

Hunting for Hairstreaks- a guide to their haunts, habits and trees they call home in and around Tunbridge Wells



A guide produced by William Malpas, Butterfly Conservation Kent



Introduction-

Although the White-letter Hairstreak is often cited as being one of our more elusive and vulnerable butterflies in this country, it can still be found surprisingly often in the right places, using the right methods. In the past, this species was arguably one of our most common butterflies during its peak flight season, before the ravages of Dutch Elm Disease arrived in the 60s/70s. The spread of this new and aggressive strain of elm disease on the backs of elm bark beetles saw the destruction of millions of trees, Elm having been one of our most iconic and culturally significant species, perhaps only second to the Oak in its popularity and recognisability. Their loss was felt deeply across the nation, as well as internationally, and many of our native species which depended on the elm for parts of their lifecycle became scarce, and saw catastrophic declines. The White-letter Hairstreak effectively saw a 90% reduction in its habitat availability, if not more, and other species such as the Large Tortoiseshell became extremely scarce during this period, many arguing that its apparent regional extinction was at least in part driven by the loss of elms across the country.

However, this is only part of the story. Although the vast majority of mature elm trees disappeared, in odd places throughout the landscape, lone trees survived, and these became the last strongholds for the White-letter Hairstreak. Where these trees have survived, so has the butterfly, and now finding and documenting such trees is the key to understanding the modern distribution of this species. Traditionally, mature elm was seen as essential to the lifecycle of the species due to the caterpillars feeding on the early opening flowers only found on mature trees. However, the butterfly has managed to colonise new habitats, and can now be found on scrubby Elm hedgerows which have regenerated from suckers, where most trees typically grow to a semi-mature size before being found by the beetles once again, and declining in a repetitive cycle every 10-15 years. The most exciting development to this situation is the introduction of disease resistant elms (DRE) on a completely new scale, despite having been around even since the 80s, they have recently become available en masse, and are now being planted by various groups on an exceptional scale across the country. These new trees have been thoroughly tested, and will undoubtedly host Hairstreaks and other rare species as they mature over the coming years. By developing an awareness of this butterfly, and the places it can be found, it is hoped that we will be able to track what will be a resurgence for this species, even if it still remains one of our trickier species to observe at close quarters.

Current Localities-

Over the past couple of years, I have made a concerted effort to find this species in the Tunbridge Wells area, and it can be found at various locations across the town and the surrounding landscape. In fact, the Alders Valley between Capel and Pembury may well hold one of the most significant populations of this species in the whole country, which is all the more remarkable for being in what was previously considered a distribution blackspot, with the maps highlighting their range showing a notable lack of records over this part of the High Weald. As it turned out, the lack of records was exactly that, as opposed to a genuine gap in their range, and I have found this species at the following locations-

-Beulah Lodge, Lansdowne Road- there were a handful of sporadic records attributed to this area in the past, and the large Wych Elm adjacent to the lodge appears to be the origin for these.

-TWGSB, St Johns Road- a recent discovery was a line of Field Elm type trees outside the school, planted adjacent to the road. I confirmed the presence of the WLH via UV surveys this Spring.

-Victoria Grove, Tunbridge Wells Common- last year, it was discovered that 6 Belgica elms from the original avenue on the Common have survived, and are now being inoculated against DED. WLH presence was confirmed by finding an egg earlier this year, followed by UV surveys.

-Fir Tree Road carpark, Tunbridge Wells Common- typical scrubby elm suckers can be found next to the carpark, and UV surveys confirmed the presence of the species in Spring

-Tea Garden Lane, Rusthall Common- a lone Southern Wych Elm leans over the lane near the Beacon pub, UV surveys this year confirming a strong colony of WLH here.

