

Annual Report: OVA Himalayan Balsam Project; Colaton Raleigh brook; 2018

It seems that we are most definitely at a turning point in our campaign to clear the Colaton Raleigh brook of Himalayan Balsam (HB). In 2012 we only managed three sweeps to the bottom of the Stowford blocks and it took until 2015 to achieve the aim of three sweeps right down to the flood plain. Now, not only have we completed three sweeps in each of the last 4 years, but we are hitting a new problem Finding HB to pull! This will require a new strategy in 2019.

First some basics of the 2018 experience need to be reported.

Last year I reported feelings of frustration because although long stretches of the Colaton valley were, as a result of our efforts, completely clear of HB, “rogue outbreaks” had set the clock back in three or four places. This year there has thankfully been just one completely new “hotspot” (and that small) ... just three old ones that flared up again! Elsewhere the long clear stretches are hugely gratifying. And yet, this brings a problem! Volunteers turn out to pull HB but if there is none, the exercise is in danger of being pointless. A new strategy is required. This strategy will be considered in the conclusion below.

Volunteers and Hours input

Table 1 (p2 below) shows the number of participating volunteers in each of the 7 years of the campaign. As can be seen, 2018 was in the middle of the range with 19, as in 2015. In three years there have been fewer, and in two this number has been exceeded, So this is a fairly good performance. It is disappointing that we dropped from the excellent number, 25, who turned out last year as it meant that the total hours worked was substantially less (305½ compared with 384. Medical factors certainly played a role with several stalwarts affected. (Kevin and Teresa Creton, Ann-May and David Lindsey-Halls; and Jim Pithouse in the last month or so). Martin Wisdom is still busy keeping the East Devon Golf Club on a steady course.

The weather may also have played a role. One of the longest dry and often hot spells in memory lasted from mid-May, through June and well into July. It may well have deterred some and shortened work spells for those who did turn out. On more than a couple of occasions we decided to stop at the end of the coffee break rather than challenge the heat of the mid-day sun.

Before the 2019 season, a renewed publicity campaign is probably needed. In early September (in my absence) David Hatch organized a repeat of the Gazebo display of 2014. This could make a contribution.

Year	Total Participating Volunteers	Outings	Hours approx.	Hours per Volunteer approx.
2012	14	94	309	22.1
2013	16	95	245	15.3
2014	27	150	375	13.9
2015	19	111	301	15.8
2016	11	93	255	23.2
2017	25	149	384	15.4
2018	19	120	305½	16.1

Table 1 Participating Volunteers 2018

Below, in Table 2, the individual inputs are illustrated and the right-hand column indicating new members this year (just 2). All are thoroughly deserving of our thanks. As I have said before, we hugely appreciate every single outing made by each and every volunteer. Between them those who, for one reason or another, only managed one or two outings nonetheless, **between them**, put in almost 24 hours of work. That's an awful lot of HB seeds removed, if you reckon on a potential of 800 seeds per plant (Royal Horticultural Society).

Name	Outings	Hours	New Member
2 Bob Murdoch	11	29½	
Jim Pithouse	10	29½	
4 David Hatch	10	29	
5 Mike French	10	26½	
Gillian Withycombe	10	26½	
7 Gill Hamilton	11	25½	
8 Geoff Porter	6	15½	
9 Clare Meiklejohn	4	11	
10 Chris Bird	4	10½	
11 Jean Turner	3	7½	New
Martin Wisdom	2	7½	
13 Rosemary Humphries	2	5	
Neville Humphries	2	5	
15 Kevin Creton	2	4½	
Mo Mills	2	4½	
17 David Rolls (DWT)	1	3	New
18 David Lindsey-Halls	2	2½	
19 Ann-May Lindsey-Halls	1	½	
	120	305½	

