

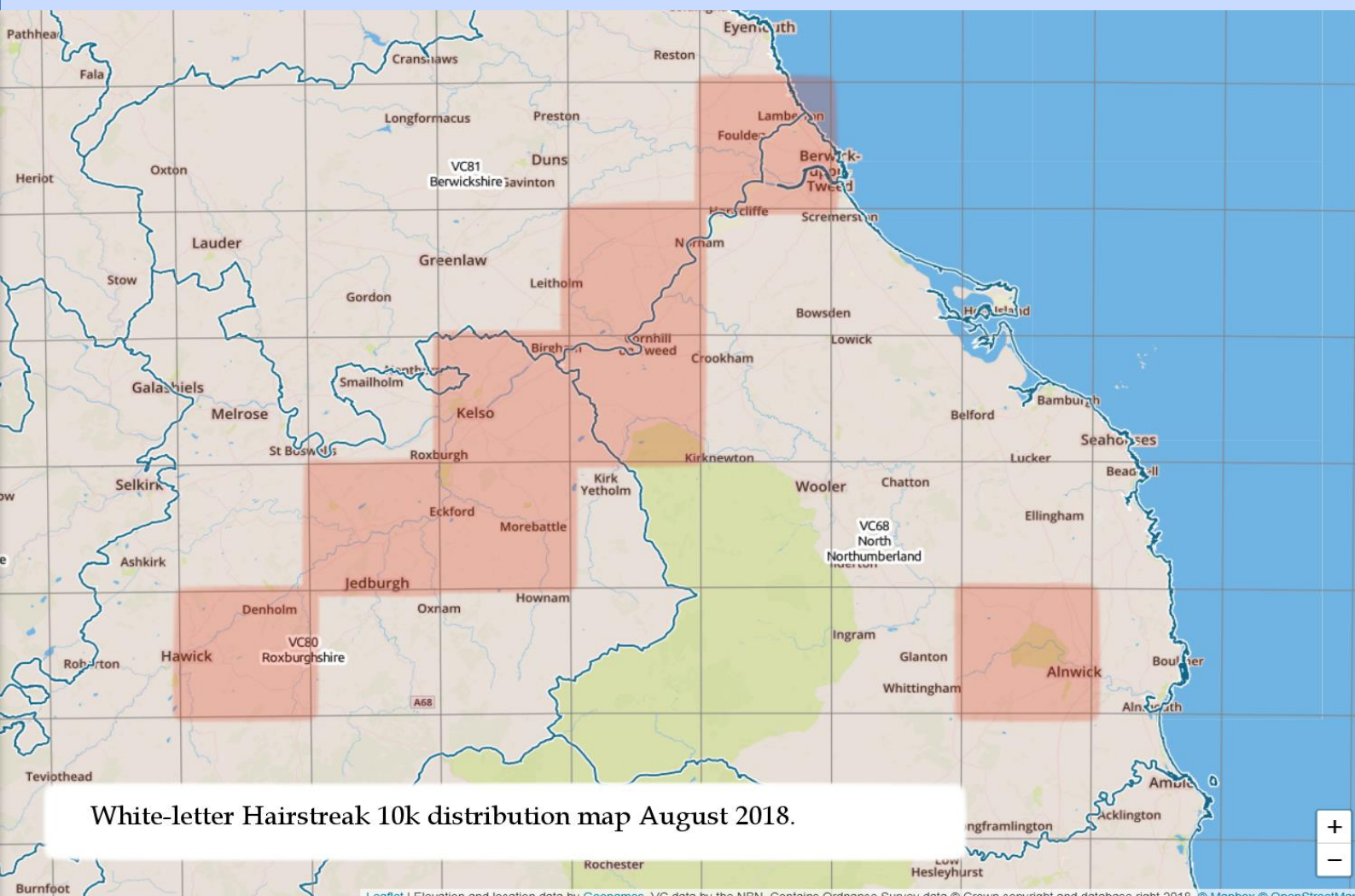
# White-letter Hairstreak

Scottish Borders and North  
Northumberland 2018.



# Overview

I will start this summary of White-letter Hairstreak findings and discoveries with the illustration below. This is how quickly a small number of enthusiastic volunteers have been able to find evidence of the Butterfly in the space of one season. It's been a remarkable effort by so few to discover so much about a Butterfly that was barely on the radar prior to that famous adult White-letter I found back in August of 2017. Since that day we have had the quite invaluable help of the legendary Jill Mills and Ken Haydock from Lancashire who for many years had been tracking this Butterfly northwards. Without the input of Jill and Ken, backed up the expert advice from Liz Goodyear and Andrew Middleton, leaders of a UK nationwide survey on the species, it may have taken us many years to understand the situation as fully as we do now.



White-letter Hairstreak 10k distribution map August 2018.

# First Contact

In hindsight, I, as Scottish Borders Butterfly recorder should have taken more seriously the possibility of someone, at some point, turning up White-letter Hairstreak in the next few years. In my defence in the 2015 Scottish Borders review I did write at the time *“Purple Hairstreak seem an almost impossible species to add to our Scottish Borders list and the same could be said for the White-letter Hairstreak, though even more so. My only hope is that we will find them within the next few years. Purple Hairstreak has a history within the Scottish Borders though sketchy with a record at Bowhill Estate near Selkirk way back in what is now ancient history. I have included them on this list because it’s not impossible.....only almost.”* Not impossible, only almost was about right in the end.

