

While Giant hogweed does not create significant direct impacts in the built environment (though rooting is deep, growth is not lignified (woody)), it has significant human and animal health impacts. The sap of the plant contains toxic chemicals (furanocoumarins) that cause blistering and photodermatitis following contact with the skin (Tiley et al. 1996). Consequently, while the risk of damage to property is limited, there is a significant risk of civil litigation in circumstances where the plant has not been controlled and managed effectively and safely (e.g. where it has inadvertently been cut using machinery, exposing the operator and/or public to toxic sap). Additionally, safe access to

riverbanks and amenity areas is hampered by the presence of this plant. Williams et al. (2010) estimate the annual cost of managing Giant hogweed UK-wide at c.£2,400,000 per annum.

Giant hogweed is listed under Section 9, Schedule 14 of the Wildlife and Countryside Act (1981) and it is therefore an offence to plant or otherwise cause this species to grow in the wild in the UK. The species is also governed by Sections 33 and 34 of the Environmental Protection Act (1990), whereby it is classified as controlled waste when it is taken away from its site of origin and must therefore be accompanied by the appropriate waste transfer documentation.

In contrast with Japanese knotweed, Giant hogweed can be eradicated at the local scale using a range of effective herbicides, though glyphosate-based herbicides are recommended (Caffrey, 2001; Klima & Synowiec, 2016). Aside from uncertain efficacy and decreased environmental and economic sustainability of treatment, mechanical (physical) methods of control (e.g. cutting) and grazing of this species with livestock may give rise to significant health and safety concerns (Klima & Synowiec, 2016).

## 6 Conclusions and Suggested Changes

### 6.1 Overview

This section brings together the evidence reported in Sections 3 and 4 to provide conclusions against the study questions. Consideration is given to the approaches taken to Japanese knotweed in the context of property sales across the UK. The study then looks wider to consider approaches taken in other countries, before undertaking comparisons. Finally, the section identifies suggested changes for the UK approach going forwards. Consideration is then given to the potential economic, environmental and social impacts of the suggested changes.

### 6.2 Conclusions

#### 6.2.1 Approaches across the UK

*How does the approach taken across the four administrations of the UK differ?*

A summary of the approaches taken across the UK administrations is shown in Table 6-1 below.

Table 6-1: Summary of approaches taken across the UK administrations				
Approach	Administration			
	England	Wales	Scotland	Northern Ireland
Allowing Japanese knotweed to grow on your property is not considered an offence	✓	✓	✓	✓
Allowing Japanese knotweed to spread to a neighbouring property may be considered an offence	✓	✓	✓*	
Disposing of waste containing Japanese knotweed in an inappropriate way (i.e. not using properly licensed hauliers and landfill facilities) is considered an offence	✓	✓	✓	✓
Property information form contains specific question(s) about Japanese knotweed	✓	✓		
Surveyors registered with the Royal Institution of Chartered Surveyors (RICS) expected to conduct surveys in line with the Red Book guidance and Japanese knotweed information paper as part of mortgage lending requirements	✓	✓	✓	✓
Lending policy relating to valuation is linked to standards, advice, guidance and information provided by the Royal Institution of Chartered Surveyors (RICS)	✓	✓	✓	✓
Testing of legal cases regarding Japanese knotweed and properties	✓	✓		
<b>Notes:</b> * It is offence in Scotland to allow Japanese knotweed to spread 'into the wild'; some may perceive 'into the wild' as being into a neighbouring property				

#### *Legislation and guidance*

Within the four UK administrations it is not against the law to allow Japanese knotweed to grow on a property. However, there are laws dictating the proper disposal of waste containing Japanese knotweed. In Northern Ireland and Scotland, allowing Japanese knotweed to spread to a

neighbouring property is considered to be a civil matter; however, in England and Wales the Anti-social Behaviour, Crime and Policing Act 2014 allows the police and local authorities to issue a community protection order requiring an individual or company to take action to control Japanese knotweed.

#### *Buying process and approach*

In England and Wales, it is commonplace (but not a legal requirement) to use the Law Society's property information transaction (TA6) form which includes a specific question about Japanese knotweed. It is a legal requirement to complete a Home Report including the Property Questionnaire in Scotland, however this questionnaire does not include a specific question on Japanese knotweed. In Northern Ireland, as in England and Wales, it is commonplace to use the Replies to Pre-contract Enquiries form published by the Law Society of Northern Ireland; this form does not contain a specific question about Japanese knotweed.

The regulatory requirement for mortgage lenders to ensure that an independent valuation of the property is undertaken is the same across the four UK administrations. Surveyors registered with the Royal Institution of Chartered Surveyors (RICS) would be expected to conduct surveys in line with the Red Book guidance and Japanese knotweed information paper.

#### *Lender attitudes*

Consultation revealed that lending policies relating to Japanese knotweed are the same across the UK. Lending policy relating to valuation is invariably linked to standards, advice, guidance and information provided by the main valuer professional body in the UK (RICS). If the RICS guidance changed it would be likely that lender policies would also change once a full risk assessment of the guidance had been undertaken and its contents considered.

In the case of Japanese knotweed, lenders generally ask to be informed if it is present and many will decline to offer a mortgage if it close to the property (within 7m) or causing damage to physical structures, unless a remediation plan is in place. Lenders generally want a fully-costed and funded plan laid out, to be carried out by a professional from a suitable body (Invasive Non-Native Species Association or Property Care Association), with suitable guarantees/insurance in place.

Valuers acting on behalf of lenders must take all relevant factors into consideration when putting a valuation for mortgage purposes on a property. It is then for lenders to decide, based on their own risk appetites, whether to lend on a property. Japanese knotweed is recognised as a plant that may damage physical structures and reduce the amenity of a property. However, lenders would expect valuers to take into consideration and draw attention to any other plants (or trees) that have an impact on the value of a property so that they can take it into consideration when deciding whether to lend. Japanese knotweed is relatively high profile and fairly widespread, so lenders have developed specific policies for the species.

#### *Attitudes to property values*

Internet research has suggested that attitudes to Japanese knotweed and property values are similar across the four administrations. Japanese knotweed still affects property values due to the market, public perception and lender approach. Stakeholder consultation has indicated that there is an increasing awareness that eradication of Japanese knotweed is not a helpful objective, and that the focus should be on management and control. However, the presence of an infestation on adjoining land can significantly affect the value of a property, but there may be severe limitations on the degree



to which this can be identified or determined, especially within the scope of a brief mortgage valuation inspection. Managing adjoining infestations is even more of a problem.

*Case law*

To date, legal cases regarding Japanese knotweed and properties have only been brought in England and Wales. Most legal cases relating to Japanese knotweed and property are pleaded as misrepresentation, professional negligence and private nuisance. There is an advanced court system in the UK and the court cases play a significant role in affecting consumer behaviour. As demonstrated in 3.2.3, case law examples in England and Wales are abundant and are the main driver for the approach. Nevertheless, the treatment of Japanese knotweed plant material and soil containing Japanese knotweed rhizomes as contaminated waste (EPA 1990) is a key underlying driver for knotweed issues generally in relation to property. The difficulty, cost and expense of excavating a patch of Japanese knotweed in a garden and disposing of it at licensed landfill sets Japanese knotweed remediation apart from other invasive plants and trees. The need to manage knotweed is therefore driven by two factors: the classification of soil containing knotweed as hazardous waste (and the expenses associated with this) and the potential for knotweed to negatively impact properties (where such impacts could include physical damage to a built structure but also encapsulate wider negative impacts including limiting use of outdoor space).

Table 6-2 summarises the response to the study question: How does the approach taken across the four administrations of the UK differ?

