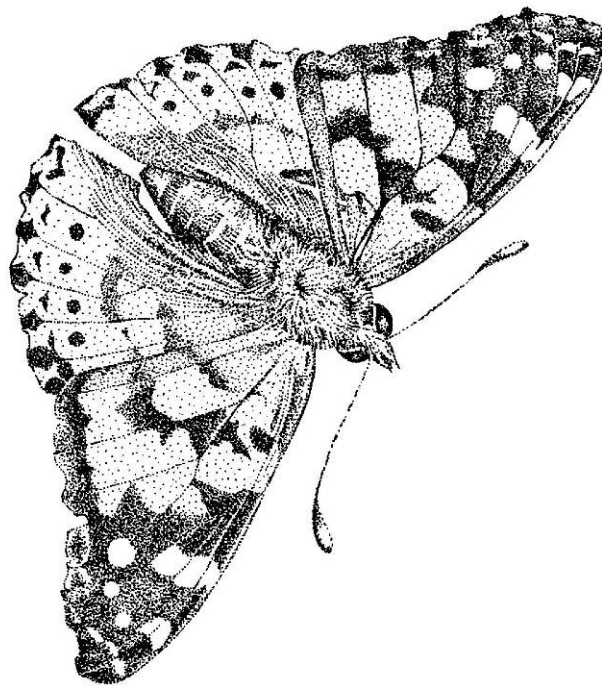


NORTH EAST ENGLAND BRANCH

BUTTERFLY CONSERVATION



BUTTERFLY SUMMARY

2019



Compiled by Steve Austin, Stephen White & Roger Norman



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(Front cover: Painted Lady, Terry Coult)

The latest annual reports, newsletters and Branch details are available on the website:
www.northeast-butterflies.org.uk

RECORDERS' REVIEW FOR 2019

Welcome to the Annual Butterfly Summary for 2019. We hope you enjoy reading it and that it helps you recall last summer. That was a year that will be remembered for the massive influx of Painted Ladies, this was possibly a “once in a generation” event. There were some other less obvious changes to our populations that perhaps occurred under-the-radar. The spread of Brown Argus through County Durham needs watching, not just for the future of our own Northern Brown Argus, and the winter egg searches for White-letter Hairstreak showed that the species is present throughout our region.

The Orange tip made an increase in 2019 whereas the Large White was down in 2019 along with the Small White. Speckled Wood is still showing a strong presence in our area. Large Heath is still pretty much under recorded and it's possible that not many recorders even see this butterfly even though it has a stronghold in Northumberland.

We would like to let all recorders know that we now have “verifiers” for both Durham and Northumberland for the “irecord” butterflies app and that these records are included in our database for the region. If you have a smart phone and want to record your butterfly sightings without using a spreadsheet, try downloading this free app from the Butterfly Conservation website. The feedback we have had is that it is easy and convenient to use.

We would like more records from the south-east corner of County Durham for the Essex Skipper whose numbers seem to have decreased in 2019 – but a good photo is always needed for this butterfly preferably showing the sex band of the male not just the darker or black antennae. Perhaps this is a “hands-and-knees” task! Brimstone and Silver Washed Fritillary also seem to have become a more frequently seen species in 2019, and we welcome any sightings but again please supply supporting evidence. It is difficult to accept these rarer butterflies without a photograph. On a closing note Gatekeeper and Clouded Yellow also fall into this category along with any other butterflies that may be thought of as a released specimen.

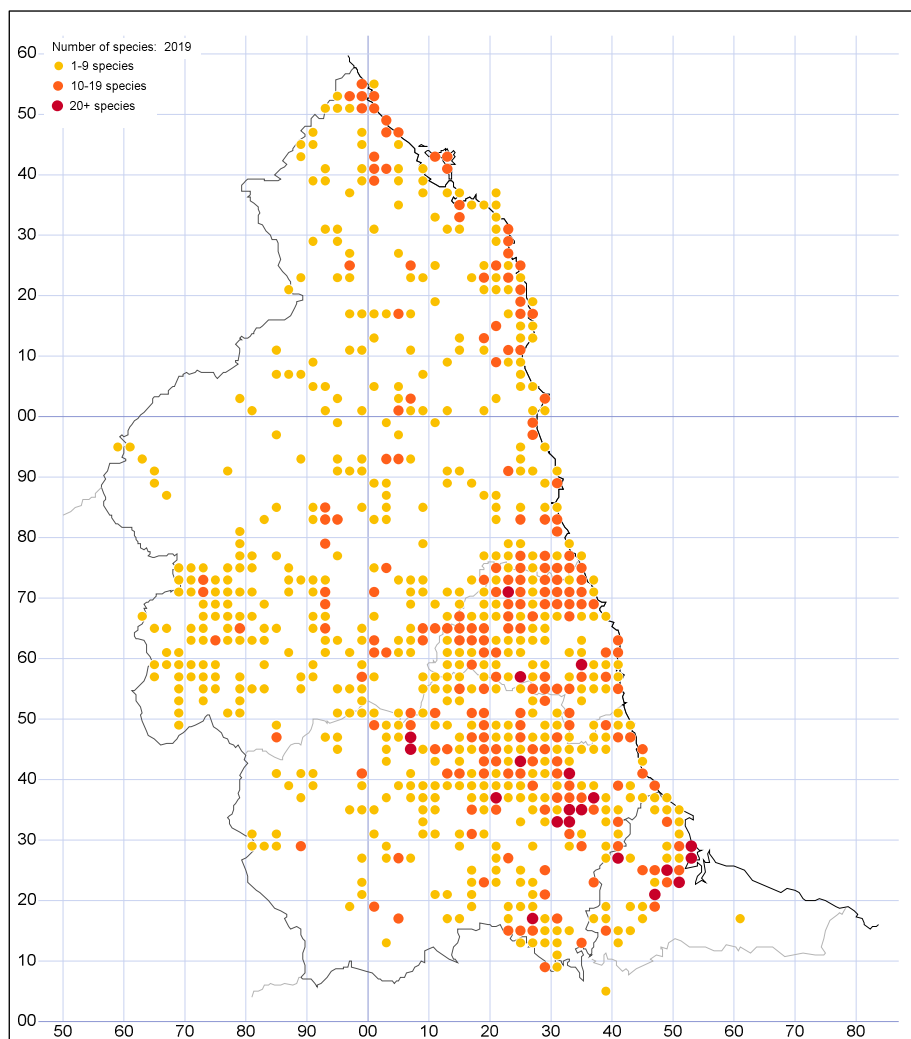
Last year was a really interesting year and we can only hope that 2020 proves to be similarly fruitful. Thanks again to all transect and casual recorders and all those involved in any additional nationwide schemes. The records you send continue to be of vital importance in providing key data to Butterfly Conservation. The conservation of the UK's butterflies remains an enormous challenge. Butterflies are the best-studied UK insects by some way. The knowledge that recorders have built helps to provide vital insights into the changing state of wider biodiversity and the ecosystem services that depend upon it.

As we write this, 2020 has got off to a very wet start with lots of rain and flooding, as the season continues let us hope that this has not had too much affect on the butterflies in our area. We will not know the full story until the end of the 2020 when we get the reports. So please send in as much as possible.

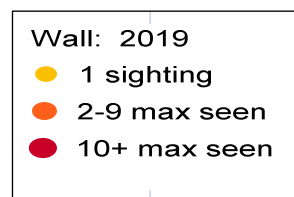
We hope you enjoyed watching our butterflies in 2019 and hope you continue to enjoy and record in 2020. As always, all the best for 2020 and let's hope for good weather! Remember if you contribute records the information you provide may be attributed to you in the annual report. If you don't want this to happen please inform us when you submit your records.

Please remember that our new permanent email address for all casual records is

records@northeast-butterflies.org.uk



Tetrad map, (2km x 2km), showing all visits in 2019



Enlarged example of colour key for the species-account maps for 2019

Weather in 2019

Our weather record information comes from the Durham University station on Observatory Hill in Durham City. Apart from the Radcliffe Observatory at Oxford, Durham University Observatory has the unbroken longest series of meteorological observations for any university in the UK. Daily records date from the late 1840s. Today, the observations are made using an automatic weather station.

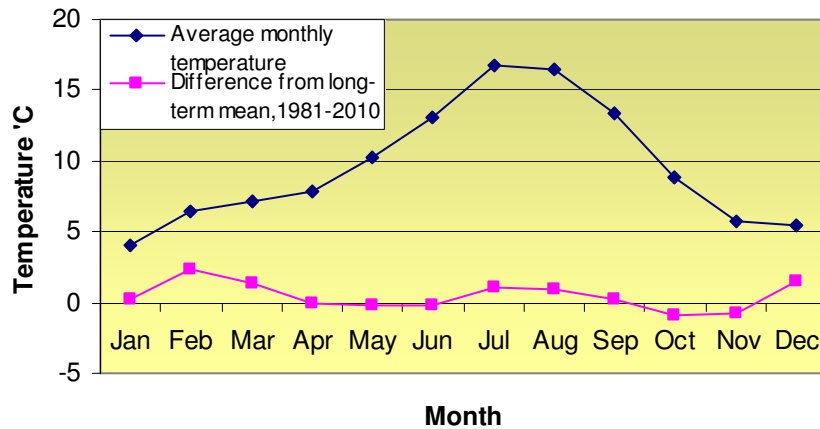
Acknowledgments: The Branch is grateful to Professor Tim Burt of the Department of Geography at Durham University for providing weather data via his website, (<http://www.community.dur.ac.uk/durham.weather/>).

These comments have been taken from his website: It was the seventh warmest summer since 1850 and the same as 2018. It was the sixth dullest since 1882, although both 2012 and 2017 were worse, and spring was sunnier than summer. Using the Davis Index, the summer was the equal 37th worst since 1900. It was generally disappointing due to it having above average rainfall and below average sunshine.

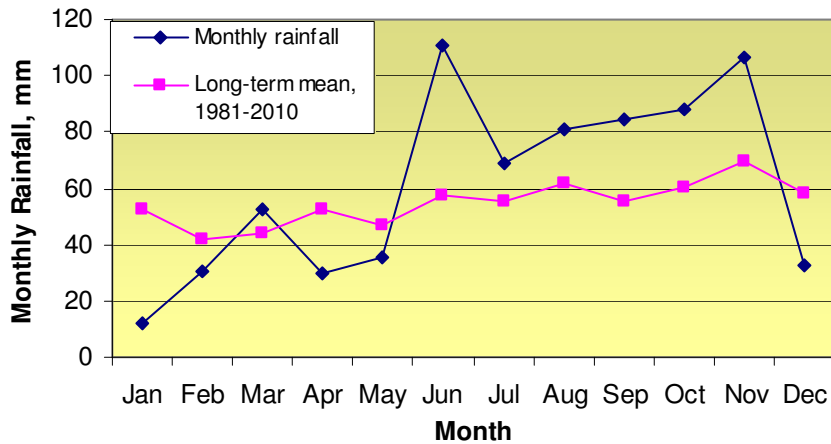
Please note that the long-term averages used have now changed from 1961-1990 to 1981-2010.

The species accounts show that many species weathered the fickle summer of 2019 and the three graphs on the next page show the main features of the weather.

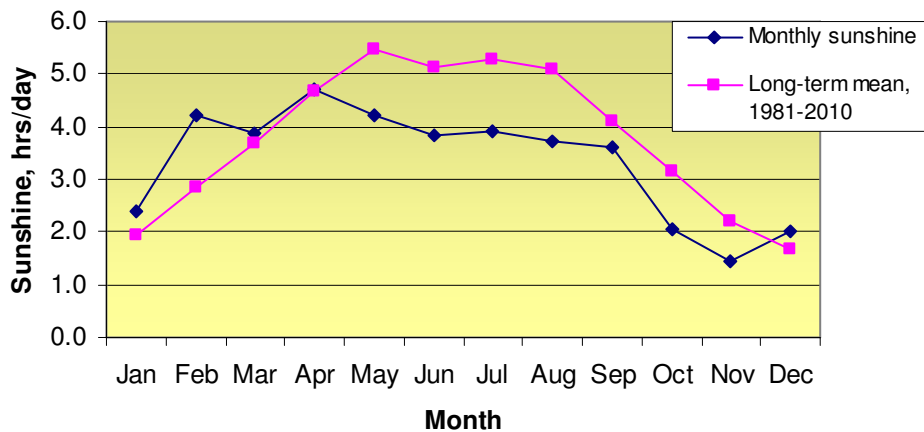
Monthly Temperature at Durham University Weather Station in 2019



Monthly Rainfall at Durham University Weather Station in 2019

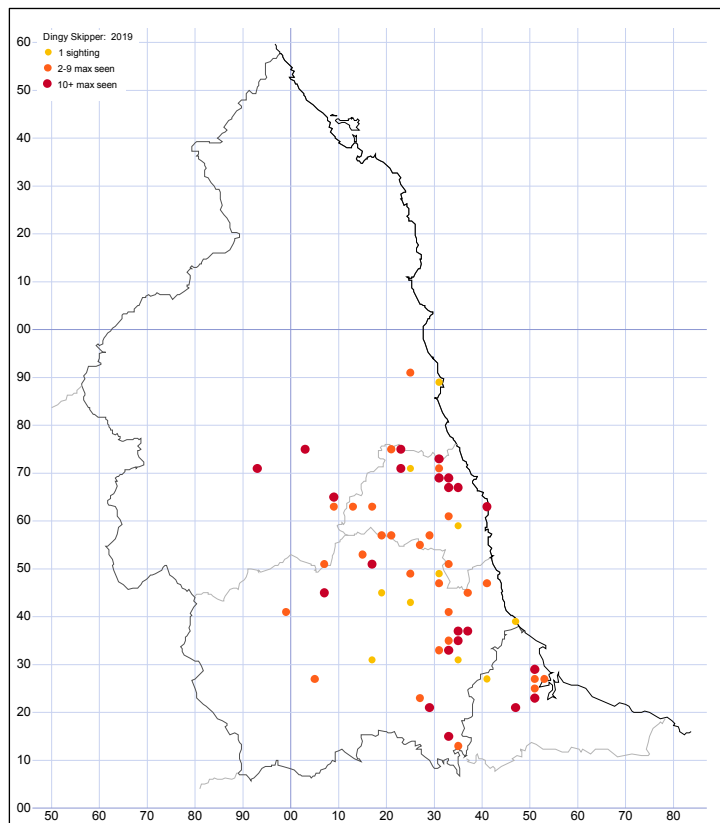


Monthly Sunshine at Durham University Weather Station in 2019



Dingy Skipper *Erynnis tages*

2019: As is so often the case, Bob Mawson recorded County Durham's first Dingy Skipper on April 26th from the Raisby Way. Although not a record early sighting for this species in our region, any April record signifies an early start to its flight period. Several other recorders encountered the butterfly in April, including Keith Walton (Raisby Way and Wingate Quarry) and Dave Liddle (Burn Hill).



There was then a hiatus in recording with no Dingy Skippers being seen for the first nine days of May. On the tenth, Keith Smith recorded the butterfly from three different Northumbrian sites: Cramlington Waggonway, Silverlink Country Park and High Flatworth. These are important records, as the number of Northumbrian sites that the species occupies is by no means great.

Sightings thereafter were pretty much continuous until the end of the month, barring the odd day at the end of May when none were seen. A good number of double-figure counts were made, too numerous to list here, with Mike Coates's counts of 38 and 45 from the Fenwick Pit site on 19th and 21st of May being the highest for Northumberland. Other noteworthy counts from sites north of the Tyne included Tom Tams's 30 at Howdon Nature Reserve on 15th May

and Roger Norman's 29 at Brenkley Old Pit site on the 21st. Martin Blick recorded the highest count for the region with 48 at Portrack Marsh on Teeside on 14th May.

As might be expected, numbers declined in June although again several double-figure counts were made, Dave Liddle's 27 at Burn Hill on the 6th being the highest. None the less, although single-site counts were lower, the number of different locations from which records were received remained high.

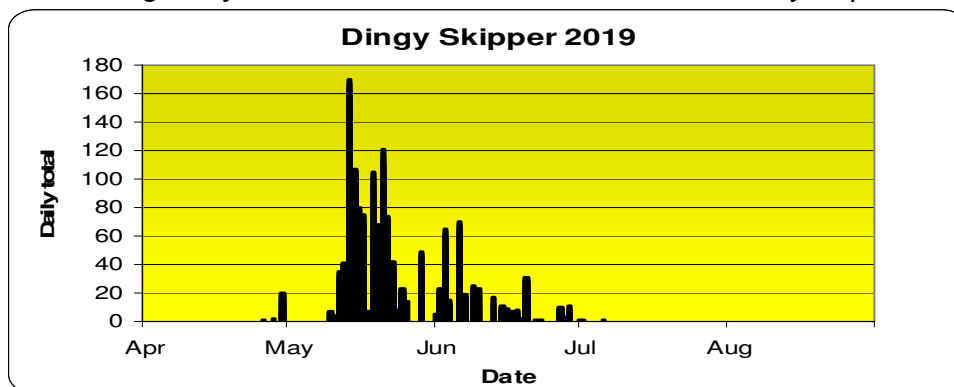
Peak flight period was on May 14th when a total of 170 Dingy Skippers was recorded from our counties, a couple of weeks earlier than the corresponding peak of the previous year. Another peak was a week later when 121 butterflies were counted.

The annual total of 1413 was excellent – one of our best ever. Again, the number of sites from which the butterfly was recorded was encouraging. This is despite the ongoing loss of sites to redevelopment and it suggests that the species continues to thrive in the north east despite the best efforts of some to destroy its habitats! Particularly encouraging were the numbers of both butterflies and sites recorded in Northumberland. Further analysis of records is needed but it seems fairly certain that the species is currently increasing in terms of both range and abundance within the county.

One Dingy Skipper was recorded in August – possibly an example of a second generation individual - by Walia Kani at Raisby Hill Grassland. This was over one month later than

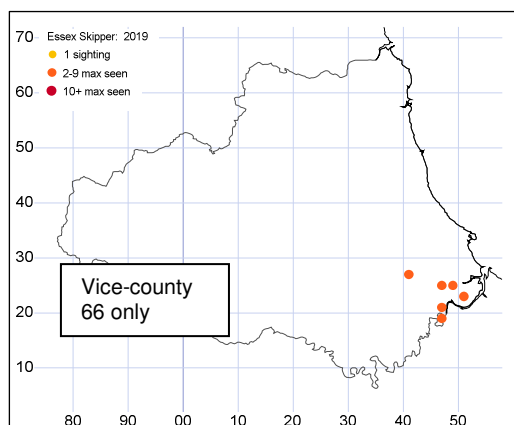
Northumberland's latest sighting, a singleton recorded by Mike Coates from Fenwick Pit on July 1st.

So, overall this was another good year for the Dingy Skipper in our region. Our populations continue to thrive – in good years at least – and retain their nationally-important status.



Essex Skipper, *Thymelicus lineola*

2019: Since its first discovery in 2015, the number of records had declined quite markedly until 2019. From 37 records and 92 individuals in the first year of discovery, there were 17 records in 2016 with only 5 in both 2017 and 2018. It is therefore pleasing to report that 2019 saw a small but welcome increase with 14 records giving 35 individuals. All were in the south-east of County Durham.



The first record came from Graham Megson who photographed an individual on the early date of 4th July along the A1185 road verge near the Salterns at Greatham Creek.

The next record came from Ron Henderson at Portrack Marsh LNR on the 8th July with six individuals. This also reflects the season's highest count and is well below the high count of thirty recorded here in 2018 by Dave Wainwright. David Phillips also reported four from this site on the 21st July.

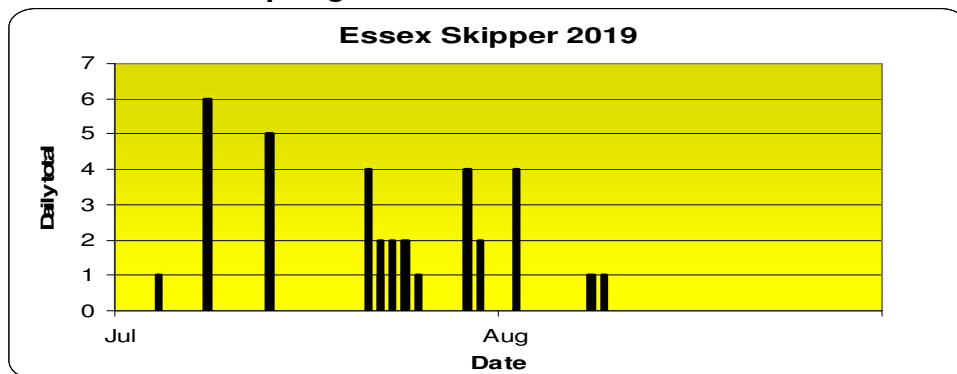
Martin Partridge found five at the JM Biodiversity Site in Billingham on the 13th July, with four seen at the same site on the 29th July and 2nd August with a single observed on the 8th August being the last sighting from here.

Whilst the majority of records came from Portrack Marsh and the JM Biodiversity Site, other records in late July included 1-2 individuals from Cowpen Bewley Woodland Park and two seen at RSPB Saltholme. The last butterflies of the season were reported by Gavin Struthers at Cowpen Bewley Woodland Park on the 9th August.

It was recorded in six tetrads with the butterfly being found in a total of 21 tetrads since 2015. It was recorded on thirteen days out of the flight period of 37 days (35%).

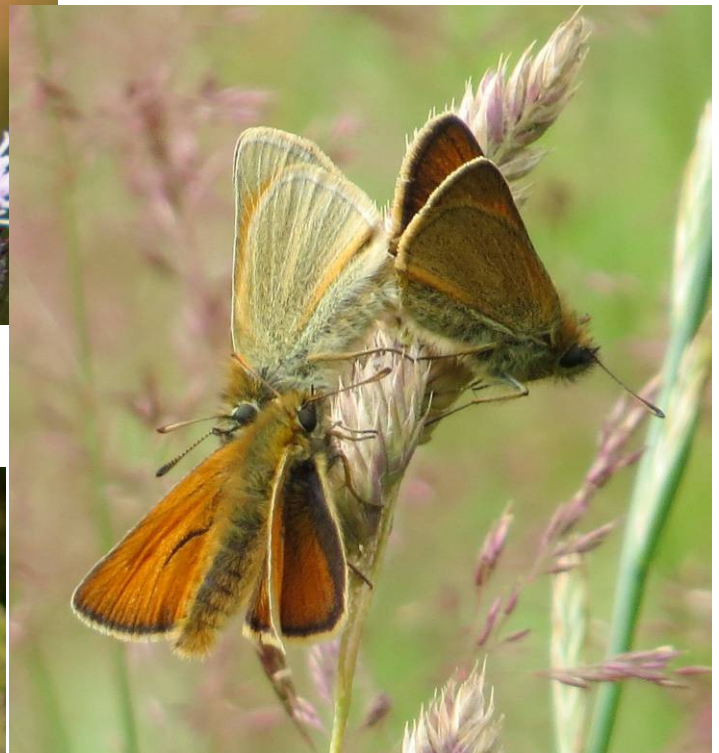
One species for which we would like more records is Essex Skipper. **However, all recorders are reminded that good evidence is needed for this species before sightings can be accepted; and while head-on shots of the skipper's black antennae may be enough, photographers should be aiming to capture clearly the sex band of the male,**

which is the key feature to distinguish Essex from its very close relative, the Small Skipper. To encourage more observations we are planning to hold an ID field workshop in July 2020 to demonstrate these salient identification features. More details can be found in our Spring 2020 newsletter.



An unusual Painted Lady, *ab pallens* photographed by Ron Henderson at Washington on 3rd August 2019

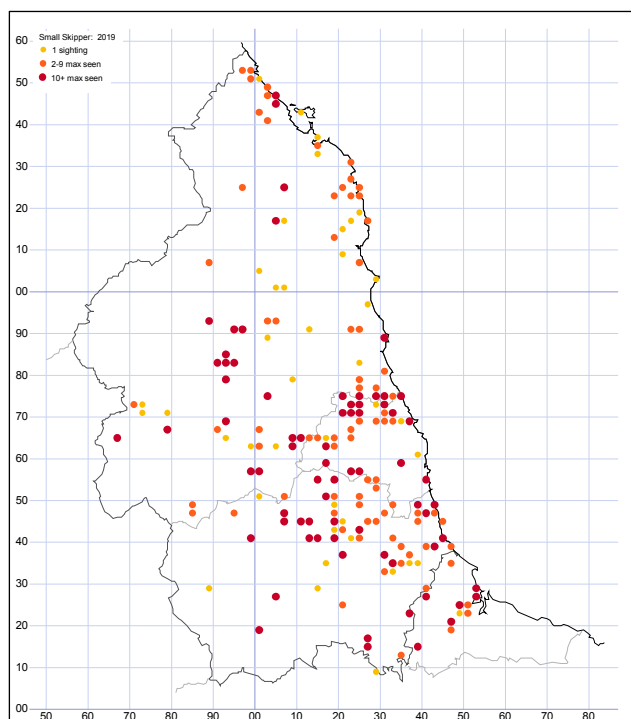
Small Skippers, photographed by Steve Holliday at Cramlington on 19th July 2019



Small Tortoiseshells, photographed by Keith Walton at Langley Park on 16th September 2019

Small Skipper *Thymelicus sylvestris*

2019: The first report of the year involved three found at Northumberland Park, North Shields on 6th June by Mike Coates. This was followed by singles in County Durham at Dalton Park (Graham Mitchell), Low Farm (Sarah Wherry) on 10th June. These records were much later than in 2018, (19th May) and 2017, (11th May).