Table 2 Volunteers: Individual Outings and Hours

Progress in the Field 2018

The Timing of the Sweeps

	2015	2016	2017	2018
1st sweep start	19 Jun	22 Jun	15 Jun	14 Jun
1st sweep finish	23 Jul	25 Jul	3 Aug*	28 July
2nd sweep start	23 Jul	28 Jul	20 July	9 Aug
2nd sweep finish	20 Aug	29 Aug	26 Aug	29 Aug*
3rd sweep start	30 Aug	1 Sept	21 Sept	29 Aug
3rd sweep finish	13 Oct	13 Oct	12 Oct	11 Oct
Extra				25 Oct**

Table 3 Timing of Sweeps

* still small areas outstanding but had been largely clear on 1st sweep.

** I did a tidy-up/recce on 25th October

It is worth reflecting for a moment on the number and timing of sweeps. Two aspects:

1. *Missed plants and late germinators* Himalayan Balsam (HB) plants will always be missed and HB seeds seem to germinate from early spring until well into autumn (late October at least). The hope is that missed plants will have been small when missed on that first sweep. If this is the case, and we return between 4 and 6 weeks later, the hope is that, although the plant may be 8ft tall and in flower, the seed pods will not yet have burst. Obviously this must not be allowed to happen. From experience we rarely encounter, on later sweeps, plants that have blown their pods which suggests that we have got the about right. But if we did not have a second sweep in early August, and then follow that with a third in September, obviously we would allow multiple new hotspots to develop.

Late germinators simply add to this need for multiple sweeps. In other words, not all HB plants encountered on the later sweeps are the result of missed plants. Quite possibly seeds had germinated since the earlier sweep.

2. *Expanding the target area.* There is another aspect to this question of the timing of sweeps: the size of the target area. The length of time taken for a sweep depends on the amount of HB needing to be pulled and the number of volunteers available to pull it. The former has changed hugely. In the early years, the infestation in the upper reaches around Stowford Farm was so great that the target area remained that small area. Eventually the amount of HB was reduced to

the extent that we could extend right down through the village to the flood plain (2013) and then do this three times (2015) (*see my maps of this sequence in the 2014 Annual Report pp 8 to 12*). This is now the norm. But we have reduced the amount of HB remaining to such an extent that we can complete a sweep in much less than 4-6 weeks. Of course we could do this even more impressively if we doubled the number of volunteers! And this opens up the question, what can the volunteers do with the extra time that has opened up, let us say in weeks 3 and 4, if the first sweep is completed in weeks 1 and 2? The possibility is the exciting one of expanding the target area. This development is worth exploring a little further.

As usual, our campaign started in mid-June (14th) and, again, we expressed solidarity with Clinton Devon Estates by joining in on Kate Ponting's opener (20th June) on the Budleigh brook at Yettington. In "our" Colaton Raleigh brook, early signs were encouraging. My recce on 11th June showed relatively little HB in the lower reaches, even though, in the upper Kingston tributary, the "new" (2017) hotspot above Kingston Farm (the bales field) was alive and kicking. Because of the long drought, our first outing tackled the swamp which should have been dry. It wasn't! Equally surprising was the relative lack of HB!! Twelve of us tackled it that first morning (14th June) and 3 or 4 of the group found no HB to pull! We finished by 10.45am, which was extraordinary compared with past years when it had usually taken several mornings. (Strangely there was more in the swamp on the third sweep in September!). The result was that progress on the first sweep was so rapid that, by 12th July I took the decision, after consulting Kate Ponting (CDE), to extend our target area along the edge of the flood plain in front of the Dairy. We duly finished our normal target zone on time on 28th July (see table 2 above) and took another week or so to finish a first sweep in this new extension.

How this process will develop in future years is discussed in the Conclusion below.

Progress in the Field: Colaton Brook: the 7 Sketch Map Summaries

So what did we encounter in 2018?

