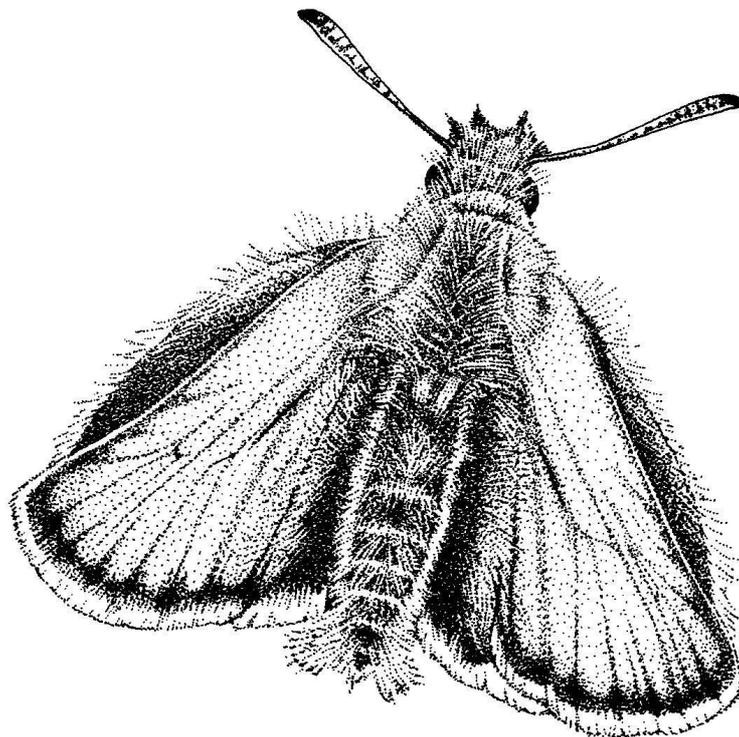


NORTH EAST ENGLAND BRANCH BUTTERFLY CONSERVATION



BUTTERFLY SUMMARY 2015



**Butterfly
Conservation**

Compiled by Steve le Fleming, Ian Waller, Michael Perkins, Roger Norman, Keith Dover & Anne Donnelly



Butterfly Conservation

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The latest annual report, newsletter and branch details are available on the website:

www.northeast-butterflies.org.uk

RECORDERS' REVIEW

Last year was chaotic for the Recorders: we have to apologise for the late appearance and incomplete content of the Annual Summary which was partly due to new software provided by Butterfly Conservation and to pressure of work among well-intentioned volunteers. Some but possibly not all the omissions are corrected in *Errata* which follow this review.

2015 was the year Essex Skipper was first recorded in our region; we knew it had been down in Yorkshire for some time, but to our shame it took botanists to notice that it had arrived on the southern borders of our region. The full story and the follow-up investigation by Ian Waller and Mike Hunter is told by Ian in his article in the Branch's Newsletter № 32, accessible on our website. Clearly the beast is now established down there and we will have to look twice at all those Small



Brimstone – Robin Turner

Skippers in future. We expect that Essex Skipper will follow Comma and Speckled Wood in expanding its territory northwards, but because it is so difficult to distinguish from Small Skipper we will need to have photographic proof before accepting records. Incidentally Small Skipper itself seems to have expanded its territory hugely in the last thirty years.

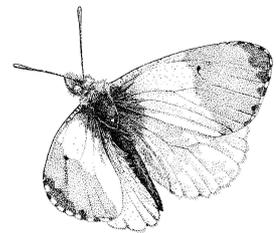
Another highlight in what was generally a rather bleak year for butterflies were the sightings of Marbled White, normally reported only in the immediate vicinity of its original release site at Wingate Quarry, at the new location of Littlewood; we have to wait to see whether they were strays from Wingate or members of a new breeding colony. One was also spotted at Thrislington.

The weather graphs which follow show how bad it was in Durham, though some variation has to be taken into account for the region as a whole; even so, it would seem simple to make a correlation between deviations from the monthly temperature and sunshine norms and numbers for the butterfly species on the wing at the time. Not so, of course: some early species, for instance, failed to comply. Despite a disappointing May with above-average rainfall and with less sunshine than in April, Dingy Skipper and Orange Tip improved their performance over 2014, records for both reaching peak figures on May 23rd. Holly Blue had a relatively good year, its first brood starting in April was slightly up on 2014. Green Hairstreak, however, another early bird, clearly did not do well; perhaps upland species are indeed particularly vulnerable to rain.

This was not the only species to lose ground, however. Regional sightings of Green-veined White were down an alarming 47%, Wall, in national decline, and White-letter Hairstreak were both down 43%, Small White down 33%, Peacock down 30%, Small Skipper 26% and Large Skipper 22%. Most worrying perhaps was the apparent decrease of 56% in Northern Brown Argus numbers. Work on improving habitat and a better recording effort on its coastal sites may rectify this.

On the other hand, Speckled Wood continued to thrive and Small Heath trebled its 2014 score. Others such as Common Blue and Small Tortoiseshell managed increased counts due, at least in part, to higher numbers of recorders. Comma and Red Admiral showed slight improvement, while Dark Green Fritillary and Holly Blue both more than doubled their still quite modest totals, as did the migrant Painted Lady. Brimstone continues a modest increase

in its appearances; it is naturally a wanderer, but normally scarce in our region, so three new locations of sightings for it may indicate a growing willingness to settle here.



Orange Tip – Terry Coult

There was a record number of transects walked during 2015. Congratulations and thanks to all the transect walkers for their time and commitment.

The records you send in do not just go towards compiling this Annual Summary for the North East; they are used by Butterfly Conservation in compiling their national surveys and formulating their policies. They are therefore crucial in ensuring that the public is kept aware of the importance of butterflies and, increasingly, of moths. Only this way can their survival be secured.

ERRATA

The editors would like to apologise for a number of omissions in the last two annual summaries. Below is a brief listing of some of the notable records that should have been included. The initials refer to the following contributors: MA & LN: Martyn Anderson & Liz Naughton, GB: Graham Beckwith, JH: Julie Hogg, JM & CT: Julia Meldrum & Chris Tomlinson, SL: Stephen Lowther, PW: Peter Webb.

2013: Peacock: Julie Hogg found one flying at Rainton Meadows on 29th December. This is a new latest date and surely one difficult to beat.

2014: Dingy Skipper: Thirty nine at Running Waters Quarry on 21st May, (GB), seven at Hamsterley Forest on 6th June, (PW).

Wall: Twelve at Dorman's Pool on 19th May, (JH). An excellent count of 27 on 21st May at Running Waters Quarry, Durham (GB).

Large Heath: An early record of one on 18th June and a larva on 28th July, both near Rothbury (GB).

Grayling: Mike Leakey's records on 9th July and 5th August, were from North Gare, not South Gare as stated. Nine at Greatham Creek on 14th July, (JH). Hew Ellis's record of pupa should in fact refer to two females ovipositing on 26th July at Cambois.

Small Pearl-bordered Fritillary: A very high count of 58 at Debdon Plantation, Rothbury on 11th June, (GB). A late record of two near Harwood village on 23rd July, (JM & CT).

Dark Green Fritillary: Three larvae near Rothbury on 6th May, 13 at Newton Steads on 22nd July, (both GB), 12 at High Force on 25th July, (PW).

Purple Hairstreak: Three at Blaydon Burn NR on 9th July, (JH), three at Teesdale Way, Cotherstone on 22nd July, (PW). 2 near Longhirst on 8th August, (JM & CT). 20 at Aykley Wood, Durham on 17th July and eight at the DLI Museum on 7th August (both GB). Two at Stobhill, Morpeth on 19th and 20th August, this is a new site, (MA/LN).

Green Hairstreak: Twelve at Sharnberry Gill (west of Hamsterley Forest), on 17th May, (PW). Nine and eight were found at two sites near Rothbury on 20th April, (GB).

White-letter Hairstreak: Three on 21st July at Cooper house Farm, Cotherstone, (PW). Three near Longhirst on 14th July, (JM & CT). In early July up to 11 seen, peaking on 9th, at the Chester-le-Street A1 roundabout, (GB & SL).

Northern Brown Argus: 28 at Bishop Middleham Quarry on 21st June (GB).

Common Blue: 41 at Newton Steads 22nd July and 34 at Wingate Quarry on 28th June, (both GB).

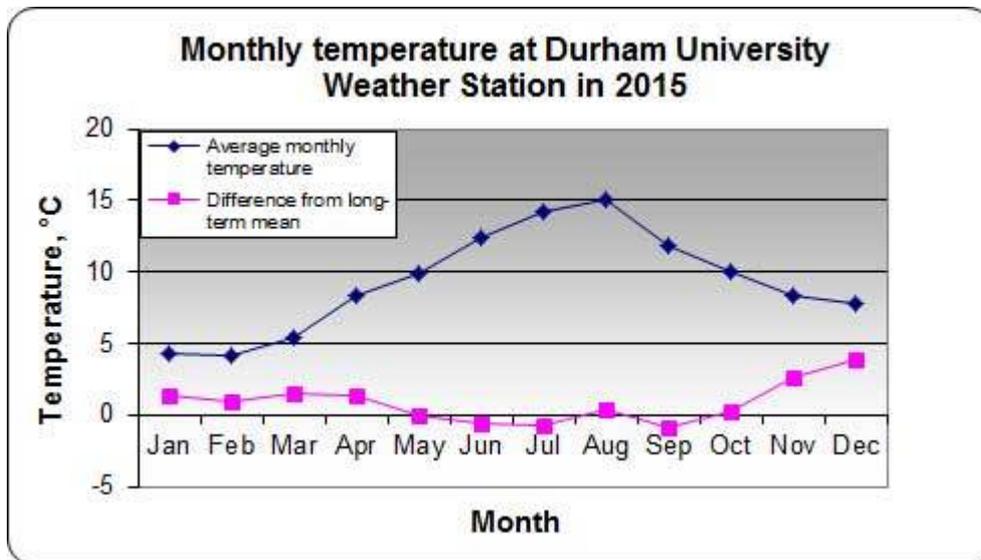
Other contributors not credited in the 2014 report were: V. Coy, R. Hockin, Mike & Denise Hunter, Pauline James, Brian Pollinger, and V. Robins.

WEATHER SUMMARY: 2015

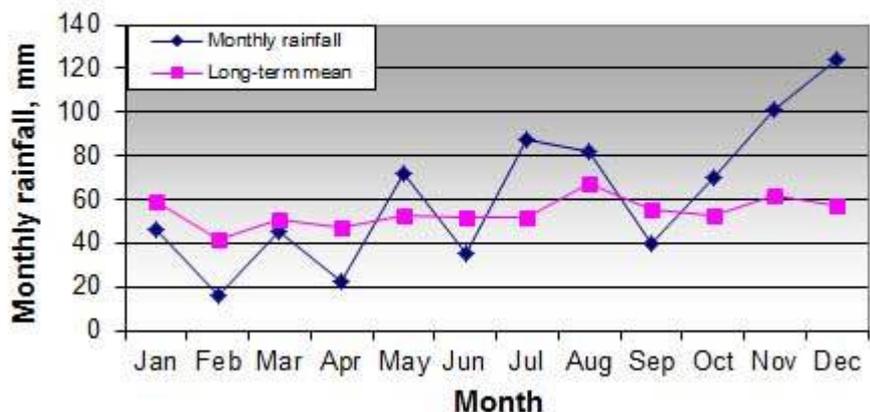
Durham University Observatory, County Durham						
Elevation: 100 metres (328ft), Grid Reference NZ 267 415						
TEMPERATURE, RAINFALL and SUNSHINE and DIFFERENCES from 1961 - 1990 AVERAGES						
Month	Mean (°C)	°C Difference	Rain (mm)	% of Average	Sun (hr)	% of Average
Jan	4.3	1.3	46.6	79	97.1	181
Feb	4.2	1	15.6	37	87.6	134
Mar	5.4	1.5	45.5	89	114.4	108
Apr	8.3	1.3	22.8	48	188.2	141
May	9.9	0	71.8	138	147.2	88
Jun	12.4	-0.6	34.8	67	138.7	85
Jul	14.2	-0.7	87.2	169	120.9	78
Aug	15.1	0.4	81.6	122	126.5	82
Sep	11.8	-0.9	39.4	71	107.9	87
Oct	10	0.2	69.8	133	66.6	72
Nov	8.3	2.6	100.8	162	50.3	70
Dec	7.8	3.9	124	216	44.8	98
2015	9.3	0.8	739.9	114	1290.2	97

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

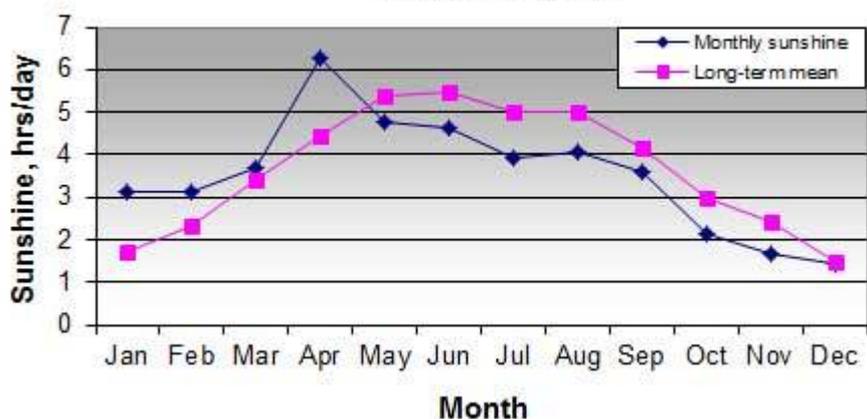
The following graphs show the main features of the weather in 2015.



Monthly rainfall at Durham University Weather Station in 2015



Monthly sunshine at Durham University Weather Station in 2015



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

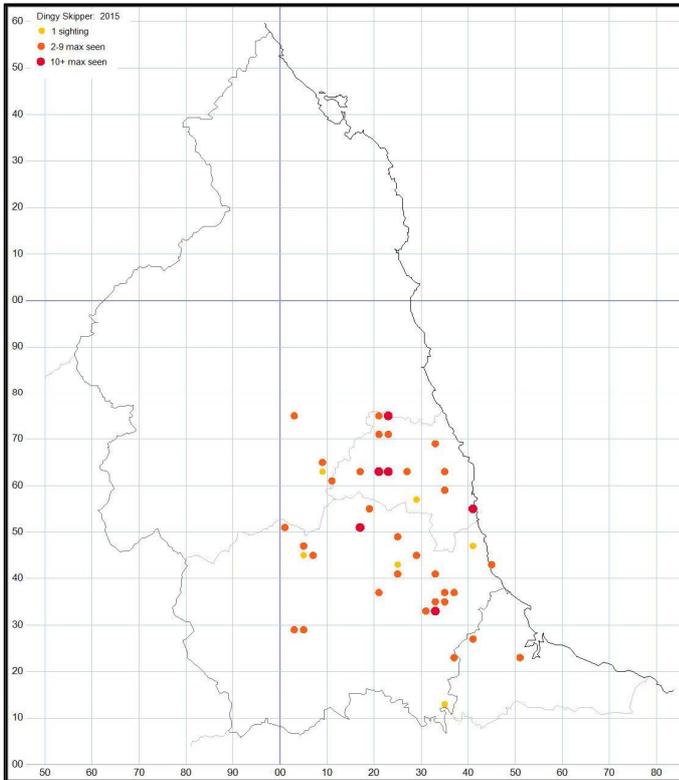


Small Tortoiseshell – Mike Coates

SPECIES REPORTS 2015

Dingy Skipper *Erynnis tages*

2015: Joint honours for the first Dingies seen in 2015 went to John Wilson and Graham Mitchell. John recorded two at Morrison Busty Pit Yard while Graham recorded a singleton from Dalton Park. Although not a record for our region, 23rd April definitely represents one of our earlier starts to the flight period of this species.

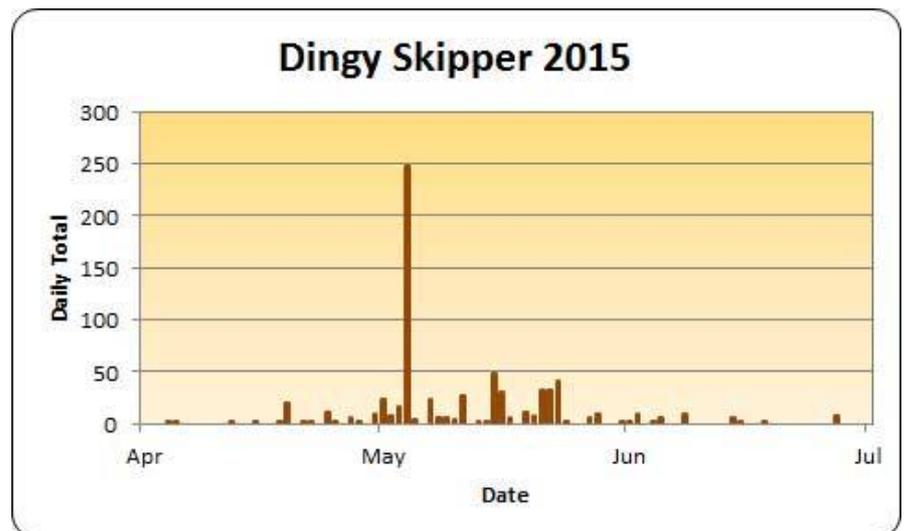


Northumberland's first sighting was claimed by Dave Stebbings at Havannah on May 11th, closely followed by Jonathan Wallace's count of four from Paradise, Scotswood, two days later.

Only ten double-figure counts were recorded in 2015; of these, Brian Pollinger's 65 from Timber Beach, Roger Norman's 47 from Brenkley Old Pit and Harry Eales' 30 from Honey Hill Treatment Works were the most notable. All three counts were made on May 23rd when it would seem that every one of the branch's able-bodied recorders was also out recording. The day's total reached 248 which is well over one third of all those recorded in 2015 and must be close to the record for a single day's recording of this species in our region. However, although the annual total of 706 Dingy Skippers for 2015 was 90 more than in 2014 it was by no means an exceptional

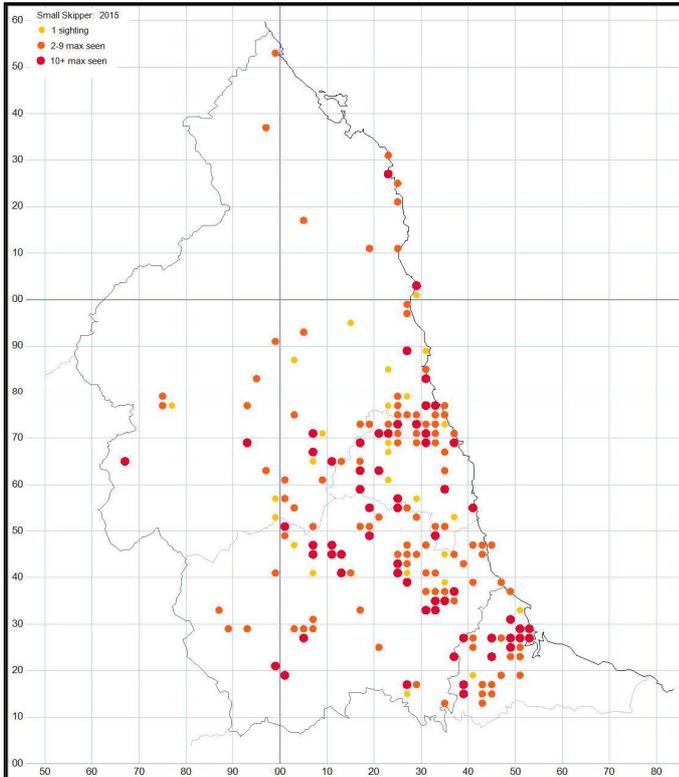
one and the fact that such a high proportion of that total was recorded on a single day is a reflection of the poor weather conditions that prevailed for much of the flight period.

There were no unduly late sightings that might have suggested a partial second brood. Harry Eales' seven at Honey Hill Treatment Works represented Durham's last on July 16th while Dave Stebbings' singleton at Havannah on 27th June was Northumberland's latest record. It is hoped that extensive surveys of Dingy Skipper sites that are currently being undertaken will yield bumper results for 2016.



Small Skipper *Thymelicus sylvestris*

2015: The first sighting of the year was in County Durham, where P. Johnson discovered one at Newton Hall on 12th June. It was five days later when the first report in Northumberland involved a single found by Robin Bailey at Druridge Pools on 17th. Both were later than in recent years, when respective first dates in 2014 and 2013 were 8th June (both years) for County Durham, and 12th and 15th June for Northumberland.



Numbers built up slowly in the latter half of June, increasing during July when several peaks were apparent. A total of 30 were noted 'mud puddling' at Coatham Stob on 11th July (Ian J. Waller, Dave Lowery). A large count of 137 was made at Thrislington Plantation (Co. Durham) by K. Walton on 25th July. Other peak counts included 50-65 at Broompark picnic site, Coatham Stob, Inkerman, Stargate Ponds & Bewes Hill, and Tanfield Lea Marsh (all Co. Durham) between 11th July-1st August. The sole count over 50 in Northumberland involved 58 at Havannah NR on 23rd July (David Stebbings). The last large count of the year was 51 at Burn Hill on 17th August (David Liddle).

