<u>The Otter Valley Association (OVA) Himalayan Balsam Campaign;</u> <u>Annual Report, December 2014</u>



Stream bed in Stowford Woods; 13 June 2014. Give it an inch ...

Sometimes you just have to laugh at Himalayan Balsam. It is so cheeky

Background

This is a report on the third year of the OVA's involvement in the Otter Valley Himalayan Balsam Project (now the "Invasive Species" Project). In previous years (reports for 2012 and 2013, both on this website) I described how our involvement came about and how the Environment Agency (EA) had contracted the Farmers and Wildlife Advisory Group (FWAG SW) to lead the project. Also explained was the logic of concentrating on tributaries rather than the main river Otter, and how the OVA came to focus on the Colaton Raleigh brook, leaving other tributaries to other local groups in Newton Poppleford, Hawkerland and East Budleigh. In 2014 FWAG SW remained heavily involved in the upper catchment (See the FWAG SW 2014 report on this website) so we continued to liaise locally with Clinton Devon Estates (CDE) and these other groups in "our patch" ie the lowest 5 parishes on the Otter.

Aims

It is no bad idea to start off by recalling targets for 2014 set in my 2013 report:

• **Volunteers**: to double the number of volunteers who made it into the field from 16 to over 30.

- To achieve this by boosting **publicity**, above all by setting up a **demonstration plot and information centre** on the River Otter footpath between White Bridge and Otterton early in the campaign. This would be accompanied by a **wider poster campaign**.
- To **extend the cleared area** along the Colaton Brook to include the whole valley down to the CDE Dairy Farm at the bottom of Church Road.
- To conduct at least two sweeps throughout this length.
- To **promote a Colaton Raleigh Village group** to match those on the Budleigh Brook in East Budleigh and the Back Brook in Newton Poppleford.
- To **take on the Knowle Brook** from Dalditch farm down to Budleigh Salterton if circumstances allowed.
- To investigate the desirability of investing in **a brushcutter**.

Progress in 2014

Negatives: In the event, it proved impossible to extend the target area to include the Knowle Brook within the time window available, that is to say before the first seedpods were formed in late July. There was still too much work needed in the Colaton valley. In fact, as last year, it was decided that the priority at that time (end of July-early August) was to help Ted Swan on the Back Brook at problematic Goosemoor in Newton Poppleford. As to the aim of establishing a permanent group in Colaton Raleigh, some progress was made to the extent that bonds were strengthened with two Colaton Raleigh residents, Neville Bennett and David Gibson. Both currently work solo, the latter maintaining the stretch from the main road down to Place Court but no coherent group yet exists to take over the whole tributary valley.

Positives: The OVA duly invested over £500 in a Stihl FS90 brushcutter in June, having also financed the training and licensing of David Hatch, Iain Ure and self as operators. Shortly thereafter, the decision was taken for Iain to take over the brushcutter operations and focus on the flood plain of the Otter where large clear stands of HB were particularly suitable for its use. Iain has written a report on these activities and it can be found on this website.

As to the other four targets, each will now be examined under the following three headings:

- 1 Publicity: The Demo Plot on the River Otter
- 2 Volunteers
- 3 Field Progress: the Colaton Brook: area cleared and number of sweeps

These form the structure for the rest of the report.

1 Publicity: the Demonstration Plot/Information Centre; and the poster campaign.

It duly happened! After much debate through the winter (David Hatch (DH), Iain Ure (IU) and self (PH)) it was decided that there needed to be a "happening" down on the flood plain. Two issues are involved:

- Visibility: A problem with the OVA campaign in the Colaton Raleigh Brook is that, although the reason for working there is supremely logical (since seeds float downstream, first clear the tributaries, then the main river), those efforts are invisible. In contrast, the Otter river footpath, where there is super-abundant Himalayan Balsam, is highly public. Feedback has often suggested that, as a result, many people think both that the problem is insoluble and that no-one is doing anything about it. Neither is valid.
- Some would argue that, notwithstanding the logic of giving tributaries priority, there is a case for attacking it on the main river. It will be interesting to monitor carefully what happens where such work has been undertaken.

What was planned therefore was a demonstration plot on the main riverbank, where volunteers would pull and stack HB. This would be accompanied by a tent in which posters would be hung, leaflets distributed, volunteers signed up and questions could be asked. So:

- DH duly purchased a gazebo.
- PH drafted, and OVA funded, five new laminated posters, which were edited by DH and IU before being formatted, edited (final) and dispatched to the printer by Rosemary Hatch.
- Dr Sam Bridgewater (CDE)'s map of OVA progress on the Colaton Brook (See my Annual Report 2013) was included.
- Roland Stonex (FWAG SW) provided leaflets addressing the Himalayan Balsam problem.
- Smaller "Bash the Balsam" posters were produced for wider distribution along the river. They announced the event which was fixed for three Saturdays running from 21st June 2014 and also asked for volunteers, gaving contact details.
- An open, grassy site was chosen for the gazebo near the junction of the East Budleigh aqueduct and the river.

The following photos illustrate the gazebo on the fine sunny morning of 21st June. Sadly there are no photos of the demo plot which lay adjacent on the downstream side. Sadly also one of the other Saturdays was lost because of rain. Nonetheless all the feedback was positive, including, on occasion from summer visitors tackling HB in their home areas in the Midlands and the North of England. So this target was indeed achieved and may well be followed in the future.



Gazebo and Posters Two posters can be seen as well as Sam's progress map for 2013



The gazebo on the Otter bank at the aqueduct confluence (on Right)



David Hatch, Iain Ure and Dee Woods ready for action; 21st June 2014.

2 Volunteers

So did this publicity have any impact upon the number of volunteers coming forward in the weeks thereafter? Very probably, although only four people signed up as volunteers in the gazebo, which was disappointing. Nonetheless, it may well be that the efforts in the gazebo and folk sweltering away pulling and stacking HB on the adjacent river bank, as well as the proliferation of posters in the general area, produced an enhanced awareness of the problem and that this is reflected in the numbers coming forward. These are illustrated in the table below, which compares the numbers making it into the field in the last three seasons:

Year	Total Participating Volunteers	Total Outings*	Estimated Total Hours
2012	14	94	234
2013	16	95	245
2014	27 (+2)	150	375

- An "Outing" is one person's field session.
- The figure of 27+2 for 2014 is because there are two who pull Himalayan Balsam independently in Colaton Raleigh but do not join OVA sessions. Their hours are not known.
- An exact record of hours was not kept this year. Almost all outings were from 0930 to 12 noon on Thursdays and Saturdays so the number of outings was simply multiplied by 2.5 hours to get an estimate. Thursday proved much more popular than Saturday.