As in previous years, the sketches below show the approximate distribution of HB encountered on the last (third sweep). As such they are the best indication of the current state of play and may be compared with previous years. HB is shown by red dots roughly representing a small cluster of perhaps 5-10 plants. Where surrounded by a circle that represents a "hotspot" of perhaps 30-50 plants. The green shading shows approximately the location of Himalayan Balsam in 2012 at the start of the campaign. Blue indicates streams: the Colaton Brook and, on Sketch Map 4, its two tributaries (see blue arrows):

- the Kingston brook just north of Kingston Farm and running eastward past Kitts Hayes to the main stream; and
- what we might call the Selwood brook in the SW of Sketch Map 4 running west-east just south of Selwood Farm House to join the main Colaton brook just below the Swamp.

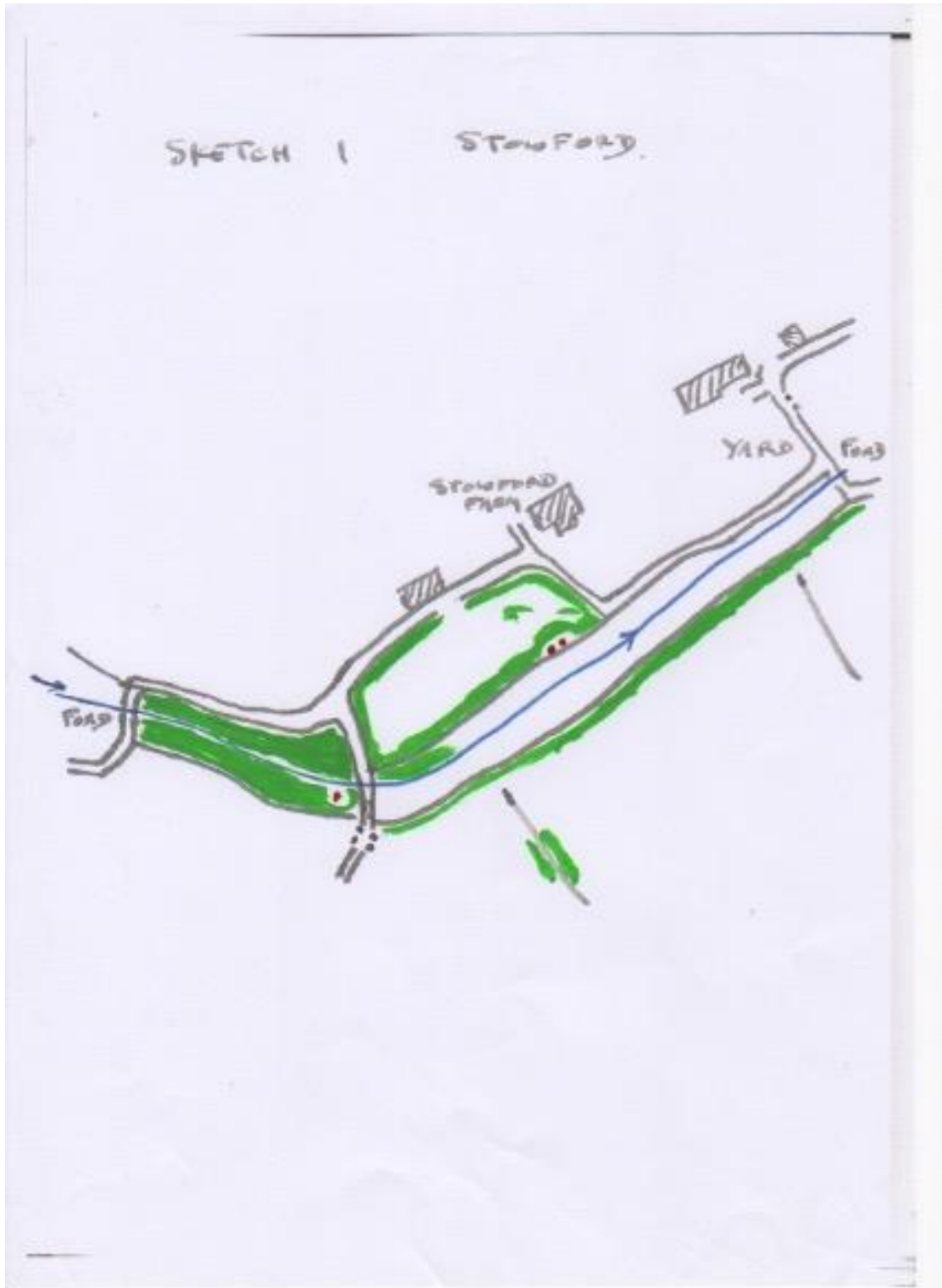
The difference between the 2017 and 2018 set of maps is often so small that the following account will sometimes be brief.