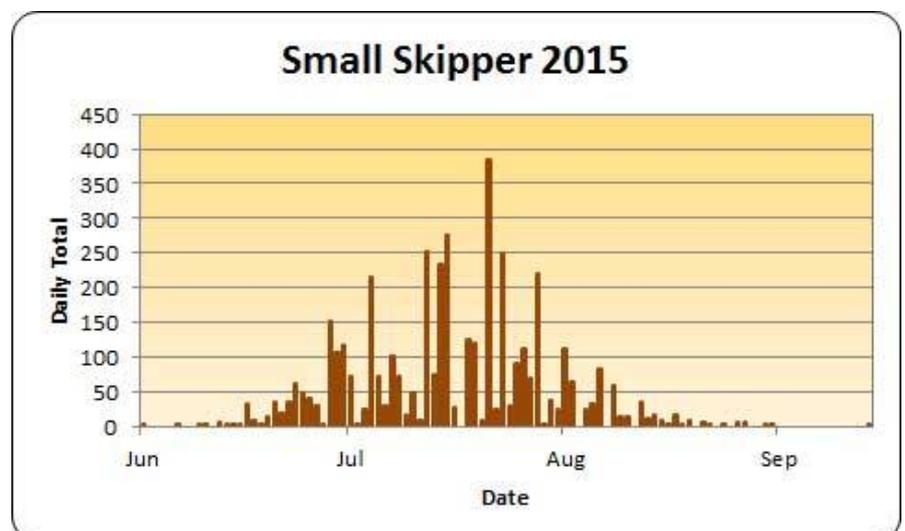
A total of 383 individuals were logged on 1st August by 21 observers (at about 30 sites); the most productive day of the season (compare 698 individuals on 24th July

2014).

Numbers declined by late August and there were 18 reports of one to four Small Skippers in September (16 of which were between 1st-11th). Two at Dunstan Heughs on 7th September (Marion Gallon) were the last reported in Northumberland (30th September in 2014). The final records in Co. Durham were of singles at two nearby sites at Euden Beck, Hamsterley Forest recorded by Malcolm Gallimore and Gordon Simpson on 25th September (24th August in 2014).

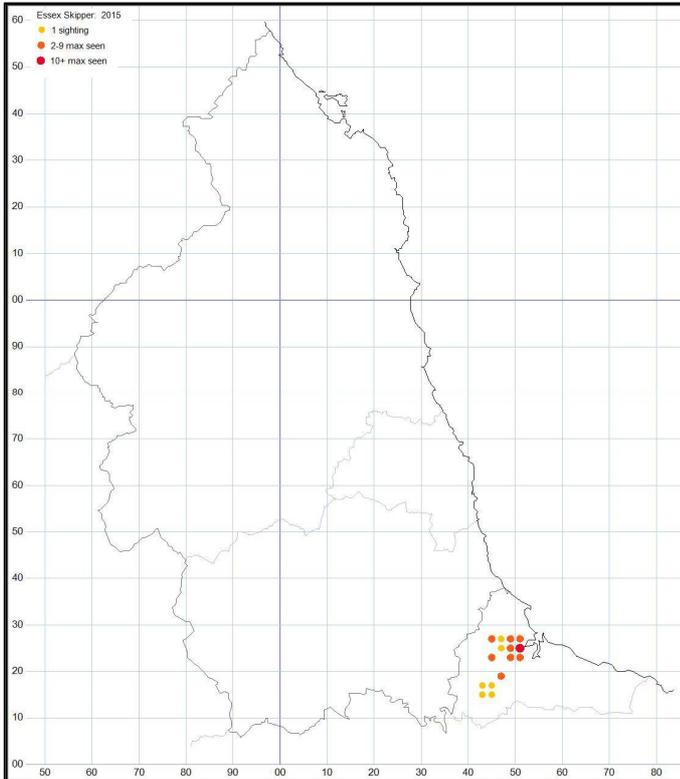
A total of 4,323 individuals were recorded during the season, a similar figure to the 4,461 in 2014 but significantly less than 6,016 reported in 2013. An average of 6.9 individuals per report was also lower than means of 10.8 in 2014 and 14.3 in 2013.

The species had a flight season of 106 days, and was recorded on 78 days during this period (73%), compared with 115 days (59%) in 2014 and 81 days (68%) in 2013.



Essex Skipper *Thymelicus lineola*

There was never really any question over which butterfly would take pride of place on the cover of the 2015 annual report with the discovery of Essex Skipper in the south east of our region. Not only was the butterfly found but subsequent field work established it must have been resident for a number of years. What makes the finding of Essex more amazing is that the nearest site is in South Yorkshire, about 80 miles away and while the butterfly will colonise new areas, the rate of expansion is around 1 mile a year!



It was on 22nd July that Michael Wilcox, a visiting botanist from Yorkshire found the first ever Essex Skipper in Co. Durham along a roadside verge next to Cowpen Marsh hide. His report of three individuals prompted searching by Mike Hunter and Ian Waller two days later around the same area; and it was on 24th July that the region's highest count was made by Mike and Ian when they found eight males and eight females along the same stretch of roadside verge where they had been first found. The same day, either by searching a 1km square together or separately Mike and Ian discovered the butterfly present in another nine 1km squares.

The next day, the search moved north towards the Greatham area, where Ian discovered it in another four 1km squares. On 26th July, Essex Skippers were found around the Portrack Marsh area and then

just south over the river Tees in North Yorkshire, right next to the Tees barrage by Carol Davies and Ian Waller, which added another three 1km squares to the ever growing distribution map. The next records came from the Preston on Tees area where a meeting point of grid squares gave four 1km squares to Ian on 30th July.

The poor weather that had hampered searching in July continued in August but despite that Mike Hunter managed to add another two 1km squares to the map with discovery of the insect at Wolviston and Billingham. On the same day, 1st August, Mike and Dave Foster recorded the only sighting of a mating pair at Greatham Creek. Spurred on by the discovery of Essex at Billingham, Ian searched around the Country Park area and found it in another three 1km squares.

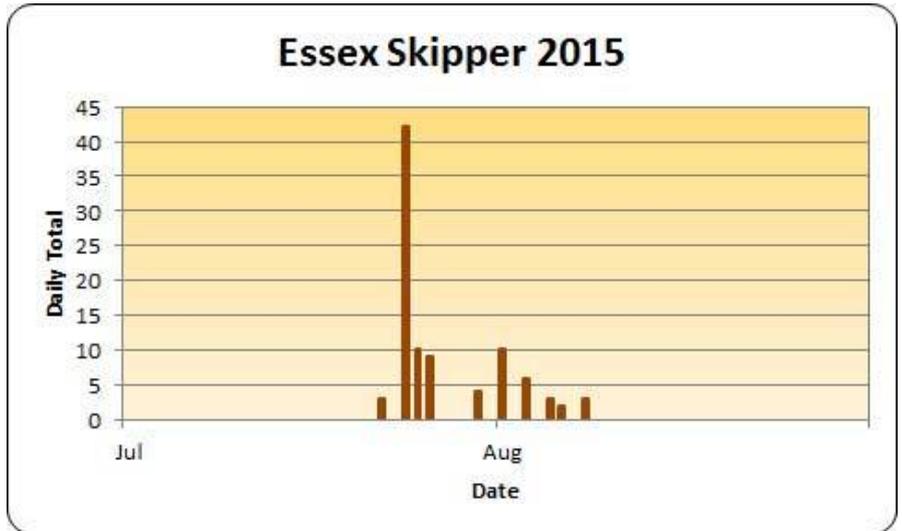


Essex Skipper – Ian Waller

By 8th August, the butterflies were getting noticeably worn and the last record of the season was by Mike Hunter who spotted a male at RSPB Saltholme, which was another new 1km record.

Other records were sent in from Tim and Dorothy Nelson, Julie Hogg, Mike Eccles and Rob Mawson. All of these records were from the Cowpen area.

The records show it was recorded over a period of 18 days, and while the end of the flight period is certainly around 8th August, it is reasonable to argue that the butterfly should be found late June/early July and those interested in searching for it would be wise to start checking Small Skippers around then for possible Essex and certainly in and around areas where it has already been discovered.



Essex Skipper – Ian Waller

92 Essex Skippers were noted in 2015 but this does not tell the full story as 100s of Small Skipper were also checked to ascertain which Skipper they were. A full summary can be found by Ian Waller in newsletter no. 32 which details the areas searched but no Essex found and suggests places to go looking for the butterfly in 2016. Those wishing to do field work for this species would be well advised to read

Jonathan Wallace's excellent article on Skipper identification in newsletter 33. Some recorders struggle with telling the difference between Large and Small, and with Essex now resident itemisation skills need to be sharper than ever.

Credit is given to Ian Waller whose field work contributed 17 1km squares and to Mike Hunter with four 1km squares. Mike and Ian worked together on another two 1km squares, and Ian and Carol Davies for another three. Adding on the original 1km sq. from Michael Wilcox, gives an impressive 27 1km squares where the Essex Skipper was found in 2015.

All recorders are reminded that photographic evidence is needed for this species before sightings can be accepted; and while head on shots of the Skippers 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 them from its very close relative the Small.

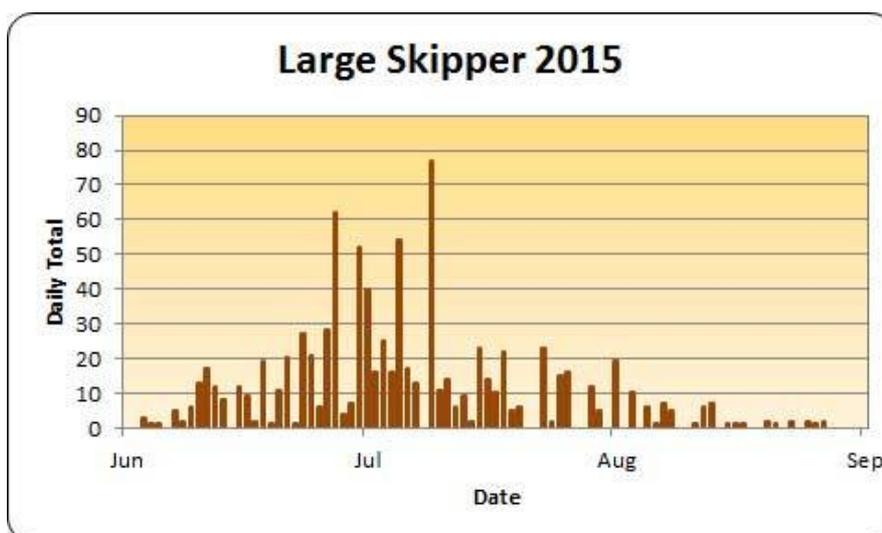
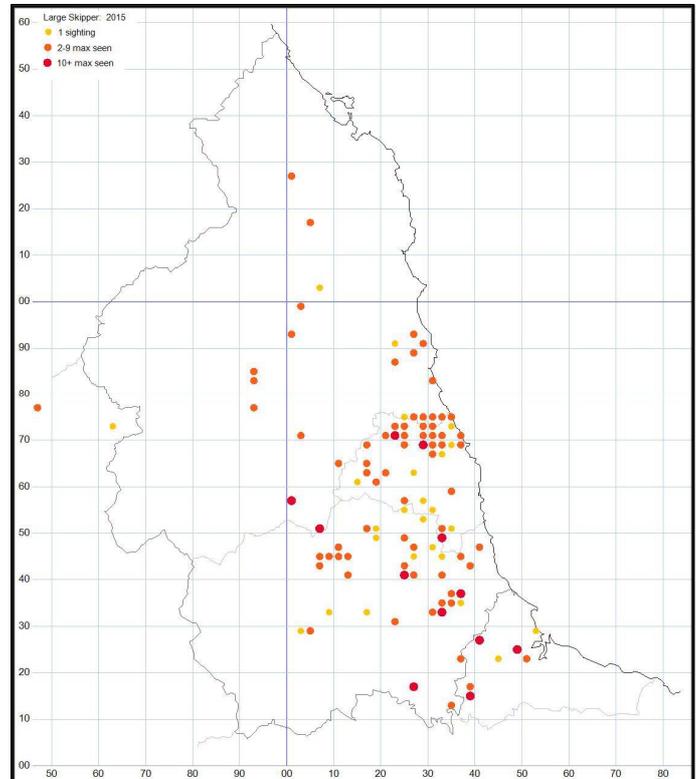
Large Skipper *Ochlodes sylvanus*

2015: A total of 291 records were received, nine more than the previous year. These recorded 878 individual butterflies; unfortunately this is over 240 down on 2014. The flight period covered eighty six days, fifteen days longer than in 2014, and the Large Skipper was seen on sixty nine of these days, representing 80% of the flight period.

The number of Large Skippers seen was down compared to 2014 and below the average of the last ten years.

This year the season started in early June with records pouring in during the first week of the month. Just heading the list with the first records of the season were Stanley Straughan who saw two at Ashington Community Woods on 3rd June and David Stebbings with one at Havannah Nature Reserve near Newcastle the same day. Durham's first record was just a day later with Pippa Smaling seeing one at West Park Nature Reserve, Darlington on 4th June.

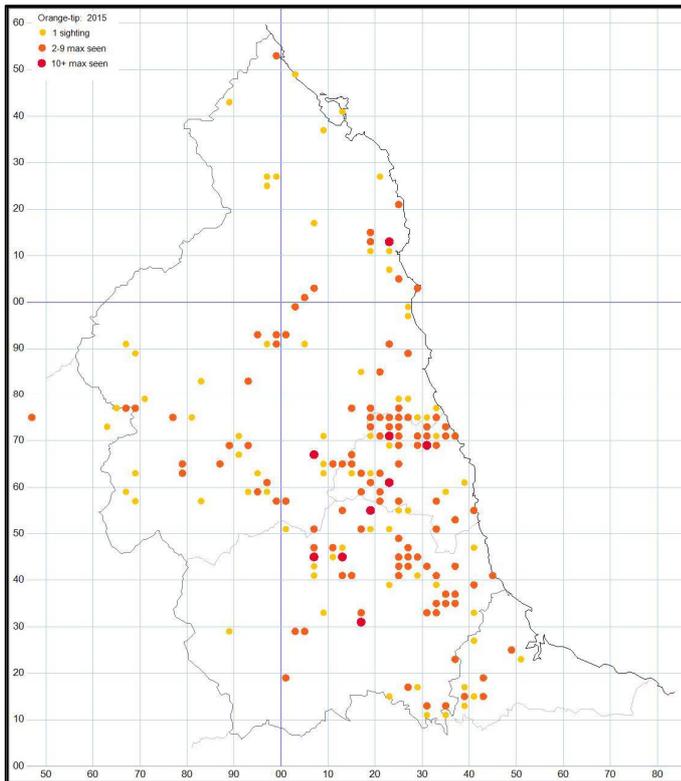
The peak of the flight season was the last few days of June and the first half of July with numbers reaching a maximum on 9th July when 77 were recorded by observers throughout the region on that day. Whilst the vast majority of records were of fewer than five butterflies there were a few high counts. The highest individual count came from Pippa Smaling with 23 at West Park Nature Reserve, Darlington on 23rd June, and from Hewitt Ellis who spotted 21 at the Rising Sun Country Park, Wallsend on the 27th June.



Unusually the flight season extended well into August this year with records from locations all over the two counties during the first half of August. In Northumberland the final sighting of the year was from Mike Carr who recorded one on 21st August at Ellington Dene at the southern end of Druridge Bay. The final sighting of the year for County Durham came from Pippa Smaling who saw one

at West Park Nature Reserve, Darlington on 27th August.

Orange-tip *Anthocharis cardamines*



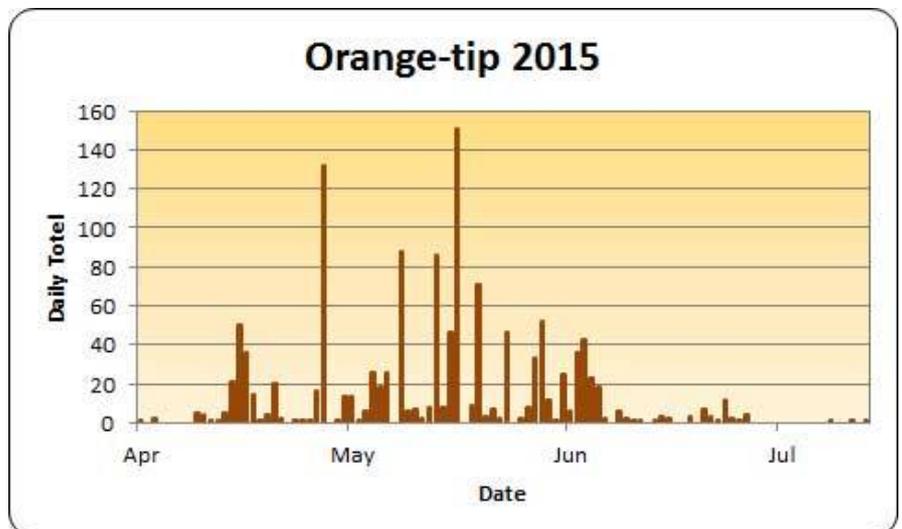
2015: The Orange-tip saw an increase in the number of records with 529 records (up by 14% from 463 in 2014) but a slight decrease in numbers of individuals with 1259 counted compared to 1479 individuals in 2014 (15% down). The species was recorded on 76 days out of a total recorded flight period of 104 days (73%).

Ian Davidson recorded the region's first Orange-tip sighting of the year at Washingwell Wood near Wickham on 8 April and on 10 April John Almond recorded the second and Northumberland's first at Warkworth. Peak numbers occurred on 23rd May with 32 records comprising a total of 150 butterflies.

Dave Liddle had the best count of the year with 26 Orange-tips at Burn Hill on 23 May. Other good counts were recorded by Steve Reid with 21 at Tanfield Lea Marsh on 15

May and Ian Waller and Carol Davies who counted 20 at Low Barns on 4 May. The best count in Northumberland was made by Dave Stebbings at Havannah LNR near Hazlerigg on 4 May when he counted 17.

Numbers dropped away in the second half of June but the species persisted on the wing into July in both Durham and Northumberland. The Orange-tip's flight season in Durham came to an end on 18 July when Lesley Hodgson recorded one at Black Plantation near Satley, and the very last record of the year was in Northumberland (just over the boundary with Durham) at Moss Wood Sewage Treatment Plant near Allensford where Harry Eales saw one on 20 July.



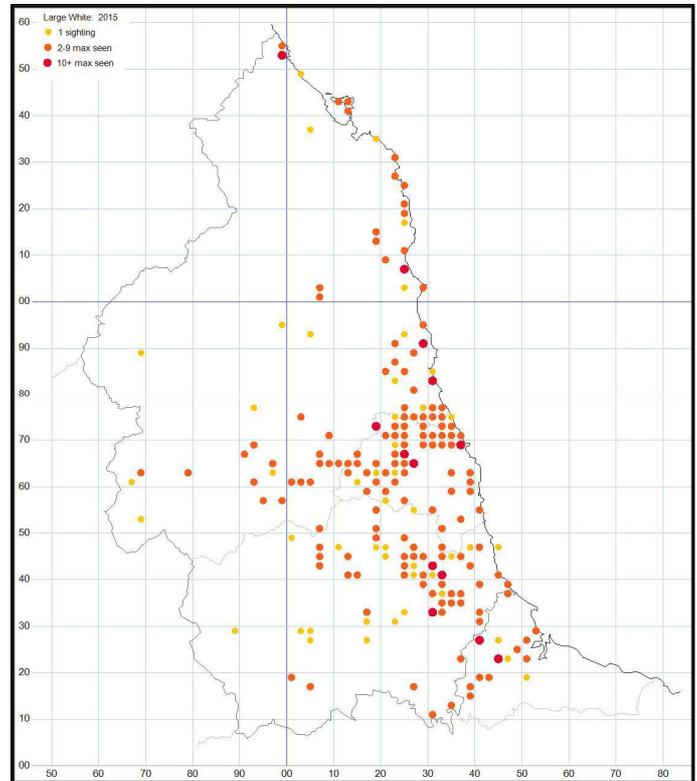
There were records of immature stages from Hew Ellis, Bob Mawson, Graham Beckwith and Jonathan Wallace.

Large White *Pieris brassicae*

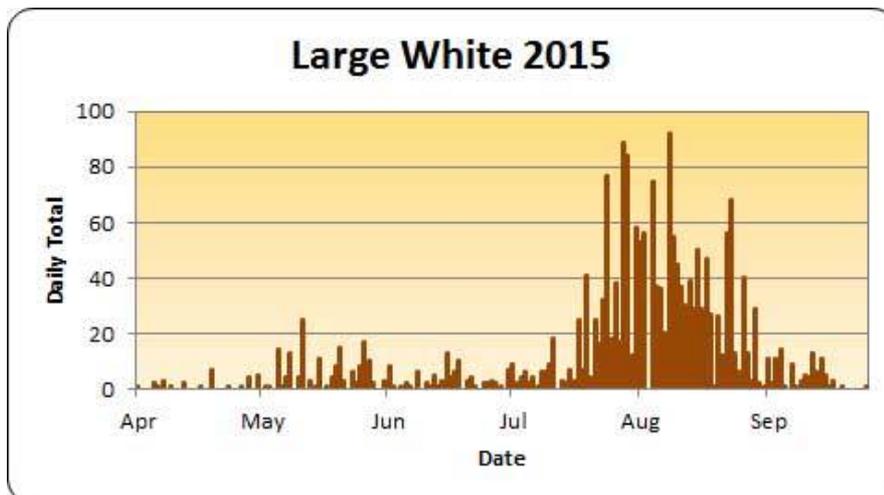
2015: There were 940 records of Large White in 2015 which was 6% up on the 885 records received for this species in 2014. However the total of 2,029 individuals recorded was very slightly down on the previous year's total of 2,043. The species had a total flight period of 178 days and was recorded on 137 of these (77%).

Hew Ellis recorded the first Large White of the year in Tynemouth on 16 April but County Durham had to wait nearly a week longer for its first which was recorded by Graham Mitchell at Sherburn on 22 April. Peak numbers in the first generation were recorded on 26 May when there were nine records of a total of 25 individuals. There were no double figure counts of Large White recorded during the first generation and the highest individual counts received for this generation were Philip Jordan and Jane Gray at Havannah Nature Reserve, Hazlerigg on 20 May, Brian Kerr at Holywell Pond on 26 May and Roger Norman at Needles Eye, north of Berwick on 30 May who all recorded counts of six.

The second generation started to build from about mid-July and numbers peaked on 23 August when there were 35 records comprising a total of 92 individual butterflies. The highest second generation



count and highest of the year was made by Graham Mitchell who counted 22 at Sherburn Railway on 12 August. There was just one other count over 20 which was made by Julie Mason who counted 21 at Billingham Beck Valley on 15 August.



