

Small Blue Butterfly

Survey 2015

Berwickshire and North Northumberland



Butterfly
Conservation
Scotland

Iain Cowe
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INTRODUCTION

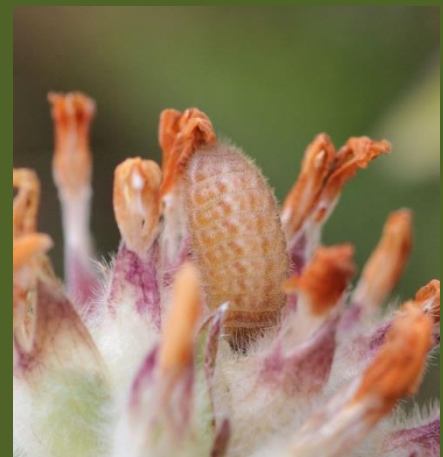
2015 saw some very testy conditions for Butterflies in general let alone the Small Blue. A cold dry spring finally gave way to something a little more summer like, but it was never going to be a vintage year. So, new challenges were presented whilst out recording in the field. The season seemed to start well enough with the first of the adult Small Blues appearing after a long search on the 13th of May. It would be 10 days later before I saw another one. This dearth of early adults continued despite seeing the odd one until the end of the month. Repeated searches at all sites saw very little activity. The Small Blue finally peaked around the middle of June with some very healthy numbers being seen at most sites, and then the weather turned again. So the Small Blue flight period lengthened beyond normal into July. This period in late June early July produced the best sightings, and the period after that into August was very good for larval counts that can be tricky to do. Larvae were found at most sites very easily, and at a few where adults were scarce. The most outstanding find came about just when I had pretty much given up for the season with an adult found on August 24th, an incredible second brood male.

My thanks to everyone who has so far contributed this year to both sightings and surveys. I do expect to be getting more records in towards the end of the year.

CATCAIRN BUSHES

3 Small Blues were seen at Catcairn Bushes scree slopes on the 23rd of May. Numbers remained quite low into June at this site and peaked in the middle of June with 30 and 40 counts. I found several adults on the 3rd of July, very late indeed. Larvae were found on the 19th of July, 10 in all.

Very few threats to the habitat at Catcairn Bushes, though Brambles are colonising previously open areas at a rate. Gorse is stable with very little evidence of spread. Kidney Vetch is plentiful throughout the site. Females are quite capable of finding suitable areas to lay eggs. Kidney Vetch, like the Butterfly had an early and late season with Vetch still blooming into August.



The first of the Catcairn Small Blues on the 23rd May, An egg found on the 28th May, and a caterpillar found on the 19th of July.

KINGS GARDENS

The first of the Kings Gardens clan were discovered by local Partanhall resident Ian Campbell on the 26th of May. He found 3 adults along the shoreline towards Breeches rock. 11 were found on the 30th of the month. There seemed to be lower numbers in general at this steep unexplorable site with only single number sightings throughout June. 6 were finally seen on the 28th of June. There was plenty of Kidney Vetch available for the adult females to find. Females were seen egg laying on the 28th of June suggesting as had been seen elsewhere throughout the season that they were playing catch up.