Sketch Map 1 Stowford Farm (below)

As was the case in 2017, this headwater area is clearly under control. There are only two locations where HB is still encountered:

- on the upstream side of the bridge at the T-junction in the road above Stowford Farm. (Just a single plant)
- in the eastern (riverside) corner of the left-bank field just above Stowford Farm.

Not more than a dozen plants have been found in these two locations all year.



Sketch Map 1 Stowford; Third Sweep
Stowford Farm is GR 061871

Sketch Map 2 “The Avenue” (below)

The same comment applies. This stretch is almost under control. The red dots (barely visible) almost all lie in the green block at the eastern end of “The Avenue” (our name for an open corridor (with overhead power cables) between plantation blocks to north and south). This block forms a triangle butting up against Stowford Woods (Sketch Map 3) to the east. It is a covered with bracken which grows well over 6ft high so that finding HB is always difficult. Only when the bracken dies away is it possible to be thorough, which is why there is usually work to do in the September (third) sweep.

It is excellent that not a single HB plant was found in the two fields on the left bank side (north) which is where our campaign started in 2012.



Sketch Map 2 “The Avenue”
Lower Stowford Farm has GR 061872

Sketch Map 3 Stowford Woods and the Swamp (below)



Sketch Map 3 Stowford Woods and The Swamp

The top (northern) corner of the rectangle is at GR 067876.

Note that the woodland of Stowford Woods is not indicated (green) on the 1/25,000 OS map

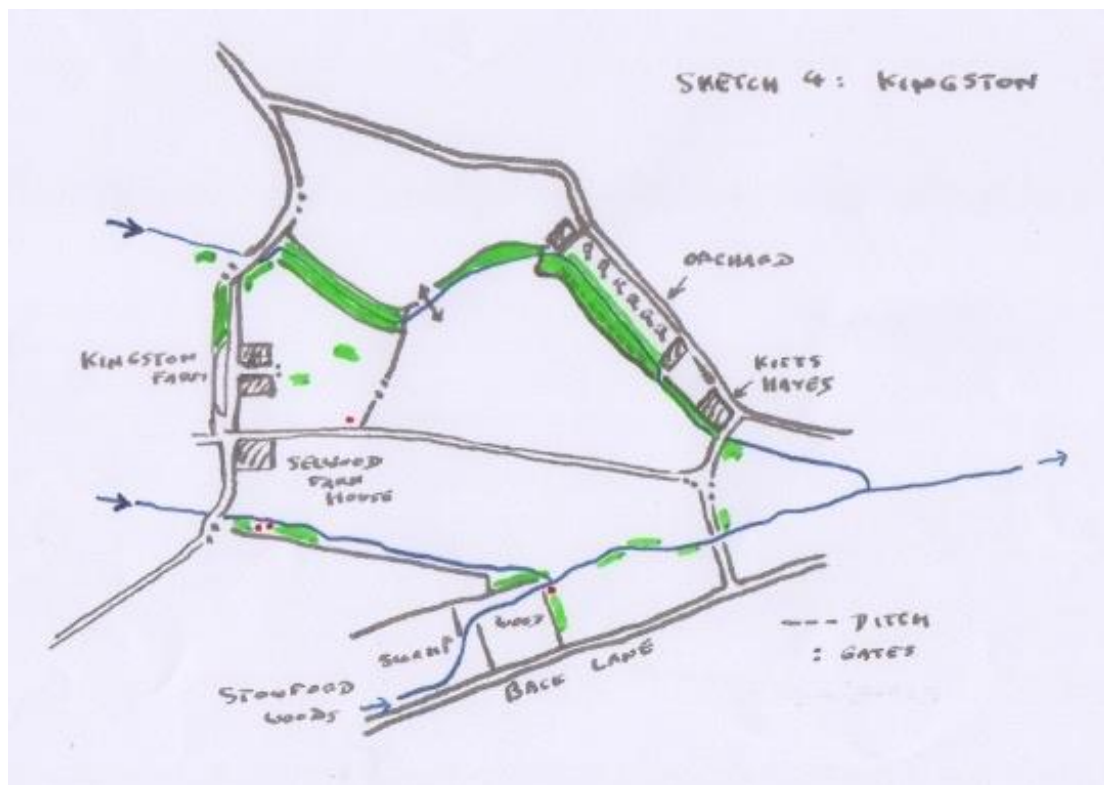
This zone has always been the most problematic, especially The Swamp.