Table 6-2: Response to study question: UK approaches	
Study question	Summary of response
How does the approach taken across the four administrations of the UK differ?	Across the four UK administrations it is not against the law to allow Japanese knotweed to grow on your property. However, there are laws dictating the proper disposal of waste containing Japanese knotweed. In Northern Ireland and Scotland, allowing Japanese knotweed to spread to a neighbouring property is considered to be a civil matter, although it may be an offence in England and Wales. The specificity of Property Information Forms in relation to Japanese knotweed varies across the UK: England and Wales require specific information on the species to be provided (in the TA6 form commonly used for residential property), whereas Scotland and Northern Ireland do not. The regulatory requirement for mortgage lenders to ensure that an independent valuation of the property is undertaken is the same across the four UK administrations. Legal cases have only been tested in England and Wales to date

**6.2.2 International approaches**

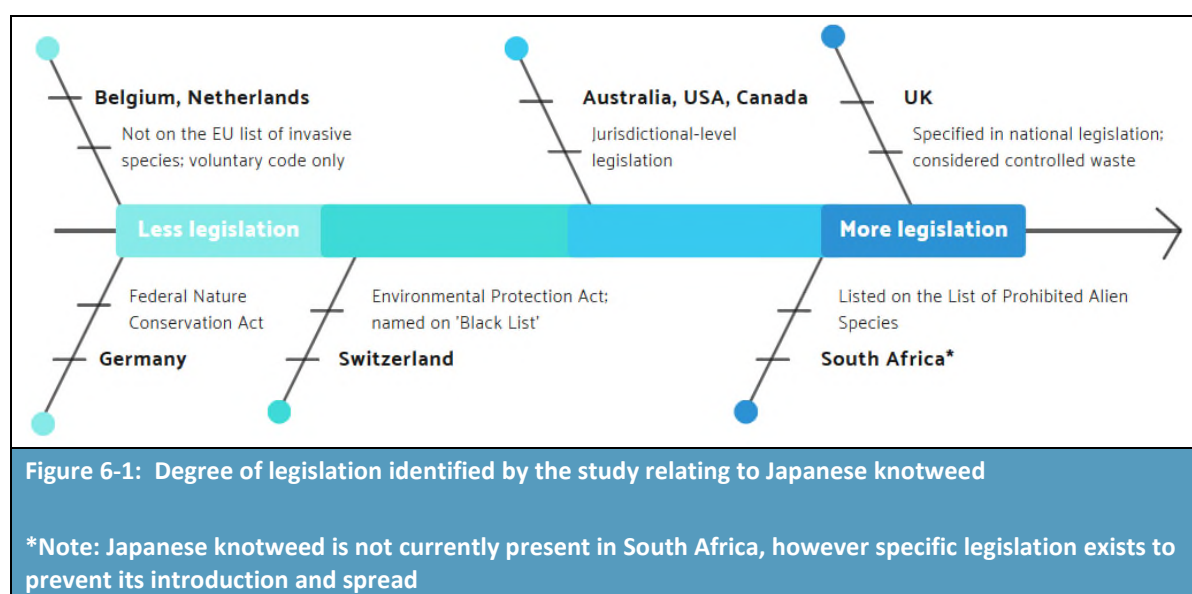
*Legislative approaches to Japanese knotweed*

Figure 6-1 illustrates the scale of legislative approaches that exist across the nine countries considered in this study. EU countries tend not to have specific legislation relating to Japanese knotweed because it is not on the EU List of Invasive Alien Species of Union concern. Consultation with the Netherlands carried out during the course of this study revealed that the addition of Japanese knotweed to the EU List of Invasive Alien Species of Union concern would oblige the Dutch government to take measures to control the species and prevent further spread; as it stands, the country relies on a voluntary code of conduct for the species.

In Switzerland, legal requirements exist in the context of construction work. Japanese knotweed must be declared for building projects as part of the building application, which must disclose whether Japanese knotweed is present on the land. Stringent requirements exist for the removal and disposal of contaminated material.

Countries outside of the EU, such as Australia, USA and Canada, have slightly more legislation relating to Japanese knotweed. This legislation is largely on a jurisdictional level; for example, listing of the species as a provincial noxious weed.

More extensive legislation for Japanese knotweed is found in South Africa. Although the species is not currently present in South Africa, specific legislation exists to prevent its introduction and spread, namely its inclusion on the List of Prohibited Alien Species. Out of all the countries considered by this study, the most extensive legislation for Japanese knotweed is found in the UK.



## Case law

Whilst legal cases regarding Japanese knotweed and properties have been identified in England and Wales, this study has not found any evidence of legal cases focusing on Japanese knotweed in the EU countries considered here. Research undertaken during the course of this study suggests that in the various European countries investigated in this report, there is no obligation to reveal the presence of Japanese knotweed. The Consumer Protection from Unfair Trading Regulations 2008 were introduced to implement the Unfair Commercial Practices Directive (2005/29/EC). Whilst there are no court cases to date in the EU countries considered as a result of this Directive, it may be that estate agents who do not reveal the existence of Japanese knotweed may be liable to the buyer under the Directive. The agent's obligation is to inform prospective buyers of any material information that may affect their purchasing decision; this could be applicable to all EU countries as well as the UK, and the Directive could potentially be used more in the EU if Japanese knotweed spreads more widely.

## *In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?*

Information gleaned from consultation with the other countries considered by this study has revealed that lenders are mostly not concerned by Japanese knotweed in the context of property sales. A

response from a European mortgage industry body confirmed that member countries (representing 13 EU Member States) are not aware of problems with the Japanese knotweed in the context of property sales. In the Netherlands, a mortgage association indicated that their member banks do not have any policies regarding plants and buildings. Similarly, in Germany a respondent was not aware of any disclosure requirements for Japanese knotweed related to lending within the banking industry. However, in Canada, one consultee indicated that invasive species which might have an impact on property value, including Japanese knotweed, would be considered a transaction-specific risk. Therefore, on a case-by-case basis and in order to mitigate risk, the mortgage loan insurer might ask for a third party report from a qualified professional in order to confirm that the property is readily marketable with no known deficiencies, concerns or unique characteristics that have an impact on value at the present time or in the future.

Table 6-3 summarises the response to the study question: In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?

Table 6-3: Response to study question: lenders' approaches in other countries	
Study question	Summary of response
In other countries, what are the approaches taken by lenders to Japanese knotweed in the context of property sales?	In summary, responses indicate that Japanese knotweed is not an issue in the context of property sales in other countries. In the majority of countries considered in this review there is no obligation for a seller to report if a property is affected by knotweed. Lenders do not consider Japanese knotweed or other plants to be an issue when providing a mortgage on a property, and banks do not have any policies regarding plants and buildings with the exception of Canada. Whilst in Canada there are some anecdotal examples of property sales falling through due to the presence of Japanese knotweed, all those asked were unaware of changed approaches by lenders to properties with knotweed infestations

***Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?***

It is important to note that implementation of the Unfair Commercial Practices Directive (2005/29/EC) varies across the countries; in some countries considered in this study, property sellers have a duty to declare hidden defects in their property. However, in these countries it is not clear whether Japanese knotweed is considered a hidden defect<sup>51</sup>. For example, the presence of Japanese knotweed might be qualified as a visible or hidden defect depending on the visibility of it or its roots.

The approach taken varies by country as follows:

- **Australia:** engagement with stakeholders based in Tasmania and Victoria suggests that property sellers do not have to declare knotweed. However, landowners in Victoria are required to control Regionally Controlled or Regionally Prohibited noxious weeds. Where a property is being sold, a land management notice from Agriculture Victoria is included in the sale documents (but note that the state manages all infestations in Victoria);
- **Belgium:** engagement suggests that stakeholders do not have to declare if the property is affected by knotweed, but knotweed could qualify either as a visible defect or a hidden one. The seller cannot be held liable where the defect is visible at the time of sale. Sellers are generally not liable for hidden defects unless they are aware of them, but it is difficult for the buyer to prove this awareness. A Belgian lawyer respondent noted that the Commercial

<sup>51</sup> Where a defect is a factor that may affect a purchaser's decision.