When confronted with the species in the field I was completely caught out on that August 9<sup>th</sup> 2017, and at exactly 13.51 and 51 seconds the first White-letter Hairstreak photograph had been taken, according to my camera information panel.

This single adult Butterfly was seen for two consecutive days only a stone’s throw from the border, on a field edge, near Paxton Toll in Berwickshire, Scottish Borders. This sighting would eventually attract the attention of those who had been long seeking this moment when the species would be found across the border. I didn’t know it yet, but I was soon to be introduced to the legendary Ken Haydock and Jill Mills.



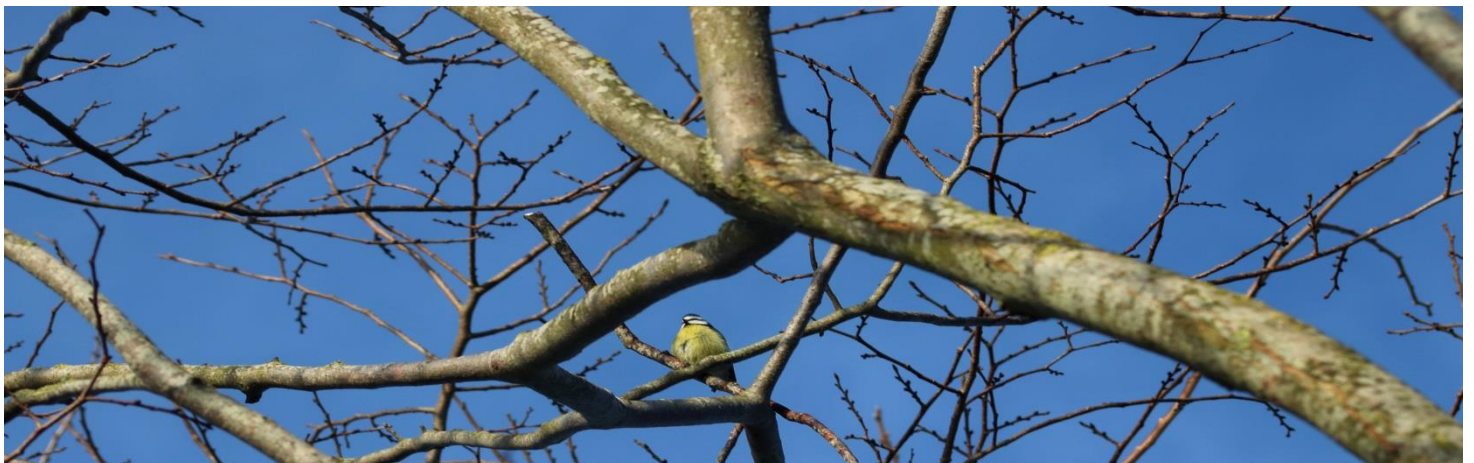
# White-Letters Revealed!

*This following article is one written by Iain Cowe in the spring of 2018 explaining the next step in the journey. The winter egg searches.*

2017 was a funny old year. At its end, the general synopsis was that it had been a real stinker for our Butterflies and Moths. However, there were a few very outstanding exceptions, none better, than the finding of a single White-letter Hairstreak on the Scottish side of the border at Paxton in Berwickshire back in August. After the dust had settled, questions remained, especially concerning the status of the White-letter Hairstreak within Scotland. Was this just a fluke sighting? Or was this the very tip of a Butterfly iceberg.

Winter searches for White-letter Hairstreak eggs on Elm have been well documented this past decade, and this method has been very successful at detecting elusive colonies of the species. Anyone can begin searching for eggs, preferably after the leaves have dropped from the tree...just makes it easier. The White-letter Hairstreak lays its eggs on the tips of the branches, between the new and old growth scars, sometimes on the buds themselves. The eggs are tiny, and green at first, soon turning a greyish colour with a white crusty edge, and are really quite distinctive, yet incredibly hard to see...so...magnification is generally required.

During the winter, hopes were not incredibly high that any evidence could be found. I had several searches as did a few others to no avail. On the 6th of February, this year, a Tuesday night, I received a breathless and excitable phone call from a Jill Mills, and that phone call pretty much completely altered our perception about the status of the species within Scotland.



During my winter searches I learned that Blue Tits were far more adept at finding things on Elm than I was....to my frustration.

Jill Mills and Ken Haydock are no ordinary Butterfly hunters, that much was clear when Barry Prater and I met them on the next morning, Wednesday the 7<sup>th</sup> at Lennel near Coldstream. Both Jill and Ken had been looking for evidence of White-letter Hairstreak for a near decade in the north west of England, hoping that one day they could prove that it had launched itself over the border into Dumfries and Galloway at some point. That was until my sighting of that adult in August of 2017 in the east. Both Jill and Ken are no small part of a much larger White-letter Hairstreak project started back in 2006 by Liz Goodyear and Andrew Middleton to monitor the status of the Butterfly across England and Wales, as well as looking at the possibility that it could push north into Scotland due to an ever changing and warming climate. It was Andrew that suggested to Jill and Ken that they might like to take a look in the eastern Scottish Borders about the Tweed for egg evidence.