The aim, then, had been to increase the total participating in the field from 16 to 32. This did not happen as the above table shows. We only reached 27 which of course is a very laudable result. However, the table hides something very striking because the **figures are net**. Simply looking at them might lead one to conclude that there was an addition of 11 new members, taking the total from 16 to 27. Not so! There were actually 17 new members which is a wonderful result! We added more that the size of last year's squad!

Of course the corollary is disappointing: that we lost 6 from last year's squad so that the "old stagers" shrank to 10. Nonetheless, this is absolutely normal as health takes its toll and family circumstances change (some even enter active grandparenthood!). There are 10 who did not make it into the field this year but some of whom, on past experience, might well return in the future.

At this stage I want to thank all those who gave of their time in 2014. The table below summarizes their efforts. Thus, for example, there were 4 volunteers who managed between 6 and 10 outings during the summer. Their combined hours in the field totalled 82.5 and of these four, one was a new member.

It is important to remember that, even if only turning out once, this makes an important impact. For example the 9 people in this position put in, between, them over 22 hours pulling HB and a lot can be achieved in that time! So one hour a year is fine by me (as long as large numbers are involved!) But others contributed far more than that and deserve special thanks: great team effort! For interest, in the table below, I have indicated new members and it can be seen that they are well distributed throughout the table; many only turning out once but some between 6 and 20 times. I will not mention names except to say that I and the OVA do appreciate especially those who travel each time all the way from Exeter to join in: David Hatch, Clare Meiklejohn, Patricia Hunt and Susan Stevens.

As can be seen from the previous table, the total number of hours expended, at 375, is substantially above those recorded in 2012 (234) and 2013 (245). In fact it represents a 53% increase over the latter.

Number of Outings pp	Number of Volunteers	Total Hours	New Volunteers
> 20	1	70	
10-20	4	132.5	1
6-10	4	82.5	1
3-5	4	42.5	3
2	5	25	4
1	9	22.5	8
Total	27	375	17

What, then, did this increased "workforce" achieve on the ground?

3 Field Progress in 2014

How can field progress be measured? Perhaps a space satellite could map the valley at time intervals and tell us how many HB plants remain in each section? Maybe it will come to that by 2030! In the meantime we can do a number of things:

- Map the areas subjected to HB clearing operations each year.
- Record the number of sweeps received by each area each year.
- Use our eyes and experience to tell us whether we are making any difference in each area.

3.1 The Number of Sweeps in 2012, 2013 and 2014

It may be remembered that a target that I set for 2014 was to complete 2 sweeps throughout the whole length of the Colaton Brook as, apart from the Stowford block at the top end of the valley, no more than one sweep had been possible in the past. This is useful context for what follows.

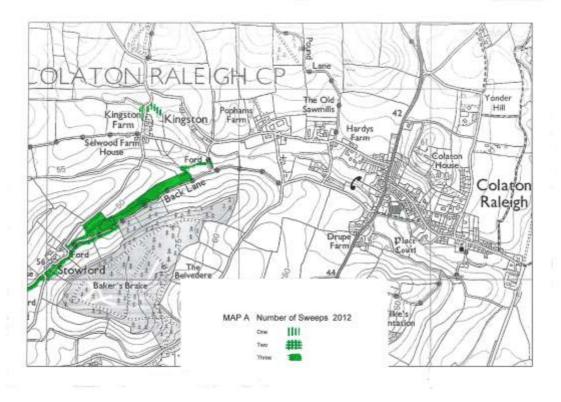
Three OS maps show this aspect of our campaign, one for each year (Maps A, B and C). On each, green shading is used to depict the number of sweeps:

 sweep: vertical green line shading
sweeps: cross-hatched green line shading
sweeps: continuous green coat (In fact in 2013, Stowford received four sweeps. This is unlikely to be repeated)

Ideally the three maps should be laid out on a table, side by side, when the pattern of progress becomes immediately apparent.

In commenting on these maps, our memories from field experience are important.

2012 (Map A)



Squares on the map are 1km squares.

This map clearly shows how operations in this first year of the campaign were almost entirely confined to the stretch of the brook running from the edge of the map (virtually coinciding with the upstream limit of Himalayan Balsam (HB) on the Colaton Brook) down through the hamlet to the rectangular block flanked on its south-eastern side by Back Lane. This block consists for the most part of woodland ("Stowford Woods") together with a substantial rectangle of swamp towards the downstream end. Downstream from this block, there was no progress, other than the short length of stream down to the ford; and in the single sweep on the upstream end of the Kingston tributary (see Map A; Kingston Farm). Two years on, it is still easy to remember the general nature of field work in that first summer. The extent of HB was extraordinary. It was by no means just along river banks but covered the whole of the floor of this rectangular block of woodland. In the swamp (for location see Sketch Map 3 below) the domination was less complete. Other wetland plants remained strongly in contention but HB was nonetheless widely distributed throughout.

In that first month (June 2012) a team from the Probations Service picked up the work for a while. I well remember the problem of finding them! To do so, you entered passages in this green wonderland (the HB was frequently head high) and followed them, skirting massive dumps of HB, until you found a "cave" where "gnomes" were to be seen slaving away at the green walls in all directions, heaps of green on the "cave" floor. Eventually the sky appeared and when, weeks later, the green dumps on the cave floor had rotted, behold, a new landscape had appeared! It was a woodland floor, and very attractive at that. Sunlight penetrated. You could see for some distance - over to the wall in one direction where cattle grazed in the field beyond. A former stream course littered with pebbles appeared on the woodland floor. In the opposite direction you could look right across to the foot of the "cliff" on which Back Lane is perched, running the length of the woodland block (Map A above).