Practices Directive (2005/29/EC) as applied in Belgium contains specific rules, with the notary being the most appropriate person to provide the buyer with essential information about real estate. According to the law, the presence of Japanese knotweed on a property is not seen as “essential information” to be provided by the notary. The respondent concluded that having knotweed would not normally lead to the termination of a sale contract. This suggests that knotweed is not necessarily seen as a material concern in Belgium;

- **Canada:** in British Colombia, property sellers have a duty as part of the Property Disclosure Statement to be forthcoming about invasive species, including Japanese knotweed. This requirement stems from the BC Weed Control Act, thus the situation is assumed to vary by province/territory;
- **Germany:** property sellers have a duty to declare defects such as moisture damage or infestations. One response from a German lawyer suggested that if not declared during a transaction, Japanese knotweed could potentially cause a legal dispute, since its infestation could be considered a hidden defect. This suggests that the presence of Japanese knotweed would be a ‘material concern’ under the Commercial Practices Directive in Germany, since if the knotweed were disclosed, the potential purchaser might make a different decision;
- **The Netherlands:** the seller has a duty to disclose any defects present when the sale is being concluded. The seller should therefore mention the presence of an invasive plant that is affecting normal usage of the property, or that has caused damage that is not visible. Whilst the seller is not liable for hidden defects under Article 6.1 of the NVM purchase contract, Article 6.3 of the same notes that the seller is liable for the repair of hidden defects which prevent the ordinary use of the property (Ploeger et al., 2005);
- **South Africa:** although Japanese knotweed is not known to be present, other invasive species such as Australian wattle must be declared during a property transaction;
- **Switzerland:** property owners do not have a duty to declare Japanese knotweed during sales, although it has to be declared as part of an application in the context of building projects; and
- **USA:** property owners do not currently have to disclose the presence of invasive species.

Thus, for most of the countries considered, there is no specific duty to declare Japanese knotweed in that sellers are not directly asked about knotweed as per the question in the TA6 form. However, in several countries, knotweed could be classed as a defect and so should be declared.

Table 6-4 summarises the response to the study question: Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants?

Table 6-4: Response to study question: the need to declare knotweed in other countries	
Study question	Summary of response
Do sellers in other countries have to declare if their property is affected by Japanese knotweed or other invasive plants	Internet research and consultation suggest that sellers do not have a duty to declare Japanese knotweed on their property in Australia, Switzerland and the USA. In South Africa, knotweed is not currently present but sellers must declare other invasive species. In Belgium, Germany and the Netherlands, sellers should declare any defects. However, there appear to be differences in terms of whether knotweed is classed as a defect (note that the term defect refers to anything that may affect a buyer’s decision, therefore goes beyond physical damage to a built structure). A respondent in Germany indicated that the property owner is liable to the buyer for hidden defects such as invasive plants that may require a soil replacement. In contrast, a respondent from Belgium commented that the presence of knotweed is not viewed as ‘essential information’ that should be provided by a notary to a potential buyer

## 6.2.3 Comparison between the UK and other countries

### *Comparisons between the UK and other countries considered by this study*

Distribution of Japanese knotweed varies across the countries considered by this study. The level of reported invasion for each country as described by four databases is shown in Table 6-5 below. Note that data is not available for every country in each database; for example, the European Alien Species Information Network (EASIN) only covers Europe. It should be noted that it is likely that the plant has spread further than can be deduced from the literature because of under reporting (CABI, 2019). Japanese knotweed is present in all countries considered by this study except South Africa. EASIN categorises the impact level of Japanese knotweed as ‘High’.

Notably, while these broad categories are useful to quantify the overall invasion stage, they do not accurately reflect the precise level of invasion at the national and/or regional scales and consequently, the response taken in each country. For example, while the UK, Canada and Germany are categorised as ‘Present, Widespread’ with respect to knotweed invasion, unique historic and contemporary environmental (e.g. climate and topography) and socioeconomic drivers (e.g. early industrialisation and later post war deindustrialisation) underpinned initial introduction, and accelerated further spread of invasive knotweeds throughout the UK. This context helps to explain why the UK is likely to contain more Japanese knotweed per unit area than other nations, though there are pronounced regional differences in distribution density. Current socioeconomic drivers also serve to explain why the UK continues to undertake localised remediation/eradication of Japanese knotweed in a property context, despite being advanced along the invasion curve (Figure 1.1); in other nations, the prohibitive costs of such operations would be difficult to justify and prioritise. In general terms, and following a balanced evaluation of the available anecdotal information at hand, it would be reasonable to state that the UK is more impacted than other nations by Japanese knotweed at the broad (national) scale: taking this into consideration, the range of legislation drafted in the UK can be viewed in context more clearly.

Table 6-5: Level of invasion of Japanese knotweed, by country				
Country	Data source			
	EASIN	CABI	Global Biodiversity Information Facility	Global Invasive Species Database
UK	Present	Present, Widespread	Present	Established
Australia	N/A	Present	Present	Established
Belgium	Present	Present, Widespread	Present	N/A
Canada	N/A	Present, Widespread	Present	Established
Germany	Present	Present, Widespread	Present	Established
Netherlands	Present	Present, Widespread	Present	N/A
South Africa	N/A	Not present	Absent	N/A
Switzerland	Present	Present	Present	N/A
USA	N/A	Present	Present	Established
Source: CABI (2019), EASIN (nd), GBIF (nd), GISD (nd)				
Note: N/A refers to data unavailable in this source				

As discussed in Section 1, preventing the introduction of invasive non-native species is more cost effective than implementing measures needed to tackle invasions. For invasive species which have already been introduced into an environment, control costs increase as invasion spreads. After their introduction, invasive alien species spread exponentially with decreasing feasibility of eradication and

increasing damaging effects and control costs (with the classification of soil containing knotweed as controlled waste being a key issue here). Non-native species are only likely to be eradicated in an early stage of detection, whilst in later stages, eradication is unlikely.

Therefore, implementation of legislation and measures to tackle invasive species at an early stage, or to prevent the introduction in the first place, is preferable.

Alongside legislative approaches, the existence and extent of non-legislative approaches to the management of Japanese knotweed can be used to indicate the level of priority afforded to Japanese knotweed in a country. As part of the data analysis for this study, a scoring system was developed to measure eight criteria relating to the response to Japanese knotweed across different countries. The scoring system was used to help consider the study question of whether the UK takes a disproportionate approach to Japanese knotweed in the buying process. Comparisons between the priority levels of different countries and the prevalence of knotweed enable a judgement to be made on the extent to which the approach is proportionate.

A summary of the results of the data analysis are shown in Table 6-6 below. The full results can be found in Annex 2 (Table A2-2). The results show that the UK affords the highest priority to Japanese knotweed in the context of property sales, in comparison to the eight other countries considered in this study. Currently, it would appear that there is more legislation regarding or linked to knotweed in the UK than in other countries. This could be influencing the RICS guidance and associated TA6 form, and also lenders' attitudes.