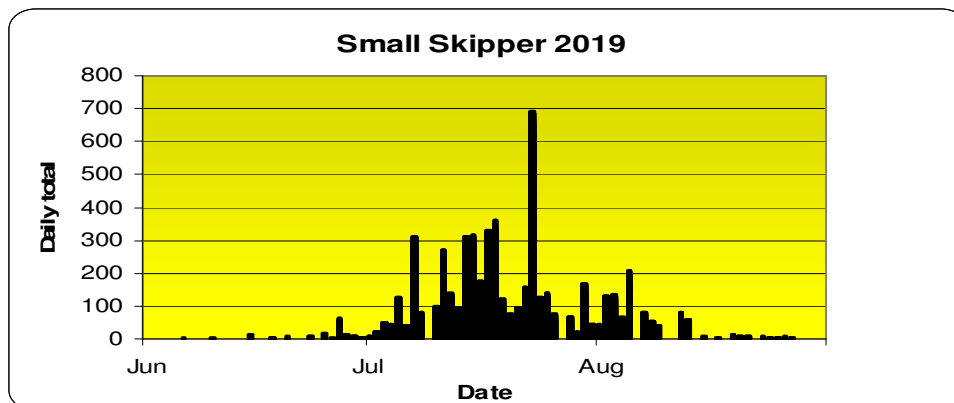
Daphne Aplin had the first double-figure count; 14 at Cowpen 2 Woodland Park on 15th June. Fairly small numbers (maximum of 20 at Murton Fields) were noted during the rest of June. An increase in July led to a peak of 105 at Oakenshaw NR on 7th (Keith Walton), and 100 at Hendon also on 7th (Dave Wainwright). Oakenshaw NR remained the most productive site and it was here that Keith Walton recorded highs, in July, of 222 on 11th and 253 on 14th (the peak count in 2018 was 72 at Black Plantation). Other substantial counts during July-August were Bowes Valley NR (55), Burn Hill (59), Horsleyhope Burn (50), J M Biodiversity Site (75) and Seaton Snook (57). The most productive date was 23rd July, when a total of 691 was recorded across 42 sites, including peak site counts of 140 at Aid Moss in Northumberland (Dave Wainwright) and 66 at Havannah NR (David Stebbings), while a total of 362 was noted on 18th July.

In August, numbers generally declined. The final reports were in late August, when five were at Burn Hill and one at Fontburn on 27th, and one near at Allenheads (Northumberland) on 31st (Louise Hislop).

A total of 5,728 individuals was recorded across the region during the season, a huge increase on 2,918 individuals recorded in 2018 and 2,184 in 2017. There were 525 records of Small Skippers in the region during 2019, with an average of 10.9 individuals per report, compared to 6.3 in 2018 and 6.3 in 2017.

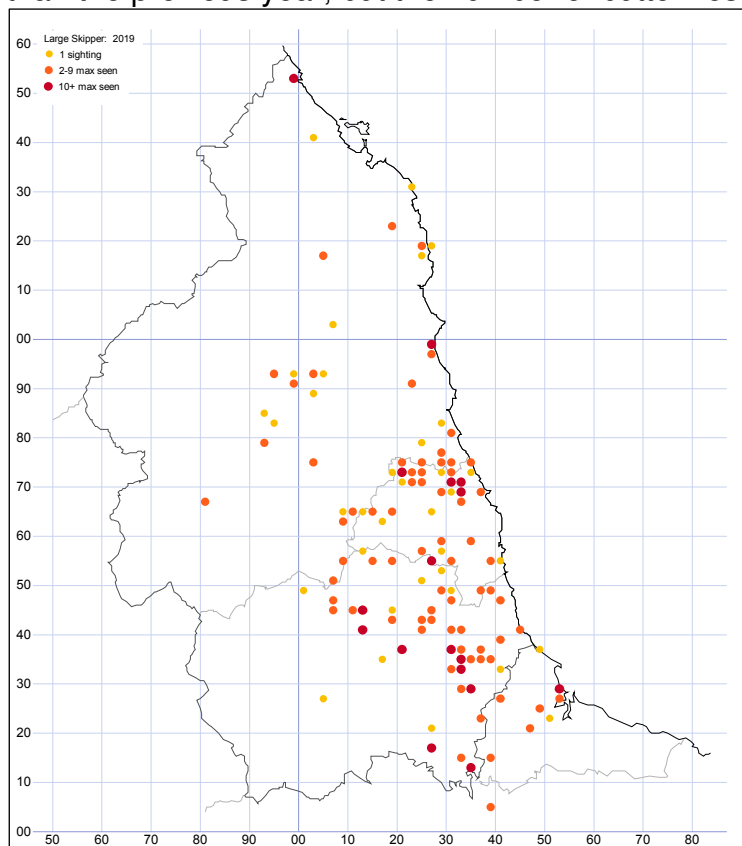
In 2019, Small Skippers had a flight season of 87 days (6th June to 31st August), and the species was noted on 65 days during the season (75%). This compares to flight seasons of 135 days (50%) in 2018 and 128 days (52%) in 2017.

A total of 193 tetrads was occupied in 2019 from a total of 765 tetrads visited, (25%). Distribution was patchy, with most records concentrated in County Durham and Tyneside and fewer in north Northumberland and in inland areas. This perhaps reflects observer bias around urban areas.



Large Skipper *Ochlodes faunus*

2019: A total of 301 records were received, these recorded 1,181 individual Large Skippers. The flight season lasted 86 days, and the Large Skipper was seen on 54 of these days, representing 63% of the flight period. The number of records received was slightly higher than the previous year, but the number of butterflies seen was over 300 up on 2018.



The numbers recorded were the highest since 2014 and breaks a sequence of four years when numbers seen were below average.

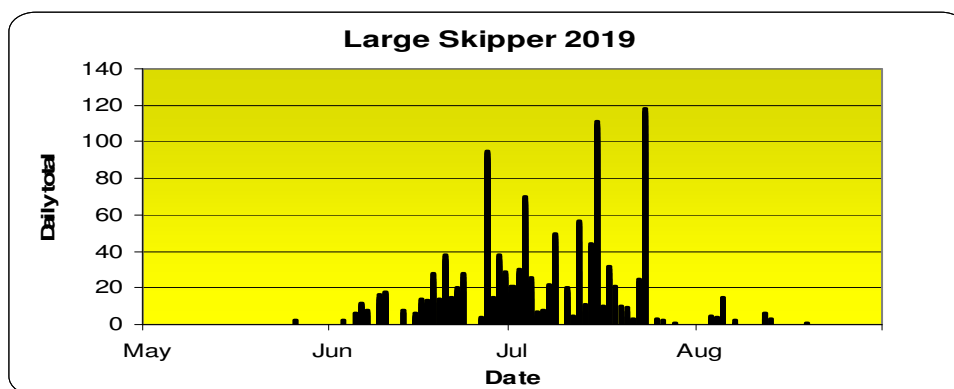
The flight season started slightly earlier than normal with the first sighting coming from Martin Partridge at the JM Biodiversity Site on Teesside who saw two on 26th May.

The first record for Northumberland was from Mike Carr who saw six at East Cramlington LNR on 5th June. Records started to pour in from 6th June onwards.

The main flight period lasted from the first week of June to the third week of July, with several peaks in late June and July. The highest individual counts this year came from Pippa Smalling who recorded good numbers at West Park nature reserve and The Whinnies in Darlington throughout July. John Olley recorded 21 at Coxhoe

Ponds on 23rd July and 20 at Raisby Way on the same day. Malcolm Hutcheson spotted 18 at Berwick Castle on 23rd June. In total there were 26 double figure counts received, quite a lot more than usual.

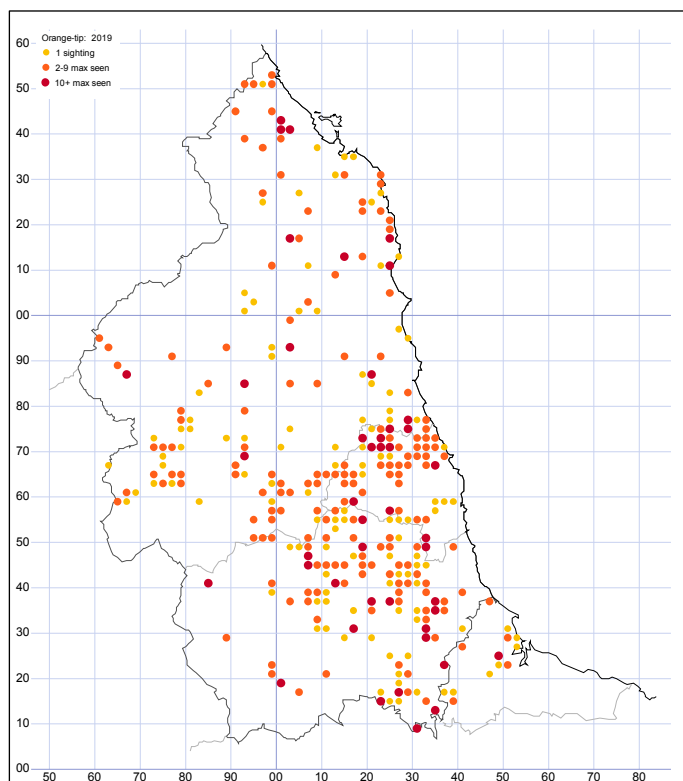
The main flight season ended as normal in the last week of July, but unusually there were thirteen records in August this year. The final sighting for Northumberland came from Gemma Vance who recorded one on 7th August at Murton Fields, North Tyneside. The final sighting of the year for County Durham was from Pippa Smalling who saw one at The Whinnies on 19th August, quite a late date for the Large Skipper.



Orange-tip *Anthocharis cardamines*

2019: Orange-tip showed an increase in the number of records and individual butterflies in 2019 compared to the previous year with 841 records (15% increase) and 2961 individuals (20% increase). The flight period lasted 105 days and the butterfly was recorded on 68% of those days. The Orange-tip was recorded in 321 tetrads which is 42% of the visited tetrads

in the region.



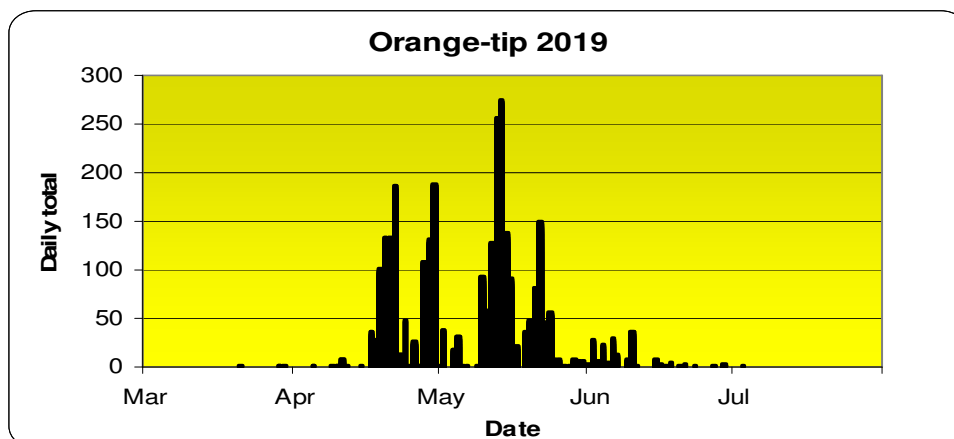
The Orange-tip made its 2019 debut on 21st March when Sarah Wherry reported one in Bishop Auckland. This was followed just over a week later by records of singletons in Washington and Bowes Valley Nature Reserve on the 29th March and in Pint Burn Wood, Hamsterley Mill by Philip Bone on the 30th. Northumberland had to wait until 5th April when Roger Norman claimed the honours with a singleton at Close House. Orange-tip numbers started to build in the second half of April with good numbers registered on 22nd and 30th of that month. The species' peak was reached on 14th May when there were 50 separate records and a total of 275 butterflies counted.

The highest individual count of the year was made by David Phillips who counted 47 at High Coniscliffe near Darlington on the 24th April. Other good counts were made by Tim Wrigley who recorded 40 at

Liddell's Wood near Wall, Northumberland on 13th May and Dave Liddle who counted 37 at Burn Hill also on 13th May.

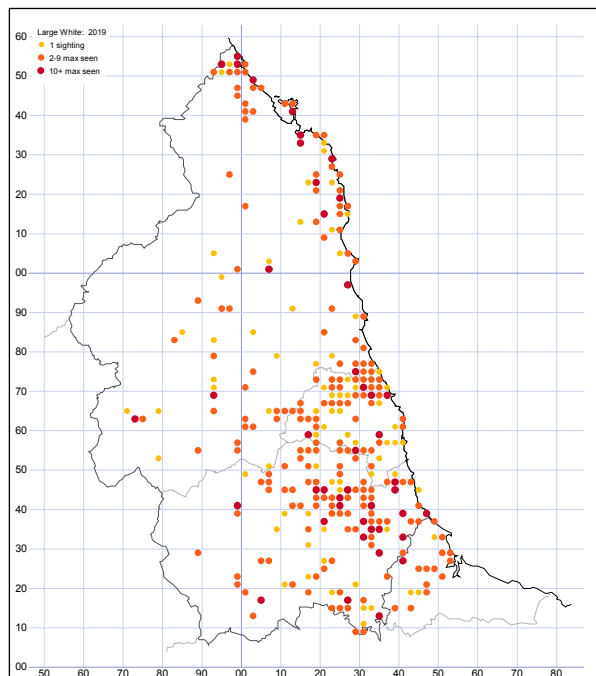
The Orange-tip continued to be seen in small numbers throughout June. The last records in Northumberland were made on the 29th of that month when Dave Stebbings recorded singletons in two separate locations in Harwood Forest. The species managed to continue on into July in Durham with David Phillips recording the last one of the year on Raisby Way on the 3rd.

Records of ova and/or larvae were submitted by Hewett Ellis, Neil Gregory, Graham Mitchell, Paul Robins, Dave Stebbings and Jonathan Wallace. These immature stages were recorded on Cuckoo Flower, Garlic Mustard and Hedge Mustard.



Large White *Pieris brassicae*

2019: There were 1671 records of Large White in 2019 which comprised 4641 individual butterflies. This was a 5% decrease in the number of records of this species in 2018 but a more substantial drop in the number of individuals of 39% from the 7653 counted in 2018. The flight period lasted 185 days and the Large White was recorded on 153 of these days (83%). The species was recorded in 302 different tetrads representing 39% of the total number of visited tetrads in the region.



The first Large White of the year was seen on 11th April by Keith Smith in the Silverlink Retail Park (North Tyneside). This was followed on 19th April by three separate sightings in Northumberland: in Beadnell by Amanda Crowley (a remarkable 11 individual butterflies), in East Sleekburn by Trevor Richardson and at Marden Quarry, Cullercoats by Hewett Ellis. Durham's first Large Whites were seen on the 20th April when Julie Hogg recorded one on Knitsley Fell and Janet Giaretta recorded one at Penshaw.

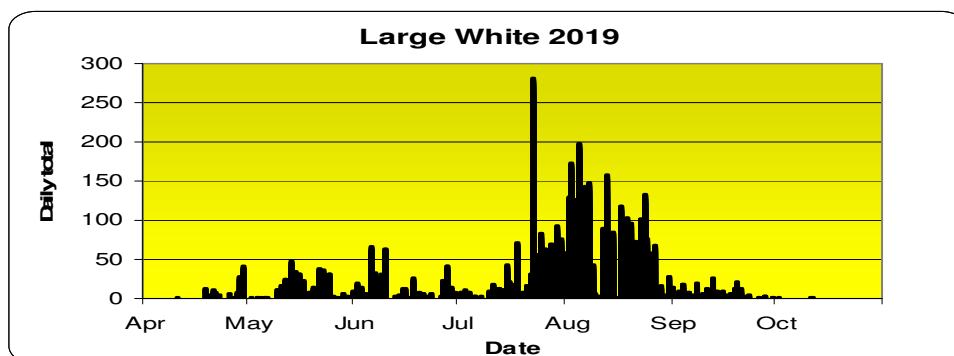
The first generation was quite stretched out with no very strong peak but the best day was 6th June when there were 29 records comprising a total of 66 butterflies. The highest count of the first generation was made by Keith Walton who recorded 35 at Oakenshaw Nature Reserve on 28th June. The next highest counts in the first generation were made by Malcolm Hutcheson

who recorded 19 at Needles Eye near Berwick on 25th May and Tom Tams who counted 19 at Tynemouth Priory on 10th June, whilst Lauren Withrington recorded 18 at Gibside on 30th April.

The second generation started to climb in numbers from around the 10th July. The day with the largest overall numbers was 23rd July when 281 butterflies were reported but the shape of the graph perhaps suggests that the true peak of the second generation was around 5th August. As for the spring generation, it was Keith Walton at Oakenshaw Nature Reserve who claimed the highest count of Large Whites during the summer generation with a count of 63 on 18th July. Other prominent counts were made by John Olley with 53 on Raisby Way on 23rd July and Stephen Kirtley with 35 on Wynyard Woodland Walkway also on 23rd July.

Numbers of Large White fell sharply after August but the species was recorded steadily through September. The last record of the year for Durham was made on 2nd October by Keith Walton at Oakenshaw Nature Reserve but in Northumberland the species lasted almost until the middle of the month with singletons reported by Russell Pannell in a garden in Old Hartley on 11th October and by Hewett Ellis in Whitley Bay cemetery on the 12th.

Records of Large White eggs and larvae were submitted by Dave King from Melkridge near Haltwhistle.

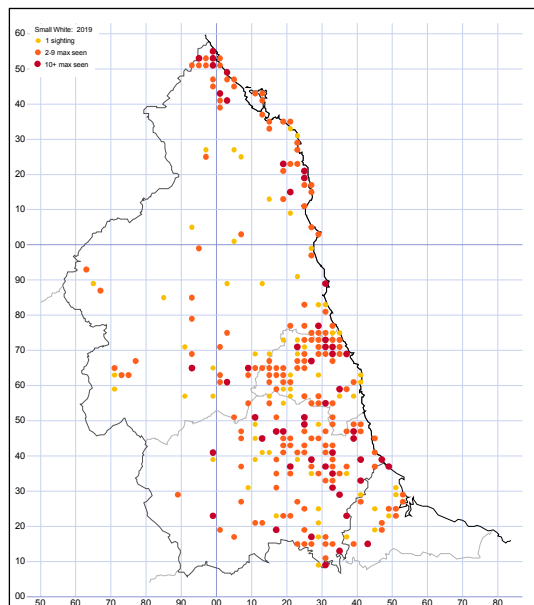


Small White *Pieris rapae*

2019: A total of 1,511 records were received. These recorded 4,954 individual butterflies, this was a fall of about 5,000 compared to last year, which was a record breaking year, and is about average for the species. The flight period covered 216 days and the Small White was seen on 161 of these days, representing 75% of the flight period. Small White numbers seem to fluctuate greatly from year to year in our region and may be linked to how common

certain parasitic wasps, which attack and kill the caterpillars, are in a particular year.

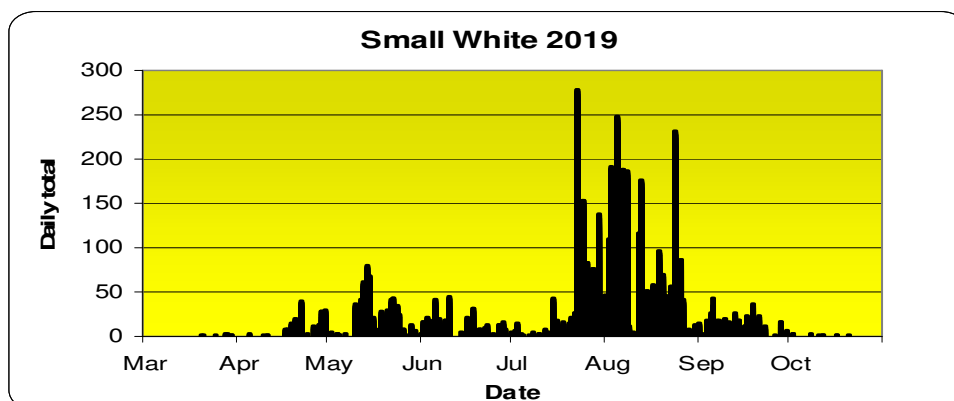
This year there were ten March records with the first being spotted by Malcolm Hutcheson who saw one at East Ord near Berwick on 20th March. The first record from County Durham was from John Olley with one at Blackhills Gill, Horden on 28th March. Both are normal dates for first sightings. There were relatively few records in April with all the counts being in single figures, the highest being eight seen by Amanda Crowley at Beadnell on the Northumberland coast on 26th April. It was quite a weak spring generation, the main flight period being mid-April to mid-June with a peak on 14th May when 80 were recorded in the region. There were only a few double figure counts for May, the best being 31 seen by Jackie Reeves at Dunstan Heughs near Craster on 13th May, and Chris Powell who counted 18 at Lane Head Quarry in



Weardale on 23rd May.

The main flight period for the second generation was from the last week of July to the end of August. The emergence started quite suddenly during the last week of July when numbers shot up from 23rd July onwards. In fact the peak of the flight period was 279 reported from around the region on 23rd July, right at the start of the emergence. However, individual high counts were lower this year and there were fewer of them, the highest being from Julie Roper who reported 120 at Howick in north Northumberland on 24th August, the highest for the year. Other counts of note came from John Olley who saw 68 at Butterby SSSI just south of Durham City on 4th August and Jackie Reeves who counted 55 at Dunstan Heughs near Craster on 3rd August.

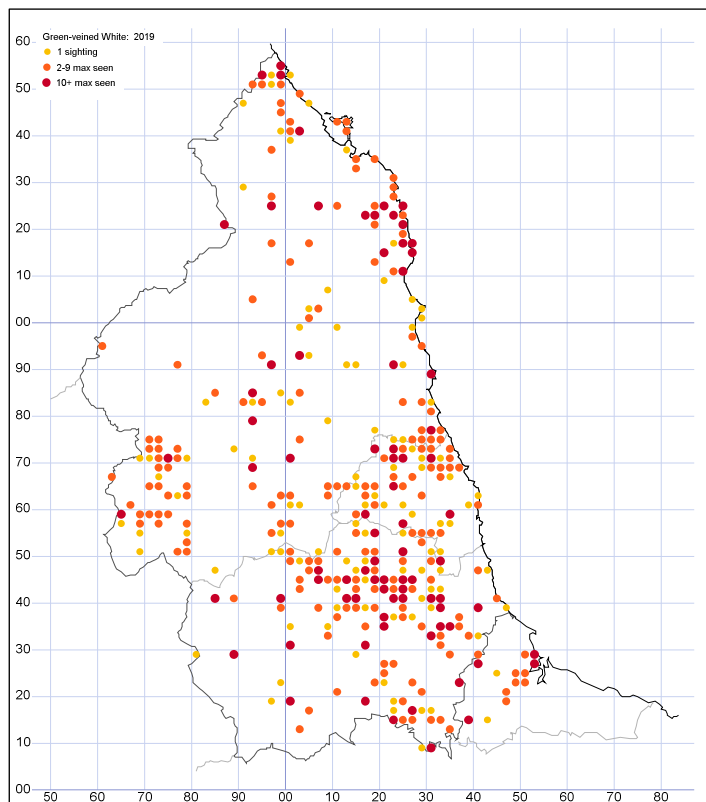
The main flight season ended quite abruptly at the end of August, with only two people reporting double figure counts after 26th August. Daily totals were well under 50 through September. There were thirteen records in October this year. In County Durham the final sightings came from Steve Austin with one in a garden at Newbottle near Houghton-le-Spring and Stewart Cowley who saw one at Morrison Busty pit yard, both on 17th October. The final sighting for Northumberland and the year was from the same person and same location as the first of the year; Malcolm Hutcheson who saw one at East Ord near Berwick on 21st October.