Small Blue male photographed on the 28th of June at Kings Gardens

BLAIKIE HEUGH

Sightings of Small Blue are very often down to how many times in the season you visit...obviously. Blaikie Heugh was visited very regularly indeed this past season, so in a way a decent picture of how the Butterfly fared in 2015 could be drawn from this site alone. This brand new colony of Small Blue appeared to us last year in very healthy numbers, but how would they fare a year on? Well weather conditions played a large part in delaying any early Butterflies from being seen. The first adults were observed after several frustrating visits on the 26th of May. Many more visits to this site revealed little else. 7 on the 30th, just the one on the 4th of June, 4 on the 9th of June. I would be giving up on finding any number on any normal year, but this year was a little different. On the 11th of June 20 were found, and on the 30th of June 15 adults. So a stuttering season. Whilst looking for larvae on the 3rd of July I found 2 quite fresh adults still clinging on to the ledges of the clifftop. I struggled to find any caterpillars last year, and this past season still left me frustrated to say the least. I was looking at sparse Vetch strung along the clifftop, ignoring the lush patch in shelter. I finally convinced myself that I was looking in the wrong place, and yes, the most unlikely spot held 6 caterpillars on the 30th of July. Kidney Vetch is reasonable at Blaikie Heugh, good years and bad years. 2015 was not a famous year for the plant at this site. Occasional disturbance persists at Blaikie, inappropriate strimming of the coastal path, makeshift camps on the cliff top, debris, litter.....all in all....the Butterfly will survive all of this....it's just such a shame to see such an incredibly beautiful site with such rich wildlife and scenery abused like it is. On the positive side, we did have a day's litter and debris clearing up near the site in the early spring which curbed for a while at least a worsening situation developing.



1 of 6 caterpillars found at Blaikie, a late Small Blue male at Blaikie on the 3rd of July.

PARTANHALL

1 adult, possibly a few more turned up here last season. I did not expect to see any adults this year at Partanhall...however...contrary to what I thought, 1 adult male appeared for a day or two at this site on the 30th of May coinciding with the first of the Northern Brown Argus. Still no Kidney Vetch found at this site that is dominated by Rockrose. There must be some somewhere. This was a nice surprise, maybe next year we will find some of the food plant no doubt responsible for this small number to remain here.



Small Blue male at Partanhall on the 30th May.

CAUSEWAYBANK

This inland site of some 5 miles from the nearest coastal colonies was a bit more than a surprise last year...more a shock. But would they persist again into 2015 ?. Well, yes they have. After a few early searches that revealed nothing I half-heartedly revisited the site again on the 4th of June. I sat for an hour or two at the spot I had seen a few adults last year, and flying high along the tops of Broom scrub I spotted the familiar silvery flash of a Small Blue. I waited for a good while for it to settle among a patch of Birds Foot Trefoil. This Butterfly appeared to be alone and several photos of the Butterfly in different locations confirmed this to be the same one desperately looking for a mate.

I returned to the Quarry at Causewaybank much later in the season on the 5th of July to look for eggs, larvae perhaps, and once again not expecting much. I found more than I had bargained for, yet another adult, this late in the season. This one was a female. I followed her around for a good while, but she was quicker and much more nimble than I. She appeared briefly then disappeared for long spells only to return right in front of me and alight perfectly on a large batch of Kidney Vetch...now..would she be egg laying at all. She certainly went through the motions of picking through the heads and finally selected a head she liked the look of. I was prepared to move in to take a closer look to see evidence of this egg. She sat for a while and then flew off...so...could I find it...well, not immediately. Getting a wee bit frustrated, I marked the plant and went off to look for other things for an hour to calm down. On my return I found the egg almost first time of looking, that always seems to be the way. On inspection of other nearby plants I found only 1 more egg, a hatched one.



Female on the 5th of July egg laying at Causewaybank

I returned to the site on the 25th of July to look for larvae. Most of the best heads had gone to seed and others had been flattened and trampled by Badger activity...so I was not hopeful. Looking at the heads still attached I found nothing. In desperation I began looking at fallen heads...and would you believe I found one. The next few fallen heads also had a plump final instar Caterpillar attached...so...what a result. In all I found 5...not bad at all for a caterpillar that can be devilishly difficult to find.

The Quarry site at Causewaybank holds up to 19 species of Butterfly now, quite a number. It is quite a goldmine for moths as well. In fact the site is an oasis in an otherwise arable and improved pasture landscape. Totally man made, then these days what isn't. The main threat to this site is the spread of scrub trees that were planted a while ago now. The shading from the canopy of these trees is already taking effect on some of the open sunny spots. The farmer though is sympathetic and is keen to keep the site private yet accessible. Perhaps something can be arranged in the future to prevent the scrub from dominating.



