In the past few years there has been a huge increase in the awareness of problems posed by invasive ‘alien’ plants. MATT MONTGOMERY of The LK Group takes a look at the issue.

Invasive plants are usually non-native or ‘alien’ plants that cause, or have the potential to cause, harm to the environment, economies, or human health. Invasive plants are said by some to be one of the most significant drivers of environmental change worldwide. They may contribute to social instability and economic hardship, placing constraints on sustainable development, economic growth and environmental conservation.

Most invasive plants in the UK, such as Japanese knotweed, giant hogweed and Australian swamp stonecrop, were introduced intentionally by horticulturalists, botanists and aquarium enthusiasts in the 19th and 20th centuries. The benefits, be they ornamental, bank stabilisation or oxygen enrichment, were seen as too big an attraction and the risks were either overlooked or not even considered.

Most invasive plants become a problem once they have been released from the normal grazing pressure of insects and other invertebrates. After that they can spread exponentially, causing ecological and social problems. Japanese knotweed is an opportunist grower which can take advantage of cracks in foundations and services, causing damage and disruption. Giant hogweed has a photo sensitising substance on the leaves and stems which, when in contact with the skin and under the influence of sunlight, can cause severe third-degree burns which can be persistent for up to seven years. Australian swamp stonecrop can choke waterways and reservoirs by forming thick dense mats in the water.

How do we begin to control these invasive plants?

Currently there are two main drivers of remediation of invasive plants: the development industry and the public sector.

Despite the attempts of some local authorities to remove invasive plants from public land, the largest achievements have been made off the back of developing land in the private sector, through planning. Policy Planning Guidance 23 gives local governments a target to provide 60%

of additional housing on previously developed land. That puts some invasive plants, such as Japanese knotweed, directly in the firing line of the development industry.

Local authorities have started to make the control and treatment of Japanese knotweed and giant hogweed a condition of planning permission. However, it also makes good business and building sense to manage invasive plants on development sites. They can cause a lot of expensive damage to structures such as tarmac surfaces and underground services.

Government action on invasive plants has had mixed success. Japanese knotweed and giant hogweed were placed on Schedule 9 of the Wildlife and Countryside Act 1981, making it an offence to knowingly introduce these plants into the wild or to cause their spread either intentionally or accidentally.

However, there is still no legislation which enforces private or public owners of land to manage invasive plants on their land. The Daily Record in Scotland carried a report in July this year of a boy in a park who muddied his leg and then used a giant hogweed leaf to rub his legs clean.

He lost all the skin on his legs and will be scarred for life. If councils or private landowners were forced to eradicate this plant on their land that sort of occurrence could be avoided. Under Part IIA of The Environmental Protection Act, local authorities can serve a remediation notice to owners of land that have substances that cause harm or have the potential to cause harm to human health or groundwater.

Giant hogweed certainly does adversely affect human health and other invasive plants certainly harm the environment. Why can that legislation not extend to plants?

There is currently an exemption from landfill tax for Japanese knotweed material.
That is useful but it does not go far enough. Contaminated land remediation gives companies 150% corporate tax relief. But for it to be applicable a company needs to prove there is a substance that causes or has the potential to cause harm to the environment or human health: again, the definition of substance excludes Japanese knotweed. Why? It does harm the environment and it certainly is a barrier to development. Removing 1,000m2 of Japanese knotweed to landfill could cost as much as £500,000.

Currently local authority approaches to the management of invasive plants can be sporadic at best. While one authority may be doing all it can to tackle invasive plants, the next may be doing nothing.

The Tweed Forum is one of the first examples of a joint approach, with relevant government bodies and private landowners working together to tackle Japanese knotweed and giant hogweed at a river basin scale. Only by working to ecological boundaries will we ever be successful; integrated environmental management is recognised as the way forward for other pollution issues and there’s no reason why the same logic does not apply to invasive plants.

There are three ways of controlling invasive plants: mechanical, herbicidal and biological. The private sector usually optimises the use of mechanical control on development sites, the public sector the herbicidal throughout the country and the biological is still being tested by the likes of Dick Shaw at CABI Biosciences. CABI has to go through a long list of experiments to make sure that any introduction of biological control agents only affects target species.

A successful introduction would control and maintain populations in the wild.

It would never completely eradicate invasive plants but would stop them from out-competing native varieties.

However, to me that begs one very large question. Most invasive plants have come from intentional introduction from horticulturalists, so why do companies such as CABI Biosciences have to go through such careful quarantine procedures and non-target experiments if garden centres can introduce new varieties of plants at will? Prevention is better than cure and currently it looks like there are no preventative measures.