



Himalayan Balsam Campaign Report 2020



Introduction

Non-native invasive plant species are recognised as an increasing problem nationally and there are concerted attempts to control them (<https://www.gov.uk/government/news/invasive-species-order-2019-consultation-opens>).

Non-native species are usually defined as those species introduced by humans outside of their natural or native range. Invasive Non-native Species (INNS) are those which cause unwanted environmental or social impacts by spreading rapidly and becoming very abundant in the environment. It is not well understood why some species become invasive and others do not, but it is thought that non-native species are more likely to become invasive than native species.

In Addingham we have Japanese knotweed, Giant hogweed, Curly waterweed, and Himalayan balsam. Addingham Environment Group is working with landowners to tackle them all. The main issue though is Himalayan balsam, which has spread extensively. Here we report on our experience, effort and progress over the last four summers in attempting to eradicate it from the parish.

Himalayan balsam (*Impatiens glandulifera*), with its showy pink flowers may look attractive but it is a troublesome 'invader'. Native to the foothills of the Himalayas, it was brought over by plant

collectors in the 19th century. In recent years, in many parts of the country including Yorkshire, it has spread along riverbanks, becks and in wet woodlands, out-competing native plants. If left unchecked, it rapidly forms dense stands.

As well as taking the place of native wildflowers, it also reduces the variety and abundance of invertebrates in the soil below and can draw pollinators away from native species. Himalayan Balsam (balsam) dies back in the autumn leaving bare ground which can cause bank erosion.

It is listed in Schedule 9 of the Wildlife and Countryside Act in England and Wales as an invasive species, making it an offence to plant or otherwise cause it to grow in the wild.

Addingham Environment Group began its campaign to eradicate balsam from the Parish in the summer of 2017. Our work so far has focussed on the four main beck systems (Town Beck, Back Beck, Lumb Beck and Wine Beck) which rise on the moors above Addingham, and flow into the River Wharfe (Fig 1)

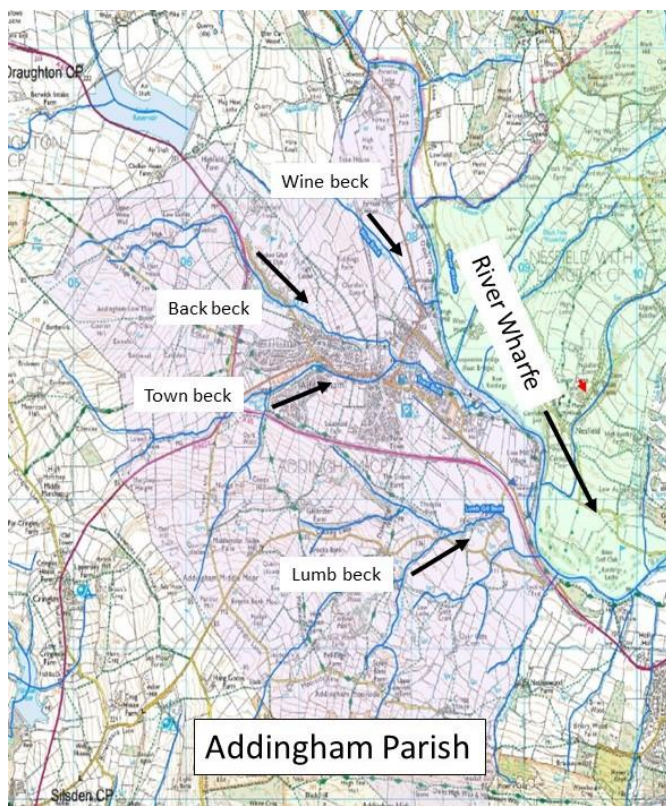


Fig.1 Addingham's beck system

Control methods

Himalayan balsam is an annual plant. The seedlings are visible in April/May and the plants grow rapidly flowering in late June/July (depending on the season). By late July/early August it forms seed pods, which when ripe, explode scattering seeds widely.

