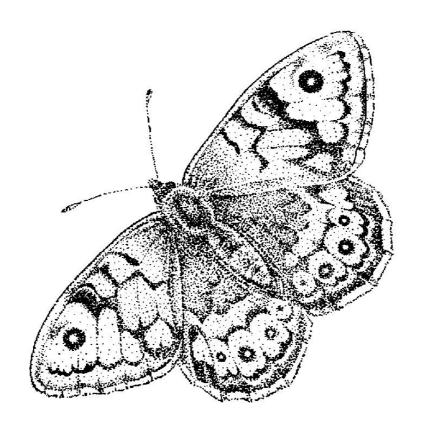
NORTH EAST ENGLAND BRANCH

BUTTERFLY CONSERVATION



BUTTERFLY SUMMARY 2018





Compiled by Michael Perkins, Stephen Lowther & Roger Norman

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

RECORDERS' REVIEW FOR 2018

2018 has proved to be a memorable year for many our prominent regional species, with the fantastic weather likely playing a key part in this.

The overall number of records for 2018 was significantly up on 2017 with 18114 records provided. This total includes transect records, casual records, Wider Countryside Butterfly Survey and the Garden Butterfly Survey records. Records from the Big Butterfly Count have for now, not been included within the annual reports due to irregularities within the records data set.

Given the long summer and dry weather that we experienced (one of the hottest on record), it's perhaps unsurprising that the butterfly numbers for many species were as high as they were.

Dingy Skipper numbers were considerably higher the 2017, with the annual total being one of the best ever figures, whilst Wall had its best year since 2013 and Small Heath numbers roughly doubled from 2017. This is a welcome upturn in fortunes for some of our regions most threatened and important species.

Our fritillaries also had impressive years in terms of numbers recorded with the added bonus of a partial second generation of Small Pearl-bordered in County Durham late in the summer, an event never previously seen in the North East. Silver-washed Fritillary also made a welcome return to their 2017 haunts, with some fantastic pictures to go alongside the records.

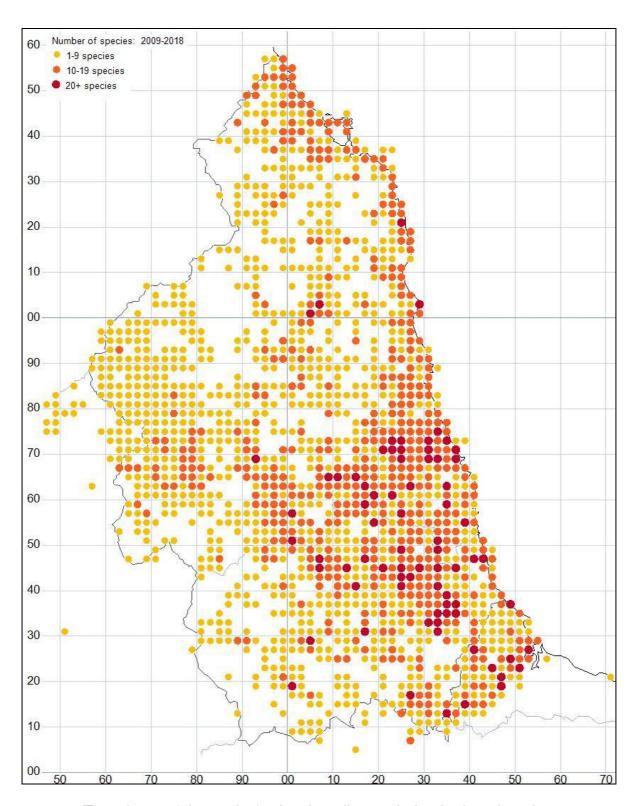
We have slightly changed the presentation of the tetrad occupancy figures on page 45 to show the distribution over the last decade, 2009-2018. We feel this shows a more up-to date distribution than in previous reports. For example, it shows the tremendous advance of Speckled Wood from being an extreme rarity twenty years ago to being our tenth most widespread species. For the next report, it is planned to show the distribution maps for each species as well over a rolling ten-year period.

The map on the next page shows that there are still areas of the north-east that have not been visited by our contributors. Indeed, recent discoveries show that White-letter Hairstreak is present in previously unsuspected and perhaps little-visited northerly areas of Northumberland, i.e. in VC68.

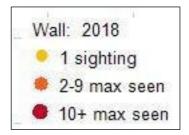
Last year was a truly exceptional year and we can only hope that 2019 proves to be similarly fruitful. Thanks again to all transect and casual recorders and all those involved in any additional nationwide schemes. The records you send continue to be of vital importance in providing key data to Butterfly 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 always, all the best for 2019 and let's hope for good weather!

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



Tetrad map, (2km x 2km), showing all records for the last decade 2009-2018



Enlarged example of colour key for the species-account maps for 2018

WEATHER SUMMARY: 2018

Durham University Observatory, County Durham Elevation: 100 metres (328ft), Grid Reference NZ 267 415

TEMPERATURE, RAINFALL and SUNSHINE and DIFFERENCES from 1961 - 1990 AVERAGES							
Month	Mean (^o C)	^o C Difference	Rain (mm)	% of Average	Sun (hr)	% of Average	
Jan	4.1	1.1	63.4	107	53.9	101	
Feb	2.4	-0.8	39	94	73.4	113	
Mar	3.9	-1.1	86.4	169	71.1	67	
Apr	8.4	1.4	74	156	112.2	84	
May	12.1	2.2	24.4	47	241.7	144	
Jun	14.3	1.3	30.8	59	151.8	93	
Jul	17.3	2.5	56	109	185.3	120	
Aug	15.5	0.8	49.8	74	95.3	61	
Sep	12.9	0.2	46.8	84	114.4	92	
Oct	9.8	0	50.6	96	95.9	103	
Nov	7.5	1.8	62.4	101	42.3	64	
Dec	5.5	1.6	43.8	76	61.1	134	
2018	9.5	0.9	627.4	97	1298.4	97	

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.

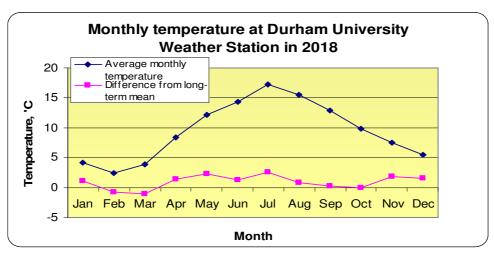
Acknowledgments: The Branch is grateful to Professor Tim Burt of the Department of Geography at Durham University for providing weather data via his website, (http://www.community.dur.ac.uk/durham.weather/).

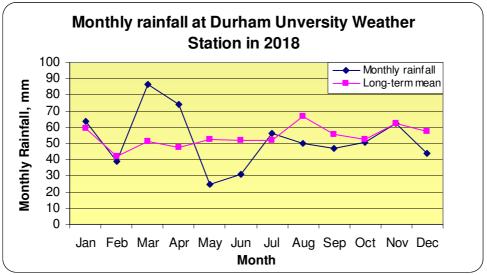
These comments have been taken from his website: For the year as a whole, 2018 was the equal 16th warmest since 1850. Only February and March fell below average whilst May and July were exceptionally warm, more than 2 ℃ above average. As noted above, it was the 7th warmest summer at Durham, perhaps the most memorable aspect of the year. Annual rainfall was a little below average whilst annual sunshine was a little above.

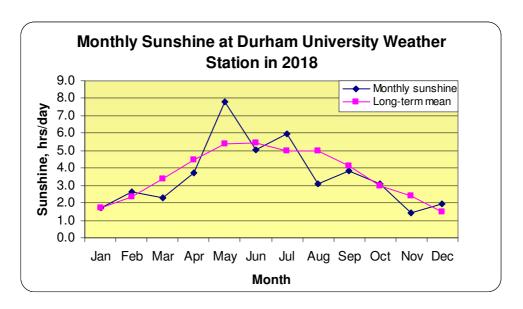
Please note that the long-term averages used are those for 1961-1990.

The species accounts show that the effect of the hot weather and the sunshine resulted in a productive year for many of our butterflies leading for example to an unprecedented partial second brood for Small Pearl-bordered Fritillary in County Durham.

The three graphs on the next page show the main features of the weather in 2018.

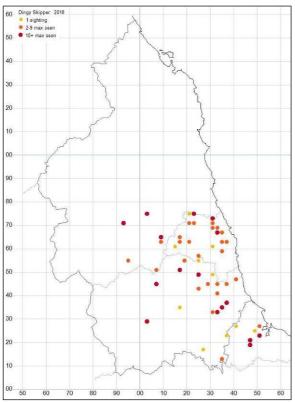






Dingy Skipper Erynnis tages

2018: Bob Mawson – yet again – recorded County Durham's first pair of Dingy Skippers on May 10th at Kelloe Bank on the Raisby Way. Northumberland's first records were four days later with no fewer than three recorders, (Keith Smith, Jonathan Wallace and Dave Stebbings), reporting the species from three different sites on the same day, (The Spetchells,



Paradise SNCI and Havannah LNR respectively). Keith's count of three adults was the highest with the others recording two and one respectively.

Peak flight period was on May 31st when a total of 111 Dingy Skippers was recorded from our counties. This date is identical to that of the previous year despite 2017's flight period having commenced almost two weeks earlier. Dave Liddle's and Roger Norman's respective counts of 34 and 29 from Burn Hill and Brenkley Old Pit Heap comprised the bulk of the 2018 total.

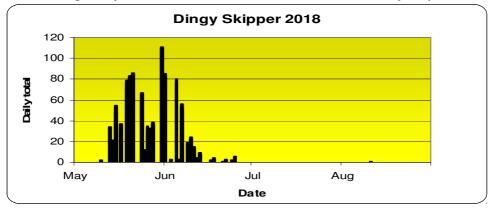
Our region's and County Durham's highest count was the 64 Dave Wainwright saw at Aycliffe Quarry on May 25th. Northumberland's best was Mike Taylor's highly impressive count of 51 that he recorded at The Spetchells on May 20th – an excellent count for any site but even more so for Northumberland where the species is relatively scarce.

The annual total of 1159 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 despite the best efforts of some to destroy its habitats!

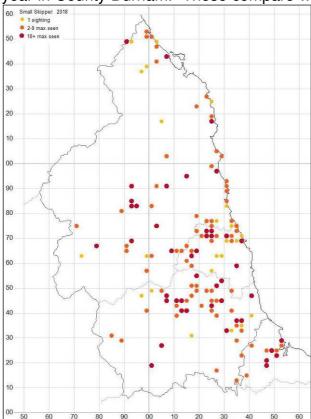
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Perhaps surprisingly in the light of June and July's scorching weather, there was only one record suggestive of a partial second brood: Philip Jordan and Jane Gray's record of a singleton on August 11th. Even more surprisingly, this butterfly was seen at one of our more northerly sites, Dinnington Pond. Contrastingly, County Durham's season closed with a count of six butterflies at Wingate Quarry on the relatively early date of June 25th, recorded by Gavin Struthers.

So, overall this was a 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.



2018: Reports began on 19th May when Steve Westerberg found eight at Warden (Northumberland) and were followed by two at Newburn Business Park (Northumberland) on 31st (Dick Gilhespy). Nine at Stargate Ponds on 1st June (Jill Stewart) were the first of the year in County Durham. These compare with first dates of 11th May 2017 and 9th June 2016



in County Durham, and 26th May and 27th June respectively in Northumberland.

The first double-figure count of the year was of 12 at Thrislington plantation on 10th June (Valerie Standen). Relatively small numbers continued throughout June but far greater numbers appeared in July. Peak days were 10th, when a total of 181 was counted at 14 sites, including 72 at Black Plantation near Lanchester by Keith Walton – the largest site Totals of 165-175 were count of 2018. recorded on 4th and 6th (compare 8th July 2017 with a peak of 351). Additional peak site counts were 60 at Burn Hill (Co. Durham) on 12th July (David Liddle), 51 at Saltholme on 19th and 50 at Spetchells on 1st July (Mike Taylor), while 42-46 were at Hamsterley Forest, Havannah NR, Longhorsley and near Netherwitton. counts were a slight improvement on 2017 but still well below peak site counts of 110-131 in 2016.

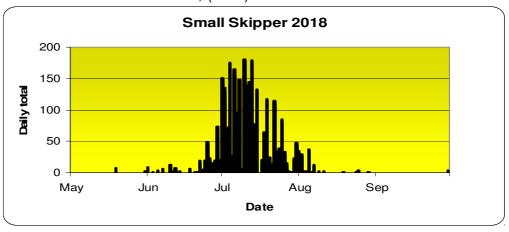
Numbers dropped off rapidly during August and final reports in that month concerned one at

Weetslade CP on 24th (Paul Tankard) and one at Morrison Busty Pit Yard on 29th (Melvyn Conlong). After a gap of one month, an isolated and final record concerned four at Bearpark Woods on 30th September (Elizabeth Clowes).

A total of 2,918 individuals was recorded across the region during the season, an increase on 2,184 in 2017 but less than the 3,760 noted in 2016. In 2018, an average of 6.3 individuals per report was evident, compared to 6.3 in 2017 and 7.2 in 2016.

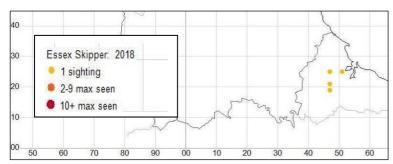
In 2018, Small Skippers had a flight season of 135 days (19th May- 30th September) and the species was noted on 50% of days during this period. This compares with 128 days (52%) in 2017 and 94 days (73%) in 2016.