Green-veined White *Pieris napi*

2019: A total of 1,606 records were received. These recorded 7,584 individual butterflies. The flight period covered 202 days and Green-veined White was seen on 154 of these days, representing 76% of the flight period days. The number of Green-veined White seen this year was slightly down on the previous year but still about average for the species.

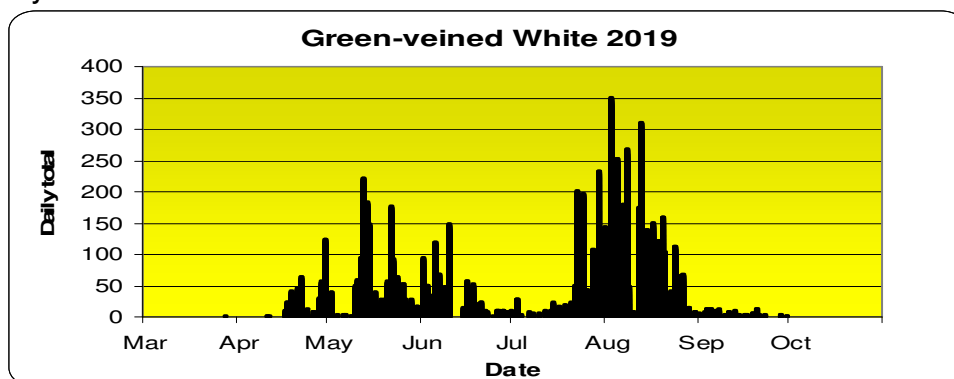
The season got off to quite an early start, certainly compared to 2018. There were plenty of



records received in April this year, 145 records before 30th April. This compares with only six records received in April 2018. Jaci Beaven recorded the first, seeing one at West Acres, Alnwick on 25th March. The first record from County Durham came in from Graham Mitchell who spotted one at Sherburn on 12th April. The spring generation was flying in numbers from late April until mid-June with a peak around mid-May with 223 being recorded in the region on 13th May, exactly the same peak date as the previous year. Spring generation notable counts came from Ian Findlay with 43 from Upper Teesdale on 22nd May, Richard Hockin: 40 at Lanehead, Weardale on 14th May, Mike Richardson with 32 at Colt Crag Reservoir, Northumberland on 13th May, and David Phillips, 30 seen at High Coniscliffe, Darlington on 2nd May.

The second generation, started to emerge in late July, peaking in early August, with 351 being recorded throughout the region on 3rd August, closely followed by 311 reported on 13th August. Good second generation counts came in from Tim Wrigley, who counted 111 at Liddells Wood near Hexham on 1st August, the highest in the region for the year. Jackie Reeves saw 95 at Dunstan Heughs on the Northumberland coast on 3rd August. Jane Lancaster spotted 63 at Newton Point also on the Northumberland coast on 8th August. The highest from a Durham site came from Dave Wainwright with 47 seen at Hedleyhope Fell on 13th August.

The main flight season ended fairly abruptly with a sudden drop off in numbers at the end of August. Although there were plenty of records through September these were mainly single figure counts. This year there were three records in October. For County Durham the final record was from Keith Walton who saw one at Brancepeth near Durham on 8th October. The season ended with Northumberland's last record which was from Mike Carr who spotted one at Low Hauxley on the Northumberland coast on 12th October.



Clouded Yellow *Colias croceus*.

2019: There was one record of this migrant from warmer climes in 2019, with Richard Hopwood lucky enough to find one at Bishop Middleham Quarry on 14th July.

Brimstone *Gonepteryx rhamni*

2019: In 2019, the butterfly appeared in February – not unusual for this species which overwinters as an adult and is often seen on milder days in early spring or even earlier as in this case.

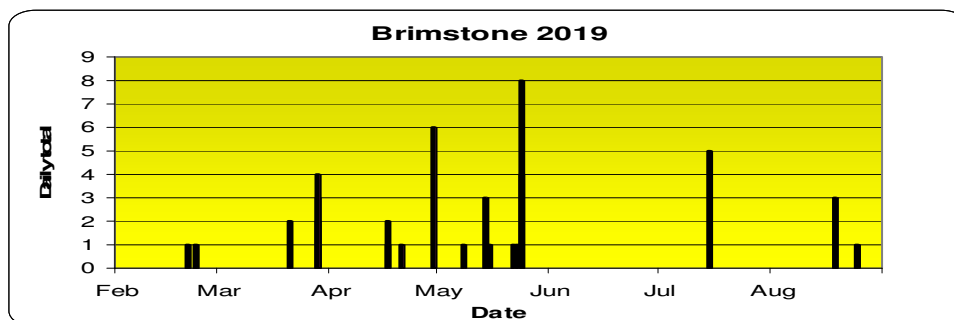
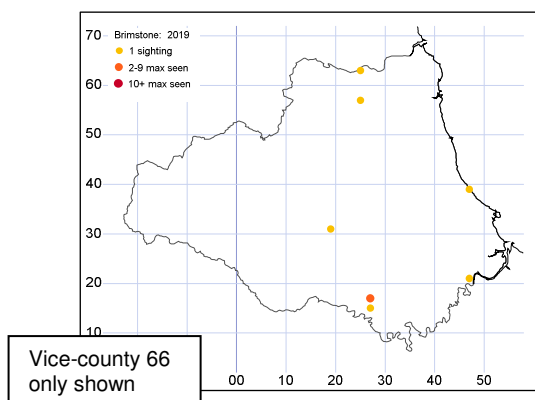
The first was seen on 21st February by Pat Nevison in the Faverdale area of Darlington, which is close to West Park where the butterfly now seems established in small numbers. Another was seen at Escomb by Ken Neat on 23rd February.

Records for 2019 continued to be mainly in and around West Park NR, Darlington. There was a peak of 6 seen by Pippa Smalling on 30th April. Steve Kirtley saw 4 males there on 25th May and the bulk of the records were in the spring.

There was then a gap through to 15th July when the next generation appeared – Pippa Smalling saw 5, again at West Park and then a further 3 on 19th August.

True to form, wandering individuals can turn up virtually anywhere and this year was no exception. As well as the Escomb individual seen in February, there were singles also seen at Blackhall Rocks on 8th May, Dunston on 15th May, the Johnson Matthey site on Teesside 23rd May and then finally the last record of the year was of one at Bowes Valley Nature reserve near Birtley seen by Ronald Henderson on 25th August.

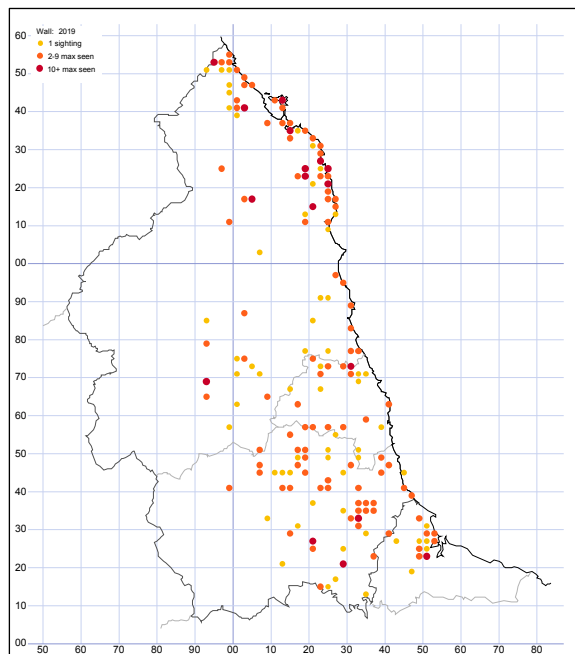
Despite several personal visits to West Park during the year, the writer has yet to see a female or any of the immature stages there. Buckthorn is present on site and given the pattern of records, it is more than likely that Brimstone is breeding there. Hopefully in 2020, this can be proven....



Brimstone, photographed by Ron Henderson at Bowes Valley NR on 25th August 2019

Wall *Lasiommata megera*

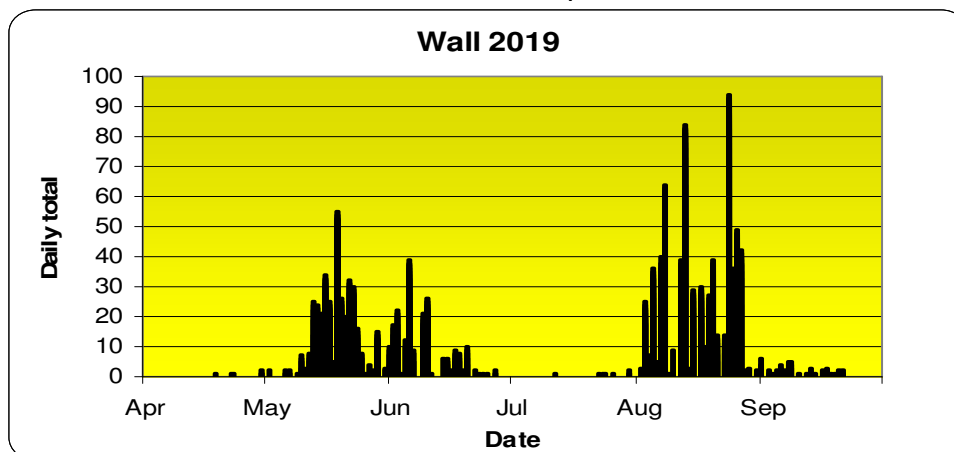
2019: A total of 474 records were received which detailed 1,335 individual butterflies. The flight season lasted 156 days and the Wall was seen flying on 98 of these days, representing 63% of the flight period. Numbers of Wall seen this year showed a drop of nearly 800 compared to 2018. However, it was still higher than the numbers seen in the three years before that making it an above average year for recent years, although not suggesting the long term decline of the Wall is being reversed.



The first sighting of the year came from Northumberland, where Amanda Crowley spotted one at Beadnell on the north Northumberland coast on 19th April, about the normal date for seeing the first Wall. For County Durham Keith Walton reported the first with one on Raisby Way on 30th April. A high proportion of the early records came from locations on the Northumberland coast. The spring generation was mainly flying from mid-May to mid-June reaching a peak in terms of numbers reported on 19th May when 55 were recorded throughout the region. There were only a few high counts for the spring generation. The best was from Paul Bastin who counted 14 at Dormans on Teesside on 22nd May and Mike Carr who spotted 11 on the north dunes on Holy Island on 19th May. The second generation started to emerge during the first week of August, rather later than usual.

Peaks in terms of numbers seen throughout the region happened on 13th August when 84 were seen and 24th August when 94 were seen. Peak numbers were well down on the previous year. For the second generation only 17 double figure counts were received, all bar one from being from Northumberland sites, mostly coastal locations. The highest was from Jane Lancaster with 31 at Newton Point on the Northumberland coast on 13th August. The only double figure count for the second generation from a Durham site came from Den Gregson with 10 at Shildon on 12th August. My feeling is the Wall is faring better in Northumberland, particularly at coastal locations, than it is in Durham.

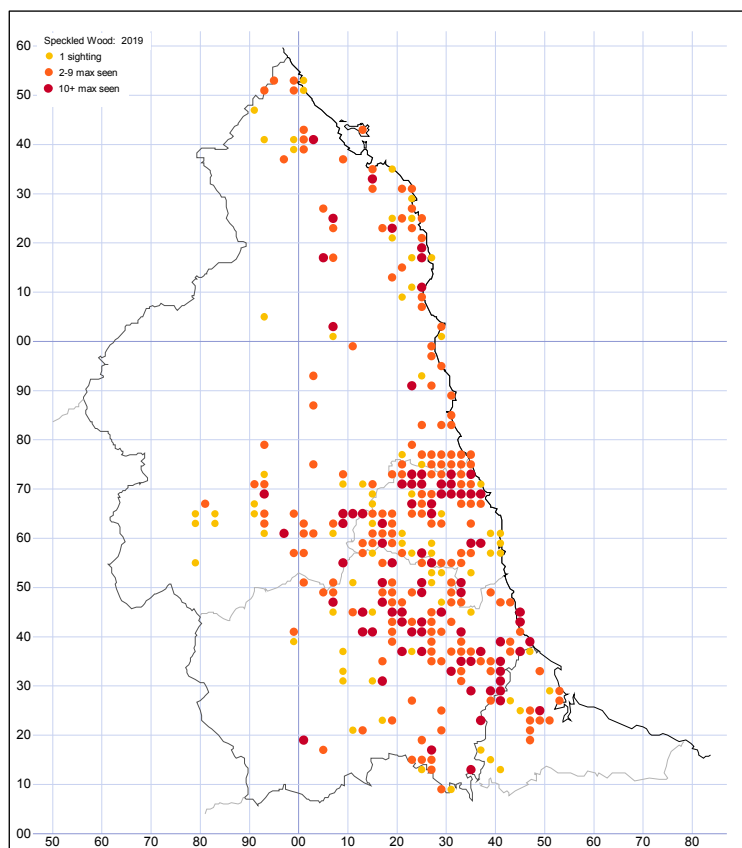
There was a rapid decline in numbers after the end of August with only 27 records received for September. The majority of the September records were from County Durham sites (18 out of 27), in contrast to the early spring generation records which were mainly from Northumberland. Perhaps the flight period is slightly different in the two counties. The last records of the year from both Durham and Northumberland came on the same day, Darren Archer saw one at Easington Colliery and Mike Richardson also saw one at Colt Crag Reservoir in central Northumberland both on 21st September.



Speckled Wood *Pararge aegeria*

2019: The pattern of records for this species continues to show it with a strong presence in our region.

In 2017, there were 7389 individuals seen from 1892 records, 2018 yielded 12047 individuals from 2102 records and 2019 had 10218 from 2100 records.



2018 was an exceptional year for butterflies so 2019 continues to show good numbers but not as high as 2018.

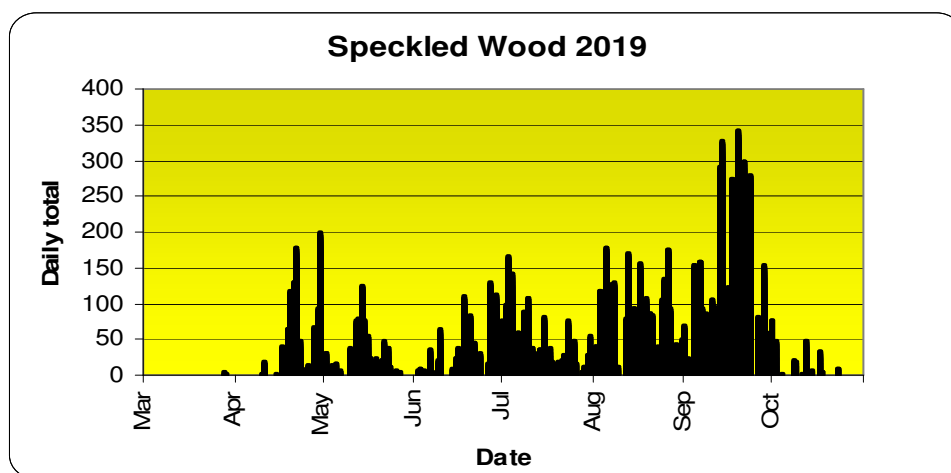
This butterfly can overwinter as pupae or larvae and as a result of this plus two or three generations a year, means the butterfly is seen across a large part of the year. The first record was on 25th March at Broompark by K Walton. There were several counts over 30 but the largest numbers came later in the year: 78 at Bearpark by Elizabeth Clowes on 14th September, 83 at Crowden Hill by Julia Meldrum on 19th September and the largest of 100 at Branton by Alnwick Wildlife Group on 21st September.

The largest number seen in one day in 2018 was 142 (also in September) so the peaks this year were down from 2018 but the butterfly continues to flourish in good numbers.

The distribution map shows a generally easterly distribution as the butterfly has

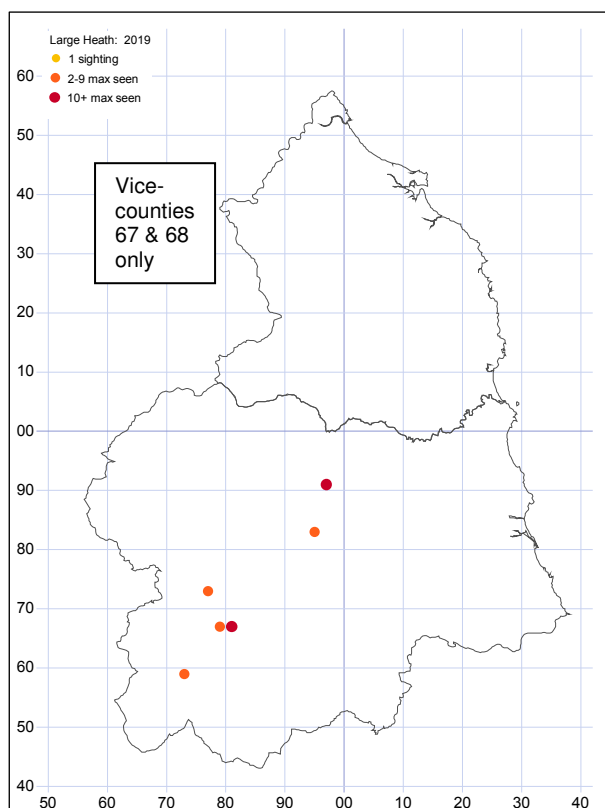
spread up the coastal areas. However, I am confident that it will have spread westward in our region especially following river valleys and it is probably under-recorded across the area. It was reported in 332 tetrads, (43% of those visited)

This is now one of our commoner species and can be expected almost anywhere where suitable woodland or scrubland habitat can be found.



Large Heath *Coenonympha tullia*

2019: Even though the Large Heath has its English stronghold in Northumberland, it inhabits inaccessible upland bogs. This together with its short flight period means this is one of our most difficult to see butterflies in the region even at the best of times. Indeed very few people get to see it at all.



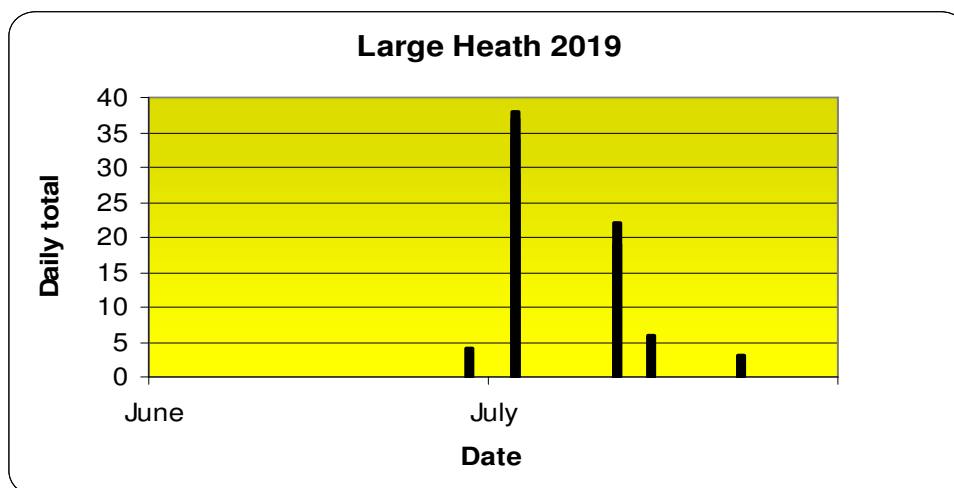
In 2019 the number of Large Heath recorded in the region was 73. This compares favourably with the previous highs of 38 in 2017, 26 in 2016 and 41 in 2015 but is well below the record high of 162 recorded during the dry, hot summer of 2018.

A total of nine records were submitted by six observers. The first of the sightings was by Dave King of 4 adults on the 29th June on the Northumberland peak bogs at Coanwood, Lambley, 6 miles SW of Haltwhistle, (NY7358). Paul Robins then submitted three records on the 3rd July, two totalling 32 adults at Whinnetley Moss (NY816664) with a further adult observed on the SW edge of the Moss (NY813663). Also on the same day 5 adults were observed on the wing near Simonburn (NY7772) by Dave King. The second double figure count was made by Mike Carr on the 12th July with 19 at Steng Moss (NY967912). Elsewhere on this day, Tim Wrigley recorded 3 at Muckle Moss, 2 miles NE of Bardon Mill (NY803672). Two further July

records saw Mike Taylor record 6 on the 15th July at Grindon Lough near Hadrians Wall, (NY799671) and Dave Wainwright observed 3 on the 23rd July near Sweethope Lough (NY948828). This record represented the last sighting for 2019.

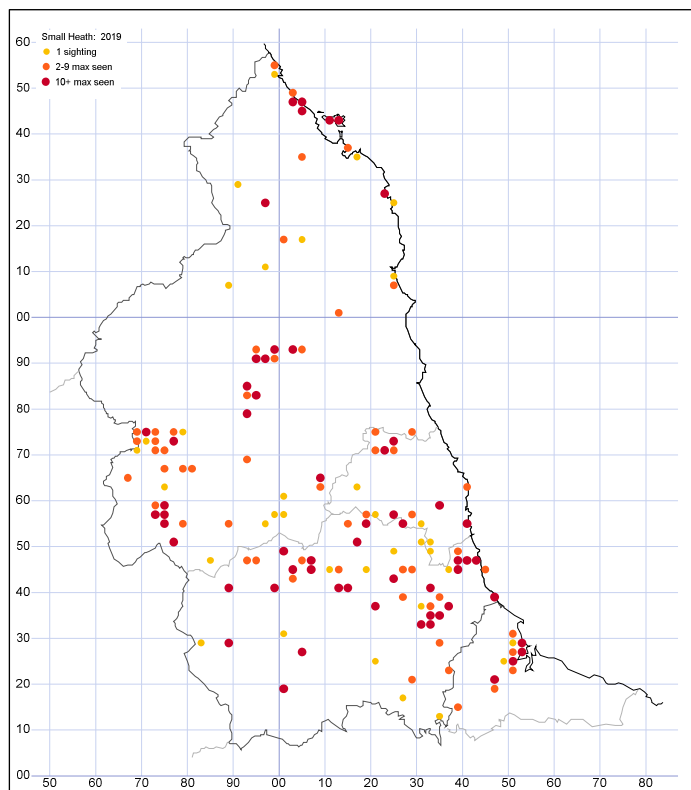
They form fairly sedentary colonies, breeding in lowland raised bog, upland blanket bog and damp acidic moorland where Harestail Cotton-grass, the larval food plant, is plentiful. The adults are generally first seen on the wing in the last week of June or the first week of July and have a short flight period of only 5-6 weeks. The flight period in 2019 lasted 25 days.

The latest they have been recorded in our region is the 14th August in 1996 and 2012. Observers need to get out and about during July to record this species although care must be taken as many upland sites are remote and potentially hazardous. Most are best visited with a colleague.



Small Heath *Coenonympha pamphilus*

2019: A total of 554 records were received. These recorded 4,943 individual butterflies, this represents an increase of about 600 on the figure for 2018 and is right on the average for the species. The flight period covered 131 days and Small Heath was seen on 100 of these days, representing 76% of the flight period. These flight period figures are almost identical to the previous year.



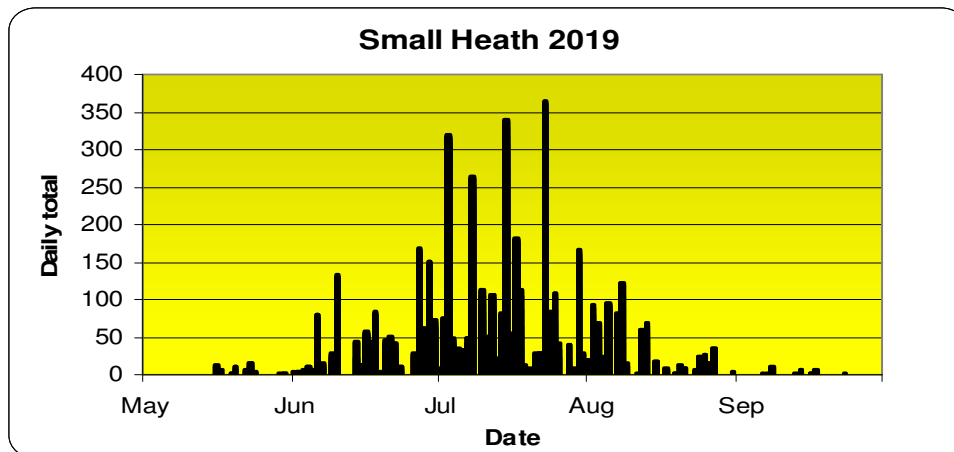
The first records for the year for both Northumberland and Durham came on the same day. Malcolm Hutcheson saw twelve at Cheswick Dunes on the Northumberland coast south of Berwick and Keith Walton reported one at Raisby Way both on 16th May. This is very much the average date for the first sightings in the region.