Downstream, out under the open skies of the Swamp, there was pink everywhere and, in contrast to the woodland floor, HB plants had a nasty habit of running horizontally across the ground perhaps for a couple of feet before shooting their stems upwards. Each plant needed care and time to pull since it is important to retrieve the whole root system. Work was slow. Bootfulls of water were a common experience as also the odd tumble in mud. In the woods there were no such aberrations and the plants, like 6ft stalks of tender celery, were pulled easily. There were just too many of them.

By the time that we (even with the help of the Probation Service for three or four outings) had cleared down to the bottom end of Stowford Woods including the swamp and bottom woodland block (See Sketch Map 3) it was time to start again! Plants were already appearing and maturing in the cleared upper areas and could not be left to flower and seed, undoing all the good work. So on 8th August a second sweep began and then, on 22nd September, a third which continued until 21st October.

On only one occasion did we attempt to extend from the Stowford block. Before finishing the first sweep through Stowford, on July 10th 2012 we began work on the badly infested Kingston tributary, clearing the first leg that runs south-east from Kingston Farm (Map A) to the bend where it swings northeast. There was only time, that summer, for this singe sweep over just one leg of the Kingston tributary.

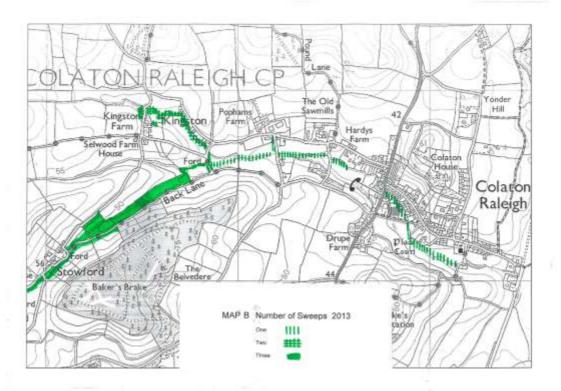
So in late 2012, we remained blissfully unaware of what lay downstream but we were pretty content to have hammered Stowford section three times (continuous green on Map A).

The timing of these sweeps is interesting in that the first lasted a long time indeed:

- First sweep: 7th June to 31st July 2012
- Second sweep 1st August to 21st September 2012
- Third sweep 22nd September to 21st October 2012

Operations ceased in Late October.

2013 (Map B)



As can be seen in Map B above, there was a very significant expansion of the field of operations to embrace almost the whole length of the Colaton Brook.

On the opening day, June 13th, in Stowford Woods, it was clear that the amount of balsam had dramatically reduced from the 2012 level (see 2013 Annual Report), which was most gratifying. This, and the fact that we had a wonderfully large turn-out of volunteers (23) from both the OVA and CDE, resulted in the Stowford Woods being cleared, to our amazement, in a single day. It had taken until the end of July in the previous year. This meant that progress downstream could now be made without risk of flowering taking place behind us. The whole of the Kingston tributary, some of it very bad, was

cleared and then a second sweep through Stowford finished by the end of July. This allowed us to get downstream and it was decided, partly because of the access problem posed by gardens, to leapfrog beyond the upper village to clear from the main road down into the pasture by the parish church, which was bad (Map B). This was finished by 18th August without a major seed-popping problem. Stowford could then be given a third sweep and Kingston a second. Late in September a tentative push was made down past Pophams Farm (See Map) where much had seeded and burst. In mid-October a fourth sweep was made through Stowford, picking up stragglers.

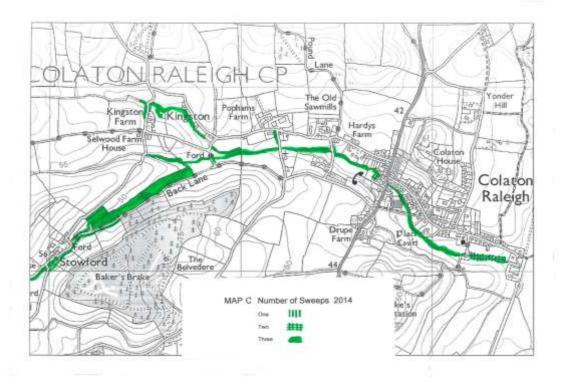
Map B clearly reflects this progress. Summarizing, tight control continued over the Stowford block (solid green). It intensified on the Kingston tributary receiving two sweeps over the whole of its length (cross-hatched on Map B) instead of just one on a part of it as in 2012. For the rest, only a single sweep was achieved and none at all in the dense garden stretch above the main road, nor at the very bottom below the church.

Summarizing the sweeps:

- First Sweep Stowford Area to 27 June.
- By 4 July Kingston First Sweep completed.
- Second Sweep Stowford from 11th to 25th July.
- 18 August: sweep from the main road past Place Court (See Map) to the pasture above the Church.
- 25 August to 5 September: Stowford Third Sweep. Kingston Second Sweep.
- Late Sept: Pophams Farm stretch to top of the village. Access problem.
- October 13th: Fourth Sweep at Stowford especially the swamp.

So how did this year's efforts compare with 2012 and 2013? The map tells the story:

2014 (Map C)



A cursory glance at Map C allows us to see that the target of completing two full sweeps down the whole length of the Colaton valley was handsomely surpassed. In fact, all but the very bottom stretch below Colaton Church (cross-hatched) received **three sweeps**, which is a most gratifying result.

This year the first sweep took until the end of July ie much later than in 2013 but that is simply because we took it right down to the flood plain at the CDE Dairy Farm and not just to the end of Stowford Woods. The problem with access to the gardens of private houses above the main road was solved by two neighbours (Mrs Pam Hitchings and Mrs Scott Langley) agreeing to let us access the stream from their gardens whenever we wanted. A warning phone call would suffice. We are most grateful to them. While clearing in the built-up section, a chance encounter with Mrs Rachel Gibson, below the main road, led to the discovery that her husband takes it upon himself to keep that leg down to Place Court clear of HB. He is now linked to the group, attending the now traditional CDE barbecue/seminar in October.

