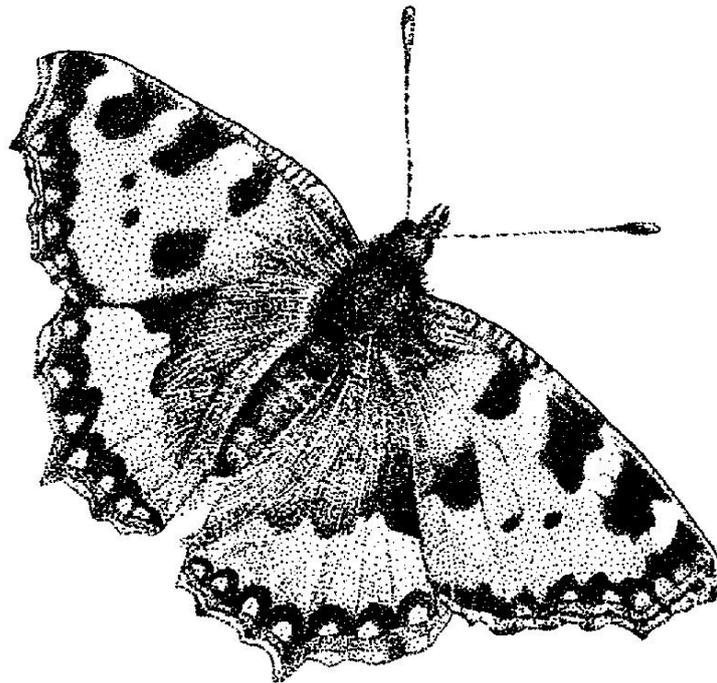


NORTH EAST ENGLAND BRANCH

BUTTERFLY CONSERVATION



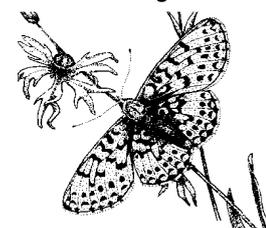
BUTTERFLY SUMMARY

2020



Compiled by Steve Austin & Roger Norman

North East England



Butterfly Conservation

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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 2020

Welcome to the Annual Butterfly Summary for 2020. This is a report for an extraordinary year, one that we hope will never be repeated. The Recorders expected that the number of records would be severely reduced by the effects of government "lockdown" but to our surprise there was only a modest reduction in the total number of records. What was impacted though was the number of transects walked. These reduced from 47 in 2019 to 34 in 2020. Less obviously, the effects of travel restrictions also affected where records came from, with very few records coming in from our more distant parts of the region, Holy Island for example produced few records. Many observers must have concentrated on the home patches. Twenty-two members for example registered for the Garden Butterfly Survey sending in almost 1700 records, more than a tenth of the year's total for the north east.

Among the highlights was a find of Silver-washed Fritillary mating in Castle Eden Dene, found by Alan Edwards on his transect. We can only hope that this butterfly continues its colonisation of the county. Elsewhere there was other fritillary news with a finding of Small Pearl-bordered Fritillary by Nigel Foggo at a site near West Chevington, the first lowland site in Northumberland. This will be revisited with great interest in 2021. Of our commoner species, Small Tortoiseshell had a particularly good year, suggesting it is so far at least, unaffected by the parasitism present further south in the country. As might be expected, after the tremendous invasion of Painted Lady in 2019, they made a very poor showing in 2020. Also, well down were numbers of Holly Blue. They have a well-known "boom and bust" cycle due to a parasitic wasp. 2019 was a boom year and so it was perhaps to be expected that 2020 would be a low point. Perhaps 2021 will see a recovery. An extraordinary finding was of a Green Hairstreak by Chris Barlow on a slip road of the A1 on the northern edge of Newcastle. This is another site deserving of checking in 2021.

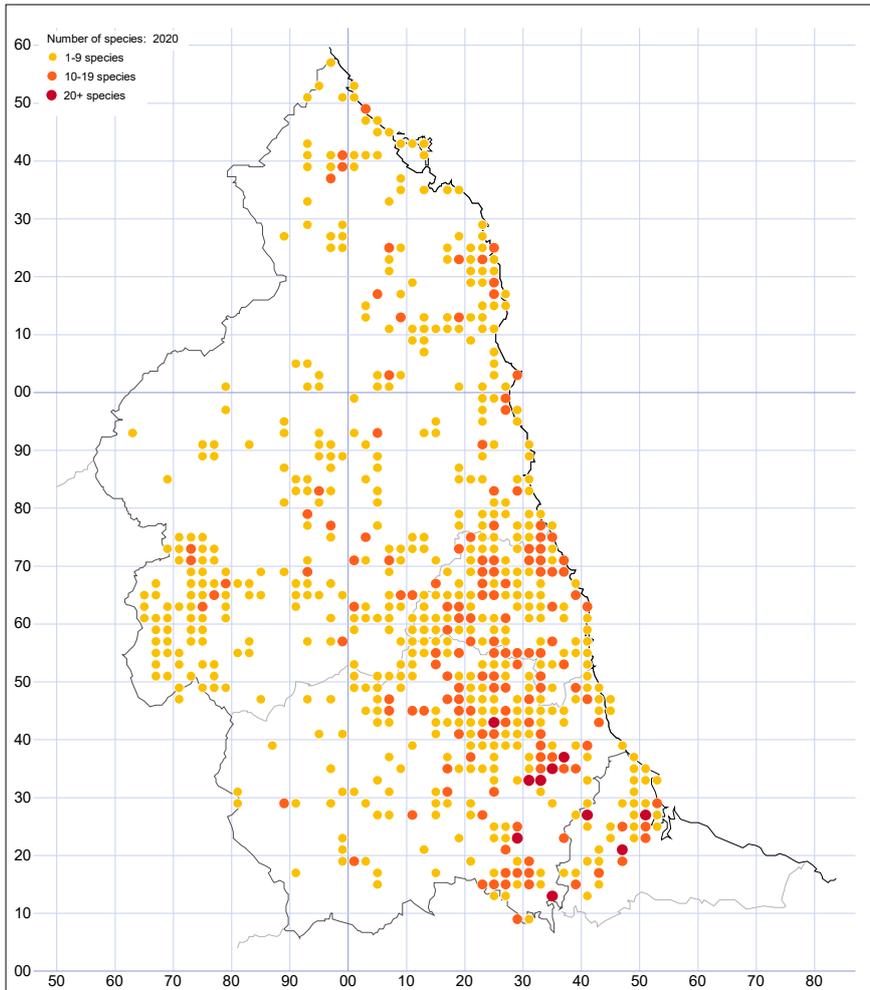
Because of the disruption to the recording year, records of many species are lower than in previous years and so caution should be exercised in drawing any comparisons. We hope that 2021 will be unrestricted and produce a more accurate picture of the region.

At the time of writing both the County Recorders for Durham and Northumberland have stepped down from their roles. There is also a vacancy for Editor of this report. The Branch Committee therefore has a number of vacancies for these roles. Neither being a County Recorder or editor requires outstanding expertise in lepidoptera, merely a reasonable level of knowledge and plenty of enthusiasm. Full support and advice are, of course, available from the out-going recorders. All records go off each year to our headquarters and form part of the national picture of how our wildlife is faring and they play a part in influencing government policy.

It is important that these vacancies are filled so the Branch can play its part in looking after our butterflies. If anyone would like to offer their services, please contact anyone on the committee as soon as possible. Contact details are on the back cover.

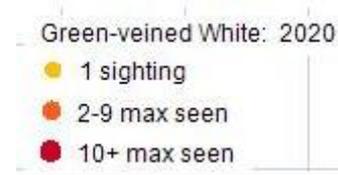
We hope you enjoyed watching our butterflies in 2020 wherever you were able and hope you continue to enjoy and record in 2021. Naturally we hope there is freedom to travel and so explore our corner of the country in 2020 and also of course we hope for good weather! Remember if you contribute records the information you provide may be attributed to you in the annual report. If you don't want this to happen please inform us when you submit your records.

Please remember that our new permanent email address for all casual records is records@northeast-butterflies.org.uk



Tetrad map, (2km x 2km), showing all visits in 2020

Enlarged example of colour key for the species-account maps for 2020



Weather in 2020

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.

The grid reference for the station is NZ 267 415 and the altitude is 100 metres a.s.l

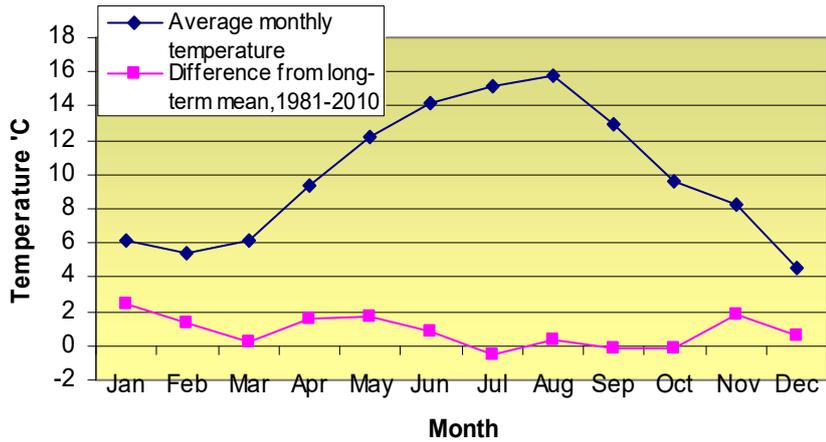
Acknowledgments: The Branch is grateful to Professor Tim Burt of the Department of Geography at Durham University for providing weather data via his website, (<http://www.community.dur.ac.uk/durham.weather/>).

The spring was noticeably dry, warm and sunny, giving a promise of a marvellous summer. However this was misleading as the summer as a whole was then rather disappointing with substantial rain in June and August and noticeably dull in July and August with below average sunshine.

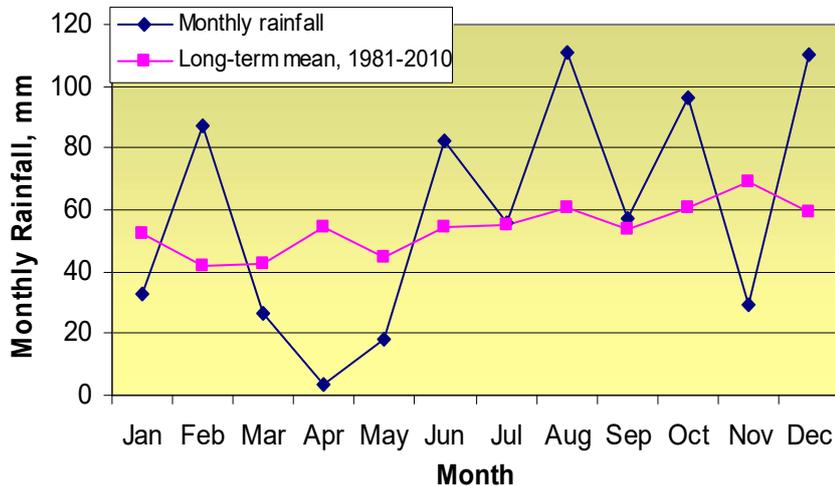
Please note that the long-term averages used have now changed from 1961-1990 to 1981-2010.

The species accounts show how species weathered the summer of 2020 and the three graphs on the next page show the main features of the weather.

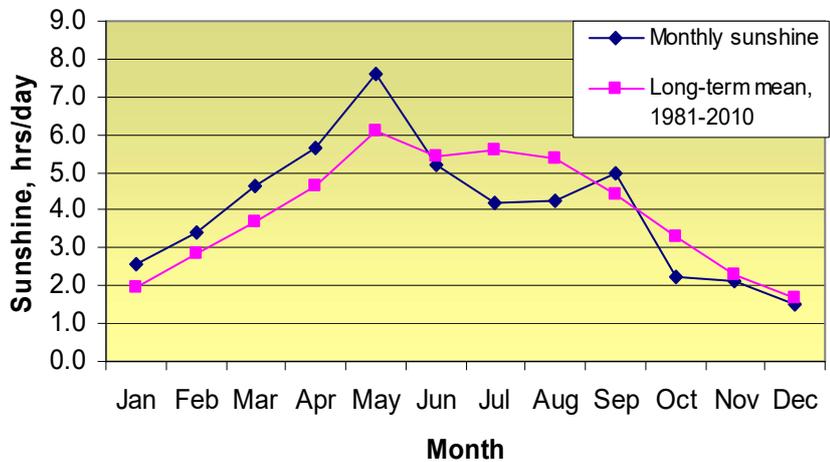
Monthly Temperature at Durham University Weather Station in 2020



Monthly Rainfall at Durham University Weather Station in 2020

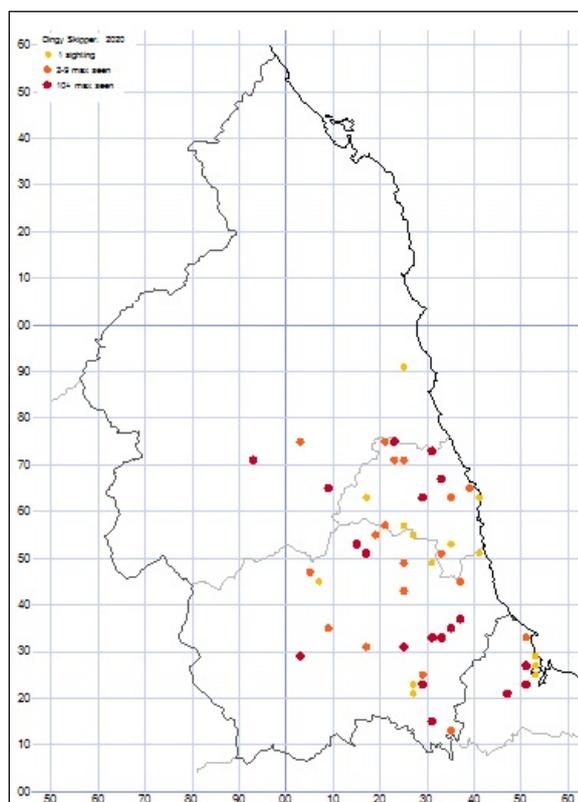


Monthly Sunshine at Durham University Weather Station in 2020



Dingy Skipper *Erynnis tages*

2020: Our earliest sighting for 2020 was made by – surprise, surprise – Bob Mawson on the Raisby Way. Bob's singleton was seen on April 23rd, only five days later than our earliest ever. Dave Wainwright recorded 8 adults the following day at Aycliffe Quarry. The following days saw a run of single figure counts, including a singleton reported from Fenwick Pit on May 4th, the year's first for Northumberland. Our first double figure count was of 10 butterflies. These were also seen in Northumberland; Tim Wrigley was the lucky finder at a site east of Chollerford.



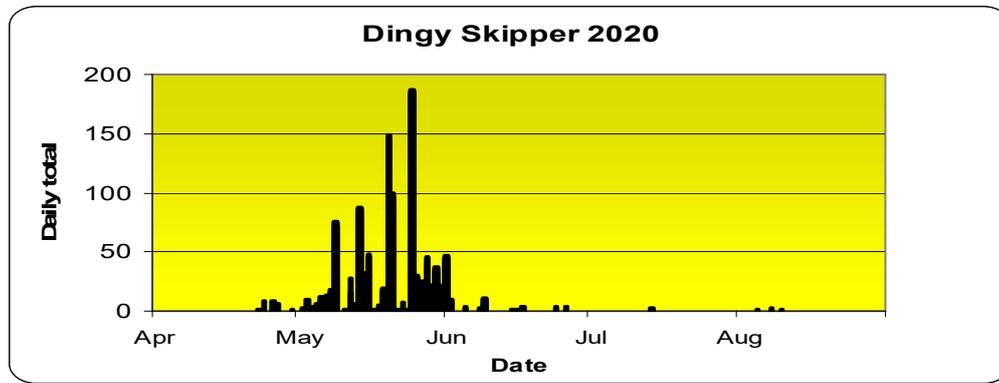
Unusually, records were submitted for every day in May excepting the 10th. Daily totals fluctuated although the overall trend was upwards until the year's peak count was recorded on May 25th. Two substantial counts contributed significantly to that day's total of 172 butterflies: one of 39 adults made by Stephen Goodhart at Bishop Middleham Quarry was the year's best for our region, while Graham Beckwith counted one fewer at Wingate Quarry. During the build up to the season's peak there were some good counts from some of the region's less recorded sites: Stewart Cowley recorded 27 from a site near Dipton, Roger Norman scored 29 at Brenkley Old Pit, James Common counted 13 at Walker Riverside Park and Rachel Hepburn recorded 11 from a site near Kirk Merrington. Numbers tailed off after the peak with no count exceeding 20 adults being submitted. Further noteworthy counts from sites not referred to above included Peter Webb's 16 from Hamsterley Forest, Roger Norman's 11 from High Flatworth, Keith Shaw's 15 from The Spetchells, Coralie Niven's 10 from Kyo and David Phillips' count of 12 from Darlington's Red Hall Ponds.

Philip Jordan's pair of butterflies seen at Brenkley Old Pit on June 2nd ended Northumberland's season; however, the south of our region wasn't quite done. Here, there were several more single figure counts up until mid-July which would be a fairly typical endpoint to the flight period. However, later sightings by Martin Blick (one seen at Brenda Road Treatment Works on August 5th) and counts of 2 and 1 respectively by Bob Mawson on the 8th and 10th August respectively might easily have been second generation specimens.

The annual total of 1106 was - despite being some 307 butterflies short of 2019's total – excellent, given that lockdown restrictions were in place for a considerable portion of the flight period. Maybe the requirement to exercise locally ensured that folk were more focused than usual on bio-diverse urban and semi-urban habitats to a greater degree than would normally be the case. Maybe it was another good year. Who knows?

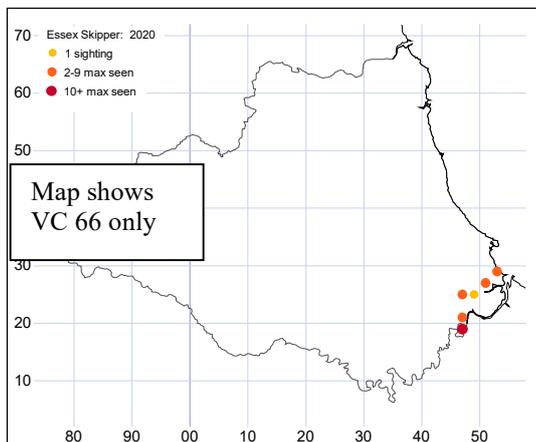
As in 2019, previously unknown sites in Northumberland were discovered – fantastic news, given that the species is far more common south of the Tyne than to the north.

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



Essex Skipper, *Thymelicus lineola*

2020: From 37 records and 92 individuals in the first year of discovery in 2015, the number of records had declined until last year, when a small increase occurred with 14 records giving 35 individuals. This was followed in 2020 by 15 records giving an impressive 60 individuals. Whilst this is still below the record 92 individuals reported in 2015 it nevertheless represents a welcome increase compared to previous years. All reports came from the south-east of County Durham.



The first record came from Martin Partridge who saw 3 on the early date of 1st July at the JM Phoenix Site in Billingham. This was 3 days earlier than the previous earliest modern record for this species in our region. The next record also came from Martin Partridge at Greenabella Marsh on 6th July with 3 individuals. The same person then again saw 3 at the JM Phoenix Site, Billingham two days later.

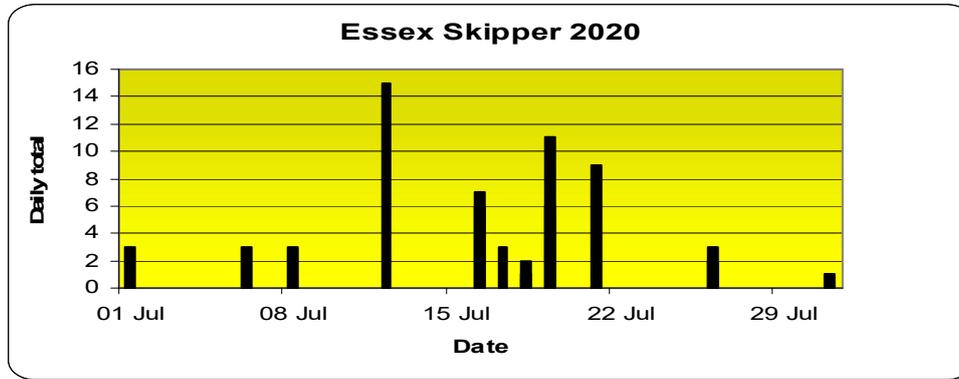
The season's highest count came from David Phillips with a count of 15 at Portrack Marsh on 12th July. Other notable counts came from Martin Partridge who

found 6 at the JM Phoenix site, Billingham on 16th July with the same observer reporting 9 at the same site on 21st July. Graham Beckwith found 6 individuals at Cowpen Bewley Woodland Park on 19th July including a mating pair and 5 were seen by David Phillips at Portrack Marsh on the same day. Away from the usual Teesside sites, 3 were observed by Joyce Scott at North Gare on 17th July. This is the first record of this butterfly from this site.

A total of 1-2 individuals continued to be reported from Portrack Marsh and Cowpen Bewley Woodland Park from mid to late July, with the last butterfly of the season reported by Martin Partridge at the JM Phoenix Site, Billingham on the early date of 31st July.

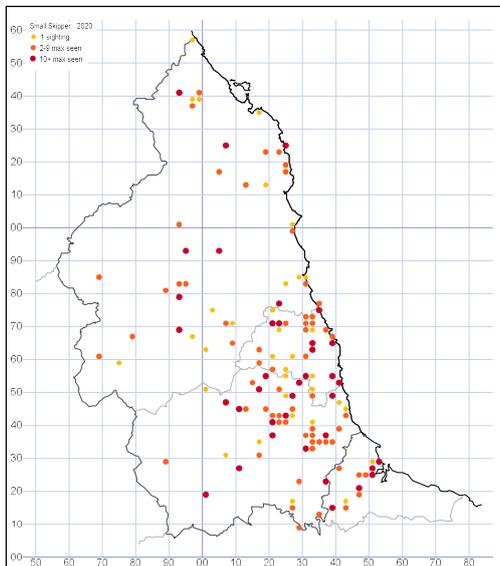
It was recorded in six tetrads with the butterfly being found in a total of 22 tetrads since 2015. It was recorded on 11 days out of the flight period of 31 days (35%).