Table 6-6: Priority afforded to Japanese knotweed in the context of property sales			
Country	Score	Priority	Justification
UK	32	Very high	No other country takes a similar approach to Japanese knotweed in the context of property sales as the UK. This is predominantly due to the high persistence and impact on the native ecosystem followed by linguistic alarmism that affects all areas of the housing industry
Canada	13	Medium	The species is present in Canada and a listed weed in some provinces
USA	12	Medium	Japanese knotweed is a significant invasive species in the USA, however awareness is still low among the public, lenders and potential buyers. Some media coverage
Australia	11	Medium	The species is naturalised in a few states, although not widely distributed. Legislation exists at the jurisdictional level in some states
Netherlands	10	Medium	Increasingly guidance is being developed in the form of national protocol, but this is voluntary. There is no obligation to report if a property is affected by knotweed
Switzerland	10	Medium	Japanese knotweed infestation is comparatively low with ambitions to eradicate within the next 100 years. Legal requirements exist in the context of construction projects
Germany	9	Low	The species is present in Germany however there has been little governance or attention to control management. Some media coverage
Belgium	7	Low	Few management control measures, although some guidance on a regional level. Lenders do not consider Japanese knotweed to be an issue when providing a mortgage on a property



Table 6-6: Priority afforded to Japanese knotweed in the context of property sales			
Country	Score	Priority	Justification
South Africa	5	Low	South Africa has no occurrences of Japanese knotweed; however, the country's regulations on non-native invasive species are strict

***Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?***

The UK is the only country in which lender attitudes are affected by Japanese knotweed. Evidence gained from both research and consultation with stakeholders indicates that in other countries, banks do not have specific policies relating to Japanese knotweed and the species is not considered to be an issue when providing a mortgage on a property. The level of advice on the subject of Japanese knotweed that is provided to prospective house buyers or sellers is low and media coverage of the issue is only at a moderate level. This suggests that public awareness of Japanese knotweed in these countries is limited. Whilst contractors that manage and remove invasive species do exist in the countries considered in this study, there does not appear to have been the same proliferation of specialist Japanese knotweed companies that has occurred in the UK. These factors combined may prevent stigma from being created around the subject of Japanese knotweed during the buying process.

Stakeholder views of the proportionality of the UK's approach were varied. Whilst the UK approach to Japanese knotweed during the buying process is substantially different to the other countries considered, stakeholders consulted in Switzerland, Germany and the USA were of the opinion that the UK's approach to Japanese knotweed during property sales is not disproportionate to the threat posed by the plant. Conversely, stakeholders in the Netherlands and Canada were of the opinion that the situation has been somewhat exaggerated, and the threat caused by Japanese knotweed is not greater than the threat from many other plant species. In spite of this, the Netherlands look to the UK as an example of how to manage Japanese knotweed, since the country lacks specific legislation to deal with it, but the species is a growing cause for concern<sup>52</sup>.

When comparing the level of priority afforded to Japanese knotweed against knotweed distribution, it could be considered that the widespread distribution in the UK is in line with a stricter or more rigorous approach than for a country where knotweed is less prevalent. Hence, it could be argued that the UK is ahead of the rest of the world with management methods for knotweed in cases where it is necessary. In countries such as the USA, where Japanese knotweed was not utilised to such an extent in landscape plantings, the magnitude of the problems caused by the species is lower, therefore the approach to management is less stringent. In South Africa, a country without Japanese knotweed present, the emphasis is on preventative legislation, which is the most cost-effective approach to invasive species management. Therefore, determining the strengths and weaknesses of each approach is difficult, since the approach taken is relative to the situation in the country, and these approaches are not necessarily comparable.

Table 6-7 summarises the response to the study question: Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?

<sup>52</sup> Pers. comm.

Table 6-7: Response to study question: proportionality of approach in the UK	
Study question	Summary of response
Does the evidence from these other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?	The evidence collected for this study suggests that the UK approach to Japanese knotweed during the buying process fits the situation in the UK, and although there are aspects that could be improved, this does not necessarily make the approach disproportionate. Indeed, other countries, such as the Netherlands, look to the UK for best practice in terms of the management of Japanese knotweed. Consultation during the course of this study has suggested that consideration of Japanese knotweed during the property buying process may be a helpful measure in tackling invasive species, since the turnover of private property means that most properties will be captured periodically during transactions, enabling mitigation to be put in place

## 6.3 Suggested changes

### 6.3.1 Changes to the approach in the UK

#### *Limitations on changes*

This study has been tasked with considering three questions that have implications for the approach taken to Japanese knotweed during property sales in the UK:

- How could the approach be improved in the four UK administrations<sup>53</sup>?
- Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?
- Alternatively, should additional invasive plants be required to be declared, and if so, which ones?

At the inception meeting, it was acknowledged that there is existing case law, which would need to be considered if legislative changes were to be proposed. Thus, the study is restricting itself to making suggestions for changes that would not need alterations to legislation but could nonetheless improve the approach to knotweed in the UK. The following sections identify these suggested changes with consideration also given to the potential impacts.

#### *How could the approach be improved in the four UK administrations?*

Table 6-8 considers the approach taken in the UK against six evaluation criteria, namely:

- **Relevance:** does the current approach match the needs i.e. could resources be better targeted?
- **Effectiveness:** does it deal with Japanese knotweed as an invasive species?
- **Efficiency:** could other approaches be used? Are there any burdens that could be considered excessive?

<sup>53</sup> Note that in the study specifications, the full wording of this question is "If so, how could this approach be improved in the four UK administrations" and it follows on from the question "Does the evidence from other countries indicate that the UK takes a disproportionate approach to Japanese knotweed during the buying process?"

- **Coherence:** does the approach to Japanese knotweed in the context of property sales complement other initiatives taken against invasive species?
- **Impact:** what changes have occurred as a result of the current approach? Are there any unintended impacts?
- **Sustainability:** how far any benefits of the current approach are likely to continue in the longer term?

To consider potential improvements, the information gathered has been considered against criteria typically used in evaluation of policies, namely: relevance, effectiveness, efficiency, coherence, impact and sustainability. Potential changes have then been identified by looking at what could be improved under each of these criteria.

Table 6-8: Comparison of approach taken in the UK against six evaluation criteria		
Evaluation criteria	UK approach	Suggestions for change
Relevance	Evidence from this study suggests that capturing Japanese knotweed in the property buying process is relevant, since the turnover of private property means that most properties will be captured periodically, providing an opportunity for knotweed to be identified and managed appropriately at the point of transaction	<b>Accurate and clear risk communication within property sales discourse</b> is required (including ensuring the TA6 guidance notes are supplied to sellers and buyers during the conveyancing process). There should also be evidence-based, comprehensive and practical 'best practice' guidance for Japanese knotweed control, management and remediation to combat media alarmism. An objective risk assessment at the site inspection level should be promoted by government and appropriate bodies, with adequate training provided to those commissioned to undertake site surveys
Effectiveness	Evidence collected suggests that the distribution of Japanese knotweed in the UK is at such an extent that control methods are focused on long term management as opposed to eradication of the species. The UK legislative approach would appear effective for this purpose, in that it is not an offence to allow Japanese knotweed to grow on your land, although knotweed is defined as controlled waste and proper disposal procedures must be followed. (i.e. its presence is accepted but there is a legal requirement to ensure it does not spread)	Potential improvements to the process include standardisation of Japanese knotweed 'best practice' around evidence-based research. There should also be a change in language used by professionals to enable the <b>normalisation of knotweed as an environmental issue</b> rather than a social/property issue. This would still enable Japanese knotweed to be managed as an invasive species, but on the basis of its environmental impacts rather than its physical impacts on property
Efficiency	Excessive burden stems from the stigma surrounding Japanese knotweed in the UK, where beliefs about its effects are exaggerated, creating nervousness among buyers, sellers and lenders during the property buying process. This impacts the efficiency of the approach as parties become unduly risk-averse. The response has so far been reactive rather than proactive	<b>Public education and awareness raising campaigns</b> are needed to address the stigma of knotweed and reassure potential house buyers/sellers that the implementation of management plans for Japanese knotweed provides appropriate mitigation. This could, for example, follow the previous <i>Be Plant Wise</i> campaign model, which focused on awareness raising amongst gardeners who may unknowingly assist the spread of harmful plants by

Table 6-8: Comparison of approach taken in the UK against six evaluation criteria