- **Stowford Woods** (the upstream rectangle marked “Woodland” on the above sketch).
 - Left bank: The two red dots just north of the stream are relics of 3 or 4 hotspots that for long survived on or north of the steep stream bank. One of the two in the far north adjacent to the “Field” (the easterly one) is a new mini-hotspot (close to one at the top edge of the swamp) whilst the other (deep in a wet tributary trench) is the only survivor of an earlier large hotspot.
 - Right Bank: The top end the swampy glade has always had a small hotspot and this persists if much smaller. The red spot lower down was a nasty surprise on the second sweep: a flourishing hotspot of giants, presumably from one or two that had been missed. There was scarcely a survivor on this third sweep but there will be seeds for 2019 lying in wait!
- **The Swamp**: the experience this year was the inverse of what might be expected. Whereas on the first sweep there was “not enough” HB for

the dozen volunteers available, by the time of the third sweep there was a fair amount of work to do, especially out in the central zone.

- **The Little Swamp:** (See Sketch Map 3) This is a small zone but refuses to die. Always there seem to be a dozen or so plants and these are difficult to access because of the expanding bramble cover. Of course this cover increases the probability of missing seedlings.
- Downstream the **Bottom Wood** (“woodland” on Sketch Map 3) below the swamp, is now virtually under control, although, strangely, last year’s pattern is reversed: the left bank is completely clear on the third sweep and only 3-4 in the block on the right bank. Last year (2017) it was the opposite.
- Above Back Lane (See Sketch 3 above; ie south of Back Lane away from the brook.) the **Plantation** was almost clear on the third sweep, although on the first sweep a couple of new hotspots had been located in the eastern section. For one of these I counted 63 tall plants and estimated 40 for the second. These must have sprung from missed plants that had succeeded in seeding in 2017.

Sketch 4 Kingston Farm and the Two Tributaries (below)



Sketch Map 4 Kingston Farm and the Two Tributaries

This sketch suggests almost complete control which is a wonderful improvement, given that in 2017 I was referring to it as problematic on the same scale as the swamp. No longer.