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



Small Skipper *Thymelicus sylvestris*

2020: Joyce Scott produced the first report of the year; two at Coatham Woods (County Durham) on 25th May. The first for Northumberland occurred two days later, when Trevor Richardson found one at East Sleekburn on 27th May. Both were earlier than respective first dates of 10th June and 6th June in 2019.



Generally small numbers (one to seven) were noted at 13 widespread sites until the first double-figure count of 24 at Byerley House (Co. Durham) on 19th June (Dave Liddle). Counts of ten to 25 also came from Hendon-Ryhope, Horsleyhope Burn, North Gare (two areas) and Oakenshaw NR (all Co. Durham) by the end of June. Greater numbers were evident in July and included peak site counts of 123 at Oakenshaw NR (Co. Durham) on 8th (Keith Walton), 75 at Millburn (Northumberland) on 31st, (Duncan Hutt/Alice McCourt), 56 at Kyo (near Stanley, Co. Durham) on 18th (Dave Liddle), and 31-37 at Colliery Wood (Chester Moor), Greenabella Marsh, Phoenix Site (Billingham) and Wingate Quarry (all Co. Durham), Liddells Wood and St Mary's Wetland, (Northumberland).

The most productive dates were 31st July, when a total of 196 was noted at 16 sites, and 8th July, when 192 (including the aforementioned 123 at Oakenshaw NR) were recorded at nine sites. Peak day totals in 2019 were significantly greater; 691 on 23rd July and 362 on 18th July.

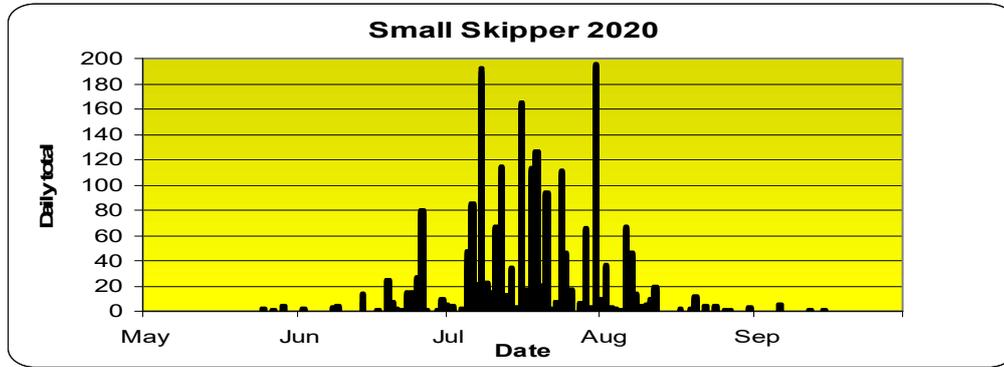
A general fall in records occurred during August, the peak day total being 67 on 6th including 25 at Colt Crag Reservoir (Northumberland). The final double-figure count was 12 at Fontburn slurry pits (Northumberland) on 7th. There were three September reports; five at Howick Hall (Northumberland) on 6th (Alnwick Wildlife Group), and singles at Crook on 12th and 15th (Gillian Canney).

A total of 2,092 individuals was recorded across the region during the season, a large decrease on the 5,728 individuals recorded in 2019 and 2,918 in 2018. There were 355 records of Small Skippers in the region during 2020 (525 in 2019), with an average of 5.9 individuals per report, compared to 10.9 in 2019.

In 2020, Small Skippers had a flight season of 114 days (25th May to 15th September), and the species was noted on 71 days during the season, (62%). This compares to flight seasons of 87 days in 2019 (58%) and 135 days (50%) in 2018.

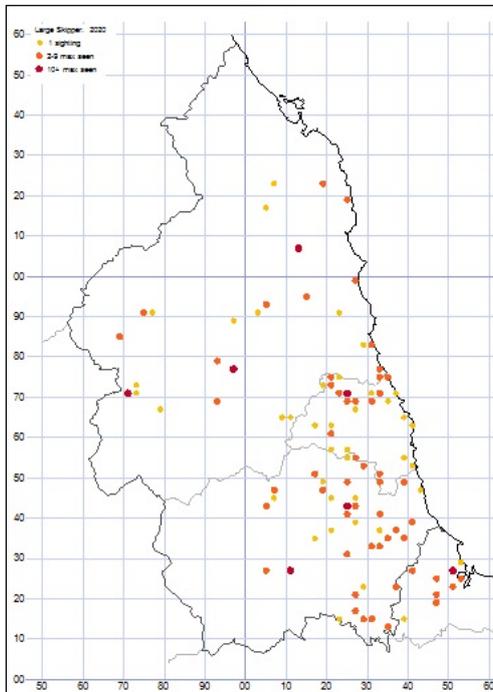
A total of 135 tetrads was occupied in 2020 from a total of 655 tetrads that received a visit, giving a mean figure of 21% (188 tetrads, 25% in 2019).

As in 2019, distribution was patchy but widespread, with most records concentrated in County Durham and Tyneside. Fewer were found in Northumberland, although the species was recorded almost up to the Scottish border and well inland.



Large Skipper *Ochlodes faunus*

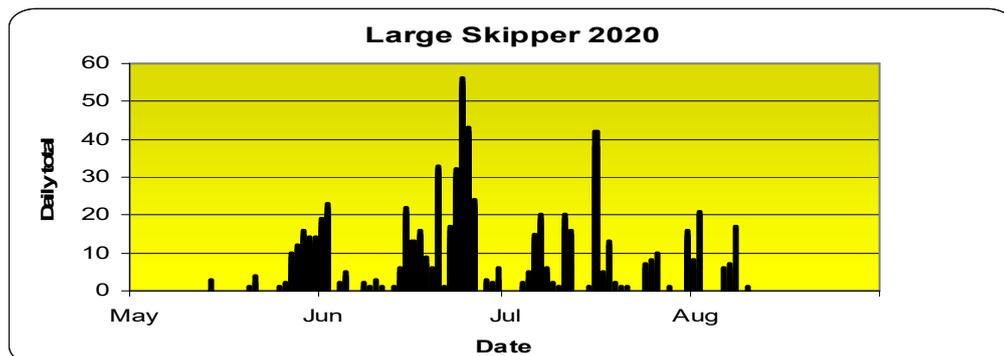
2020: A total of 237 records were received, these recorded 677 individual Large Skippers. The flight season lasted 89 days, and the Large Skipper was seen on 62 of these days, representing 71% of the flight period. It is difficult to make comparisons with previous years as the restrictions on travel due to coronavirus over part of the flight period would inevitably mean recorders were not out recording. This almost certainly accounts for the drop in both records received and numbers of Large Skipper recorded.



Despite the recording difficulties the first sighting of the year was on a record early date, Rachel Hepburn seeing three at The Old Brickworks, Kirk Merrington near Newton Aycliffe on 14th May. The previous earliest sighting being on 19th May in both 2007 and 2011. There were many early records for Durham, perhaps the very warm weather in April led to an early emergence. In Northumberland the first record came from James Littlewood who spotted two at Gosforth Park Nature Reserve, north of Newcastle on 28th May.

The main flight period lasted from late May until late July, with a distinct peak in late June, when 56 were recorded throughout the region on 24th June. The highest individual count this year came from Louise Hislop who recorded 30 at Edlington, between Rothbury and Alnwick on 16th July. There were only six double figure counts this year.

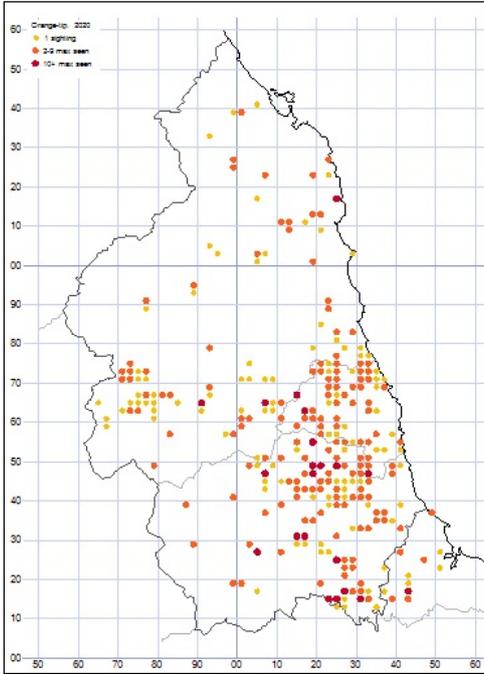
The main flight season ended as normal in the last week of July, but there were ten records received in August. The final sightings of the year for County Durham were from Pippa Smalling who saw one at The Whinnies and four at West Park Nature Reserve, both in Darlington, on 7th August. The final sighting of the year for Northumberland and the region came from Julie Roper who recorded one on 10th August at Howick, North Northumberland.



Orange-tip *Anthocharis cardamines*

2020: The flight period lasted 113 days and the butterfly was recorded on 66 (58%) of those days. The Orange-tip was recorded in 280 tetrads which was 43% of the tetrads in the region that were visited by recorders in 2020.

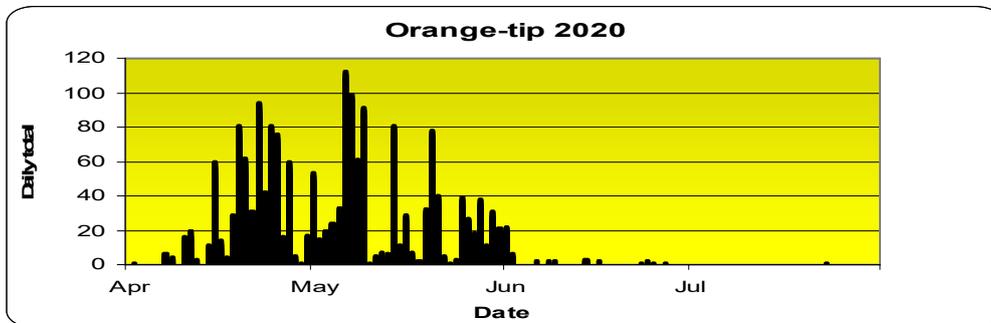
The Orange-tip made its first appearance in 2020 on 2nd April when Frank Lightfoot saw one at Barmoor Castle (North Northumberland). A flurry of sightings then followed on 7th April with records of singletons from Dave Wainwright (Newton Aycliffe), Terry Wright (Darlington), Keith Walton (Broompark Picnic site, Durham), Louise Hislop (Wylam), Pamela Johnson (Newton Hall, Durham) and Phillip Jordon (Arcot Pond, near Cramlington). Peak numbers were reached on 6th May when there were 43 separate records and a total of 112 butterflies counted.



Honours for the highest count of the year were jointly claimed by David Phillips who saw 21 at High Coniscliffe, Darlington on 7th May and Dave Liddle who counted 21 at Horsleyhope Burn on 20th May. Other good counts were made by Julie Roper who counted 18 on the 5th May and 12 on the 19th May, both at Howick, Steve Reid who counted 15 at Tanfield Lea Marsh on 9th May and Richard Hockin with 15 at Burnhope on 28th May.

Numbers seen dropped sharply at the end of May but there were a smattering of records throughout June. The final record for County Durham was made on 27th June by Joyce Scott who saw one at Hartburn, Stockton. In Northumberland a solitary record in July on the 23rd was the final record of the year when Nick Johnson saw one at Killingworth.

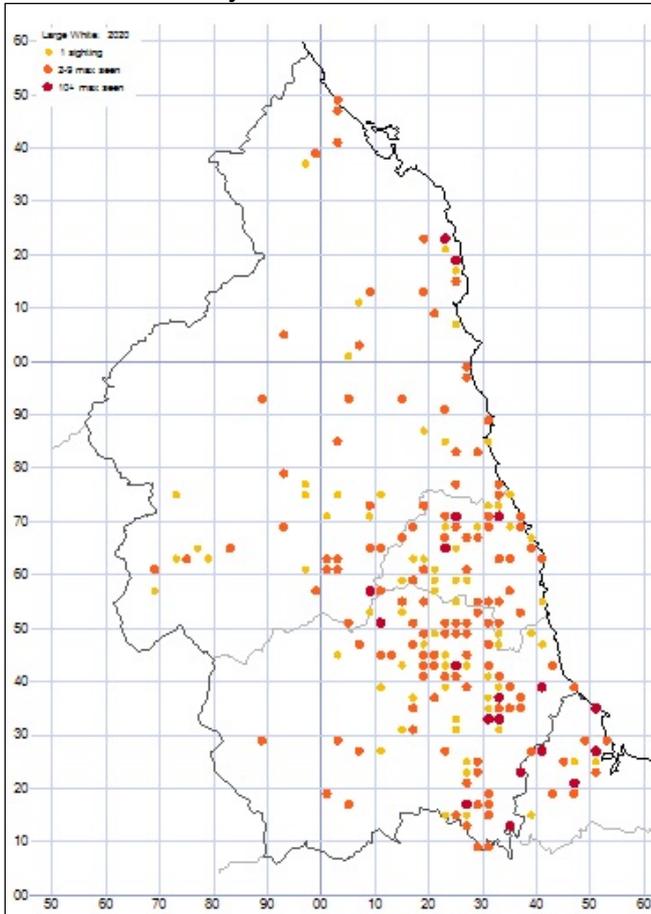
Records of ova and/or larvae were submitted by Dave Stebbings, Graham Mitchell and Joyce Scott. Graham Beckwith recorded a pupa. These immature stages were recorded on Cuckoo Flower and Garlic Mustard.



Grayling, photographed by Alan Priest at Newbiggin on 25th July 2020

Large White *Pieris brassicae*

2020: The flight period lasted 198 days and the Large White was recorded on 148 of these days (75%). The species was recorded in 221 different tetrads representing 34% of the tetrads visited by recorders in 2020.



The Large White made its first appearance of the year on 7th April when Phillip Bone saw one in Blaydon (County Durham for recording purposes). The first Northumberland records were a day later when Phillip Jordan saw two in Jesmond, Mike Coates saw one at Earsdon Cemetery, North Tyneside and Alan Todd recorded one at Great Whittington, Northumberland.

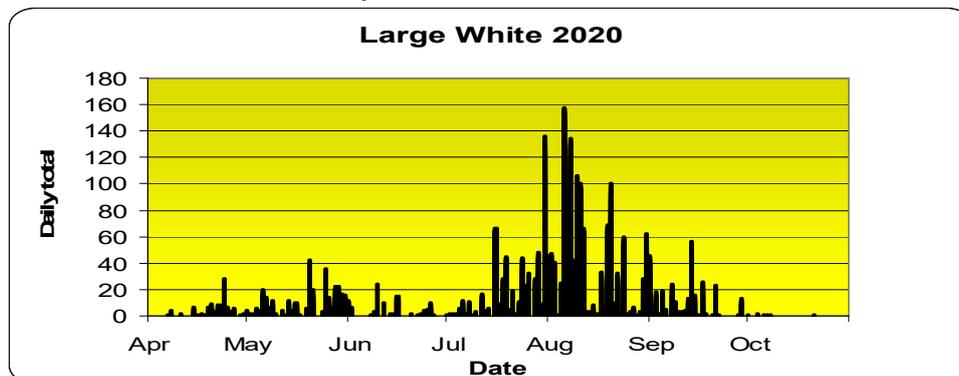
The best day of the first generation was 20th May when there were 23 records comprising a total of 43 butterflies. The highest individual count of the first generation was made by Frank Lightfoot who recorded 24 in Gosforth Nature Reserve on 10th June. Frank also recorded 10 on the 12th June and 12 on the 16th June at the same location but no-one else broke into double figures.

As always, the Large White was more abundant during the second generation which reached its peak on 6th August when there were 40 individual records and a total of 158 butterflies recorded. The single highest count of the year of 28, was achieved by Elaine Carter at Consett on 10th August.

Other prominent second-generation counts were made by Frank Lightfoot with 26 in Moorside Allotments, Newcastle also on the same day, and Dave Wainwright with 22 on Thrislington NNR on the 6th August.

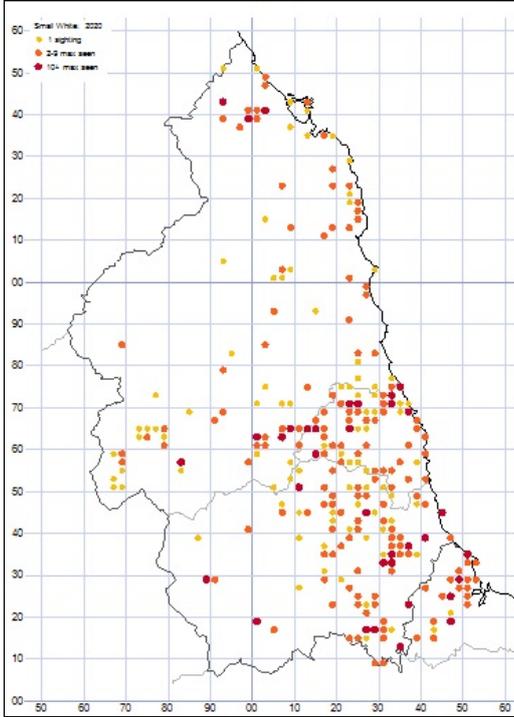
The Large White was recorded steadily through September, but only very small numbers were seen thereafter. There were seven October records, all of single individuals. The last record for county Durham was on 7th October when Jeff Fowler noted one at Wynyard Woodland Park. The last one in Northumberland and the last record of the year for this species was claimed by Trevor Richardson who saw one at East Sleekburn, Northumberland on 21st October.

Records of Large White larvae were submitted by Dave King from Melkridge near Haltwhistle and by Graham Beckwith from Colliery Wood, Chester Moor, Durham.



Small White *Pieris rapae*

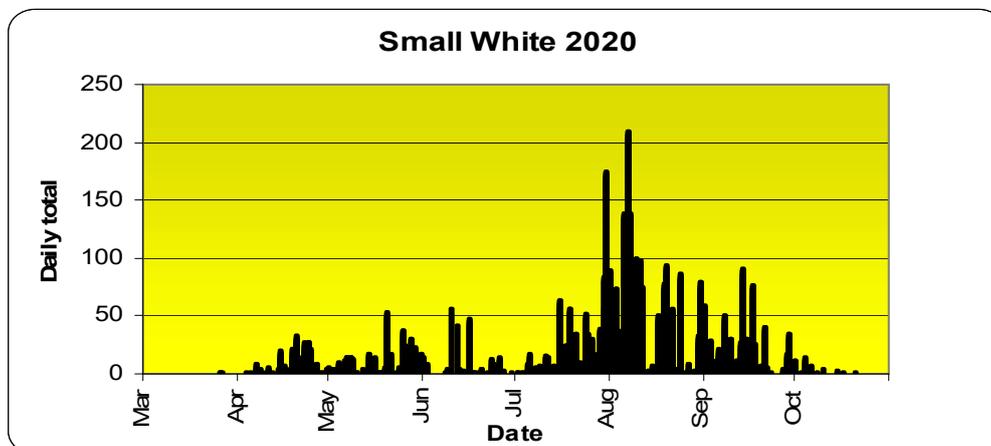
2020: A total of 1,388 records were received. These recorded 3,878 individual butterflies. This was a drop compared to the previous year, but could easily be accounted for by fewer recorders being out, especially during the spring generation, due to travel restrictions during the lockdown. The flight period covered 210 days and the Small White was seen on 174 of these days, representing 83% of the flight period.



This year there were three records for March. The first records of the year were from Dave Wainwright who saw one at Newton Aycliffe and Pamela Johnson who also saw one at Newton Hall, just north of Durham City, both on 26th March. The first record from Northumberland was from Matthew Hawking who spotted one in the Heaton area of Newcastle on 4th April. There were relatively few records in April which coincided with the main lockdown, most counts being in single figures. However, there were two high counts from Frank Lightfoot who recorded 56 at Gosforth Nature Reserve, just north of Newcastle on 10th June and 42 at the same location two days later on 12th June. Apart from these the only other notable early count was from Mike Coates with 20 at Northumberland Park, North Shields on 20th April.

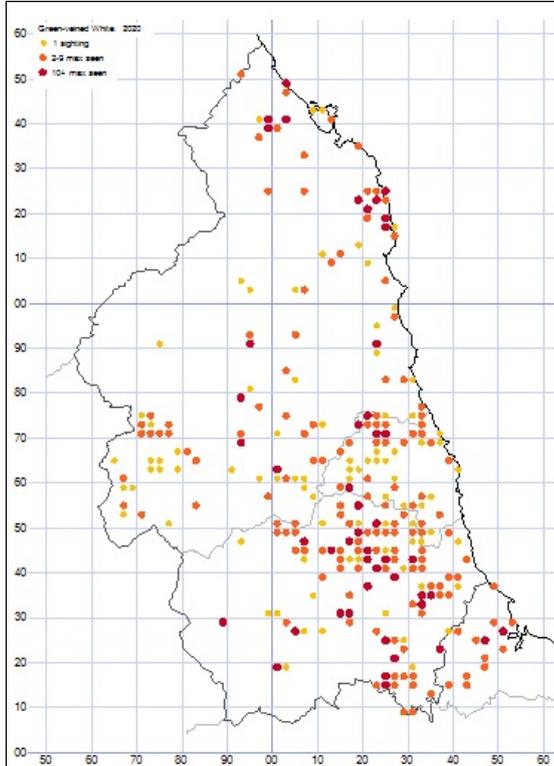
The main flight period for the second generation was from mid-July to the end of September. The peak of the second generation was during the first week of August, when 215 were reported from around the region on 7th August. The highest individual counts were low this year, none over 100, in fact relatively few were even in double figures which is very unusual. The highest count came from Pippa Smalling who reported 61 at West Park Nature Reserve, Darlington on 11th August. She also recorded 54 at the same location and 44 at The Whinnies, Darlington both on 7th August. Apart from these the highest came from Mike Coates with 40 at Old Hartley fields in North Tyneside on 22nd August.

The main flight season extended well into September this year, with plenty of records right up to the end of the month. Daily totals approaching 100 were seen in mid-September. There were 29 records in October this year. In County Durham the final sighting came from David Phillips with one seen at Hartlepool Headland on 17th October. The final sighting for Northumberland and the year was from Duncan Hutt and Alice McCourt, who spotted one at Ford Moss, Northumberland Wildlife Trust reserve near Wooler, on 21st October.



Green-veined White *Pieris napi*

2020: A total of 1,149 records were received. These recorded 4,156 individual butterflies. The flight period covered 188 days and Green-veined White was seen on 150 of these days, representing 80% of the flight period days. The number of Green-veined White seen this year was roughly half of those seen in a normal year. The effects of travel restrictions on recording, especially during the spring, must have had an impact and not too much should be read into these figures.