As seen from the accompanying map, distribution was patchy in some areas of the region. Records well inland were uncommon, especially in Northumberland, where reports from the north of the county were also rather patchy. The species was recorded in 142 tetrads from a total of 586 tetrads that received a visit, (24%).



Essex Skipper Thymelicus lineola

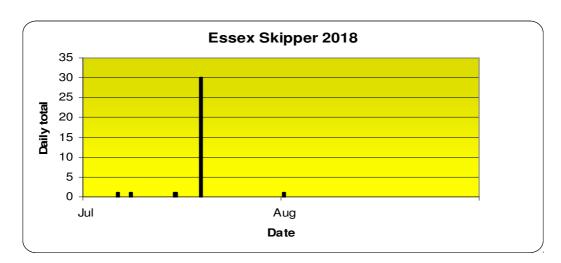
2018: One species for which we would like more records is Essex Skipper. Since its first discovery in 2015, the number of records has been declining quite markedly. From 37 records and 92 individuals in the first year of discovery, there were 17 records in 2016 and 5 in 2017.



Last year, 2018, there were also only 5 records with 4 individual records and one major one. What is causing this decline? It seems to be a lack of observers getting a good look at Small Skippers in south-east Durham. The weather during the flight period (July) was very hot so it should have

been a good season for Essex Skipper. Can 2019 improve on the poor tally of records over the last two years, and maybe even expand the recorded range? The map shows the location of the four tetrads, all at Tees-mouth. Martin Partridge found the first on 6th July at the Johnson Matthey Biodiversity site, followed by Julie Hogg two days later. Martin Blick recorded one at Portrack Marsh STW on 15th July with Dave Wainwright finding 30 there on 19th. The last was reported by Gavin Struthers at Cowpen Bewley on 1st August. The flight period was 27 days and the butterfly was seen on 19% of these. Dave Wainwright comments: "I found Essex skipper at Maze Park, just opp. Portrack on the south side of the Tees, on July 10th. As with the Portrack survey, I actually found higher numbers of Essexes than of Smalls. On both days I saw plenty that I didn't net and which I omitted from the records owing to not being sure of which species they were"

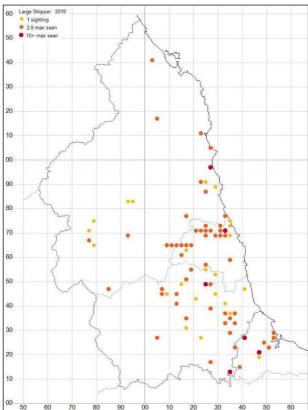
Dave's record of 30 at Portrack shows they are out there on Teesside and south-east County Durham. Let's have some more records!



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.

Large Skipper Ochlodes faunus

2018: A total of 226 records were received, these recorded 673 individual Large Skippers. The flight season lasted 70 days, and the Large Skipper was seen on 52 of these days, representing 74% of the flight period. The number of records received was virtually the same as the previous year, but the number of butterflies recorded was nearly 200 fewer than the previous year. The number of Large Skippers seen was well below average for the species and was the poorest year since 2012. This year continued a sequence of poor years and may indicate the Large Skipper is struggling in the region.

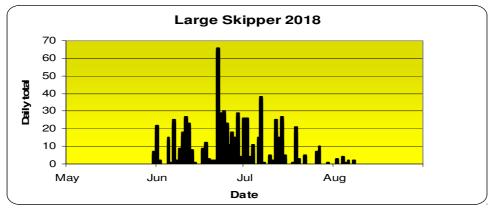


As is often the case with this species first sightings can be on the same day around the region. This is due to something called synchronised emergence, whereby adult Large Skippers emerge at exactly the same time even on different sites. It happened this year with first records from Stephen Goodhart, two at Bishop Middleham Quarry, Keith Walton, one also at Bishop Middleham Quarry, Jill Stewart, one at Stargate Ponds and Bewes Hill, Pippa Smaling two at The Whinnies, Darlington and David Stebbings one at Weetslade Country Park, North Tyneside, all on 31st May.

The main flight period lasted from the beginning of June to the last week of July, with a peak in terms of numbers seen throughout the region on 22nd June, when 66 Large Skipper were recorded. This was a somewhat lower peak than in recent years. The highest individual counts this year were much lower than usual also. The highest individual count came from Mark Wilson with 18 at Druridge Bay on 12th July, a traditionally good site for Large Skipper.

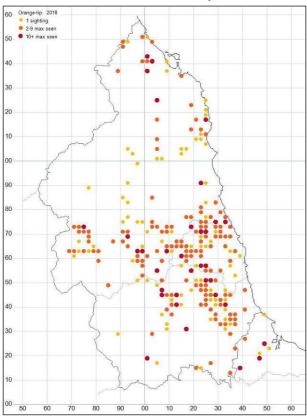
Gemma Vance recorded 15 at Murton Fields in North Tyneside on 22nd June and Jeff Fowler spotted 14 at Wynyard Woodland Park - Pickards Meadow on 7th July and the same number again on 14th July. In total there were only nine double figure counts received.

The main season ended as normal in the last week of July with only eight records after 30th July. The final sighting from Northumberland came from Stephen Westerberg who recorded one on 4th August at Druridge Pool on Druridge Bay. The final sighting of the year for County Durham was from Pippa Smaling who saw two at West Park Nature Reserve near Darlington on 8th August.



Orange-tip Anthocharis cardamines

2018: There were 729 records of Orange-tip in 2018, comprising 2475 individuals. This was an improvement of 20.5% (records) and 45.5% (individuals) on 2017's totals and was in fact the best year for this species since at least 2005. Although this is a spring flying species that might have been expected to be affected less by the hot summer of 2018 than later flying species, its flight period overlapped with the beginning of the fine weather in May and June and it appears to have benefitted. The flight period lasted 121 days and the butterfly was recorded on 46% of those days.

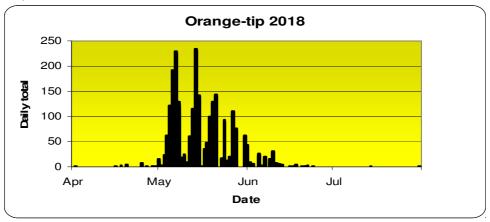


Orange-tip was first recorded on the 2nd April by Frank Lightfoot who saw one on the National Trust's Gibside estate near Rowlands Gill. The next record was not until two weeks later when Stephen Westerberg saw one on 16th April, in Elswick, Newcastle then, two days after, that John Lawson recorded one at Stillington Forest Park near Stockton on Tees on the 18th. The Orange-tip was recorded in dribs and drabs through the rest of April but the species really got going in May reaching its peak on the 14th when there were 53 records and a total of 234 individual butterflies counted.

The best individual count of the year was made by Julia Meldrum and Chris Tomlinson who counted 30 on their transect near Ulgham on the 14th May. Other notable counts were made by Mike Carr who recorded 29 on 6th May at Newtown Bridge, Chillingham, Dave Liddle who counted 28 at Burn Hill on 24th May and Julia and Chris again who counted 25 on their transect on 8th May.

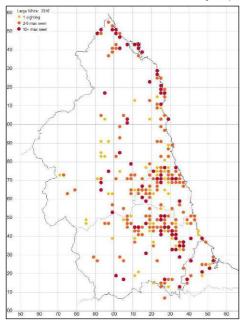
May and the first half of June although numbers declined from about mid-May. The last records for Northumberland were made by Dave King who recorded singletons on 22nd June at two locations close to Greenlee Lough. Two days later the flight season for Durham also appeared to be over when John Lawson recorded one at Stillington Forest Park, Stockton on the 24th. However, there were still two July records to come: on 14th July Alex Midson recorded one at Hardwick Park near Sedgefield and then on the 31st of July Ian Thompson recorded the region's last Orange-tip of the year at RSPB Saltholme.

Records of ova were submitted by Hew Ellis, Paul Robins and Jonathan Wallace and Paul and Jonathan also submitted records of larvae. These immature stages were recorded on Cuckoo Flower, Garlic Mustard and Dame's Violet.



Large White Pieris brassicae

2018: There were 1756 records of Large White in 2018 which comprised 7653 individual butterflies. Compared with 2017 this represented a 29% increase in the number of records and an impressive 145% increase in the number of individual butterflies counted. By these measures it was easily the best year for the Large White since 2009, when there were 2061 records of 7875 individuals, suggesting that this species was one of the beneficiaries of the hot, dry weather of 2018. The flight period lasted 189 days and the Large White was recorded on 152 of these days (80%).



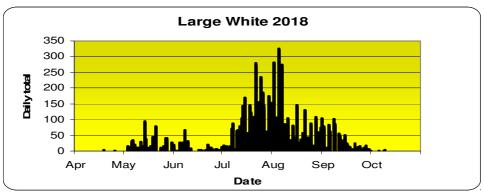
The Large White did not make its appearance in 2018 until 19th April when five observers shared the honour of the first record of the year: David Stebbings recorded one at Havannah LNR near Hazelrigg, Hewett Ellis saw one near Furnace Bridge, Bedlington, Jaci Beaven had one in a garden in Alnwick and Julia Meldrum and Chris Tomlinson recorded one on their transect near Ulgham. There were a further four records of the species in Northumberland during April but Durham had to wait until May before it saw its first Large White. This was recorded by Fiona Barlow at Low Newton Junction on 2nd May and was followed two days later by Alan Edward's record of 4 individuals in Castle Eden Dene NNR.

The peak of the first generation was on 14th May when there were 26 records of Large White were made involving 95 individual butterflies. This included an impressive count of 33 made by Lauren Withrington at Gibside near Rowlands Gill. The best count of the first generation,

however, was made by Mike Carr who recorded an even more impressive 66 at Linhope Burn in the Cheviots on the 8th June.

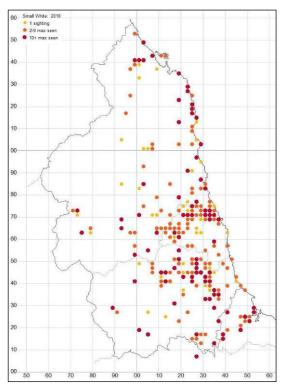
The second generation started to appear at the end of June/beginning of July and numbers climbed steadily through July and into August, reaching their peak on 5th August when there were 49 separate records comprising a total of 326 individual butterflies. As for the first generation, the highest second-generation count belonged to Mike Carr who counted 100 on the north Northumberland coast at Longbridge End, Beal on 8th September. This was the only individual count to run into three figures but other decent counts were made by Marion Gallon who counted 61 at Dunstan Heughs, near Craster on 21st July, Julie Roper who counted 58 at Howick on 23rd July and 51 at Howick on the 6th August and Amanda Crowley who counted 54 at Beadnell on 26th July.

Numbers of Large White dwindled away during September but its flight period continued well into October. The last record of the year for Durham was made on 9th October by Pippa Smaling at the Whinnies, Darlington but in Northumberland the final record of the year was two weeks after that on 24th October when Amanda Crowley recorded a singleton at Beadnell. Records of Large White larvae were submitted by Dave King and by Wendy Carter.



Small White Pieris rapae

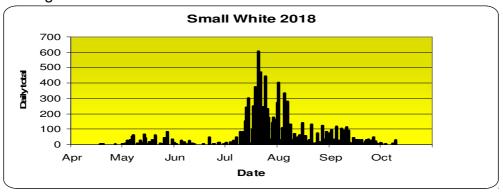
2018: A total of 1,692 records were received. These recorded 9,912 individual butterflies, this was a dramatic increase on the 2,627 recorded last year, and made it the best year on record in terms of numbers seen. This record breaking year followed the second poorest year ever in 2017, it is surprising how numbers of the Small White can fluctuate so greatly from year to year. The flight period covered 205 days and the Small White was seen on 162 of these days, representing 79% of the flight period.



Unusually there were no March records this year. possibly due to the very cold spell at the end of February and beginning of March delaying the emergence of the hibernating pupae. The first record of the season was from County Durham where B & J.A. Robinson saw one at South Hylton, Sunderland on 1st April. The first record from Northumberland was eight days later when Alnwick Wildlife Group spotted one at Smeafield, north Northumberland on 9th April. There were only a few records for April and the main emergence of the spring generation did not really start until the beginning of May, with a peak on 28th May when 84 were recorded in the region. There were only a few high counts for the spring generation, the best being 36 seen by Jackie Reeves at Dunstan Heughs, just north of Craster on the Northumberland coast on 26th Mav.

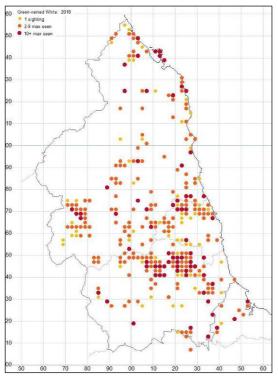
Numbers seen in the spring generation were about average, but the second generation was very strong this year with high numbers reported everywhere. It is possible the good summer weather provided ideal

conditions for the developing caterpillars and many more than usual survived to adulthood. The main flight period of the second generation was from mid-July to mid-August. There were several days during this period when daily counts throughout the region exceeded 300, much higher than normal. There were many individual high counts this year. The highest was from Mike Coates who estimated 500 at East Holywell in North Tyneside on 21st July, a huge number. Other counts of note came from Julie Roper, 138 at Boulmer, Northumberland on 25th July, Martin Blick with 106 at Portrack Marsh STW, near Stockton-on-Tees on 29th July and Pippa Smaling who saw 98 at West Park Nature Reserve, Darlington on 27th July. Although the main flight season was over by mid-August, after which numbers dropped, many sighting were still being reported through September and into October, with daily counts still in excess of 100 in early September. In fact Mike Carr reported a count of 100 at Longbridge End, Beal on the Northumberland coast as late as 8th September. For both Northumberland and Durham the final sightings of the year were on the same date. Jaci Beaven saw one in Alnwick and Frank Lightfoot also saw one at Gibside near Rowlands Gill, both records being on 22nd October.