Numbers held up into September with 68 seen on the 7th but dropped away thereafter. There were four October records with the last record for Durham being on

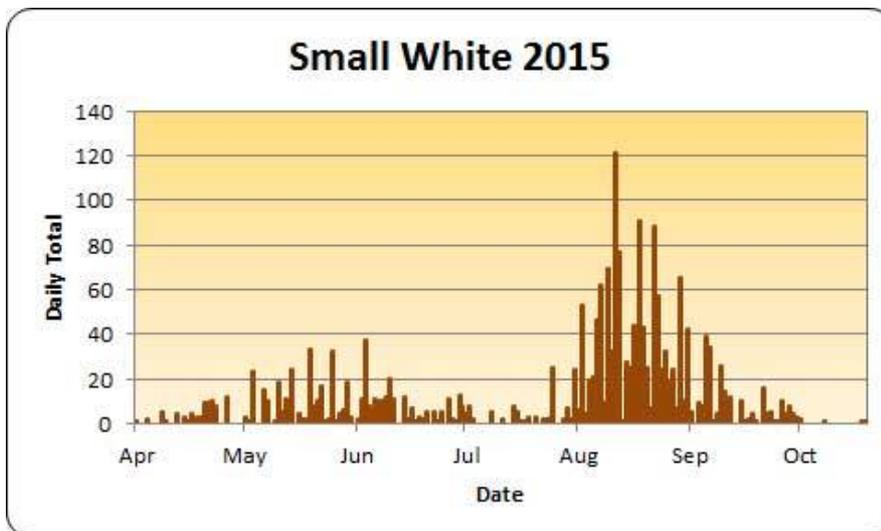
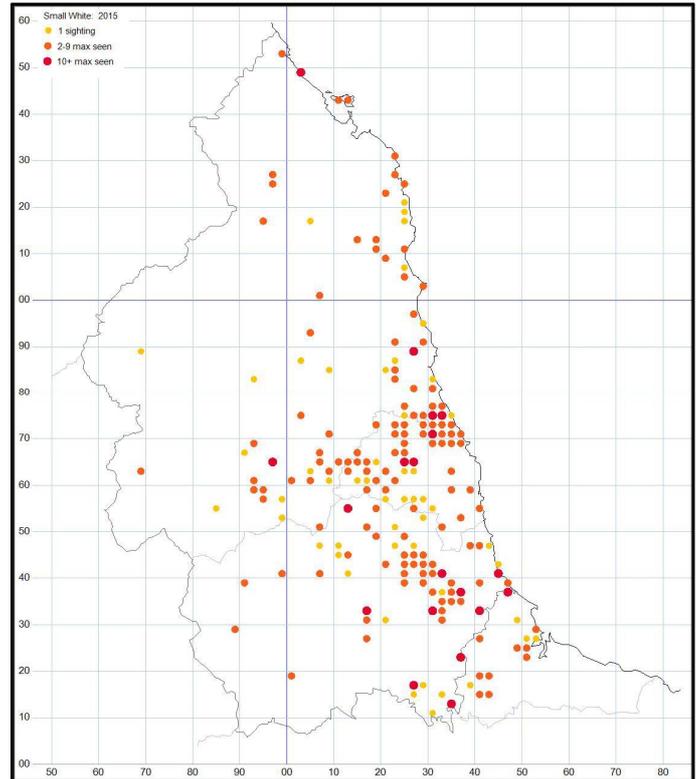
4 October when Harry Eales recorded a singleton at Birtley Sewage Treatment Works and the very last sighting of the year was on 10 October in the dunes at Bamburgh, Northumberland where Mike Carr recorded one.

Small White *Pieris rapae*

2015: A total of 850 records were received. These recorded 2,036 individual butterflies, this was a substantial drop from the 3,685 recorded in 2014. The flight period covered 202 days and the Small White was seen on 147 of these days, this represents 73% of the flight period.

This was the second poor year in succession for the Small White, with numbers considerably down compared with the previous year. There has now been three poor years for this species in the last four years. Let's hope this is not the start of a longer term decline for the Small White.

The first record of the season came from Dee McKeown who saw one near the King Edward VII Bridge in Newcastle on 2nd April. The first record from a Durham site was a week later when Graham Mitchell spotted one at Sherburn on 9th April. These dates are a little later than average. Many of the records for April and May were of single butterflies only. In fact only three counts in the spring generation made it into double figures, and all three counts were of ten. These were from Pippa Smaling at the Whinnies near Darlington on 11th May, Stanley Straughan at Ashington Community Woods on 20th May and John Almond at Hamsterley Mill on 26th May.



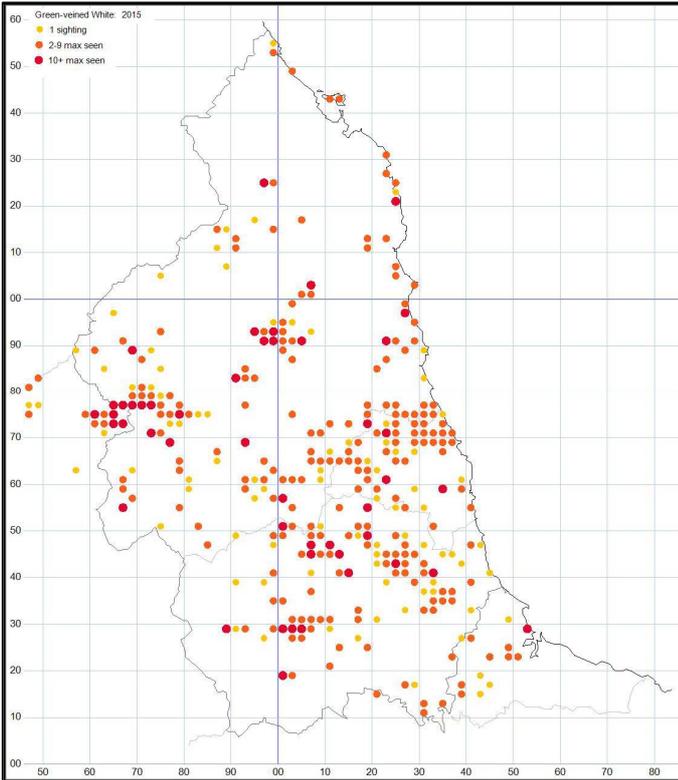
The emergence of the second generation did not really get going until early August, a few weeks later than normal. This is shown by the peak day for numbers recorded being on 12th August when 121 Small Whites were seen by recorders throughout the region. The highest individual totals recorded were also well down on the previous year. The highest was 34 seen by Malcolm

Hutcheson at Needles Eye near Berwick on 10th August. For Durham the highest count came from Andrew Paciorek who counted 33 at Howden le Wear on 23rd August.

Records continued to come in throughout September, although again they tended to be small individual counts, and there were several records for early October. For Northumberland the final sighting of the year was by M & N Tuck, who saw one at Murton Village on North Tyneside on 9th October. The final sighting of the year for Durham and the region came from Ian Davidson a little later on 20th October when he saw one at Washingwell Woods near Whickham.

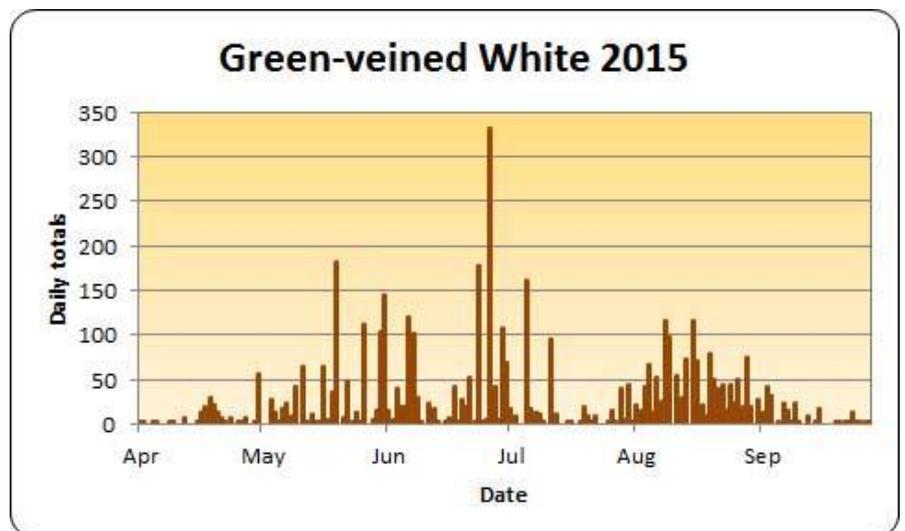
Green-veined White *Pieris napi*

2015: The total number of 4,446 individuals recorded was down 47% on the 8,404 reported in 2014, due in part to rather fewer records being received (1,284 against 1,453 in 2014). It is clear from the histogram that this year the butterfly's second brood was much weaker than the first. Last year the broods were apparently roughly equal and in most accounts the second brood is held to be normally more numerous, so the weaker second brood is prime suspect for the alarming fall in numbers.



The first sighting of the year came from Martyn Anderson and Liz Naughton at Morpeth on April 5th, and a day later Graham Beckwith saw one at Cowpen Bewley, Teesside. In May individual counts in double figures begin to appear and on 23rd a daily total of 182 was recorded from thirty one observers. In late June the highest daily count was reached: 306 from 32 observers on 30th. Even so the vast majority of records are in single figures,

although Gordon Simpson and Malcolm Gallimore managed a total of 275 from twenty two points in the Wark Forest area on June 30th and 150 from thirteen points in the Spadeadam Forest area on July 9th. Ian Findlay had the last Durham sighting in Upper Teesdale on September 27th, followed by four Northumberland records culminating in Alan Todd's trio at Mootlaw Quarry on October 1st. The butterfly was recorded on 147 of the 180 days (82%) of its observed flight period in the region.



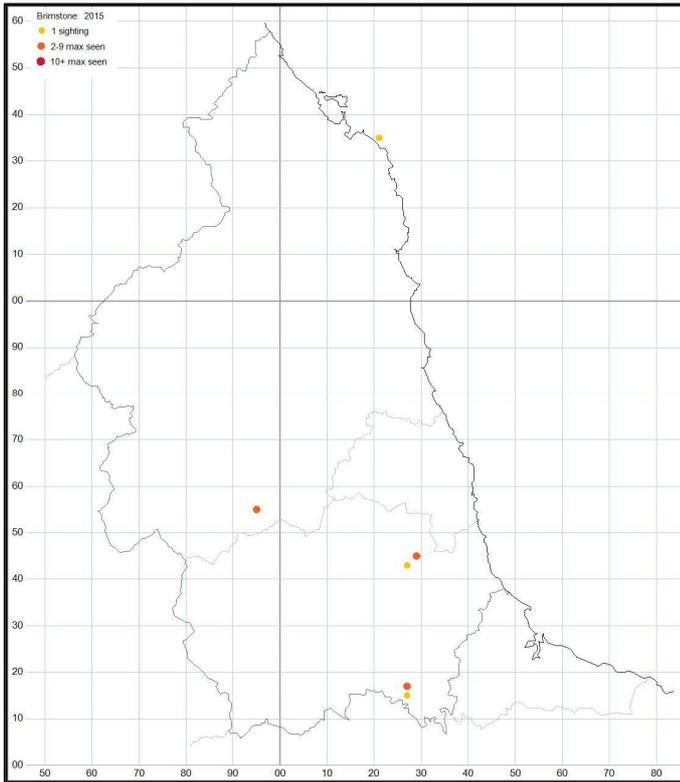
Green-veined White is already our most widely distributed butterfly, yet despite its poor performance this year it still managed to find 16 new tetrads in our region.

Clouded Yellow *Colias croceus*

2015: The sole record for the year involved one photographed by Tommy Pybus at Billingham Beck Valley Country Park (Co. Durham) on 6th October (compared with six reports in 2014 and two in 2013; all singles).

Brimstone *Gonepteryx rhamni*

2015: Following 2014's excellent year for this species in the region the trend continued with 14 records totalling 22 individuals.



The first record of the year was at Low Newton Nature Reserve on 2nd April when David Lacey spotted a single butterfly. This represents a new early date for the species in the region.

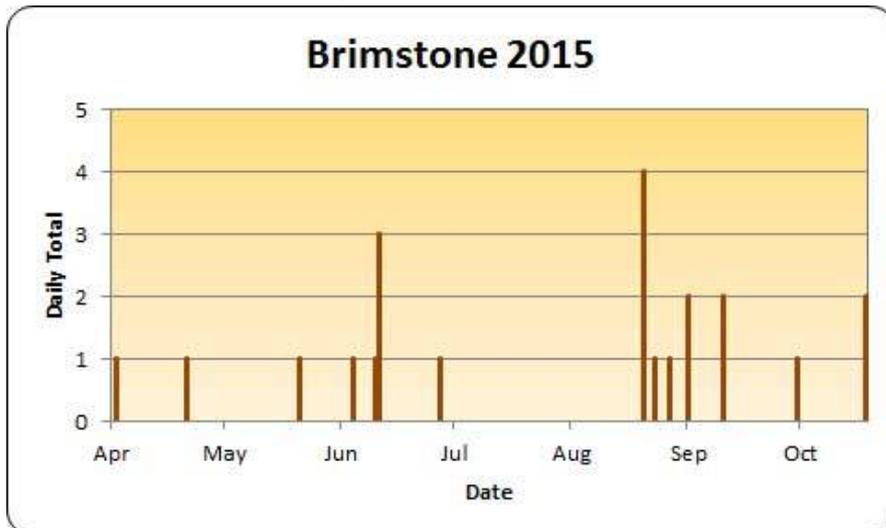
Congratulations are once again due to Pippa Smalling who saw a total of 15 butterflies between 21st May and 30th September. All of these were recorded at West Park Nature Reserve which is clearly a good location for the species. Pippa recorded three individuals on 11th June and four on 20th August. She also saw two butterflies on each of 1st and 10th September. Her 30th September record was the final record for Durham.

Two butterflies were recorded in Northumberland: the first was spotted by Lana Blakely on the Farne Islands on 27th June and the second, the last for the region, by R. Turner in Slaley Forest on 18th October.



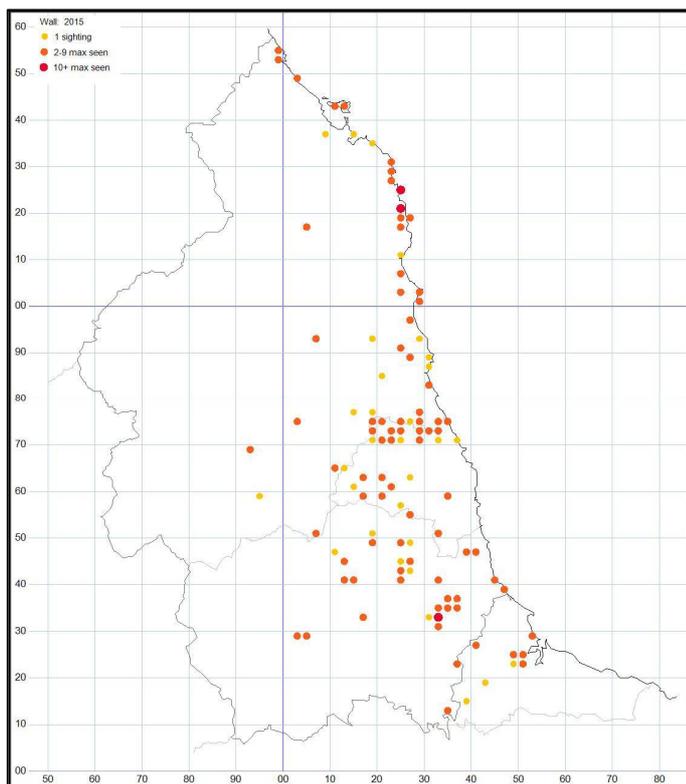
Brimstone – Robin Turner

The final sighting on 18th October was a new record last flying date for the species. Combined with the new early date this resulted in a flight period of 200 days with the species being recorded on 14 of those days (7%). The species was recorded in three new tetrads during the year.



Wall *Lasiommata megera*

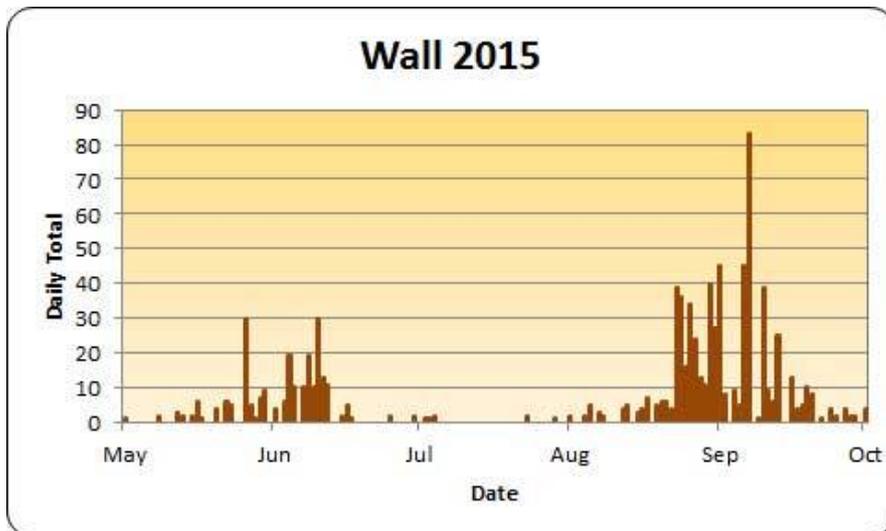
2015: A total of 350 records were received which detailed 867 individual butterflies. The flight period lasted 154 days and the Wall was seen flying on 81(53%) of these days. Numbers of



Wall seen in 2015 were the lowest this century, continuing a worrying long term decline for the species both in the region and nationally. Considering that 5,303 were seen in the region over the summer of 2006, this year's total of 867 represents a huge decline. The reasons for the decline are not fully understood. It is known the Wall undergoes periodic fluctuations in numbers sometimes lasting many years. For example the Wall went from being common in the region in the early 19th century to becoming very rare for over 100 years from the early 1860's until the 1970's, then becoming common again. Butterfly Conservation nationally has designated the Wall a species of high conservation priority because of these declines.

The first sighting of the year came from Robert Mawson who saw one at Raisby Way 1st May, a fairly typical first sighting date for the Wall. Northumberland's first sighting was by Joe Dobinson who spotted one at Long Nanny near Beadnell on 12th May. There was no real peak in the spring generation this year; rather it was spread out through late May and early June. Only one record in double figures was received for the spring generation. That came from Ian Waller who counted 20 at Bishop Middleham Quarry on 26th May.

The second generation this year seemed to be much later than normal. Mainly records of single butterflies only were received for the first three weeks of August and numbers did not start to build until late August and peaked in early September. There were only seven double figure counts in the second generation. The highest came from Marion Gallon with 33 at Dunstan Heughs, near Craster on 7th

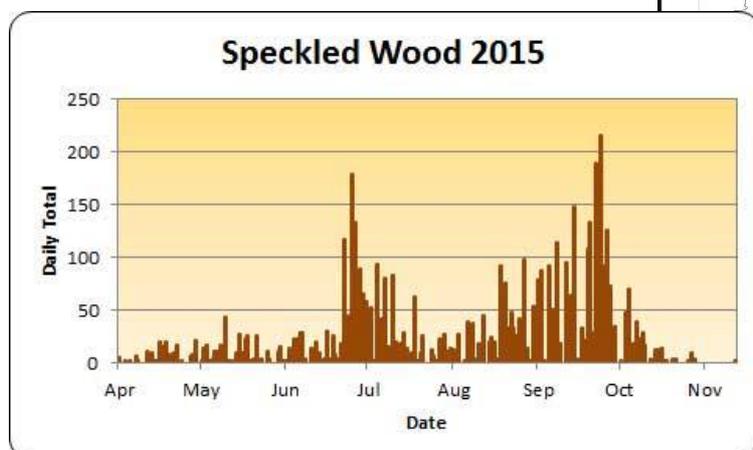
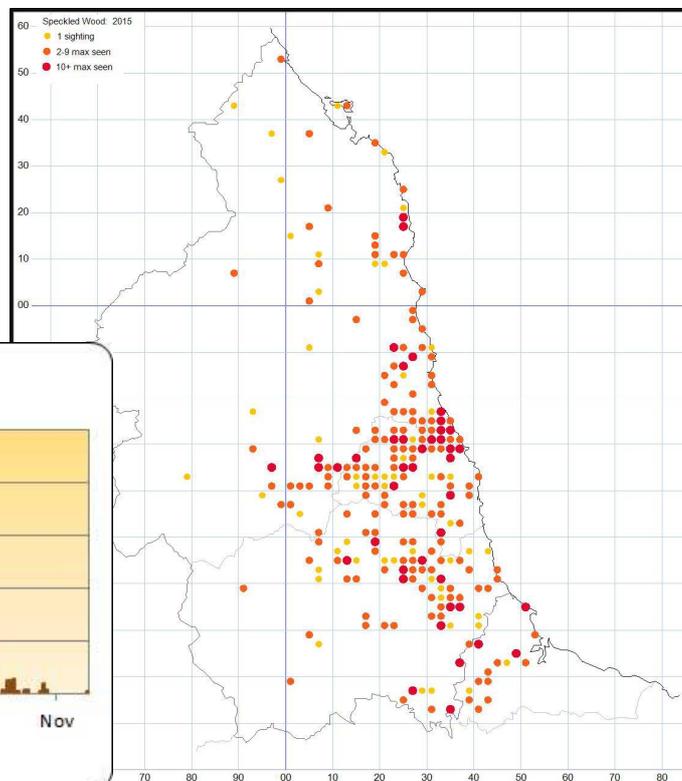


September. The only counts in double figures from a County Durham site came from Ian Waller again at Bishop Middleham Quarry where he saw 11 on both 24th and 26th of August. Interestingly apart from Bishop Middleham Quarry all the high counts came from sites along the north Northumberland coast.