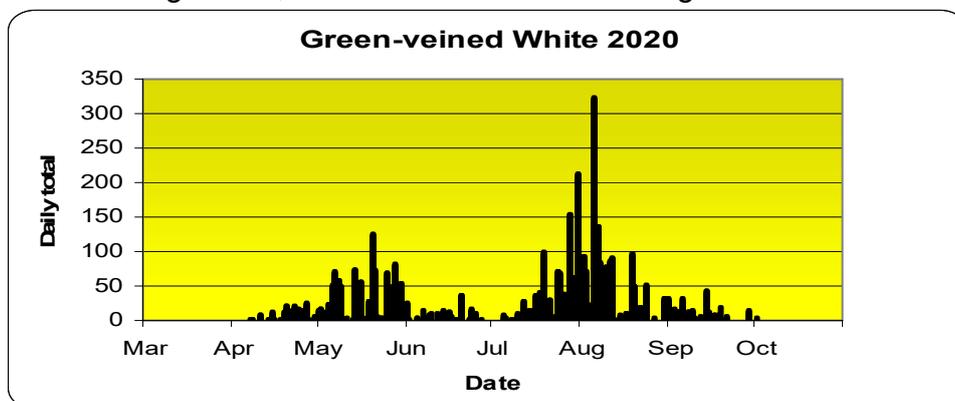
The season got off to quite an early start. Tim Gatenby seeing the first one in Gateshead on 31st March. The first records from Northumberland were from Gemma Vance with one at Murton Fields, North Tyneside, Philip Jordan one at Garden Village, Gosforth and Peter Howe also one at Riding Mill, all on 8th April. There were definitely fewer records than usual for the spring generation probably due to lockdown restrictions. The peak in mid-May of 132 seen flying on 20th May was well down on the 200+ maximum in normal years. Spring generation notable counts came from Roger Norman with 30 at Benshaw Moor, Northumberland on 20th June and Ian Findlay, 23 from Upper Teesdale on 28th May.

The second generation, started to emerge in mid-July, peaking in early August, with 323 being recorded throughout the region on 6th August. Good second generation counts came in from Joyce Clayton, who had the highest count of the year, 121 on two transects at Doxford Farm, north

Northumberland on 28th July. She also recorded 109 at the same sites on 6th August. Julie Roper spotted 58 at Howick, north Northumberland on 31st July. The highest from a Durham site came from Frank Lightfoot with 24 seen at Gibside National Trust, Rowlands Gill on 12th August.

The main flight season was over at the end of August, although there were still plenty of records coming in through September and there were three records in October. For Northumberland the last record was from Julie Roper who saw four at Warkworth on the Northumberland coast on 2nd October. The final record for Durham and the year was from K. Walton who spotted one at Oakenshaw NR on 4th October.

Finally there was an interesting record from Graham Beckwith who reported finding a pupa in its final instar at Waldridge Park, Chester-le-Street on 8th August.

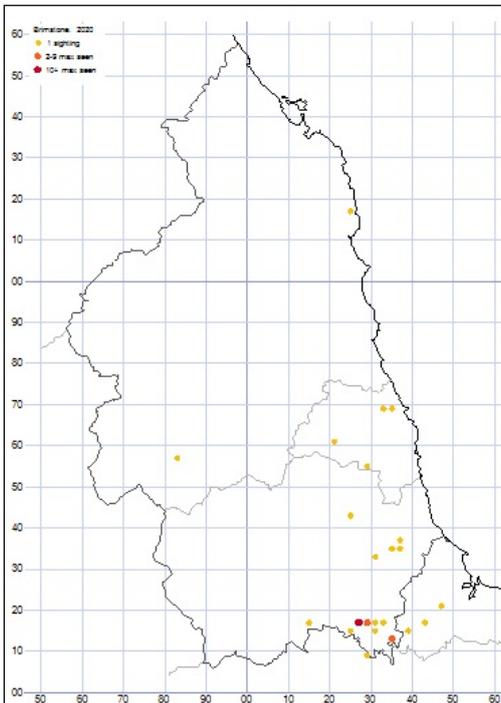


Clouded Yellow *Colias croceus*.

2020: There were only three records of this superb migrant in 2020. The first was by Kirsty Appleby at Willington on 30th April. The other two records were both at Bishop Middleham Quarry, on 25th May and 3rd September. The first was by Stephen Goodhart whilst walking his transect and the second by Keith Walton.

Brimstone *Gonepteryx rhamni*

2020: The Brimstone was first seen on the 20th March – a little later than 2019. The first record was from Richard Hockin and the butterfly was seen along the Tees near Winston. 2020 saw a good spread of records and also more records than in 2019. There were 47 records comprising 105 individuals compared with 20 records of 41 individuals previously. It's difficult to draw any firm conclusions in this 'lockdown' affected year but Brimstone does seem to be on the increase.



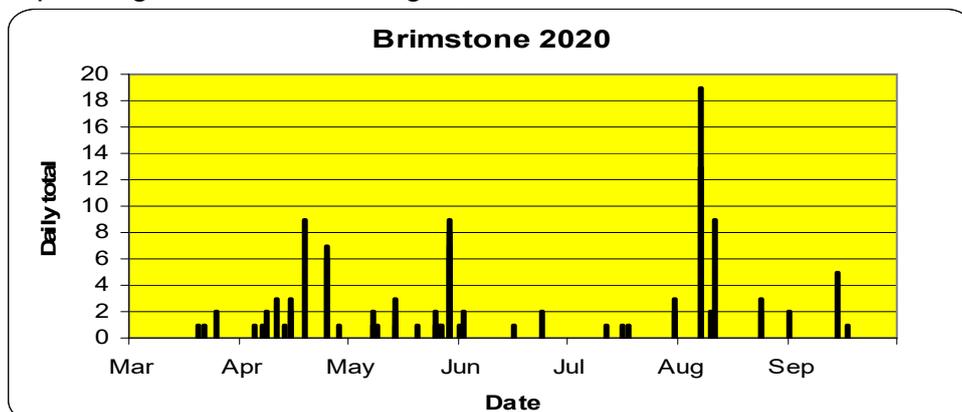
In broad terms, the sightings followed a similar pattern to recent years. There was a good presence in the Darlington area – especially at West Park Nature Reserve. Breeding was proved at this site – please see my article in the Spring 2021 Newsletter for more details. Up to 9 adults were seen there in the Spring and then later in the year 13 were seen on the 7th August by regular site recorder, Pippa Smaling.

It is also interesting that there were several other sightings in and around Darlington. Six were seen at the Whinnies Nature Reserve (also 7th August by Pippa Smaling) and there were other records (mainly singles) from David Phillips from Drinkfield Marsh and the Barmpton area.

Away from Darlington, there were many records of single wandering individuals from as far North as Howick by Geoff Sample (27th May) and again Howick (1st June) by Phil Hammer and as far West as Allendale in late May (Susie White).

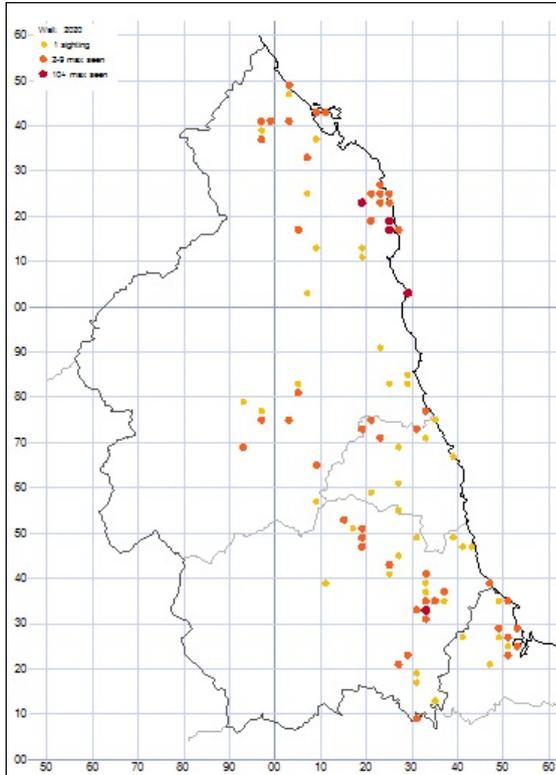
As well as these, there were sightings from Wingate, Whickham, Birtley and North Shields among others. The butterfly is well known as a wanderer and it can turn up in pretty much any part of our region.

It seems that this butterfly is trying hard to become more established in our area but continues to be held back by the poor distribution of its larval foodplant, Buckthorn here. If a programme of planting could be encouraged, then the Brimstone will find it!



Wall *Lasiommata megera*

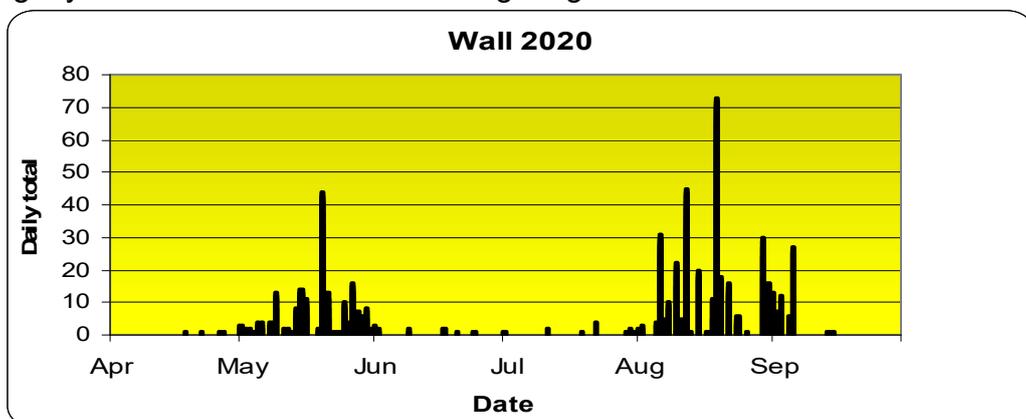
2020: A total of 217 records were received which detailed 600 individual butterflies. The flight season lasted 151 days and the Wall was seen flying on 71 of these days, representing 47% of the flight period. No conclusions should be drawn from this year's figures as travel restrictions due to lockdown must have meant fewer recorders were out looking for butterflies.



The first sighting of the year came from County Durham, where Darren Archer spotted one at Tanfield Railway on 18th April. For Northumberland the first record was from a member of Alwick Wildlife Group who saw one at Smeafield in north Northumberland on 22nd April. The spring generation was mainly flying from the beginning of May to the first week of June, reaching a peak in terms of numbers reported on 20th May when 45 were recorded throughout the region. The flight period of the spring generation was slightly earlier than usual, perhaps because of the fine warm weather in April this year. The highest count was 19 spotted by David Phillips at Bishop Middleham Quarry on 20th May. Only three double figure counts were received for the spring generation, all from Bishop Middleham Quarry.

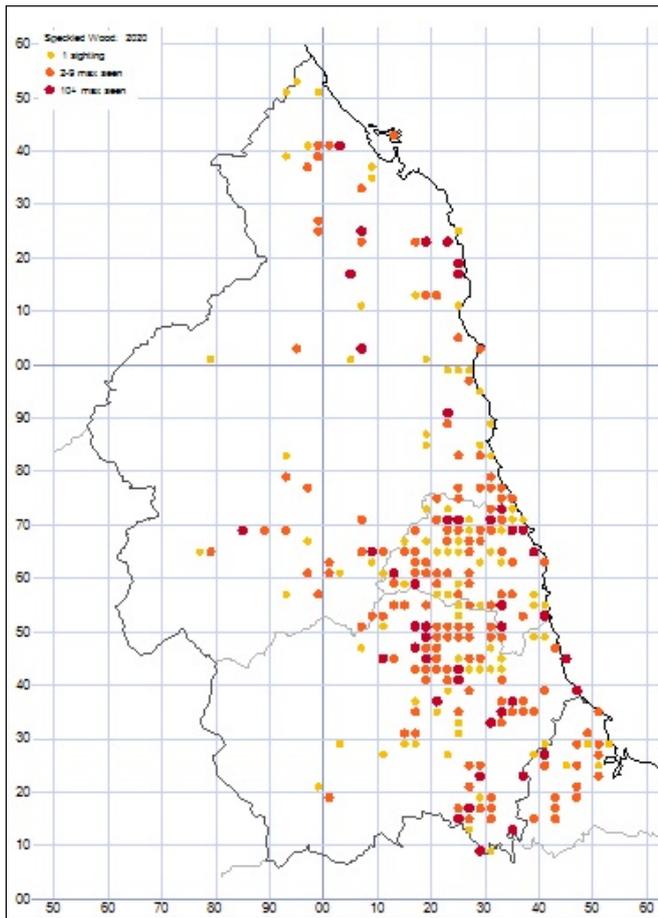
The second generation started to emerge during the first week of August, and continued until the first week of September. The peak in terms of numbers seen throughout the region happened on 19th August when 73 were recorded. For the second generation only 8 double figure counts were received, this may be a reflection of fewer recorders being out. The highest was from Joyce Clayton with a total of 60 at her two Doxford Farm transects in north Northumberland on 19th August. The only double figure count for the second generation from a Durham site came from Stephen Goodhart with 13 at Bishop Middleham Quarry on 12th August. This disused quarry is definitely the best County Durham site for Wall.

There was a rapid decline in numbers after the first week of September. The last record of the year for Northumberland came from Mike Taylor with one seen at the Spetchells, Prudhoe on 14th September. The final record of the year from Durham was just a day later with K. Walton spotting one at Bishop Middleham Quarry on 15th September. This was perhaps slightly earlier than normal for last sightings.



Speckled Wood *Pararge aegeria*

2020: This species seems to have had a poorer year than 2019 – although we should be cautious in making direct comparisons as 2020 was not a normal year! In 2019 there were 2100 records of over 10,000 individuals whereas in 2020 there were only 1423 records of 4671 butterflies.



The first record for the butterfly came on the same date as in 2019 - 25th March at Red Burn by K Walton. In 2019 the same observer noted the species at Broompark on the same date.

Speckled Wood was seen in low numbers in the spring – many singles recorded with only a handful of records making it into double figures. My own perception in Darlington (where the butterfly is well established) was that it was in lower numbers in spring 2020.

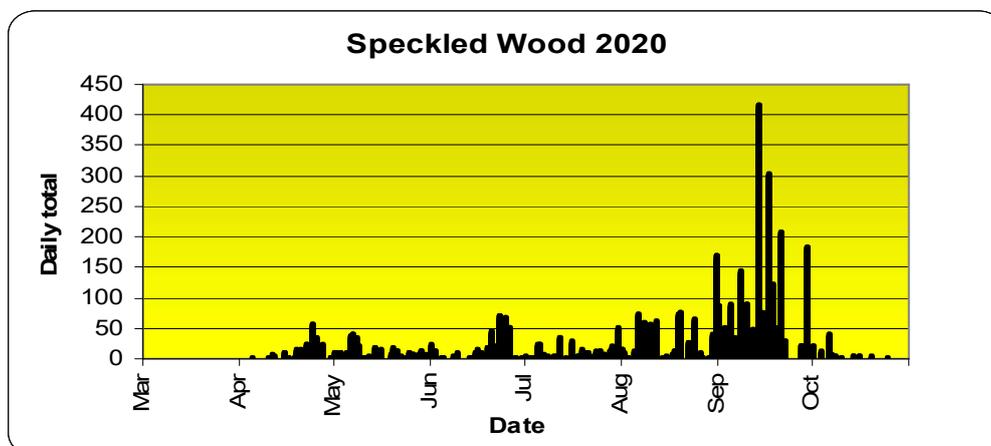
This butterfly can be seen at almost any time from March through to late October with peaks coming in late April/early May, then again in late June with a build up from August to a much higher peak in the second half of September.

Peak counts in recent times have all come in September – in 2020, the largest single record was of 61 at Gibside by Frank Lightfoot on 17th September. In 2019, the largest count was of 100 and in 2018 of 142.

Having said all of that, it is worth remembering that this species only really

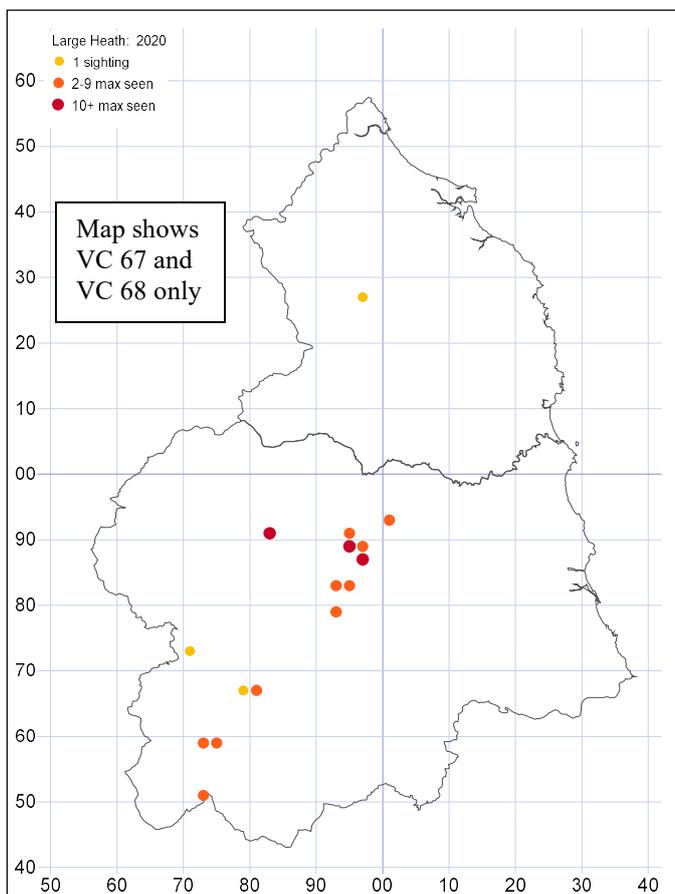
started to spread north through our region in the early 2000's and it is definitely now well established here.

There has also been an interesting recent report (Taylor-Cox and others 2020) that Speckled Wood at the northern end of its range has slightly larger wings which may help with better ability to disperse and colonise new areas.



Large Heath *Coenonympha tullia*

2020: In 2020 the number of Large Heath recorded in the region was 112. Whilst this is below the record high of 162 recorded during the dry, hot summer in 2018, it compares most favourably with the previous highs of 73 in 2019, 38 in 2017, 26 in 2016 and 41 in 2015.



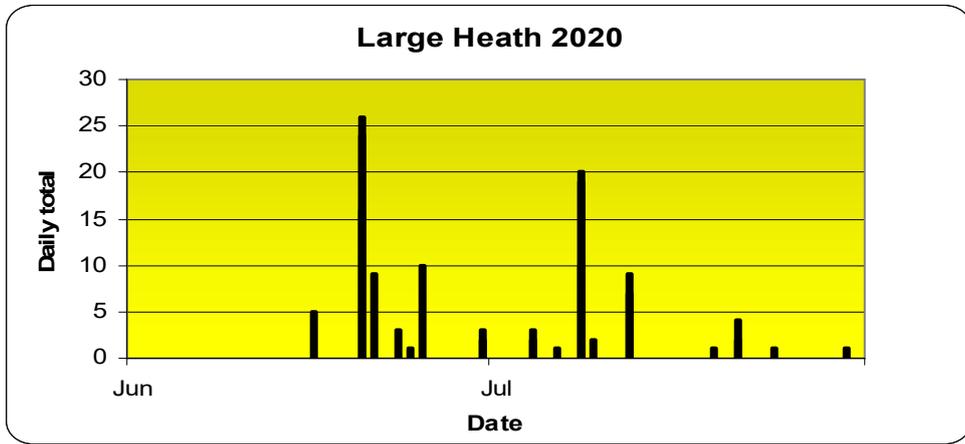
A total of 26 records were submitted by 11 observers. The first of the sightings was by Tim Wrigley of 5 adults on 16th June at Muckle Moss (NY8067). Duncan Hutt then submitted an impressive record of 24 over the upland mires near Whitley Pike (NY8291) on 20th June. Roger Norman reported two at Benshaw Moor (NY9490) on the same day. The following day saw 9 reported by Duncan and Sally Hutt from Aid Moss (NY9283).

Further June records from Duncan Hutt included 3 near Colt Crag (NY9379) on 23rd June, a second double figure count of 10 near Raechester (NY9787) on 25th June, 2 adults at Wanney Byre (NY9383) and a single individual at Green Rigg Moss (NY9282) at the end of the month. 13 were seen at Steng Moss by Mike Carr on 23rd, and Dave King provided the only other record for this month with a single adult seen at Wark Forest (NY7173) on 24th June.

Records for July began with 2 adults near Wolf Crag (NY9788) and a single adult seen at Todcrag Moss (NY9689) on 4th July, observed by Duncan Hutt. A single individual was seen at Whitfield Moor (NY7358) on 6th July by Dave King. A third double figure count by Duncan Hutt included 10 at Ottercops (NY9489) on 8th July, with 9 observed by David Phillips at Greenleighton Moss (NZ0192) and a single individual seen by Dave King at Whitfield Moor (NY7358) on the same date.

Further sightings from Dave King included 2 at Whitfield Moor (NY7458) on 9th July increasing to 9 in this area on 12th July. A single adult was seen by Chris Bird at Steng Moss (NY9590) on 19th July. Dave King then saw 2 individuals at Willyshaw Moss (NY7351) on 21st July and Dave Wainwright observed 2 adults at Lunga Crag (NY9482) on the same day. The penultimate sighting made by Mike Taylor was of a single individual at Grindon Lough (NY7967) on 24 July. A single individual seen on 30th July by Dan Bye at Wooler Common (NT9727) represented the last sighting for 2020. Dave King should be congratulated on checking many sites in variable weather for this species.