Green-veined White Pieris napi

2018: A total of 1,610 records were received. These recorded 7,966 individual butterflies. The flight period covered 189 days and Green-veined White was seen on 153 of these days, representing 81% of the flight period days. The Green-veined White bounced back after a poor year in 2017. The number of butterflies seen this year was nearly double that of the previous year and was about average for the species.

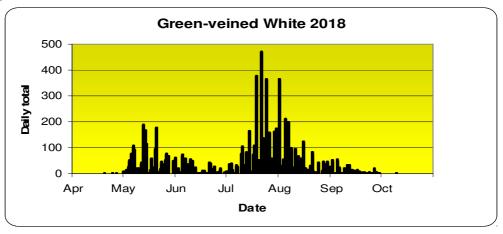


It was a late start to the season this year with only six records received in April. Malcolm Hutchison recorded the first, seeing one at East Ord, near Berwick upon Tweed on 5th April. The first record from County Durham was not until 20th April when Bob Mawson spotted one at Hurworth Burn near Trimdon. The spring generation really got going in early May with the peak being around mid-May with 190 being recorded in the region on 13th May. Spring generation notable counts came from Ian Findlay with 33 from Upper Teesdale on 18th May, Andrew Craggs, 31 on Lindisfarne on 15th May and Tim Wrigley with 25 at Liddells Wood near Hexham on 20th May.

The second generation, started to emerge in the second week of July, peaking in late July and early August, reaching a maximum of 471 recorded throughout the region on 22nd July. Unusually numbers recorded dropped dramatically after mid-August. This was possibly due to the hot summer weather enabling the spring hatched caterpillars to

develop quickly, pupate and emerge earlier, and the adults to complete the mating part of its life-cycle earlier. Good second generation counts came in from Robert and Molly Hardie who recorded 85 at Hunting Hall Farm, near Lowick, north Northumberland on 25th July. Dave Wainwright saw 50 at Blackbog Burn, near Chollerton, Northumberland on 27th July. Simon Hodgson counted 27 on the Tees Railway Walk, near Barnard Castle on 31st July. Many high counts were recorded in July whereas in most years they are in August, again perhaps a reflection of the hot summer weather accelerating the butterfly's development.

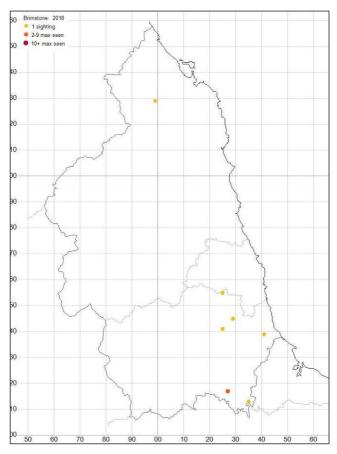
The butterfly continued to be recorded in small numbers right to the end of September and there were three October records this year. The final records for the year for both Northumberland and Durham were on the same day. M. & N. Tuck saw one at Carey Burn, near Wooler, and Keith Walton spotted one at Baxter Wood near Durham City both on 10th October making them the last records for the season. A record of a Green-veined White ovipositing on Hedge Mustard in Brierdene, Whitley Bay on 19th July was received from Hewett Ellis.



Clouded Yellow *Colias croceus.* There were no records of this migrant from the warmer climes In 2018.

Brimstone Gonepteryx rhamni

2018: The records for this species continue to follow a similar pattern to recent years. There is a growing trend in sightings and there also now seems to be an established presence in the West Park area of Darlington suggesting that the species is breeding there (Buckthorn is



present on the site) – as I write this, the butterfly has already been seen there in 2019. 5 individuals were seen there by Pippa Smaling on 14th May 2018 and there were other records mainly of 1 or 2 butterflies on other dates in May and then 25th June and 26th July (the final record for 2018).

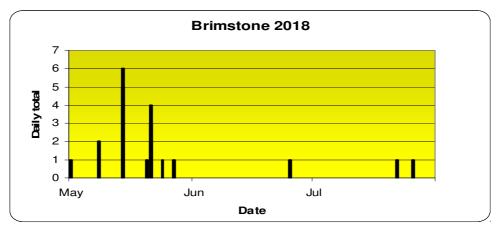
Away from West Park, there were sightings in a variety of locations: -

Singles were seen at Broompark by K Walton on 1st May (first record of the year) and 21st May, at Kibblesworth on 20th May by Julie Hogg as well as at Wooler on 24th May by Claire Ashby and at Low Newton on 22nd July by Dave Gosling.

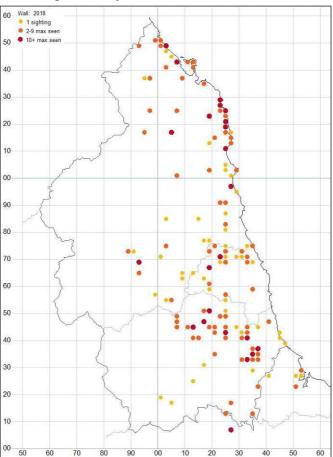
Pippa Smaling also had singles at the Whinnies nr Darlington on 14th and 21st May. This butterfly is a strong flyer and is known to wander over long distances. It is also generally very visible which helps with recording. Away from West Park, it could turn up virtually anywhere. However, there are recent repeat records for Brimstone at Low Newton where the foodplant does occur and it has also been proven to breed there in 2009

so this is also a site to pay particular attention to as well.

The impression given is that the butterfly continues to try to spread into our region but is being held back from establishing itself more fully here due to the scarcity of Buckthorns here.



2018: A total of 553 records were received which detailed 2,129 individual butterflies. The flight season lasted 173 days and the Wall was seen flying on 95 of these days, representing 55% of the flight period. Numbers of Wall seen in 2018 showed a considerable increase over the numbers seen in recent years, it was the best year since 2013. No doubt the hot dry summer benefitted this warmth loving species. Although numbers seen were nowhere near the peak years of the early 2000's, it was nevertheless a welcome reversal of fortune for this declining butterfly.

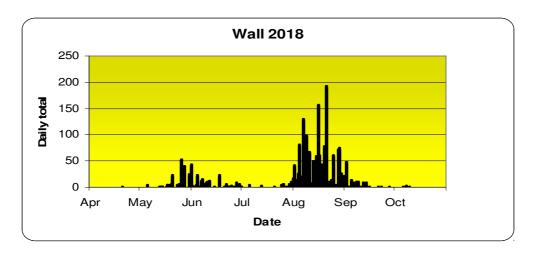


The first sighting of the year came from Northumberland, where Alnwick Wildlife Group spotted one at Branton near Powburn in north Northumberland on 21st April, about the normal date for seeing the first Wall. However, in County Durham the first Wall was not reported until 6th May, quite a late date, when David Gosling recorded one at Low Newton Junction, near Durham City. The first generation reached a peak in terms of numbers reported on 26th May when 53 were recorded throughout the region, this is almost identical to the peak of 54 for the spring generation in 2017. There were only a few high counts for the spring generation. The best was from Jackie Reeves who counted 17 at Dunstan Heughs near Craster on the Northumberland coast on 18th June. Mike Carr spotted 15 at Branton gravel pits in north Northumberland on 27th May and Stephen Goodhart saw 11 at Bishop Middleham Quarry on 26th May.

The second generation started to emerge during the last week of July and peaked in mid-August with 193 being recorded

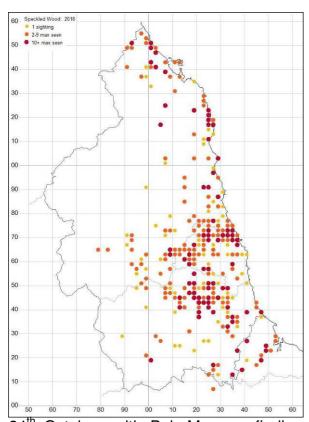
throughout the region on the 21st August. There was quite a strong second generation this year with peak numbers during August well up on the previous year. Having said that the high counts were not higher than normal which means more small counts were received from more locations which must be a good sign. Good numbers were seen by Joyce Clayton from her two transects at Doxford Farm near Embleton in north Northumberland; she spotted 39 on 16th August and 33 on 21st August. Other high counts came from V. Robins and V. Coy, 37 at Beal Point, Northumberland on 7th August and David Phillips and Phil Sharp, 26 at North Gare-Seaton Carew sand dunes on the Durham coast on 18th August. The traditionally good sites of Wingate Quarry and Bishop Middleham Quarry produced good counts from several recorders for the second generation.

The season extended into September this year with plenty of records during the first two weeks of that month. The last record for Durham came from Melvyn Conlong with two at Morrison Busty pit yard on 14th September. In Northumberland there were quite a few records after this for North Tyneside and along the coast. The last came from Amanda Crowley who saw one at Beadnell on 10th October, making it the last sighting of the year.



Speckled Wood Pararge aegeria

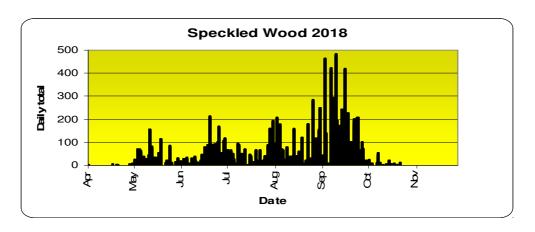
2018: Speckled Wood had another good year with the number of records again increasing, from 1892 in 2017 to 2102 in 2018. There was also a large increase in the number of individuals reported, up from 7389 in 2017 to 12047. The flight period was 228 days with the butterfly being seen on 177 of those, (78%). The first record of the year was of two on 4th April, by Alnwick Wildlife Group at Branton in Northumberland. Graham Mitchell recorded one at the Sherburn Railway transect for Durham's first on 18th of the month.



There appeared to be four peaks in population through the year, in early May, mid June, the end of July and through September. The first peak was on 14th May when 158 were reported, the mid June peak was of 214 on 22nd, the third peak was on 5th August with 208 found. In September, the daily total peaked at 484 on 12th. The highest individual count during the summer was of 142 by Julie Roper at Howick in Northumberland on 18th September. All the other three-figure counts were also in September, with 130 at Bearpark reported by Elizabeth Clowes on 9th and 116 by Julia Meldrum and Chris Tomlinson at the Crowden Hill Plantation transect on 12th. There were a large number of double figure counts reported. Both Malcolm Hutchinson and Julia Meldrum and Chris Tomlinson recorded 64, at Spittal Cliffs near Brewick on 31st July and at the Crowden Hill Plantation transect on 28th June respectively.

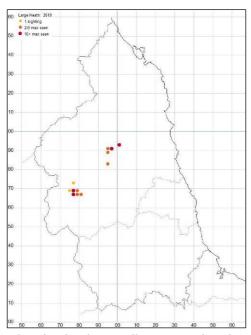
The last record for Northumberland, like the first, was by the Alnwick Wildlife Group at Branton on

24th October, with Bob Mawson finding the last for Durham at Trimdon Grange on 17th November. Hew Ellis reported Speckled Wood mating in his garden in Tynemouth on 5th September. All in all, this was a tremendous year for this relative newcomer to the region, with it apparently going from strength to strength. In 2018 it was the second most widespread butterfly, after Green-veined White, being seen in 48% of tetrads. Over the last decade it is now the tenth most widespread in the north-east.



Large Heath Coenonympha tullia

2018: 2018 was remarkable for its dry, hot summer and this was reflected in the dramatic increase in the numbers of Large Heath recorded in the region, a superb 162 compared to the previous highs of 38 in 2017, 26 in 2016 and 41 in 2015. This was even more remarkable compared to the 3 years preceding this when the highest number recorded was 19 in 2012 and the lowest was just 4 recorded in 2014. In recent years it is only 2011 with 130 adults recorded when numbers have approached those of 2018.



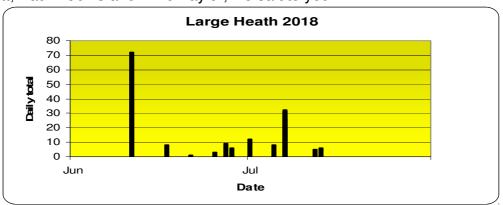
The number of records was also much improved, reaching double figures (17) for the first time in 8 years thanks largely to there being significantly more recorders venturing out into the peat bogs of Northumberland. Where normal years see 3-4 records made by 3 recorders, in 2018, there were 17 records submitted by 8 different recorders over 11 days, spanning a 33 day flight period between the 11th June and the 13th July.

There were 4 double figure records – the first two of these on the 11th June by Dave Wainwright – 40 at Twice Brewed (NY763675) and 28 at Crag Lough North (NY765682). Mike Carr recorded 12 on 1st July at Steng Moss (NY967912), where Large Heath are regularly recorded, and Dave Stebbings recorded 20 on the 7th July at Greenleighton Moss (NZ016925).

Paul Robins recorded 9 adults on the wing on the 27th June at Whinnetley Moss (NY814664) in an area of 50m x 50m but reported an estimated 80-100 adults on the

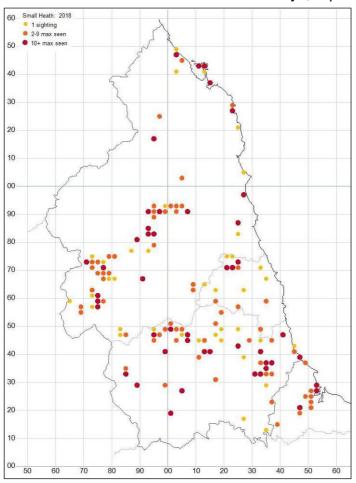
wing in the immediate area but had insufficient time to do more recording.