Evaluation criteria	UK approach	Suggestions for change
		disposing of unwanted pond plants inappropriately. Such a campaign would help foster the necessary reassurance to both lenders and buyers to enable balanced and measured decisions to be taken in the context of property sales. Generally, a more proactive governmental approach to knotweed management will increase efficiency in dealing with the plant. Any approach needs to be applied universally, so everyone has the same understanding
Coherence	<p>Evidence from this study suggests that the approach to Japanese knotweed in the context of property sales is lacking coherence. Lenders base their policies on the risk categories presented in the RICS guidance, however there is a lack of consistency in lending.</p> <p>There is further incoherence with respect to control management. Individual residential property owners carry a disproportionate burden whereas commercial and development sites are not considered in the current approach (e.g. council owned land)</p>	<p>Potential improvements to the process include <b>reassessment of the risk categories presented in the RICS guidance</b> to provide clarity for lenders and enhance coherence in lending policy. A more coherent and holistic approach amongst a wider range of stakeholders would improve effective knotweed management</p>
Impact	<p>Evidence from this study indicates that although Japanese knotweed has caused problems in the property market because of concerns about its damaging effects, these concerns are often based on misunderstanding and overreactions to the extent of the damage that can be caused. Unintended impacts of the UK's approach include legal firms looking for business through targeting individuals who have purchased property and may be able to make a claim against their surveyor for not picking up that Japanese knotweed is present (as per the RICS guidance).</p> <p>Furthermore, it has been suggested by the Law Society that where estate agents do not reveal the presence of Japanese knotweed, they may be liable to the buyer under the Consumer Protection from Unfair Trading Regulations 2008 (which implement the Unfair Commercial Practices Directive (2005/29/EC))</p>	<p><b>Provision of consistent advice from professionals involved in the property sales process</b> (lenders, valuers, conveyancers, estate agents), to build awareness and discourage legal firms from playing on buyers' or sellers' fears about Japanese knotweed, instead promoting the resolution of disputes through mediation rather than litigation</p>

Table 6-8: Comparison of approach taken in the UK against six evaluation criteria		
Evaluation criteria	UK approach	Suggestions for change
Sustainability	<p>The current approach focuses primarily on private residential property owners. Even though long-term management of such properties is crucial, commercial sites and development land as well as other public spaces need to be considered as part of the management approach. If this does not occur, managed and remediated properties will be infested recurrently, resulting in short-term benefits instead of long-term sustainability.</p> <p>Furthermore, glyphosate-based herbicides are the only effective and sustainable tool for the management of established stands of Japanese knotweed in most circumstances. Herbicides allow effective in situ control at a range of spatial scales and, where necessary (e.g. in borders or hedges) can be applied using very precise methods i.e., stem injection. The possibility of an EU-level glyphosate ban will have significant negative implications for the sustainability of management of invasive knotweeds</p>	<p>To control the plant in the long-term, there is a need for an <b>evidence-based approach to invasive knotweed management</b> that is more holistic, achievable and sustainable. This approach should <b>involve a wider range of stakeholders with multi-neighbour agreements</b> to control, manage and remediate Japanese knotweed effectively. It could include ensuring that appropriately qualified and accredited contractors are sought for the control, management and remediation of knotweed</p>

***Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?***

Research and stakeholder consultation undertaken during the course of this study indicate that the question on the TA6 form is consistent with a long-term management approach to an invasive species, since it encourages the implementation of management plans for heavily infested plots, aimed at population suppression and facility/resource protection. Prior to the current approach, (i.e. declaration of Japanese knotweed in the property (TA6 form), which leads to a management plan and treatment to be arranged), people were buying properties having no idea that the property was affected by knotweed. Typically, properties were being sold in the winter months (so no active knotweed growth) with all surface growth removed by the vendors. Therefore, inclusion of a specific question on the TA6 form has made the issue more explicit. However, the linking of this issue to mortgage lending requirements has resulted in over-inflated risk perceptions, whereby the requirement for insurance-backed guarantees and treatments plans not only results in considerable expense to homeowners who want to sell their property, but further embeds stigma associated with issue. Lenders' attitudes are currently disproportionate to the physical risk posed by Japanese knotweed, and the media, and as a result the public, have a disproportionate fear of the problem. Valuers recognise all of this but must reflect public perception and the resulting impact on values, so, their response is not disproportionate. Consequently, lenders respond to valuers' concerns by adopting strict policies. As a result, the public are affected by lender policies and this influences their behaviour.

Lenders base their policies on valuation impacts, costs of remediation, general risk assessment and the risk categories presented in the RICS guidance. Valuers' assessments of Japanese knotweed rely on four risk assessment categories (categories 1-4). Where the Japanese knotweed infestation falls

into categories 3 and 4, further investigations are automatically required. In terms of a 'further investigation', this should be carried out by an appropriately qualified and/or experienced person who should carry out a detailed inspection and assessment of the property and provide a 'management plan'.

There is, however, a lack of consistency in the context of lending; where some lenders determine a category 2 infestation unacceptable, others will provide a mortgage on a category 3 infestation, demonstrating different attitudes to risk. However, it could be argued that category 2 (Japanese knotweed was not seen within the boundaries of this property, but it was seen on a neighbouring property or land within 7 metres of the boundary) is worse than category 3 (Although Japanese knotweed is present within the boundaries of the property, it is more than 7 metres from a habitable space), since it is outside of the boundary and therefore out of your control. As discussed in Table 6-8 above, potential improvements to the process include reassessment of the risk categories presented in the RICS guidance to provide clarity for lenders and enhance coherence in lending policy. Stakeholder consultation has revealed that a Working Group has been established by RICS to inform the new Guidance Note and a number of constructive suggestions have been made about how the Risk Criteria might be updated. No decisions have yet been made but it is acknowledged that the new criteria must continue to provide residential mortgage valuers with a straightforward and objective assessment process while reflecting the research findings and the needs of the residential property market. The following will be considered when deciding the new criteria but may not define the final process:

- It is recognised that the risk of physical damage to dwellings ought not be regarded as a major consideration, although damage to lightweight structures, paving and boundary walls, etc. is an issue;
- A distance measure is objective and helpful. Research suggests that 3 metres is a more justifiable distance than 7 metres;
- Simply amending the risk criteria by reducing the distance from 7m to 3m would be straightforward and of benefit but would represent a missed opportunity to more accurately align the criteria with the actual risk posed by Japanese knotweed as demonstrated by the recent research; and
- The impact of an infestation on the amenity use of a property can vary significantly and, if practicable, this ought to ideally form part of the risk assessment.

Stakeholder consultation indicates that the risk categories remain useful as they are; they fulfil the purpose for which they were designed, to establish clear criteria for quantifying (1 - 4) the scale of risk attached to one or other Japanese knotweed 'stand'. However, 7m has long been viewed as a worst-case scenario rather than a typical 'norm' (borne out in recent research involving data gathered by RICS surveyors and Property Care Association members) and it is therefore anticipated that future risk categories will reflect this understanding. The challenge is to make the new risk categories matrix simple to use whilst reflecting highly varied site circumstances encountered by valuation surveyors. The Property Care Association is, in parallel to the RICS project, developing a more sophisticated risk assessment tool but this would be targeted at specialist surveyors and involve detailed site investigations beyond the scope of a valuation.

Therefore, alongside reassessment of the RICS risk assessment categories, the UK approach may benefit from a change in language by professionals to enable the 'normalisation' of knotweed as an environmental issue rather than social/property issue; this would enable Japanese knotweed to still be managed as an invasive species, but on the basis of its environmental impacts rather than its



physical impacts on property. This would reflect the underlying driver for Japanese knotweed property issues being ecological legislation. Better quality information throughout the conveyancing process would serve to reduce risk, as risk would be better understood, could be quantified accurately and consequently could be better managed and accounted for. This would allow potential owners to consider knotweed in terms of how it might affect their future plans for the property and what the likely costs of remediation might be. It should, however, be noted that stakeholder consultation also suggested that media alarmism serves a purpose of keeping the issue in the spotlight, otherwise the environmental impact of Japanese knotweed would likely worsen.