This year the flight season extended to the first day of October. The last record from County Durham was from Keith Walton who saw two at Baxter Wood near Durham city on 29th September. In Northumberland there were three last records all seen on 1st October. Alan Todd recorded one at Mootlaw Quarry near Matfen, Duncan Hutt saw one at Cresswell on Druridge Bay and Ian Davidson spotted two at Annstead Dunes near Seahouses.

Speckled Wood *Pararge aegeria*

2015: Speckled Wood had another good year although numbers were down on 2014. A total of 1,507 records were received (a 3% drop on 2014) and these included 5,386 individual butterflies (17% lower than in 2014).



The flight period extended over 226 days and the butterfly was recorded on 181 (80%) of these days.

The first record of the year was from Keith Smith who had two on 6th April at Cobalt Business Park. The first record from Durham was from P. Johnson who had a singleton on 16th April at Hopper's Wood, Newton Hall



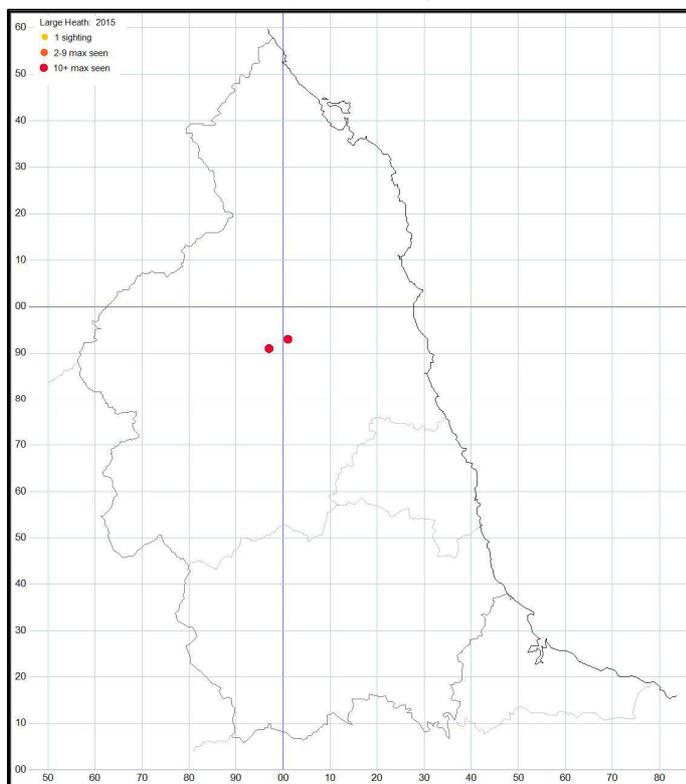
Speckled Wood – Sally Rogers

The highest count of the year was 51, recorded by Stanley Straughan on 29th September at Ashington Community Woodland, which seems to be the perfect environment for the butterfly; Stanley had three other counts of over 30 at the same site in June, July and August. There were 24 counts of 20 or more individuals at other sites during the season.

The last record for Northumberland came from Keith Smith at Backworth on 2nd November. Graham Mitchell had the last record for County Durham and for the season with a singleton at Sherburn on the 17th November, the latest ever record for this butterfly in Northumberland and Durham, extending its flight period by five days.

Large Heath *Coenonympha tullia*

2015: 2015 saw a slight improvement in terms of numbers of adults recorded compared to the past three years – 41 on three days during the four day flight period recorded between the 3rd and 6th of July at Steng Moss (NY967912) and Greenleighton Moss (NZ016925). The



latter is thought to be a new site on a peat bog north of Scots Gap. Many thanks to Mike Carr, Dave Stebbings, Liz Naughton and Martyn Anderson for venturing into the wilds in 2015 to search out the elusive Large Heath.

Previous years' totals by comparison were four (2014), 18 (2013), 19 (2012) and a splendid 130 (2011).

The Large Heath is a Species of Conservation Concern in Britain and Northumberland is the English stronghold with 156 recorded sites, 74% of the total for England and Wales.

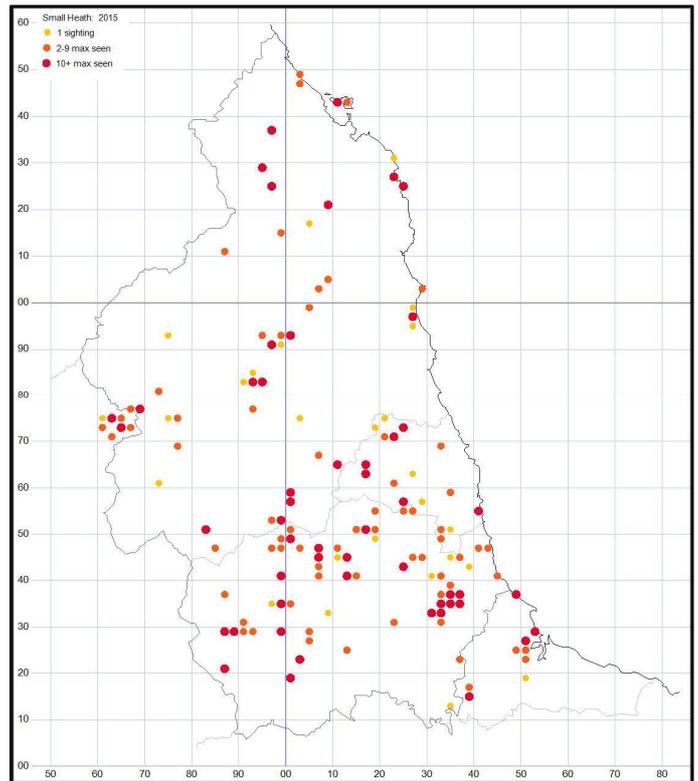
They form fairly sedentary colonies, breeding in lowland raised bog, upland blanket bog and damp acidic moorland where Hare's tail cottongrass the larval food plant, is plentiful.

The adults are generally first seen on the wing in the last week of June or the first week of July and have a short flight period of only 5-6 weeks. The latest they have been recorded in our region is the 14th August in 1996 and 2012.

Small Heath *Coenonympha pamphilus*

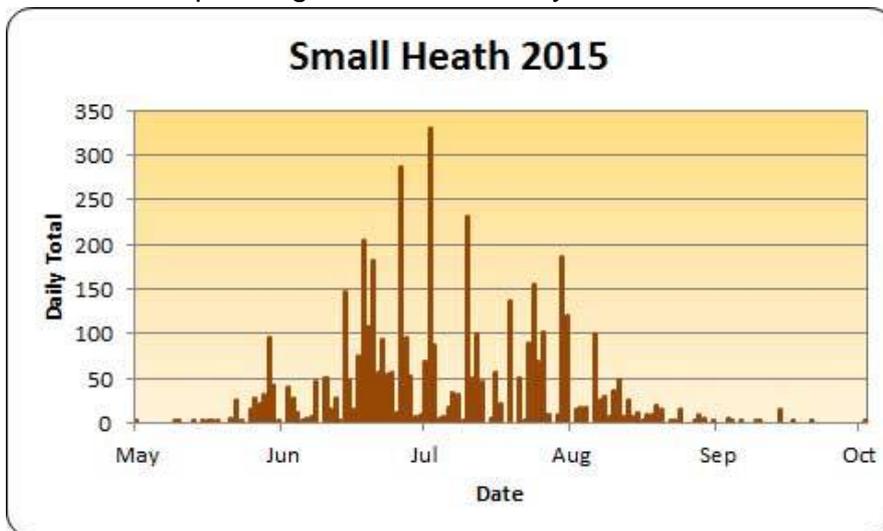
2015: A total of 629 records were received. These recorded 4,497 individual butterflies, compared to just 1,404 last year. The flight period covered 155 days and the Small Heath was seen on 107 of these days, representing 69% of the flight period.

The Small Heath bounced back in 2015 after the very poor year in 2014. The numbers seen were close to the average for the last ten years. It is remarkable in fact how the numbers recorded for this butterfly do not vary significantly from year to year, making the drop in numbers in 2014 a bit puzzling. There are normally two overlapping generations of this butterfly spread out over the summer months. However, this year there were several records in late September and early October, which may indicate the emergence of a third generation in the autumn.



The first record of the season came from John Wilson who saw one at Littlewood LNR, near Coxhoe on 14th May. The first record from a Northumberland site was from Harry Eales with two at Whittle Dene sewage treatment works, just north of the Tyne near Corbridge on 22nd May. These are slightly later than average dates for first sightings.

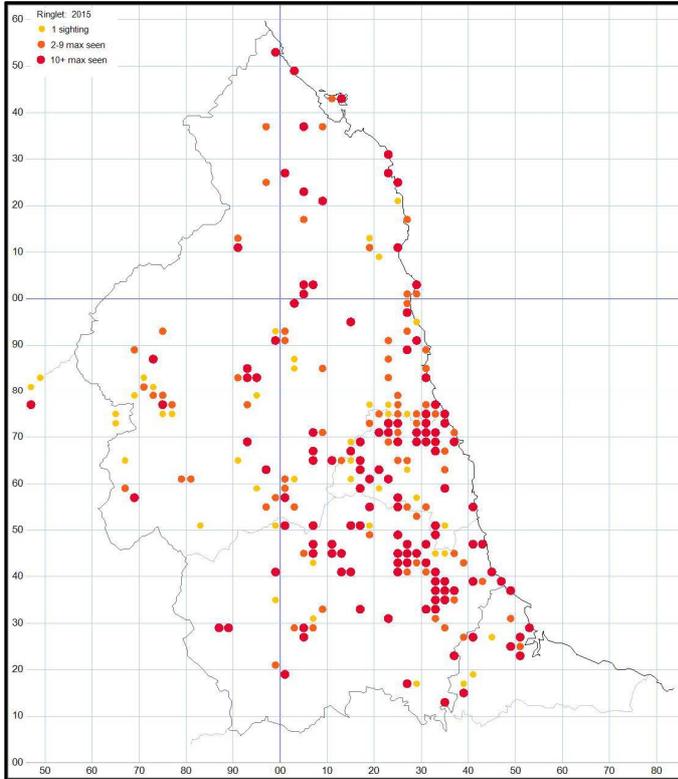
The peak of the flight season was reached in the middle of July with 330 Small Heath being recorded throughout the region on 15th July. This compares with a mere 84 on the peak day in 2014. Many double figure counts from all over the region were received. The highest count of the season was from Dave Liddle with 73 seen on the Burn Hill transect on 15th July. Dave Wainwright had consistently high counts on the Inkerman transect near Tow Law throughout the summer, peaking at 63 on 14th July. In Northumberland 49 were seen by Andrew Craggs at Lindisfarne NNR on the Northumberland coast on 3rd July. Hewitt Ellis also saw 49 at Havannah LNR just north of Newcastle on 15th July. These represented the highest counts for Northumberland.



There was a clutch of records in late September from all over the region and the flight season continued into October with two records in that month. In County Durham the last record was from Harry Eales who saw two at Birtley sewage treatment works 4th October. In Northumberland the last sighting was by Alan Todd with one at Mootlaw Quarry near Matfen on 15th October.

Ringlet *Aphantopus hyperantus*

2015: The first sighting of an adult on the wing by Brian Pollinger on the 10th June at Friar's Goose (NZ275632) was very late by the standards of recent years. Compare this to Tim



Wrigley's record the year before on the 24th April at Liddell's Wood (NY934691). This is the earliest ever record and the only time it has been seen on the wing in April, with the majority of first sightings in mid-May.

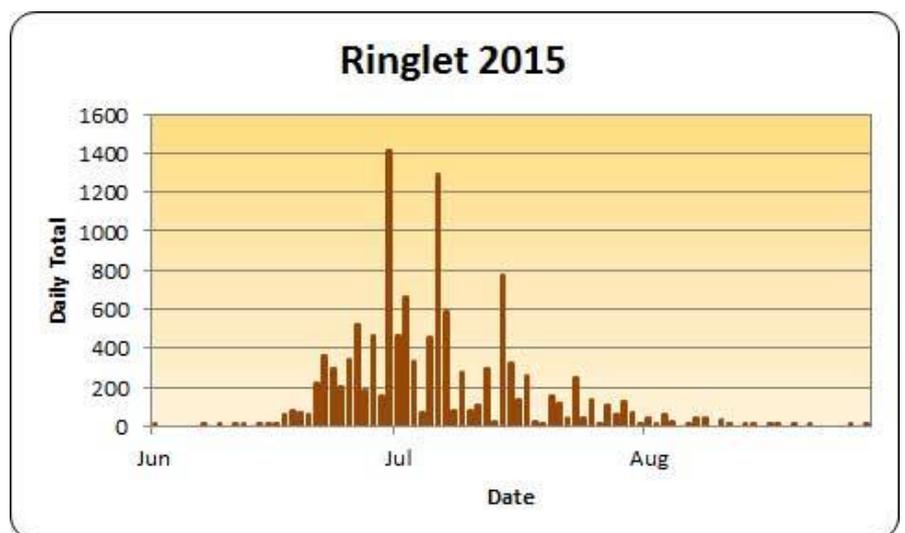
The number of adults recorded during 2015 was a respectable 12,230 which compares favourably with the 12,972 in 2013 and well up on the 7,216 recorded in 2012. The 2015 total was from 800 records over 89 days. However, it is worth noting that the totals are based on almost 150 and 200 more records in 2013 and 2014, respectively.

Counts reached double figures for the first time in 2015 on the 26th June at the Rising Sun Country Park and near Silver link Retail Park. Counts climbed to three figures for the first time on 7th July where

they were recorded by the Etheringtons at Raisby Way (NZ3434). The highest count was Ian Waller's of 239 adults on the 9th July at Raisby Hill (NZ33354). Dave Liddell and John Olley also recorded counts over 200, the former at Burn Hill (NZ067444) on the 15th July and the latter at Wingate Quarry (NZ373374) on the 14th July.

Maximum counts were well down on previous years, with none approaching those of Joe Dobinson's at the Rising Sun Country Park which topped 600 in 2014 and two counts in 2013, one of over 500 and the other over 400.

The last recorded sighting of an adult on the wing was by John Almond on the 6th September at Sunnyside (NZ205590). Early to mid-September is fairly typical for the last sighting of the year.

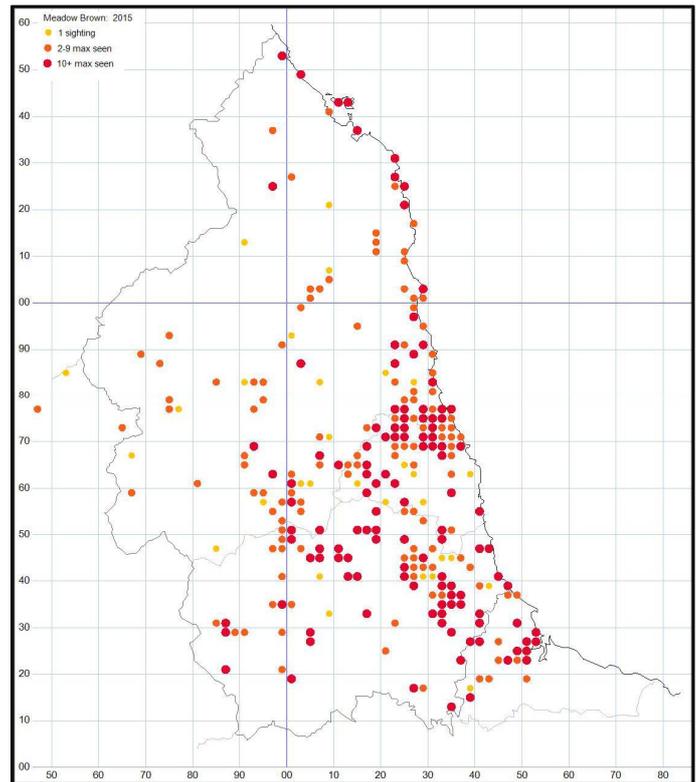


The butterfly is common and widespread across every county in the region and recorded in all but a very few tetrads.

Meadow Brown *Maniola jurtina*

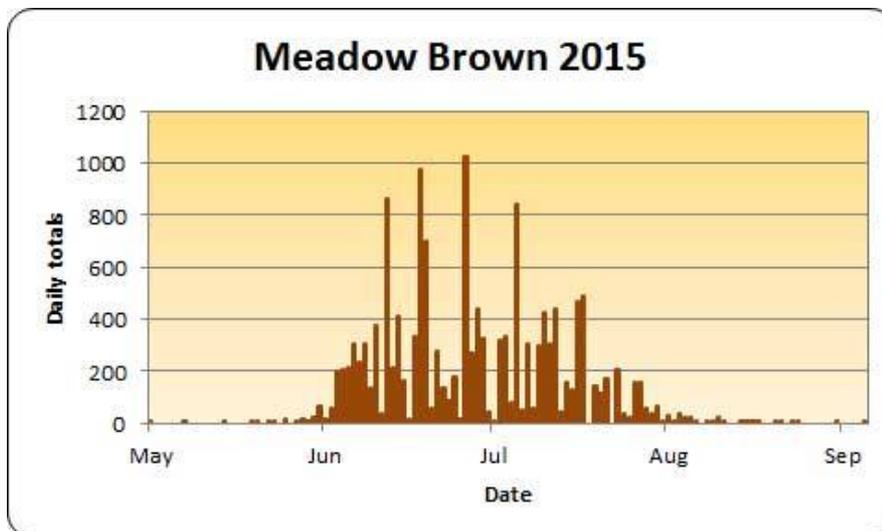
2015: The total number recorded was 14,903, up slightly on 2014's 13,459. This may reflect an increase in recording rather than a trend in the butterfly's population.

This year's first sighting was at Annfield Plain by John Wilson on May 28. The first in Northumberland was by Robin Bailey on June 3 at Druridge Bay. There was then a brief lull before more were recorded sporadically from mid-June; on the 28th it was recorded at seven sites from Saltholme to north of Cramlington. Numbers peaked in July with 14 individual counts of over 100, including three of over 200. Top scorer with 247 was Ian Waller at Raisby Hill grassland on July 9th. Jane Lancaster saw 142 at Newton Point on August 1st. By mid-September the end was in sight: Durham's last record was by Steven Hutchinson on 20th at Waldrige, but there was one more Northumberland sighting before Harry Eales recorded the last for the region on



October 2 at Whittle Dene STW. The highest number on a single day was 864 on July 9th from forty one records submitted.

Meadow Brown was recorded in our region on 89 days over a period of 128 days, 72%; if we



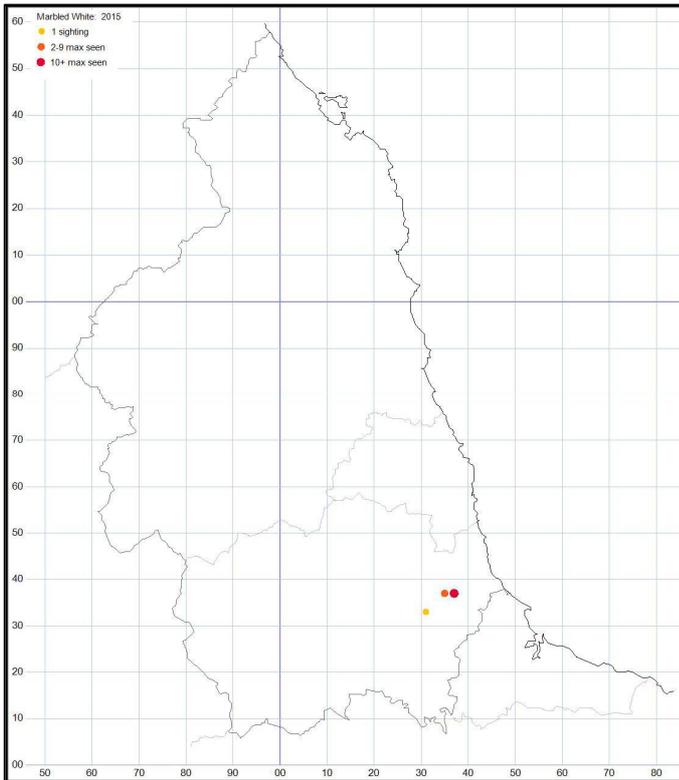
omit the two earliest and two last sightings of singletons to leave only its sustained appearance between 15th June and 20th September, we recorded on 99 days, 90% of the butterfly's flight period. It was recorded in fourteen new tetrads in 2015.

Gatekeeper *Pyronia tithonus*

2015: Once again there were no reports of this butterfly in the region. Since we are on the very northern fringe of its range recorders in the south of the region are likely to have the best opportunity to find this species.

Marbled White *Melanargia galathea*

2015: Until this year Marbled White, which was introduced to Wingate Quarry in 2000 as an experiment, was not known to have strayed any distance from there. In 2015 we had repeated sightings 3km west at Littlewood LNR, not yet enough to prove that it had taken up residence there, but evidence that it was venturing out further than we had seen previously.

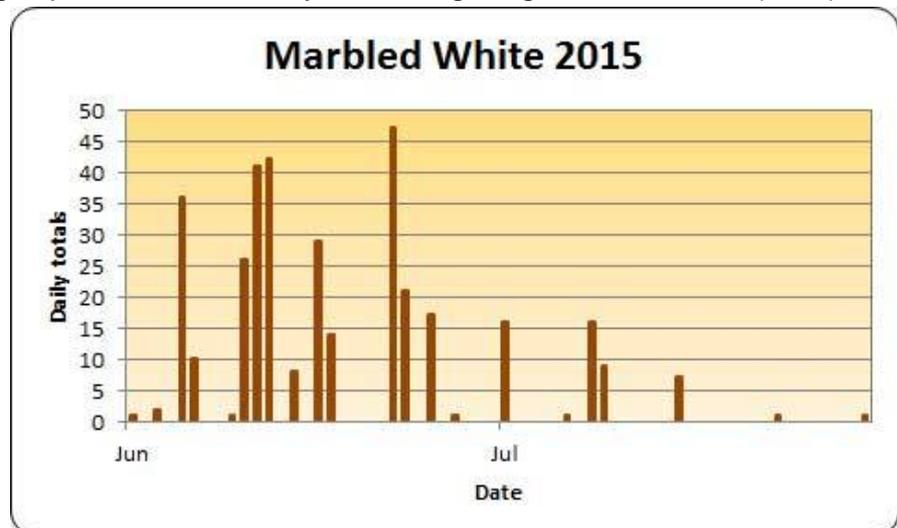


The twenty five of the thirty one records from eleven recorders were made at Wingate, the first coming from Robert Mawson on June 29th. The total count was 347 butterflies spread through July and August, the highest for a single day being 47 on July 20th, 46 of them provided by Keith Walton. The last sighting at Wingate was on August 19th by John Olley.