One access problem that remains to be solved is Place Court itself. The Colaton Brook flows through its grounds and has some HB along the banks. The property changed hands this year and the new owners had not moved in by September. It is hoped that, early in 2015, contact will be made with the new owners and access authorized. Such access problems are very minor compared with the problems encountered by FWAG in the upper reaches of the Otter where there is a complicated ownership pattern and permission has to be gained from each and every landowner. In our area, a phone call to Clinton Devon Estates is all that is usually required.

Summarizing the activity pattern in 2014:

- First Sweep from Opening Day (13th June) to 31st July
- Second Sweep 7 August to 31st August
- Third Sweep 2nd 20th October

We thus stopped late in October but it has to be said that the autumn was unusually mild and it is quite possible that the HB had some tricks up its collective sleeve during November. It is frosts that kill HB and they have hardly occurred at the time of writing: early December. We shall see next summer!

3.2 The Present State of Himalayan Balsam (late 2014)

So where does this leave us? Maps A, B and C (above) tell us a lot about the scope of OVA activities over the last 3 years, but nothing at all about the extent to which the problem has been solved. **How much HB is still there?** Has it all gone? If not, have we made any difference? Of course we do not know how successful this year's three sweeps have been. That will become clear next June. But we do know what remained to be cleared after two of those three sweeps this summer. The maps that follow therefore illustrate this: the impact of the two years 2012 and 2013 plus the first two sweeps in 2014.

The maps should be seen as a best estimate. They depend entirely on my memory. And they have a serious scale problem. The two OS maps (Maps D and E below) give a fine overall picture but the scale is too small for detailed plotting. For this reason I drew the seven, admittedly crude, sketch maps. These are much better but even so only allow approximate plotting eg in Stowford Woods (Sketch Map 3). If anything, the area of red is exaggerated. These, it is hoped, will be a helpful reminder in future years as well as a historical record.

Key: The key is important!

Both sets of map use the same colour shading system:

Green: Himalayan Balsam has been encountered at some stage in the three seasons 2012-2014 but the area was already clear at the start of the third sweep in Sept-Oct 2014.

Red: Himalayan Balsam was encountered during the third sweep in September-October 2014.

At the outset, it was clear that we had entered a new world. Knowing that there would be a big turnout of volunteers on the Opening Day (13th June) my problem was ... Where is there enough HB to keep so many people occupied for a whole morning? This was an unusual circumstance, to put it mildly! Certainly a recce through Stowford Woods had revealed that frequency of occurrence of HB was significantly less than in 2013 let alone in 2012. Volunteers would have to search carefully for HB and this could be a problem for new volunteers with no previous experience of HB recognition, especially as it was not in flower. For them, a continuous stand would be much easier to handle.

A recce solved the problem. There was still serious infestation on the stretches down towards the flood plain, not only on the very bottom leg from the church down to the CDE dairy, which had never been cleared, but on the leg above the church running to Place Court which had received a single sweep late in 2013. In the latter stretch, as expected after only a single sweep, there was plenty of HB. In both areas there were fairly clear stands at the water's edge, as shown in the photo below in the stretch below the church:



Recce 10th June: Young Himalayan Balsam low on the far stream bank below the church, backed by a mix of brambles and nettles (The pink flowers are foxgloves!). This had never been cleared before.

Sometimes it was in a mix with nettles or brambles:



Recce 10th June: A mix of HB and nettles on the stream bank below Place Court. This had been received one sweep in 2013

Sometimes the HB extended along field margins where the farmer had cut off the upper stalk ... but it had re-sprouted:



Recce June 10th: This HB has re-sprouted after being cut by the farmer (see especially the group of stalks upper centre right). Brambles and nettles add to the fun.

In all three situations shown by these photographs, work would be slower than on large clear stands on a flat woodland floor. Finding the roots, without being scratched or stung, takes time.

So, on the Opening Day on 13th June, a healthy 15 OVA volunteers and a comparable number from CDE, assembled at The Otter Inn car park and duly worked the stretch from Place Court (See Sketch 7 or Map D below) down to the church. It took all morning to clear it. The following photos (some by Mo Sandford) illustrate this first morning:



Coffee Break on the Opening Day; 13th June 2014



It can be fun! (Fiona Fitzpatrick; CDE)

Photo by Mo Sandford



Photo by Mo Sandford **CDE volunteers tackle HB from the stream; Opening Day 2014.**



Trevor Waddington and Teresa Creton battling the nettles and brambles; Opening Day 2014.



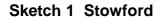
Photo by Mo Sandford

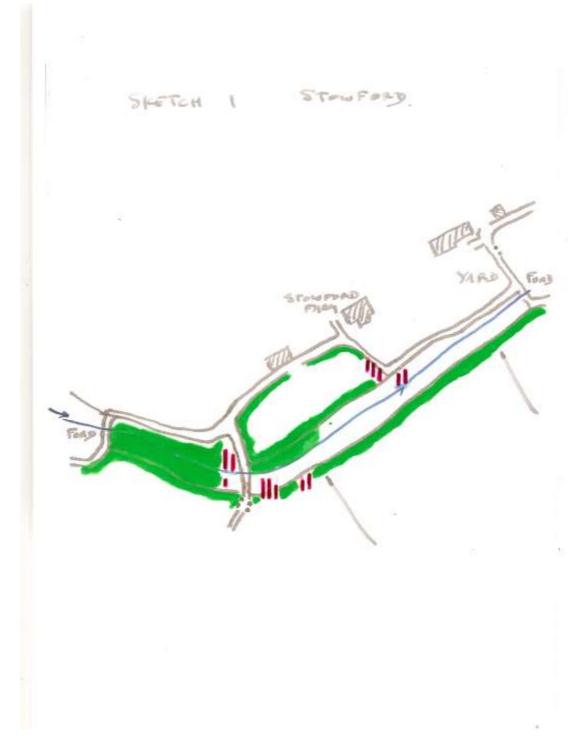
Diane Waddington compares thick re-sprouting HB with a slim young plant

The team worked very well that morning and completed this stretch above the church and below Place Court. Last year's single sweep had left plenty of work to do, as was to be expected on the basis of past experience. So the very bottom leg to the dairy farm, which has never been pulled (by OVA at least), remained for another day.