Table 6-9 summarises the response to the study questions: How could the approach be improved in the four UK administrations? and: Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?

Table 6-9: Response to study question: improving the approach in the UK	
Study question	Summary of response
<p>How could the approach be improved in the four UK administrations?</p> <p>Should the question on property information form TA6 regarding whether the seller's property is affected by Japanese knotweed and whether they have a management plan in place be removed?</p>	<p>Our research suggests that there needs to be evidence-based government guidance on the issue, particularly with respect to 'best practice'. There remains confusion around Japanese knotweed control, management and remediation measures in government, statutory bodies, infrastructure providers and contractors. While some of the confusion leads to the application of less effective and/or sustainable treatment methods, in other cases, current practice leads to further spread and/or the application of illegal herbicides and/or illegal disposal. Therefore, the UK approach could be improved through a combination of improved public awareness (via education and information campaigns), accurate and clear risk communication within property sales discourse to combat media alarmism, a change in language, reassessment of RICS risk criteria and provision of consistent professional advice to re-frame Japanese knotweed as a mitigatable environmental issue, rather than a property or social issue.</p> <p>Evidence gathered as part of this study suggests that the question on Japanese knotweed should not be removed from property information form TA6 since it is consistent with a long-term management approach to invasive species, and fitting for the extent of Japanese knotweed invasion in England and Wales. There is a link between the question on the TA6 form and the policies of lenders as informed by the advice of the surveyors and valuers upon whom they rely, which is now reinforced by case law as well as the statutory framework. The TA6 question was the result of policies adopted by lending institutions and the continued use of the question is due to current lending policies as reinforced by existing and emerging case law, which in turn informs the guidance provided by surveyors and valuers to lending institutions and expert evidence given in court proceedings on matters relating to Japanese knotweed</p>

***Alternatively, should additional invasive plants be required to be declared, and if so, which ones?***

Consultation and research have indicated several plants of concern in other countries. In South Africa, the presence of invasive species such as Australian wattle, eucalyptus (gums) and pine have resulted in many legal cases in the context of property sales. In the United States, milfoil and running bamboo (e.g. *Phyllostachys* spp.) also affect property values. This study has also considered additional native and non-native species in the UK which may be of concern due to their potential to cause damage to structures. Whilst there is potential for tree species such as oak, willow, poplar, lime and pine to cause subsidence interference to property, notable trees are already included in the surveying process as detailed in RICS guidance. One stakeholder was of the opinion that Buddleia should be afforded the same level of concern, since it has been shown to be far more destructive than Japanese knotweed. However, there is no quantitative evidence for this argument.

Table 6-10 summarises the response to the study question: Should additional invasive plants be required to be declared, and if so, which ones?

Table 6-10: Response to study question: addition of other invasive species	
Study question	Summary of response
Alternatively, should additional invasive plants be required to be declared, and if so, which ones?	Research undertaken as part of this study has not indicated any additional invasive plants which should be declared, although some species were identified as damaging (e.g. Buddleia) and potentially problematic (e.g. Giant hogweed). Other than Buddleia, Giant hogweed has the greatest potential for civil litigation claims going forwards. Tree species which have the potential to cause structural damage to property, such as large trees, are already noted by surveyors in the UK approach to property transactions and additional declaration requirements would be considered an excessive burden

***Potential impacts of the proposed changes***

Table 6-11 summarises the potential economic, environmental and social impacts of the main suggested changes put forward in this report.

**Table 6-11: Potential economic, environmental and social impacts of suggested changes**

Suggestion for change	Potential impacts		
	Economic	Environmental	Social
Accurate (evidence-based), timely and clear risk communication within property sales discourse to combat media alarmism	Greater certainty and less risk within the conveyancing process, leading to lower reductions in property value and fewer property sales that fall through	Appropriate evidence-based control, management and remediation before, during and after property transactions will reduce knotweed's negative impact on property and the wider environment	Reduces stigma associated with buying property affected by knotweed
Normalisation of knotweed as an issue, with a greater focus on the proven environmental issues it causes (since environmental legislation is the underlying driver for property issues). This could include changes in the use of language around knotweed	Focusing on environmental issues could encourage collective management of knotweed with costs distributed proportionately amongst all stakeholders (e.g. multi-stakeholder management plans)	Raising the profile of knotweed as an invasive species rather than a property specific issue could have benefits for wider invasive species management as people learn more about invasives and the need to avoid planting and spreading them	Normalising knotweed could provide reassurance to potential house buyers/sellers that knotweed is primarily an environmental issue but can be managed in the context of property
Awareness raising including public information campaigns	£ required for campaign	Raises awareness of invasive species more generally	Reduces stigma associated with buying property affected by knotweed
Reassessment of RICS risk categories for Japanese knotweed <sup>54</sup>	£ required to update guidance; Time/effort for surveyors to become familiar with the new guidance; Improved clarity for lenders with regard to lending policy (potentially resulting in greater coherence across the sector)	No significant environmental impacts expected	Improved coherence in lending policy could result in decreased stress/worry for potential buyers who are considering properties affected by Japanese knotweed
Provision of consistent, evidence-based advice from government and professionals involved in the property sales process to build awareness and promote the resolution of disputes through mediation rather than litigation	Sizeable industry is built around Japanese knotweed litigation	Consistently effective and sustainable invasive knotweed control and net biodiversity gain in the wider environment	Decreased illegal activities to hide knotweed infestation

<sup>54</sup> Note that this is already underway

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## Annex 1 Lending Policies at Banks and Building Societies

Table A1-1 provides an overview of the current lending policies of banks and building societies where properties are affected by Japanese knotweed (with information extracted from Which (2019)).

Table A1-1: Current Japanese knotweed lending policies at banks and building societies (extracted from Which, 2019)		
Lender	Current policy on lending if Japanese knotweed is identified	Will it update its lending policy?
Bath Building Society	Lending decisions at Bath Building Society could be affected if Japanese knotweed is found within seven metres of the property. At this point, a specialist report is requested and if an eradication plan is recommended, the Society will proceed with the application once proof has been given that a Property Care Association (PCA) contractor is conducting the programme	Bath Building Society reviews lending policy according to RICS guidance
Coventry Building Society	We use the RICS Japanese knotweed categories. Under these, it is acceptable when the valuer identifies that the category level is 1 or 2: The application will be declined when the valuer has noted the presence of Japanese knotweed in category 3 or 4	It is entirely dependent upon its content, it's not possible to say we would or wouldn't change the policy without seeing the update - we would however review any updates in conjunction with our panel valuers to ensure our policy was reflective of current research/evidence/market practice
Furness Building Society	We base our ability to lend on these cases purely on valuers' comments	Did not answer this question explicitly
Hinckley & Rugby Building Society	We've had no recent experience of lending on properties afflicted by Japanese knotweed, but we would always rely on the valuer's opinion if we encountered knotweed	Even if this opinion was positively influenced by legislative changes we would still ultimately accept the opinion of the valuer
HSBC / First Direct	Current HSBC policy classifies any Japanese knotweed noted closer than seven metres to the property as unacceptable security. We may consider properties for mortgage where Japanese knotweed is present under certain policy circumstances subject to provision of an insurance backed treatment plan by an appropriately qualified person or company, being an accredited member of an industry recognised trade association, which must have commenced and been paid for in full. An assignable ten-year guarantee must be also provided upon completion, as the risk is that without the full treatment the infestation is likely to reappear. The key factors in whether we will proceed to lend are the distance of the infestation to the mortgaged property, whether any serious damage has been caused as a result and at what stage the treatment is	We will consider all relevant guidance on Japanese knotweed when reviewing our policy, but we rigorously maintain our core lending principles of ready saleability and mortgageability