Our approach is to hand pull and leave the plants on the ground to rot down, in as dry a place as possible. Balsam is shallow-rooted and can generally be pulled up easily, but it is a labour-intensive task and so ideally suited to volunteer effort. It is frequently found growing with nettles, bramble and gorse.

Although most plants will pull up easily, sometimes the stem will break when attempting to do so. If the roots are left in the ground regrowth can occur so it is worth attempting to dig it out.

When in flower, we have found that breaking off the flower heads is worthwhile, to ensure that plants do not continue to grow when left on the ground to rot down.

The work needs to be done before the seed pods form and ripen. Towards the end of the season, where we have found plants with ripening seed pods, we have cut the seed/flower heads off very carefully straight into a bag, before pulling up the rest of the plant. Seed and flower heads are taken away for burning (not composting).

On Addingham Moorside, in at least two cases, landowners have attempted to control balsam using herbicide treatments, with limited success. AEG does not endorse this method, not only is it ineffective but it is undesirable, killing neighbouring native plants, polluting water courses and contaminating the soil.

Progress So Far

Summer 2017

A small group of AEG volunteers began by checking out where balsam was growing along **Town Beck** in the village. Several dense stands were removed, as well as smaller groups and individual plants along most of the length of the beck. A very visible dense infestation next to **Lumb Beck at Cocking Lane** was also tackled.



Summer 2018

Over the autumn/winter of 2017 we worked with the Yorkshire Dales Rivers Trust to set up the Addingham 4Becks Project. Central to this was recruiting volunteer Beck Stewards to keep an eye on specific reaches of the becks where they run through or are close to the village.

Beck Stewards checked out **Town Beck, Back Beck and Wine Beck**, and removed the balsam found. Pleasingly far fewer plants were evident on Town Beck in places where dense stands had been cleared the previous summer.

On **lower Town Beck** close to the confluence with the Wharfe, adjacent to Low Mill lane, large stands of balsam remained which we were not able to remove. Landowners were unreceptive to volunteer work parties. In flood the beck and main river join, so our view is that controlling balsam here needs to be part of a wider campaign engaging with riparian landowners along the whole length of the River Wharfe.

Surveys along **Back Beck** found no evidence of balsam. This also applies to **Wine Beck**, except at the confluence with the River Wharfe at Olicana Park.

We also turned our attention to the **Lumb Beck catchment** in earnest, with the help of an AEG member who lives on Addingham Moorside. He mapped where the worst infestations of balsam were and made initial contact with landowners.

AEG followed up with the landowners, several of whom had tried to deal with some of these infestations but were finding it difficult to bring it under control on their own. In one case, spraying had been tried with limited success.

It was clear to make an impression on the larger stands we would need a big volunteer workforce, so we involved Addingham Scouts. With their help, big stands of balsam were cleared at Stegg House, Lumb Ghyll Farm and Cuckoo's Nest, on an evening work party in late June with 28 volunteers taking part. In total, we organised nine volunteer work parties between late June and the end of July, with 129 hours of volunteer effort (56 hours of which were on the work party with the Scouts). As well as working on Lumb Beck and its tributaries, we also helped clear balsam from a farmyard at Gildersber.



Summer 2019

Beck Stewards kept a watching brief and pulled any balsam found on the becks in the village, while again our volunteer work party effort concentrated on the Lumb Beck catchment. We re-visited some lengths of beck and adjoining land cleared in 2018, returning to Cuckoo's Nest, Stegg House and Lumb Ghyll Farm. We also tackled some new areas notably the wetland on the site of a medieval pond, the woodland copse above it and headwaters on Ghyll House Farm. We also helped to clear balsam along a farm track and in the farmyard of a second farm at Gildersber, and with the help of a volunteer with climbing experience tackled a steep-sided wooded section of Hall Gill.