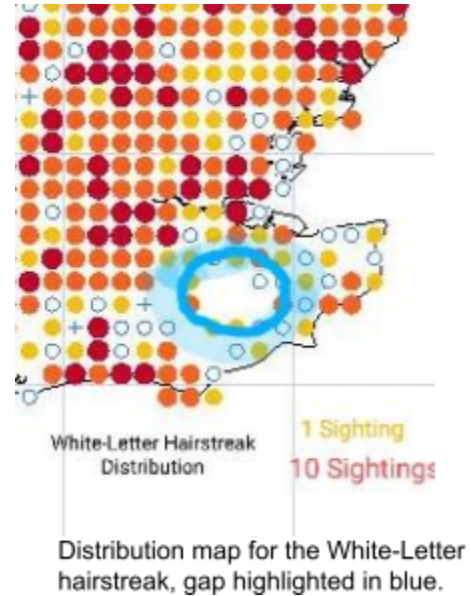
- The Bumps Meadow, Rusthall Common- a large and unusual Field Elm exists near this meadow, and it was the first new site I discovered WLH in June last year. It was this colony that encouraged the planting of further DREs in this area.

- Halls Hole Road junction, Hawkenbury- a huge Southern Wych Elm can be found at this junction, fondly known as 'The Beast', it is a difficult tree to survey. There are certainly WLH on the tree, but further observation to confirm their colony strength is needed.

-Pinewood Road- another large Southern Wych Elm, some brief movement last summer confirmed a colony in this tree.

- The Weald School, Pembury road, Tonbridge- I spotted some fairly small Wych Elm growing adjacent to the school, and had a quick check with the UV torch in Spring, which yet again found caterpillars even in marginal habitat.

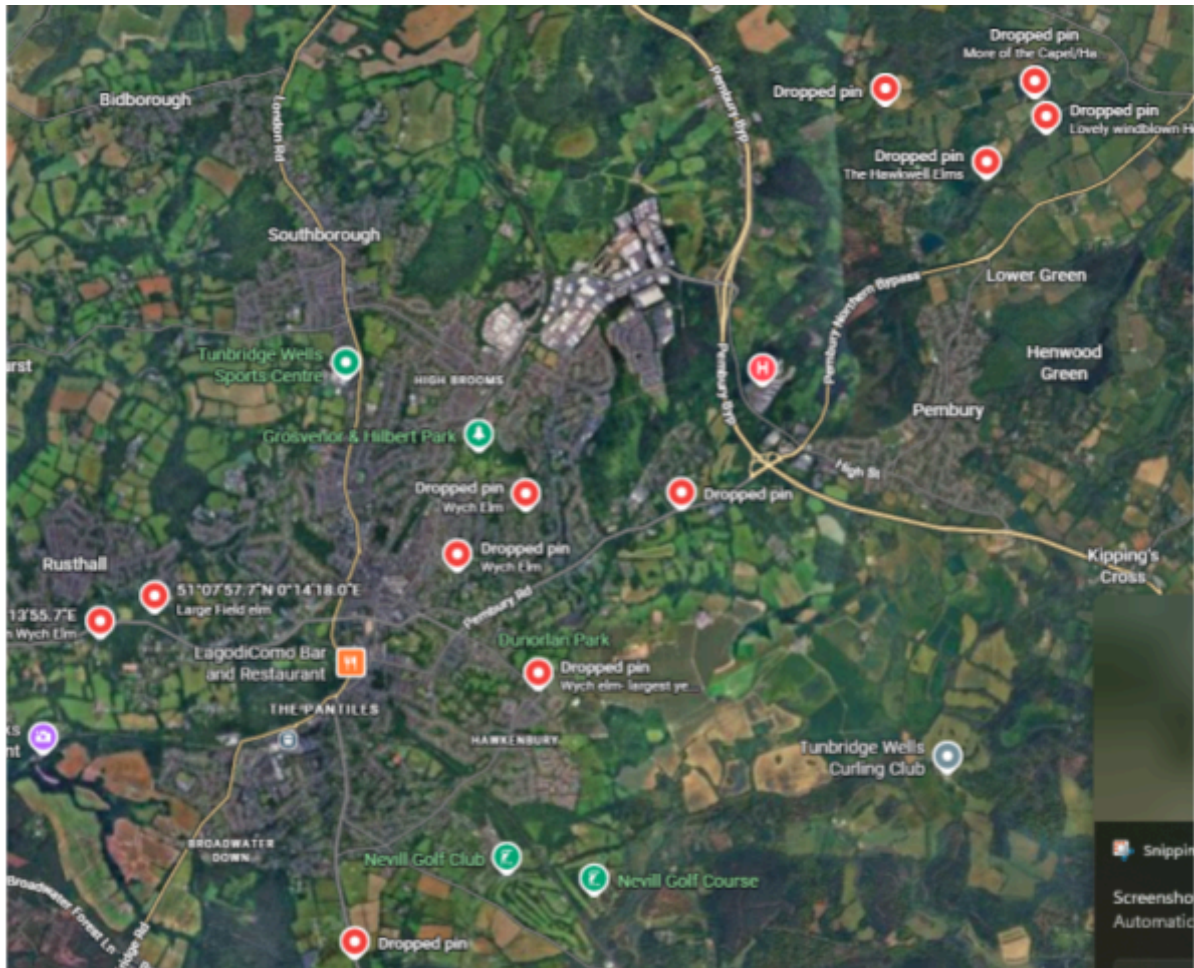
- 3 meta-colonies along Amhurst Bank Road, Capel- Some of the strongest colonies for this species exist in this valley, with the massive elms that survive here providing an exceedingly rare habitat that retains the elm as a feature of the landscape. A count of 41 butterflies in 15 minutes last year was rather exceptional.