On that morning of the 7<sup>th</sup> February, Jill and Ken showed Barry and I no less than 3 White-letter Hairstreak eggs down on the Tweed banks, on low overhanging branches. One of the three eggs was a hatched egg, possibly from 2016...so even better! This was quite amazing to see, and a lot take in. Jill and Ken also showed us a further egg find on the English side just across the Tweed Bridge at Cornhill. This egg was found on a busy roadside with a few scrappy Elms overhanging the path...and to be honest, my first thoughts were just how absolutely random this looked. That Cornhill egg, more than the three on the Scottish side, convinced me, that we were witnessing something very special indeed.



Ken Haydock and Jill Mills at Lennel

The next week was full on press coverage for this White-letter Hairstreak find, and Ken Haydock and Jill Mills have since become household names. Most folks may well have rested on their laurels after that, but not this pair, not by any means. Spurred on, I think, by talk that we may have to provide more evidence of the Butterfly being present in Scotland before we can officially declare a new species, they revisited us here in the Scottish Borders on the 18<sup>th</sup> February, this time finding 5 eggs on the Teviot at Kelso, and the next day another 5 eggs at Kalemouth on the Teviot, and finally another magnificent find at Harestanes, Ancrum, a further 2 eggs on the 20<sup>th</sup>.

The White-letter Hairstreak is an arboreal Butterfly, and spends a great deal of its life in or about its food plant, the Elm. The adults can stick to the canopy of the tree, and never very often find a need to descend to the ground to nectar, as they can utilise aphid honey dew on the leaves of several tree species, like Ash, Oak and Lime as well as Elm and that's why they can be so elusive. If you are ever looking to catch them at ground level nectaring, try Bramble flowers, Ragwort and Thistle on the edge of a woodland containing Elm. The flight period is likely to be through July up here, probably latter half being peak with Butterflies still active into August.

Over the next few weeks the Elm will begin to flower, when it does, the eggs will hatch and the caterpillars will eat their way into the flower buds, and stay there until they are large enough to move onto the leaves. Now that we can be confident that it's possible to find this Butterfly in our neck of the woods, I'm very sure that this will not be the end of the White-letter Hairstreak story, merely the beginning.

Iain Cowe 06/03/18



Barry Prater inspects an Elm branch at Cornhill-on-Tweed.

# A New Universe found on the tip of a Branch

This article was written by Iain Cowe for the Borders Newsletter in Spring 2018 and is an excerpt from that article.

So, starting from scratch, and identifying the Elm tree in winter. Now, that took time to achieve, but surprisingly I twigged fairly quickly. I was feeling very ignorant that I was quite unable to differentiate between Cherry, Elm, Lime or Sycamore. I found that the Elm most likely found in our area is the Wych Elm, and that it's a lot more widespread and common than I thought. After only a few weeks I became proficient at recognising Elm from distance, but what's going on close up? The Butterfly lays its eggs between the old and new growth spurs, and looking at the tips of these branches is like looking into a whole new universe under magnification. The White-letter Hairstreak is not the only species of Lepidoptera to follow a similar strategy. Before now, I had no idea. I found several eggs after my first few searches that were, as far as I knew, Moth eggs of some sort and was later to learn that I was finding eggs of the Brick Moth and Dusky Lemon Sallow. The Dusky Lemon Sallow was quite interesting as it has been quite scarcely recorded in the Scottish Borders yet I found it at several locations. Perhaps this species is quite shy of the Moth trap, or it too could be re-establishing itself in the area.

The flight period for the White-letter Hairstreak should be during July and into August. It will be very interesting to see if adults can be found at the known sites that have now been revealed. There will be no exact science to it, just lots of watching and waiting. The Butterfly can spend its entire life in the canopy of the tree, so close ups at eye level on the ground are rare. The experts say that the Butterfly can seek nectar after rain, as the rain washes the aphid honey dew from the leaves. The best nectar sources at ground level are Ragwort, Thistle, Bramble flowers and various Umbellifers.

My fingers are crossed that we are able to see the adults come July. Meanwhile I advise that you swot up on your tree identification. It really is worthwhile looking that little bit closer at the world around us.

# Dusky Lemons and Bricks



Whilst searching Elm for White-letter Hairstreak I found quite a few Lepidopteran eggs. The thin and fragile white Dusky Lemon Sallow and the darker rounder eggs of The Brick. The Dusky Lemon Sallow eggs appear to be overlaid on top of each other. In the second photo on the right you can see a Dusky Lemon Sallow overlaid on top of a Brick Moth egg.

These were found on sucker Wych Elm by the banks of the River Whiteadder.





# The overwintered egg

As well as being shown by Jill and Ken the eggs at Lennel and Cornhill, I was very keen to find my own. This though just never materialised despite searching thousands of branches across many seemingly suitable sites. I eventually had time to travel over to Kelso on the 9<sup>th</sup> of March 2018 where Jill and Ken had some success by finding eggs at Teviot Bridge. The test for me was, could I re find them. The task was made far easier for me by the fact that Jill and Ken had tied string around the branches that contained eggs....but even then I struggled to see the eggs as even a short length of branch under magnification becomes a very large area to search. There were 5 eggs to find, and I found, eventually all 5. These eggs contain a fully formed caterpillar that lies in dormancy awaiting those flowering Elm buds to burst. The eggs are quite gnarly in appearance, and over those long periods of cold and dark almost become part of the branch itself.

On the left, 2 of the Teviot Bridge White-letter Hairstreak, and on the right one of the Lennel eggs.