Table A1-1: Current Japanese knotweed lending policies at banks and building societies (extracted from Which, 2019)		
Lender	Current policy on lending if Japanese knotweed is identified	Will it update its lending policy?
Leeds Building Society	We instruct independent valuers to advise on all property evaluations. Lending decisions on properties with signs of Japanese knotweed will be determined on a case-by-case basis	We keep our lending criteria under constant review and would consider the impact of any changes to the RICS 2012 framework
Lloyds Bank/ Halifax/ Ulster Bank	Our lending decisions are made subject to the valuer confirming the property as suitable to lend on. To inform that decision, the valuer will require a specialist report outlining the issues and remediation costs. The knotweed may impact the valuer's assessment of the property and therefore amount that will be lent. If Japanese knotweed is seen as a structural threat to the property, the lending decision would be declined	We follow best practice advice from RICS as the professional standard setters for valuing properties. If any updates were made to its 2012 framework, we would review any impacts this could have on our lending policy
Metro Bank	We do not as standard lend on properties which are affected by Japanese knotweed, nor where Japanese knotweed is within seven metres of the property, however we may consider cases on an exceptions basis based on our professional valuer's advice. If we do decide to lend, then this would typically be on our standard terms, however we make ask for assurances that an appropriate warranty backed treatment plan is in place	When our policy was developed, it was intended to align to industry best practice. We are aware of the current debate, we're working with our surveying partners to determine if our stance is still appropriate, and we will also review the Science and Technology Committee's findings as part of this. We would also review any updates that RICS might make to its 2012 framework as part of this
Nationwide	Our policy on Japanese knotweed depends on how far the plant is from the property. If it is less than seven metres away from the property, we would request a specialist report about eradicating it before deciding whether we could lend. If the plant is more than seven metres away, we would need written confirmation from the borrower that they want to proceed with their mortgage application despite the presence of the plant	Our policy is aligned to RICS and if they were to update their guidance/framework we would definitely complete a review of our policy
Newcastle Building Society	The category and comments from the valuer would impact our lending decision. If the Japanese knotweed falls into categories 3 or 4 further investigation is required. This is to be undertaken by a Property Care Association registered firm. All recommended remedial works must be undertaken and covered by an insurance backed guarantee. The guarantee must be for a minimum of 10 years, be property specific and transferable to subsequent owners and mortgagees in possession. There is likely to still be some impact on the value of the property with the Japanese knotweed being treated due to public perception, market and lender attitude to the problem	If RICS did change framework then we would work in conjunction with our valuation risk partners before making a decision

**Table A1-1: Current Japanese knotweed lending policies at banks and building societies (extracted from Which, 2019)**

Lender	Current policy on lending if Japanese knotweed is identified	Will it update its lending policy?
Post Office / Bank of Ireland	If Japanese knotweed is identified, its presence is reported by the valuer acting on behalf of the Bank in line with current RICS guidance. If the Japanese knotweed is deemed to be at less than a safe distance from the property, the Bank will ask for evidence that treatment has been completed or that a first treatment has been carried out and there is a plan in place for future treatment. Such treatment must comply with current environmental legislation. Given the presence of knotweed, we also consider the valuer's advice in relation to the marketability of the property. We expect our valuers to follow the most current RICS guidelines	We expect our valuers to follow the most current RICS guidelines
Royal Bank of Scotland (RBS)	Where an environmental issue, such as knotweed, is identified, the case will be assessed on its merits taking into account such factors as marketability, mortgageability and insurability. Underwriters must follow the valuer guidance and progress the application with this in mind	We would expect our valuer to follow the most up to date guidance from the RICS, and act on their recommendation
Santander	Santander does not decline properties for a mortgage where Japanese knotweed is found. At the moment, in line with current guidance, when a valuer identifies the presence of Japanese knotweed at a property, we require it to be assessed by a specialist, such as a member of the Property Care Association or similar body. Currently, if the Japanese knotweed is found within seven metres of the property, we require the invasive weed to be removed by a specialist who is able to provide an insurance backed guarantee for their work	Our policy is based upon the RICS guidance and we keep this under review with them and our own secured lending and risk teams as new thinking and information on Japanese knotweed, and the affect it can have on a property, emerges
The Cambridge Building Society	Due to the invasive nature and damage Japanese knotweed can inflict on a property we will not lend if it is present on the property or in close proximity. On a case-by-case basis we would look for assurances through specialists in this area to advise on whether Japanese knotweed in 'close proximity' would negatively affect or damage our customers' property prior to committing to lending	If RICS were to update their framework we would certainly review our policies in accordance with any updates
The Loughborough Building Society	The RICS Information Paper has informed our policy and there are 4 categories of Japanese knotweed, in the case of 3 & 4 (within boundaries of the property) we would require a specialist report, treatment plan by a member of the Property Care Association and a guarantee of works undertaken (these would be subject to a full retention). However, in all cases we rely on the judgment of the valuer and for categories 1 & 2 (present on a neighbouring property) if it is seen to present a significant threat to the property we would decline as suitable mortgage security	We would discuss with and take advice from our Valuation Panel Manager

Table A1-1: Current Japanese knotweed lending policies at banks and building societies (extracted from Which, 2019)		
Lender	Current policy on lending if Japanese knotweed is identified	Will it update its lending policy?
TSB	TSB will lend in cases of Japanese knotweed but subject to certain restrictions around putting an approved eradication programme in place. Category 1 - no action is required unless recommended by the valuer. Category 2 – case to be reviewed on individual merits following valuer advice. Category 3 or 4 - a full report and detailed treatment plan must be undertaken by an appropriately qualified expert. When treatment is required it must be carried out by a member of the Property Care Association or Invasive Non-Native Specialists Association (INNSA) and backed by a minimum 10-year insurance guarantee. The guarantee must be property specific and transferable to subsequent owners and mortgagee in possession. The valuer will not provide a present condition value until phase 1 of the remediation programme has been completed satisfactorily and in full. If the presence of Japanese knotweed on the property or neighbouring land (e.g. very close to the boundary) is such that it presents such a risk then the property should be declined as unsuitable mortgage security by the valuer. Insurance must be available for the property on standard terms	We would consider all guidance provided from the RICS and look to adopt these as best practice
Yorkshire Building Society	Depending on the severity of growth of the weed and its proximity to the property, we might ask for a specialist report, and in some cases we might not lend. We'd always recommend that if borrowers affected by the weed have work done to treat the infestation, that they secure some form of insurance-backed warranty or guarantee	We continually review our policies to make sure they're meeting our customers' needs and are in line with current guidance from professional bodies, our regulators and the Government
Extracted from: Which (2019): Are mortgage lenders 'overly cautious' about properties with Japanese knotweed? Accessed at: <a href="https://www.which.co.uk/news/2019/05/are-mortgage-lenders-overly-cautious-about-properties-with-japanese-knotweed/">https://www.which.co.uk/news/2019/05/are-mortgage-lenders-overly-cautious-about-properties-with-japanese-knotweed/</a> on 8 <sup>th</sup> January 2020		

## Annex 2 Criteria Used to Assess the Level of Priority Afforded to Japanese Knotweed

Table A2-1 provides a breakdown of the criteria used to assess the level of priority afforded to Japanese knotweed in the different countries considered by this study. It includes the definitions for the different scores for each criterion. Table A2-2 then provides the detailed results from the analysis.

