

CONSULTATION

Response Document



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Japanese knotweed and the built environment (Science and Technology Committee)

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Introduction to CIEEM

The Chartered Institute of Ecology and Environmental Management (CIEEM), as the leading membership organisation supporting professional ecologists and environmental managers in the United Kingdom and Ireland, welcomes the opportunity to comment on this consultation.

CIEEM was established in 1991 and has over 5,000 members drawn from local authorities, government agencies, industry, environmental consultancy, teaching/research, and voluntary environmental organisations. The Chartered Institute has led the way in defining and raising the standards of ecological and environmental management practice with regard to biodiversity protection and enhancement. It promotes knowledge-sharing through events and publications, skills development through its comprehensive training and development programme, and best practice through the dissemination of technical guidance for the profession and related disciplines.

CIEEM is a member of:

- Environmental Policy Forum
- Greener UK¹
- IUCN – The World Conservation Union
- Professional Associations Research Network
- Society for the Environment
- United Nations Decade on Biodiversity 2011-2020 Network

¹ Supporter Member

Comments from CIEEM

CIEEM Response

CIEEM is pleased to comment on this inquiry into Japanese knotweed and the built environment. In addition to our comments below, we note that the management of Japanese knotweed requires a multi-disciplinary approach including ecology, waste management (as a controlled waste), development/construction, property management, local authorities and others.

CIEEM believes that there are several significant gaps at present in the management of Japanese knotweed and the built environment:

1. There is currently no recognised risk assessment for sites (e.g. domestic properties, development sites, sections of infrastructure such as rail and road network). This increases the likelihood that a consultant assessing a built structure will be risk-averse and advise excavation etc. although, in some cases, a risk assessment could actually conclude that no action is necessary. This is one of the most important issues to be addressed.
2. Fuelled by inaccurate videos, photos and articles, the perception that Japanese knotweed can drill through brick and concrete is widespread. Japanese knotweed can exploit cracks in built structures, however there is little scientific evidence of structural damage caused by knotweed. Property owners and occupiers, mortgage lenders, consultants and other professionals are often risk-adverse, with the result that this inaccurate perception can be used to de-value properties, which causes stress, delays and costs to both the property buyer and seller. The problem caused by knotweed is largely a perceived problem caused by misinformation and fear.
3. The interpretation of the law in relation to 'plant or otherwise cause Knotweed to grow in the wild' has never been tested in the courts. It is generally thought that private land, and in particular gardens, does not come within the definition of 'wild'. The Environment Agency Knotweed Code of Practice states that "It is not an offence to have Knotweed on your land and it is not a notifiable weed". These interlinked issues require revision to ensure that they are compatible. In addition, *Guidance on section 14 of the Wildlife and Countryside Act, 1981*² is extremely pragmatic and useful but not widely known – it should be revised and reissued.
4. Consultant ecologists provide advice on dealing with Japanese knotweed, and their clients (i.e. UK business and industry) have spent – and continue to spend – millions of pounds on its control despite there having been no studies to determine if all of this effort has reduced the infestation nationally, regionally or locally. We suspect that the effort to control Japanese knotweed will not have reduced its distribution as control methods are for local sites, and are not designed for large-scale control. There have also been no studies to identify what can be learned as to how we could achieve more effective and sustainable control especially within the urban environment.
5. Cases have been identified where herbicide control appears to have killed the treated Japanese knotweed but in fact has put the rhizome into a dormant condition such that should suitable conditions arise in the future (e.g. soil disturbance), the rhizome would be triggered to regenerate (Rennocks, 2007; Seal, 2012; Jones *et al.* 2018). Should these experiential observations be correct, this situation creates the potential for significant issues in the future for the urban environment. There is a need to ascertain if herbicide dormancy is a reality and, if so,

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69205/wildlife-countryside-act.pdf

what is the frequency of such a response and what are the conditions which encourage it to happen and what are the conditions which stimulate regeneration.

6. Misidentification of Japanese knotweed is a concern. Plants that are misidentified as knotweed include horsetail, buddleia, bindweed, bear's breeches, periwinkle, tutsan/St John's Wort, pheasant berry and Himalayan balsam. If Japanese knotweed is not identified but is present this can cause issues in the future for property owners/managers and risks spreading the plant unintentionally. Conversely, falsely identifying Japanese knotweed as present when it is not creates an unnecessary burden on property owners/managers.