It was very gratifying to see so many more recorders for Large Heath in 2018 and their names appear in lights below in the hope this may spur them and others to repeat the exercise in 2019 - Dave Wainwright, Mike Carr, Dave Stebbings, Tim Wrigley, David James, Duncan Hutt, Paul Robins and Mike Taylor, we salute you.



Small Heath Coenonympha pamphilus

2018: A total of 587 records were received. These recorded 4,330 individual butterflies, this represents a big increase on the 2,627 recorded in the very poor year of 2017. Small Heath is usually a reliable species with numbers seen being fairly consistent from year to year. This year's figures are back up to normal for the species. The flight period covered 131 days and Small Heath was seen on 97 of these days, representing 74% of the flight period.

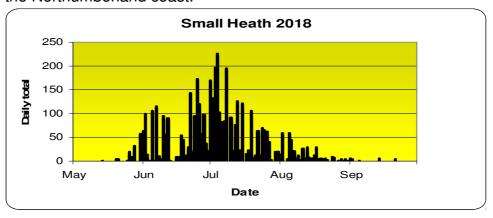


Small Heath is a butterfly with a long flight season. from late Mav September, with either an extended emergence or overlapping broods. This year there was a peak in sightings in early June, a main peak in early July, with a count of 226 recorded throughout the region on 4th July, followed by a gradual decline to the end of August. The first record of the year came from Pippa Smaling who saw one at The Whinnies in Darlington on 14th May. Two people saw Northumberland's first. Mollie Hardie spotted one at Cocklawburn Dunes and Malcolm Hutcheson also saw one at Cheswick both on 21st May, both sites are on the north Northumberland coast near Berwick. These dates are rather later than average for the species.

A high early season count came from Dick Gilhespy who estimated 100 Small Heath at Newburn Heughs just west of Newcastle on 2nd June, a huge count for so early in the season and in fact the highest count in the region for the year. Other notable counts came from Dave

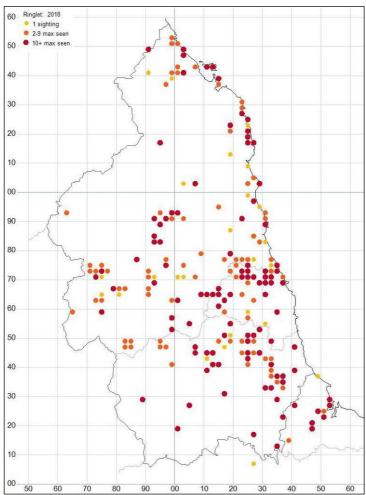
Wainwright who had high numbers on his Inkerman transect near Tow Law throughout the summer, peaking at 77 on 8th July. Mike Carr recorded 54 at Steng Moss, Northumberland on 1st July, Dave Liddle counted 48 at Burn Hill also on 1st July, and Graham Megson spotted 63 at North Gare, Teesmouth LNR on 3rd July.

Numbers were generally lower than normal in August this year and there were ten records in September. The honour of the last record from County Durham was shared by three people. Dave Wainwright saw two at Inkerman, Stephen Goodhart one at Bishop Middleham Quarry and Julie Hogg one at Wingate Quarry, all on 2nd September. For Northumberland the last record came quite a bit later on 21st September from Amanda Crowley who spotted five at Beadnell on the Northumberland coast.



Ringlet Aphantopus hyperantus

2018: Ringlet fared slightly better in 2018 than in 2017, increasing from a count of 8,516 adults to 10,915. Like 2017, there were only 9 three-figure counts and again these were all relatively low by the standards of good years, with only two above 200. The first of these was



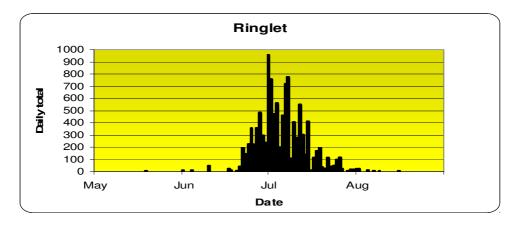
recent low of just 77 days in 2016.

Dave Wainwright's record of 250 on the 7th July at Liberty Hill (NY927908) and the last, Dave Liddle's transect count of 262 on the 12th July at Burn Hill (NZ067444).

The number of records was up on the previous year by over 100, at 739, suggesting that this was not a particularly good year for Ringlet despite the good weather. The dry summer will have meant less lush grass, the food plant of the larval stages.

The first sighting of adults on the wing was made about three weeks earlier than in 2017, by Steve Westerberg at Warden (NY9165) on the 19th May. The last sighting by David Turnbull at Alnwick Main Cemetery (NU194123) on the 30th August, a week earlier than in 2017.

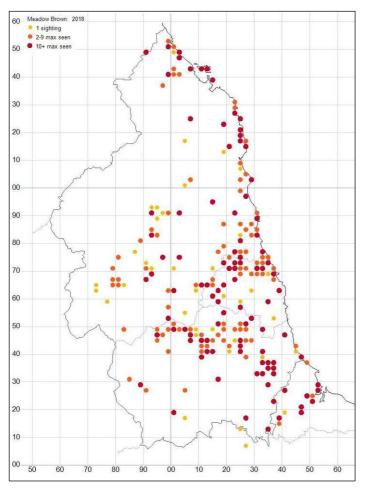
Adults were recorded on 63 days, spanning a flight period of 104 days between the first sighting in May and the last in August. This was slightly longer than the flight period of 91 days the previous year and compares with the recent high of 124 in 2014 and the



Meadow Brown Maniola jurtina

2018: A total of 921 records were received. These recorded 7,931 individual butterflies, an increase of over 1,800 on the previous year, but still well below average for the species. The flight period covered 107 days and Meadow Brown was seen on 85 of these days, representing 79% of the flight period. This was another poor year for the Meadow Brown, making it three in row. Given the good summer of 2018 it is surprising more were not seen.

As one of our most common wider countryside species it is worrying to see such a continuing decline in numbers. Let's hope the good weather during the breeding season this year led to more eggs being laid and an increase in numbers for 2019.

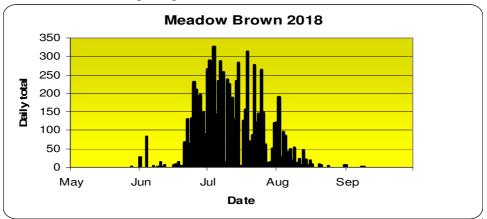


The season was rather late starting with Northumberland's first record coming from Mark Wilson who spotted one at Druridge Bay on 26th May. For Durham the first record was not until 1st June when Jill Stewart recorded 28 at Stargate Ponds and Bewes Hill. The season really got going from 21st June after which date numbers picked up rapidly.

The main flight period this year spanned the last ten days of June until the middle of August, with few records after 16th August. The peak of the season in terms of the day when most butterflies were reported was on 4th July when 327 individual Meadow Browns were seen throughout the region, closely followed by 19th July when 314 were seen. Only one treble figure count was received this year which was from Graham Megson who counted 121 at North Gare - Teesmouth LNR on 3rd July. Jane Lancaster recorded 84 at Newton Point on the north Northumberland coast on 4th June. Other high counts came from Kevin Redgrave. 79 on 3rd July and 83 on 10th July, both on the north from Newton Links

Northumberland coast and Julie Roper 64 at Boulmer on 25th July. Interestingly these and other high counts were all from coastal locations.

The main flight season was over by the middle of August, with only a few records in September. The season's final records were: for Northumberland, Marion Gallon reported seeing two at Dunstan Heughs on the coast on 8th September, for Durham Keith Walton saw two at Malton LNR near Lanchester a day later on 9th September. Both were quite early dates for last Meadow Brown sightings.



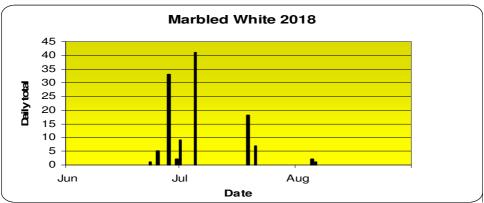
Gatekeeper *Pyronia tithonus* **2018:** Once again, there were no records in 2018 of this butterfly for which we are on the very northern fringe of its range.

Marbled White Melanargia galathea

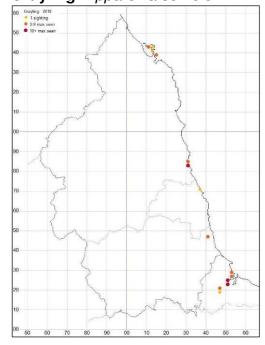
2018: Marbled White produced only 10 records in 2018, all of which were at Wingate Quarry. This species was introduced there as an academic experiment connected to climate change in 2000. Whilst the butterfly has survived and indeed some of the daily counts are quite substantial, it appears unable or unwilling to spread and colonise other apparently similar sites in County Durham. In previous years there had been indications that perhaps it was spreading its wings and expanding its range, but none of these indications has led to sustained expansion. This year none was seen outside the quarry.

The first record of the season was an early report by Bob Mawson of one on 23rd June. There were only three double figure counts over the next month with the maximum being 41 by John Corcoran on 5th July, (this was exactly half the 2017 peak count of 82 by Keith Walton on 2nd July 2017). Keith reported 33 there on 28th June and also the last record for the year of one on 6th August. There were 10 records on 10 days, so all the reports were on different days! A total of 119 butterflies were reported but clearly the same individuals were being seen over several days. The flight period was long at 45 days and it was recorded on 10 of them (22%). Perhaps the butterfly is unable to cope with the North-east weather away from the warmer micro-climate of the quarry despite the good weather we had in July. We must wait and see what future years will bring.

A late record just received from John Buxton of one at Hurworth-on-Tees, grid ref NZ308084 at the very southern tip of our region, on 2nd July 2017 is exceptional and must reflect a vagrant from the south.



Grayling Hipparchia semele



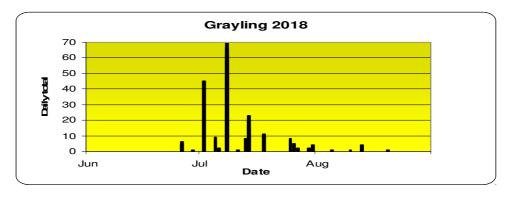
2018: The Grayling experienced a rather better year in our region than 2017. However, the annual total of 204 butterflies reported represents less than one third of that of our best-ever year (2006) but is in fact higher than that of any year since 2013.

The region's first records were from two VC66 sites on June 26th: Dorman's Pool, where Tim and Dorothy Nelson saw four, and Hartlepool where George Hogg Dick Gilhespy spotted pair. recorded Northumberland's first with an impressive count of 45 made on July 2nd at Cambois. This was our region's second highest count for 2018 and was only narrowly beaten by Julie Hogg's 49 from the Greenabella Marsh area on July 8th. Our only other double-figure count was one of 20 butterflies, made by Tim and Dorothy Nelson at Greatham Creek, also on July 8th. Not surprisingly, this was the date when the region's highest daily total was recorded and may have been

the peak of the species' flight period.

Durham's recording season concluded on July 31st when Graham Megson recorded four at North Gare. Several later sightings were made in Northumberland with Mike Carr recording a series of single figure counts from locations on Holy Island before members of Alnwick Wildlife Group recording our region's last on August 20th, a singleton again from Holy Island.

Overall, the Grayling appeared to have experienced a reasonable year in our region. One suspects it remains one of our most under-recorded species on account of the remoteness of some of its coastal haunts and the lack of accessibility to some of its brownfield ones.





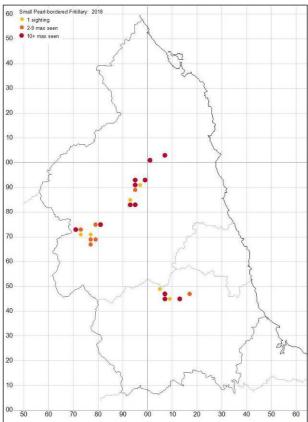
Painted Lady at Craster 9th September 2018 by Mike Carr



Small Coppers at Baxter Wood 13th September 2018 by Keith Walton

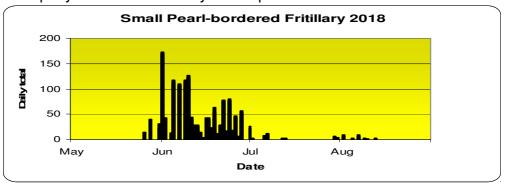
Small Pearl-bordered Fritillary Boloria selene

2018: Another really good, if not unique, year for the Small Pearl. As well as the normal early summer emergence we saw the appearance of a partial second generation in County Durham late in the summer, an event never previously seen in the North East. A very large number of records were received and record numbers of butterflies seen. However the figures may be distorted slightly as many people visited the County Durham sites this year to look for this attractive butterfly, and many more records than normal were received from relatively few sites, which would inevitably lead to double counting.



The butterfly was first reported from County Durham sites in the last few days of May and first days of June, recorded at Black Plantation from 26th May, Waskerley Way and Burn Hill from 1st June. In Northumberland, Debdon near Rothbury provided the first record on 31st May, closely followed by Sweethope Lough on 1st June. Numbers quickly reached a peak in early June and good numbers were seen throughout Black Plantation, like last year, that month. produced some good counts with more than 50 being seen by many recorders, but all the Durham sites did well. In Northumberland records were received from sites away from the such traditional strongholds. as Hadrian's Wall at Steel Rigg, from near Gunnerton and from Benshaw Moor, an area of peat bog to the south west of Harwood Forest. The normal flight season lasted until early July when the last record from Durham was from Burn Hill on 12th July, for Northumberland the last record was received from the Sweethope Lough area a day later on 13th July.