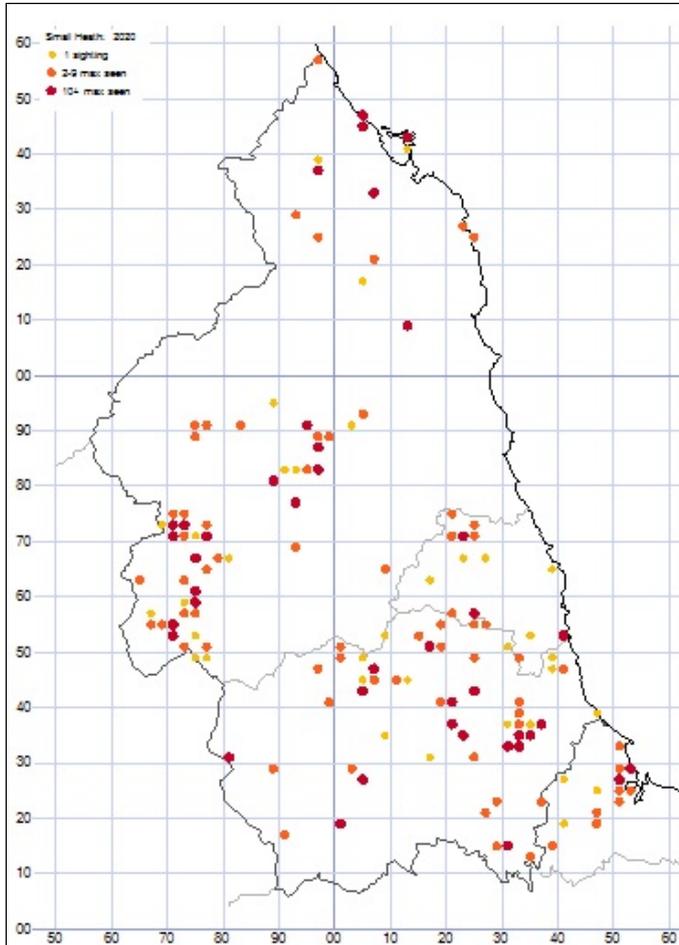
The Large Heath is a Species of Conservation Concern in Britain; Northumberland is the English stronghold where the adults are generally first seen on the wing in the last week of June or the first week of July. They have a short flight period normally of 5-6 weeks. The flight period in 2020 lasted 45 days from mid-June to the end of July. Good weather may have spread the emergence period, or enhanced survival. Equally it may have encouraged a few more observers out on to the Northumberland peat bogs. Care must be taken when seeking this butterfly, as many upland sites are remote and potentially hazardous. Most are best visited with a colleague.



Holly Blue, photographed by Alan Edwards on 17th September 2019 at Castle Eden Dene

Small Heath *Coenonympha pamphilus*

2020: A total of 502 records were received. These recorded 3,370 individual butterflies. These figures are below average, but this is not surprising given the difficulties of recording during 2020, and not too much should be read into them. The flight period, the date between the first sighting and the final record of the season, was 132 days and Small Heath was seen on 100 of these days, representing 76% of the flight period. These flight period figures have now been almost identical for three consecutive years.



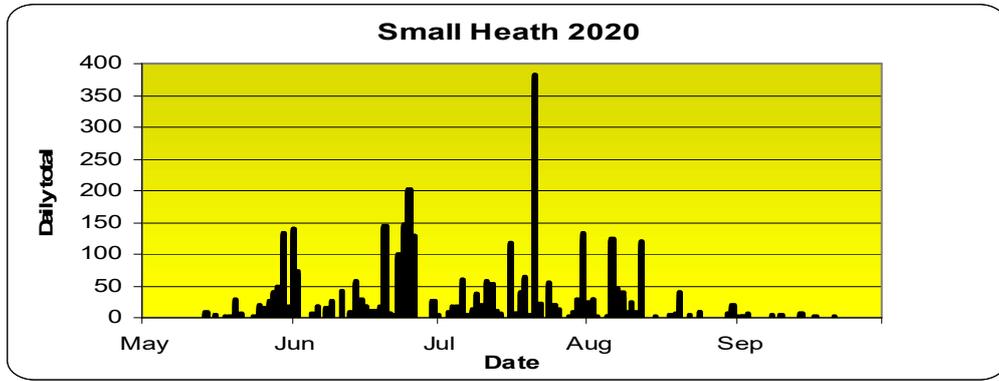
The first record of the season came from Robert Mawson who spotted one at Kelloe Bank, Raisby Way on 13th May. The first Northumberland records came in a week later with Mike Taylor seeing four at the Spetchells near Prudhoe, and a member of the Alnwick Wildlife Group reporting one from Branton Ponds between Alnwick and Wooler both on 20th May.

This year the main flight season lasted from late May to the middle of August. There were several peaks through the year. The first being in late May and early June when 100+ were recorded on two days. This early peak could be attributed to the warm spring of 2020. There was another peak in late June when a total of 202 were recorded throughout the region on 25th June and 100+ recorded on several days around this. In July there was a huge spike on 21st July when 383 were recorded, however most of these were from one record, Dave Wainwright counting 300 at Blackbog Burn near Bellingham, by far the highest count of the year. There were also

two days in August when 100+ Small Heath were seen.

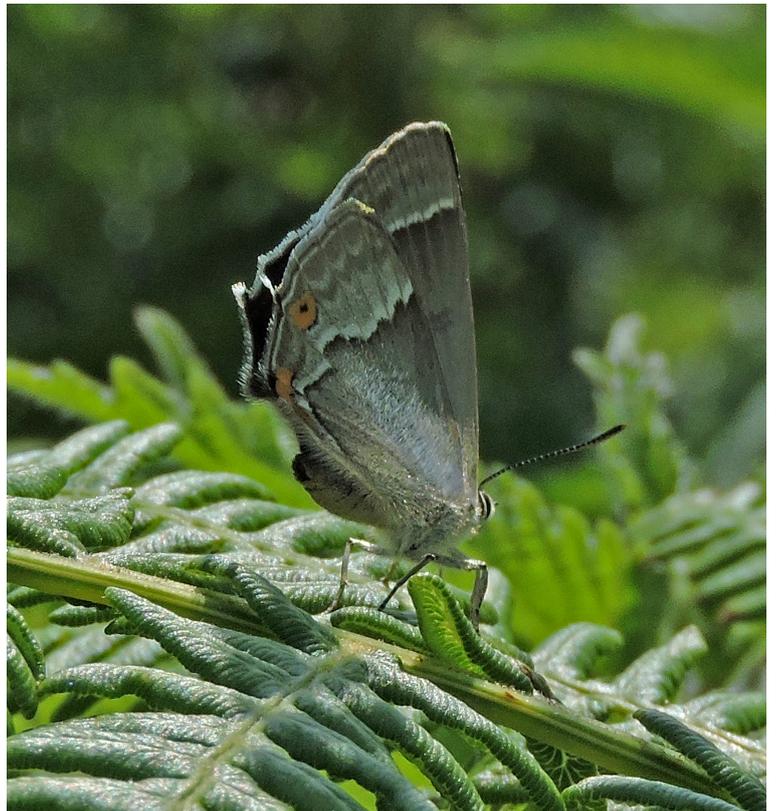
Apart from the high count mentioned above, other good counts came from Mike Richardson with 70 at Folly Moss, central Northumberland on 6th August, Roger Norman with 50 at Benshaw Moor, Northumberland on 20th June and Dave Wainwright who reported 50 from Cat Beck near Wolsingham on 23rd June.

Numbers seen tailed off sharply from mid-August but there were 21 records in September, all from County Durham sites. In fact there were no records from a Northumberland site after Dave Stebbings's report of two at Havannah Nature Reserve, just north of Newcastle on 20th August, which is a very early date for the last record for the county. This continues a trend reported last year suggesting the Small Heath flies later in County Durham than in Northumberland. The last records from County Durham came from Damian Money who saw one at Blackhall Rocks and Val Standen who also spotted one at Thrislington Plantation both on 21st September.



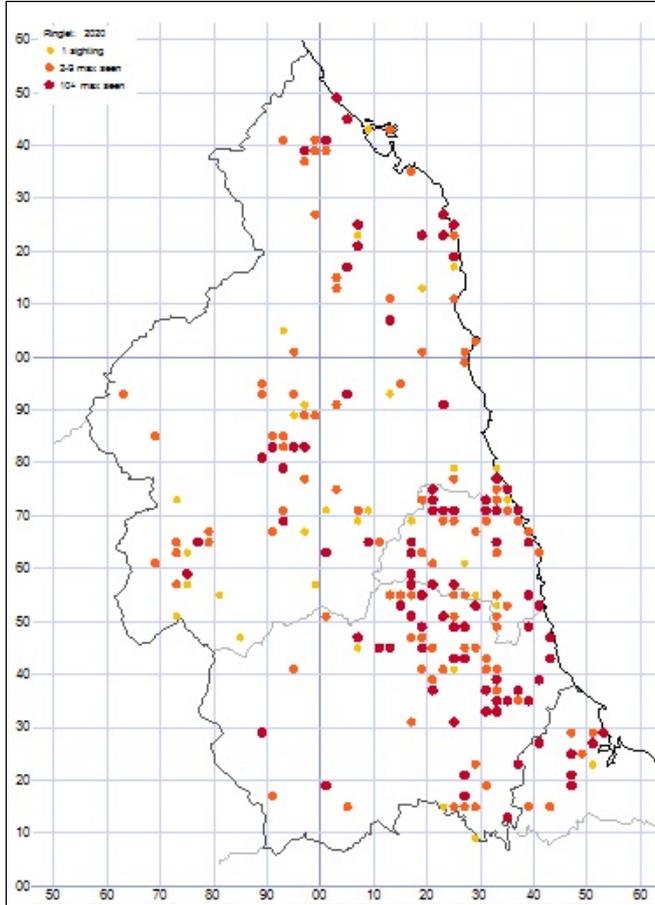
Small Pearl-bordered Fritillary,
photographed by Nigel Foggo near
West Chevington on 26th May 2020

Purple Hairstreak, photographed by
Peter Howard at Sewingshields Crag on
31st July 2020



Ringlet *Aphantopus hyperantus*

2020: A total of 597 records were received. These recorded 6,405 individual butterflies. The flight period covered 143 days and Ringlet was seen flying on 72 of these days, representing 50% of the flight period. The figures this year are considerably down on the record breaking year of 2019. However, no conclusions should be drawn from this year's figures as travel restrictions due to the corona virus pandemic almost certainly meant fewer recorders were out looking for butterflies.

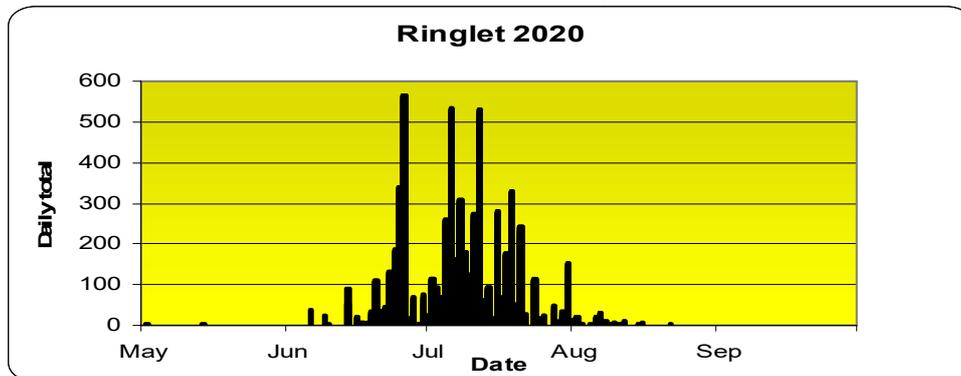


The year got off to an unusually early start with two records in May. The first record on 2nd May from Barry Robinson was the earliest Ringlet has ever been seen in the region. He saw two at Herrington Country Park near Sunderland on that date. The other May record was from Rachel Hepburn who saw four at The Old Brickworks, Kirk Merrington near Newton Aycliffe on 14th May. Perhaps the warm April weather contributed to this early emergence. The first from a Northumberland site was from Graham Beckwith who counted 25 at Newton Steads on the north Northumberland coast on 9th June, a more normal date for the start of the flight season.

The main flight period was from mid-June to the end of July. There were three days in this period when more than 500 Ringlets were recorded throughout the region, with a peak of 565 being seen on 26th June. The highest counts came from Joyce Clayton who saw a total of 204 on her two transects at Doxford Farm Walk, north Northumberland, on 6th July, and 160 from the same two transects on 26th June, Valerie Standen who reported seeing 135 at Thrislington Plantation on 6th July, Dave Wainwright with 120 at Blackbog Burn near Bellingham on 21st July, Jane Lancaster seeing 97 at Newton Point on the Northumberland coast on 9th July and Stephen Goodhart, 93 at Bishop Middleham Quarry on 3rd July.

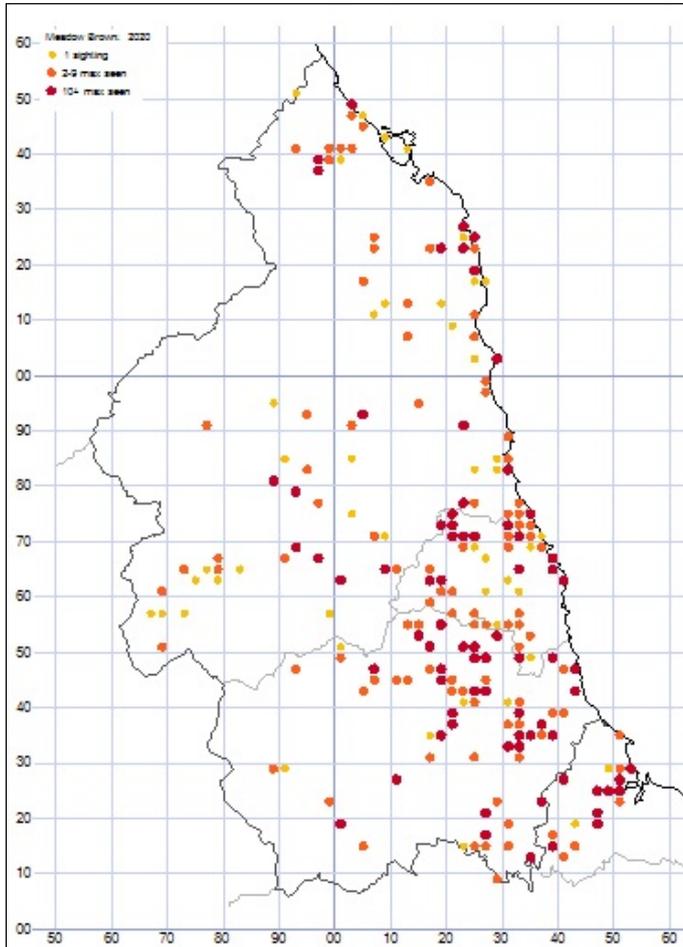
The season continued into August with low numbers being recorded up to 16th August and only four records after this date. The last report for Northumberland was from David Turnbull who saw one at Alnwick main cemetery on 13th September. The final record for Durham came in from Elizabeth Hawkins who saw one at Birtley on 21st September.

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Meadow Brown *Maniola jurtina*

2020: A total of 746 records were received. These recorded 7,046 individual butterflies. The number of records received this year was about 200 fewer than normal, almost certainly due to recorders not venturing out due to pandemic restrictions. Not too much should be read into this year's figures for this reason. The flight period covered 132 days and Meadow



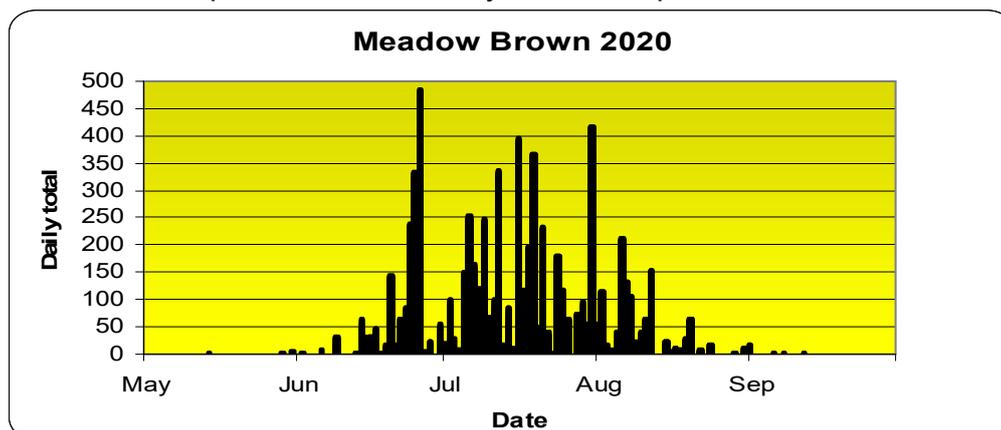
Brown was seen flying on 85 of these days, representing 64% of the flight period.

The season got off to an early start in Northumberland with David Turnbull reporting one at Alnwick main cemetery on 7th May, a very early date indeed. In County Durham the first record was a week later when Rachel Hepburn saw two at The Old Brickworks, Kirk Merrington near Newton Aycliffe on 14th May. These early sightings were possibly due to the unusually warm April leading to early emergence.

The main flight period this year was from the middle of June until the middle of August, with numbers dropping away rapidly after 12th August. The peak of the season in terms of the day when most Meadow Browns were reported was 26th June, when 485 individuals were seen throughout the region. There were several days in July when 300+ were recorded, with 427 being seen on 31st July. The highest counts were lower than the average of recent years. The highest was 147 seen by Jane Lancaster at Newton Point on the north Northumberland coast

on 9th July. Other high counts came from Martin Blick with 125 at Horden Sewage Treatment Works, near Peterlee on 31st July, Valerie Standen who saw 112 at Thrislington Plantation on 16th July and Jill Stewart who counted 82 at Stargate Ponds near Blaydon on 26th June.

The main flight season was over by the middle of August. However there were sixteen records for September this year, which is rather more than normal. The season's final records were: for Northumberland: Mike Coates with three at Fenwick Pit, East Holywell, on North Tyneside and a member of the Alnwick Wildlife Group with one at Howick Hall both reported on 6th September, for County Durham that last record came in from Keith Walton who spotted one at Bishop Middleham Quarry on 15th September.



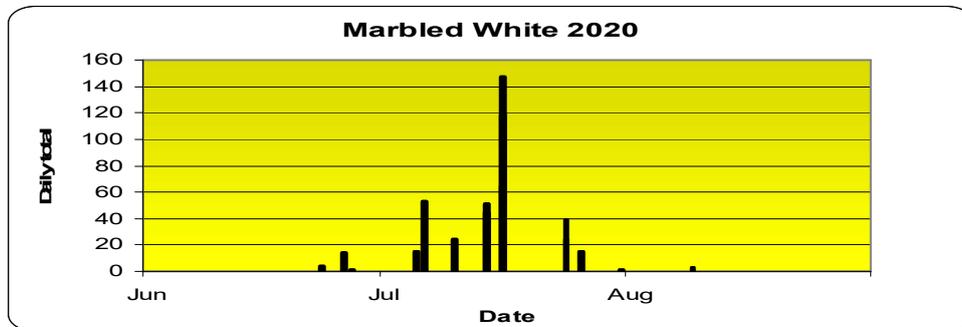
Marbled White *Melanargia galathea*

2020: All but one record for 2020 came from Wingate Quarry (NZ3737), the release site in 2000. Whilst the butterfly has survived here with some impressive daily counts, it shows a remarkable reluctance to move any great distance and has so far not colonised other areas.

A total of 16 records with 367 individuals reported over the season was typical of recent years. The flight period started early in 2020 with 4 individuals observed by Richard Mawson at Wingate Quarry on June 23rd. A total of 14 were then recorded in the quarry on 26th June. Numbers continued to increase here with Graham Beckwith observing 53 on July 6th. A few days later Steve Austin noted 44 individuals on 14th July. The peak count occurred two days later when David Phillips recorded 65 on July 16th. Numbers thereafter declined with 24 sighted at the quarry on 24th July and 15 at the same location two days later. The last sighting date was August 3rd when Stephen White reported 3 from the quarry.

Meanwhile, away from Wingate Quarry there was a rare sighting by Walia Kani of a single specimen at Raisby Hill Grassland, just over 1km from Coxoe on 31st July.

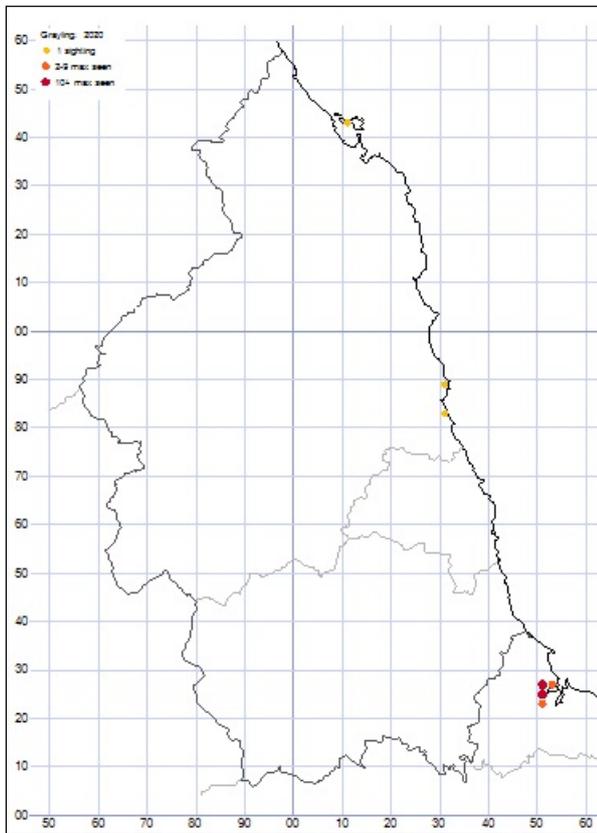
The butterfly's recorded flight period was 48 days, with sightings recorded on just 12 days (25%).



Small Copper, photo by Chris Barlow at Newcastle Great Park on 25th May 2020

Grayling *Hipparchia semele*

2020: The Grayling experienced a reasonable year in our region in 2020 with 380 butterflies reported. Annual totals since 2006 have fluctuated between a low of 80 in 2014 and a high of 612 in 2006 so 2020's total is not too far off the midpoint of these extremes.