CIEEM would be very happy to explain further why these issues are so critical to the management of Japanese knotweed in the built environment.

Responses to Inquiry Questions

Q 1. What scientific evidence exists on the effects of Japanese Knotweed on the built environment

1. The recent research into the capacity of Japanese knotweed to cause structural damage and typical rhizome extension (Fennell, et al. 2018) identified that Japanese knotweed does not cause structural damage in excess of that caused by other plants, and indeed causes less than many woody trees. This calls into question the relevance of selectively highlighting Japanese knotweed as a risk to buildings on mortgage applications. Further research is planned to assess regenerative capacity of knotweed organs in the form of a MSc (underway) and a PhD project at the University of Leeds.

2. A review undertaken by CIEEM of the information on Japanese knotweed provided by the National House-Building Council reveals that the house construction industry has been of this view since at least the late 1990s. In its Standards Extra Issue 14 (March 1997), the NHBC drew attention to Japanese knotweed and the perceived risks associated with it, describing a plant which "can grow through walls, tarmac and concrete where joints or porous sections occur. It is even possible that the plant may grow under suspended floors and perhaps encourage dampness into the dwelling". Through this short article the NHBC sought "to establish just how aggressive the plant is and what damage it could do to a new dwelling. If you have had problems caused by this plant the [NHBC] would be interested to hear from you". Standards Extra 15 (October 1997) included a follow up note which reported that "there had been about fifty experiences of this weed [Japanese Knotweed] on sites. Although it can be found almost anywhere in the UK, the damage it can do appears to be superficial, such as growing through macadam or cracks in concrete and masonry. The survey confirms NHBC's experience that the weed does not appear to physically damage buildings. However, the plant should not be ignored. Remember that it is extremely robust and difficult to eradicate." A search of Standards Extra issues number 1 and 8 onwards to 2011 when it became Technical Extra has identified that Japanese knotweed was referred to once in Standards Extra (Issue 40 in 2007) which actually draws attention to field horsetail (or mare's tail (*Equisetum arvense*)), comparing it to Japanese knotweed, and once in Technical Extra. The latter (Issue 2 in 2011) draws attention to changes to NHBC's Technical Guidance 1.0/02 Japanese Knotweed which had been updated to reflect the latest Environment Agency guidance in its Knotweed Code of Practice (Environment Agency, 2006).

Q 2. How does the presence of Japanese Knotweed in the UK affect mortgage lending decisions and property valuations?

1. The presence of Japanese knotweed has an effect on the attitude to those purchasing property and on the lender's attitude to mortgages secured on land and property contaminated by it. At the

very least we see that Japanese knotweed is a consideration by lenders if the plant is discovered during the course of a survey associated with condition reporting or valuation. It is apparent that a property whether it be residential or a plot available for development, with Japanese knotweed would be considered to be worth less than the same property where Japanese knotweed is absent.

Q 3. Are mortgage lending decisions relating to the presence of Japanese Knotweed currently based on sound scientific evidence of its effects on the built environment?

1. Condition, location and availability may all affect value as might the presence of Japanese knotweed along with other condition-related matters. The Royal Institution of Chartered Surveyors’ risk assessment is the only recognised tool for determining risk and this is not based on scientific evidence. RICS may well modify the Information paper in the light of the recent research (Fennell *et al.*, 2018).

2. The implications of treatment, waste disposal and the risk of civil or criminal prosecutions are considerations for those assessing the risk of Japanese knotweed on a property. This includes consultant ecologists and surveyors. Though not scientific, these principles are based on the biology and physiology of the plant as well as the financial implications of its presence.

Q 4a. What guidance for the sector currently exists?