# The Caterpillar stage

I had ultimately failed to find my own overwintering eggs, however a new determination was to find a first ever Scottish caterpillar. I can laugh now as I never for a minute considered how ridiculously difficult it could be, though I had written off any hope of me finding one at the same time. Without very much research I set off for Kelso Teviot Bridge on the 24<sup>th</sup> of May, knowing at least that the caterpillars would all be hatched and all be feeding...at what stage, I had no idea.

My first task was to attempt to find the old eggs on the branches to give me some clue as to their whereabouts. The Elm tree is a very different beast when clothed in its springtime coat of bright green leaves and bunches of, equally bright, yellow green seeds. At close range the branches had now become miniature jungles full of foreign creatures of all shapes and sizes, none of them caterpillar sized and shaped. I resorted to Google for more clues and used my phone to bring up the brilliant Jamie Burston's guide to finding White-letter Hairstreak life stages. I noted straight away from Jamie's guide that I needed to find seed pods that had been eaten away in the centre. Lo and behold I could suddenly see through the fog of war. I could see feeding damage on the seed pods right before my eyes. I thoroughly examined the seed pods...but nothing at all could be found of the caterpillar. After great deliberation I decided to cut a short branch end with feeding damage and take it to a well-lit spot where I could examine the entire thing forensically.



The danger here is that I was completely out of my depth. When I cut that branch I suddenly felt a great deal of responsibility. I was tremendously focussed, laid the branch down on a white cloth, and began searching the seed pods one by one fully expecting to really struggle to find this caterpillar, if it was indeed on the short length I cut. I really need not have worried quite so much, as within only a few seconds I saw the unmistakable shape of a Lycaenid caterpillar nestled so tightly among the packed seed pods. I have had so many years of experience looking for Small Blue caterpillars among the dead heads of Kidney Vetch that I knew straight away what I was looking at. I spent 10 minutes recording this caterpillar on camera and observing it before I needed to somehow return it to the tree.

Not an easy task, returning a caterpillar to a specific food source. I was very afraid that it would drop to the ground as I very carefully waited for it to crawl from the branch I had cut to the newly selected bunch of attached seed pods on the tree. Eventually the caterpillar arrived back home and it just disappeared among the Elm branches jungle of seed pods.



# Flight season

The thinking was that adults would start emerging from July across the Scottish Borders. However, a very untypically warm and sunny June could well have sped things up a bit. An email from Christine Johnston on the 30<sup>th</sup> of June put all speculation to rest. Keith Knight had found this individual taking moisture from a puddle in the garden and Christine was immediately able to identify it simply because this Butterfly had been so well publicised locally.

This was just the sort of news we had been waiting for, and now it was time to get out there and look for those adults on the wing, something I and many others had been looking forward to for many months.

I would spend three consecutive Saturday's from the 7<sup>th</sup> of July down at Kelso and Coldstream studying if I could the behaviour of the adults in what I hoped would be fine weather.

The following article was written by Christine Johnstone.

Photo by Keith Knight 30<sup>th</sup> June 2018 Coldstream



# White-letter Hairstreak butterfly colonises Scotland!

31 July 2018

One of the opportunities presented by the geography of living in Berwickshire on the border with England is an increased likelihood of recording a 'First' sighting for your county / country. Tracking the arrival of the White-letter Hairstreak butterfly in Scotland is clocking up several Firsts.

In August 2017, Iain Cowe, Butterfly Conservation's Borders Butterfly Recorder, discovered a rather bedraggled adult butterfly at Paxton, the First recent evidence that the butterfly was indeed in Scotland. A search for eggs commenced and that winter the First evidence of eggs was discovered at several nearby sites.

By spreading the word, Iain got the message out that the hunt was on for adult butterflies flying this summer. The key details were: their flight period is July-August and the butterflies are elusive, living their entire life in the very top of elm trees, although after rain they may be seen at ground level looking for nectar on for example Ragwort, Thistle and Bramble<sup>1</sup>.

Roll on to 30 June 2018 and in my garden an unusual looking butterfly is seen taking water from a puddle next to the garden hose. It is caught, and we identify it as a White-letter Hairstreak. Another First – this time for our garden!

A brief email is sent to Iain for verification. We are thinking that this cannot actually be the First for Berwickshire / Scotland this year, but Iain's response tells us otherwise – he is literally speechless (it comes over in email, honest!). He verifies that it is a White-letter Hairstreak, it is the First to be recorded this year, and is an adult male in pristine newly-emerged condition, probably from a population in our elm tree. It is also a First for our 10km square in Scotland!

This sighting is added to the First Sightings table on Butterfly Conservation's East Scotland Branch website and provided an impetus for further exploration. And indeed, Iain has confirmed that when he checked the other egg sites, the White-letter Hairstreak is found in flight. Result! The butterfly has arrived and has been breeding in Scotland at least this year, if not for longer.

## So what does all this demonstrate?

Recording a 'First' is a bit of fun but it does add a light touch to the engagement of recorders in the rather more serious business of contributing to our understanding of species distributions. It is important that we know what to look out for so that we can record what we have and understand what is moving in or out of an area. This information can be used to ensure our actions will not have a negative impact or used as the starting point for looking at the reasons for change.