Probable sites that need confirming-

-Frant Road, near Bunny Lane- a recent discovery was a large White Elm (*Ulmus laevis*) at this location, a very unusual species of tree, and the only one I have found locally. There will definitely be WLH here, but it needs to be confirmed.

- Pembury Road, opposite Seven Springs Homes- another recent discovery, a row of large Field Elms stand here, the street lighting and heavy traffic made it difficult to survey with UV, and although there is certainly a population here, it is another location which would be great to visually confirm



Locations Map- most of the locations listed are on the map above, you can see there are trees throughout the town, and there will be more yet to be discovered.

Photo Gallery of locations-



A rare 'Ulmus Laevis' or White Elm, Frant Road.



Ulmus 'Belgica', Victoria Grove- rare trees from the original elm avenue on the common.



The 'Beast' of Hawkenbury, an impressive Southern Wych Elm



The magnificent 'Bea Schwarz' elms, at the old Hawkwell Mill near Capel.



An unusual elm adjacent to TWGSB, St Johns Road.



Large Field Elms, opposite Seven Springs homes, Pembury Road.



The Southern Wych Elm that characterfully leans over Tea Garden Lane.



A typical scrubby elm hedgerow, with a mixture of dead, dying and new trees poking through, Langton Road.

How to find them-

Finding the trees-

As you may have noticed so far, the general rule is- **if you find an elm big enough, you will also find the butterfly.** Pretty much every tree that I have been able to survey properly has produced sightings in some form, so developing an eye for spotting elms is by far the most important step before finding the butterflies themselves. A few small and isolated suckers probably won't produce much, but a proper hedgerow as pictured above could well do, and any individual trees of a good size almost certainly will.

I'm still discovering new trees around the town that I must have driven past dozens if not hundreds of times, and there are more to be discovered throughout the area. Once you start to clock elms here and there, spotting the typical asymmetric pattern of the often glossy green leaves, you will start to notice them more and more, and I would encourage readers to visit some of the trees pictured to get a real feel for the elms of this region.

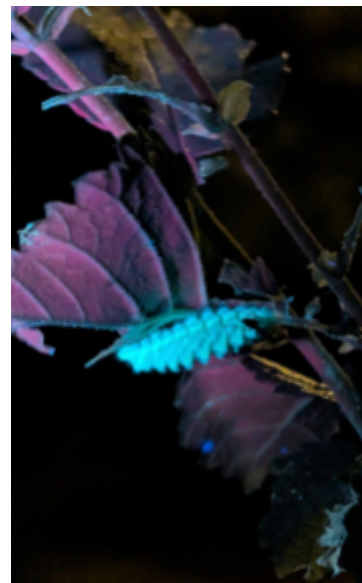


Elm leaves- notice the asymmetric base of the leaf, and serrated edge.

You may also wonder why there appears to be quite a number of large Elms left around the town, and that is a reasonable observation. It seems there may well be something unusual about the trees in this area which has allowed them to survive, and various experts in the field are taking a keen interest in these trees.