Caterpillar at Causewaybank 25th July. An egg found eventually laid by the female above on the 5th of July at Causewaybank.

DARING, AGATE POINT, HILTON BAY



These satellite colonies hold the vanguard of possible north and southward expansion. There has been little apparent progress to the south as opposed to the very healthy lurch to the north. Dealing firstly with the southern section at Hilton Bay.

HILTON BAY

Hilton Bay lies just to the south of Catcairn Bushes. The main feed of Butterflies along the Catcairn section of the coastal path is reliant on a cessation of sheep grazing where a sporadic flush of Vetch persists all along the way dying out just south of Hilton Bay. High numbers can sometimes be seen along the coastal path and a few can be seen on the Railway sidings. Females are using the Kidney Vetch that grows on the wall tops and this year 5 caterpillars were found on the 17th of July. The first adult of the season was found on this section on the 13th of May, 10 days later 3 were found. Small numbers were quite typical this season with a nice count of 12 on the 7th of June that coincided nicely with a Small Blue Butterfly walk. The last Butterfly was seen on the 30th of June at Hilton Bay.

Whilst looking for larvae on the 15th August above Hilton Bay, my brother Robin Cowe swore that he saw a Small Blue adult briefly. We were unable to refind the Butterfly, however, we returned some time later on the 24th August and found and photographed a male Small Blue on the Catcairn coastal path section. This was unlikely to be the same Butterfly as the one a week and more before. It is also unlikely to have been connected to the earlier emergence of the Butterfly, concluding, a very likely second brood at the site in 2015. I have looked for evidence of this second brood Small Blue possibility for several years and had found nothing up to now. It was quite an exciting moment to find this Butterfly made no less exciting by the close proximity of a Black Darter Dragon that swiped at the Small Blue just as I was getting a closer look. Happily, the Little Blue was just a little quicker on this occasion.

The Kidney Vetch was quite late flowering as well this season; perhaps the dozen or so second brooders may well have been successful at late breeding. I would need to be looking for larvae in mid-September....a tall task to find evidence of that I think.

DARING

Last season one adult and a number of eggs and larvae were discovered for the first time on this site that lies 800 meters north of the Blaikie Heugh site which itself was new in 2015. So the Butterfly had made a giant leap to reach this site. Much searching this year did not turn up anything until the 30th of May just to the north of Daring when a Small Blue was briefly seen at Scout Point by the Eyemouth golf course on the coastal path. Another adult was found on the 11th of June this time at Daring itself. Searches for eggs proved to be fruitless on the many plants dotted around the cliff tops. It was not until the 11th of August that I found 3 larvae on straggly heads on the clifftop at Daring. I was very glad to find them having spent so much time there this season with little to show for my efforts.

AGATE POINT

This site, a little further north of Daring is so very likely to hold some adults now and that was proved to be the case with 1 male seen and photographed by Barry Prater on the 10th of June. Kidney Vetch is very abundant all the way down the coast to Eyemouth Bay and Gunsgreen.



Second brood male on the 24th August.



1 of 3 larvae on the Daring site on the 11th of August.



Small Blue male nr Agate Point on the 10th June. Photo Barry Prater.



Caterpillar on Kidney Vetch above Hilton Bay on the 17th July.

OTHER SEARCHES

Searches were carried out at Gunsgreen, Eyemouth Bay, Fort Point, Killiedraught, Linkim Shore, Yellowcraig Head, Milldown Burn, and Lumsdaine Shore. I made no searches into North Northumberland in 2015. Roger Norman searched the area north of Berwick upon Tweed with negative results. Up to the point of writing this I have no other records of searches negative or positive. Search areas pretty much remain the same areas outlined in my original Small Blue report from 2012.