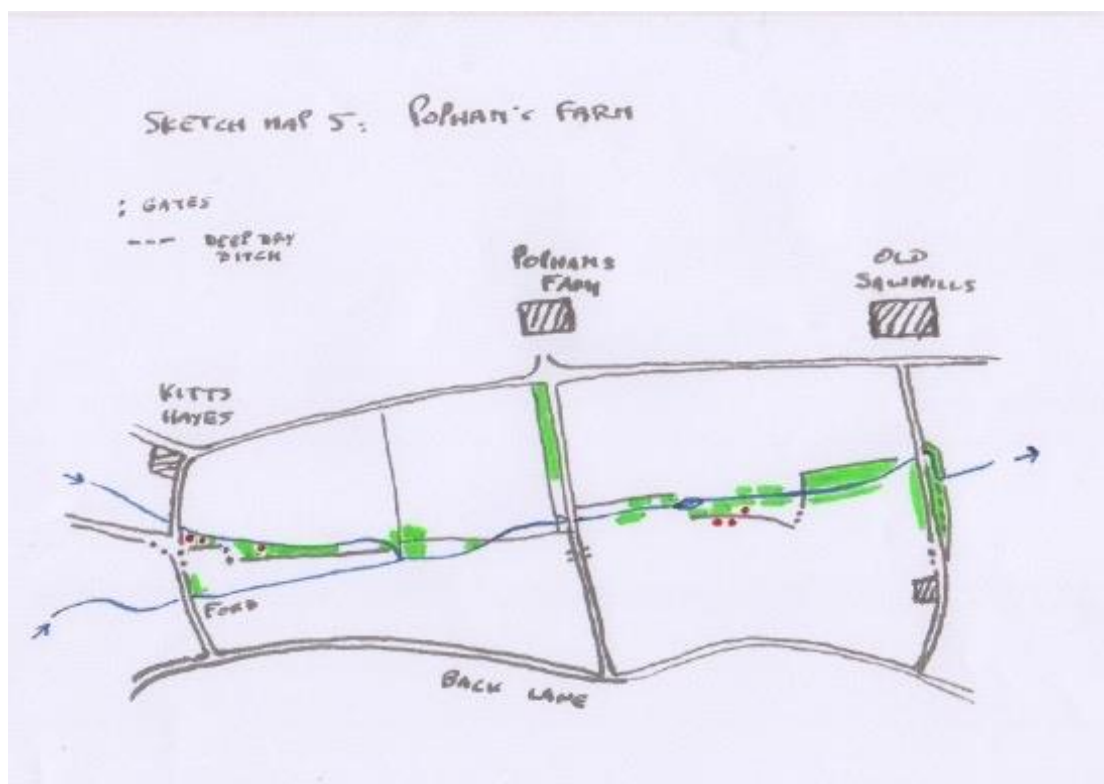
The axis of the northern (Kingston) tributary has been completely clear in its eastern section all year. In the west there were a couple of very small clusters in earlier sweeps. Nothing on the third however. Away from the tributary, the problem in 2017 had been the large new (2016) hotspot by the bales in the field SE of Kingston Farm. It was still there on earlier sweeps this year though limited to the bracken-infested corner of the field. The bales area was clear. By the third sweep this corner hotspot was reduced to a single plant largely due to a mechanical assault by the farmer.

The southern (Selwood) tributary remains the same: a single hotspot at the upstream end: the "Selwood Bramble Haven". It is smaller in size than in earlier years but still quite strong, helped of course by the brambles.

Sketch Map 5 Popham's Farm (below)

Interestingly and sadly, this middle stretch of the Colaton Brook, which in 2017 had been declared "dead" as far as HB is concerned, is no longer. Two small hotspots have surfaced:

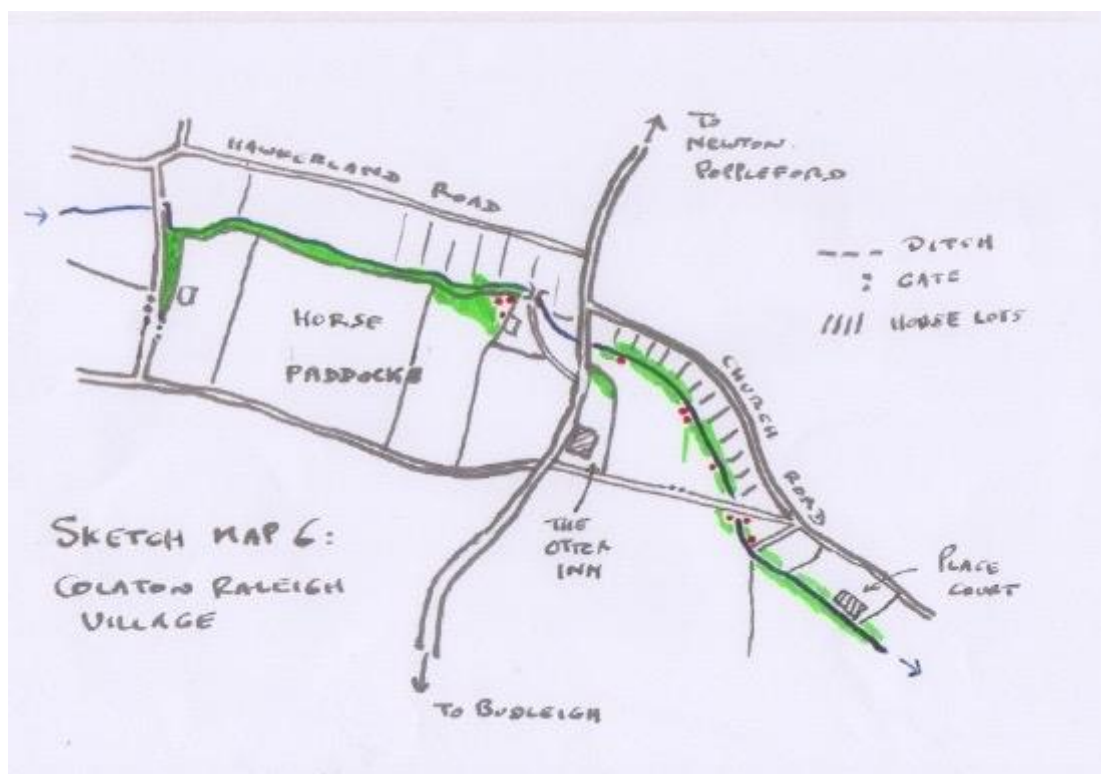
- Upstream, in the west, on the Kingston Brook tributary just below Kitts Hayes House. This is a resurrection of an earlier hotspot.
- Downstream, in the eastern block on Sketch 5, there is now a small cluster of a dozen or so plants awkwardly located in a brambly hedge. It had been discovered on the second sweep and has persisted. One plant had popped a couple of pods so there will be more in 2019.



Sketch Map 5 Kitts Hayes to the Saw Mills.

Popham's Farm has GR 072878

Sketch Map 6 The Village: Horse Paddocks and Adventure Playground
(below)



Sketch Map 6 Horse Paddocks and the Adventure Playground
The Otter Inn on the main road is a noted landmark

This section of the Colaton Brook has been active!

- The western upstream section remains completely clear from the road down to the bottom paddock (See Sketch Map 6 above). This had provided surprises on the first sweep. There had always been a small hotspot along the barbed wire fence in the bottom corner of the paddock, between it and the brook. The field got left until late on the first sweep and by this time there was a startling hotspot of over 140 plants enjoying the July sunshine. By the third sweep there were only 8 or so and vigilance in 2019 should see it eliminated.
- The middle section includes a paddock (up towards the main road) and, below it the Adventure Playground. This is the section which had caused us such despair on 22nd July 2017 when we discovered that a local resident who had undertaken to keep it clear of HB, had been too busy to undertake the task so that it was now a sea of pink blossom. A year on, it is hugely improved. Yes, here were still a couple of hotspots (of perhaps a dozen plants each) on the third sweep but so much better than a year ago. The Adventure playground produced a single plant.

- Below the footpath bridge (from the Otter Inn to Church Road) the brook flows down to Place Court (See Sketch 6 above). In all sweeps there have been 3-5 large HB plants low on the bank in this section.