Published guidelines

Table 1. Summary of provision of guidance in England and Wales for dealing with Japanese knotweed

Title	Source/authors	Year published/ released	Comments
Guidelines for the control of Japanese Knotweed	Welsh Development Agency	1991	
The Control of Japanese Knotweed in construction and landscape contracts: Model Specification	Welsh Development Agency	1998	
The Eradication of Japanese Knotweed: Model Tender Document	Welsh Development Agency	1998	
The Japanese Knotweed Manual	Child, L.E. and Wade, P.M.	2000	First comprehensive guidance to be published in the UK
The Environment Agency Code of Practice for the Management, Destruction and Disposal of Japanese Knotweed. Version 1	Renals, T. and Rene, P.	2001	
Information Sheet	Centre for Ecology & Hydrol-	2004	Two pages focussing on man-

5: Japanese knotweed	ogy (CEH)		agement options
Japanese Knotweed Guidance for Identification & Control	Cornwall Knotweed Forum and Devon knotweed Forum	undated	A useful and very well illustrated nine page booklet
Japanese knotweed - <i>Fallopia japonica</i> .	Angling Trust	undated	A three page summary of key facts
Guidance for the Control of Invasive Weeds in or near Fresh Water	Environment Agency	2006 (revised 2010)	Just two pages for Japanese knotweed (fact file and control) – no longer available
The Knotweed Code of Practice - Managing Japanese knotweed on Development Sites	Environment Agency	2006	Comprehensive guidance for developers, contractors, and property/land owners on how best to manage Japanese knotweed
Japanese Knotweed and Residential Property. RICS Information Paper 27/2012	Royal Institution of Chartered Surveyors	2012	Essentially an assessment for risk of damage to buildings
Code of Practice for the Management of Japanese Knotweed	Property Care Association	2013	Draws on expertise of contractor members to further the guidance given by the EA and provide a standard of best practice within the industry. Freely available.
Addendum to The Knotweed Code of Practice	Environment Agency	2013	An update of key changes
Invasive Species Compendium: <i>Fallopia japonica</i> (Japanese knotweed)	CABI	Last updated November 2018	Provides detailed coverage of invasive species threatening livelihoods and the environment worldwide
The Knotweed Code of Practice	Environment Agency	2016	EA took The Knotweed Code of Practice down from its website though it has remained available, e.g. on the GB Non-native Species Secretariat's web site
Guidance: Prevent harmful weeds and invasive non-native plants spreading		Last updated 30 March 2016	How to identify, control and dispose of plants that can harm livestock and the environment. For more detailed information on non-native species it refers to the Non-Natives Species Secretariat website. Applies to England and Wales

Guidance: Prevent Japanese knotweed from spreading	Environment Agency	2016	How to identify, control and dispose of Japanese knotweed. Applies to England and Wales
Regulatory Position Statement (RPS) 178: Treatment and Disposal of Invasive Non-native Plants	Environment Agency	2016	Guidance that, if followed, negates the need for an environmental permit. Deals with 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
Code of Practice, Managing Japanese Knotweed	Invasive Non-native Specialists Association (INNSA)	2017	INNSA's standard for managing Japanese knotweed. Available for £18
Good practice management - guidance for Japanese knotweed	RAPID LIFE	2018	Deals with management and control with sections on legislation and health and safety (file:///C:/Users/max.wade/Downloads/Good_Practice_Management_-_Japanese_knotweed%20(1).pdf)
Code of Practice for the Management of Japanese Knotweed (revised)	Property Care Association	2018	A revision of standard of best practice within the industry. Freely available.
Roundup proactive label recommendations	Monsanto (Bayer)	November 2016	Label recommendations for using herbicide product on Japanese knotweed. Attached to every can of product
Non-Native Species Secretariat (NNS) website	NNS http://www.nonnativespecies.org/index.cfm?pageid=226	Current	Lists publications and scientific papers concerning Japanese knotweed
The Ultimate Japanese Knotweed Guide	Job Prices https://job-prices.co.uk/japanese-knotweed/		Guidance instigated by the Cornwall Knotweed Forum, supported by the Cornwall Council website and the City & County of Swansea

Training and Qualification

Training for invasive weed identification, survey and management can include guidance in relation to dealing with Japanese knotweed. Training that is currently available and which includes relevant sections on Japanese knotweed are summarised in Table 2.