So yes, of course, there was plenty of HB on this low stretch of the Colaton Brook which had received so little attention in the past. But what about the rest of the valley, especially the Stowford block which we had swept through a total of seven times in the last two years? A fair comment would be that the impact has been very considerable and there are extensive areas where there is now no longer HB. Where it occurs, it does so in quite widely separated clumps.

Perhaps the best way to spell this out is to comment very briefly on each of the seven sketch maps which describe the situation, field by field before the third sweep this year.





The sketch is of the hamlet of Stowford (See OS Maps A-E; or Map F below). The immediate gratifying conclusion is that the green colouring is so extensive.

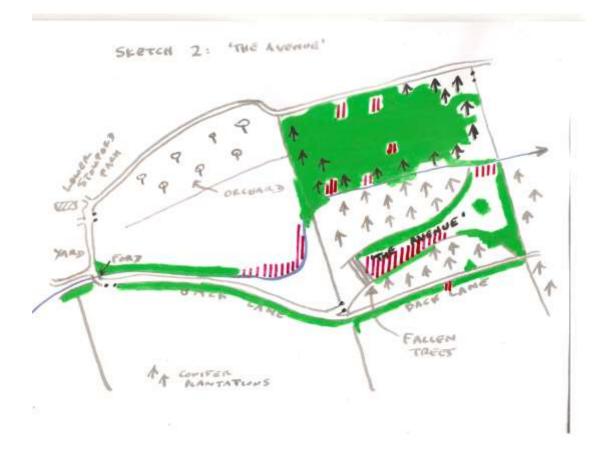
The ford on the left-hand edge of the map represents the upper limit of Himalayan Balsam (HB) on the Colaton Brook when surveyed in 2012.

Working downstream it can be seen that HB has almost been completely eradicated (green colouring) on both banks of the stream in this first stretch and in the adjacent field to the south almost as far as the bridge/road junction. The red by the first road junction represents just 4-5 plants found at the beginning of the third sweep this year. In 2012 there had been clusters of HB all along this stream axis and over the bank in the adjacent field. Most has gone.

Following the fields north-eastwards on the south side of the stream there remain just two patches of red (representing perhaps a dozen plants) and then nothing to the right-hand edge of the map. All of this used to be quite bad with a cluster every 5 yards or so. Walking that field margin onto the next map and right through two fields to the conifer plantation (Sketch Map 2 below) there was just a single spot with two plants on that field boundary, which is an excellent result.

Returning to map Sketch 1 above, the small field north of the brook used to have HB all round the margin, being especially bad by the riverbank (SE side). Now there is just a small cluster in the NE corner and another awkwardly located (ie not easily accessible) outside the field on the stream bank.

So this part of the Colaton Brook is very much under control and easily cleared by one person in 30 minutes.



Sketch 2 Stowford: "The Avenue"

Turning to Sketch 2, which lies downstream from the previous one, the almost total control over the field boundary along the south side of Back Lane has already been commented on (above).

To the north of Back Lane there lies, in the west, the stream below the ford, and it can be seen that it has been effectively cleared (green) for the first stretch but then, as the stream swings north, there is a fairly extensive section of red on the curve of the north bank. In fact most of this is on the field margin and has been a troublesome spot throughout. We is our first **"hot spot."**

Further downstream (ie on the right-hand side of the map) there are two fenced blocks:

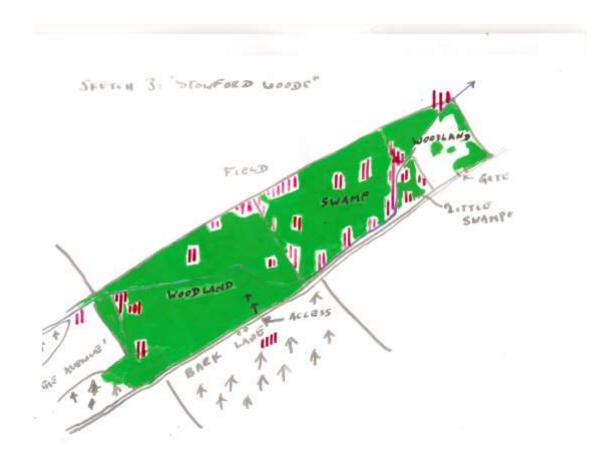
- On the north side of the river there is a rectangular area of open grass with clusters of trees. It was where the OVA started its campaign in 2012 (in heavy rain!) and was very bad at the time over the whole of the rectangle. Now, there is just a scattering of small clusters with most of the area completely clear.
- On the south side of the brook is a very dry and sterile conifer plantation and to the south of that "The Avenue," which is a name that we have given to an open grass corridor created to allow telegraph poles and cables to cross the conifer plantation. Access is by a gate off Back Lane at the SW corner (see sketch; gate = two dots) and at the eastern end of the Avenue it is possible to scramble through into the main block of Stowford Woods (Sketch 3).

Last winter the avenue was blocked by falling trees at its western end (see Sketch 2). On the eastern side of these fallen trees there is a minor "hot spot." In fact the Avenue was strimmed in 2013 by CDE and it seemed to have been very effective (see photo 10 late in the 2013 report). But this year there have always been plants, again often small in the open grass, and although the infested area is shrinking it always needs attention. However, as can be seen on the sketch (the green) HB used to extend along the northern side of the Avenue as well as right along the south side and round the corner up to the slope below Back Lane. This is now completely clear (green).

At the north-eastern end of the Avenue, there is a small hotspot on the south bank of the stream ideally located to feed seeds downstream.

Control in this map area is thus not quite as complete as on Sketch 1.

Sketch 3 Stowford Woods and Swamp



Sketch 3 illustrates the area that has been the bain of our lives these last three years, as the Annual Reports have made clear: the rectangular block of Stowford Woods, including the swamp. Back Lane bounds it on the SE side; and a field wall along the NW side. The stream enters at the SW corner, works across to the foot of the steep slope below Back Lane and then cuts north into the small block of woodland below the Swamp before exiting at the northern corner of that woodland. Working downstream there is first the large rectangle of woodland that was so heavily infested in 2012 (see above p 9). Then below this is the quite large wet open area that we have labelled "The Swamp" (see sketch 3). Where the streams swings north away from Back Lane, a smaller open wetland is located ("The Little Swamp"). Below this is a smaller block of woodland.