Table A2-1: List of criteria used to assess level of priority afforded to Japanese knotweed in the context of property sales						
Criteria	Description	Rating / Value				
		None	Low	Moderate	High	Very high
		0	1	2	3	4
<b>Legislation</b>	Presence and type of legislation	No legislation	No legislation, but some guidance documents	Invasive species legislation, but Japanese knotweed is not named specifically	Japanese knotweed-specific legislation at regional level e.g. state prohibited weed	Japanese knotweed-specific legislation at national level e.g. Wildlife and Countryside Act 1981
<b>Control method</b>	Type of control method	No control	Informal control methods only	Formal control methods, but no specific guidance	Formal control methods, with guidance provided for management	Formal control methods. Specialist contractor and/or guarantee required; specialist licence required for control/removal
<b>Owner perspective</b>	Extent to which Japanese knotweed is perceived as problematic by owners purchasing property	Not considered a problem	May be low level of stigma but not enough to impact property value or ability to sell	Presence of Japanese knotweed may result in some impact on property value and or ability to sell. Some stigma. Costs of management are moderate	Significant level of stigma. Costs of management to mitigate this are high. Impacts on house value and ability to sell are high but not insurmountable	Very problematic. Significantly impacts ability to sell and property value. High level of stigma. Very high costs of management, so much so it may not be possible to mitigate

**Table A2-1: List of criteria used to assess level of priority afforded to Japanese knotweed in the context of property sales**

Criteria	Description	Rating / Value				
		None	Low	Moderate	High	Very high
		0	1	2	3	4
<b>Lender perspective</b>	Extent to which Japanese knotweed is perceived as problematic by lenders in the context of property sales	Not problematic, no mention made	Will lend without condition	Yes, with conditions	Yes, by exception	Very problematic. Will not lend if Japanese knotweed present
<b>Management plans</b>	Type and extent of management plans	No management plans in place	May be a low level of informal management, but no specific plan in place	Local management plan(s) in place	Regional management plan(s) in place	National management plan in place
<b>Media coverage</b>	Type and extent of media coverage of issue in relation to property sales	No coverage	Low level of coverage but no mention of context of property sales	Moderate level of coverage e.g. regionally; with mention of properties, gardens, etc.	High level of coverage in media with mention of property sales	High level of coverage in national media; Japanese knotweed in the context of properties sales portrayed as very problematic
<b>House sale website advice</b>	Type and extent of advice to prospective buyers/sellers	No advice	Low level of advice for invasive species, Japanese knotweed not mentioned specifically	Moderate level of advice on Japanese knotweed provided	High level of advice, specific to Japanese knotweed; not portrayed as a 'deal breaker'	Detailed level of advice; specialist information regarding Japanese knotweed; portrayed as a 'deal breaker'

Table A2-1: List of criteria used to assess level of priority afforded to Japanese knotweed in the context of property sales						
Criteria	Description	Rating / Value				
		None	Low	Moderate	High	Very high
		0	1	2	3	4
<b>Invasive removal companies prevalent</b>	Extent of invasive removal companies	Companies not prevalent	May be a small number of removal companies, but Japanese knotweed is not mentioned specifically	Specialist removal companies are present, but only for commercial/ construction clients	Specialist companies exist for residential and commercial properties	Specialist companies prevalent for residential and commercial properties. Existence of guarantees and certificates. Trade association codes of practice widespread

Table A2-2: Results of data analysis

Country	Legislation	Control method	Owner perspective	Lender perspective	Management plans	Media coverage	House sale advice	Removal companies	TOTAL	Justification
<b>UK</b>	4	4	4	4	4	4	4	4	<b>32</b>	No other country takes a similar approach to Japanese knotweed in the context of property sales. This is predominantly due to the high persistence and impact on the native ecosystem followed by linguistic alarmism that affects all areas of the housing industry
<b>Australia</b>	3	3	0	0	2	1	1	1	<b>11</b>	Japanese knotweed is naturalised in a few states; however, it is generally not widely distributed. Legislation is in place on jurisdictional level in some states to eradicate the plant and prevent distribution as well as introduction
<b>Belgium</b>	1	2	1	0	1	1	1	0	<b>7</b>	Japanese knotweed is present in Belgium, however there has been little governance and attention to control management. Increasingly, in-/formal guidance is being implemented. Lenders do not consider Japanese knotweed to be an issue when providing a mortgage on a property
<b>Canada</b>	3	3	2	0	2	1	1	1	<b>13</b>	Japanese knotweed is present in Canada. However, awareness is still low amongst the public, lenders and potential property buyers
<b>Germany</b>	2	1	1	0	1	2	1	1	<b>9</b>	Japanese knotweed is present in Germany, however there has been little governance and attention to control management
<b>Netherlands</b>	2	2	1	0	1	2	1	1	<b>10</b>	Japanese knotweed is present in the Netherlands, however there has been little governance and attention to control management. There is no obligation to report if a property is affected by knotweed. Increasingly, in-/formal guidance is being implemented, although this is voluntary. Some media attention during summer
<b>South Africa</b>	3	0	0	0	0	0	1	1	<b>5</b>	Japanese knotweed is currently not known to be present in South Africa, hence why it scores low in many categories. However, invasive species are a significant problem, therefore the focus is not on knotweed but on invaders such as Australian wattle, eucalyptus and pine
<b>Switzerland</b>	2	2	1	0	2	1	1	1	<b>10</b>	Switzerland's knotweed infestation is comparatively low and, in most parts, managed in such a way that it will be eradicated within the next 100 years
<b>USA</b>	3	2	2	0	1	2	1	1	<b>12</b>	Japanese knotweed is a significant invasive species in the US. However, awareness is still low amongst the public, lenders and potential property buyers

Source: study team's interpretation of data



# Annex 3 International Instruments that Address Invasive Alien Species (IAS)

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## Key international instruments

UK signatory (current status)

(Stokes et al. 2004; Turner 2008)

### Biodiversity conservation

- IUCN Guidelines for the Prevention of Biodiversity Loss caused by Alien Invasive Species (2000)
- Convention on Biological Diversity 1993 (CBD 1993)
- Ministerial Conference for the Protection of Forest in Europe (1993)
- Agenda 21 (1992)
- Bonn Convention on the Conservation of Migratory Species of Wild Animals (1983)
- Bern Convention on Conservation of European Wildlife and Natural Habitats (1982)
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention) (1975)

### Aquatic environment

- International Maritime Organisation (IMO) Guidelines for the Control and Management of Ships' Ballast Water to Minimise the Transfer of Harmful Aquatic Organisms and Pathogens (1997)
- International Council for Exploration of the Sea (ICES) Code of Practice on the Introductions and Transfers of Marine Organisms (1994)
- United Nations Convention on the Law of the Sea (UNCLOS) (1994)

### Phytosanitary measures

- Food and Agriculture Organisation (FAO) Code for the Import and Release of Exotic Biological Control Agents (1996)
- Food and Agriculture Organisation (FAO) Code of Conduct for Responsible Fisheries (1995)
- International Plant Protection Convention (IPPC) (1951)

### Trade-related agreements

- WTO Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) (1995)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (1975)

### Transport

- International Civil Aviation Organisation (ICAO) Resolution on Preventing the Introduction of Invasive Alien Species (1998)

## Key European instruments

UK signatory (current status)

(Stokes et al. 2004; Turner 2008; Hillocks 2012, 2013)

### Invasive Alien Species (IAS)

- Regulation 1143/2014 on Invasive Alien Species
- The Wildlife Trade Regulation (338/97/EC)
- Habitats Directive (92/43/EEC)
- Wild Birds Directive (79/409/EEC)
- Directive on Locally Absent Aquatic Species (708/2007)

### Relevant:

- Pesticide Authorisation Directive (PAD) 91/414/EEC
- Sustainable use of pesticides Directive 2009/128/EC
- The Environmental Liability Directive (ELD) 2004/35/EC
- The Environmental Impact Assessment Directive (EIA) 85/337/EEC (as amended)
- The Strategic Assessment Directive (SEA) 2001/42/EC
- The Water Framework Directive (WFD) 2000/60/EC



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