Meanwhile, on July 7th John had spotted a single specimen at Littlewood and on 12th Ian Waller saw another there. On July 20th Mark Dinning recorded one at Town Kelloe Banks between Wingate and Littlewood and on 25th Keith Walton saw one at

Thrislington Plantation. The last sightings of the year were at Littlewood, again of singletons, by John Olley on August 20th and J. Butler on August 27th.

The butterfly's recorded flight period was 60 days, with sightings made on 22 (37%). There are now three more sites to keep an eye on in 2016, with a possibility of more. It will be interesting to see if the butterfly establishes itself outside Wingate Quarry.

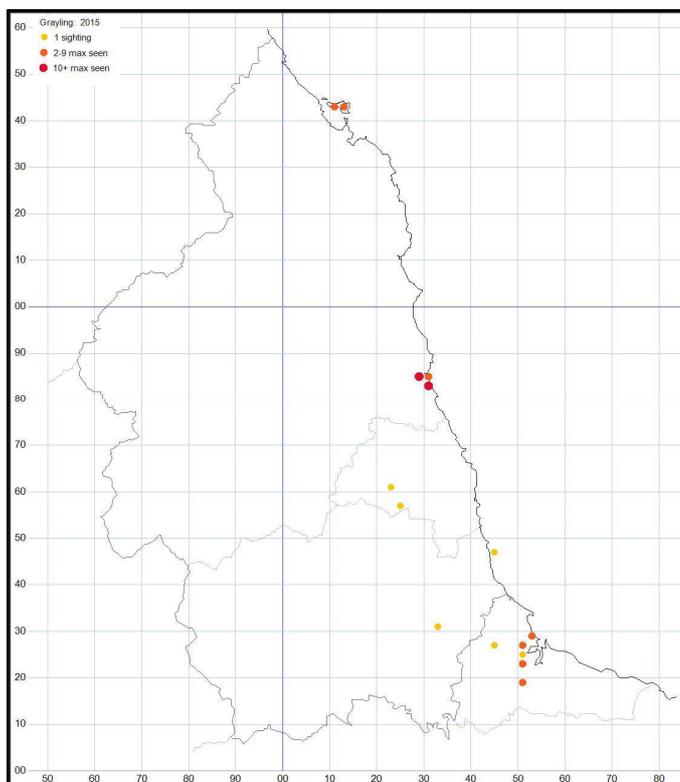


Grayling *Hipparchia semele*

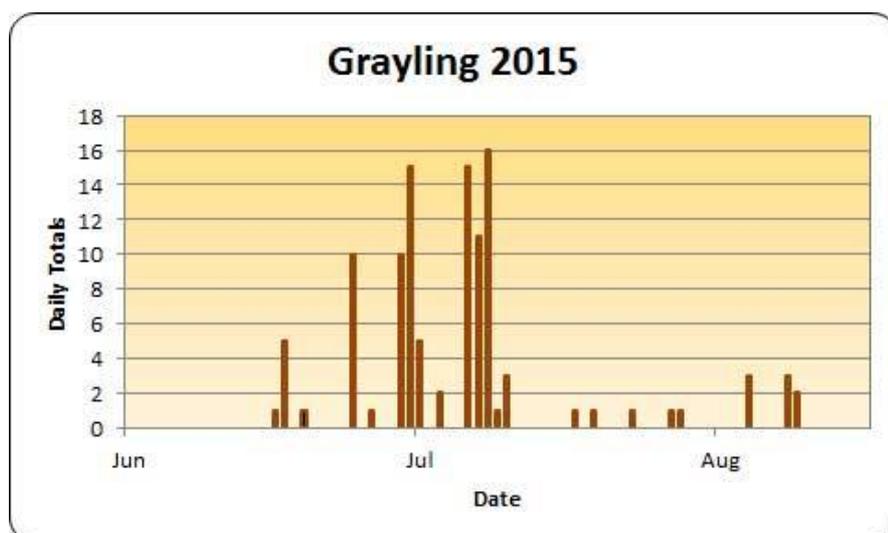
2015: The total of 109 Grayling recorded in our region in 2015 was a modest improvement on 2014's depressing effort. Recent annual totals have been 612 (2006), 141 (2007), 116 (2008), 155 (2009), 349 (2010), 190 (2011), 91 (2012), 325 (2013) and 80 (2014).

Mike Leakey recorded the region's and VC66's earliest sighting for 2015 with a singleton at North Gare on July 1st. Roger Norman recorded Northumberland's first the following day at Cambois with a count of four.

Only four double-figure counts of Grayling were made in 2015, two each by Mike Coates, who recorded the year's highest (15 from Cambois on July 21st) and Steve Holliday who counted one fewer from disused railway lines near to where Mike's count was made. The pair's other two counts, made on different days, were each of ten butterflies, again from sites near Cambois. Almost unbelievably, the highest counts of Graylings at any VC66 site in 2015 were of only two butterflies. Julie Mason (Greatham Creek) and John Olley (Saltern Marsh) shared this honour.



On a slightly more positive note, Ian Waller recorded one at Hawthorn Hive, John Olley recorded one at Fishburn Lake and David Atkinson recorded one in Dunston Vicarage's garden. None of these sites is renowned as a Grayling hotspot (one assumes the Dunston record had strayed from nearby brownfield habitat) and it would be nice to think that there are further, as yet undiscovered, colonies to be found.



The year's latest for our counties were John Olley's sighting at Fishburn Lake (Durham, August 24th) and Graeme Bowman's at Holy Island (Northumberland, same date).

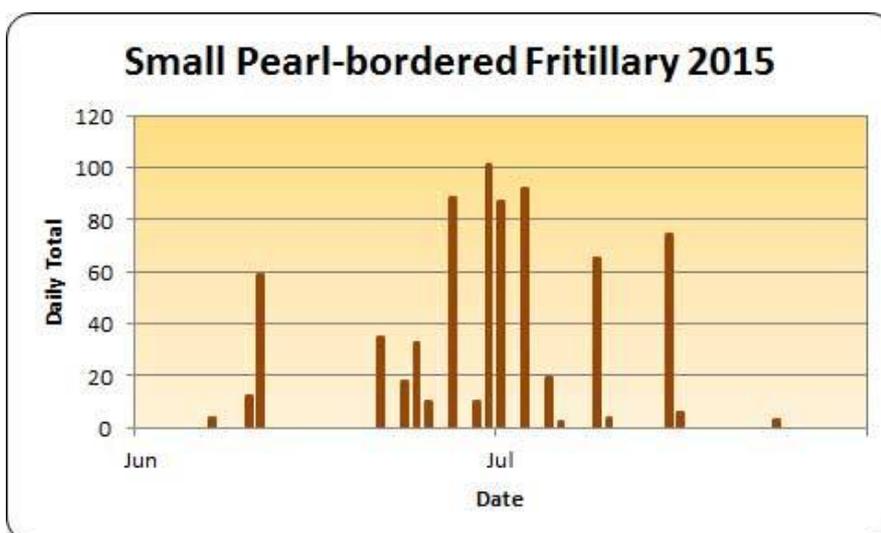
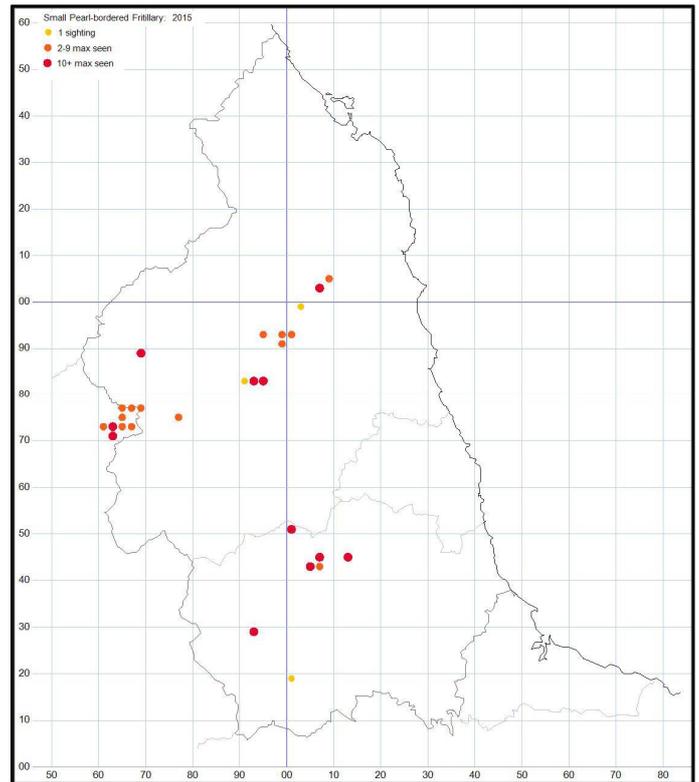
Grayling is probably one of the most under-recorded butterflies found in our region. Almost all the best-known sites are either remote (e.g. Holy Island, Ross Links) or on

brownfields (e.g. Tees Valley, Blyth). If anyone feels able to commit to helping with survey work, please contact Dave Wainwright.

Small Pearl-bordered Fritillary *Boloria selene*

2015: A total of seventy records were received. These recorded 722 individual butterflies. The flight period lasted for forty-eight days and the butterfly was seen on nineteen of these days, representing 40% of the flight period. This was another good year for the Small Pearl with record numbers for the species being reported. Good numbers were seen at the North West Durham sites. In Northumberland more reports were received from sites away from the traditional Sweethope Lough sites. These were in the forestry areas of Kielder, Wark and Harwood, and around Rothbury. Small Pearl-bordered Fritillary was also confirmed at a site on the Tees Railway Walk, near Barnard Castle, where a work party was recently undertaken to improve the habitat for the species.

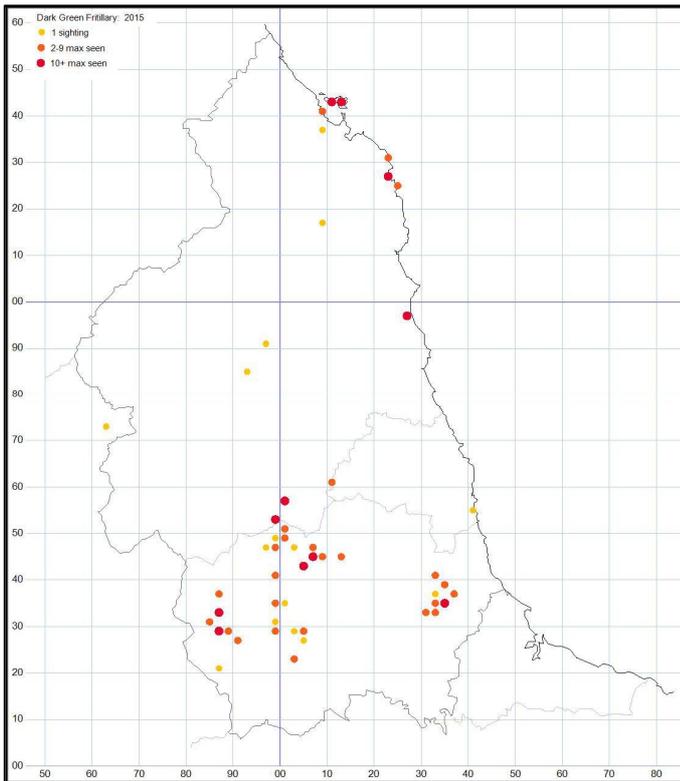
As in 2014 the flight season started about ten days earlier than average. The first sightings of the year came from Graham Beckwith who saw four at Debdon Plantation near Rothbury on 7th June. The first record from County Durham was three days later on 11th June with Dave Liddle recording twelve at Black Plantation. The peak of the flight season was the last week of June and the first ten days of July, which is normal for this part of the world. The highest individual count came from Dave Liddle who recorded 60 on the Burn Hill transect on 1st July, this is down from the 100+ counts recorded there in 2014. The highest count from a Northumberland site was 57 by Graham Beckwith at Debdon Plantation near Rothbury on 11th June. Graham reported this is the highest ever count he has made at the site.



The final sighting of the year in County Durham came from Dave Liddle with six at Waskerley on 16th July. The last record from Northumberland was on 24th July when Gordon Simpson and Malcolm Gallimore saw three adults at two different locations at Furlaws Forest north of Sweethope Lough.

Dark Green Fritillary *Argynnis aglaja*

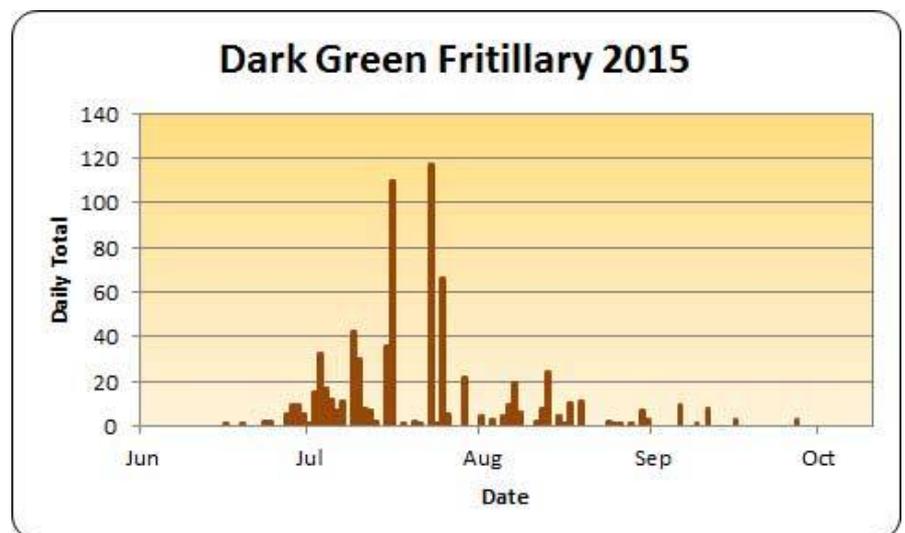
2015: This seems to have been a rather good year for the Dark Green Fritillary. There were 157 records which was a 165% increase on 2014 and these comprised a total of 722 individual butterflies which was an increase of 108% compared to the 2014 total (347). The species was recorded in an impressive 51 tetrads (20 in 2014) and was on the wing for 104 days of which it was actually recorded on 54 days (52%).



The first Dark Green Fritillary of the year was seen by Bob Mawson on 16 June at Raisby Way and the next six records were also all from Durham. Northumberland waited until 27 June for its first record, when Robin Bailey saw nine at Druridge Bay. Numbers peaked on 23 July when a total of 117 Dark Green Fritillaries were recorded by six different observers at twelve locations across the region.

The highest count of the year was made by Dave Liddle with an excellent 74 counted at Waskerley on 16 July. Holy Island was forced into second place with Keith Smith recording a total of 67 (across two tetrads) on 23 July whilst, at the other end of the region, Mike and Denise Hunter counted a very impressive 42 at High Force on 25 July. Double figure counts were recorded in various parts of the region including the Northumberland coast (other than Holy Island), Winnows Hill (between Slaley and Blanchland), Kellas and Raisby Way in addition to the locations already mentioned, underlining the good year this species had. New tetrads were added both in the Teesdale area and in the south-east Durham Magnesian limestone and it is worth repeating that there are substantial areas of the region that are little prospected from a lepidopteran point of view and it is very likely that searches in suitable habitat will continue to unearth new locations for this species.

In contrast to the previous year, 2015 saw the Dark Green Fritillary continuing to fly until well into September. The last Northumberland record of the year was on Holy Island where Mike Carr saw one on 9 September but the species was present until almost the end of the month in Durham with Ian Findley recording three in Upper Teesdale on 27 September.

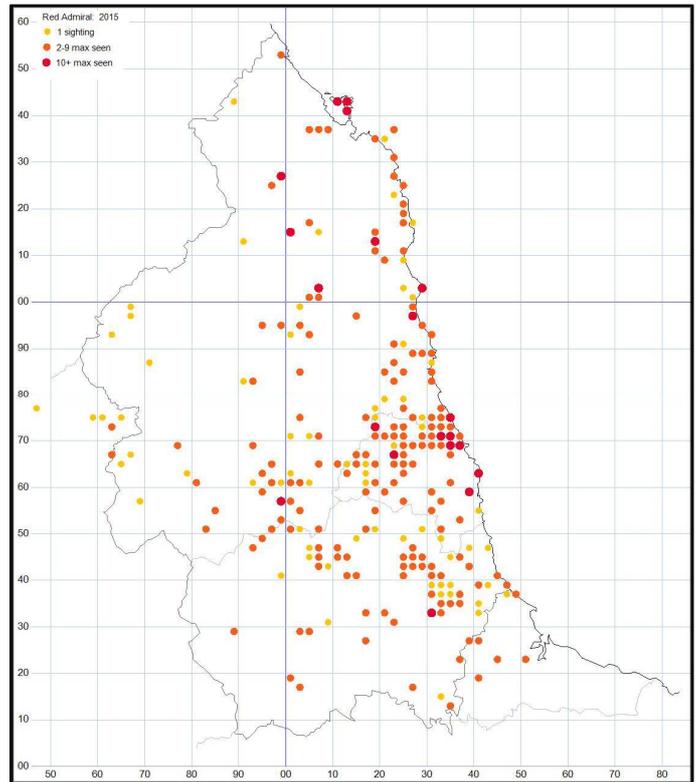


Red Admiral *Vanessa atalanta*

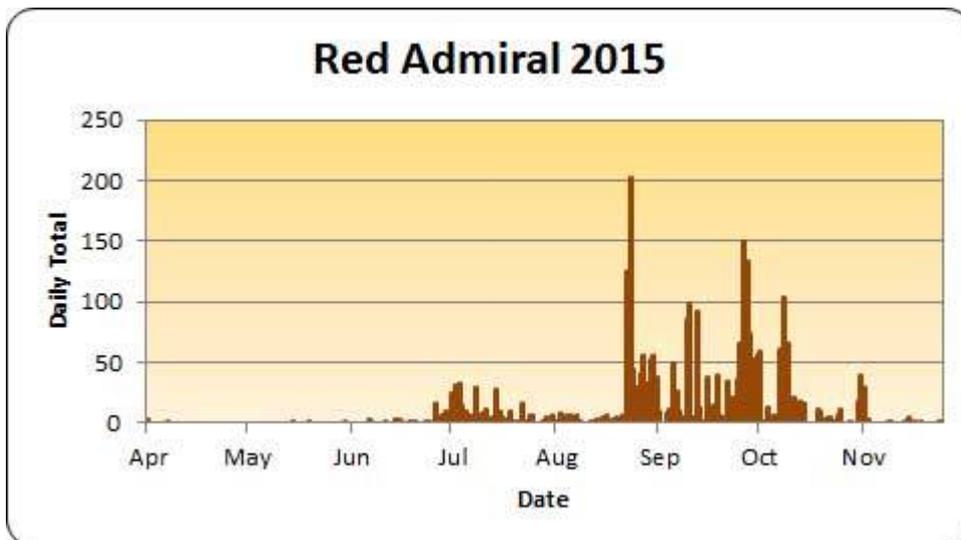
2015: During the previous year, 2,279 butterflies were reported, however, during 2015, 2,814 individuals were sighted, right across the North East England area from Berwick to Darlington. This shows an increase of 535. After the disastrous year of 2013, the Red Admiral is maintaining a healthy growth.

Elizabeth Waterson spotted the first insect on the wing in her garden in Newcastle on 2 April. Alison Allington-Smith recorded the last one on 25 November at Flass Vale, Durham, a little later than the previous year. The flight period was for 238 days and the insect flew on 140 of those days. (59%)

Mike Carr saw the highest number in one location, 83 individuals at The Snook, Holy Island on 23 August, followed by Mike and Denise Hunter with 50 at Tynemouth on the following day. There were 659 sightings of individual butterflies during the period but only 37 records were in double figures. 1129 records were submitted in total for the season.