SMALL BLUE BUTTERFLY WALK



A Small Blue walk was held on the 7th June 2015 from Burnmouth Village Hall to the Catcairn Bushes colony and Hilton Bay. Despite pretty iffy weather conditions leading up to the event the day itself was fair and bright. In all we had 16 in our group some local and some not so local. The bulk of the number were from Burnmouth itself which was great to see. We were very lucky to see a good number of the Small Blue adults and also had a quick search for eggs on the Catcairn Bushes slopes. There was some great enthusiasm shown by all whom attended, enthusiasm enough that members of the party not previously familiar with the Butterfly spotted it long before I did. Easily one of my favourite Butterfly walks.

Thanks to all whom attended. Many thanks to Burnmouth Community, and thanks to Barry and Barbara Prater for support.

SMALL BLUE HABITAT AND ASSOCIATES

This is something I am still working on. Habitat associates can be anything animal, vegetable or mineral that turns up on Small Blue sites with regularity. Now that we have identified more than one Small Blue site we can compare these sites for suitability.

So far I do not have much to go on. I have a few plants which are present on Small Blue sites. Wood Vetch (*Vicia sylvatica*) the Butterfly uses this plant as cover and nectar. The Wood Vetch is present at Catcairn Bushes, Kings Gardens, Blaikie Heugh and Hilton Bay. At all of these sites the Butterfly uses the plant in the exact same way. The pre flowering buds of the Wood Vetch can resemble that of a roosting Small Blue...coincidence perhaps. Small Blue were found roosting in numbers among pre flowering Wood Vetch at Blaikie Heugh this season and previously at Kings Gardens and Catcairn Bushes.

A more unusual associate seems to be Coltsfoot (*Tussilago farfara*). It's not the bright yellow flower that attracts them but the large lily pad leaves that appear after flowering. The Coltsfoot is present at several sites especially at Catcairn Bushes and Causewaybank. They use the leaf of the plant, despite the two colonies being 5 miles apart, in the exact same way. They seem to take moisture or minerals from the leaves surface and can often be found basking on the large fleshy leaves. The Coltsfoot is often found in damp flushes where there is run off....there may be a mineral tie in.

It is very rare to find the Small Blue nectaring at Kidney Vetch though they do. The most common go to plant is the Birds Foot Trefoil (*Lotus corniculatus*).

Ant associations are probable. I have struggled to identify several species of Ant that I have encountered in the Small Blue colonies. I was happy enough when I thought I only had to identify the one. So this season I found at least 3. The Yellow Meadow Ant (*Lasius flavus*) is very common at all sites. The Black Ant (*Lasius niger*) is also present. The other Black Ant present on all sites I am having trouble identifying. I need more evidence that there is some sort of association between the 2 species.

So realising that this is a pretty short list of associates I shall endeavour to try harder.



Small Blue on Coltsfoot leaf.



Small Blue on Wood Vetch.

PLANS FOR 2016

A concentrated effort of surveying to the north at Eyemouth and try a bit harder to look at the southern section to the north of Berwick Upon Tweed. The spread of Small Blue across the Border is pretty critical now and inevitable at some point if not already.

A section between Eyemouth and Coldingham is very likely soon as well...but...in my view the next discovery will be closer to Eyemouth around Gunsgreen and Ramfauds.

Butterfly Walks and field trips will be planned for during winter for Small Blue and other species present at flight time involving as many locals and local groups as possible.