It also demonstrates that providing some basic information about what to look out for enables more recorders to be informed and on the lookout. These last two points raise the interesting question as to how long the species might have been present – might it have been here some time but we just have not noticed it?<sup>2</sup> Notwithstanding all this, there has been a lot of interest in the sightings of this butterfly and it is now hoped that eggs will be found in elm trees this winter.

I'd like to take this opportunity to thank Iain Cowe for the energy and commitment he puts into recording, verification and recorder engagement. It is voluntary effort that is greatly appreciated and very worthwhile, and it is recognised that this effort is essential if we want to maintain and expand our understanding of butterfly distributions. Effort like this is replicated by verifiers across the country for many different taxon groups and it is sobering to think that without it, we would not have the databases of records that are used to inform decision-making, and which can be shared on platforms such as the NBN Atlas.

*Written by Christine Johnston, NBN Scottish Liaison Officer*

### Footnote

<sup>1,2</sup> The primary source of information about the discovery of eggs and the ecology of the White-letter Hairstreak is an article by Iain Cowe *A New Universe found on the tip of a Branch* in Borders Newsletter, Issue 20, Spring 2018, published by Butterfly Conservation Scotland.

# 7<sup>th</sup> of July, Springwood Park Kelso

Of all the adult discoveries to come I was most focussed on finding my first 2018 adult and becoming reacquainted with the species I so very briefly encountered in August of 2017 at Paxton. This time I was travelling once again to Kelso and Teviot Bridge, stopping off on my way through town that morning at a few Elms I had my eye on throughout the winter and spring months.

The Springwood Park Elms are unremarkable at first glance. They are sucker Elms of a young age and medium height among Ash, Sycamore etc. on a grassy overspill carpark close by the Teviot. I had searched for eggs on these very Elms back in March with no luck whatsoever, so my hopes, as ever, were realistically low. It was close to 20oC and light winds made it feel very hot. As I scanned the canopy to my great surprise, one following the other, 3 males screamed across the Elm face, bombed into the sky and dived like missiles back into cover. Well!! That was easy!! Great overexcitement took over I'm afraid and for close to 3 hours I poured over those few Elms and began to build a picture of the set up. The males were dominating the canopy, were very quick to react to incursions by rivals and on the lookout for passing females. They were extremely fast flying and elusive. The females when they did appear were much more methodical and docile, far less reactive to potential threats, merely crawling slowly to the underside of a leaf until they felt it safe enough to come back out.

A male defends territory at Springwood Park Elms



Another thing you notice about Elm and the position the Butterflies take up are the various aspects of the tree. The Elm tree, like any other, is multi-dimensional and as the day progresses, particular parts of the tree are in shade or full sun. Wind direction is also a factor to look out for. The Elm also contains platforms and sheltered hollows where adults will hang out in order to control airspace and temperature. Temperature was a key factor during the hottest part of the day as adult male activity lessened. Female activity at this time increased as they set about egg laying duties, carefully and methodically picking through branches. Females would flutter slowly hovering at times then landing on an Elm branch, exploring the branch with antennae, and abdomen lowered. This was so very interesting to watch, but not so easy to follow. After a while you can lose a female in the foliage only to find a completely different individual emerging from the spot the original female disappeared. In those few hours of observation I had learned so much about this species that I could hardly wait to put all that learned knowledge to the test at other nearby sites.

Female egg laying Springwood Park



# White-letter Hairstreak



Freshly laid egg 7th July



One week old 14th July



2 weeks old 21st July

Of the three dates I visited the Springwood Park colony I photographed this eggs early development for colour change, more than anything else. The egg was laid on a small sucker Elm of four feet high with many splayed branches at a height of a few feet from the ground. The freshly laid egg was quite visible, and a bright green, though by a week in it had turned a bronze brown and was not quite so easy to pick out. Finding the egg after week 2 was even trickier as it looked a more familiar winter spring steel grey.

This was my first ever White-letter Hairstreak egg finds after all my winter and spring endeavours. The females at Springwood Park were putting down many eggs on these few trees and I wondered how many I would be able to re find in winter 2018/19.