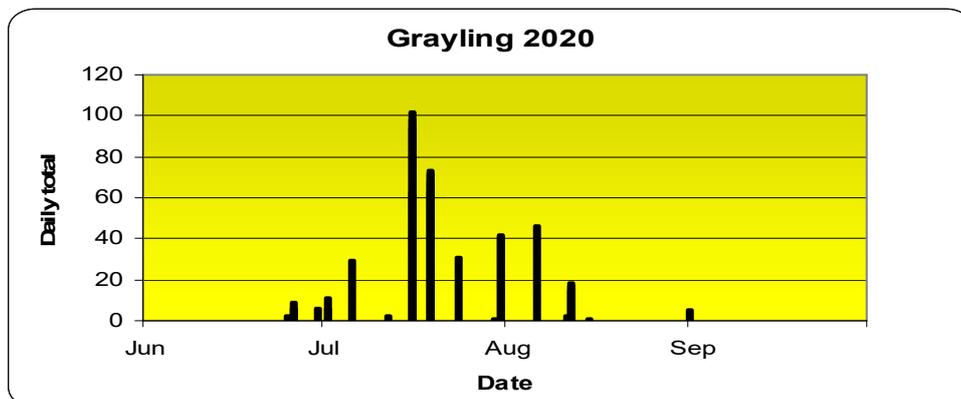
David Phillips recorded our region's first sightings with a pair at Dorman's Pool on June 25th. He saw a further six the next day at the same site. The first double figure count to be reported was from Martin Partridge who saw 29 at Greenabella Marsh on July 6th. This figure was dwarfed by another count made at the same site twelve days later, again by Martin. On this occasion he recorded no fewer than 63 butterflies which represents a very good single day count for any of our sites. This would be easily the year's highest count had it not been matched by one made by Graham Beckwith on July 19th at Greatham Creek.

Only three records were received from north of the Tyne and all were sightings of single butterflies. Alan Priest recorded the county's first on July 30th at Newbiggin while Andy Suggitt recorded one a day later at Cambois. Alan's record is an interesting one: the species has been recorded from the Newbiggin area previously but not for many years.

Northumberland's final record was one seen at Holy Island by Alnwick Wildlife Group on 15th August.

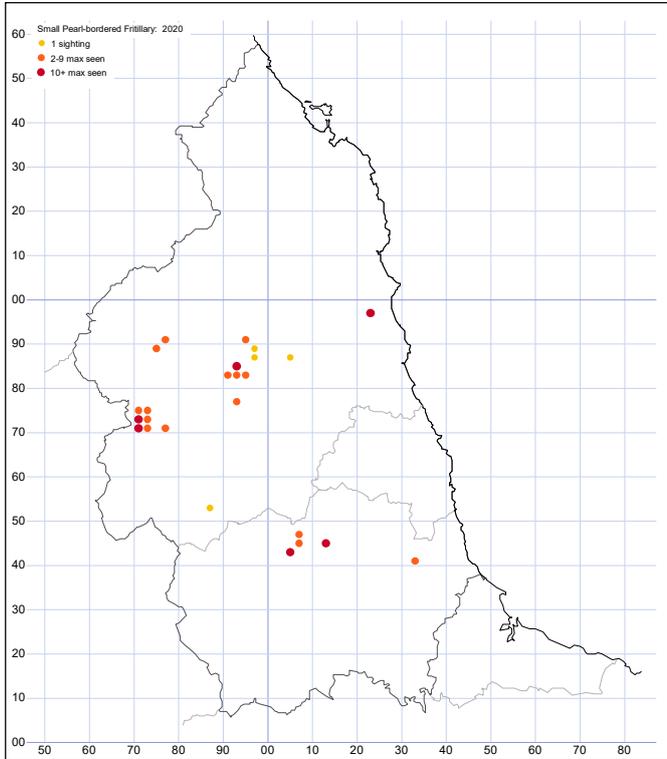
Durham's recording season ended on 1st September; maybe the flight period lasted a little longer as Joyce Scott counted five on that date.

Most Grayling records in 2020 were from known sites but in addition to Alan Priest's Newbiggin record there was another interesting sighting to report, this time from Joe Stockil at Seaton Common. Again, this is another site from which records are very scarce. These two finds show both that the Grayling is a butterfly that periodically explores new areas and also that looking over less well known sites can sometimes pay dividends!



Small Pearl-bordered Fritillary *Boloria selene*

2020: The number of records received this year and the number of Small Pearls seen were the lowest for several years, 52 records and 379 butterflies. Although disappointing this could easily be accounted for by fewer recorders being out due to travel restrictions, so not too much should be read into this year's figures.

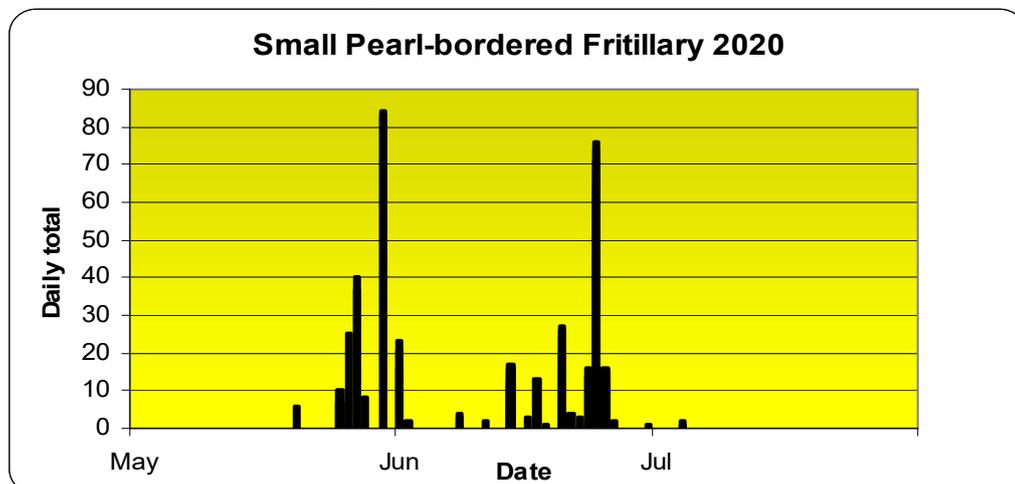


The first records of the year were from County Durham sites with records coming in from Black Plantation on 20th May, a little earlier than normal. Perhaps the warm sunny weather of April led to an early emergence. In Northumberland the first record came in from a previously unknown site for Small Pearl; Colliersdene Wood just inland from Druridge Bay. Nigel Foggo reported seeing three there on 25th May, Roger Norman visited on 28th May and spotted eight and Nigel Foggo again reported seeing sixteen there on 1st June. This is a very interesting discovery and is many miles from the nearest other colonies in the Rothbury area. Whether this is a previously overlooked colony or an introduction is not known.

Black Plantation, as in previous years, was the best site in County Durham, although numbers here were down on previous years.

In Northumberland Duncan Hutt and Dave King, respectively, ventured into lesser explored areas of Kielder and Wark Forests and were rewarded by finding Small Pearl at several new sites. The main flight season this year was from the last week of May until the last week of June, a slightly earlier and shorter season than normal. The last records from Durham were from Longburnford, Horsleyhope Burn and Black Plantation all on 25th June. For Northumberland the last record was received from Duncan Hutt who saw two around Wolf Crag near Kirkwelpington on 4th July.

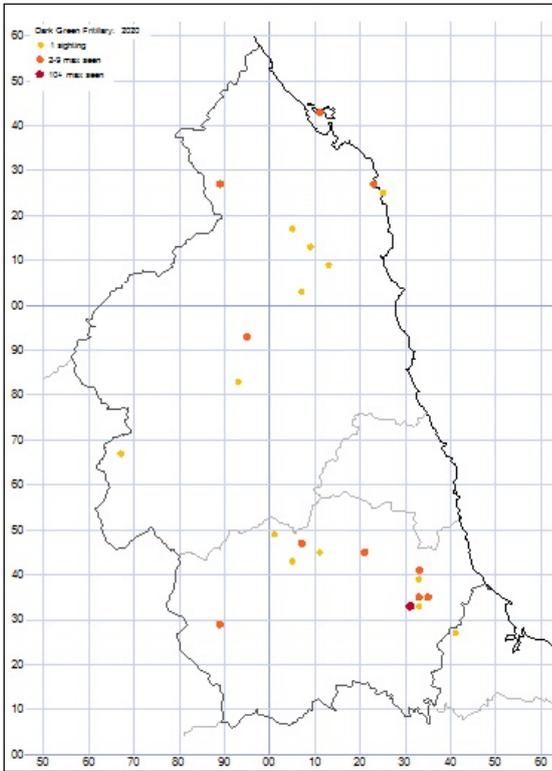
This year again demonstrated that in Northumberland recorders looking at suitable habitat away from the traditional sites did indeed find Small Pearls, indicating that there are still new sites to be found in little visited parts of the county, such as Mike Carr's record at Ladle Well on Hexamshire Common on 31st May.



2019 Dark Green Fritillary *Argynnis aglaja*

2020: The Dark-green Fritillary was on the wing over 97 days and was recorded on 42 of these (43%). The Dark Green Fritillary was recorded in 26 tetrads (4% of total tetrads from which butterfly records were received in 2020).

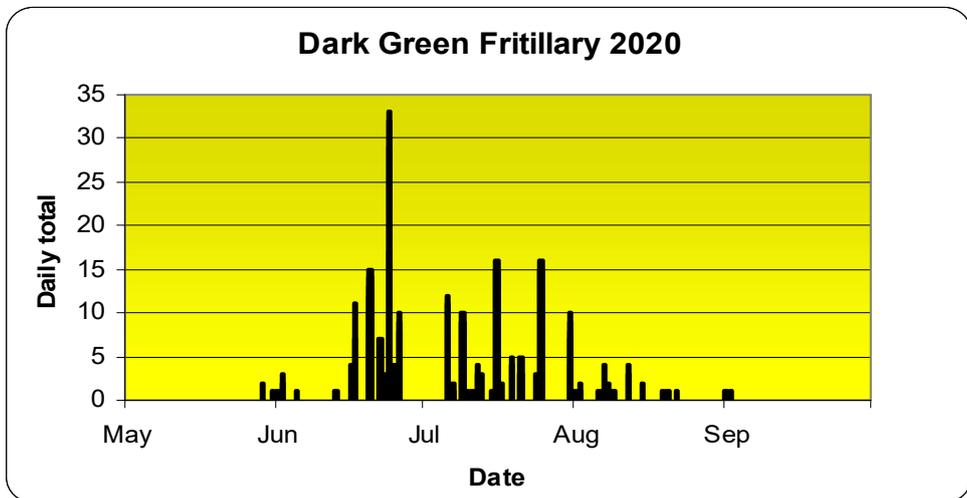
As in 2019 the first Dark-green Fritillary of the year was recorded on Raisby Way, County Durham, where Robert Mawson recorded two on 29th May and then another single on 31st May. The first sighting in Northumberland followed hard on the heels of these with Pete



Howard recording one at Walltown Quarry, Green head near Haltwhistle on 1st June. The highest daily numbers were counted on 24th June when there were four records totalling 33 individual butterflies. However, this included two separate counts carried out at Thrislington by Dave Wainwright and Val Standen respectively and may include some double counting. Next highest dates were 16th and 25th July which both yielded two records and 16 individuals. The best individual count of the year was made by Dave Wainwright on 24th June when he counted a total of 17 individuals at Thrislington. This was the only site where double figure counts were recorded for this species in 2020. Joint second highest counts there were 15 counted by Val Standen on 16 July and by Dave Wainwright on 25 July. Away from Thrislington, the best count was 9 recorded by Joyce Clayton at Long Nanny, Northumberland on 9th July. Very unusually, Holy Island barely featured in the records for this species in 2020 with only two records reported – both by the Alnwick Wildlife Group. This may simply reflect the restrictions on

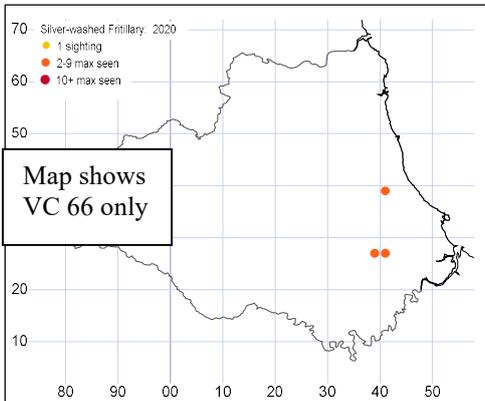
travel in 2020 due to the Covid-19 crisis and it is to be hoped that 2021 season for this species will allow all of its favoured sites to be visited more easily to allow us a clearer picture of how it is faring.

The Dark Green Fritillary was recorded in small numbers throughout most of August but Northumberland saw its last record of the species on the 22nd of that month when Alnwick Wildlife Group recorded one at Branton near Powburn. The species just continued on into September in County Durham with a sighting on the 1st September at Wynyard Woodland Park by Jeff Fowler and the very last one of the year seen a day later by Keith Walton at Bishop Middleham Quarry.

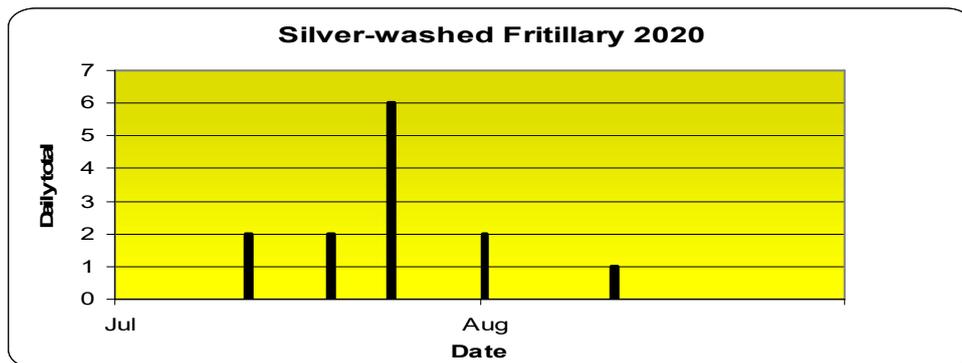


Silver-washed Fritillary *Argynnis paphia*

2020: In recent years, this butterfly has been spreading northwards re-colonising territory it lost in the late 19th century. It crossed the river Tees in 2017 when a single male was recorded in Wynyard Woodland Park, since then it has been recorded in the park every year. The earliest Wynyard date for the butterfly in 2020 was of two in Tilery Wood on the 12th of July, an impressive six were recorded in the same wood on the 24th of July. Two were recorded in Brierley Wood on the 1st of August and the last for the year a singleton in Tilery Wood on the 12th of August. Sadly there was no repeat in 2020 of the Hummersknott, Darlington record of 2019.



Before its nineteenth century local extinction the silver washed fritillary was reported from Castle Eden Dene, Gibside, Dilston and Jesmond. The only dated specimen, however, was from Castle Eden Dene in 1855, the dene becoming the “classic” historical, north-eastern location for this butterfly. The exceptional news of 2020 is that silver washed fritillary has again been recorded in Castle Eden Dene a mating pair was photographed on the 19th of July by Alan Edwards, 165 years after its local extinction. The dene lies some 12.5 km north and east of the Wynyard population as the butterfly flies, not an impossible distance for a natural range expansion but the possibility of a “helping hand” must also be considered.

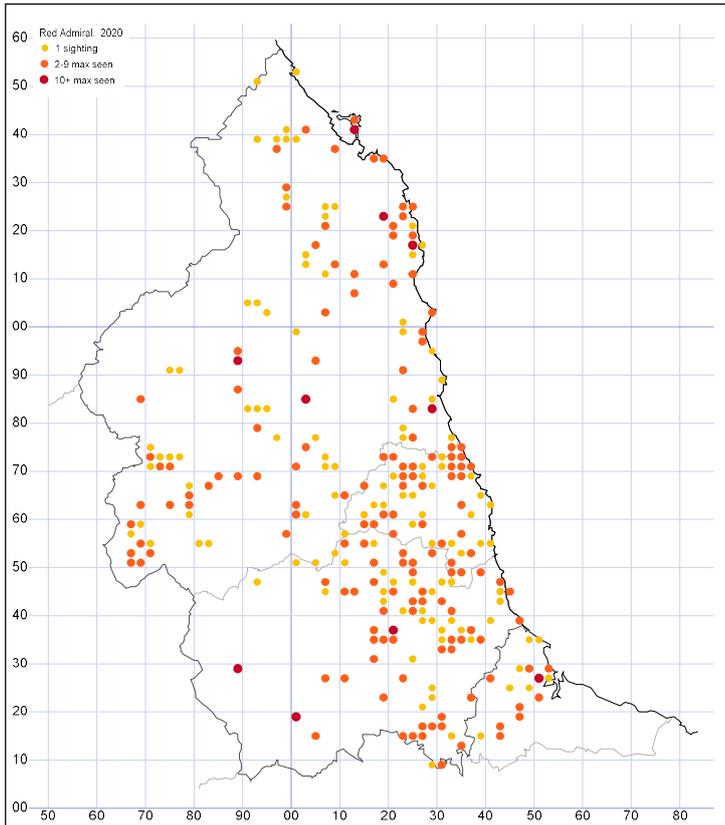


A superb photo of Silver-washed Fritillaries mating at Castle Eden Dene, taken by Alan Edwards on his transect on 19th July 2020

Red Admiral *Vanessa atalanta*

2020: After the dramatic rise in Red Admiral numbers in 2019 the reports for 2020 are hugely disheartening. The numbers reported are back down again, as is the case with the Peacock. The reported sightings in 2019 were 5253 individual butterflies but 2020 saw a decrease to 2206 individual insects from 1195 records submitted.

The flight period was roughly the same at 251 days and saw the Red Admiral flying on 164 of those days, 65% of the available time. The first one was reported by Janet Giaretti at Penshaw on 5th March, much earlier by two weeks later than the year before. The last of the season was seen by Trevor Richardson on 10th November at East Sleekburn only a few days later than the previous year.

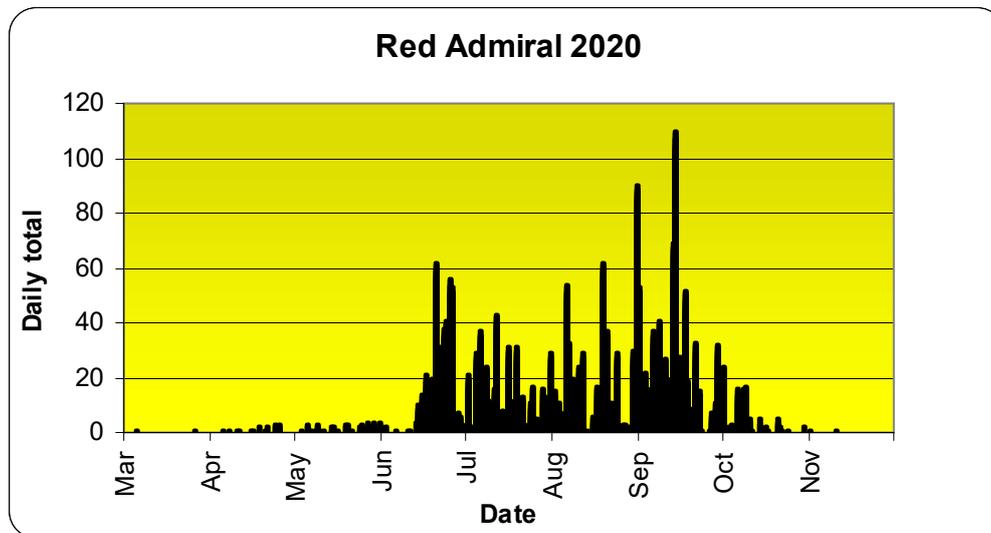


later than the previous year.

Of the sightings, 789 were of single insects, spread throughout the region, 838 reports were in single figures and 15 in double figures. The greatest number reported was 35 individuals recorded by Chris Rowley on 13th September at Wallington. September was the best month for Red Admirals. The 288 records received totalled 675 insects.

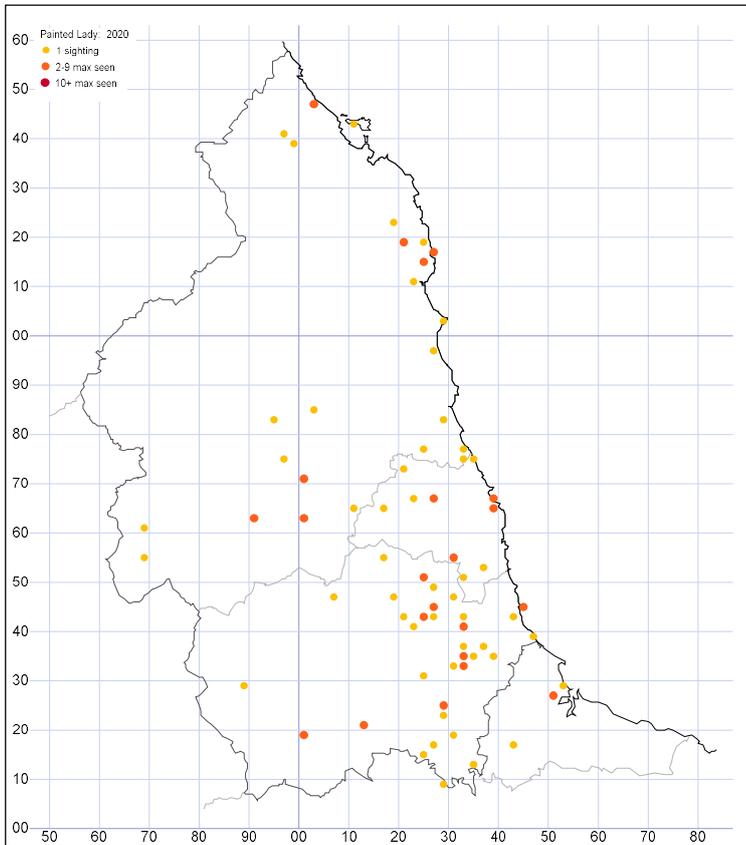
The Butterfly was recorded on 279 tetrads in the Branch area, 43% of those visited. Distribution was right across the North East England Branch area. Most records came from the Tyne Valley and Tyne and Wear as usual, with Durham and Cleveland closely following. In the north of the region, north of Morpeth, records remained steady at 163, netting sightings of 358 insects, five more than in 2019. It is disappointing to see the decline in numbers after such an encouraging year in 2019. This may

well however reflect the unique circumstances caused by the pandemic.