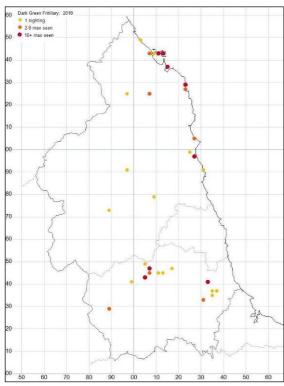
However, this was not the end of the flight season for the Small Pearl-bordered Fritillary for 2018. Reports came in late July and early August from a Durham site of freshly emerged adults. Searches then found them on four sites, Black Plantation, Burnhill, Horsleyhope Burn and Nanny Mayors between 30th July and 13th August. It must be assumed the long hot summer meant some caterpillars accelerated their development to complete their life cycle and emerge as a partial second generation. This partial second generation, with adults appearing in August, does occur in southern England but as far as is known this has never happened before in County Durham. A limited search of four sites in Northumberland failed to find any Small Pearls in early August, so the phenomenon may have been confined to County Durham in our area, although it was also reported from North Yorkshire, Cumbria and from Galloway in south west Scotland. Altogether a unique year for the butterfly in this part of the world!



Erratum First & Last Dates: For Small Pearl-bordered Fritillary the latest date for 2007 should read 31st July 2007 and the latest date for 2017 should read 12th July. The 7th August 2017 date quoted in the report was for larvae. The late dates for 2018 are unprecedented.

Dark Green Fritillary Argynnis aglaja

2018: The number of records of Dark Green Fritillary in 2018 was well up on 2017, suggesting that the species had a good year. There were 108 records of the Dark-green Fritillary in 2018 of a total of 566 individual butterflies, compared to 61 records and and 213 butterflies in 2017. These were the best results for the species since 2015. The species was on the wing over 102 days and was recorded on 49 of these (48%).

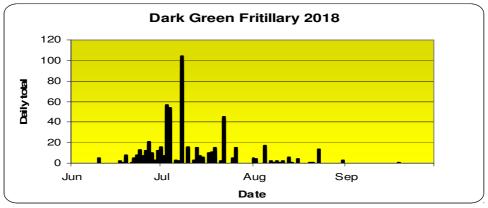


The first Dark Green Fritillary of the year was recorded by Val Standen at Thrislington Plantation on 10th June when she counted five individuals. Keith Walton followed with records on the 17th and 18th of June at Burn Hill and Longburn Ford Quarry respectively and there were several more County Durham records before Northumberland saw its first Dark Green Fritillary record of the year on the 22nd June. This was made by Mark Wilson who saw two at Druridge Bay. Numbers increased slowly, reaching a peak on 8th July when a total 104 Dark Green Fritillaries were counted across the region.

The highest count of the year was once again made by Mike Carr who counted 68 in the north dunes on Holy Island on 8th July. Holy Island also bagged the next four highest counts with John Corcoran counting 36 on 3rd July, Mike Carr recording 29 on the 22 July and Andrew Craggs recording 20 on 4th July and 18 on 27th June. Away from Holy Island and the adjacent mainland coast, the best count was at Horsleyhope Burn, near Waskerley on 4th

July when Daryl Cox counted 14. The map of the year's records shows three main clusters: on the Northumberland coast, especially around Holy Island, in the Waskerley area of Durham and in East Durham in the Thrislington-Raisby-Wingate area. Scattered records in the various forest blocks of Northumberland indicate, though, that rides and clearings in these areas are well worth prospecting for this species.

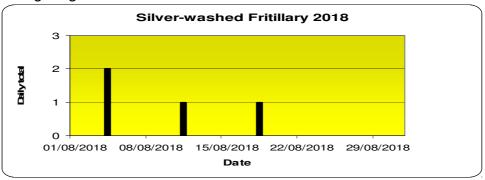
Small numbers of Dark Green Fritillaries continued to be recorded across the region throughout August and Northumberland's final record of the season came on the 31st of that month when Amanda Crowley recorded three at Beadnell. In County Durham however, the species continued for nearly another three weeks with Ian Findlay, as so often before, finding the last Dark Green Fritillary of the year in Upper Teesdale on the 19th of September.



Silver-washed Fritillary Argynnis paphia

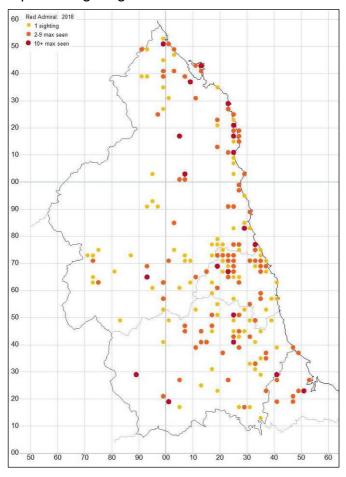
2018: Jeff Fowler and son confirmed their north of the Tees record of a single male in 2017 in Wynyard Woodland Park with photographs of male and female Silver Washed Fritillaries in the same location in 2018. Butterflies were recorded between the 4th and the 18th August with a peak of 2 on the 4th August.

Much further north a single flying Silver Washed Fritillary was reported on the 4th August on Waldridge Fell by Graham Beckwith. No photograph was taken, and this then must remain only a possible sighting.



Red Admiral Vanessa atalanta

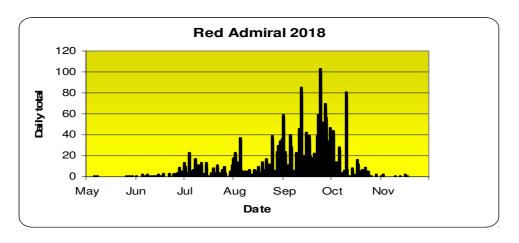
2018: After the dramatic rise in Red Admiral numbers in 2017 the reports for 2018 are massively disappointing. The numbers reported are back down to the 2016 numbers. The report for 2016 registered just 1595 insects, 2017 recorded 8838 individual butterflies. The reported sightings in 2018 were back to 1985 individual butterflies.



records were received.

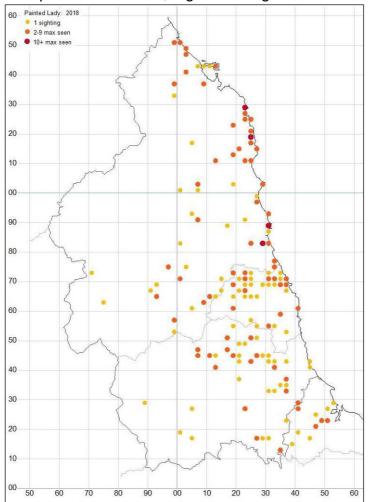
The flight period was much shorter, only 196 days and saw the Red Admiral flying on 142 of those days, 72% of the available time. The first one was reported by David Gosling at Low Newton Junction on 6th May, much later than the year before. The last of the season was seen by P Johnson on 17 November at Newton Hall, Durham, more than a month earlier than the previous year. Of the sightings, 550 were of single insects, spread throughout the region, 318 reports were in single figures and 29 in double figures. The greatest number reported was, 24 individuals recorded at Alnmouth by Mike Carr on 15th September, unlike last years' remarkable figure of 250. There was no stand-out month during 2018. The 900 records received were equally spread over the summer months, very few reports were for May and for October and November.

Distribution was right across the North East England Branch area. Most records came from the Tyne Valley and Tyne and Wear, reports with Durham and Cleveland closely following, but in the north of the region, north of Morpeth, only 164 Red Admiral These figures are very disappointing after the amazing increase in 2017 and, after the good summer in 2018, it might be expected that the count would be higher. Perhaps the migration of the insects was disturbed in some way.



Painted Lady Vanessa cardui

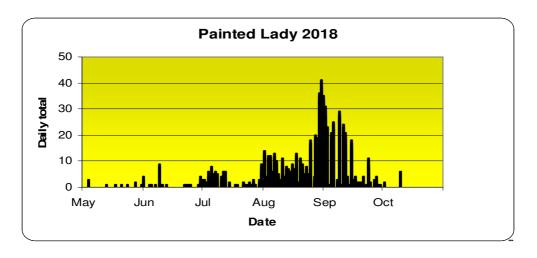
2018: The Painted Lady had a much better season in 2018 than in 2017 and although the flight season was much shorter, at only 160 days, the butterfly flew on 104 of those days, 65% of the available time. The first report was from Mark Wilson at Druridge Bay on 4 May, a month later than the previous year. The last was seen at Smeafield by The Alnwick Wildlife Group on 10th October, a good fortnight before the last record in 2017.



738 Painted Ladies were recorded, an increase of 433 from a total of 419 reports from across the region. This is a great improvement on a total of 305 butterflies in 2017. 282 of those recorded were for individual insects, only 4 sightings were in double figures, with a massive 23 being recorded by Hector Galley at Newbiggin Golf Moor on 3rd September.

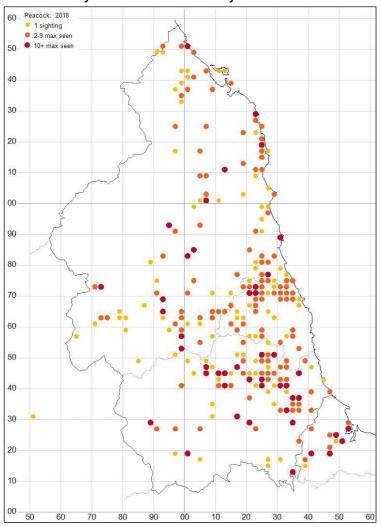
August was the best month to spot the Painted Lady with 326 insects reported, followed by September with However, there butterflies counted. were more records of multiple sightings The butterfly was in September. widespread throughout the region, Tyne and Wear and the Tyne Valley recording the most sightings, followed by County Durham. Northumberland produced 106 records from north of Morpeth with a good handful from the Berwick area.

Weather conditions and a better migration may account for the increase in numbers.



Peacock Aglais io

2018: The Peacock has made another small recovery after 2016's dreadful figures, 4362 individual butterflies were counted with 1241 records being received, six less than last year. In 2017, the count was 3285. In 2018 the flight period was 239 days and insects were seen on 142 of those days, just 59% of the time available. The first insect was reported by David Turnbull at Alnwick Cemetery on 22nd March, over two months later than in 2017. The last was seen by Peter Webb at Hury Reservoir 15 November.



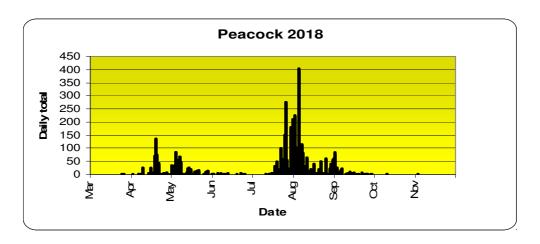
A total of 596 records were of individual insect sightings, with 80 records being in double figures. The highest number recorded on any day was 97 butterflies reported by lan Findlay in Upper Teesdale on 5th August closely followed by 89 insects seen by David Liddle at Byerley House on the same day.

August was the best month to see the Peacock. 1788 individuals were recorded during the month. However, 434 butterflies were recorded in April and 563 in May, a little earlier than usual. 1317 Peacocks were seen during the whole of June and July. There was no late flurry of insects in 2018, only 9 were recorded during October and November.

As is usually the case, the Tyne Valley and Tyne and Wear recorded the highest number of sightings, with County Durham close behind.

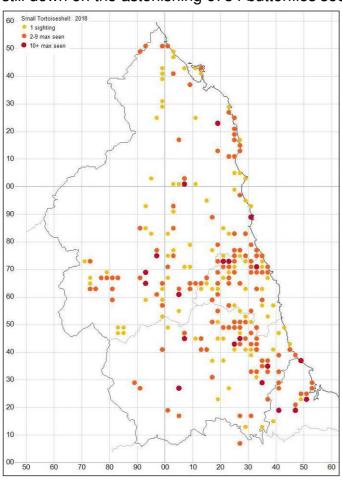
In comparison with the Red Admiral, whose numbers have almost magically bounced back, the Peacock increased more slowly. Weather conditions obviously play a part and it is shown by the rise in sightings in the early part

of the year, particularly in June and July, no doubt due to the good summer temperatures.



Small Tortoiseshell Aglais urtica

2018: This was a much better year for Small Tortoiseshells in our region. A total of 1089 records were received of 2580 butterflies. This is 1039 individuals more than last year but still down on the astonishing 6734 butterflies seen in 2015.



2016 and 208 on 6th April 2015.

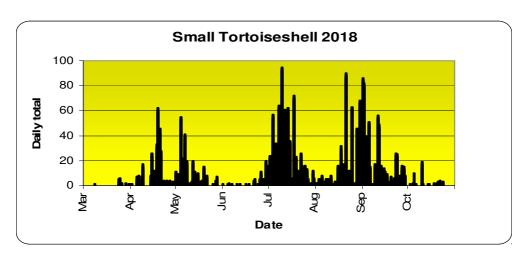
The first Small Tortoiseshell seen in 2018 was by Ann and Gordon Young on 8th March at North Shields, and the last recorded was seen by Graham Mitchell at Sherburn on the 24th October.

The highest individual count for the first flight period of 31 was recorded by Gemma Vance on the Murton fields on 4th May. In the second flight period from late June to mid August, the highest count was by Dick Gilhespy of 50 on 10th July at Preswick Carr and in the third flight period the highest count was by R. Mawson of 62 at Trimdon Gardens on 21st August.