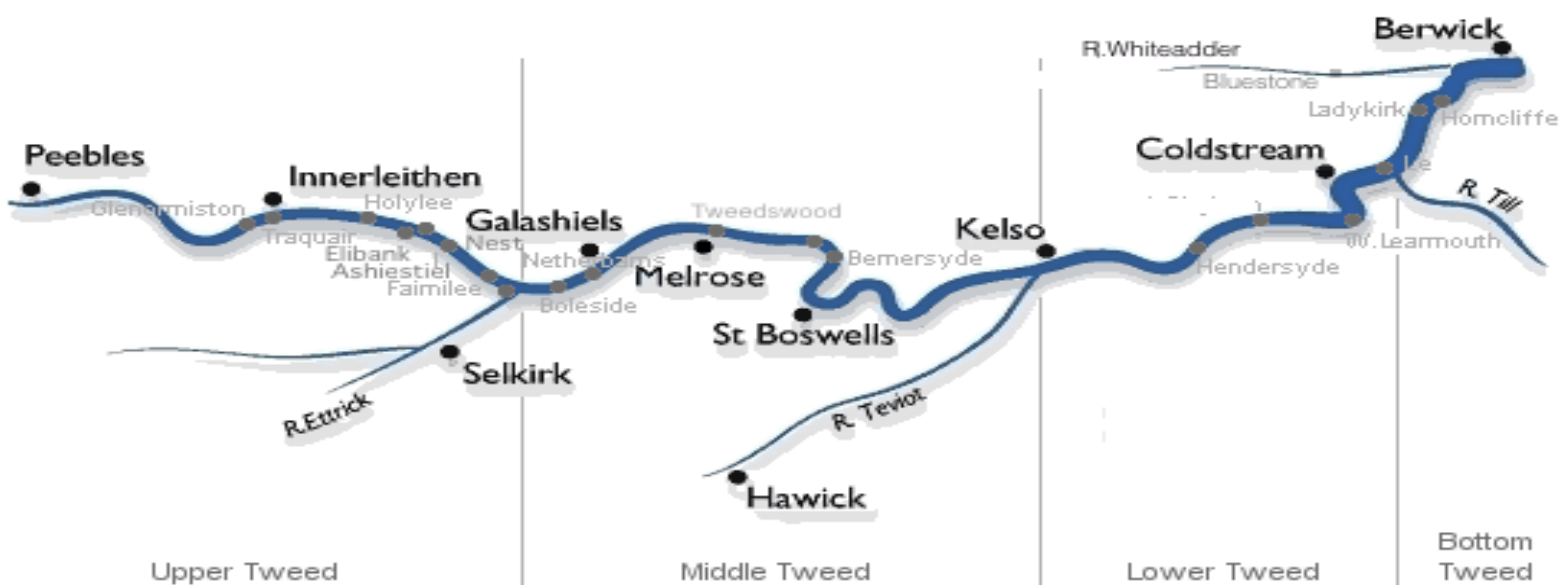


# The Tweed and its Tributaries

Most of the searches for the presence of the White-letter Hairstreak have occurred along the length of the Tweed. This is not a particular riverine species at all; it's just that the Tweed is a very convenient corridor for adult dispersion, in theory. The tributaries of the Tweed were studied to the west by Jill and Ken, for example, the Teviot at Kelso. The Teviot in itself has several major tributaries where Jill and Ken had great success. Those tributaries were the Kale, Rule Water and Jed Water. The Teviot has one more tributary at Hawick, Slitrig Water which may well be worth searching. Out to the east, the most obvious feeder north would for me be the Till that cuts through North Northumberland and joins the Tweed at Twizel on the English side, and Lennelhill on the Scottish side. The Till is where any future searches for North Northumberland colonies really should concentrate. My hunch is that the Butterfly could well be found about Etal, Heatherslaw and Ford. The Till, like the Teviot has several very interestingly situated tributaries such as the River Glen that skirts the northern boundary of the Cheviot Hills linking up east and west with the College Burn and Bowmont Water. Further south along the Till Wooler Water may bring the White-letters into the town of Wooler. The Till may turn up trumps all the way to Chatton and Chillingham. These spots are all worth a look. I would think that the White-letter Hairstreak shall be quite widespread into North Northumberland, but it's going to take some time to establish that fact. A breakthrough was made by Stewart Sexton and John William Rutter on the 22<sup>nd</sup> July at Alnwick. The first North Northumberland adults recorded. Stewarts account is on the next page.

Other Tweed tributaries to look at are the ones north of the Tweed such as the Whiteadder, The Leader, Gala Water, and the ones out west such as Ettrick and Yarrow.

Away from the rivers, the White-letter Hairstreak are using hedgerow and sucker Elm on field edges and roadsides, no doubt also using coastal corridors, railway lines disused and current. All the usual suspects.



## Another butterfly lifer...

...this time on the doorstep!

*By Stewart Sexton who was accompanied on the day by John William Rutter.*

What a morning searching some local sites around Alnwick for the White letter Hairstreak.

We were inspired by butterfly hunter extraordinaire Iain Cowe who has located a decent population up in the Scottish Borders. With the Northumberland population mainly in the south of the county, we couldn't imagine they were either side of us but none in North Northumberland?

I met John at Homebase in Alnwick and a basic plan was formed...A good walk around the Cawledge Burns area first thing didn't reveal any but we might have been too early..

Second stop was Alnwick town where the plan was to drive around and look for roadside elms. Down the road our first pause was at Canongate where a few elms were visible over the high wall and another few were either side of the road bridge over the River Aln.

We didn't really have much hope or expectations never having seen this butterfly before, so as we sat drinking tea and eating breakfast, a small flickering movement up in the elms caught the eye. Food and drink were abandoned, we scanned the tree hard with binoculars and yes, sure enough, it was a White Letter Hairstreak! We hopped the fence for a closer look and had some great views of 3+ individuals including a female laying eggs on the elm leaf bases.

We wondered if there would be any at a similar site at the other side of Alnwick near Denwick Bridge.

We drove around and found a nice looking elm near the river that seemed a bit quiet. We hung around for half an hour before a small dark butterfly flew out of the canopy and back in. The White letter Hairstreak gave us a bit of a run-around in the foliage before good views were had. We think there could be 2+ here but only one was seen well enough but not photographed.

I'm inspired to look closer at the elms around Howick now...

Stewart points out 3 individual Butterflies from photographs



# White-letter Hairstreak Timeline from 2017 through 2018, Scottish Borders

## 2017

**August 9<sup>th</sup> 2017**, First Scottish adult Butterfly recorded at Paxton, Berwickshire, *Iain Cowe*.

## 2018

**February 4<sup>th</sup> 2018**, First Scottish eggs detected at Lennel, Berwickshire, *Jill Mills and Ken Haydock*.

**February 18<sup>th</sup> 2018**, First Roxburghshire records of eggs at Teviot Bridge, Kelso, *Jill Mills and Ken Haydock*.