• The **Main Woodland block**. As can be seen on Sketch 3, most of the woodland is under control, which is excellent given the appalling infestation in 2012. Large areas have been devoid of HB since that first massive effort in 2012.

However, as always, there remain a few "hot spots":

• At the upstream end where the woodland floor happens to be very wet.

- North of the stream half way down to the swamp: a single problematic "hot spot."
- Against the field boundary towards and at the bottom end of the woods.

Given the starting point in 2012 (p9) this is a satisfying result indeed.

• **The Swamp** continues to give problems, at least partly because access can be difficult in wet spells so that it is not easy to see how well we are doing and what remains to be done. Considerable progress has, without doubt, been made. The following photos were taken this year before the third sweep:

The first photo suggests the progress:



The encouraging view of the swamp "downstream" from the woodland edge; 3rd August 2014; 3rd Sweep.

But then again:



The Swamp, looking north towards the field;

The photo is taken from the same spot as the preceding photo. Flowering Himalayan Balsam can be seen in the right foreground and in a "hotspot" under the trees and behind the rushes, upper left centre. The latter is blown up in the photo below:

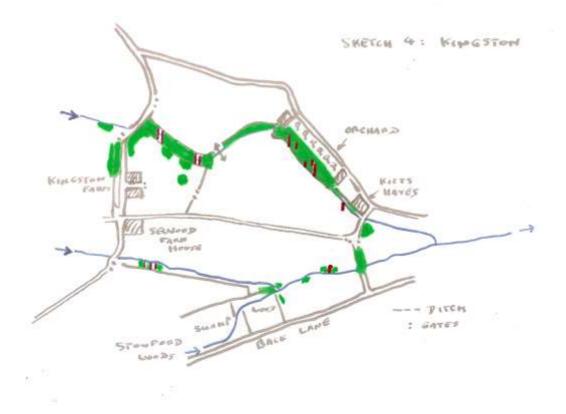


A blown-up version of part of the previous photograph.

At least three other "hotspots" are strung along the stream bank and there has always been a bad one at the bottom near the junction with the lower woodland block (See Sketch 3).

- **The Little Swamp**: Although hugely improved, and with access from Back Lane very easy, there remain small clusters therein.
- **The Bottom Woodland**. Strangely, large parts of this woodland were never infested, as Sketch 3 shows (no green or red). On the north side of the stream it was always bad but now largely clear (one "hotspot" by the field). But south of the stream there used to be 2 hotspots: one in the middle of the block and one up against Back Lane.

Conclusion: Control of the main Woodland block is almost complete but there remain major doubts about the Swamp. Massive progress has been made but access difficulties make it difficult to know how much HB remains. It will be an obvious target yet again in 2015.



The Colaton Brook has two small left-bank tributaries and both are shown on this sketch.

The Kingston tributary is the more northerly being located north of Kingston farm. It is also the more problematic. One small patch (green) has been controlled on the stream to the west of the road, as also the awkward strip running south along the road. The latter lies on a cliff-like red bank overlooking the road and farm. Formerly HB was well established not only on this steep slope but also in the field above. It has been completely removed.

East of the road there are 3 sections:

- In the first, the stream heads south-east in a deep trench with abundant brambles. This was very bad when cleared for the first time in 2013. Monster plants towered to 7-8ft. After 2 sweeps this year, there were just a couple of small clusters (2-3 plants in each) when it came to the third sweep, which is a huge improvement.
- In a middle section curving north-eastwards, the stream is open and easily accessed, including by cattle. Perhaps because of this, infestation was never more than widely-spaced clusters and it has been completely clear in 2013 as well as this year.
- Finally there is a difficult section curving south-east to Kitts Hayes House. It has a complicated structure. The orchard that flanks on the north-east side gives easy access to the deeply entrenched stream. A strong barbed-wire fence on the south side prevents access to a deep

dry ditch. This is clear of vegetation deep down but the banks are infested with brambles, scrub and small trees. A passage had to be cut along this to allow the two sweeps in 2013; and in 2014 growth had to be cut back again. Between the stream and the ditch is a substantial bank. All three features were quite badly infested in 2013 when first tackled. As the above map shows, there was a scattering of plants not deserving to be called "hot spots". For example there were 5 or so in the dry ditch and perhaps the same in the stream. This is a gratifying result.

At the southern end of the orchard, the stream cuts through the bank (under a wall) and thereafter is firstly in open field and then in the garden of Kitt Hayes House, home of the Trefussis family. There was a single small cluster in the field in September 2014.

Outside the axis of the stream there has been HB in the garden of Kingston Farm where it runs north to the stream. This has been eliminated.

In addition to the Kingston tributary, there is another to the south of Selwood House Farm. Much of this has never had HB but in 2013 a "hotspot" was found at the upper end (See Sketch 4 and photo below). This is best described as a "bramble haven" (See photo 8 in 2013 Report). Generally where cattle (or horses) can get at Himalayan Balsam, they will eat it. But brambles stop them and provide protection. The Selwood House Farm hotspot is one such, a mass of brambles allowing a dense "Hot spot" to develop. In the photo below, the volunteers are backed by a wall of brambles and the HB can just be seen with purple flowers tossing in the breeze.

Behind the wall of brambles and HB there is a woodland glade by the stream and HB was also bad there in 2013. In fact it appears that we have been more successful in the bramble haven than the woodland glade, which was a surprise. Very little remained in the brambles at the time of our third sweep in 2014 but a surprising number of young plants, easily removed, had germinated and were pushing through at the time of our third sweep.

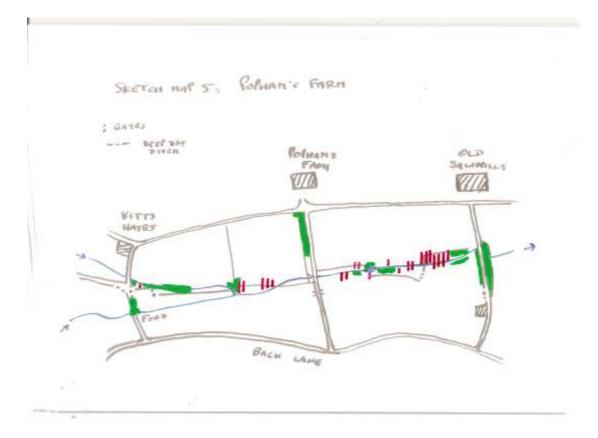
The photo below was taken before work began on this year's first sweep:



Ann-May Siddorn, David Lindsay-Halls, Gillian Withycombe, Diane and Trevor Waddington in front of the wall of the "bramble haven" on the Selwood House Farm tributary; First sweep 17th July 2014.