In 2018 of the 166 days in flight, 68 days were in double figures compared with only 10 days in double figures in 2017. In 2015 there were 91 days in double figures and on 17 days over 100 were recorded.

The highest joint total recorded in any one day in 2018 was 95 on 10th July, compared with 62 on 8th April 2017, 82 on 21st April

Small Tortoiseshells were recorded on 166 days, being 72 % of the 231 days flight period. Fluctuating individual numbers for the last eleven years are 2008 - 1886, 2009 - 3509, 2010 - 4357, 2011 - 3746, 2012 - 2478, 2013 - 4633, 2014 - 4445, 2015 - 6734, 2016 - 1618, 2017 - 1541, 2018 - 2580. 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 has been encouraging.





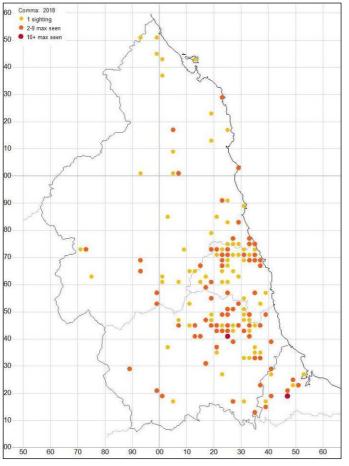
Small Pearl-bordered Fritillaries at Waskerley Way, 13th June 2018 by Keith Walton



Green Hairstreak by Mike Carr, Dipton Woods, 7th May 2018

Comma Polygonia c-album

2018: The first Comma of the season was seen on 24th March by Louise Hislop in a garden in Wylam. This was later by a month than in 2017. The last one, on 29th October was spotted at Newbiggin-by-the-Sea by Graeme Bowman, just a little earlier than the last year.

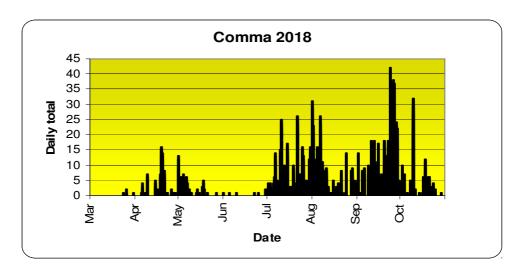


The flight period was slightly shorter than the previous year, however, the butterfly flew during 65% of the total flight time, one hundred and forty-four days from a total of two hundred and twenty possible days. This was an increase of 11% of the available time, due perhaps to the long sunny spell during the summer.

The Comma fared much better than in 2017. One thousand, one hundred and fourteen Commas were recorded during the season, four hundred and thirty-four of those were single insect sightings. This total is considerably more in comparison to 2017, when five hundred and fifteen individual butterflies were recorded. This year there were three records of sightings in double figures, the highest number being counted at Broompark Picnic Site, when fourteen were see by Keith Walton on 24th September.

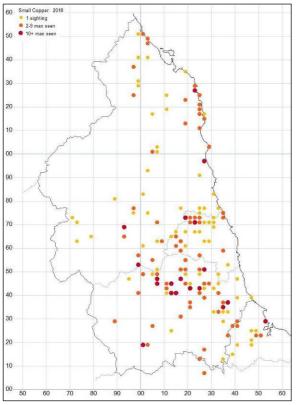
The count for 2018 is more than twice as many as the previous years' total. This year, September was the best month to see a Comma, when three hundred and ninetynine individuals were seen. Two hundred

and fifty-three butterflies were recorded in July, and August produced two hundred and fifteen sightings. As in previous years, most sighting were in the southern parts of the region. Only nine records came from north of Morpeth in 2017, there were twenty-eight records for 2018 with seven sightings from the Berwick area. 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

2018: It was 5th May when the first Small Copper of the year was noted, a single at Kelloe Bank in County Durham (R. Mawson). The first in Northumberland followed on 12th May, when Mike Carr reported one at Druridge Pools (the first reports of adults on the wing in 2017 were 8th April in Co. Durham, and 2nd May in Northumberland). Generally small numbers followed during the remainder of May.



Distinct peaks in total numbers recorded were evident in early June and early to mid-August. Keith Walton recorded some notably large concentrations for the species (all in Co. Durham), 93 at Waskerley Way on 5th June and 39 at Deerness picnic site on 3rd August, while 42 were at Burn Hill on 13th August (David Liddle). Also in County Durham, counts of 25-29 also came from Hedleyhope Fell and Malton picnic site (near Lanchester). In Northumberland, peak site counts were more modest and involved 18 at Prestwick Carr on 28th September (Roger Norman), and 12-14 at Derwent Reservoir, Druridge Bay, Havannah NR and Newton Steads.

In August the peak day count was on 7th with 121 at 18 widespread sites, and in June, 109 were at seven localities on 7th (including 71 at Waskerley Way).

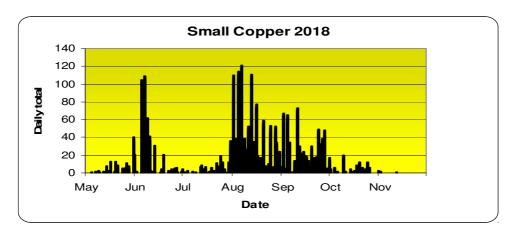
Numbers tailed off during October, when one to nine were at 20 scattered sites. The final records for the year involved one at Hauxley (Northumberland) on 25th October (Paul Tankard),

and one at Low Barns Reserve (Co. Durham) on 12th November (Dave Wainwright) (compared to 28th September and 15th October in Co. Durham and Northumberland respectively in 2017).

A flight season of 192 days in 2018 was similar to 191 in 2017 but more than 157 in 2016, and Small Coppers were noted on a total of 140 days (73%) during this period (compared to just 99 days (52%) in 2017).

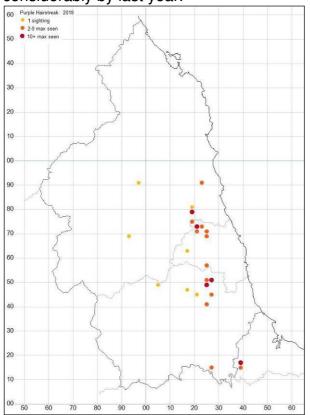
A total of 2677 individuals recorded in 2018 was a vast improvement on the 531 in 2017 and 288 in 2016. An average of 4.0 butterflies per report was also higher than 2.1 and 1.8 in 2017 and 2016 respectively.

The butterfly was found in 156 tetrads from a total of 586 tetrads visited, (27%).



Purple Hairstreak Favonius quercus

2018: There were 59 records submitted by 18 different recorders this year which was up considerably by last year.

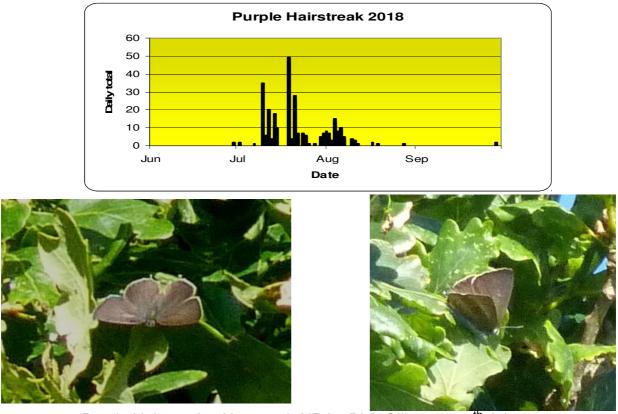


The first record was submitted by Julie Hogg on the 30th June where she saw 2 Purple Hairstreaks at Hoppers Wood, Aykley Heads. Dick Gilhespy counted 35 at Havannah Nature Reserve a high count that was only bettered by Graham Beckworth who counted an incredible 47 individuals on 3 Oak trees at Waldridge Park on the19th July. There were 3 counts of 20 and over and a further 3 counts in double figures. This seems to suggest a good year for Purple Hairstreaks. The final record was from Frank Lightfoot who reported 2 Hairstreaks at Gibside Gardens late in the season on 29th September.

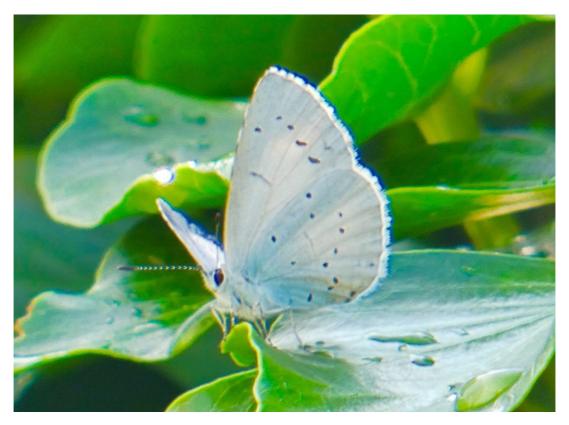
This butterfly was recorded this year over 4 months June, July, August and September. The first record was 30th June and the last record being 29th September.

On a final note most sightings are seen with its wings shut but when seen with its wings open showing the glorious purple that gives it its name it is a very fine butterfly and well worth the trouble and effort 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. Two shots of this very hard to photograph butterfly are shown below



Purple Hairstreaks, Havannah NR by Dick Gilhespy, 12th July 2018



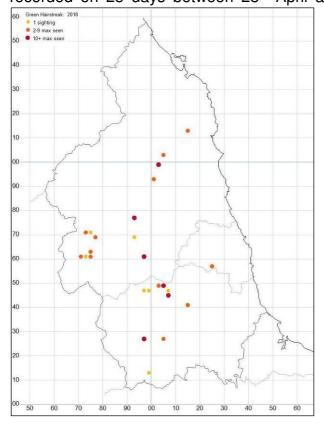
Holly Blue by Sally Davies, at Chester-le-Street, 27th July 2018



Northern Brown Argus showing white spots at Bishop Middleton Quarry, by Keith Walton

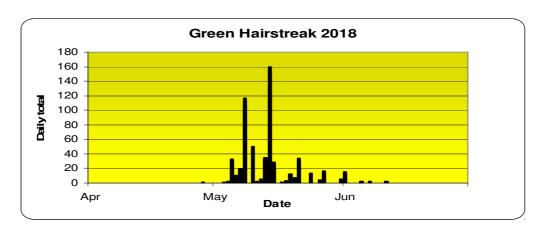
Green Hairstreak Callophrys rubi

2018: 66 reports from 18 observers were received. In total 580 individual butterflies were recorded on 25 days between 28th April and11th June. The numbers recorded were the



highest for this species this century even surpassing 2011 when 526 were recorded. The first record of the year was on 28th April when Chris Barlow recorded a single butterfly flying in Dipton Woods. The last record was Dave Wainwright's on 11th June of 2 butterflies flying close to Hadrian's Wall at Crag Lough, 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.



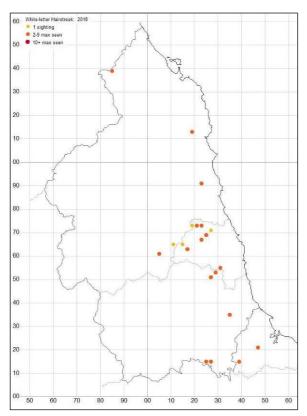
White-letter Hairstreak Satyrium w-album

2018: There were 43 records from 23 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 Dick Gilhespy on 25th June where he saw a single White letter Hairstreak at Gosforth Park on Wych Elm. Dick also saw the second of this butterfly two days later at Throckley Pond again a single and again on Wych Elm.

There were no sightings in double figures, the highest count coming from Julie Meldrum and Chris Tomlinson on 11th July at Crowden Hill Plantation and Mr R Mawson at Raisby Way Nature Reserve on 14th July where they counted 7 each at both locations. Graham

Beckworth counted 6 at the A1 Roundabout at Chester Le Street and Jonathan Wallace counted 6 also at Crowden Hill.



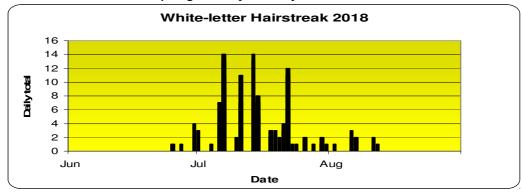
Most recorded sightings were in the month of July with only 3 sightings coming from June and 6 records from August, the latest being 12th August from Viv Coy at Washington. The flight period lasted 49 days.

Congratulations to Jonathan Wallace who recorded White Letter Hairstreak Larva on Wych Elm three times in May at Cowgate, Big Waters and Crowden Hill.

Congratulations are also due to four other recorders. Jill Mills and Ken Haydock recorded a single egg on 7th February at Cornhill. This is by far the furthest north record in our region and ties in with their findings on the other side of River Tweed in the Scottish Borders. On 21st July Stewart Sexton and John Rutter found adults at two sites on the River Aln in Alnwick, so recording the furthest north adult records for the north-east. Clearly there are more sites to find in the north of the region. We have already received more winter findings to be reported in the 2019 report.

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.



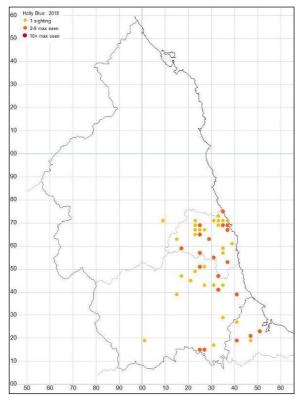


White-letter Hairstreak by Stewart Sexton at Alnwick 21st July 2018, our furthest north adult record.

A more detailed write-up of recent discoveries will appear in the 2019 autumn newsletter.

