JAPANESE KNOTWEED – WINTER TREATMENT

Japanese knotweed is an invasive plant species introduced into the UK around 1850 and can now be found all over the UK, on brownfield sites, highways, railways, canals, rivers, gardens, parks, and even graveyards. It's notoriously difficult to kill and causes damage to property, growing through asphalt, blocking underground drains, coming up through floors and damaging walls. There's a myth that Japanese knotweed, the UK's most aggressive and destructive invasive plant, can't be treated in winter. Environmental scientist,



and founding Director of Environet UK Ltd, Nic Seal, explains how best to tackle knotweed on construction sites, irrespective of the time of year





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Knotweed in the autumn

Know your knotweed

First and foremost it's important to be able to identify Japanese knotweed so that measures can be taken to control its spread. It then takes specialist knowledge to know the best way to tackle the knotweed; the options being herbicide treatment or physical removal.

The myth – knotweed can't be treated in winter It's true that herbicide treatment of Japanese knotweed during the winter months from November to April won't be effective. Most herbicides work by getting absorbed into the plant through the







Knotweed in the winter

Knotweed Shoots

active leaves and stem, which are absent in winter. There are some residual herbicides which remain active in the soil, and do affect the roots. However, they are not target specific and can be washed through the soil killing other species and polluting surface and groundwater; hence they need to be used with great care.

Perhaps a bigger issue with herbicide treatment of knotweed on construction and development sites is that of rhizome dormancy. It's very difficult, if not impossible, to verify complete eradication. If no re-growth is experienced it does not mean the rhizomes are dead, so when one then disturbs the affected soil, for example during construction work, the rhizomes are re-awakened and easily spread to other parts of the site, where they'll send up their asparagus-like shoots and cause panic amongst clients, contractors and others who can be held to account. The spread significantly increases the costs of eradication, and causes unwanted delays to construction works. For this reason it would be a fool who recommends herbicide treatment of knotweed in an area of a construction site which will be disturbed by the works. The sensible advice is to physically remove the knotweed and its rhizome system, which of course can be carried out at any time of year.

The advantages of using experts

The rhizome system presents a big challenge because it extends into the soil up to 3m deep and spreads laterally many metres from the visible above-ground part of the plant. Very large volumes of affected soil need to be excavated. It's best if this is carried out under expert supervision to make sure all affected soil is removed, and is not accidentally spread in the process. Expert supervision should also result in reduced volumes, by avoiding excavating more than is necessary. Often the solution is to then consign the affected soil to landfill as knotweed infested material and import clean fill. Known as 'Dig and Dump', it's not particularly high-tech, not the best environmental option, and is very expensive, rendering some sites uneconomic to develop using this method.

In 2008 Environet developed Xtract[™] as an alternative; an ecoinnovative method using patented machinery to separate rhizome from soil. It's an on-site remediation method eligible for Land Remediation Tax Relief. It avoids the need to consign vast quantities of infested soil to landfill and to import clean replacement fill. It continues to be used on many development sites with proven results. Costing considerably less than 'Dig and Dump', processing takes a matter of days/weeks depending upon the quantity of affected soil, and can be carried out at any time of year. More details including a video of Xtract[™] in action are available at www.environetuk.com

The importance of insurance backed guarantees Demonstrating confidence in the method, Environet provides insurance backed guarantees (IBGs) for up to ten years, which are underwritten at Lloyd's, a world-class rated insurer. IBGs are an important part of any knotweed treatment or removal programme, as they are now a requirement of most lenders to mitigate the associated risks of developing a knotweed affected site.

And finally a permanent solution for knotweed in residential gardens

A small-scale version known as Resi-Dig-Out[™] has been developed for residential properties where access and space prevents the use of Xtract[™]. This is proving to be very popular, particularly where previous attempts with herbicide have failed, and where there is a requirement for immediate knotweed removal.

• Environet offers a free consultancy service to property professionals who need assistance with specifications and costing information. Call 01932 868 700. Web: www.environetuk.com