Painted Lady *Vanessa cardui*

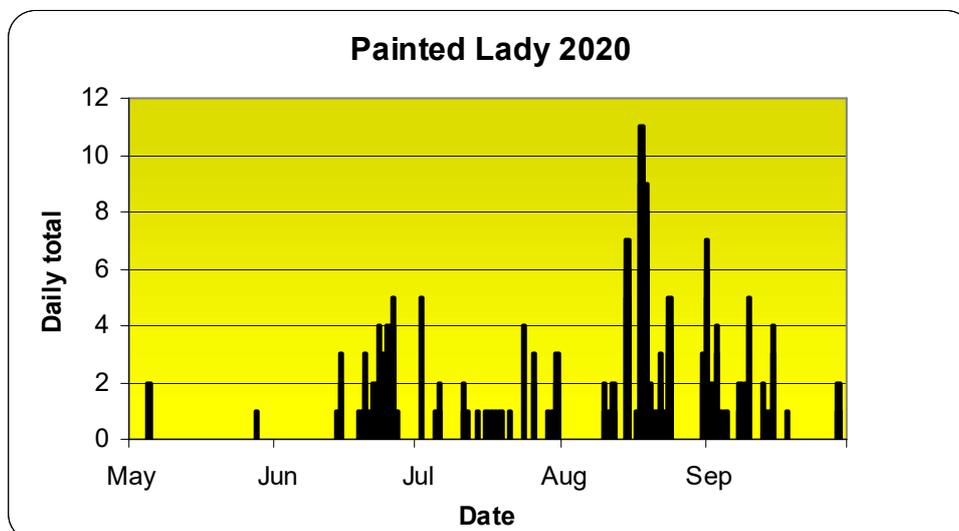
2020: The Painted Lady had an appalling season! It should be remembered however, that 2019 was a “once in a decade” event with massive immigration from the continent producing extraordinary numbers of insects. Although the flight season in 2020 was much shorter, at 148 days, the butterfly only flew on 55 of those days, just 37% of the available time. The first report was from Jane Greening at Hexham Merry Leazes East on 5th May, a full two months later than the previous year. The last was seen at Wingate Quarry Reserve by Robert Mawson 29th September, a good fortnight earlier the last record in 2020. Only 144 Painted Ladies were recorded, from a total of 102 reports from across the region and throughout the season. This is a massive fall from the amazing total of 28,861 butterflies reported in 2019. Of those recorded 83 were for individual insects. No sightings were in double figures. The highest number seen at any one time was 6, as recorded by Julie Roper at Howick on 18th August. There was no best time to spot the Painted Lady as there were so few on the wing. July, August and September seem to have the highest numbers.



The butterfly was very scattered throughout the region, County Durham produced the highest number of records, followed by Tyne and Wear. Northumberland produced only 13 records from north of Morpeth, the majority of sightings were along the coastal belt with very few in the west. The Painted Lady flew in only 72 tetrads within the Branch area, at 11% of the recorded tetrads, however, it would seem that the highest numbers have again been recorded in coastal regions.

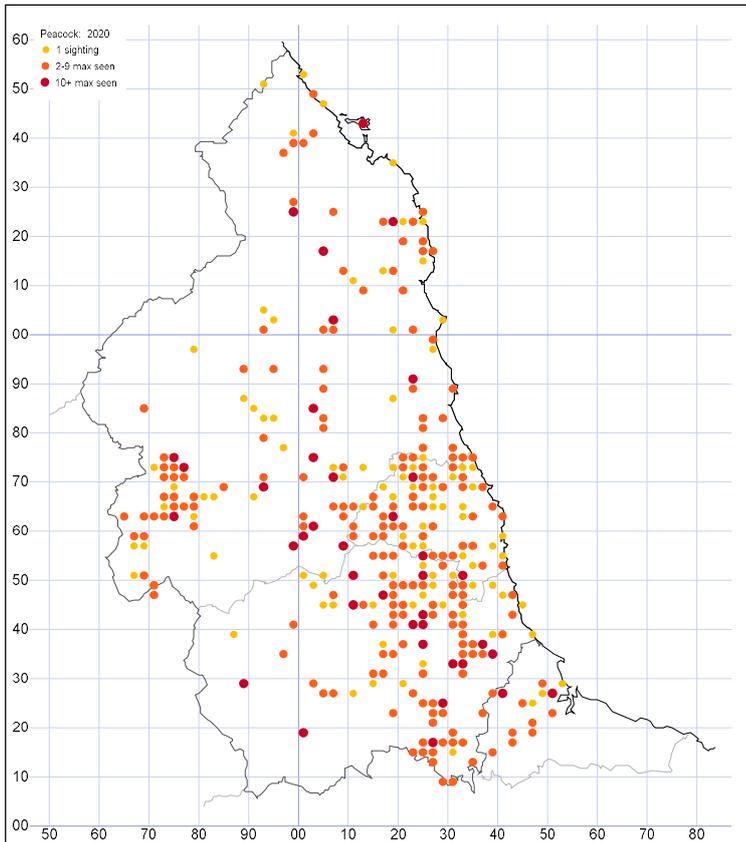
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Peacock *Aglais io*

2020: The Peacock has made another crash after a good increase in 2019- perhaps a reflection of the *lockdown* prevailing for much of the year. Only 4293 individual butterflies were counted with 1607 records being received. In 2020 the flight period was 333 days, 40 days longer but insects were seen on only 166 of those days, just 50% of the time available. The first insect was reported by Dave Wainwright at Low Barns on 21st January, two weeks earlier than in 2019. The last was seen by Darren Archer at Whickam on 18th December two weeks later.

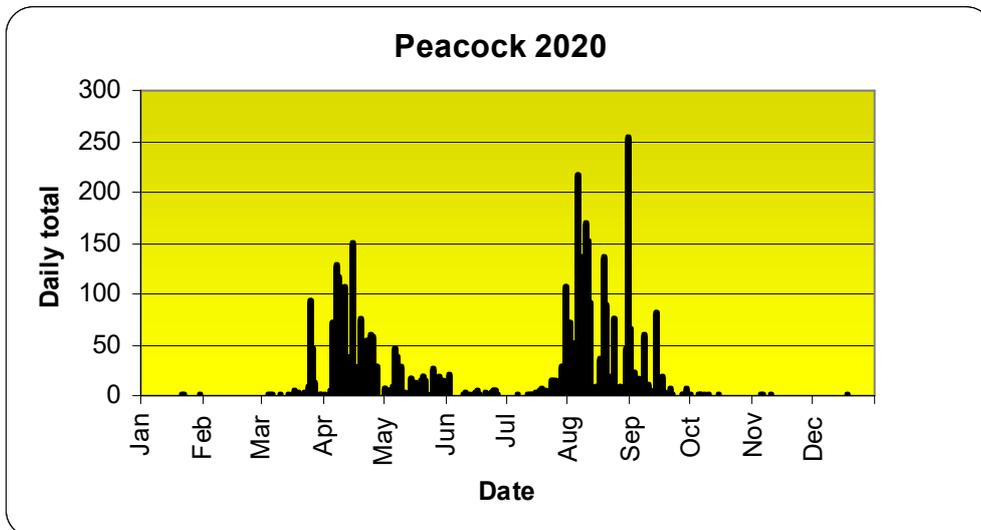


A total of 869 records were of individual insect sightings, with only 61 records being in double figures. The highest number recorded on any day was 62 butterflies reported by Graham Beckwith at Cragside on 11th August. There were 61 records of sightings in double figures.

August was the best month to see the Peacock. 1943 individuals were recorded during the month from 533 records. There was no late flurry of insects in 2020, only 11 were recorded during October, November and the last in December. David Phillips sent in 108 records totalling 240 individual butterflies from the Darlington area.

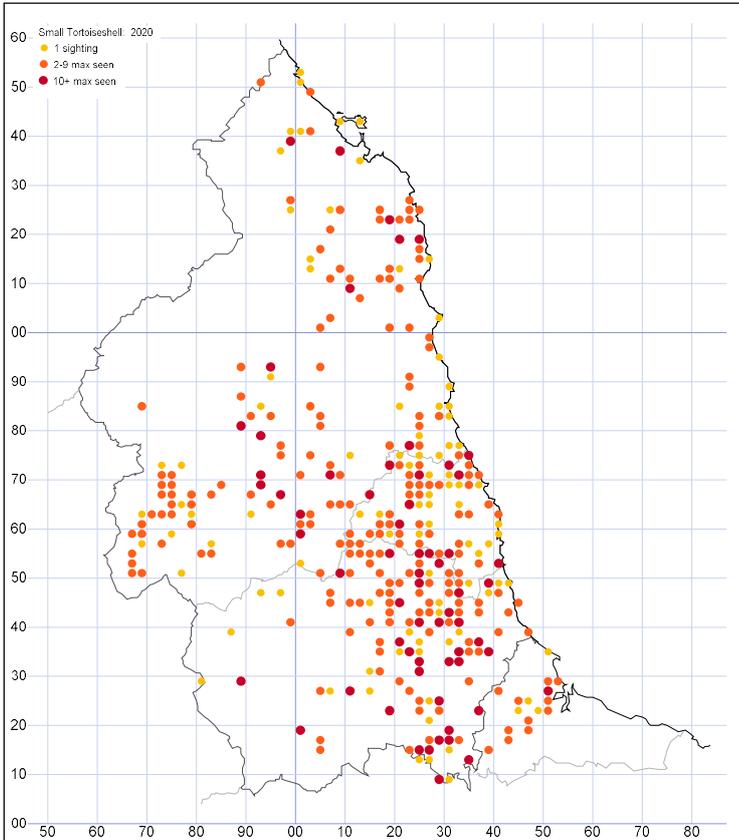
As is usually the case, the Tyne Valley and Tyne and Wear recorded the greatest number of sightings, with County Durham close behind. Northumberland managed a respectable 151 records registering

4455 butterflies. The Peacock was recorded on 328 tetrads in the Branch area, 50% of the visited tetrads.



Small Tortoiseshell *Aglais urtica*

2020: Seen throughout our region in 359 tetrads out of 655 there has been another increase in numbers for the third year running. A total of 2016 records were received of 6326 butterflies. This is 1217 individuals more than in 2019 but still down on the astonishing 6734 butterflies seen in 2015.



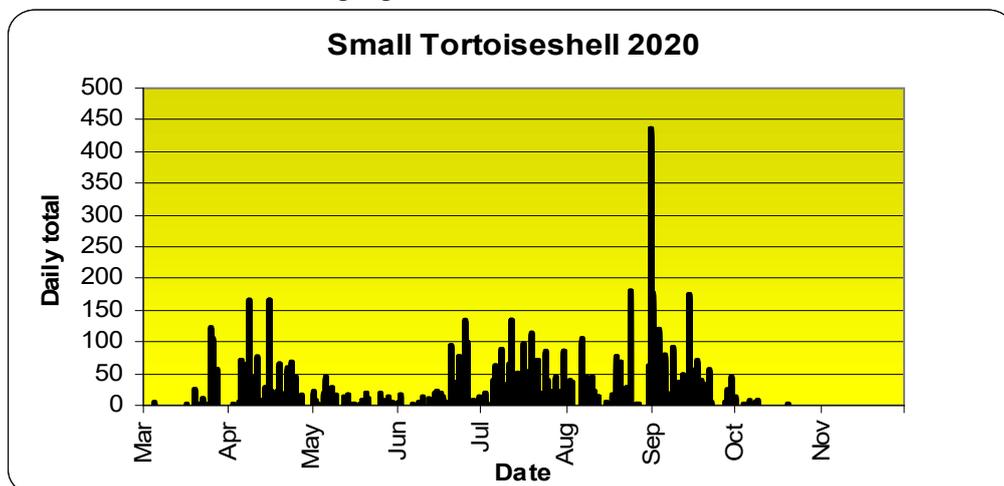
The first five individual Small Tortoiseshells seen in 2020 were on 5th March from Felton to Darlington and the last recorded was seen by M Harris at Esh Winning on the 14th November.

The highest individual count for the first flight period for the third year running was recorded by Gemma Vance again on the Murton fields on 8th April of 53 specimens. In the second flight period from mid June to mid August, the highest count was by Joyce Clayton of 65 on 12th July at Doxford Farm. Then in the final flight period on 31st August, Val Standen recorded 107 at Thrislington Plantation on the day when a massive 438 were recorded throughout our region. The highest previous daily count was 181 on the 24th August being one of 14 days with more than 100 recorded.

In 2020 Small Tortoiseshells were recorded on 185 days being 73% of the 255 days flight period. Fluctuating individual numbers for the last twelve years are:

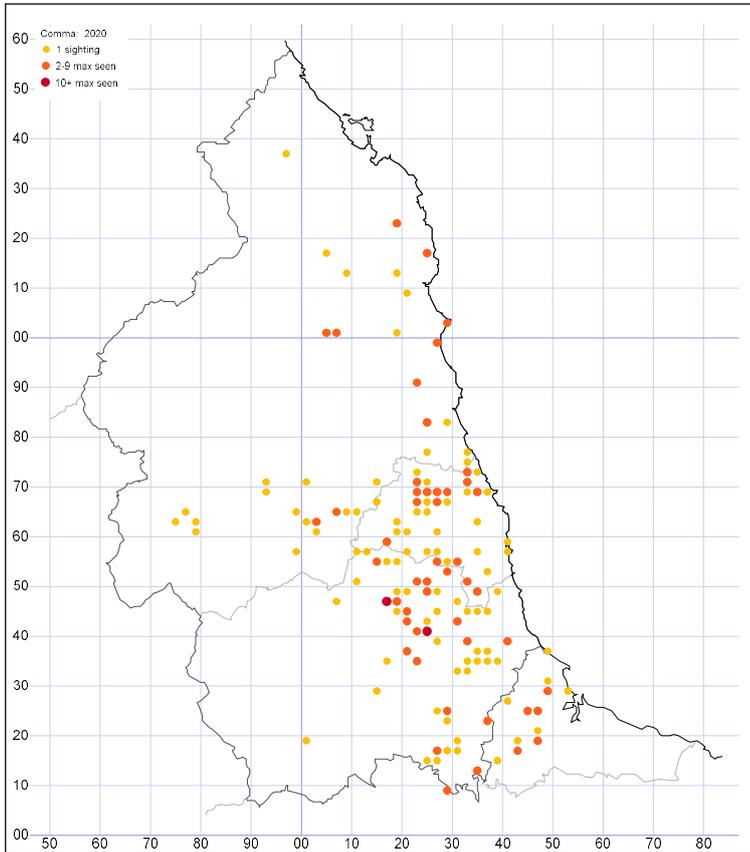
2009 – **3509**, 2010 – **4357**, 2011 – **3746**, 2012 – **2478**, 2013 – **4633**, 2014 - **4445**,
2015 – **6734**, 2016 – **1618**, 2017 - **1541**, 2018 - **2580**, 2019 - **5119**, 2020 - **6326**.

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, 2019 and now 2020 have been encouraging.



Comma *Polygonia c-album*

2020: The first Comma of the season was seen on 19th March by Darren Archer at Whickham. This was later, by a month, than in 2019. The last one, on 19th November, was spotted at Darlington Hurworth Rockcliffe by David Phillips, just a couple of weeks later than the last year. The flight period was slightly longer than the previous year, however, and the butterfly flew during 47% of the total flight time, 115 days from a total of 246 possible days.

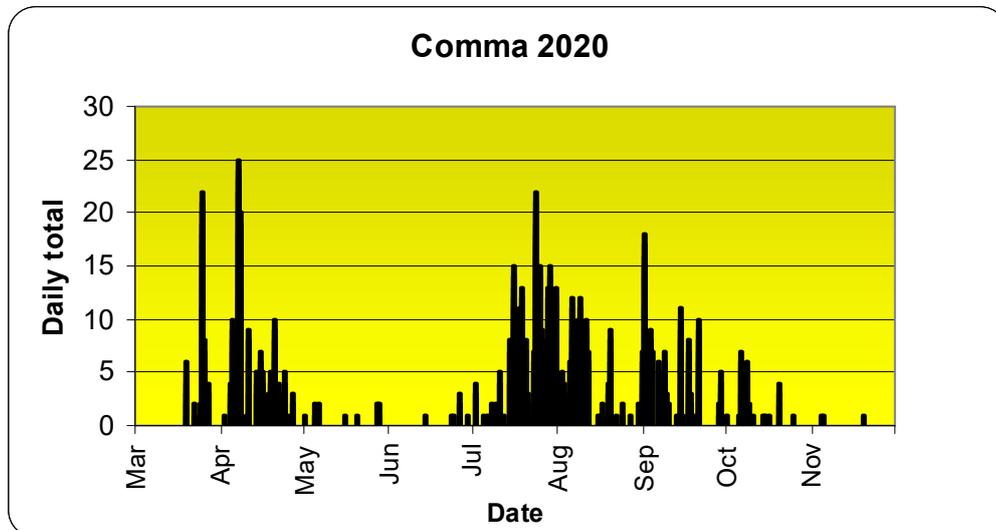


The Comma fared much worse this year than in 2019. 1433 insects were recorded in 2019 and only 601 butterflies were recorded during the 2020 season. 298 of these were single insect sightings. This year there were two records of sightings in double figures, the highest number being counted at Broompark Picnic Site, when 10 were seen by Keith Walton on 8th April and 11 butterflies were counted at Malton Picnic Site on 1st September.

This year, there were spikes in sightings in April when 129 insects were recorded then July when 179 butterflies were seen. August and September had fewer sightings than last year which is unusual.

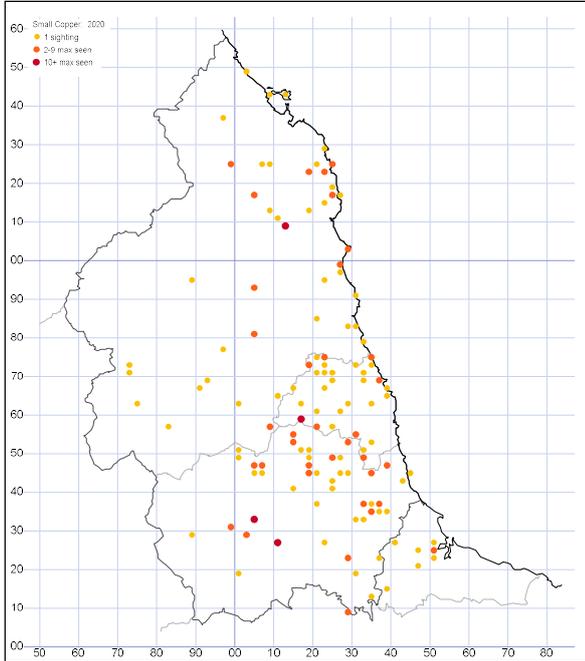
The Branch area had 655 tetrads visited and the Comma was seen at 141 of these sites that equals only 22% of the available area. As in previous years, most sightings were in

the southern parts of the region. Only 24 records came from north of Morpeth in 2020, and as usual, 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*

2020: The first reports of 2020 came in April, from County Durham, and involved singles found at Kelloe Bank (Raisby Way) by Robert Mawson on 22nd-23rd and Hedley Hill on 25th (Keith Walton). The first Northumberland reports were in May and concerned singles at Howick on 7th by Amanda Fall and at Happy Valley on 8th by Alnwick Wildlife Group. These initial reports compare to 21st March (Northumberland) and 22nd April (Co. Durham) in 2019, and 5th May (Co. Durham) and 12th May (Northumberland) in 2018.



No more than four per site were noted until the first double-figure count of the year; 23 at North Grain Beck, Hamsterley Forest (Co. Durham) on 25th May (Derek Charlton).

Small Coppers didn't have a very good year in general, numbers of reports and individuals being on the low side. There were only three further double-figure counts (of 13-15) during the year. (Butterknowle and Gibside NT in Co. Durham, and Wide Hope Forest in Northumberland).

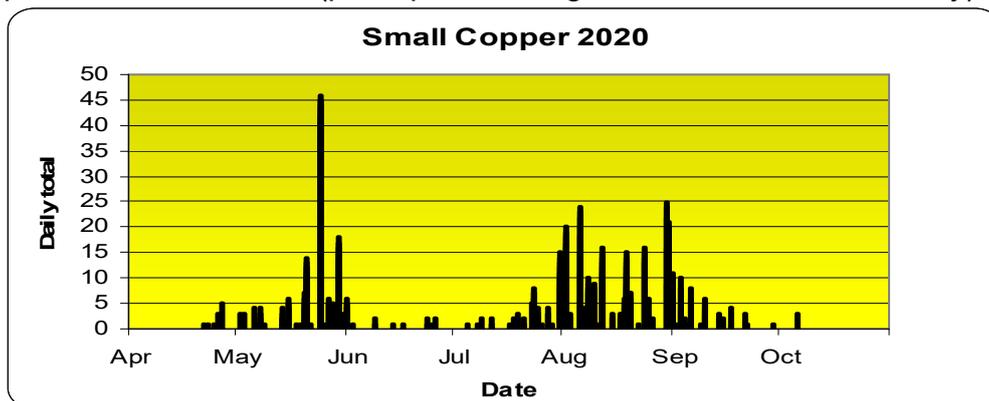
The most productive day collectively was 25th May, when a total of 46 butterflies was counted across 13 widespread sites. A lull occurred after the 'first wave' of spring until the next generation became evident from late July through August,

with no more than one to five per site between 31st May-1st August. The next peak days were 6th August (a total of 24 at eight sites) and 30th August, (26 across six sites). Numbers then declined through the first half of September.

The final reports per region were singles at two Alnwick sites on 17th September (Peter Hugo), one at Big Waters on 29th September (David Stebbings), and three at Gibside NT on 6th October (Frank Lightfoot). These dates compare with 18th October (Northumberland) and 10th October (Co. Durham) in 2019, and 25th October (Northumberland) and 2nd November (Co. Durham) in 2018.

A flight season of 168 days (22nd April-6th October) was shorter than 212 days in 2019 and 182 days in 2018, and the species was noted on a total of 85 days (51%) during the season (compared with 109 days (51%) in 2019).