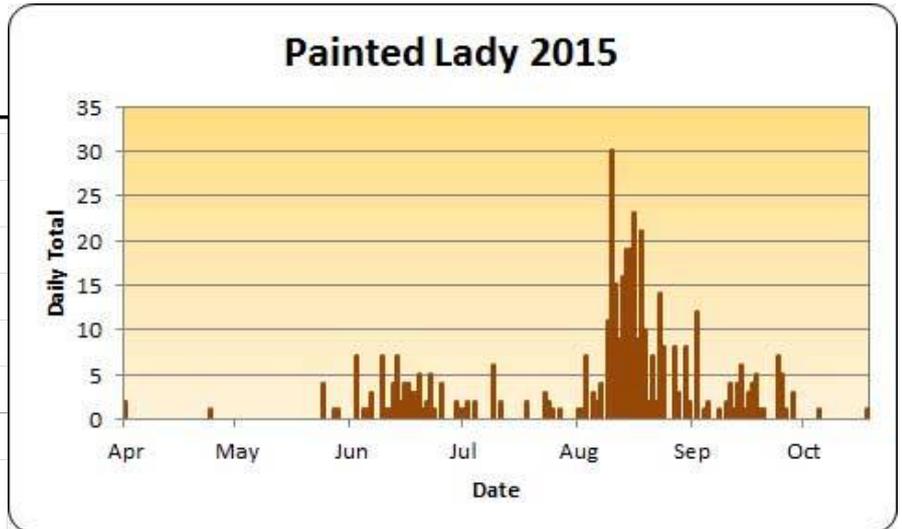
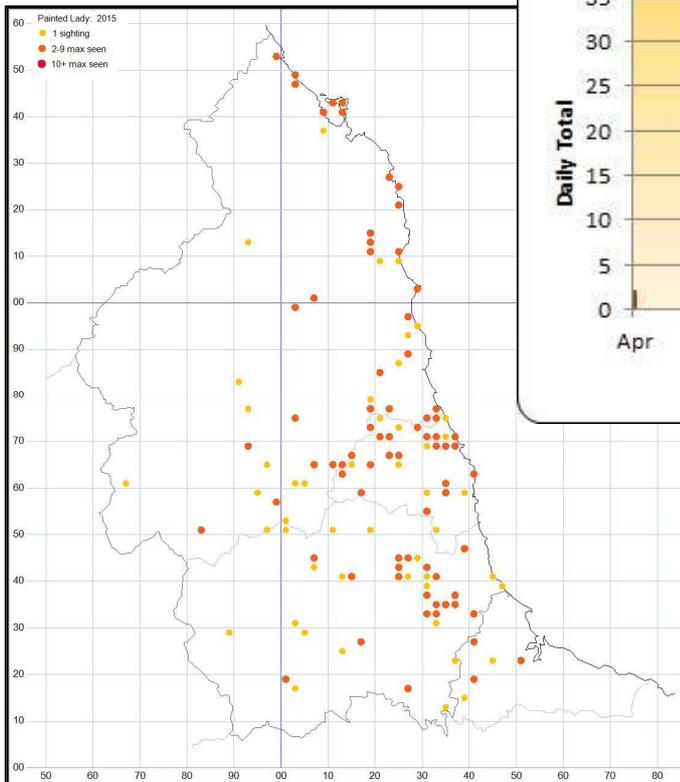
September was the best month to see the insect with 397 records yielding 1146 individuals, followed by August with sightings of 715 individuals. Again, the majority of reports came from Tyne and Wear and County Durham. Although the north of the area did respectably well, the North and West of Northumberland are always under recorded, being sparsely populated and sometimes inaccessible. However, a magnificent 339 insects were recorded on Holy Island during the flight season.



during the flight season.

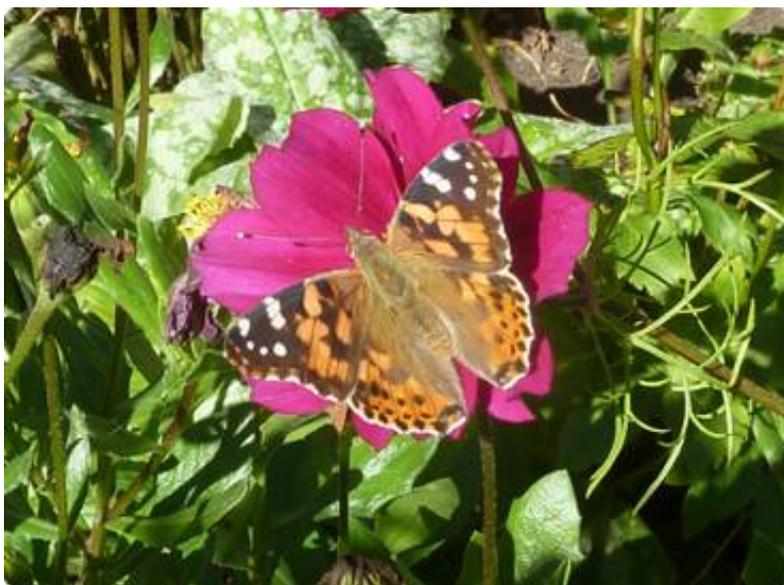
Painted Lady *Vanessa cardui*

2015: 2015 was a better year for Painted Lady and an improvement on 2014. There were 288 records (a 93% increase on 2014) and 420 individual butterflies.



The flight period for the species was longer than in 2014 at 201 days (181 in 2014) and the species was seen on 84 (42%) of these days.

The season's first and the first in Northumberland was at Liddell's Wood, recorded by Tim Wrigley on 15th April. The first Durham specimen was recorded by Graham Mitchell on 10th June at Sherburn House.



Painted Lady – Sally Rogers

Counts throughout the flight period were generally low; 81% were for single specimens. The highest count was of only six, recorded by the Alnwick Wildlife Group at Fenham Flats on the 17th August and by John Scarr on the 1st September at Thrislington. K.Walton, at Broompark and Robert Mawson on Raisby Way each recorded five.

The last specimen in the south of the Vice County was recorded by Simon Hodgson on 19th October on the Tees Railway Walk whilst

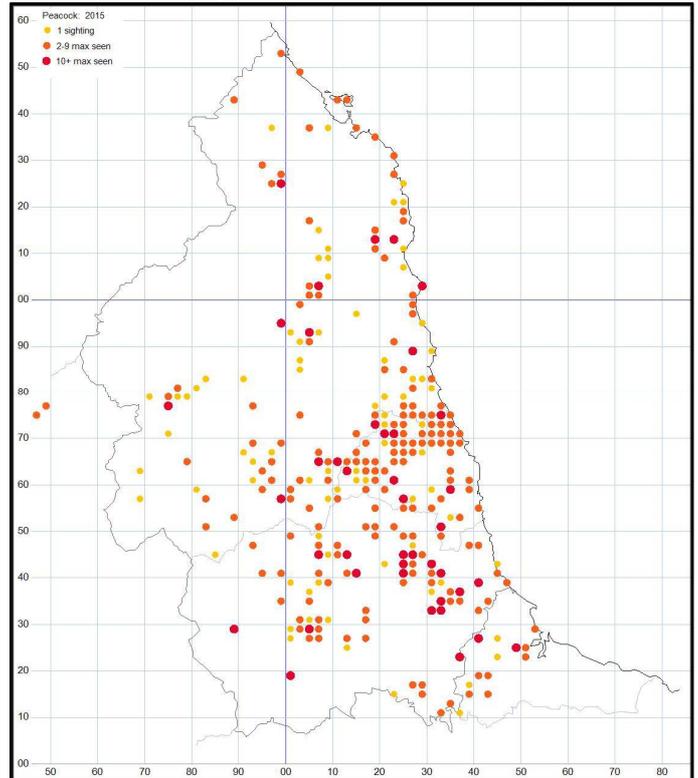
the last specimen for Northumberland and for the season was recorded by the Alnwick Wildlife Group on 1st November on Holy Island.

Peacock *Aglais io*

2015: During 2015, the flight period for the Peacock was a magnificent 347 days ranging from the first sighting on 4 January by Paul Tankard at Forsythe Road, Metro Bridge until the last, reported by Mike Hodgson at East Chevington on 16 December, sixty-four days longer than the previous year. (Is that a record record?). The butterfly was reported on 157 of those days, only 45% of the available time.

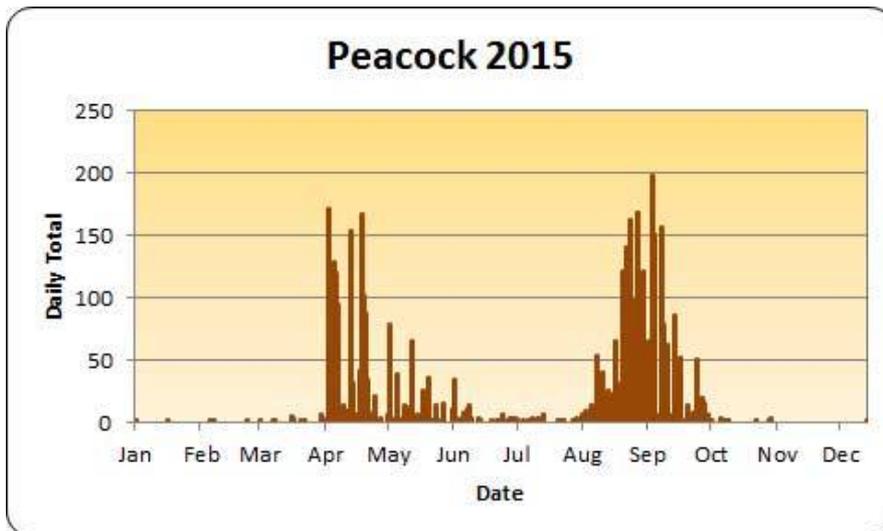
The final figure for the Peacock during 2015 was much lower than in the previous season. 4,621 individuals were counted during that time, a reduction of 2,135 insects on the previous year (2014). Ironically this figure IS almost exactly the same as the increase during 2013 when a figure of 2,125 extra individuals was recorded.

August was again the best month for the butterfly with 1,429 insects being recorded, over quarter the total seen. The best days were 23 August until 26 August, when 526 insects were recorded. The largest numbers of individuals were reported on 26 August, when Gordon Simpson saw 87 in Hamsterley Forest. On 10 September he recorded 47 at the same place. There were 700 records of single sightings throughout the flight time, only 82 records showed more than 9 individuals at any site. The highest number of records came from Graham Mitchell who sent



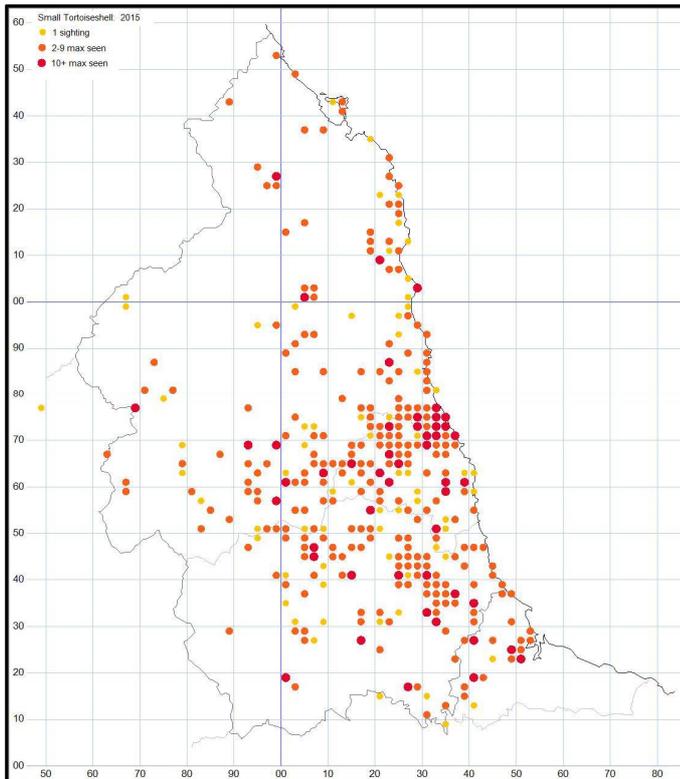
73 records totalling 186 butterflies during the season, again, rather ironically he recorded exactly the same number in 2014, the majority of which were at Sherburn.

The butterfly was well represented throughout the Branch area, with a better number than usual reported in the far north of the area.



Small Tortoiseshell *Aglais urticae*

2015: A total of 2,242 records were received of 6,734 butterflies which is an astonishing 925 records more than last year and 2,289 more butterflies.



The first Small Tortoiseshell seen in 2015 was by Louise Hislop on 19th January at Wylam and the last recorded was seen by Ann and Gordon Young at Billy Mill on 10th December.

The highest individual counts in the first flight period was of 64 on 9th April by Gemma Vance on the fields at Murton near Shiremoor then 30 on 1st October by John Olley at Bishop Middleham. Gemma continued to see high numbers of the species at the same site during April recording a total of 418 individuals during nine visits.

In 2015 of the 206 days in flight, 91 days were in double figures and on 17 days over 100 were recorded. The highest joint totals recorded in any one day were 185 on 5th April, 208 on 6th April, 176 on 16th April then 171 on 27th September.



Small Tortoiseshell – Mike Coates



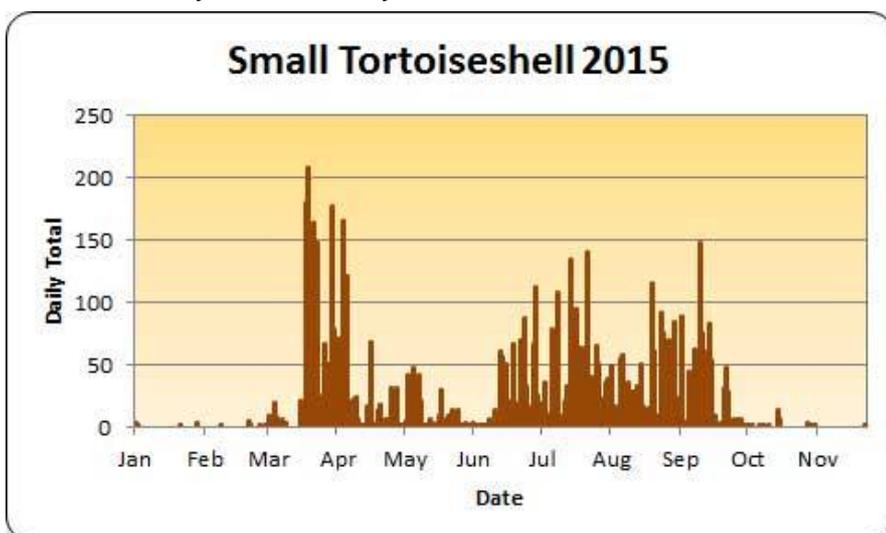
Aberrant Small Tortoiseshell – Mike Eccles

Small Tortoiseshells were recorded on 206 days being 63% of the 326 days flight period, a notable increase from the 273 days flight period in 2014.

These figures all illustrate how 2015 was a very successful year for the Small Tortoiseshell in our area.

Fluctuating individual numbers for the last seven years are:

- 2009 – 3509,
- 2010 – 4357,
- 2011 – 3746,
- 2012 – 2478,
- 2013 – 4633,
- 2014 – 4445
- and now 2015 – 6734.

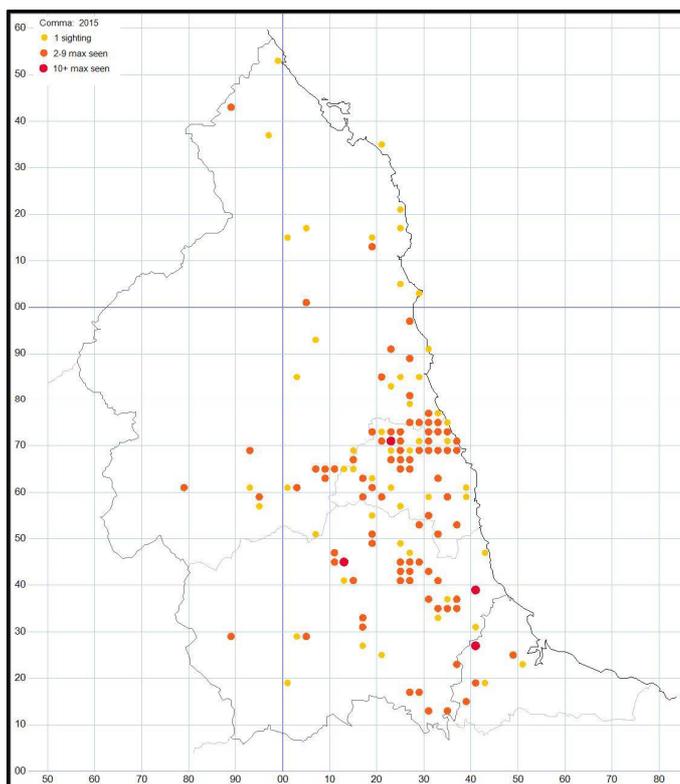


Comma *Polygonia c-album*

2015: Neville Stead saw the first Comma at Whitley Bay on 22 March; this was eleven days later than the previous year. The last one was spotted by Gordon Millward at Cramlington on 17 December, this was over one month later than the previous year, making the flight period 271 days. The insect flew on 125 of those days, a total of 46% of the time allowed.

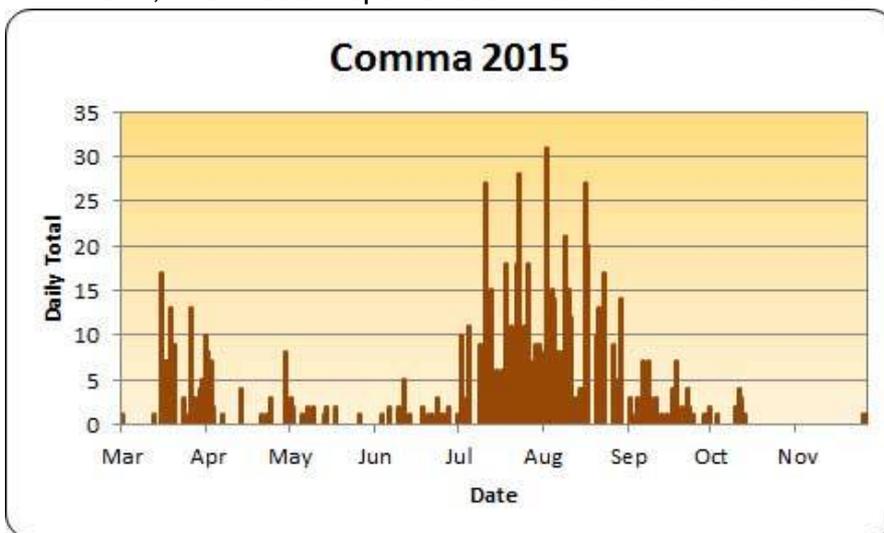
Incidentally during 2014, the number of days the insect was seen on the wing was exactly the same, although in 2015 the flight period was longer.

A total of 489 records were received, registering 774 individual butterflies. This is an increase of 50 insects on 2014 when only 724 were reported, however there were only five sightings in double figures, Alan Edwards saw 15 at Castle Eden Dene on 31 August and David Stebbings recorded 13 at Havannah Reserve on 13 August. Nearly one half of all reports were for individual butterflies, at 350.



Once again, the insect was only rarely seen north of Morpeth with only twenty sightings, all single insects, however five of these were in the Berwick area, a lot further north than the previous year. Interestingly the dates range from 10 April to 9 October; quite a wide time frame.

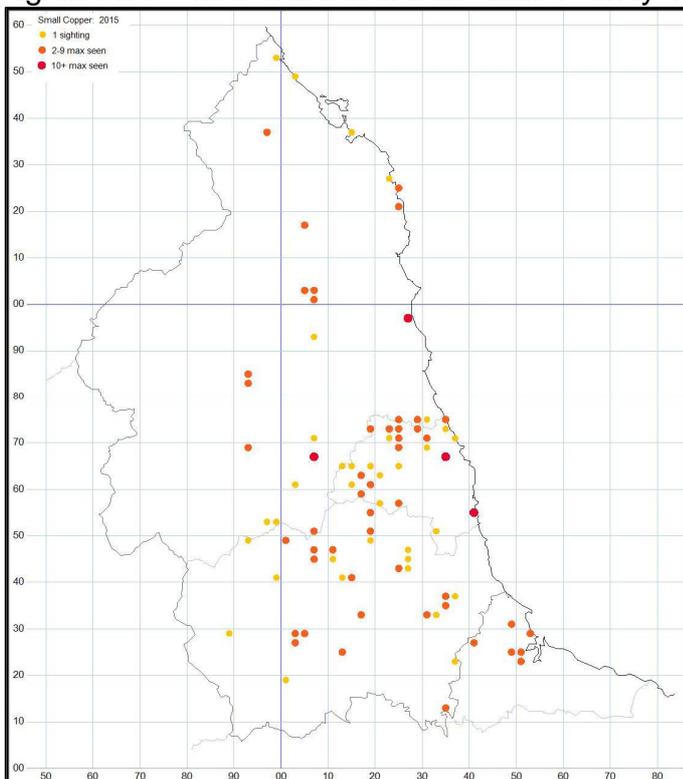
As in 2014, the insect reports seem to be centred around Tyne and Wear and the Tyne Valley westward, although County Durham is well represented.



In 2015 the “best” month to have seen the Comma was August. 340 individual insects were reported, producing 185 records. In August 2014 only 157 individuals were recorded.

Small Copper *Lycaena phlaeas*

2015: Robert Mawson reported pupae at Raisby Way (Co Durham) on 14th February and again on 6th March but it wasn't until 1st May when the first emerging adults were recorded; two at Raisby Way (R. Mawson). The first in Northumberland was one found by Philip Jordan at Gosforth Park NR on 15th May. Respective first dates in 2014 and 2013 were 8th and 16th April in Co. Durham; and 13th May and 16th April in Northumberland.

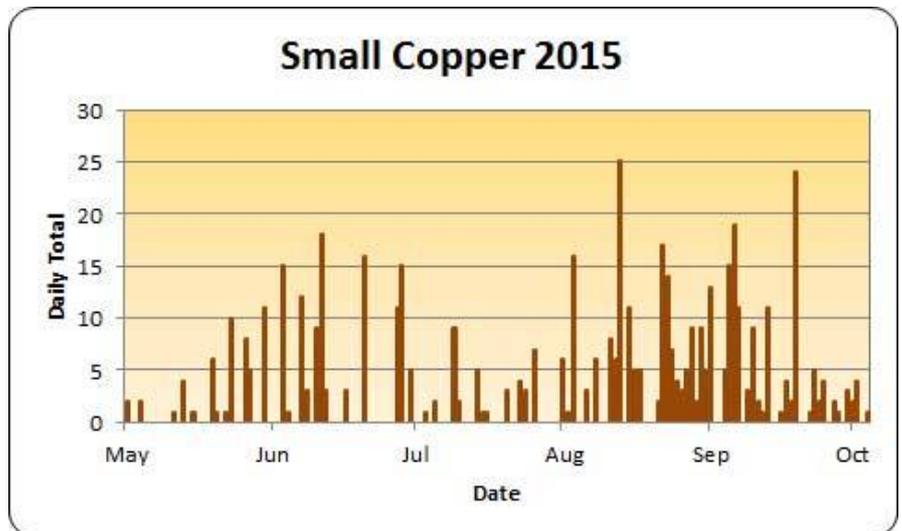


There were seven double-figure counts at five localities, with the largest being 16 at Howdon STW on 20th June (Harry Eales). A series of peaks were noted during the flight season. A total of 25 individuals recorded on 13th August (six sites; five observers) made this date the most productive day, closely followed by 24 on 19th September (six sites; four observers). These figures compare closely to 2014, when a daily peak of 28 was recorded, but fall well short of 78 in a day in 2013.