In total we organised 16 work parties in the Lumb Beck catchment from late June to the first week in August, a total of 176 hours of volunteer effort. Our teams worked on Saturday and Thursday mornings and on Monday evenings, making the most of light summer evenings.



Summer 2020

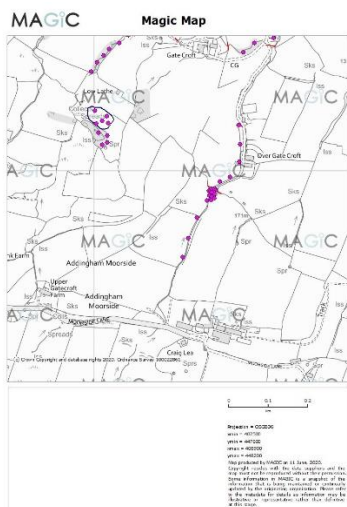
We were determined not to lose momentum in 2020 despite the pandemic. We were able to organise ourselves so that balsam pulling could be done in a socially distanced, C-19 secure way. Fortunately, the campaign season coincided with the easing of restrictions after the spring national lockdown, so that meeting up in small groups outdoors for volunteering was permitted.

We sent a briefing note to Beck Stewards and encouraged stewards to go out in pairs from early June to survey and pull plants on their stretches of beck in and around the village.

Beck Stewards, reported and pulled only a small numbers of plants on **Town Beck** from Marchup Ghyll down to Low Mill Lane, apart from one larger stand just below Aynholme Bridge, which was cleared by two volunteers in an evening's work. **Back Beck** remained clear.

As in 2018 and 2019 we concentrated most of our effort on Addingham Moorside in the **Lumb Beck** catchment.

Two AEG volunteers spent time in late May/early June recording and mapping where balsam was coming through along the whole of Lumb Beck and its tributaries. This helped us take stock of our progress to date, plan our work party programme and chat to landowners. Four more came on board with the campaign this year.



We observed that seedlings were slower coming through this year, possibly due to the dry Spring. Consequently, flowering and seed formation was also delayed, making it safe to continue work

parties to mid-August. Compared to the position when the distribution was mapped in late May/early June, by the time we began the work sessions, a greater number of plants were coming through. This was particularly evident in places we were reaching for the first time.

We went out on 24 sessions, from 20th June until mid-August, a total of 298 volunteer hours.

Pleasingly the places where we had put effort in during previous seasons, required far less time in 2020. For example, in 2019 it took two work sessions to pull balsam along the beck in Lumb Ghyll Wood Local Wildlife Site and just one in 2020. The medieval pond and the copse above it cleared for the first time in 2019 took just one session and 8 volunteer hours in 2020, compared to three sessions and 40 hours in 2019.

For the first time, we tackled the upper part of Hall Gill from Overgate Croft up to Cragg House Farm, including a large stand just above Overgate Croft and hard to reach sections of the beck below that. We also worked along the beck at Throstle Nest and pulled substantial stands on the banks above the confluence with the main Lumb Beck at Cocking Lane.

We have now surveyed and pulled balsam, from the whole of the Lumb Beck catchment, except for the tributary from Throstle Nest up towards Gildersber.

Our final effort in the 2020 summer was on **Bracken Ghyll Golf Course** where some dense stands were found in woodland and rough grassland on the edge of the golf course. Three of the work parties were spent here, after a request for help from the Golf Club to assist their volunteers.