This year the main flight season lasted from early June to the end of August, the normal period for this butterfly. There were several peaks in July, with four days when more than 200 Small Heath were recorded throughout the region, the most being 365 recorded on 23rd July, after which there was a gradual decline to the end of August.

High individual counts came from Dave Wainwright who had good numbers on his Inkerman transect near Tow Law throughout the summer, peaking at 94 on

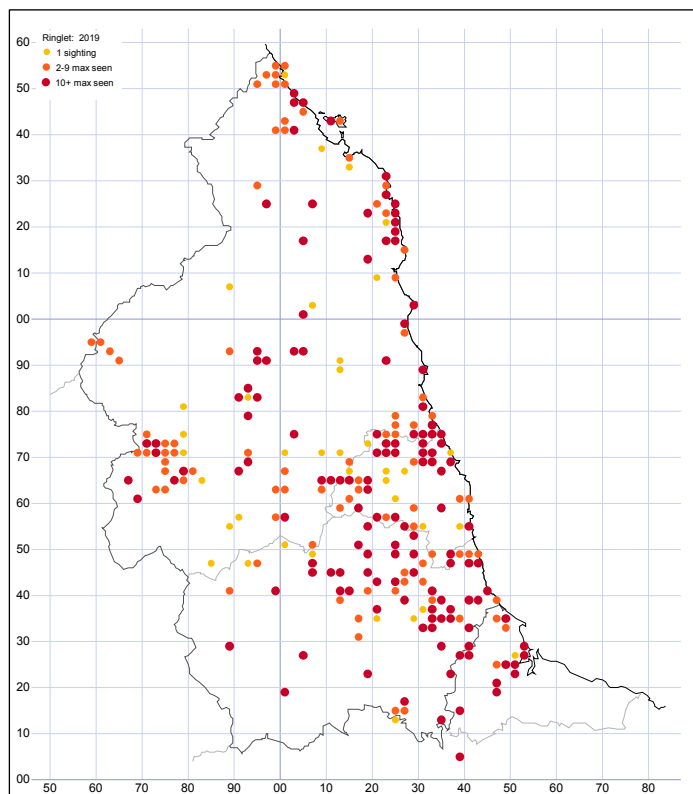
23rd July. This was the highest count for the region for the year. Dave Liddle also had high counts on the Burn Hill transect through July and August peaking at 86 on 15th July. Other high counts came from Graham Beckwith who spotted 85 at Wingate Quarry on 15th July and M. Tuck who recorded 84 at Carey Burn in central Northumberland on 30th July. These are much higher counts than have been seen in recent years.

Numbers seen tailed off sharply from mid-August but there were 22 records in September, all bar one from County Durham sites, which is interesting. There were no records for October, in fact there have been no Small Heath records for October since 2015. The final record for Northumberland came from Mike Carr who saw three at The Snook on Holy Island on 17th September, the only September record for Northumberland. The last record from County Durham and the region came from Dave Liddle who saw two at Horsleyhope Burn near Waskerley on 23rd September.



Ringlet *Aphantopus hyperantus*

2019: A total of 805 records were received. These recorded 15,158 individual butterflies. The flight period covered 73 days and Ringlet was seen flying on 57 of these days, representing 78% of the flight period. This year was a record breaking year for the Ringlet. The total number seen was more than 2,000 up on 2018 and the highest ever recorded in the region. I think this is a reflection of how it has expanded its range in recent years as well as becoming more abundant on existing sites.

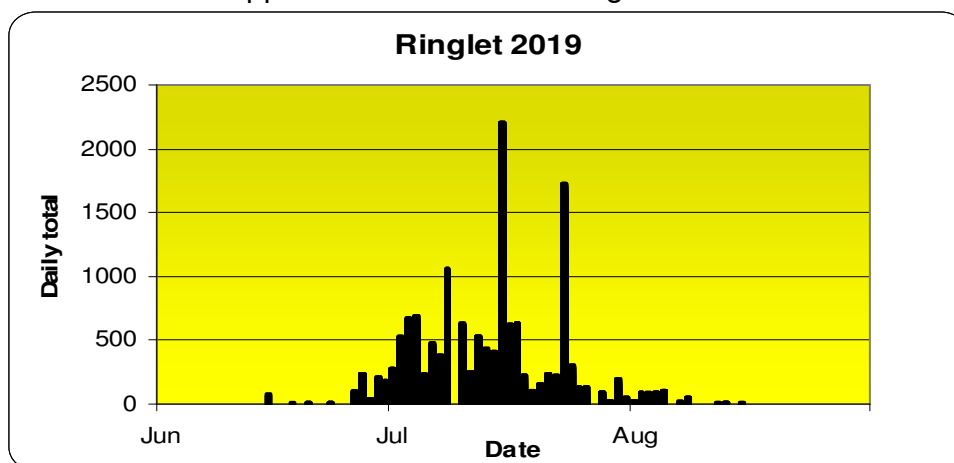


The first records for the year from both Northumberland and Durham were on the same day, 15th June, a normal date for the start of the flight season. What was not normal was an amazing 70 being seen by Daphne Aplin at Cowpen 2 (Woodland Park) on this date as the first Durham record. For Northumberland Paul Robins provided the first record of four seen at The Spetchells also on 15th June.

The main flight period was from the last week of June to the first week of August. There were ten days in July when more than 500 Ringlets were recorded throughout the region each day, with a peak of 2,204 being seen on 15th July and 1,729 on 23rd July. These totals show what a good year the species had. There were lots of high counts this year, 29 of which were in treble figures. The highest count came from Dave Liddle who saw

438 at Burn Hill on 15th July. Other notable counts came from Ian Findlay who reported seeing 301 on 15th July and 260 on 23rd July in Upper Teesdale and Lesley Hodgson with 207 at Black Plantation on 8th July. Interestingly most of the high counts were from sites in County Durham. Northumberland's highest count was from Dave Wainwright who spotted 150 at Aid Moss north of Sweethope Lough on 23rd July.

The season was over by mid-August with only three records after the 15th of the month. The last report for Northumberland was from the Alnwick Wildlife Group who saw one at Smeafield in north Northumberland on 21st August. The final record for Durham came in from Ian Findley who saw one in Upper Teesdale on 26th August.



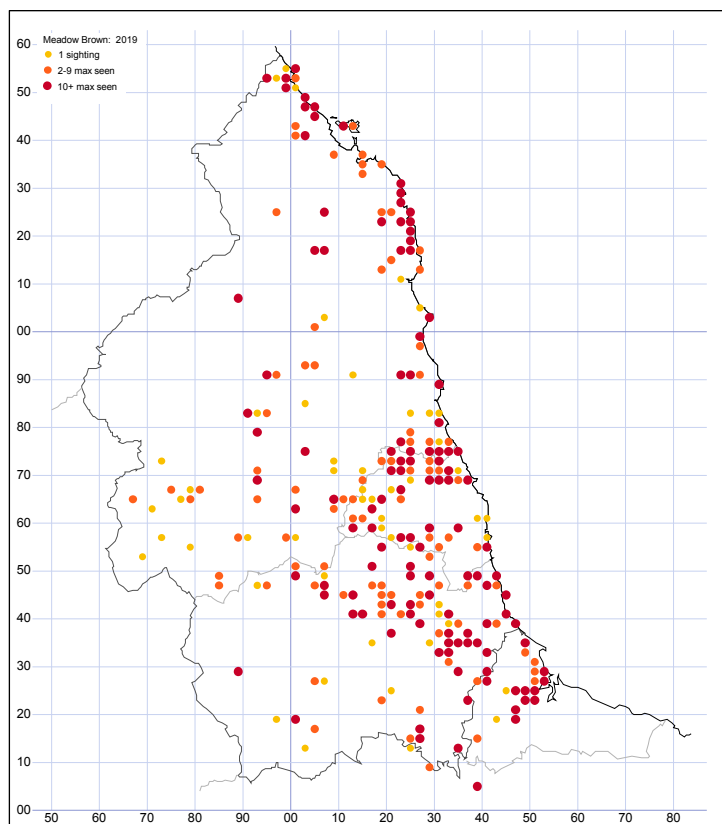
Meadow Brown *Maniola jurtina*

2019: A total of 966 records were received. These recorded 11,260 individual butterflies, an increase of over 3,300 on the previous year. This year saw a modest increase in Meadow Brown numbers after three poor years. The total this year was the highest recorded since 2015, but still slightly below average for the species. The flight period covered 131 days and

Meadow Brown was seen flying on 80 of these days, representing 61% of the flight period.

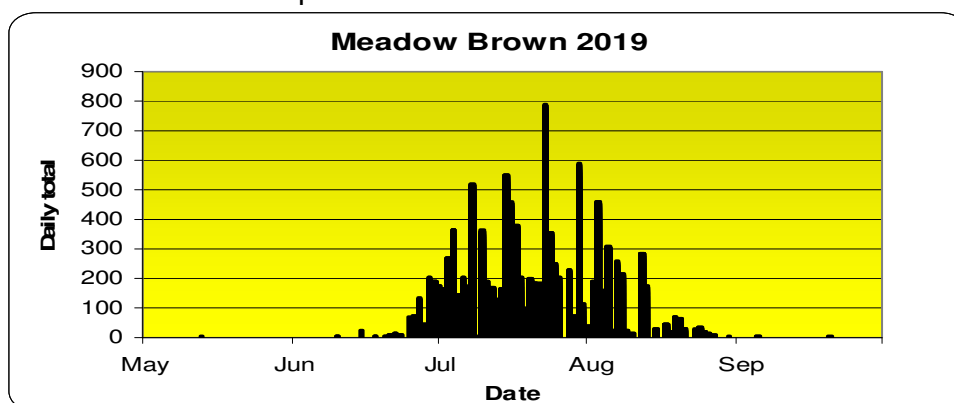
In County Durham the season got off to an early start with Walia Kani reporting three on Raisby Way Grassland on 13th May. In contrast the season was very late starting in Northumberland with the first record not coming in until 20th June when M. Gallon saw two at Dunstan Heughs on the Northumberland coast.

The main flight period this year spanned the last week of June until the middle of August, with numbers dropping away rapidly in late August. The peak of the season in terms of the day when most butterflies were reported was 23rd July when 788 individual Meadow Browns were seen throughout the region. This figure is well up on the maximum number of 327 the previous year. The highest individual counts were also well up this year with the highest being 202 seen by Jane Lancaster at Newton Point



on the north Northumberland coast on 24th July. Other high counts came from Malcolm Hutcheson with 196 and 122 from Cheswick Shiel and Goswick respectively both on 30th July, Jackie Reeves who saw 138 at Dunstan Heughs on 3rd August and Graham Beckwith who counted 117 at Annstead Dunes near Seahouses on 28th July. Interestingly all these high counts were from locations on the Northumberland coast. For County Durham the highest count received was from Neil Clark with 109 at the Bowes Valley Nature Reserve near Kibblesworth on 12th August.

The main flight season was over by the middle of August, with only seven records in September this year. The season's final records were: for County Durham, Darren Archer reported seeing one at Easington Colliery on 7th September, quite an early date for the last Durham record, and for Northumberland Jackie Reeves saw four at Dunstan Heughs on the Northumberland coast on 20th September.



Gatekeeper *Pyronia tithonus*, 2019: Once again, there were no records in 2019 of this butterfly for which we are on or beyond the very northern fringe of its range.

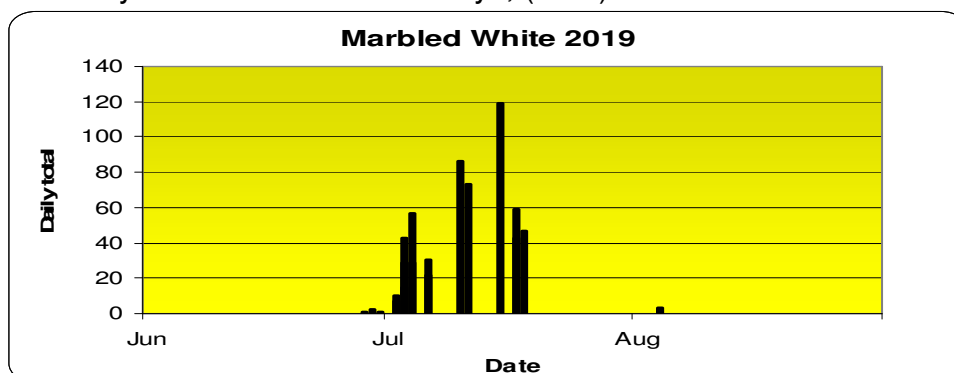
Marbled White *Melanargia galathea*

2019: As usual all sightings of Marbled White in our region came from Wingate Quarry (NZ3737), from where the butterfly has only occasionally strayed since its release here in 2000. The experiment was set up to test the ability of a sedentary species such as Marbled White to adapt to a new home in response to climate change. Wingate Quarry provided suitable vegetation and physical environment for the butterfly considerably further north than it had previously been known to breed. Whilst the butterfly has survived with some impressive daily counts and occasional sightings elsewhere in the county it appears unable or unwilling to colonise other apparently similar sites in County Durham.

In 2019 twelve observers made a total of 20 visits and counted a remarkable total of 531 Marbled Whites. Whilst the same individuals were being seen over several days, this exceeds the highest recorded total of 210 in 2014, 347 in 2015, 390 in 2016, and 358 in 2017 and shows a substantial and welcome increase compared to 2018 when only 119 were reported.

The flight period started on June 28th when Keith Walton saw one. Singles continued to be observed over the next couple of days before 7 were noted on the 2nd July by Ron Henderson. Numbers then increased with Keith Walton observing 86 on July 10th and 73 noted by John Olley the next day. The peak count occurred on July 15th when Graham Beckwith recorded an impressive 119. A few days later Ian Hillery reported 43 on July 17th with 47 seen the following day by David Phillips. The last sighting date was August 4th when Ron Henderson reported 3.

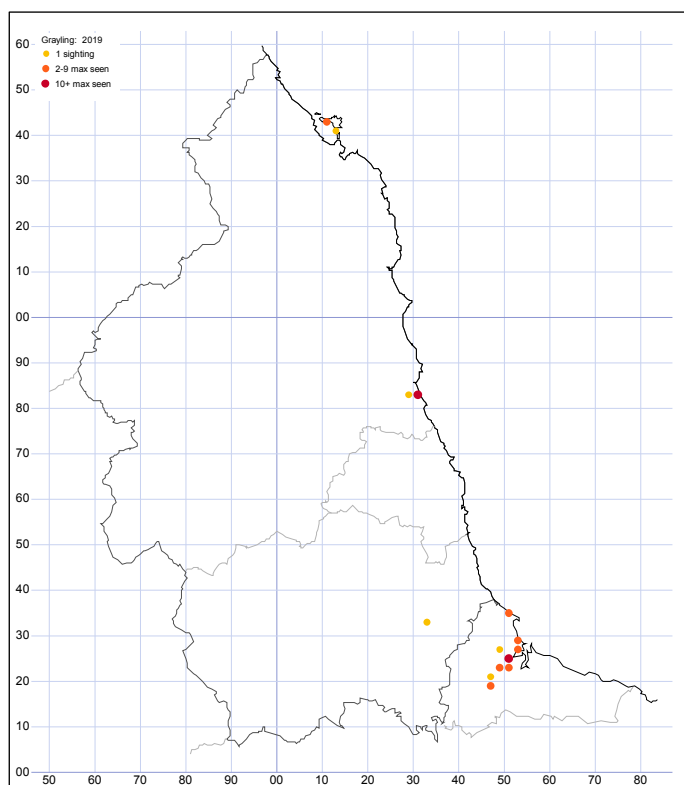
The flight period was relatively short this year compared to previous years, lasting only 38 days and the butterfly was observed on 13 days, (34%).



Silver-washed Fritillary, photographed by David Phillips in Darlington on 3rd August 2019

Grayling *Hipparchia semele*

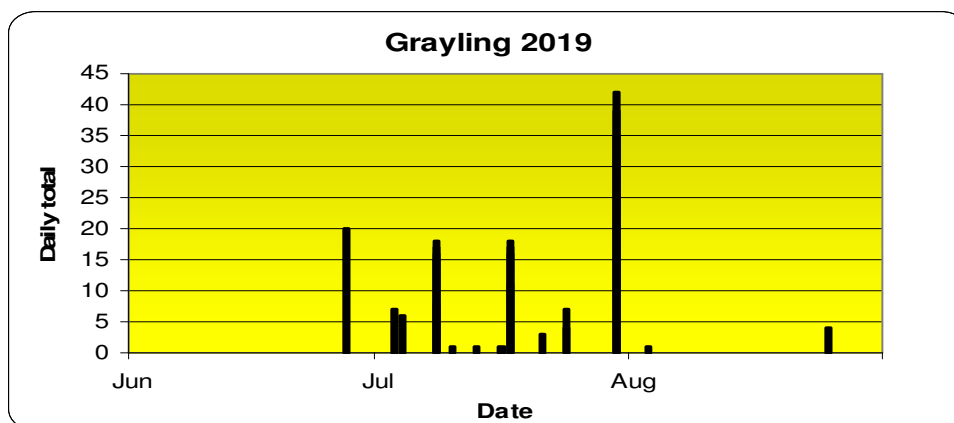
2019: The Grayling experienced a rather poor year in our region in 2019, with 129 butterflies reported. Annual totals since 2006 have fluctuated between a low of 80 in 2014 and a high of 612 in 2006. The total for 2019 was identical to that of 2017.



Mike Coates recorded our region's first sighting. His total of 20, recorded on June 27th at Cambois, is sufficiently large to suspect that the species may have been on the wing earlier despite being unrecorded. Paul Bastin recorded the first specimens from south of the Tyne on July 3rd; he saw seven in and around the top car park at Dorman's Pool. Mike's record was the second-highest reported from within our region in 2019, bettered only by Graham Beckwith's count of 35 made at Greatham Creek on July 30th. This date represented the peak of the Grayling's flight period, with Graham's count being supplemented by a further seven butterflies seen by Darren Archer at Seal Sands (4) and North Gare (3).

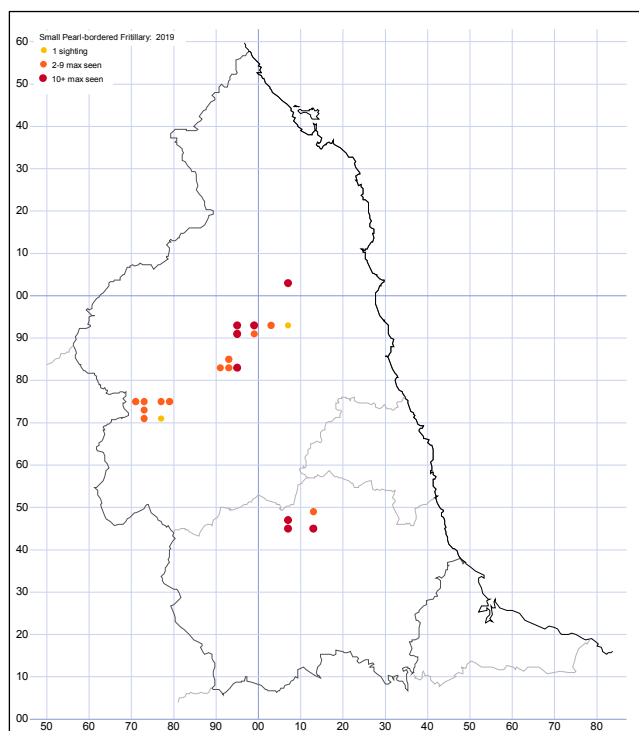
A single at Bishop Middleham quarry on 16th July by John Olley represents the second year a single has been seen at this site. Durham's recording season concluded on August 3rd when Julie Hogg recorded a singleton from Greatham Creek although the butterfly was still on the wing in Northumberland towards the end of the month, Mike Carr recording four from the Snook up on Holy Island on August 28th.

Overall, the Grayling appeared to have experienced a fairly poor year in our region. However, it remains one of our most under-recorded species on account of the remoteness of some of its coastal haunts and the lack of access to most of its brownfield ones. On Teesside especially there is a huge area of suitable habitat and it is probable that, were these sites surveyed properly, counts of this butterfly would dwarf the annual totals typically recorded.



Small Pearl-bordered Fritillary *Boloria selene*

2019: This was another really good year for the Small Pearl. Slightly fewer records were received this year 96 compared to 130 in 2018, but the number of butterflies seen was up from 1,506 to 1,626, meaning the average number per record was higher. Although the

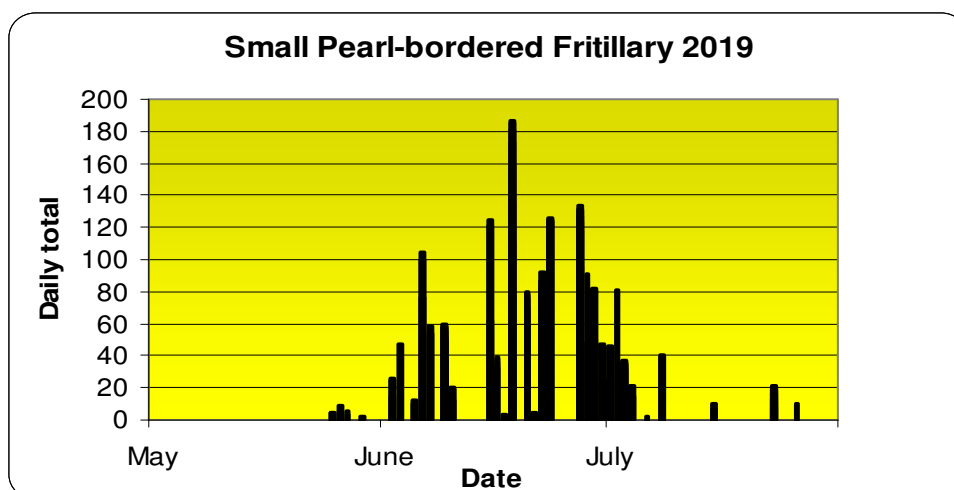


numbers seen were at an all time high the figures must be treated with some caution. The numbers are distorted by multiple records from the same sites on the same day in County Durham. For example four different people sent in records for Black Plantation on the same day in June totalling 134 butterflies, this means that there was inevitably double counting or in this case quadruple counting. There are other similar examples which would indicate double counting.

The butterfly started to emerge on County Durham sites in late May and was recorded first at Black Plantation on 25th May, a day earlier than in 2018. In Northumberland the first records came in from the Sweethope Lough area on 7th June. Black Plantation, as in previous years, produced good counts from many recorders reaching a maximum of 76 on 6th June. Burn Hill also did well 95 being recorded on 27th June. In Northumberland a

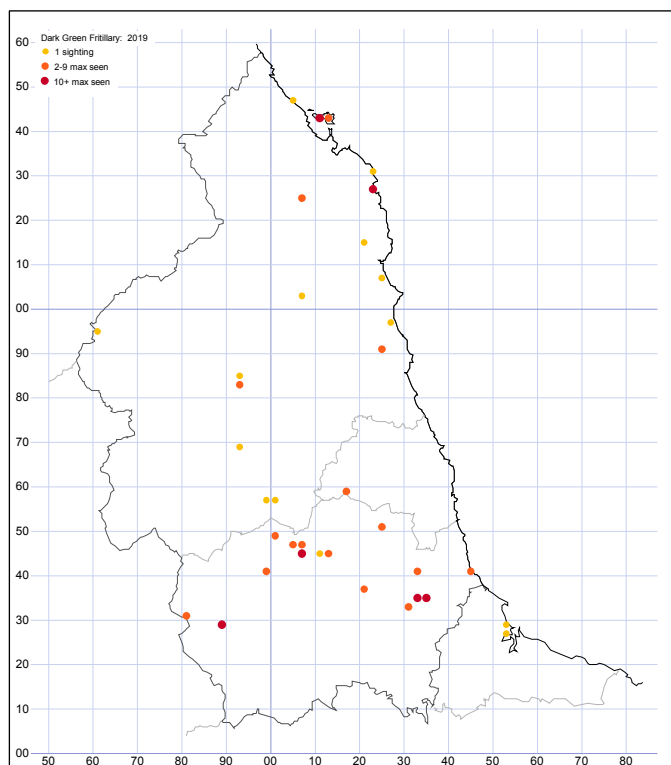
huge 124 were seen by Graham Beckwith on 23rd June at Debdon Plantation near Rothbury, a record for the site, and 49 by Dave Stebbings from a site in Harwood Forest on 29th June, again a record number for this site. The main flight season was June and the first week of July, with a peak in terms of numbers recorded on one day on 18th June when a total of 186 were reported. There were only nine records after 8th July. The last records from Durham were from Burn Hill and Nanny Mayors on 15th July, for Northumberland the flight season lasted a little longer and the last record was received from Benshaw Bog near Harwood Forest on 26th July. Altogether this was a fine year for the Small Pearl in the region.

