Tweed Invasives Project
Summary Report 2014

The project continued to deliver invasives control throughout the entire Tweed catchment (3000 sq miles) for the 12th successive year. The primary target species are Giant Hogweed and Japanese Knotweed. Himalayan Balsam is being controlled throughout the Till catchment, and on the Upper Tweed from the Lyne Water above Peebles, down to the junction with the Ettrick. This section is only lightly infested, responding to the control, and should help to reduce the amount of seed passing downstream.

As usual, by February, blanket licences on behalf of all involved were applied for and consented from SEPA and the EA. Likewise, we put the control work out to tender and appointed contractors. The two seasonal co-ordinators started in April and worked through to September, and an additional person in the office helped organize the control and monitoring efforts. This year we issued our contractors with handheld GPS devices to capture the location of invasive species that are off-river or persistent. The seasonal co-ordinators continued to conduct regular visits to ensure thorough control is still being carried out and to update our distribution database.

Giant Hogweed

Control started in mid-April and the weather conditions provided near perfect growing weather for the invasive species and resulted in a challenging control season for the contractors. Giant Hogweed plants almost seemed to emerge and flower overnight. Happily, the good conditions meant that very few days were lost because of adverse weather conditions and, although the plants grew rapidly, they were unable to get away.

Whilst coverage has greatly reduced, it is still taking a good deal of time to walk the infected areas and as the native vegetation recovers it becomes harder to find the remaining plants. This is why contractor costs have not fallen off as much as predicted. Indeed there is evidence that these costs have reached a plateau in recognition that one cannot cover the ground any faster. Until we are 100% certain that areas are free of plants we cannot reduce the area that needs to be walked over.

We have found that, occasionally, Giant Hogweed has been allowed to grow unchecked on sites away from the river and it is naturally of great importance that these sites are treated. We rely to a great extent on reports by landowners and the general public in identifying such sites, as we have to restrict our primary effort to the river. Each seed head can produce many thousands of seeds and a handful of plants could potentially upset several years’ worth of treatment. It is also clear that birds are likely to be vectors for the transport of seeds, as Giant Hogweed has been spotted growing in unusual places (see figure 2)!

Figure 1. Particularly large Giant Hogweed plant at an off-river site near the Tweed

Figure 2. Giant Hogweed plant growing from a buttress on a bridge over the Tweed.
The densities of Giant Hogweed in the Tweed catchment area are now classed as being only ‘occasional’ or ‘rare’, although there are still stretches that are described as ‘frequent’ (figure 4). Over the last two years we have commissioned very detailed botanical surveys of what were some of the most heavily infested sites on Tweed. In half of these sites Hogweed was completely absent.

Figure 3. Giant Hogweed distribution in 2005, near the start of the project

Figure 4. Relative distribution of Giant Hogweed within the project area in 2014
Japanese Knotweed

It is clear that Japanese Knotweed is more widespread than previously thought, with patches penetrating well into the headwater and dense patches found upstream of Selkirk on the Ettrick Water. Most sprayed sites have either become dormant or substantially reduced. The alternative method of ‘stem injection’ appears to be successful; however, this method is both time-consuming and requires considerably more herbicide than spraying alone.

![Japanese Knotweed regenerating from a previously treated 'crown'](image)

**Figure 5.** Japanese Knotweed regenerating from a previously treated ‘crown’

![Japanese Knotweed Distribution 2014](image)

**Figure 6.** Distribution of Japanese Knotweed within the project area

Japanese Knotweed is a particular concern, due its persistence and ability to re-establish many years after apparent eradication. Again, stands that are away from the river are difficult to come across and we rely on reports from members of the public. Long-term management will have to continue in order to prevent spread of this plant (figure 6).
Himalayan Balsam

This season on the Till control was carried out from Wooperton Hall down to Tillmouth Park, covering the entire main stem and a number of tributary burns (figure 7). Again we did find some new patches but on the whole the reduction in infestation was very encouraging, showing that this plant does respond relatively quickly to co-ordinated control.

We have a couple of fixed monitoring sites where detailed botanical surveying is carried out on a regular basis. At the Chatton site, Balsam has been completely eliminated whilst at Fowberry it is down to one or two individual plants.

Himalayan Balsam is tricky to control as there seems to be only a short window of opportunity for its treatment before it sets seed. However, the seed is only viable for a few years so results are seen fairly quickly. Unfortunately, at the moment, Himalayan Balsam control on the main stem of the Tweed is unfeasible due to the sheer scale of the problem and the lack of resources.

However, we undertook a third year of control of Himalayan Balsam in the upper Tweed catchment, from Lyne Water to the Ettrick junction. Generally, lightly scattered plants have been found along the system with some heavier patches around Sunderland Hall, Cardrona, Eshiels, and Traquair/Leithen Water, so it is worth trying to get on top of it before it gets too dense.
**Awareness raising**

The project continues to raise awareness at the local and national level through meetings with landowners and communities as well as articles in the local press and attendance at local agricultural shows.

The Control of Invasive non-Native Riparian Species (CIRB) Project that Tweed Forum has been a part of for the past four years will be holding an end-of-project conference at the end of November. Tweed Forum staff will be presenting at that conference and will be passing on the knowledge gleaned from our experience of treating INNS.

On the morning of Tuesday 2nd December, Tweed Forum will host a meeting on the Invasives Project. We would like to invite to this meeting all landowners, boatmen, farmers, anglers and members of the community who have been involved with the project, and indeed anyone who has an interest in keeping the Tweed catchment free from invasive species. Please see attached flyer for more details.

**Monitoring**

The monitoring of the success in controlling INNS is an important part of the project. Last year a new handheld system (PDA) was trialled; this year we continued the use of the PDA and augmented it with several GPS devices, which allowed the contractors to pinpoint Japanese Knotweed stands or areas requiring particular attention.

Tweed Forum’s drone continues to be of great use providing a different viewpoint and some stunning photo and video opportunities (figure 8).

![Figure 8. Upstream of Union Bridge, Berwick-upon-Tweed. Taken by Tweed Forum’s drone.](image)

**Project spend 2014**

Spend for the year was just under £66k, most of which has gone on contract spraying with the cost of chemical and the seasonal co-ordinators also being significant items. As ever, the contributions made both cash and in kind by landowners, fishery proprietors, ghillies, farmers and community members is enormously important. We are fortunate to receive support from INTERREG IVA Programme, SEPA, Natural England, SBC and Northumbrian Water.
The voluntary contribution of ghillies, farmers, landowners and community members continues to provide a cornerstone of the campaign. By people taking ownership of the situation it means the amount we have to spend on sending in contractors is vastly reduced.

A sight of the past......

......and today.