Holly Blue Celastrina argiolus

2018: At last a better year for Holly Blues in our region after last year (2017) being the worst since 2009. There were 203 records received of 267 butterflies compared with only 24



butterflies last year, 51 butterflies the year before and 101 in 2015. 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.

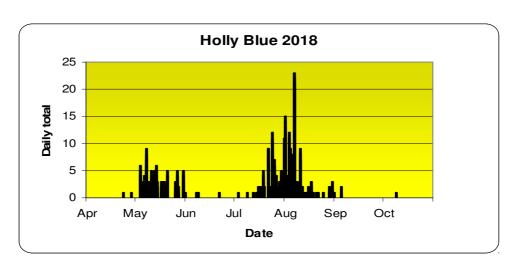
Of these 2018 records 159 were single specimens, 31 twos, 3 threes, six fours, one five and one seven. The count of seven was recorded by Graham Beckwith at Chester-le Street.

173 were recorded south of the Tyne, 91 in North Tyneside and Newcastle, two furthest north at Cramlington and one furthest west at Stamfordham.

The first Holly Blue seen in 2018 was by Hew Ellis on 24th April at Tynemouth and the last recorded was seen by Mike Coates at Northumberland Park, North Shields on 9th October.

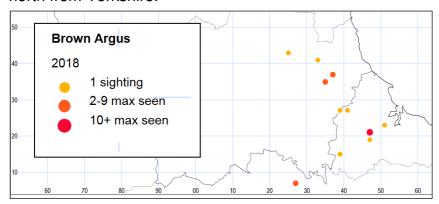
The first brood was seen on the wing from 24th April until 9th June, then there were only two weeks without records till the second brood was recorded from 22nd June until 5th September and then one late individual seen on 9th October. Holly Blues were recorded on 71 days compared with 23 in 2017 being 42% of the 169 days flight period. There were no records for the north of the region.

They were seen in 50 tetrads in 2018, compared with 31 in 2012 before these last poor years. The total number of tetrads that they have now been recorded in stands at 101 over the last decade.



Brown Argus Aricia agestis

2018: This year we had 30 records sent in of Brown Argus from fourteen different locations. The total of 70 butterflies seen flying broke all records! All the sightings were from the south of the region but widely spread. We are right on the northern limit of its range here, and it is possible the hot summer was ideal for the Brown Argus and maybe encouraged the butterfly north from Yorkshire.

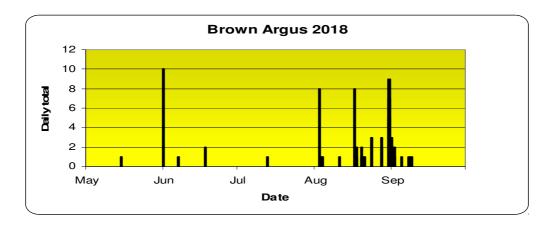


As in 2017 Martin Partridge findina reported sprina generation Brown Argus at the Johnson Matthey Biodiversity site near Billingham. He found them on three occasions and saw a total of 13 during these visits, the most being ten on 1st June. The only other spring sighting was from Graham Mitchell who saw one

Sherburn railway, south east of Durham on 12th June.

In August the second generation appeared in numbers not seen before in our region, from sites ranging over southern Durham and Tees-side. Most records were ones and twos but Martin Partridge again recorded the highest numbers at the Johnson Matthey Biodiversity site with eight seen on 3rd August and eight again on 17th August. Bob Mawson saw them in low numbers on several visits to Kelloe Bank, Raisby Way in August and September. Other records came from the Castle Eden area, Wingate Quarry, Coatham Stobs near Eaglescliffe, Seaton Carew sand dunes, Hartlepool and Stockton. The final record was from Jeff Fowler who spotted one at Wynyard Woodland Park - Pickards Meadow on 9th September. Many of the sites where the Brown Argus was seen have no Common Rock-rose growing. However, unlike the Northern Brown Argus the Brown Argus can breed on such sites as they can use alternatives plants in the crane's-bill family as caterpillar food plants.

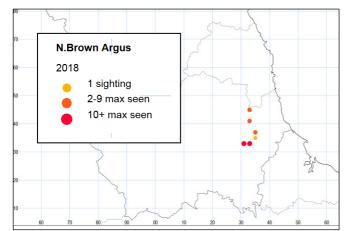
Bob Mawson also recorded eggs at Kelloe Bank during several visits in August and September and then larvae on two visits in October, perhaps boding well for next year. In summary 2018 was the best year ever for Brown Argus in our region.



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

2018: Not a great year for the Northern Brown Argus with only 188 butterflies recorded. However, the total absence of butterflies recorded at coastal sites suggests coverage of the butterfly's haunts was patchy at best. It is fortunate that dedicated transect recorders cover some of our inland sites as their data indicate that the low 2018 total derived from a genuine scarcity of the butterfly as opposed to merely reflecting low recording effort. Such information is particularly important given the species' high conservation priority.

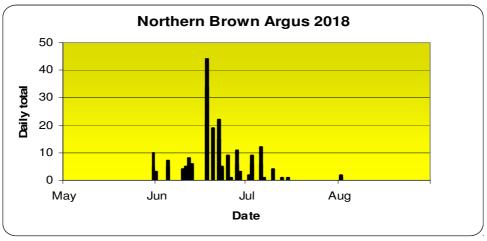


Stephen Goodhart and Keith Walton recorded our region's firsts from Bishop Middleham Quarry where they recorded no fewer than five individuals on their transect on May 31st. The next recorded sightings did not occur until June 5th when both Stephen – again on the Bishop Middleham transect – and Val Standen, walking the Transect at Thrislington NNR, recorded five and two respectively.

when a total of 44 butterflies was recorded – although it might be more accurate to suggest that this was the peak period at Bishop Middleham Quarry as this is from where all the butterflies were recorded. Stephen Goodhart (22), Bob Mawson (12) and Gavin Struthers (10) submitted the records. Stephen's count of 22 was our region's highest, narrowly beating the 19 recorded by Graham Beckwith at Thrislington NNR two days later. Our only other double figure count was one of 15 made by David James at Bishop Middleham Quarry.

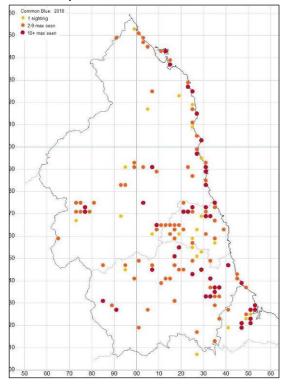
The season fizzled out with a series of low single figure counts. Val Standen's singleton recorded from her transect at Thrislington on July 15th is a fairly typical date for the flight period to finish. However, Richard Hockin recorded a later one from Little Wood LNR on August 2nd. This would be exceptionally late – though not impossibly so – for Northern Brown Argus at an inland site and illustrates the difficulties faced by recorders and determiners alike as the closely-related Brown Argus continues to spread northwards. The latter species does, of course, produce a second generation which spans the period from August to mid-September which, given the similarity of the two species, gives rise to immense confusion.

Targeted surveys of the Northern Brown Argus are set to continue in 2019. Should you wish to be involved, please contact Dave Wainwright who will provide maps showing where to look and instructions of how and what to record.



Common Blue Polyommatus icarus

2018: There were 669 reports in 2018 with 4486 individuals recorded between 14th May and 25th September with the butterfly reported flying on 110 days. This was by far the best year for this species since 2013 when 4980 had been recorded.



The first record of 2018 was on 14th May when Pippa Smaling recorded a Common Blue flying on her transect in West Park, Darlington. Common Blue Butterflies were then recorded across the region throughout the summer months with the last record, a single butterfly seen flying in Weetslade Country Park, recorded by Paul Tankard on 25th September. 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 Magnesian 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.

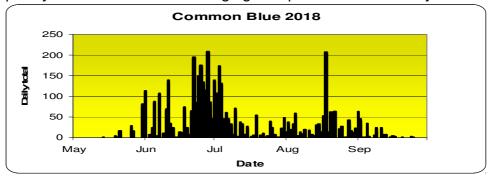
During 2018 the coastal regions provided a good number of records including the highest on the 18th August, 200 seen by David Phillips and Phil Sharpe on the dunes between North Gare and Seaton Carew. Graham Megson reported 63 butterflies flying at North Gare on 22nd August, Kevin Redgrave

84 at Newton links on 3rd July and 14 on the same site on 11th September. Mark Wilson recorded 49 Common Blues at Druridge Bay on 4th July.

On 11th June Graham Mitchell counted 103 flying at Dalton Park. This site, close to the shopping centre proved to be a good for Common Blue throughout the season with 24 recorded by Graham on 31st May and 55 at the same site on 20th August. Bishop Middleham Quarry had Common Blues flying from 26th May when Stephen Goodhart recorded 8 flying through to 16th September when he recorded 4. Numbers peaked on that site on 21st August when Stephen reported 43. Dave Wainwright counted 55 at Aycliffe Quarry on 7th June and Graham Beckwith recorded 52 flying at Wingate Quarry on 21st June, Keith Walton recorded 52 on Waskerley Way on 24th June and 51 on 27th June. Dave Liddle reported 40 at Burn Hill on 26th June and 46 on 1st July.

Brownfield sites in the east of the region hold some good colonies of Common Blue as was illustrated in 2018 by Stuart Pudney's reports of 7th June when he recorded 38 flying on sites at Brenda Road, Graythorpe and 29 at Cargo Fleet, Middlesbrough. The protection and management of habitats like these will be of vital importance to ensure the future stability of colonies of Common Blue butterflies.

After such a poor year in 2017 it is encouraging to report such a recovery in 2018.



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), Michael Harris, (Ringlet & Large Heath), Steve Kirtley, (Brimstone), Roger Norman, (Essex Skipper, Speckled Wood & Marbled White), Dave Stebbings, (Large Skipper, Brown Argus, Small White, Small Pearl-bordered Fritillary, Small Heath, Wall, Green-veined White & Meadow Brown), Dave Wainwright, (Dingy Skipper, Northern Brown Argus & 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.



Dark Green Fritillary on Holy Island by Mike Carr on 8th July 2018



Silver-washed Fritillary by Jeff Fowler at Wynyard Park on 11th August 2018

CONTRIBUTORS FOR 2018

T Allen, C Ashby, D Aplin, M Addis, T Allen, M Addis, S Austin, C Barlow, F Barlow, J Beaven, G Beckwith, K Boyle P Botcherby, M Blick, L Bentley, M Birtle, C Barlow, G Bowman, P Campion, V&J Carnell, T Carney, M Carr, W Carter, H Cessford, D Charlton, J Charlton, D Chrisp, P Chrisp, J Clayton, E Clowes, M N Coates, M Conlong, J Corcoran, T Coult, D Cox, V Coy, A Craggs, A Crowley, S Davey, A Davis K Dawson, T Dunbar, G Dunn, A Edwards, C Enderby, H Ellis, B & M Etherington, I H Findlay, J Fowler, K Fox, H Galley, M Gallon, D Gilhespy, S Goodhart, I & T Gray, J Gray, D Gosling, M & R Hardie, M S Harris, P B Hardy, K Haydock, S Hepworth, R Henderson, L Hislop, R Hockin, L.C. Hodgson, G Hogg, S Hodgson, J Hogg, S Holliday, M Holmes, H Hoskyns-Abrahall, P Howard, D Howdon, M Hughes, A & M Hutcheson, K Hutchinson, S Hutchinson, D & S Hutt, T Irvine, D James, P James, P Johnson, A Jones, K Jones, P Jordan, M Kirby, D King, S Kirtley, J Lancaster, J Lawson, D Liddle, F Lightfoot, C Lindsay, J Littlewood, N Lofthouse, G Lonsdale, D Madden, R Mawson, H McDonald, D McKeown, G Megson, J Meldrum, A Midson, J Mills, G Mitchell, A Morton, M Neil, T & D Nelson, C Niven, K & R Norman, R Pannell, M Partridge, D Phillips, J Phillips, C Powell, S Pudney, C Rawcliffe, K Redgrave, J Reeves, S Reid, T Richardson, A Roberts, P Robins, V Robins, B.A Robinson, J.A Robinson, J Roper, B N Rossiter, C Rowley, J Rutter, I Schofield, M Scott, S Sexton, P Sharp, P Smaling, K Smith, V Standen, D Stebbings, J Stewart, L Stobbs, G Struthers, T J Tams, P Tankard., M Taylor, I Thompson, A L Todd, C Tomlinson, M & N Tuck, D. Turnbull, E Turnbull, G Vance, D Wainwright, J Wallace, K Walton,, T Watson, P Webb, C Weightman, S Westerberg, T Wiffen, J Wilson, M Wilson, L Withrington, 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:

Beadnell 1 Amanda Crowley, (Coast Care volunteer)	
Beadnell1 Amanda Crowley, (Coast Care volunteer)	
Elizabeth Clowes, Bearpark Wood	
Stephen Goodhart, Bishop Middleham Quarry	
Lesley Hodgson, Dave Liddle, John Wilson Black Plantation	
Stephen Hutchinson, Brass Castle	
Dave Liddle Burn Hill,	
Dave Liddle Byerley House	
Alan Edwards Castle Eden Dene NNR – West end	
lan Schofield Cater House Colliery	
Berwick Wildlife Group* Cocklawburn Dunes	
Daphne Aplin Cowpen Bewley 2 (Woodland Park)	
Julia Meldrum, Chris Tomlinson Crowden Hill Plantation	
Joyce Clayton Doxford Farm Walk A and B (two transects, Co	oast
Care volunteer)	
Mark Wilson Druridge Bay	
Jackie Reeves, Marion Gallon Dunstan Heughs	
Helen McDonald, Lauren Withrington, Daniel Madden Gibside (National Trust)	
Jane Gray, Philip Jordan, James Littlewood Gosforth Park NR	
Alex Midson Hardwick Park	
Dave Stebbings Havannah LNR	
Dave Wainwright Hedleyhope Fell, & Inkerman (two transects	
Dave Liddle Horsleyhope Burn	
Molly Hardie, Robert Hardie Hunting Hall Farm	
Chris Powell Lanehead Quarry	
Tim Wrigley, Clare Lindsay Liddels Wood	
Andrew Craggs, (Natural England) Lindisfarne NNR	
Lynda Bentley Low Barns	
Fiona Barlow, David Gosling, Les Stobbs, Low Newton Junction	
Melvyn Conlong, John Wilson, Dave Liddle Morrison Busty Pit Yard	
Gemma Vance Murton Fields	
Dave Liddle Nanny Mayors	

Kevin Redgrave (National Trust) ... **Newton Links** Jane Lancaster (National Trust) **Newton Point**

North Gare, Teesmouth NNR Graham Megson Adam Jones, Tom Irvine, Jake Phillips, Tom Allen RSPB Saltholme

Graham Lonsdale, Graham Mitchell Sherburn Hill Graham Lonsdale, Graham Mitchell Sherburn Railway

Jill Stewart..... Stargate Ponds & Bewes Hill John Lawson, Gwynn Dunn..... Stillington Forest Park Steve Reid Tanfield Lea Marsh

Simon Hodgson..... Tees Railway Walk

The Whinnies LNR, (near Darlington) Pippa Smaling.....