In Northumberland some records were received away from the traditional sites such as from Fontburn Reservoir and the nearby Combill as well as sites much further to the north of Sweethope Lough at Fourlaws and Aid Moss, indicating that there are still new sites to be found in little-visited parts of Northumberland for the Small Pearl.



Dark Green Fritillary *Argynnis aglaja*

2019: Having had a good year in 2018 the Dark Green Fritillary fell back slightly in 2019 with 91 records (16% decrease) comprising 492 individual butterflies (13% decrease) registered. The species was on the wing over 131 days and was recorded on 40 of these (31%). The



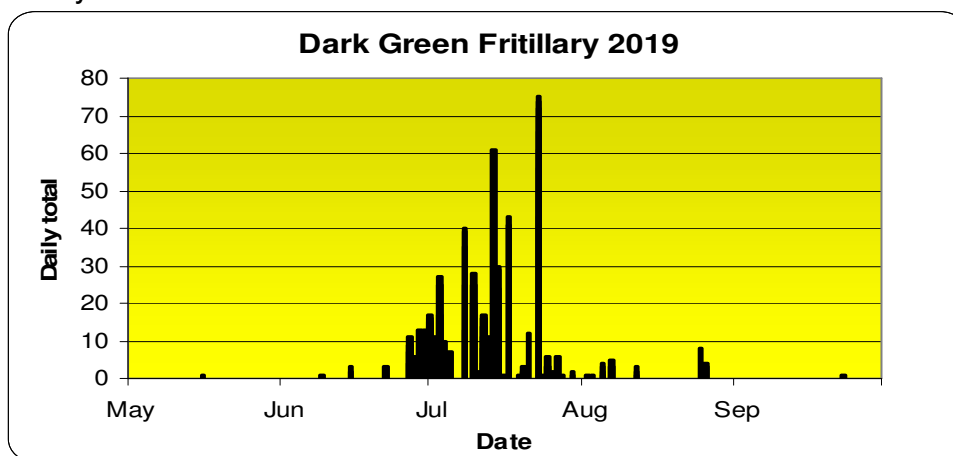
Dark Green Fritillary was recorded in 36 tetrads (5% of total).

Keith Walton recorded the first Dark Green Fritillary of the year on Raisby Way on the very early date of 16th May which was a day earlier than the previous earliest modern record for the species in our region. It was another 24 days before the species was seen again, this time by Graham Beckwith at Debdon Plantation near Rothbury on the 9th June. Peak numbers for the species were reached on 23rd July when there were 9 records and a total of 275 individual butterflies.

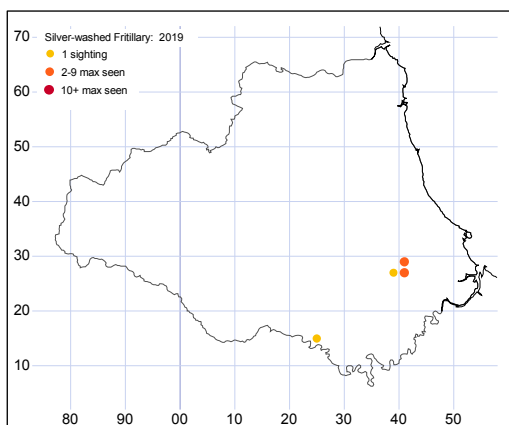
For the third year in succession the highest count of the year was made by Mike Carr on Holy Island where he counted 61 on the Snook 14th July. Holy Island was also the location for the next three highest counts with A Craggs counting 43 on the 23rd July and 41 on the 17th and P Parsons counting 20 on the 10th July. Away from Holy Island

and the adjacent mainland coast, the best count was at Raisby Way where Keith Walton counted 13 on 29th June. Double figure counts were also made at Newton Dunes (Mike Carr and Kevin Redgrave), Burn Hill (Dave Liddle) and Upper Teesdale (Ian Findlay).

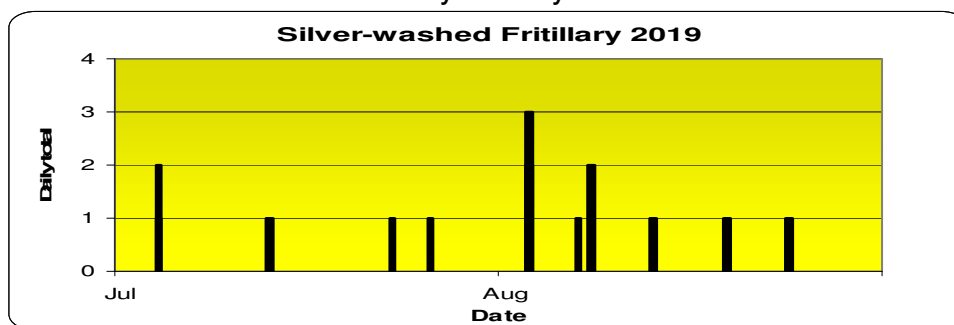
After the July peak numbers fell quite sharply but small numbers were recorded throughout the first half of August. There was then a gap with no records until nearly the end of the month when Mike Carr recorded 8 on Holy Island on the 25th and Ian Findlay (near High Force) and Derek Charlton (Cow Green Reservoir) both recorded the species in Upper Teesdale on the 26th. Mike's record was the final sighting of Dark Green Fritillary in Northumberland but, remarkably, having claimed the earliest modern record of the species at the beginning of the season, Keith Walton recorded one at Oakenshaw Nature Reserve on 23rd September. This is both a new 10km square record and the latest modern record for the species by four days.



Silver-washed Fritillary *Argynnis paphia*

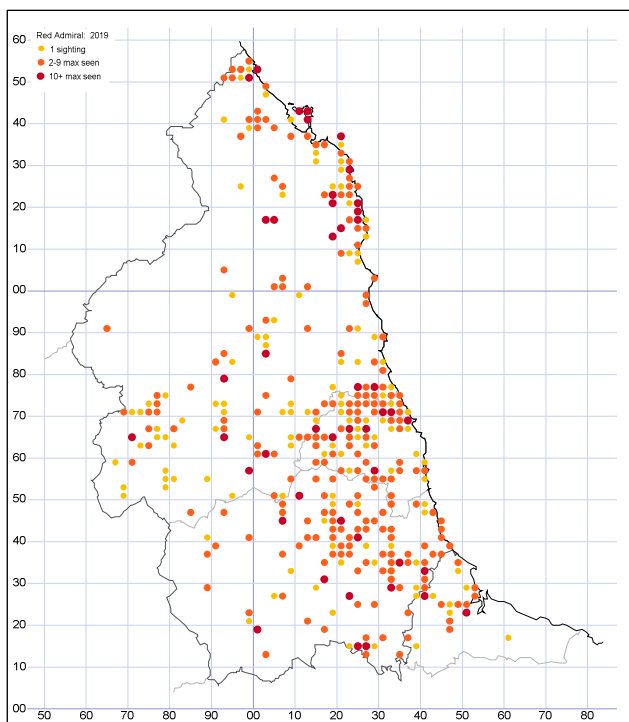


2019: Wynyard Woodland Park and the adjacent Castle Eden Walkway again showed small numbers of Silver Washed Fritillary, between the 4th of July and the 24th of August. Most were singletons with counts of two seen on the 3rd and 8th of August. Interestingly a good photograph of a single worn female was taken at Hummersknott in south west Darlington, some twenty kilometres south and west of the Wynyard population, hopefully this is a sign of natural rather than assisted range expansion. There was no repeat of the possible Waldrige Fell record of 2018. The map shows Vice-county 66 only.



Red Admiral *Vanessa atalanta*

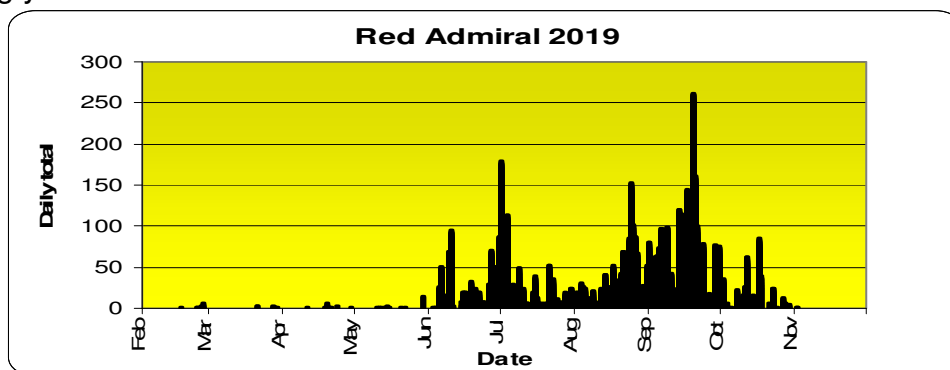
2019: After the dramatic fall in Red Admiral numbers in 2018 the reports for 2019 are hugely encouraging. The numbers reported are back up to the decent numbers. The reported sightings in 2018 were 1985 individual butterflies but 2019 saw a good increase to 5253 individual insects from 1955 records submitted.



The flight period was much longer at 259 days and saw the Red Admiral flying on 160 of those days, 62% of the available time. The first one was reported by the Alnwick Wildlife Group at Fenham Mill on 17th February, much earlier by two months than the year before. The last of the season was seen by Michael Holmes on 2nd November at Slaley, only a couple of weeks earlier than the previous year. Of the sightings, 1039 were of single insects, spread throughout the region, 838 reports were in single figures and 838 in double figures. The greatest number reported was, 112 individuals recorded by Malcolm Hutcheson on 19th September. September was the best month for Red Admirals. The 576 records received totalled 2109 insects. The Butterfly was recorded on 371 tetrads in the Branch area at 48% of those visited in the area. Distribution was right across the North

East England Branch area. Most records came from the Tyne Valley and Tyne and Wear as usual, with Durham and Cleveland closely following. In the north of the region, north of Morpeth, and mostly along the length of the coast records improved to 360, netting sightings

of 1233 insects. It is encouraging to see the improvement in numbers after such a disappointing year in 2018.



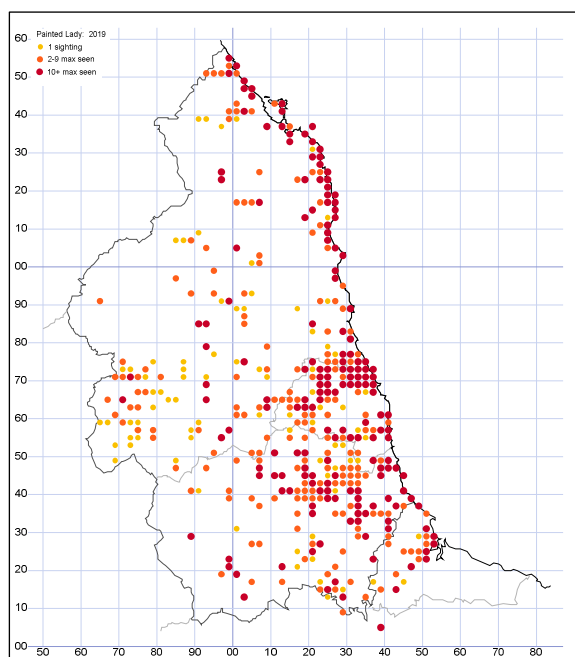
Painted Lady *Vanessa cardui*

2019: The Painted Lady had a stunning, once-in-a-generation season! Although the flight season was much longer, at 244 days, the butterfly only flew on 134 of those days, just 55% of the available time. The first report was from Dave King at Melkridge on 22nd February, a full two months earlier than the previous year. The last was seen in Newcastle by Roger Norman and Gavin Struthers at Saltholme on 23rd October, a good fortnight later the last record in 2018.

Now hold onto your hat!

28,861 Painted Ladies were recorded, from a total of 2,550 reports from across the region. This is a massive improvement on a total of 738 butterflies reported in 2018. 925 of those recorded were for individual insects, 445 sightings were in double figures, with 33 records of over 100 and a staggering 5 records of over 1,000 insects being recorded during the season. Jane Lancaster reported the highest number of 1,465 at Newton Point on 30th July.

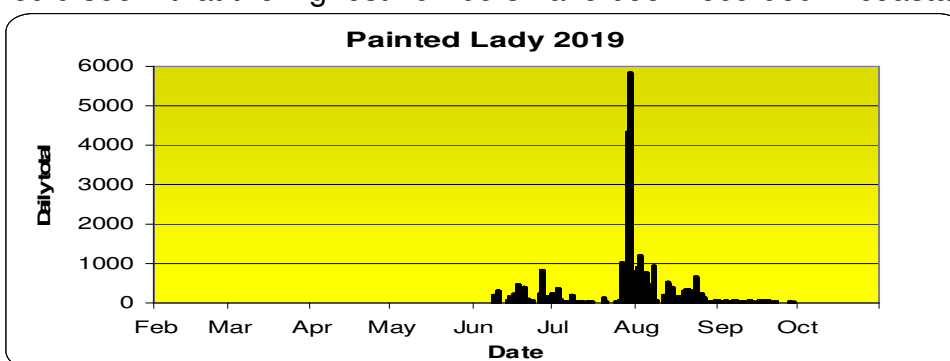
The graph below shows that there was a massive, (unprecedented?) influx along the coast at the end of July, in just five days from 27th to 31st July, 12,832 butterflies were counted. Several observers stopped counting at 1000! and simply recorded



their observations as 1000+.

The butterfly was widespread throughout the region. Northumberland produced 390 records from north of Morpeth, a count of 10,032 insects, the vast majority of sightings were along the whole of the coastline.

The Painted Lady flew in 431 tetrads within the Branch area, at 56% of those visited, however, it would seem that the highest numbers have been recorded in coastal regions.

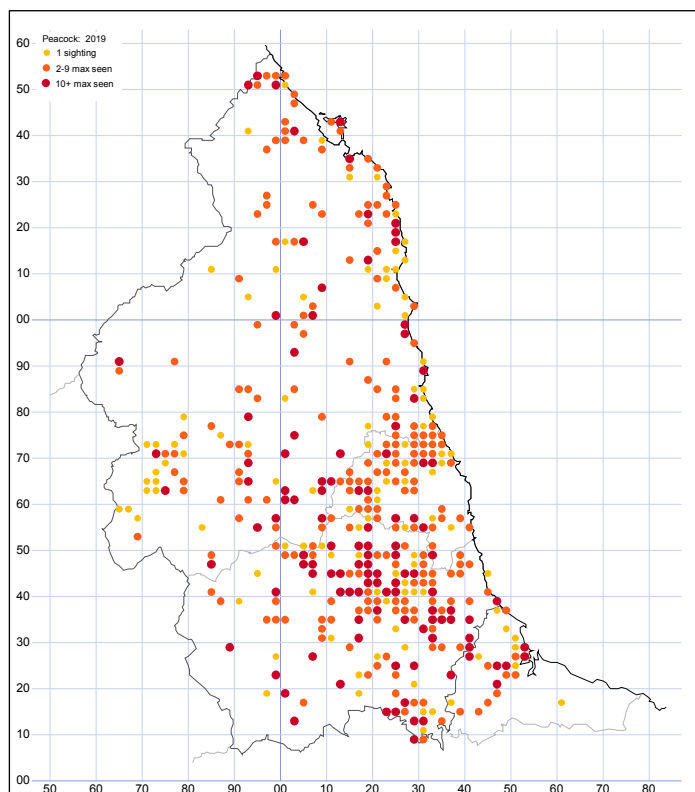


Peacock *Aglais io*

2019: The Peacock has made another good recovery after a small increase in 2018. 12695 individual butterflies were counted with 2161 records being received. In 2019 the flight period

was 293 days and insects were seen on 173 of those days, just 59% of the time available. The first insect was reported by Peter Webb on the Tees Railway Path on 14th February, over one month earlier than in 2018. The last was seen by Derek Charlton at Pitington Hills on 3rd December.

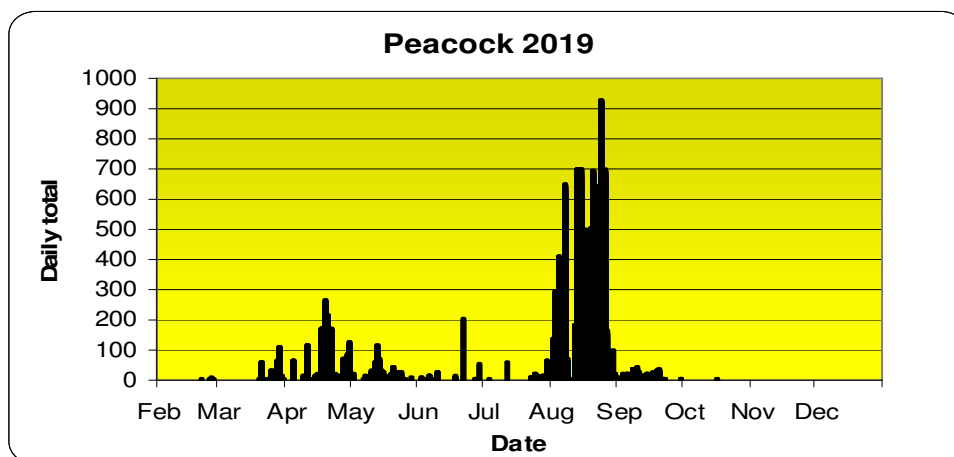
A total of 852 records were of individual insect sightings, with 261 records being in double figures. The highest number recorded on any day was 408 butterflies reported by Ian Findlay in Upper Teesdale on 26th August. There were 11 records of sighting of over 100 insects, all in August. August was the best month to see the Peacock. 8963 individuals were recorded during the month from 858 records. No late flurry of insects in 2019, only 18 were recorded during October, November and the last in December. Keith Walton sent in 246 records totalling 3440 individual butterflies.



As is usually the case, the Tyne Valley and Tyne and Wear recorded the highest number of sightings, with County Durham close behind. Northumberland managed a respectable 271 records registering 1463 butterflies, a good improvement on 2018.

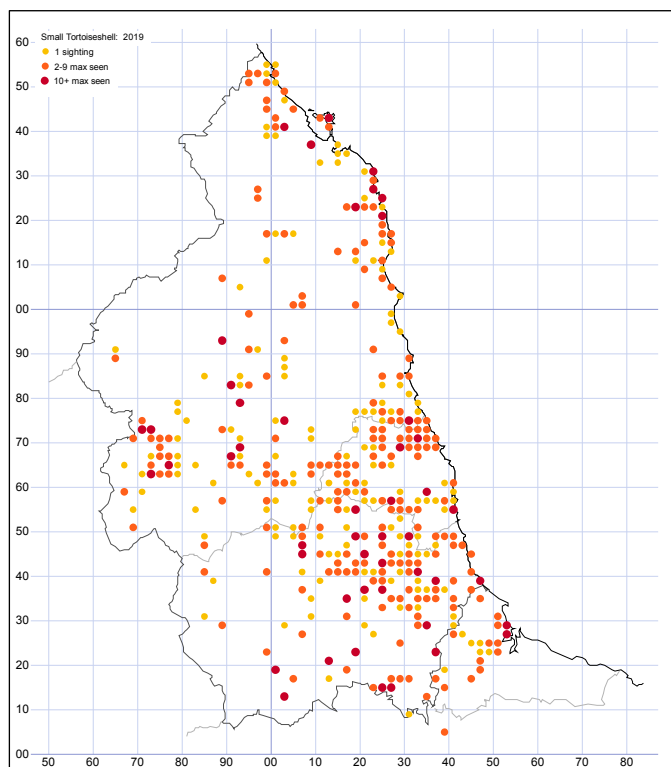
The Peacock was recorded on 423 tetrads in the Branch area, 55% of those visited.

In comparison with the Red Admiral, whose numbers have almost bounced back, the Peacock increased more slowly in 2018, but 2019 saw a dramatic improvement in the numbers of both recordings and sightings. Weather conditions obviously play a part and it is shown by the rise in sightings in the later part of the year in August and September.



Small Tortoiseshell *Aglais urtica*

2019: There was another increase in numbers for the second year running. A total of 1928 records were received of 5119 butterflies. This is 2539 individuals more than in 2018 but still down on the astonishing 6734 butterflies seen in 2015.



The first Small Tortoiseshell seen in 2019 was by Alnwick Wildlife Group on 15th February at Branton (near Powburn), and the last recorded was seen by Russell Pannell at Seaton Sluice on the 9th December.

The highest individual count for the first flight period of 37 was recorded by Gemma Vance on the Murton fields on 18th April. In the second flight period from late June to mid August, the highest count was by Maria Jeffrey of 95 on 23rd July at Hardwick Park.

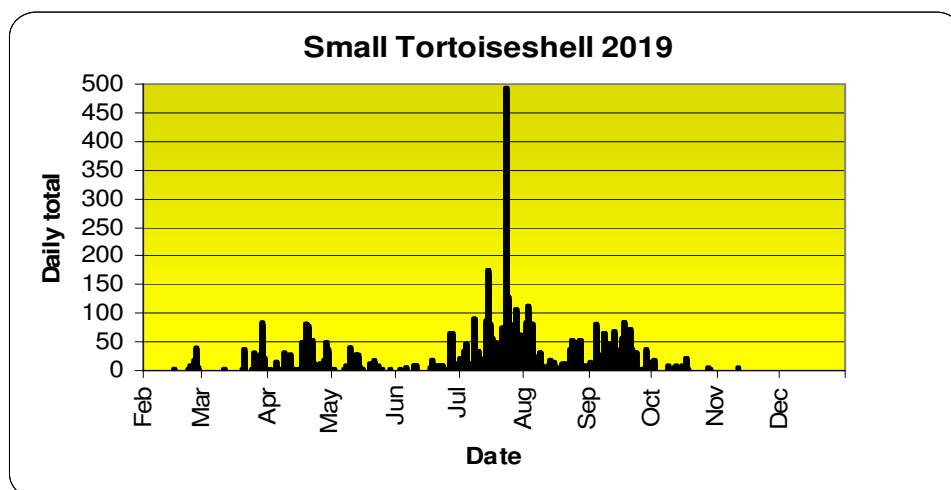
In 2019 Small Tortoiseshells were recorded on 185 days being 62 % of the 298 day's flight period.

The highest joint totals recorded of over 100 in any one day in 2019 were 176 on 15th July, **494** on 23rd July, 129 on 24th July, 107 on 28th July then 113 on 3rd August, compared with the highest joint total on any day in 2018 being 95 on 10th July.

Fluctuating individual numbers for the last twelve years are:

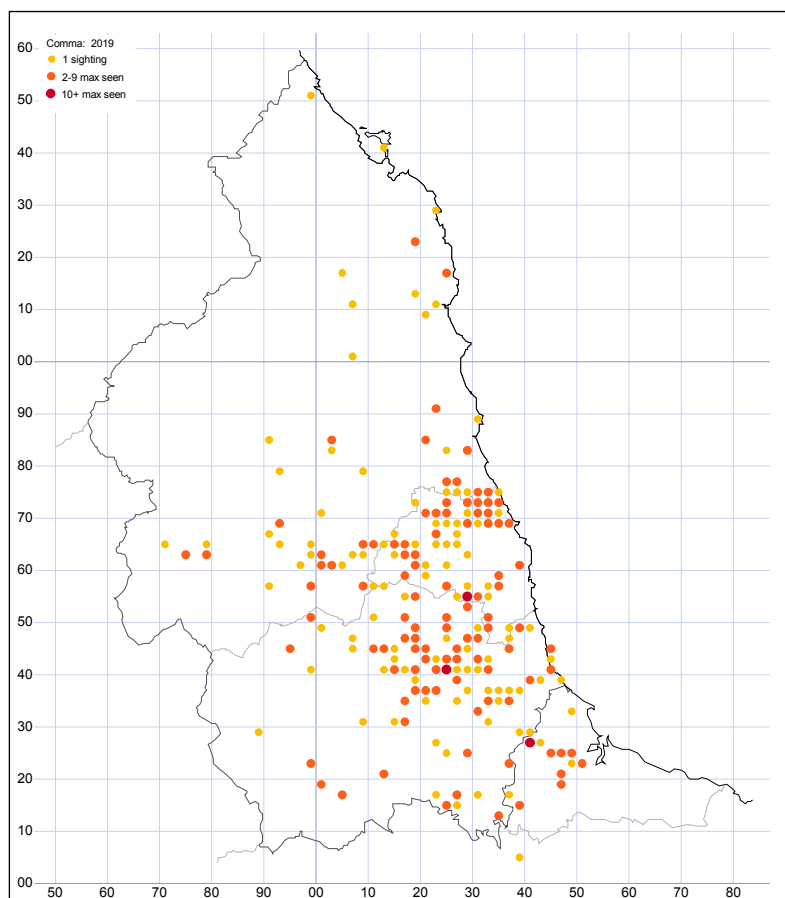
2008 – **1886** 2009 – **3509** 2010 – **4357** 2011 – **3746** 2012 – **2478** 2013 – **4633**,
2014 – **4445** 2015 – **6734** 2016 – **1618** 2017 – **1541** 2018 – **2580**, 2019 – **5119**

This shows 2017 to have been the worst year recorded for Small Tortoiseshells in our region for over ten years. After 2015 being by far the most successful year for the Small Tortoiseshell in our area for over ten years and 2016 and 2017 being disastrous, 2018 and now 2019 have been encouraging.