Overall distribution was generally patchy, particularly in Northumberland, with more records from Tyneside and Co. Durham perhaps reflecting observer bias.

Although higher than in 2014, when 427 were recorded, the total of 525 individuals counted during 2015 was significantly lower than the 852 recorded in 2013. An average of 2.4 butterflies was noted per record, compared with 1.9 in 2014 and 2.7 in 2013.

The final records of adults in Northumberland and Co. Durham were both noted by Harry Eales, who had singles at Whittle Dene STW on 2nd October and Birtley STW on 4th October respectively. Larvae were recorded by Robert Mawson at Raisby Way (Co. Durham) on 26th and 31st October. These compare with respective last dates in 2014 and 2013 of 30th September and 26th October in Co. Durham, and 5th and 9th October in Northumberland.



The flight season extended for 156 days and adults were recorded on a total of 81 days (52%), compared with 181 (47%) in 2014 and 194 (46%) in 2013.

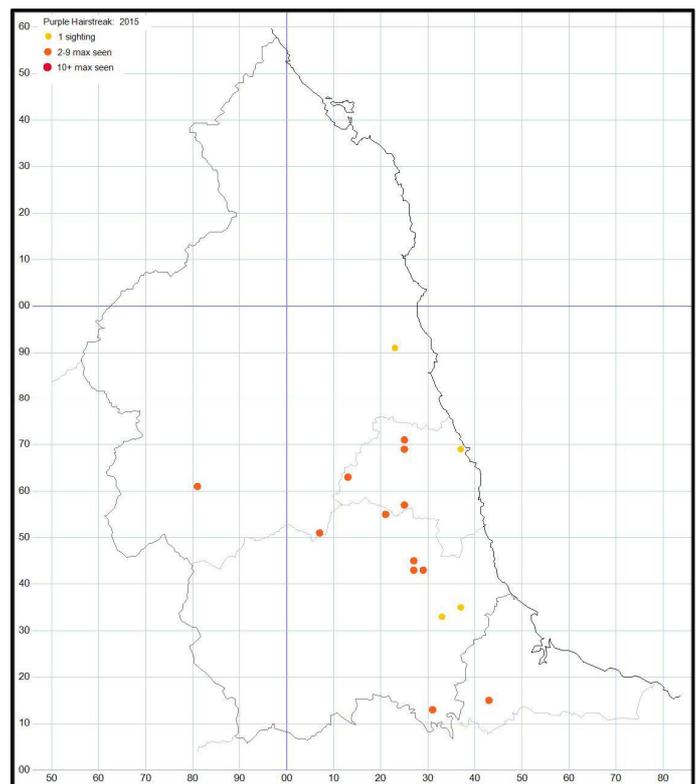
Purple Hairstreak *Favonius quercus*

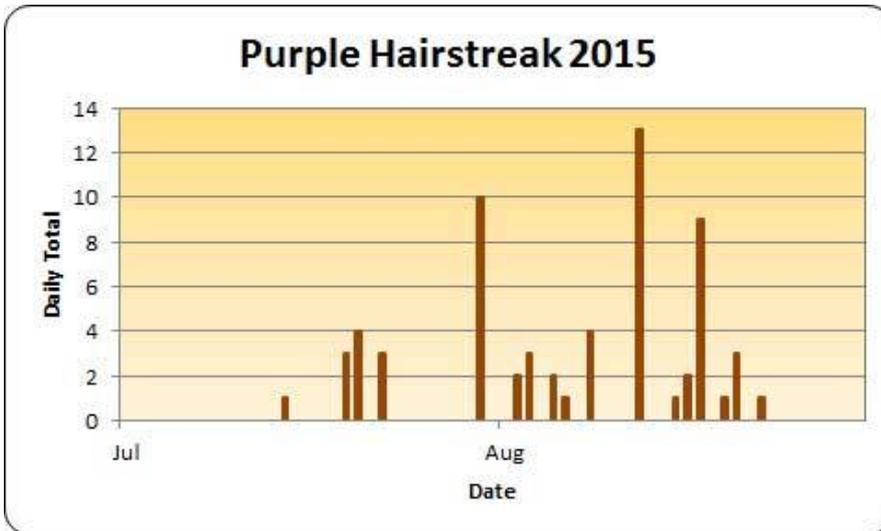
2015: Following 2014's poor showing for this species 2015 proved to be a better year with 24 records received totalling 63 individuals.

The first record of the year, and the first for Northumberland, was a single butterfly seen by Nick Rossiter on 14th July at Staward. This was a new tetrad for the species. Five days later, on 19th July, Harry Eales recorded the first individuals in Durham spotting three at Birtley Sewage Treatment Works.

The final record of the season for Durham was on 20th August when Brian Pollinger recorded three butterflies at Jackies Plantation, Greenside. This represents another new tetrad for the species. The final record in Northumberland was a single individual at Northumberland Park, North Shields spotted by Mike Coates on two days later.

The flight period was 40 days with butterflies being recorded on 17 days (43% of the flight period). The highest individual count was the nine individuals spotted by Julie Hogg at Hoppers Wood, Aykley Heads on 12th August.





The species was recorded in five new tetrads during the year. In addition to Staward and Jackies Planation mentioned above the butterfly was recorded in Northumberland at Crowden Hill Plantation, Longhirst, and at Causey Arch and Bishop Middleham Quarry, both in Durham.

It seems that the best time to search for this species is after 6pm on sunny evenings

in August.

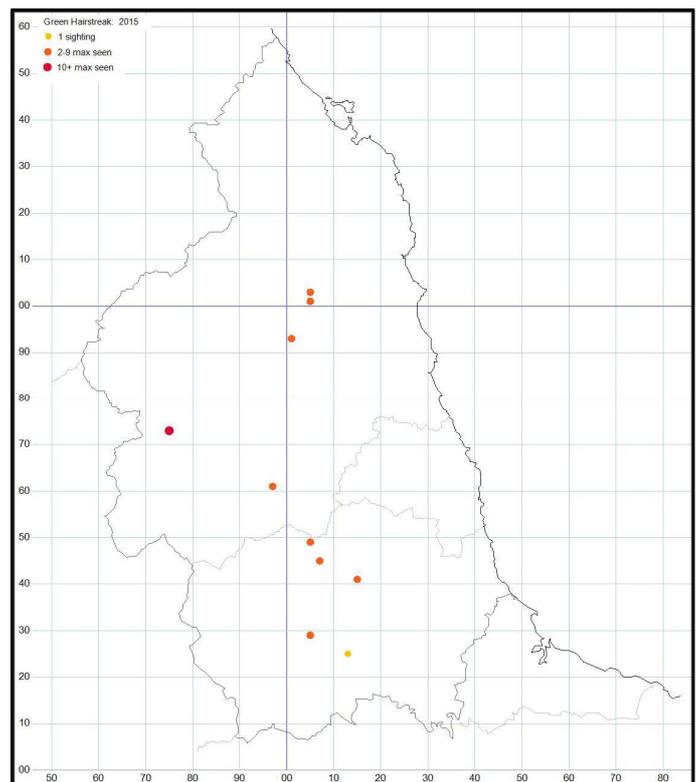
Green Hairstreak *Callophrys rubi*

2015: Eighteen reports from nine observers were received for 2015 covering 11 tetrads. In total only 63 individuals were recorded on 12 days between 19th April and 16th June.

The first records of the year were an individual seen by Graham Beckwith at Rothbury on 19th April and four recorded at Greenleighton Moss by Dave Stebbings on 23rd April.

Some of the region's well known sites provided only small numbers of sightings in 2015:

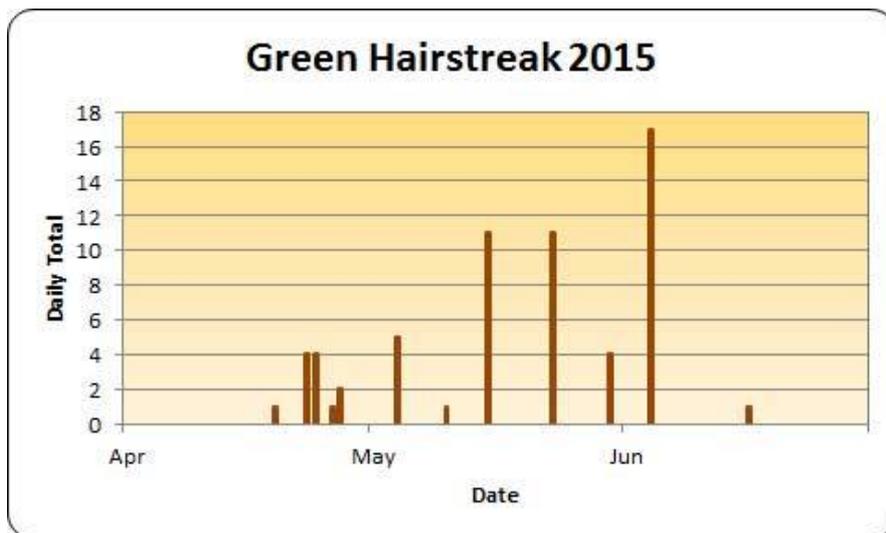
- Dipton Woods - four from Keith Smith on 24th April, six from Roger Norman and five from Mike Taylor on 15th May.
- Hedleyhope Fell - Dave Wainwright reported seven on 23rd May and single butterflies on 30th May and 4th June.
- Muggleswick - two from Dave Liddle on 23rd May and five from Julie Hogg on 4th May.



The highest numbers recorded for the year were 12 from Wark Forest reported by Gordon Young. The last record of the year was on 16th June when Gordon Simpson saw a single butterfly on Cockfield Fell; a new tetrad for the species.

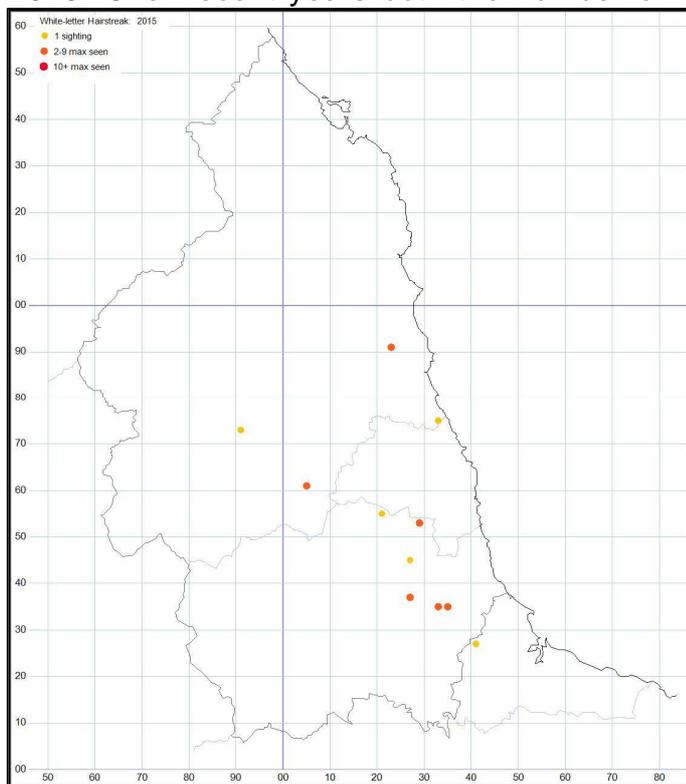
The numbers of this early season upland butterfly recorded each year appears to depend on the spring weather. The dry and sunny spring of 2011 resulted in 526 individuals being recorded but the poor spring weather of 2012 and 2013 saw a dramatic decrease in numbers with something of a recovery to 346 individuals in 2014. With only nine reporters and records

from 12 tetrads in 2015 it is difficult to draw conclusions regarding the butterfly's population and distribution in this region. Green Hairstreak remains an under-recorded species which is great pity for such a charming spring butterfly.



White-letter Hairstreak *Satyrrium w-album*

2015: Over recent years both the number of records and the number of individuals of this species seen has increased year on year. In 2015 19 records were submitted – slightly down on 2014 – however, only 41 individual butterflies were counted plus a pupa. This represents a decrease of 43% compared with 2014.



The first records of the year were made by Ian Waller on 7th July when he saw one individual at Raisby Quarry and another at nearby Raisby Hill Grassland. Ian also recorded the final record of the year at Raisby Quarry on 26th August. This represented a flight period of 51 days with individuals recorded on 15 days (29%).

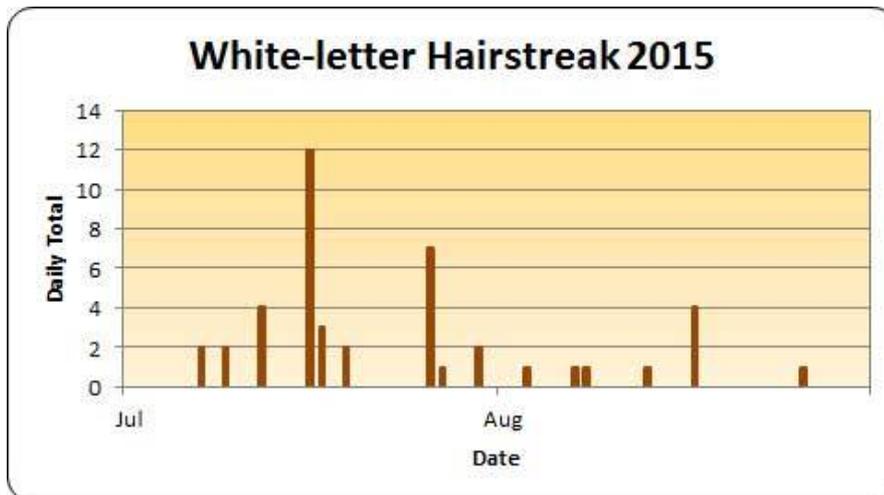
The flight period in Northumberland was much shorter with the first record not made until 26th July when Julia Meldrum spotted two individuals at Crowden Hill Plantation, Longhirst. The final Northumberland record was from the same site on 17th August. On

this occasion Julia again saw two individuals.

Despite the works carried out at the A1 roundabout, Chester-le-Street in 2014 this species continues to be recorded at the site with a total of 13 individuals recorded on four dates between 9th and 26th July.

The highest individual total was seven recorded by Ian Waller on 16th July at Croxdale Hall, a new tetrad for the species. Another new tetrad in Durham was Causey Burn, Nr Causey Arch where Jonathan Wallace saw one individual on 3rd August.

There were two new tetrads for the species in Northumberland: Colin Jewitt recorded an individual in Barrasford on 27th July and Hewitt Ellis found one in Upper Holywell Dene on 13th August.

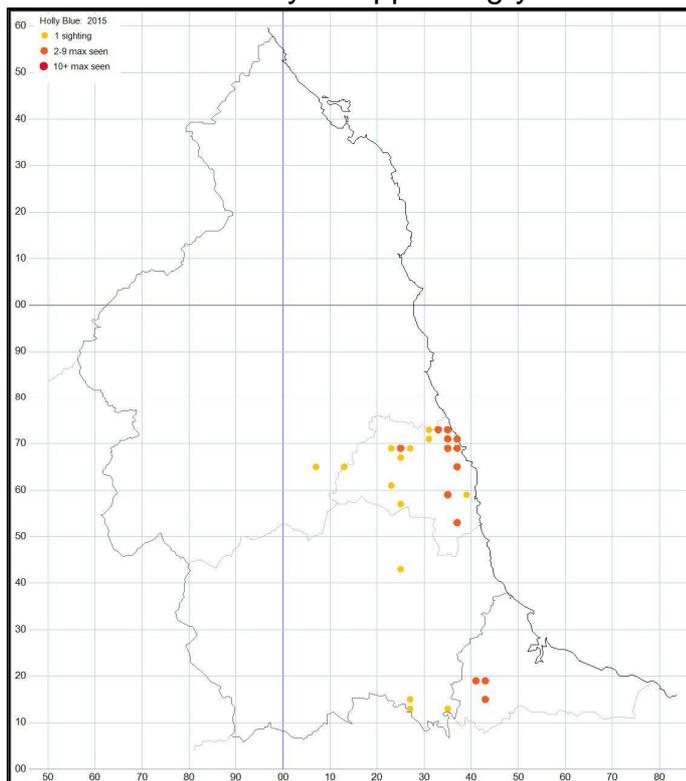


It is suspected that White-letter

Hairstreak is an under-recorded species in the region and recorders wishing to search for the species should look for sites containing elms where the canopy can be observed in July and August. The distribution of this species in the region will only be confirmed if recorders continue to seek out new sites.

Holly Blue *Celastrina argiolus*

2015: After two very disappointing years for Holly Blues in our region there were 87 records



received of 101 butterflies compared with 26 records of 45 butterflies last year and 33 records of 56 butterflies in 2013. Overall numbers have increased in our region in recent years since only one individual was recorded in 2001 and three in 2002 increasing to 284 individuals in 2007 then crashing to only seven recorded in 2009 with numbers slowly increasing again with 162 recorded in 2012.

Of these 2015 records 79 were single specimens, three were twos, four were threes with only one higher count of four. This highest individual count was by Hew Ellis on 15th August in Preston Cemetery, North Shields.

Of the 101 insects recorded

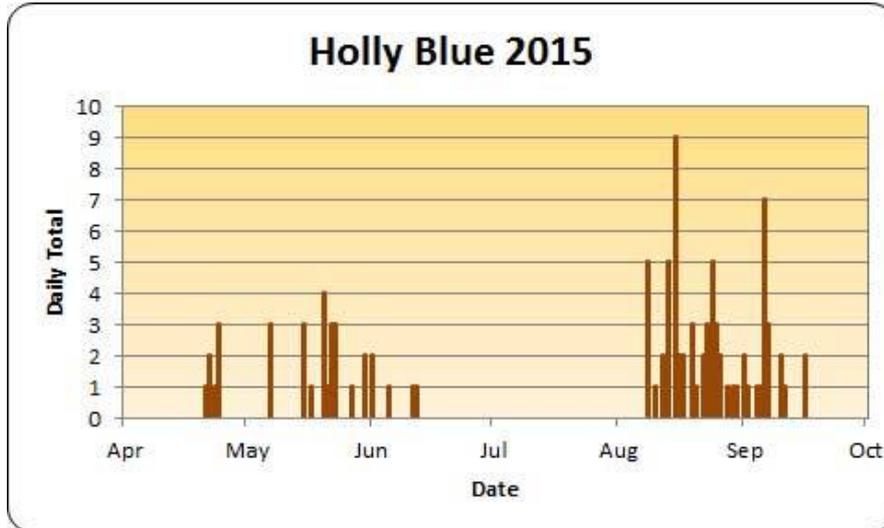
43 were south of the Tyne (all singles), 17 in Newcastle, 40 in North Tyneside and one at Ovingham being the most westerly. The furthest north was at East Holywell, just north of Whitley Bay.

The first Holly Blue seen in 2015 was by Keith Smith on 21st April at Longbenton and the last recorded was seen by Tim and Dorothy Nelson at Stockton on 16th September.



Holly Blue – Mike Coates

The first brood was seen on the wing from 21st April until 12th June with 33 individuals recorded. Then there were almost eight weeks without records till the second brood was recorded for six weeks from 8th August until 16th September with an improved count of 68 individuals.



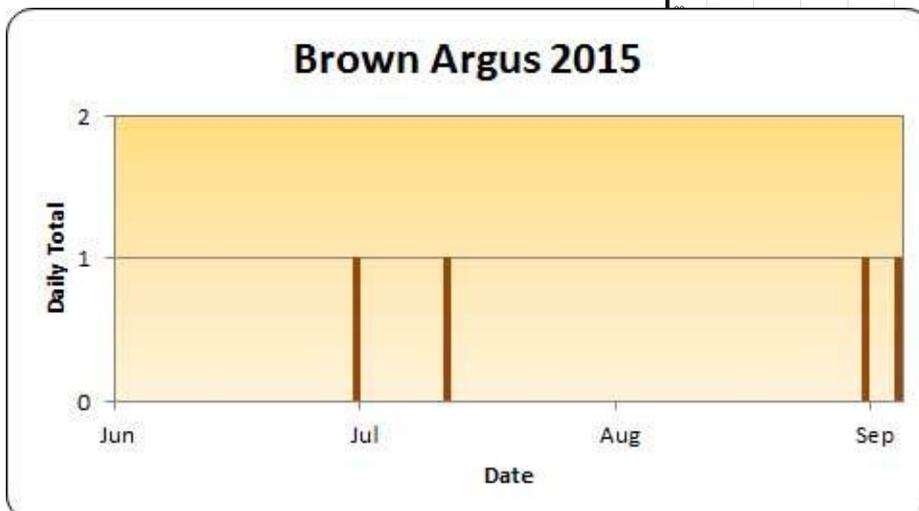
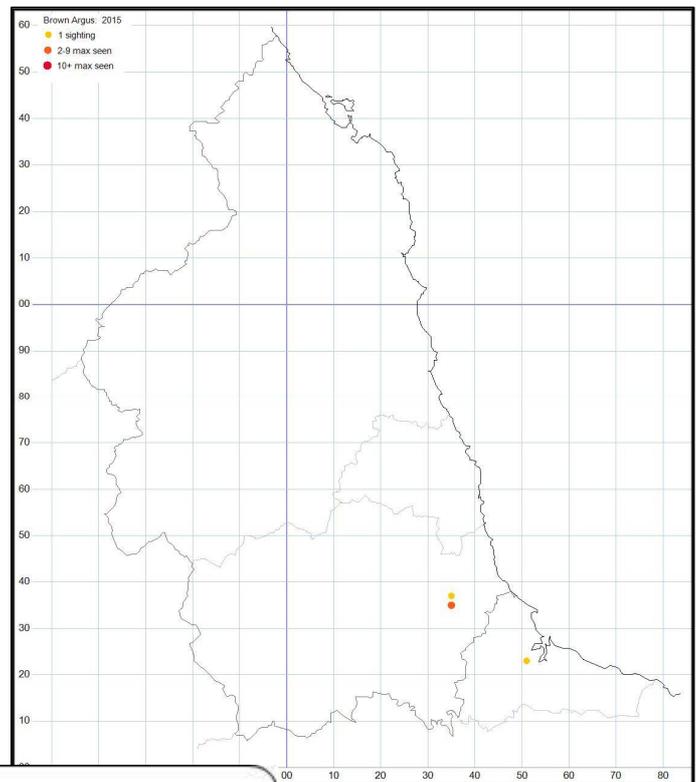
Holly Blues were recorded on 43 days being 29% of the 149 days flight period. They were only seen in a disappointing 11 tetrads in 2015 compared with 31 in 2012 before these last two

poor years. The total number of tetrads that they have now been recorded in still stands at 133, with no new tetrads this year.