The wall of brambles with Himalayan Balsam stretches from left to right. More HB lies under the trees beyond.

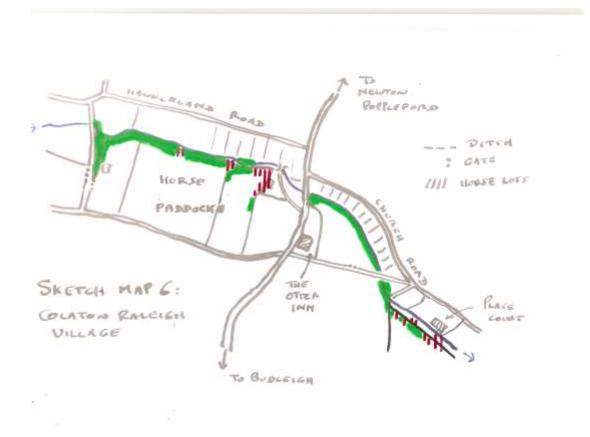
Sketch 5 Popham's Farm



Continuing downstream from Kitts Hayes, we move into territory that had received no attention until the single sweep in 2013. The brook passes through two long fields.

- In the first field, running down to the lane by Pophams Farm, there are long stretches which have never had HB (no shading of either colour). At the western end, almost complete control has been achieved. In the lane running south from Kitts Hayes House toward the ford, there was awkward HB on top of a huge embankment field boundary (out of reach of cattle!). This is now clear. Then, in the field, in 2013, there had been serious infestation on the banks of the Kingston tributary before it joins the Colaton Brook. This also is now clear. Further down the field there are two widely spaced "hot spots" both still active.
- In the lane that runs south from Pophams farm between the two fields, a deep ditch that was badly infested in 2012 and less so in 2013 is now clear.
- In the second field, as can be seen on Sketch 5, there are several patches of active HB strung along both sides of the brook. It has certainly reduced in quantity as a result of the two sweeps this year but will continue to require attention in 2015.

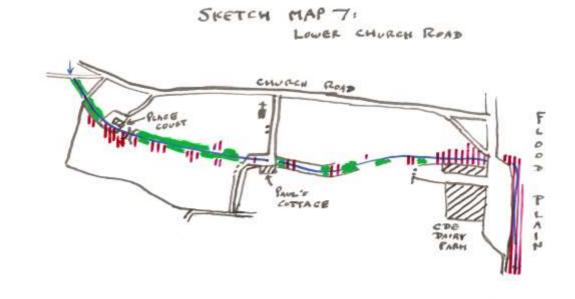
Sketch 6 Colaton Raleigh Village



At the western end of the brook on Sketch 6 above there is a deep trench that runs alongside the lane. This was very badly infested in early summer but was free of HB by the time of the 3rd sweep. From this ditch the stream cuts under the hedge and forms a feature at the bottom of each property downstream. On the south bank a strong barbed wire fence keeps the horses out of the brook.

As noted earlier, two neighbouring residents in Hawkerland Road allowed us access to the brook this year. Their properties are located on the north bank of the brook about half way along the set of small property units shown on the sketch. From there we could work both upstream and downstream in the brook and on the south bank if the fence allowed. The fields south of the brook are described as Horse Paddocks on the map, and it has always been the case that horses have been present in the two upstream fields (on the left on the sketch). In our experience there were never animals of any sort in the third field down and it is striking that there is an HB "hot spot" in the corner of that field. Small plants continued to pose a problem on the third sweep right out in the open pasture, which is unusual, and undoubtedly reflects the absence of animals.

Below the main road (ie the right hand side of the map) is the stretch monitored by David Gibson in his own time. The problem posed by the need for access to Place House, downstream end of this section has already been alluded to. That apart, control is good.



Sketch 7 Lower Church Road

Finally there is the long section of the Colaton Brook that runs from near Place Court down to the CDE dairy farm (Sketch 7 above). It may be remembered that the upper part of this, down to the church, had received a single sweep in 2014 and was the location of operations on the opening day this year. The lower stretch, below the church, had never before been tackled and received two sweeps this year. Our work on the brook terminated just upstream of the farm and below that point, solid red dominates on the map.

Not surprisingly this is the stretch of the river where HB has been most prolific in 2014; all of it on the river banks. In all other locations this year, there was never sufficient HB to build large piles of pulled plants, which is the standard and very effective method of disposal. Such piles will rot away in a fortnight. Even in the swamp the considerable amount of HB was widely scattered. Piles are the best solution where there is a lot of HB in a single place. The following photograph is located below Paul's Cottage (see Sketch 7 above) on 27th July on the first sweep:



Large pile of HB with Gillian Withycombe proxy in command; 27th July on First Sweep.

The brook lies behind the barbed wire fence and another large pile can be seen on the bank beyond. Such piles are becoming less common as HB is progressively eliminated.

Sketch Map 7 makes it clear that quite a lot of HB remained at the time of the third sweep but there is no reason why it cannot be tamed in 2015.