**February 19<sup>th</sup> 2018**, Kale Water, Kalemouth, Roxburghshire, eggs, *Jill Mills and Ken Haydock*.

**February 20<sup>th</sup> 2018**, Harestanes, Ancrum Roxburghshire, eggs. *Jill Mills and Ken Haydock*.

**24<sup>th</sup> May 2018**, First White-letter Hairstreak caterpillar found at Teviot, Kelso, Roxburghshire. *Iain Cowe*.

**June 30<sup>th</sup> 2018**, First adult Butterfly recorded for 2018. Coldstream, Berwickshire, *Christine Johnston and Keith Knight*.

**July 7<sup>th</sup> 2018**, First Roxburghshire adults at Kelso Bridge, Tweed and Teviot Bridge, *Iain Cowe*.

**July 7<sup>th</sup> 2018**, occupied sites at Coldstream Bridge. *Iain Cowe*.

**July 14<sup>th</sup> 2018**, more occupied sites discovered at Teviot Roxburgh Castle. *Iain Cowe*.

**July 16<sup>th</sup> 2018**, Adults discovered at Bedrule, Rule Water, Roxburghshire. *Jill Mills and Ken Haydock*.

**July 17<sup>th</sup> 2018**, Adults discovered at Jed Water, Jedburgh, Roxburghshire, *Jill Mills and Ken Haydock*.

**July 21<sup>st</sup> 2018**, Adult recorded between Lennel and Coldstream, Berwickshire. *Iain Cowe*.

## North Northumberland

**February 4<sup>th</sup> 2018**, First Northumberland egg discovered at Cornhill on Tweed. *Jill Mills and Ken Haydock*.

**July 22<sup>nd</sup> 2018**, First adult records for North Northumberland, Two sites on the River Aln at Alnwick, *Stewart Sexton and John William Rutter*.

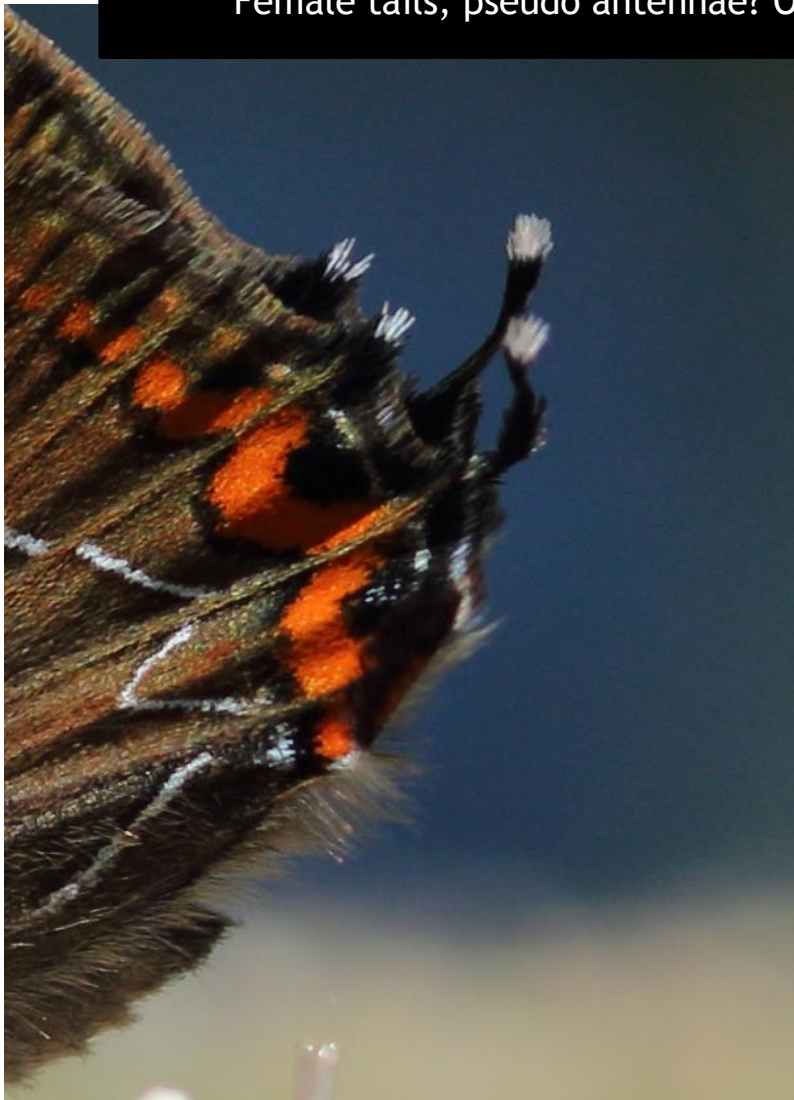
# Observations

This species, being arboreal, is very difficult to observe in full without spending a great deal of time observing its habits. I have no doubt this has all been done before as there are screeds of information on this species in books, papers and various internet sources.