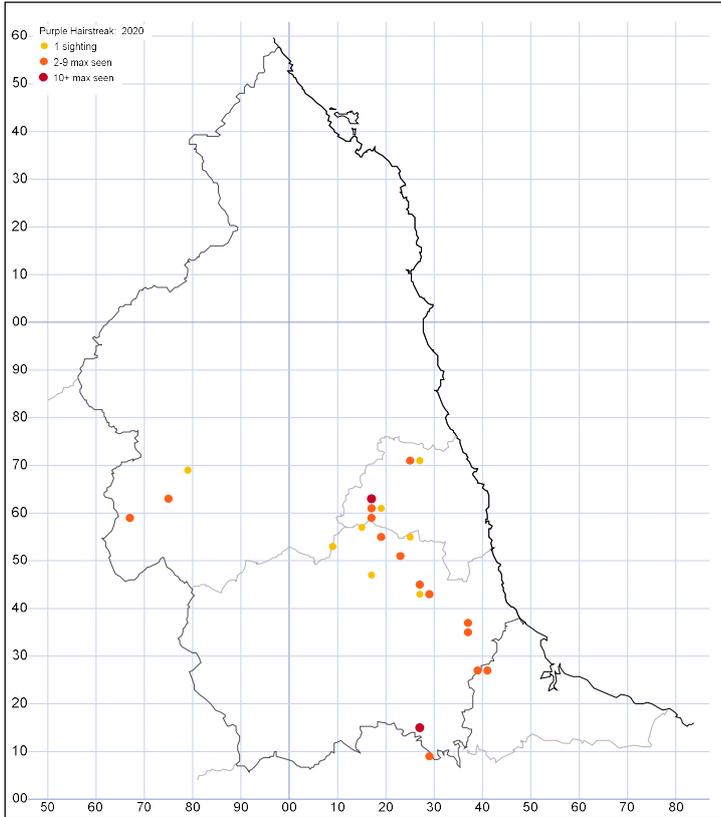
A total of 467 individuals in 2020 was significantly less than the 1,180 recorded in 2019 and 2,724 in 2018. An average of 1.9 butterflies per report this year was a drop on the 2.2 in 2019 and 4.2 in 2018. Small Coppers were found in 129 tetrads from a total of 655 tetrads surveyed, giving a mean figure of 20% (173 tetrads (23%) in 2019). Distribution of records was similar to previous years; the butterfly being found widely but patchily. County Durham and Tyneside were fairly well-represented, as was eastern Northumberland but there were far fewer reports from well inland (perhaps reflecting restricted observer activity).



Purple Hairstreak *Favonius quercus*

2020: There were 53 records this year submitted by 19 different recorders. The records were slightly down from last year but there were a few more recorders.

The first record was submitted by Graham Beckwith who saw his first Purple Hairstreak at



Aykley Heads in Durham on the 3rd July.

There were 20 records submitted in July with 33 records submitted in August and just the one record in September. This late record was by K Walton on the 4th September at Malton Picnic Park.

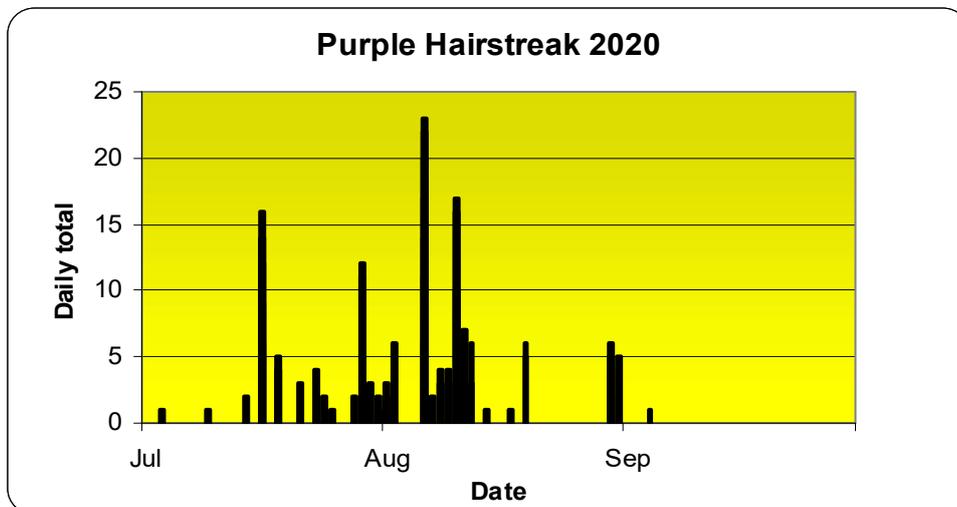
This season the highest count was 11 by Susan Hepworth on the 29th July at Path Head near Blaydon and 10 by Steve Kirtley on the 10th August in Darlington. An interesting outlier was a record of one near Sewingshields Crag on the Hadrian's Wall path by Pete Howard on 31st July.

This butterfly was recorded over three months if you count the one sighting in September. There were no early sightings in June this year but this may well reflect the lockdown restrictions that were in place because of Covid.

This gives a fairly short recording period this year being from 3rd July to the 4th September, although there were no

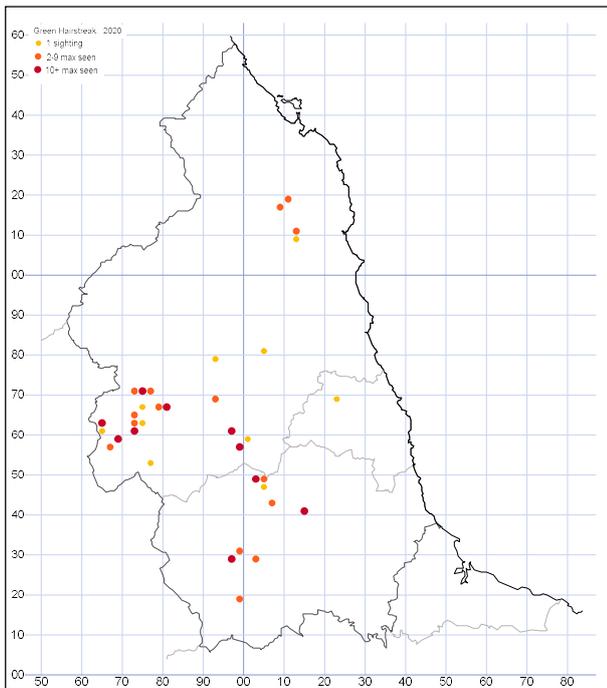
sightings last year in September.

This butterfly is still probably under recorded but is well worth the effort as on a final note most sightings are seen with 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.



Green Hairstreak *Callophrys rubi*

2020: The main flight period for Green Hairstreak in 2020 was 19th April to 30th May. Following the record numbers recorded in 2019 and the good spring and early summer weather in 2020 this promised to be another good year for the species. Unfortunately, most of the flight period coincided with the first national lockdown so recording was restricted to recorders "home patch" for much of the time. Nevertheless, 60 reports from 18 observers were received giving a total of 423 individual butterflies recorded on 21 days. This was a high number considering the restrictions and the lack of records from some localities.



The first record of the year was from Sally Rogers who reported a single butterfly at Healey which is near Slaley in Northumberland on 19th April. The last record was from Mike Richardson on 11th June when he reported a very late individual at Colt Crag Reservoir, Northumberland.

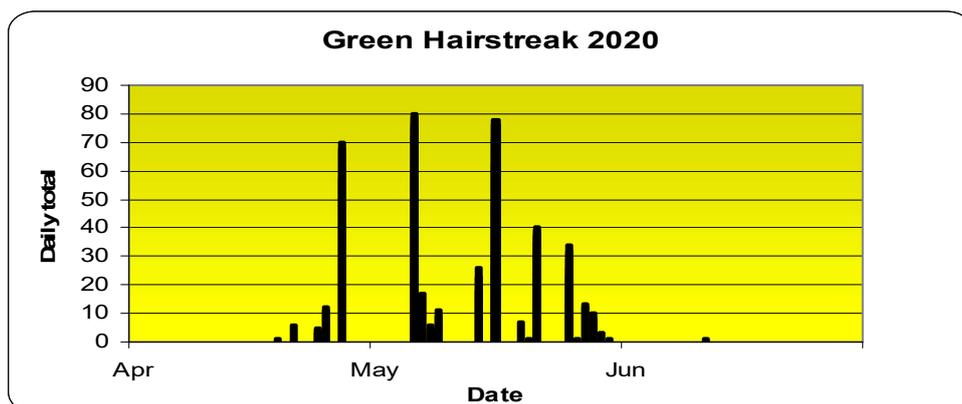
Dave King carried out an extensive survey of potential sites in his home patch, close to Hadrian's Wall, reporting on visits to 20 tetrads, (2km squares), between 24th April and 29th May. His highest number was 18 flying near the roadside at Beaconhill Plantation on 14th May. Dave's reports show that the butterfly is found widely across this area of Northumberland.

In Durham Keith Walton visited Hedleyhope Common on several occasions and on 27th April reported 57 butterflies, the highest number of the year. On 16th May he reported on visits to 4 tetrads near Edmundbyers with 21 reported at

Strawberry Hill.

The first report from Dipton Woods, which is probably the best-known locality for Green Hairstreaks in the North East, was from Mike Taylor who reported 12 butterflies seen on 21st May. Steve Austin reported the same number six days later with a final record from Dipton Woods of 8 from Tim Wrigley on 28th. Dipton Woods is normally one of the most reported sites in the North East for this species and the lack of records demonstrates the effects of the lockdown.

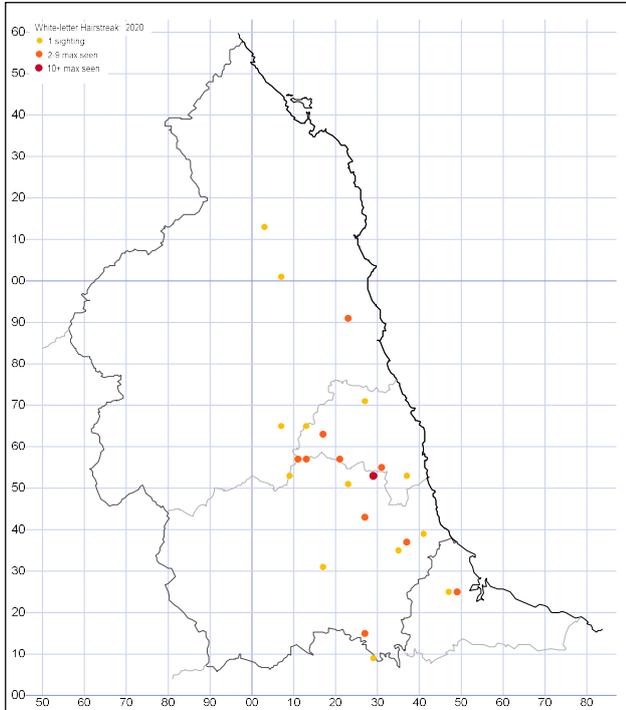
It is impossible to compare the 2020 records for Green Hairstreak butterflies with previous years. We can only hope that the sheltered sunny spots where Bilberry grows are more accessible to recorders in 2021. Chris Barlow had an amazing find by chance near his home on 25th May when he found one on beside a slip road onto the A1 at Newcastle Great Park. This is a completely new site and within the Newcastle city limits! Do we have an urban colony to monitor in 2021?



White-letter Hairstreak *Satyrium w-album*

2020: This was a particularly strange year with the Covid lockdowns in place and reporters restricted to sites they could visit.

There were 20 recorders who reported from 29 sites. 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.



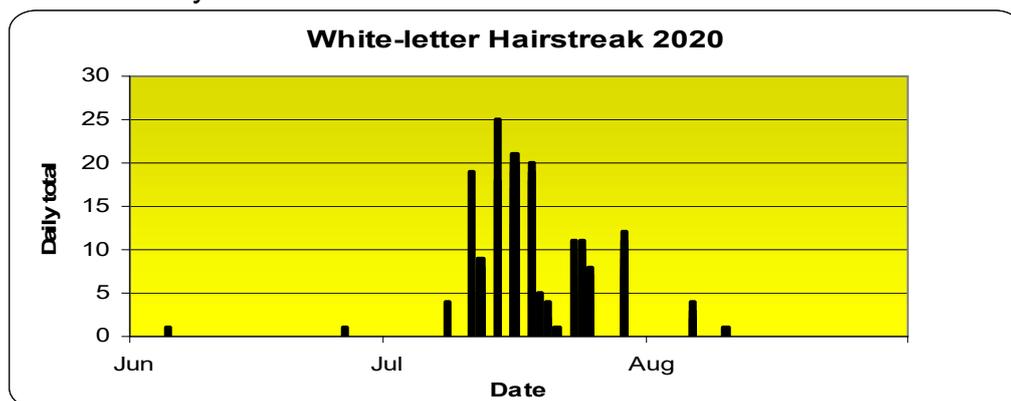
The first record for this butterfly was by Charlotte Rankin on Station Road in Gateshead, a very early sighting on 5th June. The next record was the 26th June by K Walton. These records being the only two sightings of White Letter Hairstreak in June. All the other sightings and records were in July. The largest count was of 19 by K Walton and three other observers on the 11th July at the A1 roundabout at Picktree, Chester-Le-Street.

There were two other counts of 18 at the same site.

Several pupae were found by Graham Beckworth at Aykley Heads, Durham on the 16th July and Darren Archer found pupae or signs of pupae at Washingwell Wood and Dunston Hill Hospital and Clockburn Lake on the 16th and 18th July.

There were no reported sightings of eggs this year.

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. The sightings for this butterfly seem to be on the increase.

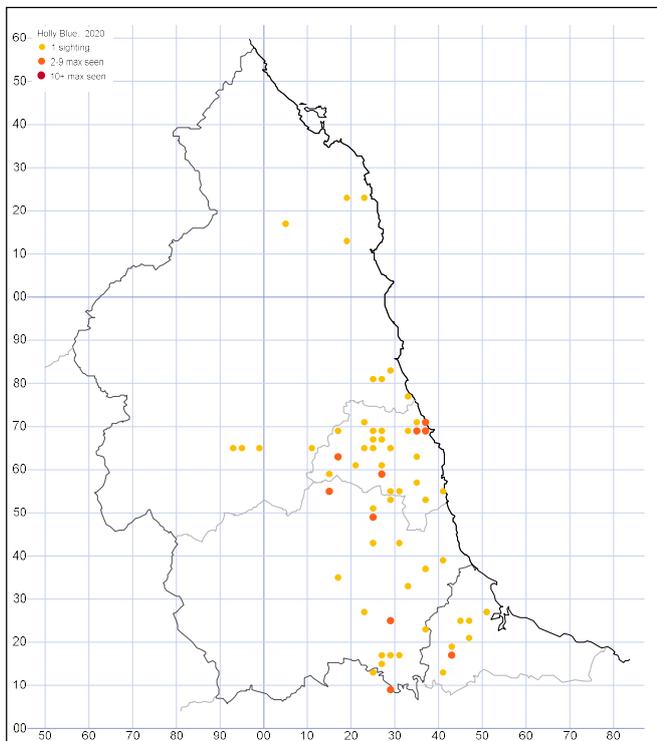


Small Blue (*Cupido minimus*)

2020: Disappointingly, there were no records from the 2019 Teesside release site in 2020.

Holly Blue *Celastrina argiolus*

2020: After last year (2019) being the best year for Holly Blues in our region, 2020 has been a great disappointment. This may be due to under-reporting because of Covid travel restrictions which we haven't experienced previously and also due to the cyclic nature of the population due to the actions of its parasitic wasp, *Listrodomus nyctemerus*.



There were only 132 records received of 156 butterflies compared with 454 records received of 728 butterflies in 2019, 267 butterflies in 2018 and 24 in 2017.

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.

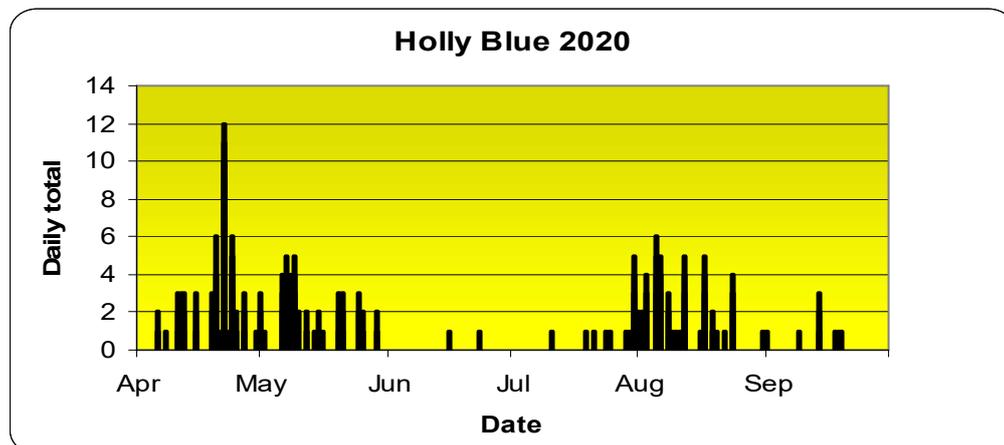
Of these 2020 records 117 were single specimens (compared to 327 in 2019), 11 were twos, 2 were threes, 1 record was of four and 1 record of seven.

The highest count this year of 7 was by Mike Coates on the 22nd April in Northumberland Park, North Shields compared with 14 seen there one day last year and a spectacular 21

seen one day last year at Chester-le-Street by Graham Beckwith.

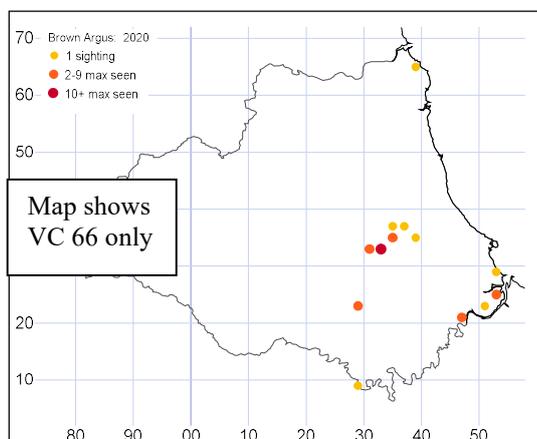
The furthest recorded north in our region were 2 in the Alnmouth area compared to 13 here last year. The furthest west was a record at Anick near Hexham. The first Holly Blue seen in 2020 was by David Phillips on 6th April at Darlington and the last recorded was seen by S Harris at East Herrington on 19th September.

The first brood was seen on the wing from 6th April until 29th May, then there were only two singles recorded in June till the second brood was recorded from 11th July until 19th September. Holly Blues were recorded on only 62 days compared with 101 in 2019 being 37% of the 167 days flight period. They were seen in 63 tetrads in 2020, compared with 122 in 2019. The total number of tetrads that they have now been recorded in stands at 181 in the last decade.



Brown Argus (*Aricia agestis*)

2020: This year we had 49 records sent in from sixteen different sites, this is about the same as last year. The total of 95 butterflies seen flying was a considerable drop over the previous year, however, was still the second highest yearly total recorded, surpassed only by 2019.



The first record of the year came from K. Walton who reported seeing one on the Raisby Way on 14th May. Other records followed on the next two days from Martin Partridge at JM Biodiversity site on Teesside and Phoenix site at Billingham. Other spring generation sightings were made at Bishop Middleham Quarry, Wingate Quarry, Kelloe Bank (Raisby Way), Dorman's Pool and the CATS site at Seal Sands.

In August the second generation started to emerge and records were received from many sites in south eastern Durham and on Teesside. Robert Mawson reported a new site for the species at New Oak

Woods near Trimdon Grange, he saw one there on 1st September. Other sightings from potential new sites in Darlington and Aycliffe Quarry were also received. The last sighting was from Robert Mawson with 1 on Kelloe Bank, (Raisby Way) on 21st September. Robert also reported finding larvae on four occasions over the summer, on two days in July and two days in September, all at Kelloe Bank.

Brown Argus is definitely becoming more widespread in County Durham. This is creating a problem of distinguishing between Brown Argus and Northern Brown Argus, because in the field it is almost impossible to tell the difference between the two.

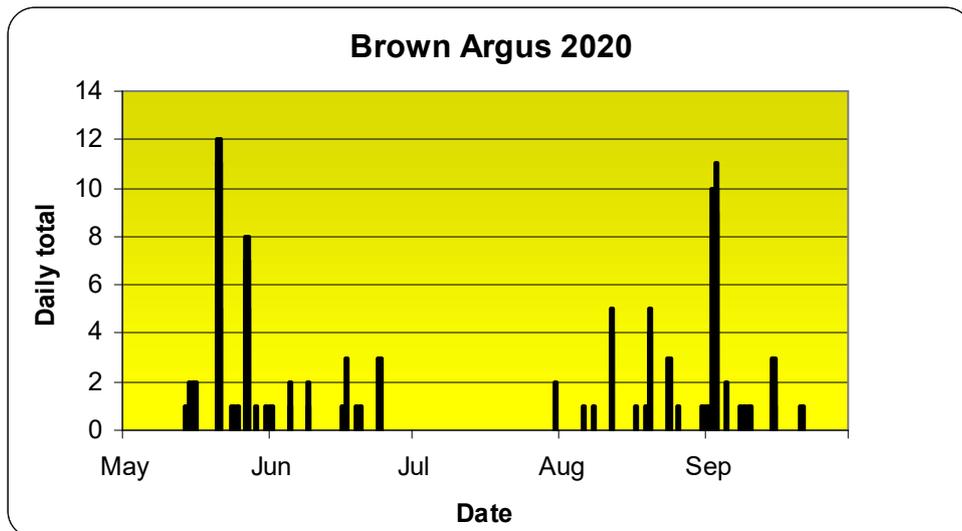
Brown Argus has two generations a year, one flying in May to June and a second in August and September. Northern Brown Argus on the other hand has one generation a year, flying in June and July. It is likely individuals flying in May or after mid-August are Brown Argus.

Habitat is also helpful for identification. The Northern Brown Argus uses only Common Rock-rose as a caterpillar food plant. This plant grows on the alkaline soils of the Magnesian limestone hills of east Durham and the Durham coast. This restricts the distribution of Northern Brown Argus to sites on this soil type with Common Rock-rose present. The Brown Argus, as well as using Common Rock-rose, also uses other plants of the geranium family particularly Dove's-foot Crane's-bill. This means the Brown Argus's habitat requirements are less restricted and it can be much more widely distributed in the general countryside. So it is likely to be a Brown Argus if it is found in a habitat without Common Rock-rose, such as the Teesside sites.

The biggest problem is on sites where Common Rock-rose is present, there are known Northern Brown Argus colonies and where Brown Argus is now also being seen. In these cases differentiating between the two species is very difficult. The last thing we want is for people to guess at identification if they are unsure, and this is likely to be happening now. One way around this is to report Brown Argus and Northern Brown Argus as an aggregate sighting if you are unsure of which species you are seeing. In other words, you know it is either a Northern Brown Argus or Brown Argus but not sure which. This method is used in moth recording where aggregate figures are recorded for moths which cannot be distinguished in the field, such as the Common Rustic and Lesser Common Rustic.

