

The “thug” from Japan

The scourge of Japanese knotweed is menacing Britain’s gardens and waterways

How bad is the problem?

The Environment Agency calls Japanese knotweed “indisputably the UK’s most aggressive, destructive and invasive plant”. It spreads rapidly, growing up to four inches in a day in summer; its bamboo-like stems can shoot up to more than 8ft. It outcompetes indigenous species, covering large tracts, particularly wasteland, riverbanks and gardens. Its strong roots push through tarmac, drains and bricks, and sometimes knock over walls. Although cases of serious structural damage to buildings are rare, it can considerably affect property prices, and make properties hard to sell. According to a 2010 study, knotweed infests more than 1% of all houses, costing £166m a year in devaluations and treatment costs.



A pest eradication expert tackles knotweed in Cornwall

rhizome the size of a fingernail can sprout a new infestation: this is how it spread across Britain. In Japan, it is controlled by natural enemies: 180 insects and 40 species of fungi prey on it. But in Britain it is predator free.

So how can it be eradicated?

The RHS suggests applying a strong glyphosate-based weedkiller in May; then reapplying in mid-summer and September. But though this may help control it, it’s unlikely to eradicate it. In fact, DIY attempts usually fail: you can dig it out, but it’s hard work and regrowth often occurs. Disposing of it is also tricky: Japanese knotweed is classed as “controlled waste”, so must be sent to a licensed landfill. It’s usually best to leave it to professionals who either

excavate it (effective but expensive) or treat it with herbicide (cheaper, less disruptive, but not always successful). Treatment isn’t cheap: it can often run into thousands.

How did Japanese knotweed get to Britain?

Fallopia japonica arrived in 1850, in a box of plants delivered to the Royal Botanic Gardens in Kew (though Chinese variants may have arrived earlier). It was gathered and sent by Philipp Franz von Siebold, a Bavarian doctor who worked for Dutch traders based on an island in Nagasaki harbour, at a time when Japan was still closed off to all but a handful of Europeans. “The source of its almost supernatural resilience lies in its native habitat,” said Sally Williams in *The Daily Telegraph*. “It was dug up from outcrops of volcanic ash, near Nagasaki, where it thrived amid lava and poisonous gases owing to an extensive network of underground stems (rhizomes) that sucked up the limited nutrients available.” It became popular thanks to the fashion for exotic species, was recommended by the gardener Gertrude Jekyll, among others, and has since colonised much of the British Isles, with hotspots in London, Wales, Cornwall and the West Country.

How can it be identified?

A large herbaceous shrub with hollow, purple-speckled bamboo-like canes and lush green shield-shaped leaves on zig-zag stems, it’s a “thug”, yet it’s “rather attractive”, says the Royal Horticultural Society (RHS). It first appears in the form of asparagus-type shoots (these are a prized spring delicacy in Japan known as *itadori*, with a tangy flavour similar to that of the plant’s botanical relative, rhubarb). Later it grows into dense thickets. In late summer it produces creamy-white tassel-like flowers. It can be identified in winter by its dead canes and distinctive rhizomes, which are bright orange inside. But it’s easy to mistake for plants like Russian vine or bindweed (for a detailed ID sheet, visit www.nonnativespecies.org).

Why is it so hard to get rid of?

It’s incredibly hardy, tolerating a wide range of temperatures and soil types. Its network of underground rhizomes can extend more than 20ft horizontally and 10ft deep. If you merely cut the stems above ground, it vigorously re-sprouts, using energy stored in the rhizomes; but excavation of the root network is extremely difficult. Although it is, thankfully, sterile – its seeds are barren – even a section of a

What is the law on Japanese knotweed?

It is not an offence to have it on your land, but under the Wildlife and Countryside Act 1981 it’s an offence to plant it or cause it to grow in the wild. A landowner who is not controlling it and could reasonably be expected to do so could face either an Anti-Social Behaviour Order, or a Species Control Order. So if your neighbour has Japanese knotweed and refuses to act, it’s best to inform the council. Failing that, he or she could be open to a civil claim for nuisance, though few if any cases have been brought on this basis. Homeowners in the process of selling have a legal duty to declare knotweed, together with details of attempts to deal with it. Mortgage providers will refuse mortgages for properties having knotweed within their boundaries unless it has been treated by a reputable company providing insurance-backed guarantees. Knotweed isn’t covered under normal household insurance, but specialist Japanese knotweed policies are now available.

Is the Government doing anything about it?

The environment department, Defra, considered nationwide eradication but decided that, at around £1.5bn, it was too costly. Government scientists went to Japan to look at importing the knotweed’s predators, and identified a sap-sucking insect, *Aphalara itadori*, as the best candidate. Since 2010, large numbers have been released into the wild here, but so far, unfortunately, have not adapted well. Scientists are also investigating a leaf-spot fungus. But by and large, Japanese knotweed is dealt with by those affected: homeowners and property developers (clearing the 2012 Olympic Park cost more than £70m). It also creates big costs for the Environment Agency, which is in charge of flood management – because it erodes river banks and flood defences. In Merthyr Tydfil in Wales, a badly infested area, an environmental officer for a housing association describes the battle as one “we are never going to win” – like “watching this vast army advance towards us”.

Alien invasions

“Invasive species” are non-native plants, animals or pathogens which cause ecological or economic harm by attacking or outcompeting native species – or by spreading disease. (In Britain, all species that have arrived since man arrived some 8,000 years ago are classed as “non-native”.) They are targeted across the developed world. The Environment Agency’s “top ten” in the UK includes: the American signal crayfish, a deadly threat to the native crayfish; the mink, which has devastated water vole populations; the so-called “killer shrimp”; and plants such as Himalayan balsam, giant hogweed – and, of course, Japanese knotweed.

Some claim such targeting is misplaced. Every species has invaded at some point, as *The Economist* argued recently, so why scapegoat more recent ones? Besides, many eradication campaigns prove ineffective. There is some truth to both charges, but they ignore the vast damage done by such species. Whether comb jellyfish transported to the Black Sea in ship ballast tanks, or cane toads taken to Australia to prey on agricultural pests, they have caused ecological carnage. Japanese knotweed, for its part, creates a vigorous monoculture, reducing biodiversity of both plants and invertebrates.