Comma *Polygonia c-album*

2019: The first Comma of the season was seen on 21st February by Martin Partridge at the JM Biodiversity Site. This was earlier by a month than in 2018. The last one, on 2nd November was spotted at Slaley by Michael Holmes, just a couple of days later than the last year.

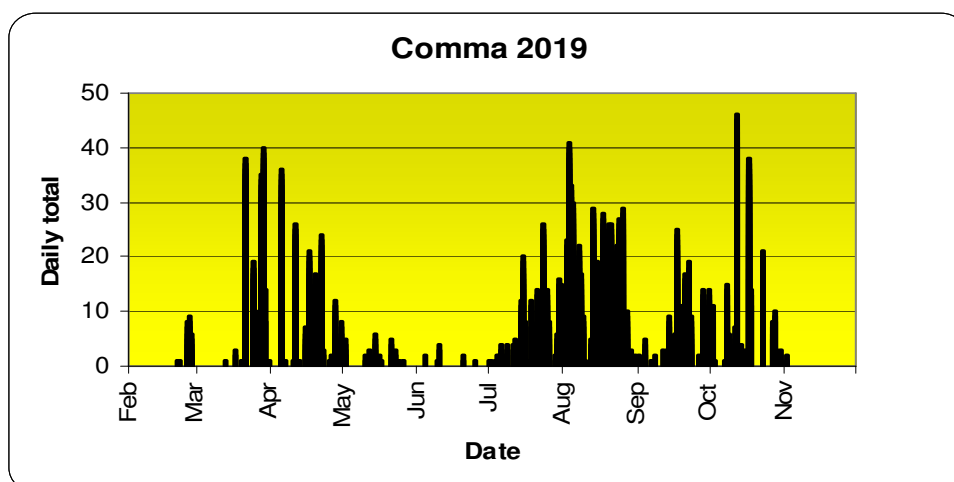


The flight period was slightly shorter than the previous year, however, the butterfly flew during 57% of the total flight time, 145 days from a total of 225 possible days, a decrease of 8% of the available time.

The Comma fared a little better than in 2018. 1114 insects were recorded in 2018 and 1433 butterflies were recorded during the 2019 season. 565 of these were single insect sightings. This year there were seven records of sightings in double figures, the highest number being counted at Broompark Picnic Site, when 26 were seen by Keith Walton on 12th October.

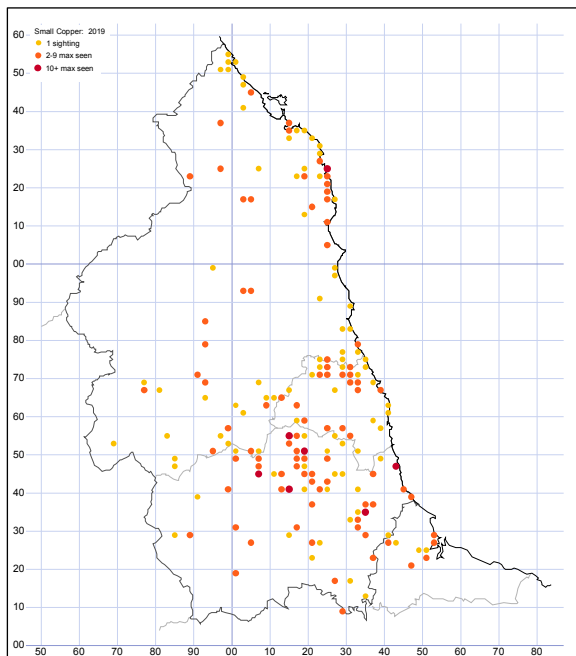
This year, there were spikes in sightings in April / May and again in October. August and September were the best months to see a Comma, when 369 records produced 607 individual butterflies.

In the Branch area, 765 tetrads were visited over the season and the Comma was seen at 211 of these sites, only 28% of the recorded tetrads. As in previous years, most sightings were in the southern parts of the region. Only 28 records came from north of Morpeth in 2019. Tyne and Wear along with the Tyne Valley westward had most of the sightings, although County Durham was also well represented.



Small Copper *Lycaena phlaeas*

2019: The first report of 2019 involved one found at Derwent Reservoir (Northumberland) by Elaine Carter on the early date of 21st March. It was over a month until the next record, another single, this time at Pow Hill Country Park (County Durham) on 22nd April (Chris Barlow). These initial reports compare to 5th May in County Durham and 12th May in Northumberland in 2018, and 8th April and 2nd May respectively in 2017. Six further reports of one to five butterflies came in the remainder of April.



A steady flow of reports in May included a peak of 11 at Raisby Way on 17th (Keith Walton), plus one to eight at a wide variety of further sites. Modest numbers (one to eight per site) continued during June. Peak day counts per month involved 44 on 6th June, and 51 on 3rd July (including 49 counted at Newton Point, Northumberland by Jane Lancaster). These counts were well below the peak day counts of 121-138 in July-August 2018.

The species was most prominent during August when peak collective day totals included 42 on 13th, 66 on 24th and 50 on 27th (compare the peak day total in 2018 of 138 on 28th September).

Individual peak site counts were largely lacking this year, the stand out count being 49 at Newton Point (Northumberland) on 3rd July (Jane Lancaster), well below a high of 93 in 2018. Other double-

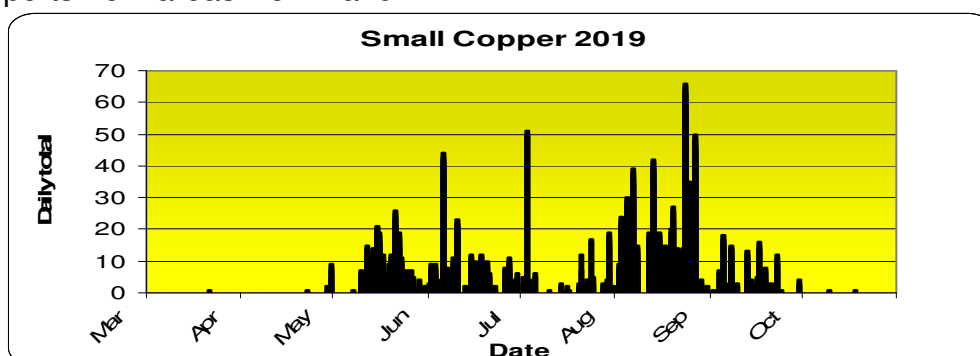
figure counts (ten to 18) came from Burn Hill, Low Ewhurst, (near Burnopfield), Hedleyhope Fell, Langley Moor and Raisby Way.

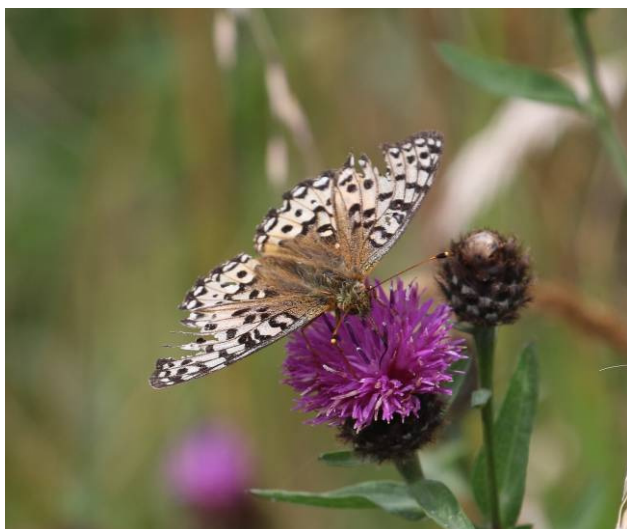
In September, one to seven were found at about 35 scattered sites until 23rd, followed by singles at five sites up to 30th. The final reports were in October and involved singles at Tees Railway Park (County Durham) on 10th (Simon Hodgson) and Newbiggin by the Sea (Northumberland) on 18th (Keith Smith). These compare with 25th October (Northumberland) and 2nd November (Co. Durham) in 2018, and 15th October (Northumberland) and 28th September (Co. Durham) in 2017.

A flight season of 212 days was longer than 182 days in 2018 and 191 in 2017, and the species was noted on a total of 109 days (51%) during the season (compared with 136 days (75%) in 2018).

A total of 1,180 individuals in 2019 was significantly less than the 2,724 recorded in 2018 but better than the lowly total of 531 in 2017. An average of 2.2 butterflies per report this year was a drop on the 4.2 in 2018 but similar to the 2.1 in 2017.

Small Coppers were found in 181 tetrads from a total of 765 tetrads surveyed, giving a mean figure of 24% (156 tetrads (27%) in 2018). County Durham and Tyneside were reasonably productive for this butterfly, as was the coastal strip of north Northumberland but there were far fewer reports from areas well inland.



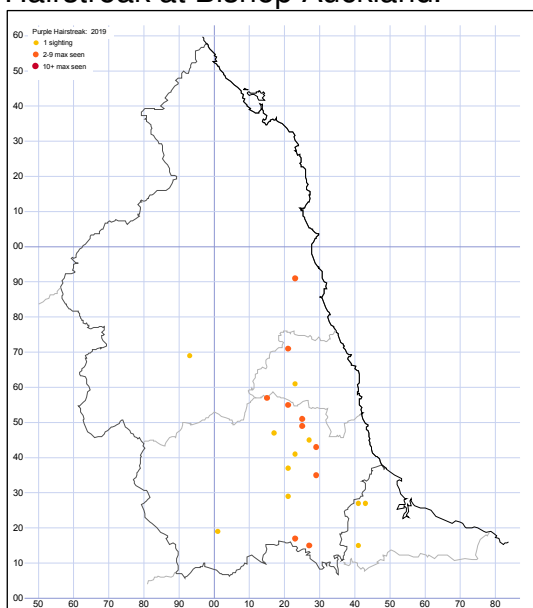


An unusual Dark Green Fritillary, photographed by Peter Tapsell at Druridge Bay on 5th August 2019

Purple Hairstreak *Favonius quercus*

2019: There were 27 records this year submitted by 15 different recorders and this year's total was up from last year by 3, although 2018 had several very high counts.

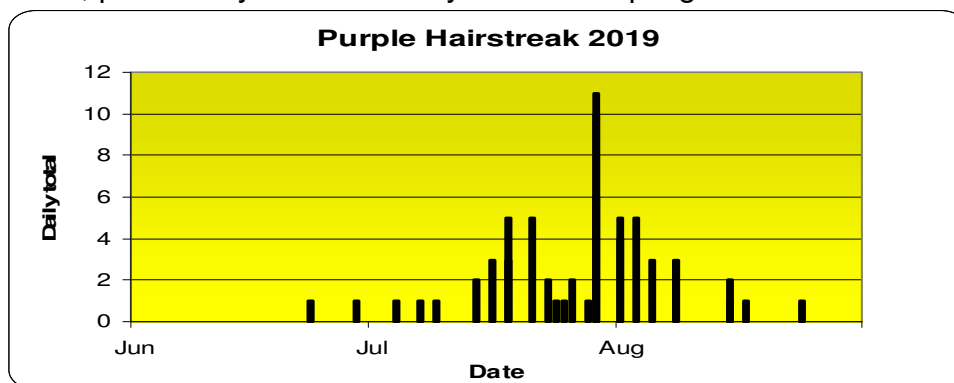
The first record was submitted by Sarah Wherry on the 23rd June where she saw 1 Purple Hairstreak at Bishop Auckland.



Last year, (2018), Dick Gilhespy counted 35 at Havannah Nature Reserve a high count that was only bettered by Graham Beckwith who counted an incredible 47 individuals on 3 Oak trees at Waldrige Park on 19th July. This year the numbers were considerably lower with the highest count being only 6 and this was by David Phillips at Mowdon near Darlington. There were two separate counts of 5, one by Jonathan Wallace at Havanah on 21st July and one by Graham Beckwith at Waldrige Lane, Chester Le Street on 3rd August.

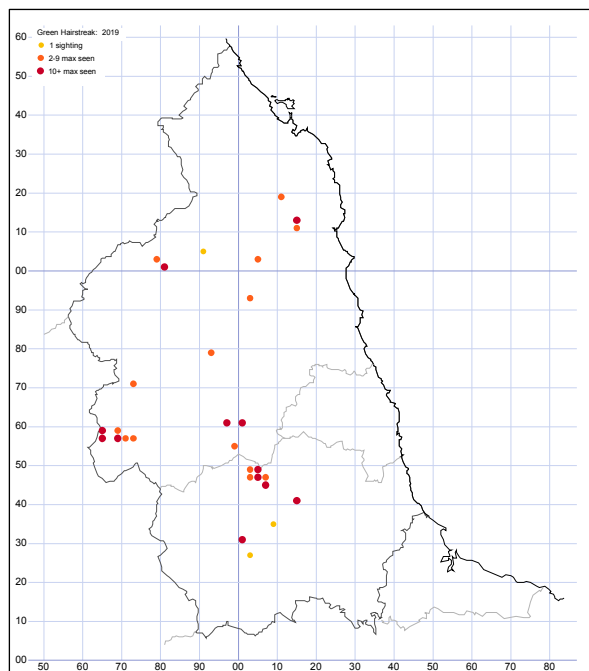
The final record was by Julie Hogg who saw a single Purple Hairstreak on 24th August on Waldrige Lane, Chester Le Street. The recording period lasted from 23rd June to 24th August. There were no sightings in September.

This butterfly is still probably under recorded but is well worth the effort as on a final note, most sightings are seen with their wings shut but when seen with their wings open showing the glorious purple that gives it its name, it is a very fine butterfly and well worth the trouble in finding. It is worth looking for this butterfly in any woodland containing sheltered sunny oak trees. It stays mainly in the canopy but does come to lower branches, particularly late in the day for courtship flights.



Green Hairstreak *Callophrys rubi*

2019: 73 reports from 18 observers were received. In total 707 individual butterflies were recorded on 26 days, the highest for this species this century even surpassing the 580 recorded last year.



The first records of the year were from Dave Wainwright and Keith Walton who reported single butterflies on Hedleyhope Fell on 17th April. The last record was from Mike Richardson on 10th June when he reported 3 flying at Colt Crag Reservoir, Northumberland

In the northeast the butterfly is usually found in moorland areas often in reasonably remote but sheltered locations where Bilberry is present. Like all Hairstreaks it can be easily overlooked partly because of the early flight period but also because even on sunny days territorial male butterflies are often resting on favoured perches and need disturbing before they will fly.

As in previous years the majority of records came from better known established colonies with 40% of the total records coming from Dipton Woods

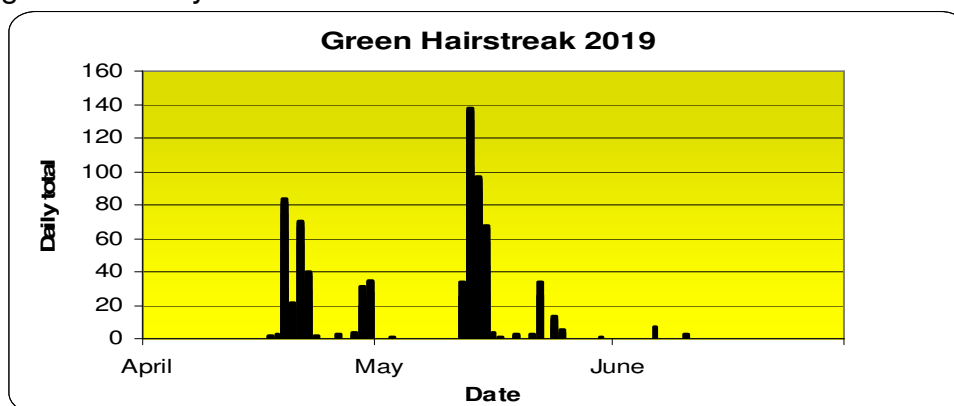
including the highest number for the year, 57 reported by Chris Barlow on 21st April

In Durham Green Hairstreaks were seen throughout the flight period. Keith Walton reported 29 flying at Muggleswick on 19th April, Ken Hutchinson reported 28 flying at Sharnberry Gill, near Hamsterley Forest on 15th May and Dave Liddle 38 at Burn Hill on 13th May and 26 on 22nd May.

In Northumberland Ian Kerr reported 17 Green Hairstreaks on two tetrads in the Otterburn Training area of the National Park and Mark Welfare 20 flying on Alnwick Moor on 29th April. Dave King reported Green Hairstreaks flying on 9 different tetrads in the county. On 14th May he recorded 43 flying on three adjoining tetrads on the east side of the A689 and on 15th May he recorded 30 flying on two adjoining tetrads a little to the west of the A689.

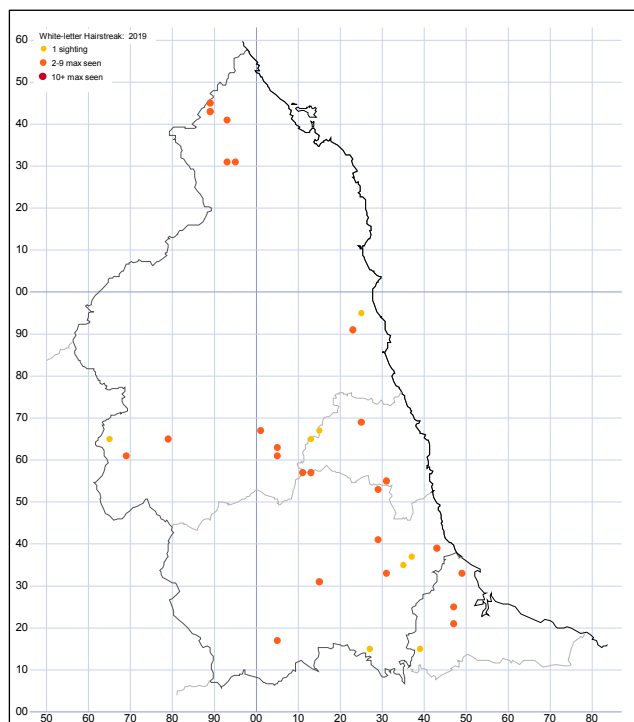
Dave King's reports, and those from others around the region, show the butterfly is to be found outside its well documented localities

After such a run of poor years it has been encouraging to see Green Hairstreaks on the wing in good numbers around the northeast region during the last two years. Those sheltered sunny spots where Bilberry grows are well worth checking during April and May for this charming little butterfly.



White-letter Hairstreak *Satyrrium w-album*

2019: There were 55 records from 19 recorders. This butterfly along with the Purple Hairstreak is probably under recorded. It spends most of its life on elm Trees but does come to ground from the elms to nectar, both bramble and thistle being a favourite and with a bit of



patience, this butterfly can be seen close up.

The first record for this butterfly was by Julia Meldrum on 29th June where she saw a single White letter Hairstreak at Crowden Hill Plantation. K Walton saw a second single at Wingate Quarry on the 2nd July.

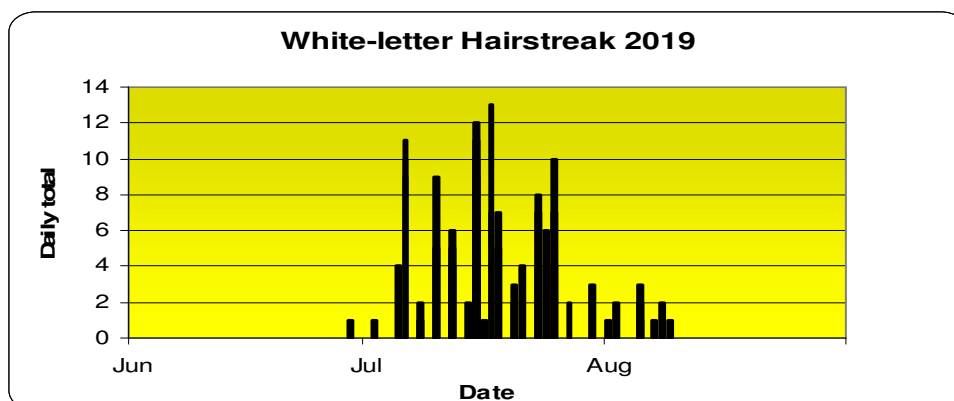
There were no sightings in double figures, the highest count coming from Graham Beckwith who saw 9 individuals at the A1 Roundabout at Chester Le Street on the 6th July. John Corcoran saw 7 in the same place several days later on 17th July.

Most recorded sightings were in the month of July with only 1 sighting coming from June and 8 records from August the latest being John Durkin at Deepdale nature reserve on 9th August.

This year we have had several notable reliable sightings of both egg and larva. Dave Wainwright found ova at Low Barns on 22nd January, and then Kenneth Haydock and Jill

Mills who spent two days, 23rd and 24th February, in the north of Northumberland at grid refs NT9330, (River Glen) and NT8843, (Twizel Bridge), and found a total of 18 eggs at these locations, several of which were newly hatched. Martin Greenland found hatched eggshell at Newbiggin on the A698 in the north of Northumberland near the River Tweed. These northerly discoveries significantly extend the recorded range in the region and this exploration in the north of Northumberland has been fully reported in the Autumn 2019 newsletter. Graham Beckwith found larva at Houghall, Durham on 6th June.

This is always considered to be an under recorded butterfly but on warm sunny days it is always worth checking Elm trees and even saplings that you may find in our area.



Small Blue (*Cupido minimus*)

2019: This species, long extinct in our region, does not normally feature in the Butterfly Summary Report. However, in May thirty adult female butterflies, plus a few males were released at a Kidney Vetch-rich site near to the RSPB's Saltholme reserve. This introduction, a collaborative project between Butterfly Conservation, Industry Nature Conservation

Association (INCA), and the site's owners, Wood plc, seeks to restore the Small Blue to the North East following a period of absence that probably extends back to the 1940s. No data are yet available that would confirm whether the two releases of 15 females each, separated by a week, were successful in terms of establishing a population of the butterfly. None from the first release were seen during the second, neither was any second generation apparent during later visits to the site (the species typically produces a partial second brood of variable numbers at the Cumbrian sites from where the released stock was obtained). However, some egg laying was observed immediately subsequent to the butterflies' release which gives some cause for optimism.

The site to which the species was introduced is a working industrial site with a secure future (unlike many abandoned brownfield sites) and support from the landowner means that future management requirements will be met. If the introduction does succeed, it is certain that the species will spread beyond the release site into adjacent habitat. Hopefully, we will be able to supply a positive update from the site in 2020's report.



White-letter Hairstreak photographed by Michael Coates on 15th July 2019 at Bywell Bridge

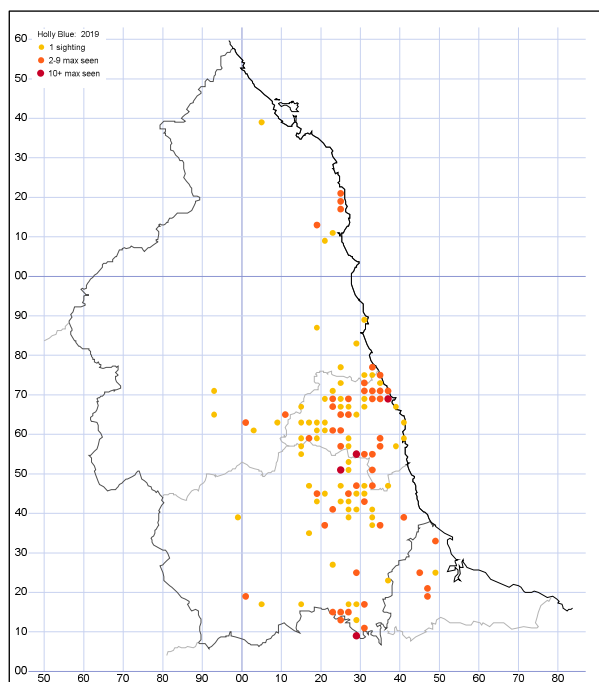


Purple Hairstreak at ground level! photographed at Wallington NT on 18th August 2019 by Paul Hewitt of the National Trust.