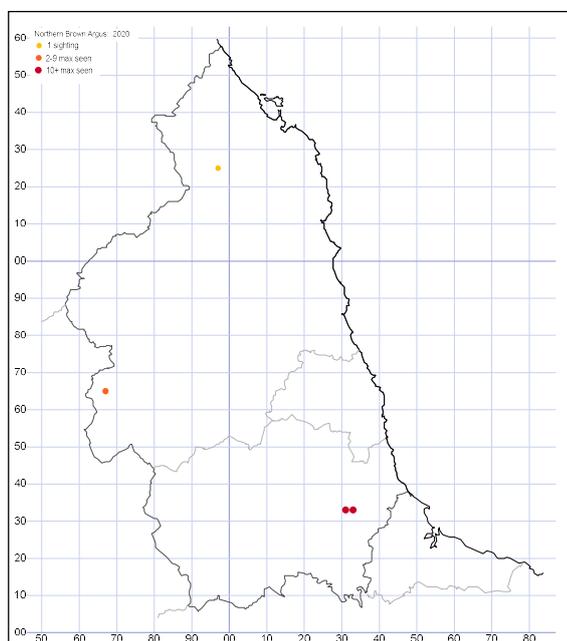
In previous annual reports we have asked people to provide evidence such as good quality photographs if they are recording Brown Argus. This has not changed and firm evidence is still needed to validate Brown Argus records, especially in June and July and from sites with Rock-rose growing. So in future please, if you are sending in records of these two species, use **BA/NBA agg.** as the species you are recording, if you are unsure of which species you are seeing.

In summary then: 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*

2020: It seems 2020 was another fairly poor year for the Northern Brown Argus with only 284 butterflies counted. David Phillips got the season off to a very early start with a singleton at Bishop Middleham Quarry; the region's next records were Dave Wainwright's pair seen at Thrislington NNR on 24th May – still early for the species. Of course one can no longer rule out the possibility of early and late records in particular being Brown Arguses as this species continues its northwards push.



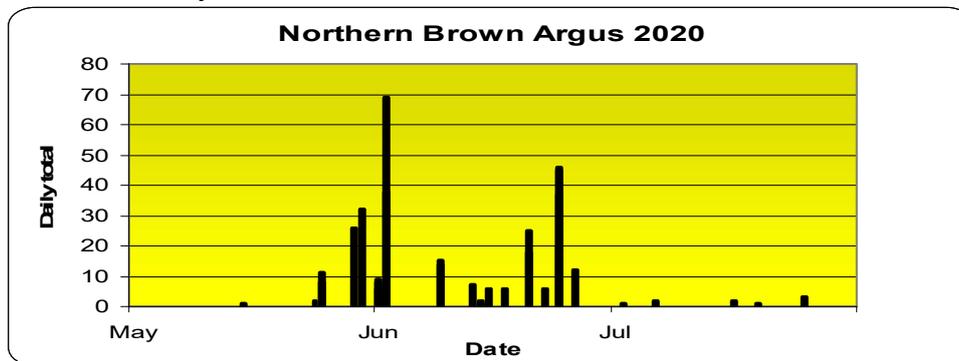
Most of 2020's records were from Thrislington. The species reached its regional peak on 2nd June – which not too many years ago would have been roughly when the flight period would be just starting - when 69 butterflies were recorded; all were seen at Thrislington and the total derived entirely from Val Standen's count of 31 and Graham Beckwith's count of 38, the latter being our region's highest count for the year. Dave Wainwright recorded year's only other outstanding count: 32 on 30th May, again from Thrislington.

Unusually, all counts made at Bishop Middleham Quarry were low; Keith Walton's record of 14 was the only double figure count made at this normally prolific site.

There were no records submitted from the Durham coast and it remains a puzzle why so few Lepidopterists appear to visit habitat which is amongst the finest the county has to offer. Anyone requiring maps depicting areas where the species breeds should contact Dave Wainwright who will be delighted to provide these in exchange for some records!

The flight period in Durham gradually wound down in unspectacular fashion with Dave Wainwright's hat-trick of arguses on 25th July being the latest. Unusually for recent years, there were no August or September records suggestive of second brood Brown Argus.

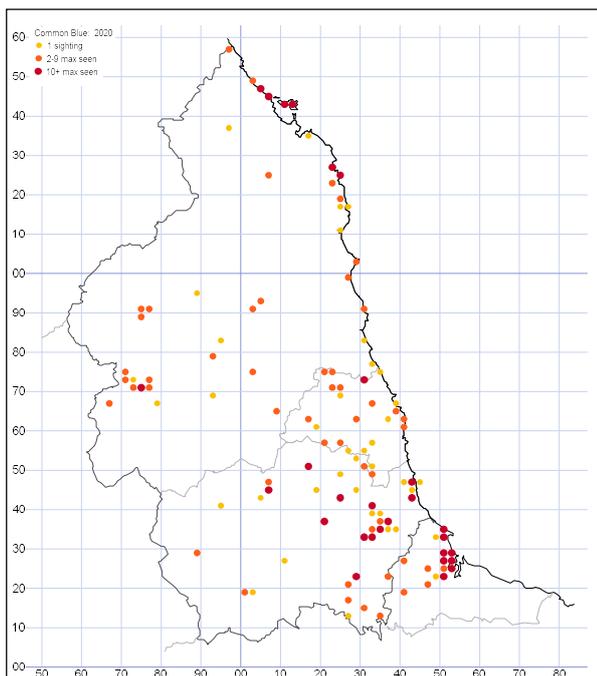
Northumbrian recorders were also busy. Three records might not sound much but given that the species remained unrecorded there for many decades these are exciting finds. The lucky – or perhaps super-diligent – recorders were Michael Veitch, who recorded singles at Carey Burn on 24th June and 2nd July, and Pete Howard who recorded no fewer than seven from a site near Greenhead. Very well done both!



Common Blue *Polyommatus icarus*

2020: There were 434 reports in 2020 with 2903 common Blues recorded between 7th May and 29th September.

As can be seen from the graph of daily totals the number of butterflies recorded peaked at September with the butterfly reported flying on 105 days. This was an unusual year in many ways with quite a big reduction in reports and an early first brood peak probably resulting from the warm spring and early summer weather.



The first butterflies in 2020 were reported on 7th May by Darren Archer at Clockburn Lake near Winlanton Mill and Robert Mawson at Kelloe Bank on the Raisby Way.

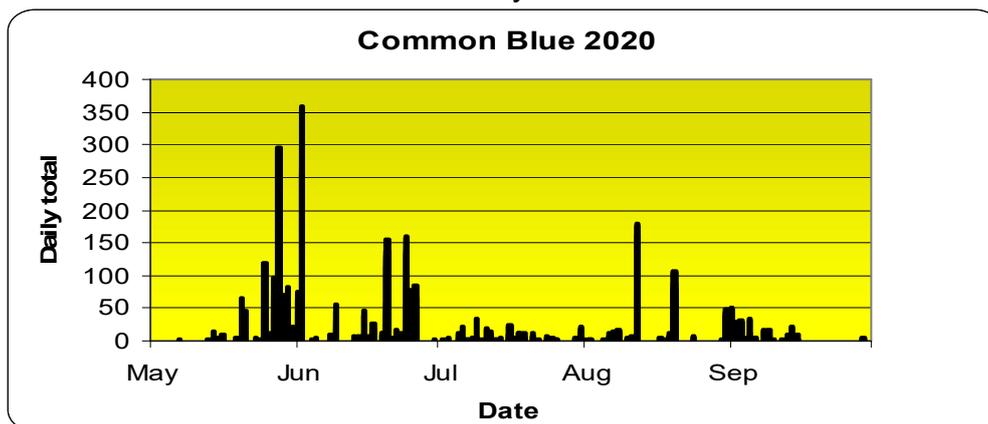
Graham Megson's reports of 52 seen on adjoining tetrads at North Gare on 20th May were the first signs of an early peak in numbers and the highest coastal record. This Teesmouth area provided the highest numbers of the year where close to Teesside's industrial heartland at Greenabella Marsh, Martin Partridge recorded 269 Common Blue butterflies on 28th May. He returned to the site on 2nd June and counted 245 but as with other parts of the North East the cool wet weather which started in the second week of June was probably a factor in the dramatic drop in numbers flying from the second week of June to the middle of August.

There were some exceptions to this trend. Val Standen reported good numbers of Common Blues flying at Thrislington Plantation at the end of June with 51 on the 20th and then 17 on 6th July and 11 on 16th July. Jane Lancaster reported seeing 30 at Newton Point on 9th July and Dave Liddle 15 at Kyo on 9th July. All other reports for late June and July gave Common Blue in single figures. There were then indications of a second brood in August. On 12th August Martin Partridge reported seeing 92 butterflies at Greenabella Marsh and on the same day David Phillips reported 37 at Bishop Middleham while Stephen Goodhart reported 28 from the same site. Common Blues were then reported flying at Bishop Middleham Quarry throughout September, with Keith Walton reporting 28 on the 2nd, Stephen Goodhart 19 on the 5th and 9 on the 13th.

There were then indications of a second brood in August. On 12th August Martin Partridge reported seeing 92 butterflies at Greenabella Marsh and on the same day David Phillips reported 37 at Bishop Middleham while Stephen Goodhart reported 28 from the same site. Common Blues were then reported flying at Bishop Middleham Quarry throughout September, with Keith Walton reporting 28 on the 2nd, Stephen Goodhart 19 on the 5th and 9 on the 13th.

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Stephen Goodhart's two at Bishop Middleham and Robert Mawson's two at Quarrington Hill on 29th September were the last records of the year.



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



White-letter Hairstreak, photo by Alan Edwards at Castle Eden Dene on 29th July 2020

Green Hairstreak, photo by Chris Barlow at Newcastle Great Park on 25th May 2020



CONTRIBUTORS FOR 2020

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

Recorder

Elizabeth Clowes,.....
 Stephen Goodhart..... ,
 Stephen Hutchinson.....
 Dave Liddle.....
 Alan Edwards.....
 Berwick Wildlife Group*.....
 Julia Meldrum, Chris Tomlinson
 Joyce Clayton.....

 Jane Gray, Philip Jordan, James Littlewood
 Martin Partridge.....
 Dave Stebbings.....
 Dave Liddle.....
 Molly Hardie, Robert Hardie.....
 Dave Liddle.....
 Tim Wrigley,.....
 Lynda Bentley
 Jane Ward & Dave Wainwright.....
 Dave Liddle.....

Transect

Bearpark Wood
 Bishop Middleham Quarry
 Brass Castle
 Byerley House
 Castle Eden Dene NNR – West end
 Cocklawburn Dunes
 Crowden Hill Plantation
 Doxford Farm Walk A and B (two transects, Coast
 Care volunteer)
 Gosforth Park NR
 Greenabella Marsh
 Havannah LNR
 Horsleyhope Burn
 Hunting Hall Farm
 Kyo
 Liddels Wood
 Low Barns
 Marsden Old Quarry LNR
 Morrison Busty Pit Yard

Gemma Vance	Murton Fields
Jane Lancaster (National Trust)	Newton Point
Graham Megson	North Gare, Teesmouth NNR
Martin Partridge.....	Phoenix Site, Billingham
Walia Kani.....	Raisby Hill Grassland
Jill Stewart.....	Stargate Ponds & Bewes Hill
John Lawson.....	Stillington Forest Park
Steve Reid	Tanfield Lea Marsh
Simon Hodgson.....	Tees Railway Walk
Pippa Smaling.....	The Whinnies LNR, (near Darlington)
Joe Davies	Thrislington Plantation
Ian H. Findlay.....	Upper Teesdale NNR
Pippa Smaling.....	West Park, Darlington
Stephen White.....	Wingate Quarry
Jeff Fowler	Wynyard Woodland Park - Pickards Meadow

* Molly & Robert Hardie, Ian & Trudy Gray, Malcolm Hutcheson

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

Illustrations and Photos

Front cover	Small Tortoiseshell	Terry Coult
Page 10	Grayling	Alan Priest
Page 18	Holly Blue	Alan Edwards
Page 20	Small Pearl-bordered Fritillary	Nigel Foggo
Page 20	Purple Hairstreak	Pete Howard
Page 23	Small Copper	Chris Barlow
Page 27	Silver-washed Fritillary	Alan Edwards
Page 41	White-letter Hairstreak	Alan Edwards
Page 41	Green Hairstreak	Chris Barlow

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

Accepting Records

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

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

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

FLIGHT PERIOD TABLE

This table covers both Durham and Northumberland, and records the first and last flying record of each species for the three-year period 2018 to 2020. 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 – 2020 are included in the last two columns. Six earliest and one latest record dates, (shown in **bold**) were beaten or equalled in 2020. One or two dates may differ from previous tables due to additional records or reappraisal.

FLIGHT PERIOD TABLE								
Species	2018		2019		2020		Record earliest	Record latest
Dingy Skipper	10-May	11-Aug	26-Apr	5-Aug	23-Apr	10-Aug	18-Apr-03	22-Aug-09
Small Skipper	19-May	30-Sep	6-Jun	31-Aug	25-May	15-Sep	11-May-17	10-Oct-01
Essex Skipper	6-Jul	1-Aug	4-Jul	9-Aug	1-Jul	31-Jul	1 Jul-20	16 Aug-16
Large Skipper	31-May	8-Aug	26-May	19-Aug	14-May	10-Aug	14-May-20	11-Sep-12
Orange-tip	2-Apr	31-Jul	21-Mar	3-Jul	2-Apr	23-Jul	5-Mar-11	10-Sep-06
Large White	19-Apr	24-Oct	11-Apr	12-Oct	7-Apr	21-Oct	8-Mar-11	27-Dec-13
Small White	8-Mar	22-Oct	20-Mar	21-Oct	26-Mar	21-Oct	3-Mar-99	1-Nov-11
Green-veined White	5-Apr	10-Oct	25-Mar	12-Oct	31-Mar	4-Oct	8-Mar-11	28-Oct-11
Clouded Yellow			14-Jul	14-Jul	30-Apr	3-Sep	30-Apr-20	15-Oct-00
Brimstone	1-May	26-Jul	21-Feb	25-Aug	20-Mar	17-Sep	21-Feb-19	28-Sep-11
Wall	21-Apr	10-Oct	19-Apr	21-Sep	18-Apr	15-Sep	4-Apr-07	12-Nov-11
Speckled Wood	4-Apr	17-Nov	25-Mar	28-Oct	25-Mar	25-Oct	5-Mar-11	17-Nov-18
Large Heath	11-Jun	13-Jul	29-Jun	23-Jul	16-Jun	30-Jul	4-Jun-96	14-Aug-96/12
Small Heath	14-May	21-Sep	16-May	23-Sep	13-May	21-Sep	22-Apr-11	28-Oct-11
Ringlet	19-May	30-Aug	15-Jun	26-Aug	2-May	21-Sep	2-May-20	2-Oct-01
Meadow Brown	26-May	9-Sep	13-May	20-Sep	7-May	15-Sep	4-Apr-99	14-Oct-95
Gatekeeper							14-Jul-06	2-Sep-10
Marbled White	23-Jun	6-Aug	28-Jun	4-Aug	23-Jun	9-Aug	19-Jun-17	26-Aug-08
Grayling	26-Jun	20-Aug	27-Jun	25-Aug	25-Jun	1-Sep	18-Jun-11	11-Sep-05
Small Pearl-bordered Frit.	26-May	13-Aug	25-May	26-Jul	20-May	4-Jul	15-May-11	13-Aug-18
Dark Green Fritillary	10-Jun	19-Sep	16-May	23-Sep	29-May	2-Sep	16-May-19	23-Sep-19
Silver-washed Fritillary	4-Aug	18-Aug	4-Jul	24-Aug	12-Jul	12-Aug	1-Jul-17	24-Aug-19
Red Admiral	6-May	17-Nov	17-Feb	2-Nov	5-Mar	10-Nov	23-Jan-06	28-Dec-07
Painted Lady	4-May	10-Oct	22-Feb	23-Oct	5-May	29-Sep	22-Feb-19	7-Nov-03
Peacock	22-Mar	15-Nov	14-Feb	3-Dec	21-Jan	18-Dec	8-Jan-96/17	23-Dec-05
Small Tortoiseshell	8-Mar	24-Oct	15-Feb	9-Dec	5-Mar	14-Nov	1-Jan-05	27-Dec-05
Camberwell Beauty							6-Jul-06	10-Sep-06
Comma	24-Mar	29-Oct	21-Feb	2-Nov	19-Mar	19-Nov	3-Feb-07	19-Nov-20
Small Copper	5-May	12-Nov	21-Mar	18-Oct	22-Apr	6-Oct	21-Mar-19	12-Nov-18
Purple Hairstreak	30-Jun	29-Sep	23-Jun	24-Aug	3-Jul	4-Sep	23-Jun-19	29-Sep-18
Green Hairstreak	28-Apr	11-Jun	17-Apr	19-Jun	19-Apr	11-Jun	29-Mar-12	27-Jul-98/08
White-letter Hairstreak	25-Jun	12-Aug	29-Jun	9-Aug	5-Jun	10-Aug	5-Jun-20	29 Aug 16
Holly Blue	24-Apr	9-Oct	29-Mar	5-Oct	6-Apr	19-Sep	26-Mar-12	21-Oct-06
Brown Argus	15-May	9-Sep	13-May	17-Oct	14-May	21-Sep	23-Apr-11	21-Oct-12
Northern Brown Argus	31-May	2-Aug	23-May	5-Aug	15-May	25-Jul	15-May-20	7-Sep-16
Common Blue	14-May	25-Sep	30-Apr	8-Oct	7-May	29-Sep	15-Apr-11	26-Oct-08

Other species: High Brown Fritillary – 30-July-2006, Long-tailed Blue – 12 / 13-March 2009 and 23-July 2013

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

Tetrads in 2017 (% of all 594 recorded tetrads)	Tetrads in 2018 (% of all 586 recorded tetrads)	Tetrads in 2019 (% of all 765 recorded tetrads)	Tetrads in 2020 (% of all 655 recorded tetrads)	Species	Tetrads over the last 10 years 2011-2020 (% of all 1569 recorded tetrads)
252 (42%)	317 (54%)	366 (48%)	282 (43%)	Green-veined White	1012 (64%)
233 (39%)	245 (42%)	400 (52%)	359 (55%)	Small Tortoiseshell	939 (60%)
253 (42%)	258 (44%)	423 (55%)	328 (50%)	Peacock	936 (60%)
378 (63%)	202 (34%)	371 (48%)	279 (43%)	Red Admiral	848 (54%)
189 (32%)	210 (36%)	256 (33%)	213 (33%)	Ringlet	768 (49%)
185 (31%)	253 (43%)	321 (42%)	280 (43%)	Orange-tip	764 (49%)
212 (35%)	224 (38%)	263 (34%)	223 (34%)	Meadow Brown	745 (47%)
231 (39%)	265 (45%)	302 (39%)	221 (34%)	Large White	734 (47%)
197 (33%)	232 (40%)	282 (37%)	271 (41%)	Small White	727 (46%)
260 (43%)	281 (48%)	332 (43%)	273 (42%)	Speckled Wood	700 (45%)
113 (19%)	151 (26%)	431 (56%)	72 (11%)	Painted Lady	620 (40%)
107 (18%)	148 (25%)	148 (19%)	151 (23%)	Small Heath	495 (32%)
131 (22%)	142 (24%)	193 (25%)	135 (21%)	Small Skipper	488 (31%)
102 (17%)	141 (24%)	173 (23%)	96 (15%)	Wall	478 (30%)
149 (25%)	154 (26%)	211 (28%)	141 (22%)	Comma	453 (29%)
96 (16%)	156 (27%)	181 (24%)	129 (20%)	Small Copper	448 (29%)
113 (19%)	145 (25%)	176 (23%)	118 (18%)	Common Blue	432 (28%)
83 (14%)	83 (14%)	123 (16%)	101 (15%)	Large Skipper	338 (22%)
12 (2%)	50 (9%)	122 (16%)	63 (10%)	Holly Blue	181 (12%)
41 (7%)	52 (9%)	60 (8%)	51 (8%)	Dingy Skipper	156 (10%)
19 (3%)	31 (5%)	36 (5%)	26 (4%)	Dark Green Fritillary	127 (8%)
7 (1%)	25 (4%)	29 (4%)	36 (5%)	Green Hairstreak	94 (6%)
6 (1%)	24 (4%)	21 (3%)	25 (4%)	Purple Hairstreak	90 (6%)
11 (2%)	21 (4%)	32 (4%)	25 (4%)	White-letter Hairstreak	86 (5%)
16 (3%)	25 (4%)	22 (3%)	25 (4%)	Small Pearl-bord. Frit.	86 (5%)
7 (1%)	7 (1%)	7 (0.9%)	23 (4%)	Brimstone	55 (4%)
7 (1%)	14 (2%)	14 (2%)	7 (1%)	Grayling	37 (2%)
3 (0.5%)	10 (2%)	18 (2%)	13 (2%)	Brown Argus	33 (2%)
6 (1%)	12 (2%)	6 (0.8%)	17 (3%)	Large Heath	29 (2%)
8 (1%)	6 (1%)	7 (0.9%)	4 (0.6%)	Northern Brown Argus	24 (2%)
6 (1%)	4 (0.7%)	6 (0.8%)	6 (0.9%)	Essex Skipper	22 (1%)
3 (0.5%)		1 (0.1%)	2 (0.3%)	Clouded Yellow	14 (0.8%)
4 (0.7%)	1 (0.2%)	1 (0.1%)	2 (0.3%)	Marbled White	8 (0.5%)
1 (0.2%)	1(0.2%)	4 (0.5%)	3 (0.4%)	Silver-washed Fritillary	5 (0.3%)
		1 (0.1%)		Small Blue	1 (0.06%)
34	33	35	34	Tetrads Species	1569 35

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 2021

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

In all cases the following information should be recorded:

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

Durham (Vice County 66)

Records should be submitted to the moth recorder for Durham:

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

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

Northumberland (Vice County 67 and Vice County 68)

Records should be submitted to **Tom Tams**, the moth recorder for Northumberland, 191 Links Road, Tynemouth, Northumberland. Tel: 0191 272 8499
e-mail: tom-tams@blueyonder.co.uk or recorder@northumberlansmoths.org.uk
Full details for submitting records in Northumberland, including a downloadable spreadsheet are given at www.northumberlandmoths.org.uk.

Validation

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

SUBMITTING BUTTERFLY RECORDS IN 2021

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

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

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

Column A - Recorder/s names.

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

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

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

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

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

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

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

A blank standard spreadsheet, with the date formatted, is available, if needed, from the website and can be sent in as an email attachment.

Email contributors must use our standard layout.

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 can still be submitted to:

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

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Butterfly Conservation

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Charity registered in England & Wales (254937) and in Scotland (SCO39268)



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