The difference between male and female behaviour is quite marked and has been touched on earlier in this summary. The females interested me and I wondered why it was that they have longer rear wing tails as opposed to the shorter tails of the males. I

then looked at the possibility that these tails were more than likely used as pseudo antennae. The females, if attacked by Birds would benefit from a rear attack rather than a head attack giving them a chance of escape. I then noted predator damage on surviving Butterflies and invariably, the tell-tale triangular cut out of the rear wing was precisely where birds were focussing attacks on the tails.

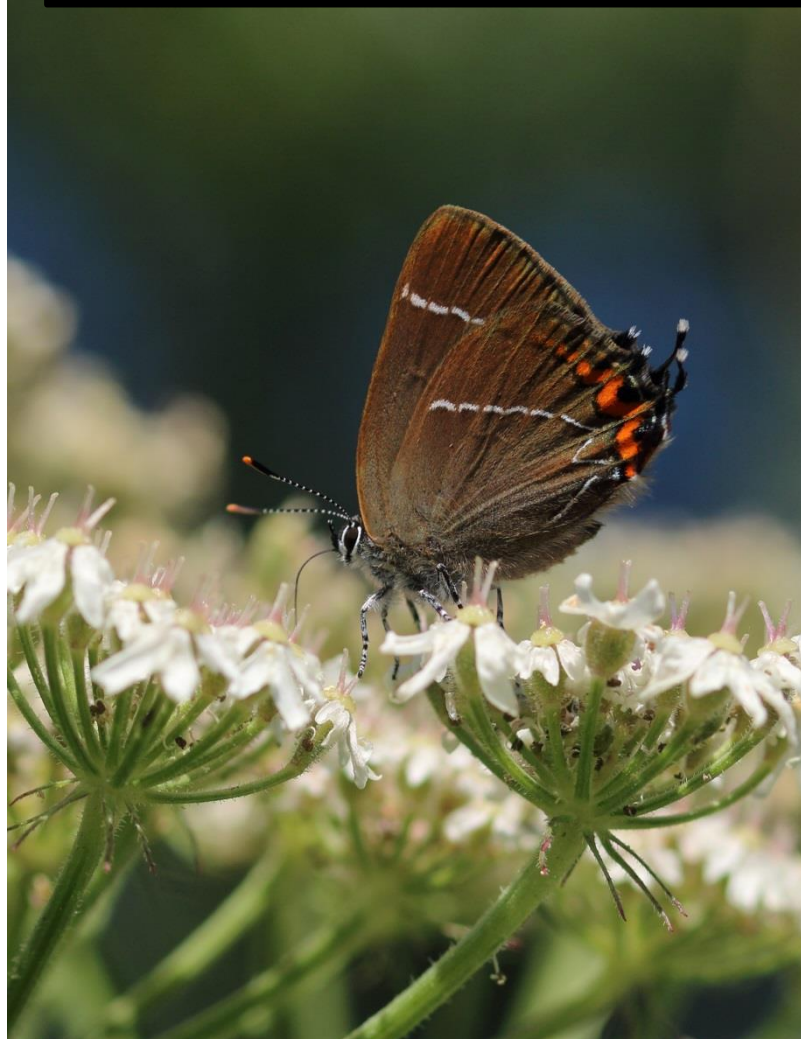
Female tails, pseudo antennae? Or just fancy bits. A survivor on the right.



Interaction with other species was limited. I actually saw 2 males chasing a Chaffinch from a tree top. There were very few other Butterfly species to contend with as they pretty much ignored passing Large White Butterflies and Speckled Wood were so few at these sights that I never observed any potential clashes. Passing Bees were often worthy of a short chase from a perch...but other than that, they were very much focused on their own kind.

Nectaring or feeding is usually done on the tree itself or at nearby tree species that provide Aphid honey dew, or flower nectar. I was always hopeful that I would find an individual at ground level nectaring on ground plants and I did see one female nectaring very quietly at Hogweed in the early afternoon. I also flushed an individual from Bramble flowers and saw one female briefly nectar from Giant Bellflower. Owing to how hot and dry the season was, it was likely a regular occurrence for individuals to stray to the ground for a top up of moisture, minerals and nectar.

A female at Hogweed and another at Giant Bellflower



# Plans for future searches



Personally I shall be hoping to unearth eggs on the river Whiteadder, the Tweed at Paxton to Berwick-upon Tweed, Norham, and the Till mouth at Twizel.

I would also like to think that I can organise a few searches were folks can join in. Kelso or Coldstream at known sites may well be very good places for people to learn what to look out for.

All in all, I would be very happy if we can find a link through North Northumberland, between Alnwick and Cornhill on Tweed and for that, the Till and Wooler water as well as Etal, Ford and Heatherslaw would be targets.

Any ideas for future reference, searches, or sightings I can be contacted at [iainacowe@gmail.com](mailto:iainacowe@gmail.com)

# Credits and Thanks

With many thanks to Jill Mills, Ken Haydock, Liz Goodyear, Andrew Middleton, Christine Johnstone, Keith Knight, Stewart Sexton, John William Rutter, Abbie Marland, Barry Prater, Charlotte-Cavey Wilcox, Dinah Iredale, Matthew Bradley.

Also many thanks to Jamie Burston of Sussex Branch for his invaluable guide to the species at <https://www.sussex-butterflies.org.uk/species/white-letter-hairstreak.php>

Springwood Park Elms







Iain Cowe

6, Lammerview

Chirnside

14<sup>th</sup> October 2018