UV Surveys-

Perhaps one of the easiest methods for finding White-letter Hairstreaks in new locations is via UV surveys. For reasons yet to be understood, caterpillars of various butterfly and moth species fluoresce brightly under UV light, and the Hairstreaks are some of the most obvious. Particularly as they get towards being fully grown, a good UV torch will light up White-letter Hairstreak caterpillars like beacons at night, and they will be visible even at higher levels of the canopy. This is the method I used for confirming a few new colonies this Spring, and you can typically search for them from late April, to mid-May, with early May being the peak time for finding them at a larger size prior to pupation. Any size of elm is worth checking, but your chances of a successful hunt increase with the size of the tree.



WLH larva under UV

It is a really easy method for confirming the presence of the species, even if you only find one caterpillar. It will also be the best method for confirming this species on newly planted trees, which the butterflies should start to use after a few years of growth, with those closest to the existing colonies, such as those on Tunbridge Wells Common, being more easily colonised.

I would highly recommend the UV Beast V3 365nm torch, as it comes with rechargeable batteries, and has a powerful beam, but there are cheaper options for occasional use. Just be wary of torches which eat through batteries that are not rechargeable, and therefore more expensive than they originally appeared.

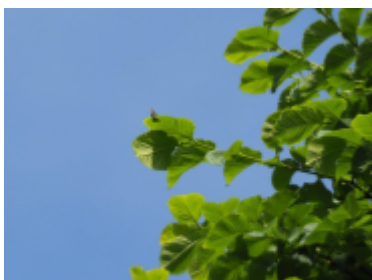
Butterfly hunting-

The main event of course is searching for the adult butterflies themselves when they start taking to the wing in early June. They can usually be found up until early July or later, but the peak season has typically been mid to late June in recent years.



Typical WLH movement high up in the canopy- they feed on Sweet Chestnut readily.

The vast majority of my sightings of the butterfly have been fleeting glimpses at the top of an elm tree, where they will sit basking for good lengths of time, before moving to a new spot in the canopy, and it is this movement between different parts of the canopy I aim to catch when observing a colony. One butterfly moving often sets off another, and they will chase each other around the canopy of a tree when there are good numbers present. It also means that you can have periods of activity that last minutes at a time, before the canopy becomes rather quiet once again, and any presence of the butterfly disappears until the next cycle of movement begins.



A WLH basking right at the top of an elm.

When I have been looking to confirm whether a tree has a colony or not, I have simply stared at the top of the canopy until the jagged movement of a small butterfly has confirmed their presence, and then moved onto nearby elms of interest to repeat the process. Any day with some sun and warmth will produce sightings during the flight period. Again, if you see a small butterfly circling around the top of an elm, by a process of elimination, you can be fairly certain it is a White-letter Hairstreak without having to see any of its markings in any detail. The only real caveat to this would be the Purple Hairstreak, which flies in a similar period, and is of a similar size and habit, but generally sticks to Oak trees. So far, I have only ever seen the White-letter in the canopies of elm.

Binoculars, or a camera with a good zoom lens, are of course useful for the identification of butterflies, and uploading any records to iRecord, or sending them across to myself for verification, is very much encouraged.

It is possible to see the butterfly at close quarters, but involves quite a bit of luck and good timing. Some butterflies will come down to briefly feed on flowers such as bramble early in the morning, and sometimes late in the afternoon or early evening, but not all colonies do this, and it is very weather dependent. The hotter it is, the earlier the butterflies will return to the canopy, and generally I would expect most feeding to have stopped by 9:30am, with the next likely window to be 4pm onwards. Butterflies love to break the rules though, and you may well find them nectaring on flowers near an elm simply by chance and at random. They are also very keen on the flowers of the Sweet Chestnut, so that is another tree to look for them on.

Next steps-

There will be plenty of new colonies of this elusive butterfly waiting to be found, often hiding in plain sight, with many going unnoticed for years. There are a couple of sites listed above which I will aim to confirm the presence of the butterfly at this season, but it is always helpful to have more pairs of eyes looking. The flight season for this species only lasts a precious few weeks, and there is simply not enough time to visit every colony in one season, so raising awareness about the White-letter Hairstreak, and encouraging more people to look for it in likely places is very much needed.

Individual colonies are still vulnerable to the loss of their host tree, whether that be through DED, climate change, or human activity, and it will be the colonisation of the newly planted resistant elms which provides a long-term and secure future for the species.

Please do log any records via iRecord, or contact me directly at willmalpas4@gmail.com , and happy hunting!