Observations & lessons learnt

- With a concerted effort it is possible to clear and control Himalayan Balsam across a beck system
- The co-operation of riparian owners throughout the system is needed
- Landowners have for the most part been very receptive and willing to work with AEG, and welcome the help of volunteers
- It is a task that volunteers enjoy and find satisfying
- It takes at least three seasons, and after that a watching brief still needs to be kept each summer to check for and remove isolated plants (balsam seed is viable in the soil for at least two years)
- Anecdotally, the spread of balsam on Addingham Moorside has been most noticeable in the last 10 years, and may be associated with more flash flooding
- Seed appears to have come in from a variety of sources, including garden escapes, builders' rubble for making farm tracks, straw bales from farming contracting activity in areas with large infestations, and transportation along the water courses
- Seed is brought downstream in the beck system in high water or flood conditions, and so establishes higher up on the banks, as well as immediately alongside the water course
- If not controlled, it then quickly forms dense stands as the seed is shed up to 7 metres when the seed heads explode
- It favours more open marshy banks, and wet woodland, but also grows among gorse, nettles and brambles, and in shady places where there is made up ground. Fewer plants establish where there is very dense shade next to the beck (for example where there are thorn and holly thickets), and where the channel is steep and rocky.

Conclusions & future plans

Over four seasons, we have made considerable progress in bringing Himalayan balsam under control in the beck catchments in Addingham parish. Our volunteer effort to date amounts to around 50 AEG work parties and over 600 volunteer hours, plus the time spent by our Beck Stewards monitoring and pulling isolated plants on their regular walks along becks in the village.

We found balsam had not spread along two of the four becks (Back Beck and Wine Beck), by contrast it was very widespread throughout the Lumb Beck catchment. In the Town Beck catchment, balsam was present along the beck through the village with the most extensive stands downstream of the Old Rectory down to the River Wharfe at Low Mill. Above the village it was present along the Darkwood tributary but not in the Marchup headwaters. Going forward, we will continue to keep a watching brief on the beck catchments. We anticipate that volunteer work party effort will still be needed in 2021, particularly in those parts of the Lumb Beck catchment which we only tackled for the first time in 2020.

We hope that we can also make progress on Lower Town Beck down to the River Wharfe at Low Mill and along Addingham's section of the River Wharfe. This will require the co-operation of riparian landowners both in and outside the parish. The main river upstream of Addingham, and the beck flowing into the Wharfe on the North Yorkshire side of the river at the suspension bridge have substantial infestations of balsam. Downstream there are also extensive infestations along the Wharfe in Ilkley and Otley, for example. Our aim in 2021 is to encourage communities and riparian landowners to join us in addressing the problem. We already have an undertaking to work together

with Climate Action Ilkley and will be approaching the Bolton Abbey Estate, immediately upstream of Addingham on the Wharfe for cooperation.

While, Himalayan balsam has been our focus, more broadly we have demonstrated that there is a role for volunteer environment groups in identifying and helping landowners tackle other invasive plants. We found infestations of Giant Hogweed along two Lumb Beck tributaries and we are working with landowners to remove it. In 2020 we also worked alongside Bracken Ghyll Golf Club staff and volunteers, to help control and remove Curly waterweed from a pond on the golf course. We will keep a watching brief on this pond in 2021. We have also alerted a landowner to the presence of Japanese knotweed on their land.

Our work on invasives, has helped to both build our volunteer workforce and form a positive relationship with many of the landowners in the countryside surrounding the village.



Jan Hindle & Rick Battarbee

Addingham Environment Group

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Addingham Moorside Landowners

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Michael Flesher	Sue & Richard Hobson
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Richard Solomons & Liz Merrick	Rob Morse
Graham Lingard	Carl & Luke Winterburn
Robert Lofthouse	Jamie Crabtree
Mrs Stapleton & Mark Stapleton	Sally Priestley
David & Susan Kelly	

The AEG Balsam Bashing Work Party Volunteer Team 2020

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Zoe Lavin-Miles	
Dave Johnston	
Shirley Johnston	
Gill Hunter	
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Melanie Taylor	Carol Miles
Jessica Penrose	Stephen Cheetham
Gill Dammers	John & Wendy Fontana
David & Shirley Johnston	David Brown
Margaret Batley	Gordon Hutchinson
Peter Miller	Barry & Angela Tiffany
Jan Hindle	Rick Battarbee