Holly Blue *Celastrina argiolus*

2019: Last year (2018) was at last a better year for Holly Blues in our region after the previous year (2017) being the worst since 2009 but 2019 has shown a fantastic increase in numbers compared to previous years.

There were 454 records received of 728 butterflies compared with 267 butterflies in 2018 and



51 butterflies the year before. Overall numbers have been increasing in our region in recent years since only one individual was recorded in 2001, three in 2002 increasing to 284 individuals in 2007 then crashing to only 7 recorded in 2009. Numbers slowly increased thereafter with 162 recorded in 2012.

Of these 2019 records 327 were single specimens (compared to 159 in 2018), 75 twos, 28 threes, 7 fours, 6 fives, 2 sixes, 2 sevens, 3 eights, then in double figures 1 ten, 2 fourteens and a spectacular 21 at Chester-le-Street recorded by Graham Beckwith.

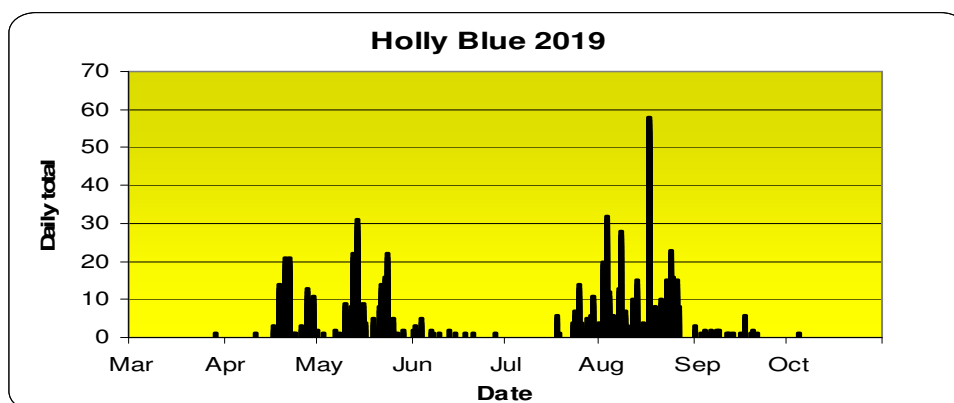
The single sightings represent almost half of the total records demonstrating the wandering nature of this species.

Interestingly in the first flight period the only double figure was north of the Tyne being 14 in Northumberland Park, North Shields on 24th May by Mike Coates. In the second flight period the only double figures were south of the Tyne being 10 at Washington, 14 at Darlington and the 21 at Chester-le-Street.

A record at Kyoie Woods is by far the furthest north recorded in our region but there were also 13 recorded in the region of Alnwick / Alnmouth. The furthest west was a record at Humshaugh.

The first early Holly Blue seen in 2019 was by Simon Elliott on 29th March at Gosforth and the last recorded was seen by Keith Smith in Whitley Bay on 5th October. The first brood was seen on the wing from 29th March until 28th June, then there were three weeks without records. The second brood was recorded from 18th July until 21st September and then one late individual seen on 5th October.

Holly Blues were recorded on 101 days compared with 71 in 2018 being 53% of the 191 days flight period. They were seen in 122 tetrads in 2019, compared with 50 in 2018. The total number of tetrads that they have now been recorded in stands at 168 over the last decade.



Brown Argus *Aricia agestis*

2019: This year we had 47 records sent in from sixteen different sites. The total of 286 butterflies seen flying makes it the best year ever for Brown Argus in the region. It would also seem from the numbers recorded during the spring that the butterfly is definitely breeding on

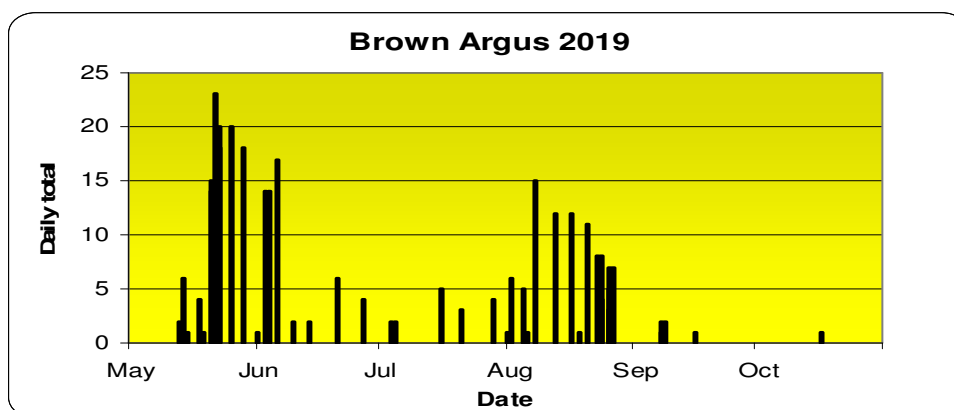
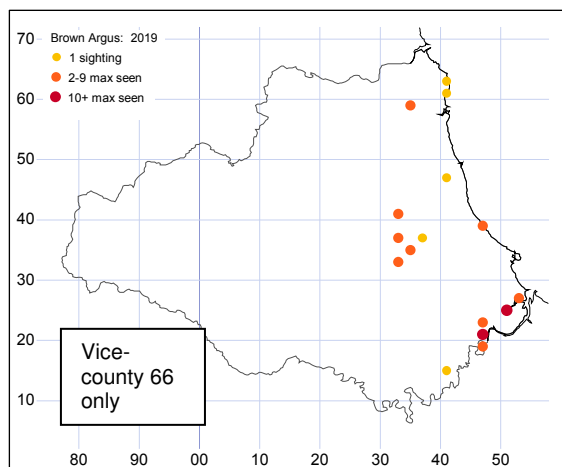
some sites here. Perhaps the good summer the year before (2018) meant successful breeding was possible and we are seeing the results of that. Nevertheless we are right on the northern limit of its range here, and the situation could easily be reversed. On the other hand we could be seeing the effects of climate change on the distribution of the Brown Argus.

The first record of the year came from Martin Partridge who reported seeing two at the Johnson Matthey Biodiversity site near Billingham on 13th May. This is a site where it is certainly breeding. Martin reported several double figure counts during the spring generation peaking at 23 seen on 22nd

May. The only other spring count in double figures was from Dave Wainwright with 14 at BP CATS at Seal Sands on 4th June. Unlike previous years when only one or two sites reported Brown Argus flying in spring, this year records were received from eight different sites.

In August the second generation started to emerge, although the numbers seen were not as high as for the spring generation. All the double figure counts were from the Johnson Matthey Biodiversity site, with the maximum being 15 on 8th August. Records from several different recorders were also received from the Kelloe Bank / Raisby Way sites, again a likely breeding location. Brown Argus was also seen on sites around Hartlepool and Seaton Carew dunes. Most records were from the South East corner of County Durham and Tees-side but some were from further afield, such as the Sunderland area, Blackhall Rocks, Dalton Park and Wingate Quarry.

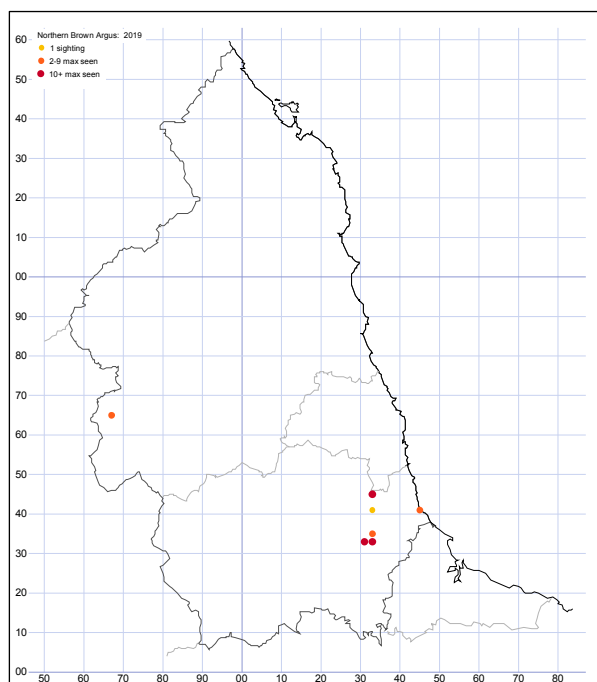
The flight season had ended by the last week of August but four records were received for September. However, the last sighting was not until 17th October when Bob Mawson saw one at Kelloe Bank, Raisby Way, a very late date indeed. This year was an exceptional year for the Brown Argus, the 286 seen was by far the highest number ever reported. Let's hope this marks the start of it establishing itself in County Durham more widely and more permanently. The map shows Vice-county 66 only.



As in previous years, records of Brown Argus at known Northern Brown Argus sites during the flight period of Northern Brown Argus must be supported by documentation, preferably photographs.

Northern Brown Argus *Aricia artaxerxes*

2019: It seems 2019 was another fairly poor year for the Northern Brown Argus with only 282 butterflies counted, although at the time of writing data from the Bishop Middleham Quarry transect had not been received. Data from the three sites monitored by transect (Thrislington Plantation, Bishop Middleham Quarry and Raisby Hill Grassland) are of particular importance for



determining long-term population changes experienced by this nationally important species as recording effort across what is a relatively few occupied sites is patchy, with some sites (notably Bishop Middleham Quarry) being visited so frequently that a significant proportion of the site's butterfly population must be recorded on multiple occasions. Other sites, such as those on the coast, are visited infrequently at best – peculiar, given that these are some of the best butterfly and moth sites within both county and region!

Keith Walton recorded our region's first at Bishop Middleham Quarry on the relatively early date of May 23rd. The next sightings were made by Ian Hillery on the 29th at the same site. Val Standen's singleton, recorded on the Thrislington transect on June 3rd was the first sighting from a

different site, by which time several more records had been submitted from Bishop Middleham.

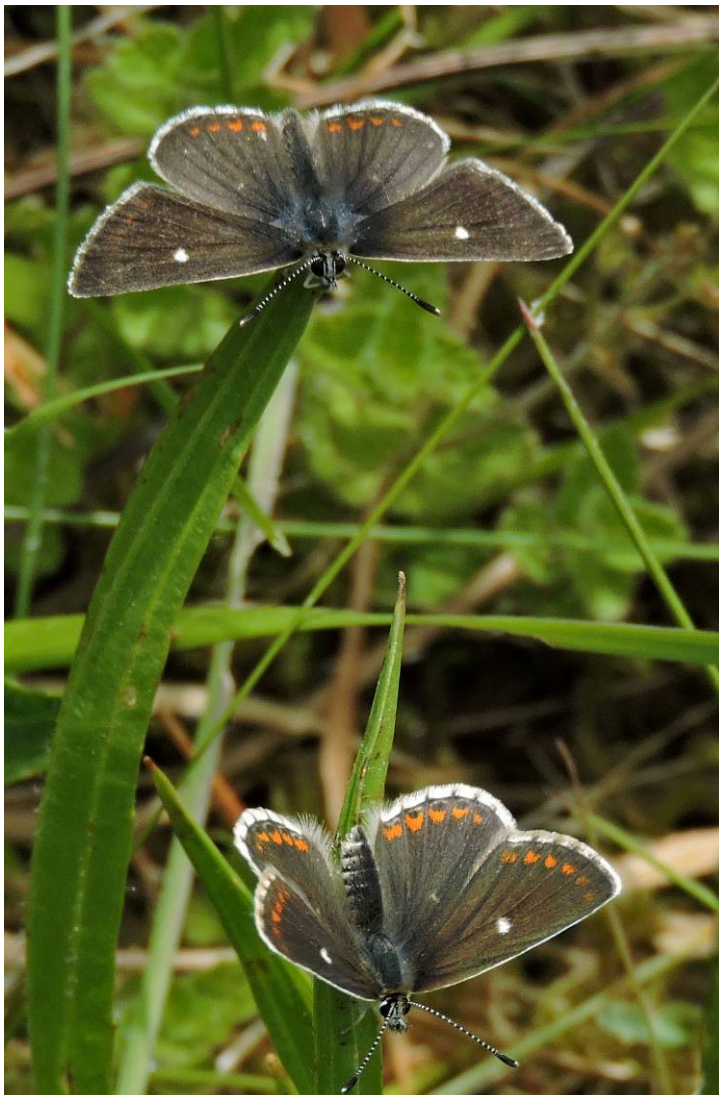
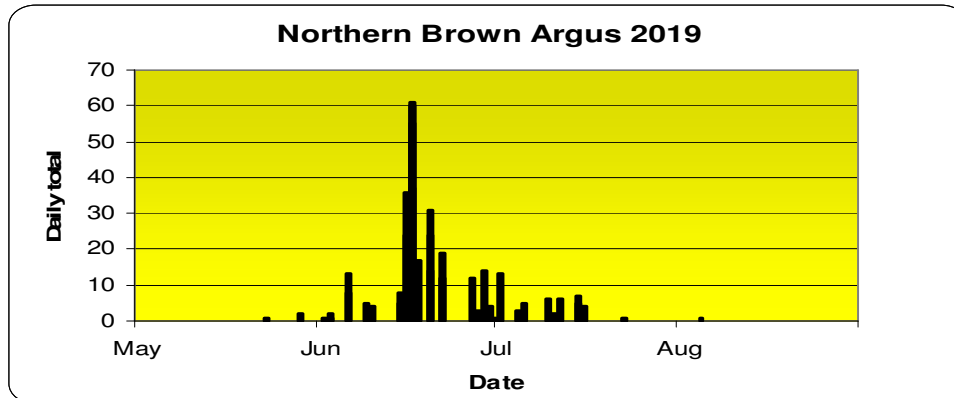
Peak flight period occurred on June 17th when a total of 61 butterflies was recorded, the bulk of the total deriving from Graham Beckwith's excellent count of 37 at Thrislington Plantation with the remainder comprised of counts by several recorders visiting Bishop Middleham Quarry. Graham's count was the highest made in our region in 2019.

Very few other sites yielded records: Derek Charlton's count of 12 from Pittington Hill made on June 22nd was the best from this site in recent years. Conversely, Julie Hogg's singleton from nearby Sherburn Hill might be cause for concern that this once medium-sized colony might now be in decline, although her visit was made on the relatively late date of July 1st, by which time numbers would be way past their peak. Dave Wainwright, out with a group of Natural England staff and volunteers, recorded 6 butterflies at Castle Eden Dene Mouth on July 12th though it should be noted that the butterfly's flight period at the coast is some 2-3 weeks later than is typical of the inland colonies. This was the only coastal record to be submitted.

The season in County Durham fizzled out with a series of low single figure counts. Val Standen's singleton recorded from her transect at Thrislington on 23rd July is a fairly typical date for the flight period to finish. However, Walia Kani recorded a later one from her transect at Raisby Hill Grassland on August 5th. This would be exceptionally late – though not impossibly so for Northern Brown Argus, for this inland site but could just as easily have been Brown Argus. The recent expansion by the latter species into our region is such that it would be surprising were the species not turning up at sites formerly occupied only by the Northern Brown Argus. Photographic evidence can certainly play a role in helping recorders determine the correct taxonomy of late and early specimens; equally, it is likely that DNA studies would provide clarity on topics such as ID dilemmas, whether and to what extent the

two species are interbreeding and whether Northern Brown Argus might be producing a partial second brood. Over to those of you with university connections!

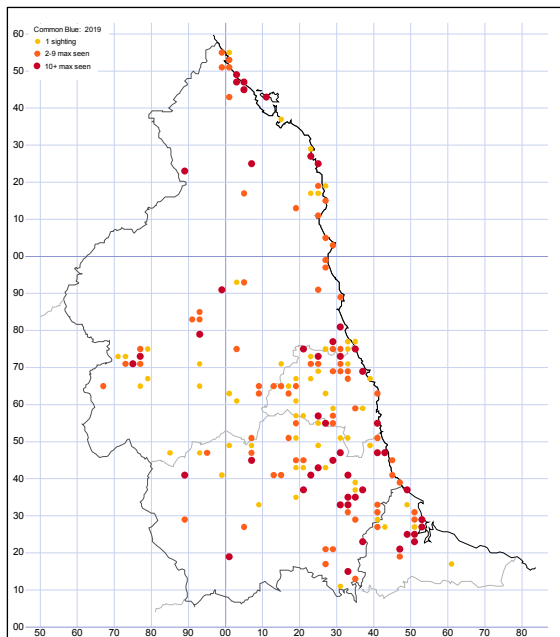
Peter Howard discovered a previously unknown colony at Walltown Quarry on the Roman Wall in the far west of Northumberland on 6th July when he found five individuals. These were of the white-spot variety and it appears at the time of writing to be a totally isolated colony. There are no known other colonies nearby. Its origin is unclear and further exploration along the Whin Sill is planned.



Northern Brown Argus, photographed at a new site, Walltown Quarry, by Peter Howard on 6th July 2019

Common Blue *Polyommatus icarus*

2019 There were 676 reports in 2019 with 5143 common Blues recorded between 30th April and 8th October with the butterfly reported flying on 115 days. This was another excellent year for this species.



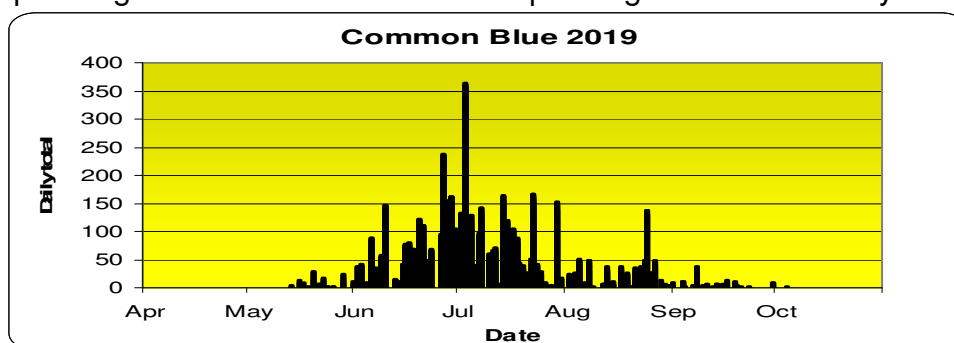
The first record of 2019 was on 30th April when Pippa Smaling recorded a Common Blue flying on her transect in West Park, Darlington. Common Blue butterflies were then recorded throughout the summer months with the last record, a single butterfly seen flying at East Tanfield Railway, recorded by Stewart Cowley on 8th October.

Both nationally and regionally Common Blue is the UK's most common blue butterfly. In the Northeast it was formerly most abundant on the coastal dunes and the Magnesium Limestone grassland of County Durham and is equally at home on brownfield sites where Common Bird's-foot Trefoil is growing. In the western areas of the region the butterfly is less common and found in smaller colonies.

Two sites in Durham, Oakenshaw and Dalton Park illustrate how well Common Blue have colonised brownfield and ex-mining areas. Oakenshaw was an opencast mining site near Brancepeth while Dalton Park Shopping centre was developed on colliery spoil heaps. Keith Walton visited Oakenshaw NR throughout the summer and reported Common Blue flying in good numbers from 16th June to 5th August with the highest number, 105 on the 5th July. At Dalton Park on 25th August Graham Mitchell reported 125 Common Blues butterflies, the highest numbers of the year, having recorded 84 on the same site on 10th June. Perhaps Common Blue is double brooded on brownfield sites in the region.

In Northumberland National Park on 3rd July Dave King reported 125 flying in an area covered by four tetrads. During 2019 there were slightly fewer reported from coastal regions than in previous years with no three figure totals. However on the Northumberland coast Kevin Redgrave reported 79 butterflies flying at Newton Links on 3rd July, Mike Carr reported 54 flying on 14th July on Holy Island and Malcom Hutcheson 87 flying on the dunes near Cheswick and Goswick Sands. In Durham John Olley recorded 26 flying on Crimdon Dunes on 5th August.

In County Durham Common Blues were recorded from better known sites such as Wingate and Bishop Middleham Quarries, Waskerley and Raisby Ways, and Thrislington, throughout the flight period. David Phillips reported 47 flying on Waskerley Way on 12th July and Dave Liddle had reported good numbers from Burn Hill peaking at 46 on 15th July.





An exotic escape in Stockton on 8th August 2019! seen and photographed by Robert Cornwall and identified as a Clipper, an Indo-Australian species by David Smith, Yorkshire Butterfly Recorder.

Additions and Corrections to the 2018 report

We would like to apologise for omitting a number of interesting records from the 2018 report. We also include a few late records and some corrections.

Essex Skipper: Six at Greatham Creek on 13th July by David Phillips.

Brimstone: One at Rockcliffe NR on 27th May by David Phillips.

Grayling: 28 at Dorman's Pool on 2nd July by David Phillips, one at Bishop Middleham Quarry, (a new site) on 19th July by Stephen Goodhart, one at Newbiggin GC (a new site) on 28th July by Alan Priest.

Marbled White: 32 at Wingate Quarry on 1st July by Steve Kirtley, 26 there on 18th July by David Phillips.

Purple Hairstreak: Two at Horsley Wood on 11th July by Nick Rossiter, ten at Lamesley Water Meadows on 15th July and ten at Mowden, Darlington on 26th July, both by David Phillips and nine there on 6th August by Steve Kirtley.

Green Hairstreak: Eight at Sharnberry Gill on 14th May by David Phillips.

White-letter Hairstreak: Three at Mowden on 1st July by Steve Kirtley, and one at Horsley Wood on 11th July by Nick Rossiter.

Small Copper: The record of 101 at Baxter Wood on 28th September 2018 should have read 11 and the latest date was one on 12th November at Low Barns by Dave Wainwright.

Holly Blue: Up to 11 at Hummersknott, Darlington, on 22nd July by David Phillips.

Brown Argus: One at Castle Eden Walkway on 4th August by Steve Kirtley.

Northern Brown Argus: 11 at Bishop Middleham Quarry on 11th June by David Phillips and eight there on 1st July, by Steve Kirtley.

Acknowledgements We would like to thank our species writers for assisting in the preparation of the annual report: Steve Austin, (Purple Hairstreak & White-letter Hairstreak), Jaci Beaven, (Red Admiral, Peacock, Painted Lady & Comma), Graeme Bowman, (Small Skipper & Small Copper), Mike Coates, (Holly Blue & Small Tortoiseshell), Terry Coult, (Silver-washed Fritillary), Steve Kirtley, (Brimstone & Speckled Wood), Roger Norman, (Clouded Yellow & Gatekeeper), David Phillips, (Marbled White, Essex Skipper & Large Heath), Dave Stebbings, (Large Skipper, Brown Argus, Small White, Small Pearl-bordered Fritillary, Small Heath, Wall, Green-veined White, Ringlet & Meadow Brown), Dave Wainwright, (Dingy Skipper, Northern Brown Argus, Small Blue & Grayling), Jonathan Wallace, (Large White, Orange Tip & Dark Green Fritillary), and Peter Webb, (Green Hairstreak & Common Blue). We are looking for more volunteers, to write up one or perhaps two species for 2019. We are also always looking to receive more photographs for inclusion in the report, (as JPEG files please). Please contact the Recorders.