Sketch Map 7 Place Court to the Dairy (below)



Sketch Map 7 Place Court to the Dairy

Otterton Church is a noted landmark

This last stretch of the Colaton Brook can be divided into stretches:

- The upstream (western) block is now perhaps the best on the whole Colaton Brook. Completely clear throughout 2018 above Place Court, only two plants were found on the reach from there down to the road by the church. For years there has been a hotspot (reported by walkers; green patches on sketch map 7) in the right bank (southern) section of this block up the slope on the boundary with a footpath (the walkers!) beyond. For the first time, this was completely clear on the third sweep.
- Below Paul's Cottage the brook runs through a short open section before disappearing down a delightful wooded "tunnel". It then emerges half way along the large field and flows down to the dairy. In the past, the big zone of infestation was where the brook emerges from the tunnel and for perhaps 100m below that. The good news is that this hot zone is now completely clear. The bad news is that there is now a new hotspot in the open stretch just above the entrance to the tunnel

and running across the hedge into the field. This was the worst hotspot on the third sweep.

- Below the tunnel and the conquered “hot zone “ below, there are still scattered plants at the fenced enclosure over the field drain and downstream from there on the right bank (4-5) right down by the dairy. This had formerly been a heavily infested area both around the enclosure and on the left bank, so this is a welcome result.
- The New Extension at the Dairy

In the section on “Timing of the Sweeps” it was explained how we came to the decision to expand the target area by attacking the stretch of the Colaton Brook in front of and below the dairy. In previous years the downstream limit of the target area has always been just below the field drain enclosure in the field by the dairy (referred to in the paragraph above and see Sketch Map 7 for general location). The dairy is shown by black shading and, in the sketch, the brook runs down, west to east just north of a line of cattle byres before going under the road. As soon as it emerges, it turns sharply right (south) and runs in front of the dairy, with its large forecourt, eventually cutting right, under the farm tracks to skirt a field to the south (not shown on the map) en route to the main Otter at Otterton Bridge. On the first sweep a difficult section was encountered with very deep and steep banks and deep water. This became the new terminus of the target zone.

Initially this north-south stretch of the brook was a mass of pink, just like most other hedgerows and stream banks on the Otter flood plain hedgerows. It was like stepping back to 2012! During this first summer three sweeps were completed and HB virtually eliminated. No doubt the seed bed will not surprise us in 2019.

Progress in the Field and Target: Colaton Brook: Conclusion

The OVA Himalayan Balsam Project is thus at an interesting stage. We have almost achieved control of the whole length of the Colaton Raleigh brook but there are warnings! If efforts are diverted away from that prime target zone in a desire to explore pastures new, there will be a risk: second or third sweeps may be delayed too long and HB plants may succeed in popping their seed boxes before we get there. As noted in discussion of the 7 sketch maps, this seems to have happened in at least four places as evidenced by surprising new hotspots: the bottom horse paddock (Sketch map 6 p12.), the hedgerow by Popham’s Farm (Sketch Map 5 p11), Stowford Woods (right bank. p9) and the Plantation above Back Lane (p10) both on Sketch Map 3.

Clearly there must be due diligence, which means good reconnaissance work between the customary Thursday and Saturday outings).

Nonetheless, the situation is very encouraging. As to the future, there is no great enthusiasm to pursue the Colaton Brook any further beyond the existing terminus of the new extension by the dairy. It remains broad policy to keep away from the flood plain of the Otter until the tributaries are under control. This being the case there is one area that does attract us hugely and which occupies a key location immediately to the south of our Colaton Raleigh focus: Bickton College estate. Reports have been coming in for several years of an alarming expansion of HB there and on 8th August David Hatch (Chairman of the OVA Natural Environment Committee) and Kate Ponting (Clinton Devon Estates) visited the college to explore possibilities. They were not successful but Kate still has a hankering for a "Balsam-free Bickton in 2019" so it is to be hoped that patient pressure will eventually achieve results. Many of our team enjoy a change of scenery and we would support Kate enthusiastically if this could get off the ground.

Patrick Hamilton
Head of OVA Himalayan Balsam Campaign.