On several occasions in this survey, the relation between animals and the presence of Himalayan Balsam has been commented on eg the concept of "bramble haven" in the Selwood House Farm hotspot; the earth bank in the analysis of Sketch 5; the paddock on Sketch 6. This relationship is particularly well illustrated by a fenced enclosure on the bank of the stream near the CDE dairy farm. Seemingly it was erected to protect a drain exit but in addition it has protected Himalayan Balsam from cattle and some monster plants had to be removed:

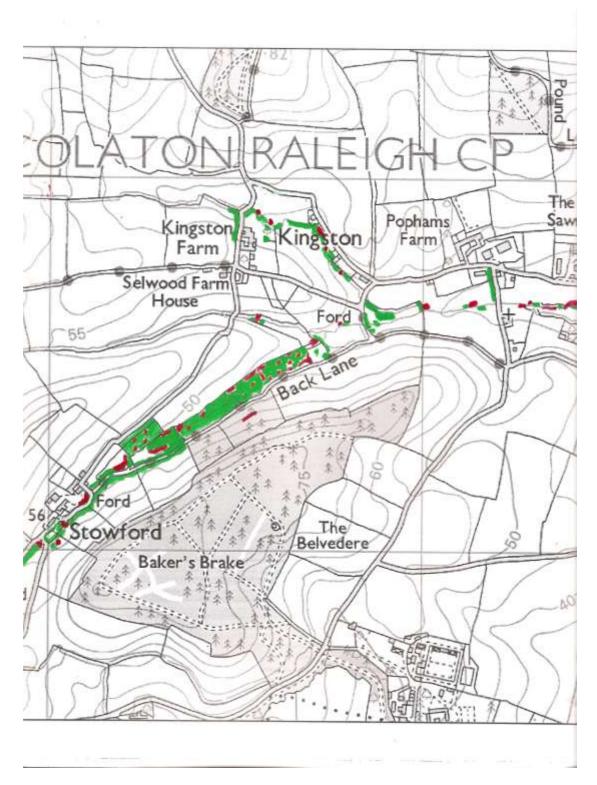


Fenced enclosure protecting a field drain exit ... and Himalayan Balsam; 27th July; First Sweep.

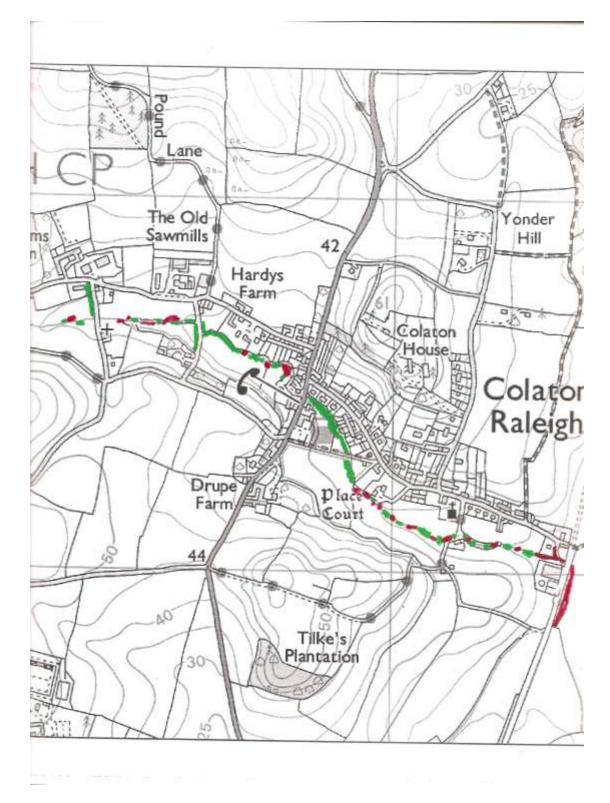
The stream can be seen on the far left of the photo. The cream house is on Church Lane. Gillians Withycombe and Hamilton, and Clare Meiklejohn prepare to do battle.

This is an excellent example of the role of cattle in restricting HB to river banks in this area. Cattle eat Himalayan Balsam and cannot reach the succulent mass in this case. If there were no cattle one assumes that all of our pastures would by now be a sea of pink balsam! This after all, is why there was such extensive HB cover across the whole floor of Stowford Woods In 2012.

Finally, the seven sketch maps that have been described, are summarized on the two OS maps that follow; one for the western, upstream section and one for the eastern. They give a good impression on the general success in controlling Himalayan Balsam as evidenced by the extent of green thereon:



Map D The Western, Upstream Colaton valley



Map E The Eastern, Downstream Colaton Valley

Conclusion

Targets

Clearly 2014 was a good year. The prime target of implementing two sweeps over the whole of the Colaton Brook was comfortably achieved. Indeed over all but the very bottom leg, three were completed. This was achieved because:

- The number of volunteers nearly doubled and
- As a result of efforts in previous years, the amount of HB needing pulling was hugely reduced in the upper reaches.

Targets in 2015

- To retain as many as possible of the existing team of volunteers and increase the total to 40. This would require a decision on whether to repeat the gazebo publicity operation on the Otter footpath.
- To eliminate all the hotspots identified in this report (above) ths allowing us to conclude that the Colaton Brook is under control.
- To link to lain Ure and his brushcutter zone by extend control of the Colaton Brook from the CDE dairy farm southwards (see Map E above) to link to lain's area of operations near Bicton Home Farm and Otterton.
- To liaise with Ted Swann in Newton Poppleford and, if volunteers allow, help eliminate their major hotspot at Goosemoor.
- To liaise with Sam Bridgewater (CDE) and, if volunteers allow, tackle the Knowle Brook at its upstream limit by Dalditch Farm.

Miscellaneous

Trimming Pods In the past it used to be argued that there is no point in continuing field operations once seedpods have been formed. Experience has shown us that this need not be so. Certainly it is a slow job but, once practised in the art, it is entirely feasible to get a truss of seedpods into a plastic bag without a pod popping (well 95% feasible!). This can be done either by:

- Carefully snipping the stalk below the pod and placing the truss in the bag without touching anything or, possibly more effective
- Smothering the truss with the palm of the hand and encouraging pods to pop; then into the bag.

Using such techniques a mass of HB has been cleared this year and last, in August and September above all. On one occasion I took 8 plastic bags of HB pods to the Non-Recyclable section of the dump. Given that one plant may yield 800 seeds (Royal Horticultural Society estimate) those bags contained tens of thousands of seeds. Each.

Dr Sam Bridgewater's BBQ. Clinton Devon generously repeated the free BBQ/seminar, this year on 23rd October in The Otter Inn. It was a valuable session again, it being most helpful to exchange experiences and discuss future plans with volunteers from other groups. Eleven of our team attended.

Patrick Hamilton, Chairman, Natural Environment Committee, OVA