Japanese knotweed Report – Llandaff Campus

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**1. Introduction**

**What is Japanese Knotweed?**

[Japanese Knotweed](http://www.ecocontrol.co.uk/) is a highly invasive plant and is recognised as the most invasive species of plant in Britain today. [Japanese Knotweed](http://www.ecocontrol.co.uk/) originates from Asia and is a member of the Buckwheat family (Polygonaceae). Records reveal that it was introduced into the UK by a Victorian horticulturalist in 1824 as an ornamental plant and as a source of feed for cattle. [Japanese Knotweed](http://www.ecocontrol.co.uk/) is now abundant throughout the whole of the UK.  
Although the most common and notorious [Japanese Knotweed](http://www.ecocontrol.co.uk/) it is not restricted to one species of Knotweed, there are varients of the species which include Giant Knotweed, Dwarf Japanese Knotweed, Himalayan Knotweed, Lesser Knotweed, Russian Vine, Hedge Bindweed and Bohemica, a hybrid formed by Japanese Knotweed and Giant Knotweed  
[Japanese Knotweed](http://www.ecocontrol.co.uk/) is a resilient plant that, in the UK and Europe, only spreads via the movement of its' rhizomes. The rhizome, according to The Environment Agency Guidelines, can grow to a depth of 3m or more and up to 7m away from the plant. The stem of the plant can reach 3m high and is bamboo like in appearance. The leaves are ‘heart shaped’ and a lush green colour. It produces white flowers around September and October depending on it’s geographical location.

 

# Japanese Knotweed Issues

Japanese Knotweed is capable of growing 10cm per day and is found throughout the UK. It is highly invasive and capable of exposing weaknesses in buildings, foundations, concrete and tarmac.  
It has the capability to regenerate from rhizome as small as 0.4g therefore there is a massive risk of spreading the plant via groundwork and disturbance.

Japanese Knotweed can cause:

* A reduction in land value
* Damage to foundations and structures
* Damage to road surfaces
* Damage to walls
* A monoculture swamping out native vegetation

# Japanese Knotweed Law

Japanese Knotweed is regulated by several pieces of legislation, the main being:

* The Wildlife and Countryside Act (as amended) 1981
* The Environmental Protection Act 1990
* The Environmental Protection (Duty of Care) Regulations 1991
* Third party litigation where damages may be sought for allowing Japanese Knotweed to spread onto other properties.

This puts a duty of care on the landowner with Japanese Knotweed infestations to be proactive in the control and eradication of it. Planning permission will also generally be refused without an [eradication programme](http://www.ecocontrol.co.uk/eradication-services.asp) in place for the infestation.  
  
All parts of the plant and any soil contaminated with the rhizome are classified as controlled waste and are required legally to be removed and disposed of by a licensed waste control operator.  
  
Claims may comprise of a private claim in nuisance or a private prosecution under The 1981 or 1990 Acts. The main objective is to take legal action quickly to ensure that remedial action is taken to ensure that the incidence of Knotweed does not hinder a potential development plot or damage neighbouring land.

**2. Japanese Knotweed Treatment | Japanese Knotweed Control**

**Japanese Knotweed Herbicidal Treatment**

**2a.Foliar spray at Flowering**

Flowering time is the optimum timing. Use of specialist extending hand lances is recommended where plants are 2-3m tall. Spray the underside as well as the upper surface of the leaves.

**2b.Two foliar sprays at 1 metre stem height**

Spray the Japanese Knotweed at 1-1.5m tall, in late May and repeat on any re-growth later in the season once they reach 1.5m again. This technique can be used where stands are particularly thick, as part of an integrated control programme or where long lances are not available.

**2c.Weedwiper**

Applications using a hand held weed wiper have proved successful. This method can be useful where treatment of nearby vegetation is to be avoided or for spot treatment of small re-growth. It has very high success rates, but is labour intensive.  
  
**2d.Stem injection**

This recent introduction from the USA can be used to treat small stands (particularly by water) and new invasions, and to tidy up escapes from eradication control programmes. The tool uses a needle to inject directly into the stem rather than cutting the stem down. Progreen sells InjectorDos, an injection applicator with the facility to ‘dial-in’ a pre-determined metered volume of spray liquid to be dispensed.

**3. Mechanical Methods**

**3a.Remove Japanese Knotweed - Dig and Dump**

Commonly used on development sites but used elsewhere in some specific circumstances. Contaminated areas are fully and completely excavated.Contaminated material is all taken to licensed landfill sites for disposal using cost effective methods.

**3b.Remove Japanese Knotweed - On-site Burial**

Where the site conditions allow an on site burial strategy may be possible. This involves placing the [Japanese Knotweed](http://www.ecocontrol.co.uk/) contaminated material at least 5m below the final ground level and capping it with clean material.

**3c.Remove Japanese Knotweed - Cell Burial**

[Japanese Knotweed](http://www.ecocontrol.co.uk/) Onsite burial is a fast cost effective method of dealing with [Japanese Knotweed Infestations](http://www.ecocontrol.co.uk/). The constraints to this methodology are site size, water levels and area of development. Within the cell burial programme a pit is dug and lined with a geotextile membrane. All joints within the cell are welded closed. The [Japanese Knotweed](http://www.ecocontrol.co.uk/) is then excavated under the direction of a highly experienced ECS clerk of works. This is then capped with a cover of geotextile membrane and welded shut, thus creating “The Cell”. A cover of soil is then placed on top of the cell to a depth of approximately 2 metres. This solution is perfect for areas of sites that are not to be piled or built on. Historically clients have built car parks on top of the cells

**3d.Remove Japanese Knotweed - On-site Translocation**

Soil can be excavated from the contaminated area and moved to a more convenient area on the site where it can be stockpiled on a geo-textile membrane where the [Japanese Knotweed](http://www.ecocontrol.co.uk/) can be allowed to grow normally then herbicidally treated. Once eradication has been completed the soil can then be reintroduced and used normally on the site. This method reduces the environmental and economic problems of the dig and dump strategy.