CONTRIBUTORS FOR 2019

A Abbs, D Adams, K Adamson, D Anderson, P Anita, D Aplin, D Archer, O Ashmead, A Atkinson, Rev. D Atkinson, C Austen, S Austin, C Barlow, P Bastin, J Beaven, J Bates, J Beaumont, G Beckwith, H Bell, J Binge, C Blues, J Boddy, P Bone, M Borroff, I Bradley, W Bradshaw, W Brien, S Brookes, M Broome, M Birtle, P Campion, G Canney, V&J Carnell, M Carr, F Carroll, E Carter, H Cessford, J Chapman, L Charles-New, D Charlton, E Charman, K Child, A Chouler, D Chrisp, P Chrisp, C Clark, G Clark, N Clark, C Clayton, J Clayton, E Clowes, M N Coates, S Coates, D Coltman, J Common, R Cook, J Corcoran, R Cornwall, S Cowley, V Coy, A Craggs, G Dalley, V Dash, S Davey, A Davis, L Davis-Sinclair, K Dawson, J Day, M Day, T&J Dean, M Duckett, J Duffell, J Durkin, G Dunn, M Eccles, A Edwards, K Edwards, D Elliot, S Elliott, C Enderby, H Ellis, A Farmer, Y Farmer, J Farooqi, P Farrington, I H Findlay, D Fleming, P Ford, J Fowler, H Frame, T Furness, H Galley, M Gallon, T Gatenby, J Giaretta, D Gilhespy, C Glenwright, J Gomme, S Goodhart, L Graham, J Gray, I&T Gray, S Gray, T Gray, J Green, M Greenland, N Gregory, D Gregson, K Gunning, M & R Hardie, I Hancock, L Hanse-Foster, K Harland, M Harris, J Haslem, M Hawking, E Hawkins, K Haydock, P Heathcote, R Heffer, R Henderson, B Herd, S Hughes, I Hillery, L Hislop, R Hockin, L.C. Hodgson, S Hodgson, Z Hodgson, G Hogg, J Hogg, J Holliday, S Holliday, M Holmes, R Hopwood, W Horsley, P Howard, D Howdon, P Howe, A Huckins, P Hughes, J Hunt, M Hughes, A & M Hutcheson, K Hutchinson, S Hutchinson, D & S Hutt, R Ibbotson, C Inskipp, H Insley, R Irving, P James, M Jeffrey, J Jewers, P Johnson, C Jones, K Jones, S Jones, P Jordan, S Judd, W Kani, V Kent, T Kepke, I Kerr, B Keywood, M Kirby, D King, J Kinsley, P Kipling, C Kirkham, S Kirtley, J Lancaster, J Latimer, L Law, J Lawson, S Le Brocy, M Leakey, C Lee, S Lee, K Lewing, D Liddle, K Liddle, A Linden, K, B Noble Linden, M Long, G Lonsdale, K Lough, M Lowe, S Lowe, S J Lowther, P Lupton, A Macfadyen, C Macgregor, T Mackenzie, C Martin, J Martin, T Martin, R Mawson, A McDonald, H McDonald, L McDonald, P Mcfarlane, S McGinty, G McGowan, G Mciver, G Megson, J Meldrum, K Menzies, A Midson, A Middleton, G Mitchell, R Mitchell, W Morley, A Morton, S Murphy, K Neat, P Nevison, C Niven, K & R Norman, W O'Brien, M Oliver, J Olley, R Pannell, P Parsons, M Partridge, T Pawson, D Pearson, D Phillips, G Pollinger, G Port, M Potts, M Preston, C Powell, A Priest, E Pritchard, C Proud, S Pudney, D Raffle, C Rawcliffe, K Redgrave, J Reeves, S Reid, M Richardson, T Richardson, A Rikeard, A Roberts, P Robins, V Robins, B.A Robinson, J.A Robinson, S Rogers, J Roper, C Rowley, C Saunders, R Scaife, T Sexton, K Shaw, M Shepherd-Wells, R Shillaker, G Short, K Sim, D Simm, P Smaling, J Smith, K Smith, M Smith, G Smy, V Spenser, A Spragg, V Standen, S Stanley, D Stebbings, A Steele, M Stephenson, J Stewart, L Stobbs, Z Strong, G Struthers, R Swan, T J Tams, P Tankard, C Taylor, M Taylor, M Teesdale, C Thompson, M Tibbetts, S Thomas, A L Todd, C Tomlinson, M & N Tuck, D Turnbull, E Turnbull, M Turton, M Vale, G Vance, P Vickers, L Vitty, D Wainwright, A Wakefield, S Walker, J Wallace, K Wallace, I Waller, K Walton, R Warner, E Waterston, L Waterston, P Webb, S Webster, M Welfare, S Westerberg, S Wherry, J Whiteford, I Williams, E Wilson, J Wilson, L Withrington, L Worku, T Wrigley, A & G Young, Alnwick Wildlife Group, Berwick Wildlife Group, Natural England, The National Trust, with apologies for any accidental omissions.

Both 'casual' records and transect counts are important for assessing the health of our butterfly populations. We would like to thank the following transect walkers:

Recorder

Beadnell1
 Elizabeth Clowes,.....
 Stephen Goodhart.....
 Lesley Hodgson, Dave Liddle, John Wilson
 Stephen Hutchinson,.....
 Dave Liddle
 Dave Liddle
 Alan Edwards
 Berwick Wildlife Group*
 Daphne Aplin
 Julia Meldrum, Chris Tomlinson
 Joyce Clayton.....

 Jackie Reeves, Marion Gallon.....
 Helen McDonald, Lauren Withrington,
 Jane Gray, Philip Jordan, Paul Tankard
 Alex Midson, M Jeffrey
 Dave Stebbings.....
 Dave Wainwright.....
 Dave Liddle
 Molly Hardie, Robert Hardie

Transect

Amanda Crowley, (Coast Care volunteer)
 Bearpark Wood
 Bishop Middleham Quarry
 Black Plantation
 Brass Castle
 Burn Hill,
 Byerley House
 Castle Eden Dene NNR – West end
 Cocklawburn Dunes
 Cowpen Bewley 2 (Woodland Park)
 Crowden Hill Plantation
 Doxford Farm Walk A and B (two transects, Coast
 Care volunteer)

 Dunstan Heughs
 Gibside (National Trust)
 Gosforth Park NR
 Hardwick Park
 Havannah LNR
 Hedleyhope Fell, & Inkerman (two transects)
 Horsleyhope Burn
 Hunting Hall Farm

Chris Powell	Lanehead Quarry
Tim Wrigley,	Liddels Wood
Andrew Craggs, (Natural England)	Lindisfarne NNR
Coralie Niven, Melissa Stephenson, Les Stobbs,	Low Newton Junction
Coralie Niven, John Wilson,	Morrison Busty Pit Yard
Gemma Vance	Murton Fields
Dave Liddle	Nanny Mayors
Kevin Redgrave (National Trust) ...	Newton Links
Jane Lancaster (National Trust)	Newton Point
Graham Megson	North Gare, Teesmouth NNR
Adam Jones, Tom Irvine, Jake Phillips, Tom Allen	RSPB Saltholme
Walia Kani.....	Raisby Hill Grassland
Graham Lonsdale, Graham Mitchell	Sherburn Hill
Graham Lonsdale, Graham Mitchell, Coralie Niven	Sherburn Railway
Jill Stewart.....	Stargate Ponds & Bewes Hill
John Lawson	Stillington Forest Park
Steve Reid	Tanfield Lea Marsh
Simon Hodgson.....	Tees Railway Walk
Pippa Smaling	The Whinnies LNR, (near Darlington)
Valerie Standen.....	Thrislington Plantation
Kate Jones	Tughall Mill, (Coast Care volunteer)
Ian H. Findlay	Upper Teesdale NNR
Alan Davis, Paul Tankard.....	Weetslade Country Park
Pippa Smaling	West Park, Darlington
Jeff Fowler	Wynyard Woodland Park - Pickards Meadow

* Enid Turnbull, Pam Campion, Molly & Robert Hardie, Ian & Trudy Gray, Andrew Morton, Kay Adamson, Malcolm Hutcheson

ERRATUM for 2018: The transect walker for Cowpen Bewley 2 (Woodland Park) should have read Daphne Aplin, This error arose due to coding details in the software used for online recording for which we apologise.

We would like to thank Kevin Redgrave for sending in transect counts from the National Trust for the Northumberland coast and to Andrew Craggs for Lindisfarne NNR. Photographs are credited as they appear in the report. We would like to thank Terry Coult for his front cover artwork and all the photographers for their superb contributions.

We always need new photos. The Branch would also welcome any feedback or suggestions to improve future editions of the Annual Report. Please send us photographs, line drawings, suggestions and articles for both the newsletters and annual reports. They are always welcome.

Accepting Records

With the increasing number of butterfly records now being submitted, and with it the increasing chances of finding locally rare species, a reminder that photographs and descriptions in support of Essex Skipper, Brown Argus, Camberwell Beauty, Gatekeeper, Silver-Washed-Fritillary and any other more unusual butterfly are essential. In the absence of any photographs, a detailed description for rare species should be submitted. A brief description should also accompany any out of place records, such as a species seen outside its normal flight period, e.g. a Small Skipper seen in the first week of June or earlier, or a species seen well outside its currently known range, for example Northern Brown Argus in Northumberland.

The Records Committee may look at any record, particularly for rarer species or species seen at unusual times or places or in unusual numbers. The Committee will assess such records and may decline to accept them.

Feedback When processing and analysing over twenty-three thousand records, plus comparisons to previous years, it is almost inevitable some mistakes will slip through. If anyone does notice any errors please inform your Butterfly Recorders.

FLIGHT PERIOD TABLE

This table relates to both Durham and Northumberland, and records the first and last flying record of each species for the three-year period 2017 to 2019. Insects found in undisturbed hibernation or in the larval stage have been excluded. For ease of reference, any record early / late sightings during the BNM project period 1995 – 2019 are included in the last two columns. Six earliest and two latest record dates, (shown in bold) were beaten or equalled in 2019. One or two dates may differ from previous tables due to additional records or reappraisal.

FLIGHT PERIOD TABLE								
Species	2017		2018		2019		Record earliest	Record latest
Dingy Skipper	28-Apr	25-Jun	10-May	11-Aug	26-Apr	5-Aug	18-Apr-03	22-Aug-09
Small Skipper	11-May	15-Sep	19-May	30-Sep	6-Jun	31-Aug	11-May-17	10-Oct-01
Essex Skipper	2-Jul	20-Jul	6-Jul	1-Aug	4-Jul	9-Aug	4 Jul-19	16 Aug-16
Large Skipper	25-May	6-Sep	31-May	8-Aug	26-May	19-Aug	19-May-07/11	11-Sep-12
Orange-tip	6-Mar	29-Jul	2-Apr	31-Jul	21-Mar	3-Jul	5-Mar-11	10-Sep-06
Large White	22-Mar	13-Oct	19-Apr	24-Oct	11-Apr	12-Oct	8-Mar-11	27-Dec-13
Small White	12-Mar	25-Oct	8-Mar	22-Oct	20-Mar	21-Oct	3-Mar-99	1-Nov-11
Green-veined White	15-Mar	30-Sep	5-Apr	10-Oct	25-Mar	12-Oct	8-Mar-11	28-Oct-11
Clouded Yellow	15-Aug	30-Aug			14-Jul	14-Jul	23-May-06	15-Oct-00
Brimstone	1-Apr	19-Sep	1-May	26-Jul	21-Feb	25-Aug	21-Feb-19	28-Sep-11
Wall	9-Apr	21-Sep	21-Apr	10-Oct	19-Apr	21-Sep	4-Apr-07	12-Nov-11
Speckled Wood	9-Mar	2-Nov	4-Apr	17-Nov	25-Mar	28-Oct	5-Mar-11	17-Nov-18
Large Heath	18-Jun	17-Jul	11-Jun	13-Jul	29-Jun	23-Jul	4-Jun-96	14-Aug-96/12
Small Heath	17-May	24-Sep	14-May	21-Sep	16-May	23-Sep	22-Apr-11	28-Oct-11
Ringlet	9-Jun	7-Sep	19-May	30-Aug	15-Jun	26-Aug	14-May-12	2-Oct-01
Meadow Brown	7-May	17-Sep	26-May	9-Sep	13-May	20-Sep	4-Apr-99	14-Oct-95
Gatekeeper							14-Jul-06	2-Sep-10
Marbled White	19-Jun	4-Aug	23-Jun	6-Aug	28-Jun	4-Aug	19-Jun-17	26-Aug-08
Grayling	6-Jul	1-Sep	26-Jun	20-Aug	27-Jun	25-Aug	18-Jun-11	11-Sep-05
Small Pearl-bordered Frit.	24-May	7-Aug	26-May	13-Aug	25-May	26-Jul	15-May-11	13-Aug-18
Dark Green Fritillary	14-Jun	2-Sep	10-Jun	19-Sep	16-May	23-Sep	16-May-19	23-Sep-19
Silver-washed Fritillary	1-Jul	1-Jul	4-Aug	18-Aug	4-Jul	24-Aug	1-Jul-17	24-Aug-19
Red Admiral	5-Mar	24-Dec	6-May	17-Nov	17-Feb	2-Nov	23-Jan-06	28-Dec-07
Painted Lady	8-Apr	30-Oct	4-May	10-Oct	22-Feb	23-Oct	22-Feb-19	7-Nov-03
Peacock	8-Jan	11-Nov	22-Mar	15-Nov	14-Feb	3-Dec	8-Jan-96/17	23-Dec-05
Small Tortoiseshell	13-Feb	14-Nov	8-Mar	24-Oct	15-Feb	9-Dec	1-Jan-05	27-Dec-05
Camberwell Beauty							6-Jul-06	10-Sep-06
Comma	28-Feb	5-Nov	24-Mar	29-Oct	21-Feb	2-Nov	3-Feb-07	18-Nov-08
Small Copper	8-Apr	15-Oct	5-May	12-Nov	21-Mar	18-Oct	21-Mar-19	12-Nov-18
Purple Hairstreak	12-Jul	26-Aug	30-Jun	29-Sep	23-Jun	24-Aug	23-Jun-19	29-Sep-18
Green Hairstreak	9-Apr	1-Jun	28-Apr	11-Jun	17-Apr	19-Jun	29-Mar-12	27-Jul-98/08
White-letter Hairstreak	17-Jun	10-Aug	25-Jun	12-Aug	29-Jun	9-Aug	15-Jun-11	29 Aug 16
Holly Blue	8-Apr	19-Sep	24-Apr	9-Oct	29-Mar	5-Oct	26-Mar-12	21-Oct-06
Brown Argus	18-May	2-Sep	15-May	9-Sep	13-May	17-Oct	23-Apr-11	21-Oct-12
Northern Brown Argus	18-May	25-Jul	31-May	2-Aug	23-May	5-Aug	18-May-17	7-Sep-16
Common Blue	18-May	15-Oct	14-May	25-Sep	30-Apr	8-Oct	15-Apr-11	26-Oct-08

New earliest and latest dates in 2019 are shown in bold print. See also Erratum on page 25.
Other species: High Brown Fritillary – 30-July-2006, Long-tailed Blue – 12 / 13-March 2009 and 23-July 2013

**TETRAD OCCUPANCY IN NORTHEAST ENGLAND -
COMPARISONS FOR THE LAST FOUR AND TEN YEARS**

Tetrads in 2016 (% of all 709 recorded tetrads)	Tetrads in 2017 (% of all 594 recorded tetrads)	Tetrads in 2018 (% of all 586 recorded tetrads)	Tetrads in 2019 (% of all 765 recorded tetrads)	Species	Tetrads over the last 10 years 2010-2019 (% of all 1576 recorded tetrads)
381 (54%)	252 (42%)	317 (54%)	366 (48%)	Green-veined White	1012 (64%)
269 (38%)	233 (39%)	245 (42%)	400 (52%)	Small Tortoiseshell	921 (58%)
270 (38%)	253 (42%)	258 (44%)	423 (55%)	Peacock	916 (58%)
231 (33%)	378 (63%)	202 (34%)	371 (48%)	Red Admiral	820 (52%)
190 (27%)	185 (31%)	253 (43%)	321 (42%)	Orange-tip	748 (47%)
250 (35%)	189 (32%)	210 (36%)	256 (33%)	Ringlet	742 (47%)
279 (39%)	231 (39%)	265 (45%)	302 (39%)	Large White	739 (47%)
243 (34%)	212 (35%)	224 (38%)	263 (34%)	Meadow Brown	729 (46%)
227 (32%)	197 (33%)	232 (40%)	282 (37%)	Small White	697 (44%)
261 (37%)	260 (43%)	281 (48%)	332 (43%)	Speckled Wood	685 (43%)
218 (31%)	113 (19%)	151 (26%)	431 (56%)	Painted Lady	612 (39%)
117 (17%)	107 (18%)	148 (25%)	148 (19%)	Small Heath	488 (31%)
154 (22%)	131 (22%)	142 (24%)	193 (25%)	Small Skipper	485 (31%)
113 (16%)	102 (17%)	141 (24%)	173 (23%)	Wall	482 (31%)
107 (15%)	149 (25%)	154 (26%)	211 (28%)	Comma	446 (28%)
88 (12%)	96 (16%)	156 (27%)	181 (24%)	Small Copper	444 (28%)
128 (18%)	113 (19%)	145 (25%)	176 (23%)	Common Blue	427 (27%)
102 (14%)	83 (14%)	83 (14%)	123 (16%)	Large Skipper	328 (21%)
19 (3%)	12 (2%)	50 (9%)	122 (16%)	Holly Blue	168 (11%)
77 (11%)	41 (7%)	52 (9%)	60 (8%)	Dingy Skipper	157 (10%)
24 (3%)	19 (3%)	31 (5%)	36 (5%)	Dark Green Fritillary	124 (8%)
13 (2%)	11 (2%)	21 (4%)	32 (4%)	White-letter Hairstreak	81 (5%)
14 (2%)	6 (1%)	24 (4%)	21 (3%)	Purple Hairstreak	81 (5%)
19 (3%)	16 (3%)	25 (4%)	22 (3%)	Small Pearl-bordered Frit.	79 (5%)
13 (2%)	7 (1%)	25 (4%)	29 (4%)	Green Hairstreak	77 (5%)
10 (1%)	7 (1%)	14 (2%)	14 (2%)	Grayling	39 (2%)
6 (0.8%)	7 (1%)	7 (1%)	7 (0.9%)	Brimstone	39 (2%)
3 (0.4%)	3 (0.5%)	10 (2%)	18 (2%)	Brown Argus	27 (2%)
5 (0.7%)	6 (1%)	12 (2%)	6 (0.8%)	Large Heath	27 (2%)
16 (2%)	8 (1%)	6 (1%)	7 (0.9%)	Northern Brown Argus	24 (2%)
10 (1%)	6 (1%)	4 (0.7%)	6 (0.8%)	Essex Skipper	21 (1%)
-	3 (0.5%)	-	1 (0.1%)	Clouded Yellow	13 (0.8%)
2 (0.1%)	4 (0.7%)	1 (0.2%)	1 (0.1%)	Marbled White	7 (0.4%)
-	1 (0.2%)	1 (0.2%)	4 (0.5%)	Silver-washed Fritillary	4 (0.3%)
				Gatekeeper	2 (0.1%)
				Camberwell Beauty	1 (0.06%)
			1 (0.1%)	Small Blue	1 (0.06%)
32	34	33	35	Tetrads Species	1576 37

See previous reports for earlier 5-year periods, (1995-9, 2000-4, 2005-9, 2010-14)
Other species: High Brown Fritillary - 2006, Long-tailed Blue - 2009 and 2013.

SUBMITTING MOTH RECORDS IN 2020

Over 1200 species of moth have been recorded in our region, some common and widespread, others represented by very few, or in some cases, only a single record. Submitting records of moths helps to improve our understanding of the distribution and abundance of these fascinating insects and to enable potential problems they may be experiencing to be detected. Separate databases are maintained for Durham and Northumberland and records should be submitted to the appropriate recorder depending on where they are made.

In all cases the following information should be recorded:

Species name:	Please indicate scientific and (where there is one) common names.
Location:	Where the moth was recorded.
Grid reference:	Ideally a six-figure grid reference for the location.
Vice County:	66 for Durham, 67 for South Northumberland and 68 for North Northumberland.
Date :	For light trapping records the convention is that the date should be that of the evening when the trap is set rather than the morning when it is emptied.
Recorder:	Name of the person who caught/observed the moth(s).
Determiner:	The name of the person who identified the moth(s) (if different to the recorder).
Life cycle stage:	i.e. adult, pupa, caterpillar or egg.
Quantity:	The number of each species recorded.
Method:	Type of trap, field record, or how the moth was caught.

Durham (Vice County 66)

Records should be submitted to either of the joint moth recorders for Durham:

Keith Dover

4 Lindisfarne Avenue
Chester-le-Street, Co. Durham
e-mail: keithdover99@gmail.com

Tim Barker

26 Farrier Close
Pity Me, Durham, DH1 5XY
e-mail: timvc66@uwclub.net

A spreadsheet for the submission of moth records for County Durham can be downloaded from www.northeast-butterflies.org.uk/recording

Northumberland (Vice County 67 and Vice County 68)

Records should be submitted to **Tom Tams**, the moth recorder for Northumberland, 191 Links Road, Tynemouth, Northumberland. Tel: 0191 272 8499

e-mail: tom-tams@blueyonder.co.uk or recorder@northumberlansmoths.org.uk

Full details for submitting records in Northumberland, including a downloadable spreadsheet are given at www.northumberlandmoths.org.uk.

Validation

It is important that records are accurate and based on correct identifications and one of the responsibilities of the County Recorders is to scrutinise submitted records and check that this is the case. For any records of rare species, easily confused species or records of species that are outside their usual geographic range or flight period they may ask for supporting evidence to be supplied before the record is accepted. Suitable evidence may include good quality photographs, or sight of the actual specimen (moths can be kept captive for a day or two in a pot in a cool place

SUBMITTING BUTTERFLY RECORDS IN 2020

Records are the bedrock of conservation and the North East Branch welcomes records of all species, for all dates and places, and of course for all forms.

As in previous years, there are two ways of sending your records in. For those without a home computer, the existing yellow paper casual record sheets will continue unchanged. However, if you have a PC, the Branch would strongly urge you to send in your records using a spreadsheet such as Microsoft Excel or equivalent. Each record should occupy one line and the format of the spreadsheet should look something like the following example:

	A	B	C	D	E	F	G
1	Name/s of recorder/s	NZ274423	Palace Green, Durham City	22-Aug-2019	Large White	7	
2	Name/s of recorder/s	NZ196858	Morpeth (riverside)	24-Sep-2019	Peacock	2	Very worn
3	Name/s of recorder/s	NZ2514	Baydale Beck Darlington	1-Jul-2019	Comma	1	<i>Hutchinsoni</i> form

Column A - Recorder/s names.

Column B - Grid reference, which should be two letters, (NT, NU, NY or NZ), followed by four or six numbers. The first two (or three) numbers are the Easting, read from the top or bottom of OS maps, the last two, (or three) numbers represent the Northing, read from either side of the map.

Column C - Site name. For obscure place names please include a nearby town or village.

Column D - Date-please try to follow the format shown, **(this is really important)**

Column E - The full name, not abbreviated, of the species seen.

Column F - **Please give the actual number seen if possible**, we prefer not to use letters for abundance, (A,B,C,D,E). For larva (L), ova (O), pupa (P) or mating (M) records, please use the appropriate code letter, optionally adding numbers seen.

Column G - For any comments you may wish to add.

Optionally, you can add a habitat code to an extra column, (column H), if you wish.

A blank spreadsheet, with the date formatted, is available, if needed, from the website. Electronic records are most easily sent as an email attachment. The deadline for records to be included, and credited, in each Annual Report is 30th November of each year.

Please send all records, wherever you live to

records@northeast-butterflies.org.uk

Paper records

Roger Norman,
1 Prestwick Gardens
Kenton,
Newcastle upon Tyne NE3 3DN

Your Branch Committee for 2020

Branch Treasurer

Steve Kirtley
Tel: 01325 460 198
Email: stephenkirtley2@gmail.com

Chair Vacant

Membership Secretary

Peter Webb
Tel: 01833 650 772
Email: apwebb@uwclub.net

Butterfly Recorder (Northumberland)

Stephen White
Email: steve-aws@hotmail.co.uk

Butterfly Recorder (Durham)

Steve Austin
Email: dunelm300@sky.com

Conservation Officer (Northumberland)

David Stebbings
Tel: 0191 285 9097
Email: david.stebbing@blueyonder.co.uk

Moth Recorder (Durham)

Keith Dover
Tel: 0191 388 9640
Email: keithdover99@gmail.com

Website Manager & Newsletter Editor

Jonathan Wallace
Tel: 0191 274 4303
Email: jonathan@cherryburn.com

Tansect & Wider Countryside Butterfly & WCBS Co-ordinator

Val Standen
Email: Valerie.standen@hotmail.co.uk

Temporary Conservation Work Party Co-ordinator (Durham), Associate committee member

Michael Harris Tel: 0191 522 0160 michaelsharris@talktalk.net

Committee Members

Julie Lowther
Stephen Lowther
Helen McDonald
Coralie Niven
Roger Norman Tel: 0191 285 8314
Dave Liddle

Email: stelow4@live.co.uk
Email: stelow4@live.co.uk
Email: helen.mcdonald02@gmail.com
Email: coralie.niven@durham.gov.uk
Email: roger@norman784.plus.com
Email: d.liddle01@btinternet.com

Branch website www.northeast-butterflies.org.uk

All Records records@northeast-butterflies.org.uk

Butterfly Conservation: Regional Office (Northern England)

Dr. D. Wainwright, Butterfly Conservation, Low Barns,
Witton-le-Wear, Bishop Auckland, Co. Durham, DL14 0AG
Tel: 01388 488 428 Email: dwainwright@butterfly-conservation.org

Butterfly Conservation

Company limited by guarantee, registered in England (2206468)
Registered office: Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP
Charity registered in England & Wales (254937) and in Scotland (SCO39268)



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