Valerie Standen..... Thrislington Plantation

Tughall Mill, (Coast Care volunteer) Kate Jones

lan H. Findlay..... Upper Teesdale NNR Alan Davis, Paul Tankard..... Weetslade Country Park West Park, Darlington Pippa Smaling.....

Jeff Fowler Wynyard Woodland Park - Pickards Meadow

ERRATA for 2017: The transect walker for Cowpen Bewley 2 (Woodland Park) should have read Daphne Aplin, not Malcolm Birtle. Graham Mitchell should have been included as a walker for the Sherburn Hill and Sherburn railway transects. These errors arose due to 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 the following for the photographs and illustrations used in this report.

Front Cover	Wall	Terry Coult
Page 23	Painted Lady	Mike Carr
Page 23	Small Copper	Keith Walton
Page 30	Small Pearl-bordered Fritillary	Keith Walton
Page 30	Green Hairstreak	Mike Carr
Page 33	Purple Hairstreak (2)	Dick Gilhespy
Page 34	Holly Blue	Sally Davies
Page 34	Northern Brown Argus	Keith Walton
Page 36	White-letter Hairstreak	Stewart Sexton
Page 41	Dark green Fritillary	Mike Carr
Page 41	Silver-washed Fritillary	Jeff Fowler

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, Brimstone 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.

When processing and analysing eighteen 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.

^{*} Enid Turnbull, Pam Campion, Molly & Robert Hardie, Ian &Trudy Gray, Andrew Morton,

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 2016 to 2018. 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 – 2018 are included in the last two columns. Two earliest and six latest record dates, (shown in bold) were beaten or equalled in 2018. One or two dates may differ from previous tables due to additional records or reappraisal.

previous tables due to additional records or reappraisal. FLIGHT PERIOD TABLE								
Species 2016 2017 2018 Record earliest Record latest								
Dingy Skipper	8 May	16 Jul	28-Apr	25-Jun	10-May	11-Aug	18-Apr-03	22-Aug-09
Small Skipper	9 Jun	10 Sep	11-May	15-Sep	19-May	30-Sep	11-May-17	10-Oct-01
Essex Skipper	23 Jul	16 Aug	2-Jul	20-Jul	6-Jul	1-Aug	6 Jul-18	16 Aug-16
Large Skipper	5 Jun	23 Aug	25-May	6-Sep	31-May	8-Aug	19-May-07/11	11-Sep-12
Orange-tip	17 Apr	7 Aug	6-Mar	29-Jul	2-Apr	31-Jul	5-Mar-11	10-Sep-06
Large White	7 Apr	15 Oct	22-Mar	13-Oct	19-Apr	24-Oct	8-Mar-11	27-Dec-13
Small White	25 Mar	19 Oct	12-Mar	25-Oct	8-Mar	22-Oct	3-Mar-99	1-Nov-11
Green-veined White	17 Apr	8 Oct	15-Mar	30-Sep	5-Apr	10-Oct	8-Mar-11	28-Oct-11
Clouded Yellow	17 7 (2)	0 000	15-Aug	30-Aug	0 7 tpi	10 001	23-May-06	15-Oct-00
Brimstone	19 Apr	13 Sep	1-Apr	19-Sep	1-May	26-Jul	1-Apr-17	28-Sep-11
Wall	11 May	25 Sep	9-Apr	21-Sep	21-Apr	10-Oct	4-Apr-07	12-Nov-11
Speckled Wood	8 Apr	11 Nov	9-Mar	2-Nov	4-Apr	17-Nov	5-Mar-11	17-Nov-18
Large Heath	14 Jul	1 Aug	18-Jun	17-Jul	11-Jun	13-Jul	4-Jun-96	14-Aug-96/12
Small Heath	20 May	22 Sep	17-May	24-Sep	14-May	21-Sep	22-Apr-11	28-Oct-11
Ringlet	20 Jun	4 Sep	9-Jun	7-Sep	19-May	30-Aug	14-May-12	2-Oct-01
Meadow Brown	20 May	6 Oct	7-May	17-Sep	26-May	9-Sep	4-Apr-99	14-Oct-95
Gatekeeper	20 May	0 000	7 IVIQY	17 ОСР	20 May	ОССР	14-Jul-06	2-Sep-10
Marbled White	3 Jul	18 Aug	19-Jun	4-Aug	23-Jun	6-Aug	19-Jun-17	26-Aug-08
Grayling	3 Jul	26 Aug	6-Jul	1-Sep	26-Jun	20-Aug	18-Jun-11	11-Sep-05
Small Pearl-bordered Frit.		23 Jul	24-May	7-Aug	26-May	13-Aug	15-May-11	13-Aug-18
Dark Green Fritillary	17 May	13 Sep	14-Jun	2-Sep	10-Jun	19-Sep	17-May-16	19-Sep-18
Silver-washed Fritillary	17 Way	10 оор	1-Jul	1-Jul	4-Aug	18-Aug	1-Jul-17	18-Aug-18
Red Admiral	8 Feb	30 Nov	5-Mar	24-Dec	6-May	17-Nov	23-Jan-06	28-Dec-07
Painted Lady	18 Apr	21 Oct	8-Apr	30-Oct	4-May	10-Oct	27-Mar-11	7-Nov-03
Peacock	13 Mar	16 Nov	8-Jan	11-Nov	22-Mar	15-Nov	8-Jan-96/17	23-Dec-05
Small Tortoiseshell	13 Jan	30 Oct	13-Feb	14-Nov	8-Mar	24-Oct	1-Jan-05	27-Dec-05
Camberwell Beauty	10 04.1	00 001	10 1 00		o mai	2.000	6-Jul-06	10-Sep-06
Comma	13 Mar	16 Nov	28-Feb	5-Nov	24-Mar	29-Oct	3-Feb-07	18-Nov-08
Small Copper	5 May	8 Oct	8-Apr	15-Oct	5-May	12-Nov	26-Mar-12	12-Nov-18
Purple Hairstreak	7 Jul	29 Aug	12-Jul	26-Aug	30-Jun	29-Sep	30-Jun-18	29-Sep-18
Green Hairstreak	20 Apr	5 Jun	9-Apr	1-Jun	28-Apr	11-Jun	29-Mar-12	27-Jul-98/08
White-letter Hairstreak	14 Jul	29 Aug	!7-Jun	10-Aug	25-Jun	12-Aug	15-Jun-11	29 Aug 16
Holly Blue	19 Apr	10 Sep	8-Apr	19-Sep	24-Apr	9-Oct	26-Mar-12	21-Oct-06
Brown Argus	16 Aug	13 Sep	18-May	2-Sep	15-May	9-Sep	23-Apr-11	21-Oct-12
Northern Brown Argus	4 Jun	7 Sep	18-May	25-Jul	31-May	2-Aug	18-May-17	7-Sep-16
Common Blue	8 May	27 Sep	18-May	15-Oct	14-May	25-Sep	15-Apr-11	26-Oct-08

New earliest and latest dates in 2018 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 RECENT PHASES OF THE BUTTERFLIES OF THE NEW MILLENNIUM PROJECT

			1			
Tetrads in 2015 (% of all 664 recorded tetrads)	Tetrads in 2016 (% of all 709 recorded tetrads)	Tetrads in 2017 (% of all 594 recorded tetrads)	Tetrads in 2018 (% of all 586 recorded tetrads)	Species	Tetrads over the last 10 years 2009-2018 (% of all 1566 recorded tetrads)	
340 (51%)	381 (54%)	252 (42%)	317 (54%)	Green-veined White	1007 (64%)	
347 (52%)	269 (38%)	233 (39%)	245 (42%)	Small Tortoiseshell	912 (58%)	
289 (43%)	270 (38%)	253 (42%)	258 (44%)	Peacock	879 (56%)	
248 (37%)	231 (33%)	378 (63%)	202 (34%)	Red Admiral	815 (52%)	
243 (37%)	250 (35%)	189 (32%)	210 (36%)	Ringlet	745 (48%)	
204 (31%)	279 (39%)	231 (39%)	265 (45%)	Large White	743 (47%)	
271 (41%)	243 (34%)	212 (35%)	224 (38%)	Meadow Brown	733 (47%)	
190 (29%)	190 (27%)	185 (31%)	253 (43%)	Orange-tip	709 (45%)	
200 (31%)	227 (32%)	197 (33%)	232 (40%)	Small White	688 (44%)	
246 (37%)	261 (37%)	260 (43%)	281 (48%)	Speckled Wood	642 (41%)	
123 (19%)	218 (31%)	113 (19%)	151 (26%)	Painted Lady	561 (36%)	
145 (22%)	117 (17%)	107 (18%)	148 (25%)	Small Heath	487 (31%)	
111(17%)	113 (16%)	102 (17%)	141 (24%)	Wall	475 (30%)	
190 (29%)	154 (22%)	131 (22%)	142 (24%)	Small Skipper	470 (30%)	
139 (21%)	107 (15%)	149 (25%)	154 (26%)	Comma	427 (27%)	
142(21%)	128 (18%)	113 (19%)	145 (25%)	Common Blue	417 (27%)	
87 (13%)	88 (12%)	96 (16%)	156 (27%)	Small Copper	417 (27%)	
106 (16%)	102 (14%)	83 (14%)	83 (14%)	Large Skipper	324 (21%)	
43 (6%)	77 (11%)	41 (7%)	52 (9%)	Dingy Skipper	152 (10%)	
51 (8%)	24 (3%)	19 (3%)	31 (5%)	Dark Green Fritillary	116 (7%)	
27 (4%)	19 (3%)	12 (2%)	50 (9%)	Holly Blue	101 (6%)	
11 (2%)	13 (2%)	11 (2%)	21 (4%)	White-letter Hairstreak	77 (5%)	
28 (4%)	19 (3%)	16 (3%)	25 (4%)	Small Pearl-bord. Frit.	76 (5%)	
16 (2%)	14 (2%)	6 (1%)	24 (4%)	Purple Hairstreak	74 (5%)	
10 (2%)	13 (2%)	7 (1%)	25 (4%)	Green Hairstreak	62 (4%)	
15 (2%)	10 (1%)	7 (1%)	14 (2%)	Grayling	35 (2%)	
6 (1%)	6 (0.8%)	7 (1%)	7 (1%)	Brimstone	35 (2%)	
2 (0.3%)	5 (0.7%)	6 (1%)	12 (2%)	Large Heath	32 (2%)	
11 (2%)	16 (2%)	8 (1%)	6 (1%)	Northern Brown Argus	21 (1%)	
15 (2%)	10 (1%)	6 (1%)	4 (0.7%)	Essex Skipper	20 (1%)	
3 (0.4%)	3 (0.4%)	3 (0.5%)	10 (2%)	Brown Argus	15 (1%)	
1(0.1%)	-	3 (0.5%)	-	Clouded Yellow	13 (0.8%)	
3 (0.4%)	2 (0.1%)	4 (0.7%)	1 (0.2%)	Marbled White	7 (0.4%)	
				Gatekeeper	2 (0.1%)	
				Camberwell Beauty	1 (0.06%)	
-	-	1 (0.2%)	1(0.2%)	Silver-washed Fritillary	1 (0.06%)	
33	32	34	33	Tetrads Species	1566 36	

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 2019

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 Please indicate scientific and (where there is one) common names.

name:

Location: Where the moth was recorded.

Grid Ideally a six-figure grid reference for the location.

reference:

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 i.e. adult, pupa, caterpillar or egg.

stage:

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 Tim Barker

4 Lindisfarne Avenue 26 Farrier Close

Chester-le-Street, Co. Durham
Pity Me, Durham, DH1 5XY
e-mail: tim@tapandspile.co.uk

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 2019

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:

	Α	В	С	D	E	F	G
	Name/s of recorder/s	NZ274423	Palace Green, Durham City	22-Aug-2018	Large White	7	
2	Name/s of recorder/s	NZ196858	•	24-Sep-2018	Peacock	2	Very worn
	Name/s of recorder/s	NZ2514	Baydale Beck Darlington	1-Jul-2018	Comma	1	Hutchinsoni 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 2019

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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

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