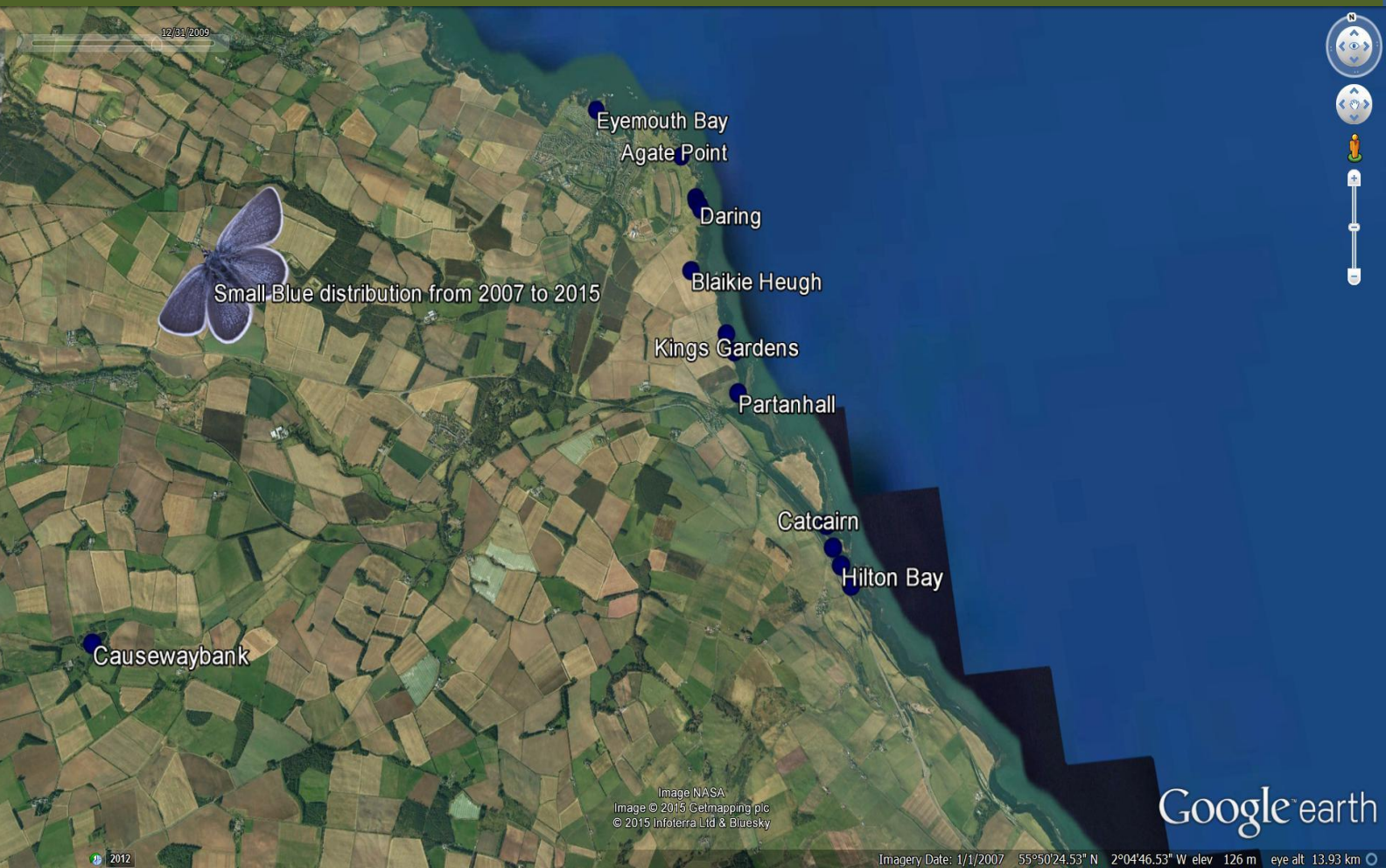
There will be a lot more to do and volunteers are always welcome to help out surveying the many sites now occupied by the Small Blue. I am struggling to keep up now...it was great when there was only the few sites to visit...but now, it's quite a job covering as much ground.

There is a bag load of info on the East Scotland Branch of Butterfly Conservation about how you can start. Contact me at bordersbutterflies@eastscotland-butterflies.org.uk

My thanks again to those have contributed to this year's survey.



CURRENT DISTRIBUTION



2015 Season produced 42 sightings of the Butterfly that amounted to 175 adult Small Blue from the 13th of May to 24th of August.

29 Larvae were counted from the 17th July to the 11th August. I do not have all the records yet submitted so numbers will rise still.

All sites occupied by Small Blue in 2014 were still inhabited by the species in 2015.

Iain Cowe 2015

GALLERY