Table 2. A summary of training currently available which includes relevant sections on Japanese knotweed

Title	Training provider	Frequency	Further details
Certificated Surveyor for Japanese Knotweed	Property Care Association (PCA)	2-3 times per year	Two days' training. Linked to PCA Examination for CSJK
Qualified Technician (PCAQT) – Japanese knotweed	Property Care Association	2-3 times per year	One day's training with end of course examination
Japanese Knotweed - On Site Containment and Cell Burial Strategies	Property Care Association	1 time per year	One day workshop
Identification of Invasive Plants	Property Care Association	2 times per year	Due to run in 2019 for first time

Q4b. What is the impact of existing legislation?

The range of legislation and regulation that impacts Japanese knotweed and Japanese knotweed management is considerable including biodiversity, waste, pollution, health and safety and control of substances hazardous to health. Table 3 summarises the key existing legislation and regulation that impacts Japanese knotweed and Japanese knotweed management.

Table 3. A summary of key legislation and regulation that impacts Japanese knotweed and its management in England and Wales

Legislation and regulation	Section	Impact
The Wildlife and Countryside Act 1981 (as amended)	Section 14, Schedule 9 part II	If any person plants or otherwise causes to grow in the wild any plant which is included in Part II Schedule 9, he shall be guilty of an offence.
Control of Pesticides Regulations 1986		All reasonable precautions shall be taken to protect the health of human beings, creatures and plants, safeguard the environment and in particular avoid the pollution of water The appropriate pesticides certificate of competence must be possessed for the safe use of herbicide and hand-held herbicide applicators, e.g. NPTC Level 2 award in the safe use of pesticides PA1 and PA6a/aw For application of pesticides in or near water, approval from the Environment Agency or Natural Resources Wales should be sought

		before use
The Environmental Protection Act 1990 (as amended); (Environmental Permitting (England and Wales) Regulations 2016; Waste (England and Wales) Regulations 2011	Part 2 Waste definition, duty of care, waste management.	<p>The management, storage, treatment and disposal of waste is controlled by these regulations.</p> <p>Excavated/removed INNS, and associated soil, have subsequently been classed as controlled waste and are covered by these regulations</p>
Hazardous Waste Regulations 2005		<p>Untreated invasive plant material is not classed as hazardous waste, but material containing such material which has been treated with certain herbicides, may be classified as hazardous waste.</p> <p>When handling and moving hazardous waste a consignment notes must be completed when any hazardous waste is transferred, which include details about the hazardous properties and any special handling requirements If a consignment note is completed, a waste transfer note is not necessary</p>
Anti-social Behaviour, Crime and Policing Act 2014 and Community Protection Notices		Local councils and the police have the power to issue Community Protection Notices against individuals who are acting unreasonably and who persistently or continually act in a way that has a detrimental effect on the quality of life of those in the locality including for invasive non-native species
EU Regulation on invasive alien species 2014		<p>Entered into force on 1 January 2015 to address the problem of invasive alien species in a comprehensive manner so as to protect native biodiversity and ecosystem services, as well as to minimize and mitigate the human health or economic impacts that these species can have</p> <p>The regulation foresees three types of interventions:</p> <ul style="list-style-type: none"> • prevention • early warning and rapid response

		<ul style="list-style-type: none"> • management <p>A list of invasive alien species of Union concern came into effect (3rd August 2016); drawn up by Member States using risk assessments and scientific evidence</p>
National Infrastructure Act 2015		Introduces powers to control invasive non-native species in England and Wales. The measures provide government agencies in England and Wales with powers to enter into control agreements and, if necessary, control orders with landowners to ensure action can be taken against harmful species on their land
City and County of Swansea Local Plan	Policy NE 8	Full details of a scheme for the eradication and/or control of Japanese Knotweed shall be submitted to and approved by the Local Planning Authority prior to the commencement of work on site and the approved scheme shall be implemented prior to the use of the building commencing

Q4c. How else can evidence-based responses to the presence of Japanese Knotweed be encouraged?

CIEEM has the potential to encourage its members and the wider industry to work towards a more evidence-based response to not just the presence of Japanese knotweed but the range of other invasive non-native plants that best our environment and the economy. CIEEM is in the position of being able to link its expert members not just to business and industry but to higher education and research groups. Direction from Government as to the priorities for such initiatives would be valuable.

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