Brown Argus *Aricia agestis*

2015: Following the pattern of recent years there were very few sightings of this butterfly in the region. This is not surprising as the extreme south of county Durham is on the northern limit of its range in Britain.

There were four sightings of adult Brown Argus, all of which were single butterflies only. The first was from Ian Waller at Littlewood nature reserve on 30th June. The second from Martin Blick at Dormans Pool on Tees-side on 11th July. The other two sightings were from Robert Mawson with single butterflies on Raisby Way on 31st August and 4th September. Robert Mawson also reported finding eggs on Raisby Way on 31st August.



Northern Brown Argus *Aricia artaxerxes*

2015: The year's total of 274 Northern Brown Argus adults was a substantial improvement on 2014's 152 but well below 2013's total of 343.

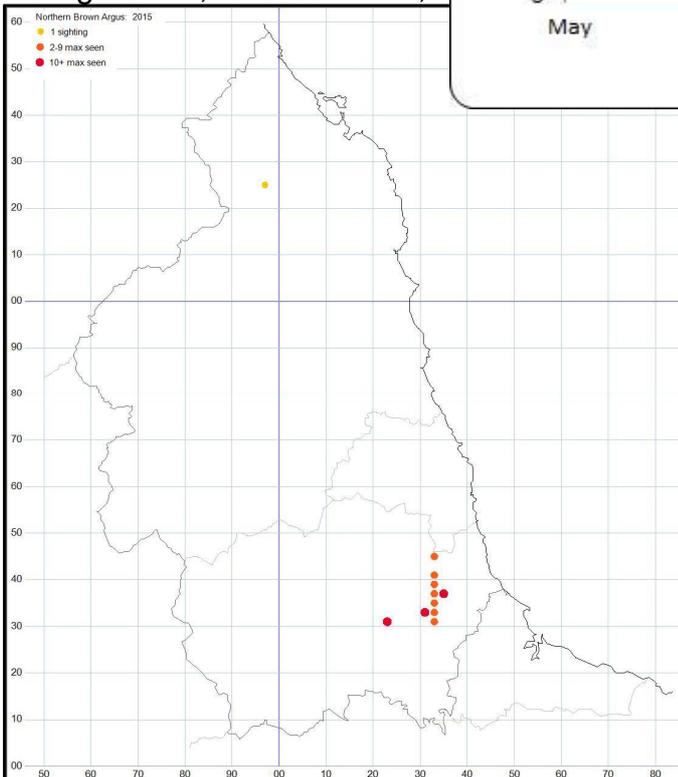
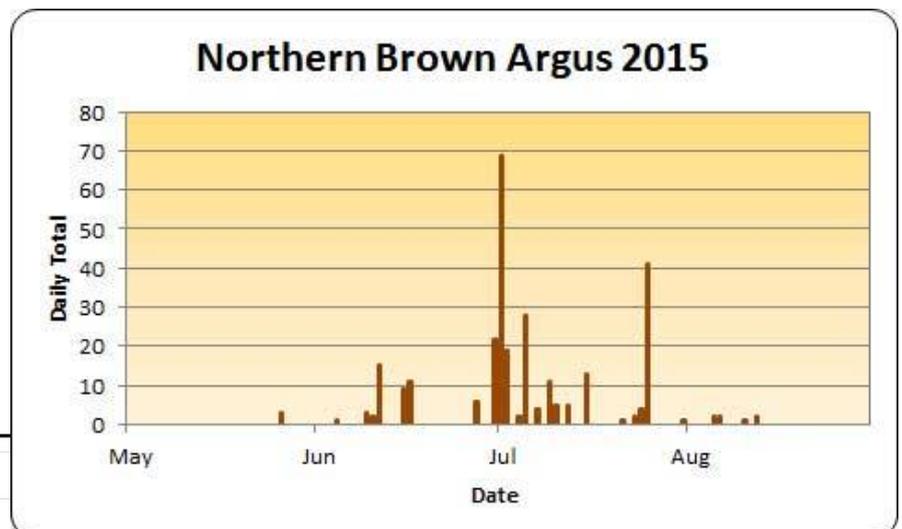
Ian Waller recorded the year's first sightings from Bishop Middleham Quarry where he saw three adults on the early date of May 26th. Steve Le Fleming's singleton at the same site on June 4th was the region's next record. M & N Tuck recorded a single female from Carey Burn Bridge in Northumberland on July 31st. This was that county's only record for 2015.



Female Northern Brown Argus M. & N. Tuck

Graham Beckwith's count of 56 butterflies at Thrislington NNR on July 1st was comfortably our region's highest and contributed to the bulk of 2015's highest daily total of 69 that was recorded on the above date. Other double-figure counts were Keith Walton's 39, also from Thrislington, Ian Waller's 16 from Town Kelloe and Mike Carr and Tim Watsons' joint count of 15 from Bishop Middleham Quarry.

The number of records from our less-visited sites was pleasing. Special mention should go to Ian Waller, who recorded a mixture of adults and eggs at Raisby Quarry, Raisby Hill Grassland, Pittington Hill, Sherburn Hill,



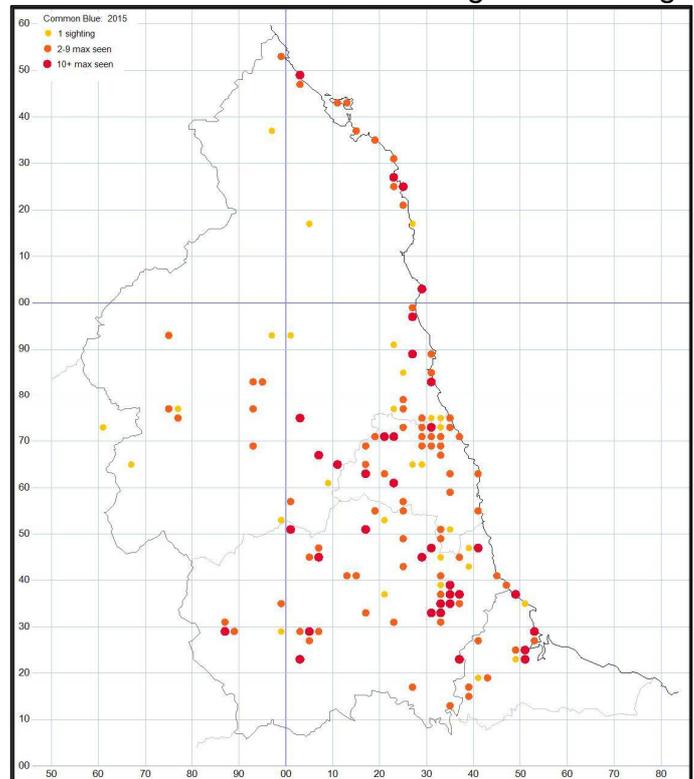
Cassop Vale NNR and Cold Knuckles Quarry. However, as is often the case, no records were received from Durham's coast. This area hosts some magnificent butterfly sites that would certainly repay some serious exploration. Butterfly Conservation can provide detailed maps of areas known to support populations of the Argus, so if you fancy a project for 2016 why not give Dave Wainwright a call on 01388 488428?

The flight period extended until mid-August. Mike Hunter's singleton on August 10th at Bishop Middleham and Ian Waller's brace on the 12th were the region's last for 2015.

Common Blue *Polyommatus icarus*

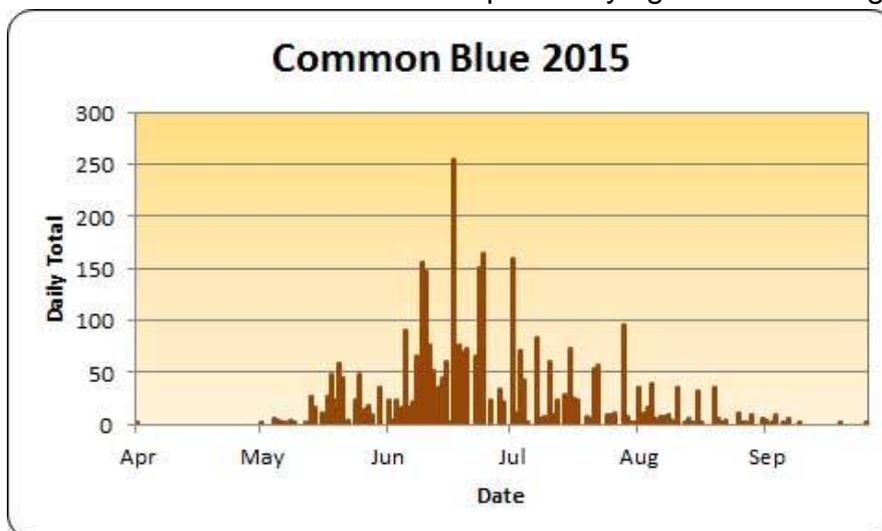
2015: There were 654 reports in 2015 with 3373 individuals recorded during the main flight period between 23rd May and 17th October. Although this is an improvement on last year this was largely as the result of an increase in the number of reports.

Common Blue continues to be a widespread species in the northeast and in the past was generally most abundant on the east coast and southern parts of the region. However, since 2011 there has been a decline in numbers particularly in coastal regions. In 2015 although Kevin Redgrave had recorded 48 butterflies at Newton Links on 16th July and 45 on 29th July this is a drop in numbers from the 72 he recorded there in 2014. The number of Common Blues found on these coastal sites continues to be much lower than the regular reports of over 100 flying prior to 2012.



The first record of 2015 had come from Mike Coates at West Holywell when he reported a single Common Blue on 23rd April, a month earlier than the main flight period. Generally small numbers of butterflies were recorded across the region during late May and June with counts of 23 by Tim and Dorothy Nelson at Dormans Pond on 9th June and 30 by Jill Stewart at Stargate Ponds and Bewes Hill on 27th June being the highest. In July B&M Etherington and K Walton reported 47 on the 9th on Raisby Way and on the 14th Gordon Simpson recorded 41 in Hamsterley Forest and John Olley 49 at Wingate Quarry. The highest number seen flying during 2015 was Keith Walton's report of 51 at Thrislington Plantation on 25th July.

Common Blue butterflies were reported flying across the region during August but mostly in



small numbers. However on the 19th 31 were recorded flying at Dormans Pond by Tim and Dorothy Nelson and 32 at North Gare by Mike Leakey. Later in the summer Steve le Fleming recorded 13 at Bishop Middleham Quarry on 10th September and the final record of the year came from Robert Mawson at Raisby Way on 17th October.

VC66 MOTH SUMMARY

A total of 12,782 moth records were submitted for VC66 for 2015 representing over 40,000 moths of 563 different species. This brings the total records for the county to 353,955.

Three firsts for the county were recorded in 2015:

Vitula edmandsii

A specimen of this member of the pyralid family was caught at Souter Lighthouse (NZ407641) on 16th August by Nick Antcliff. A genitalia determination was carried out by T.J. Tams who found it to be a male of the species. This constitutes only the second record for Britain, the first being at Spurn, Yorkshire on 8th August 1997.

Originally a North American species it is now found in a number of European countries, including Germany, Denmark, Norway and Sweden.



Vitula edmandsii – Nick Antcliff

Acleris cristana

This member of the tortricid family was recorded by Mr B. Robinson at South Hylton NZ351569 on 20th March.

Lithophane ornitopus (Grey Shoulder-knot)

This noctuid was recorded by Mr P. Webb at Shipley Wood NZ014203.

In addition a single *Cosmia affinis* (Lesser-spotted Pinion) was recorded in the county for the first time since 1898 and a *Depressaria sordidatella* for the first time since 1912.



Lithophane ornitopus – P. Webb



Acleris cristana – B. Robinson

CONTRIBUTORS

Stephen Allen, Alison Allington-Smith, John M. Almond, Martyn Anderson, David Atkinson, Andy Atkinson, Steve Austin, Robin Bailey, Jaci Beaven, Graham Beckwith, Malcolm Birtle, David Blair, Lana Blakely, Martin Blick, Stephen Block, Graeme Bowman, John Bridges, J. Butler, Veronica Carnell, Jo Carnell, Mike Carr, Margaret Chard, Dave Chrisp, Pam Chrisp, Mike Coates, Trixie Collin, Melvyn Conlong, John Corcoran, Terry Coult, V. Coy, Andrew Craggs, Ian Davidson, Carol Davies, Alan Davis, Brian Denham, Mark Dinning, Joe Dobinson, Jan Durham, Harry Eales, Mike Eccles, Alan Edwards, Hewitt Ellis, B &M Etherington, Ian Findlay, Dave Foster, Jeff Fowler, Victoria Furnues, Malcolm Gallimore, Marion Gallon, B. Galloway, Fiona Gee, Jane Gray, Neil Gregory, Lesley Hall, Trevor Hall, Molly Hardie, Robert Hardie, Brian Harle, M.S. Harris, Jean Helm, Louise Hislop, Richard Hockin, Lesley Hodgson, Simon Hodgson, Mike Hodgson, Julie Hogg, Barry Hogg, Steve Holliday, Michael Holmes, David Howdon, Mike Hunter, Denise Hunter, Malcolm Hutcheson, A. Hutcheson, Steven Hutchinson, Ken Hutchinson, Duncan Hutt, Daniel Icton, Ian J. Waller, Pauline James, Colin Jewitt, Phil Jobson, Iain Johnson, P. Johnson, Adam Jones, Philip Jordan, Brian Kerr, Ian Kerr, Steve Kirtley, David Lacey, Jane Lancaster, John Lawson, Steve Le Fleming, Mike Leakey, Dave Liddle, James Littlewood, Graham Lonsdale, Dave Lowery, Stephen Lowther, Karen MacDonald, Derek Mason, Ann Mason, Julie Mason, Robert Mawson, Joan Mawson, Helen McDonald, Karen McDonald, Pam McEwan, Dee McKeown, Julia Meldrum, Gordon Millward, Graham Mitchell, Liz Naughton, Tim Nelson, Dorothy Nelson, David Nicol, Roger Norman, Kaye Norman, John Olley, Andrew Paciorek, Russell Pannell, Stephen Passey, Helen Passey, Brian Pollinger, Emma Pollinger, Chris Powell, Ed Pritchard, Tommy Pybus, John Rae, Kevin Redgrave, Steve Reid, Mark Richardson, Mawson Robert, V. Robins, Sally Rogers, Nick Rossiter, Les Rowell, John Scarr, Ian Schofield, Gordon Simpson, Pippa Smaling, Graeme Smith, Keith Smith, Val Standen, N. Stead, David Stebbings, Jill Stewart, Les Stobbs, Stanley Straughan, Paul Tankard, Roslyn Tanner, Mike Taylor, Ian Thompson, Alan Todd, M. & N. Tuck, David Turnbull, R. Turner, Gemma Vance, Dave Wainwright, Jonathan Wallace, K. Walton, Keith Walton, Elizabeth Waterson, Tim Watson, Peter Webb, Garry Whitton, Michael Wilcox, John Wilkins, John Wilson, Gary Witton, Tim Wrigley, Ann & Gordon Young, Alnwick Wildlife Group with apologies for any accidental omissions.

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

<i>Recorder</i>	<i>Transect</i>
Jan Durham & Margaret Chad	Bearpark
Steve Le Fleming, Mark Dinning, Mark Richardson, Ian Waller	Bishop Middleham Quarry
Dave Liddle, Lesley Hodgson, John Wilson	Black Plantation
Stephen Hutchinson	Brass Castle
Dave Liddle	Burn Hill
Dave Liddle	Byerley House
Alan Edwards	Castle Eden Dene NNR – West end
Ian Schofield	Cater House Colliery
Berwick Wildlife Group*	Cocklawburn Dunes
Daphne Aplin	Cowpen Bewley 2 (Woodland Park)
Julia Meldrum	Crowden Hill Plantation
Dave Liddle	Dolly's Wood
Robin Bailey	Druridge Bay
M. Gallon & Helen Chamberlain	Dunstanburgh Heughs
Victoria Furnues, Daniel Icton, Helen McDonald	Gibside (National Trust)
James Littlewood & Andy Atkinson	Gosforth Park NR
Gordon Simpson & Malcolm Gallimore	Hamsterley Forest
Dave Stebbings	Havannah LNR
Dave Wainwright	Hedleyhope Fell

Brian Denham & Brian Kerr	Holywell Pond & Holywell Dene
Dave Liddle	Horsleyhope Burn
Dave Wainwright	Inkerman
Chris Powell	Lanehead Quarry
Tim Wrigley	Liddells Wood
A. Craggs (Natural England)	Lindisfarne NNR
John Olley, J Butler, John Wilson	Littlewood LNR
David Lacey & Les Stobbs	Low Newton Junction
Melvyn Conlong & John Wilson	Morrison Busty Pit Yard
Gemma Vance	Murton Fields
Kevin Redgrave (National Trust)	Newton Links
Jane Lancaster & Kevin Redgrave (National Trust)	Newton Point
Mike Leakey	North Gare, Teesmouth NNR
Ian Waller & Mark Dinning	Raisby Hill Grassland
Ed. Pritchard, Ian Thompson, Karen McDonald	RSPB Saltholme
Adam Jones, Fiona Gee	RSPB Saltholme
Graham Lonsdale, Graham Mitchell, Steven Hutchinson	Sherburn Railway
Jill Stewart	Stargate Ponds & Bewes Hill
John Lawson	Stillington Forest Park
Steve Reid & Dave Liddle	Tanfield Lea Marsh
Simon Hodgson	Tees Railway Walk
Pippa Smaling	The Whinnies LNR, (near Darlington)
John Scarr	Thrislington
Berwick Wildlife Group**	Tommy-the-Miller's Field, Berwick
Ian H. Findlay	Upper Teesdale NNR
Alan Davis & Paul Tankard	Weetslade Country Park
Pippa Smaling	West Park, Darlington
Gary Whitton & John Olley	Wingate Quarry
Jeff Fowler	Wynyard Woodland Park - Pickards Meadow
* Trixie Collins, Molly Hardie, John Rae, Malcolm Hutchinson, Robert Hardie	
** Stephen Block	

We always welcome new photos to include in the report. 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.

Acknowledgements We would like to thank our species writers for assisting in the preparation of the annual report: Jaci Beaven, (Red Admiral, Peacock & Comma), Mike Coates, (Holly Blue & Small Tortoiseshell), Graeme Bowman, (Small Skipper, Small Copper & Clouded Yellow), Steve le Fleming, (Green-veined White, Marbled White & Meadow Brown), Michael Harris, (Ringlet & Large Heath), Anne Donnelly, (Brimstone, Purple Hairstreak & White-letter Hairstreak), Barry Robinson, (Painted Lady & Speckled Wood), Dave Stebbings, (Large Skipper, Brown Argus, Small White, Small Pearl-bordered Fritillary, Small Heath & Wall), Dave Wainwright, (Dingy Skipper, Northern Brown Argus & Grayling), Jonathan Wallace, (Large White, Orange Tip & Dark Green Fritillary), Peter Webb, (Green Hairstreak & Common Blue) and Ian Waller (Essex Skipper). We are looking for more volunteers, to write up one or perhaps two species for 2016. We are also always looking to

receive more photographs for inclusion in the report, (as JPEG files please). Please contact the Recorders if you are able to help.

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 Brown Argus, Camberwell Beauty, Gatekeeper, Brimstone, Essex Skipper and any other more unusual butterflies 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.



Clouded Yellow – Daphne Aplin

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 and making comparisons to previous years, it is almost inevitable some mistakes will slip through. If anyone does notice any errors please inform your Butterfly Recorders. We will attempt to rectify any errors in future reports.



Holly Blue – Mike Coates

FLIGHT PERIOD TABLE

This table relates to both Durham and Northumberland, and records the first and last flying record of each species for the three-year period 2013 to 2015. 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 – 2015 are included in the last two columns. In 2015 two record earliest dates and three record latest dates were recorded in addition to the appearance of Essex Skipper in the region. One or two dates may differ from previous tables due to additional records or reappraisal.

FLIGHT PERIOD TABLE								
	2013		2014		2015		Record earliest	Record latest
Dingy Skipper	9 May	6 Aug	3 May	25 Jul	23 Apr	16 Jul	18 Apr 03	22 Aug 09
Small Skipper	8 Jun	27 Aug	8 Jun	30 Sep	12 Jun	25 Sep	29 May 11	10 Oct 01
Large Skipper	15 Jun	18 Aug	31 May	9 Aug	3 Jun	27 Aug	19 May 07/11	11 Sep 12
Orange-tip	27 Apr	29 Jul	15 Apr	25 Jul	8 Apr	20 Jul	5 Mar 11	10 Sep 06
Large White	26 Apr	27 Dec	14 Apr	7 Oct	16 Apr	10 Oct	8 Mar 11	27 Dec 13
Small White	15 Apr	26 Oct	6 Apr	12 Oct	2 Apr	20 Oct	3 Mar 99	1 Nov 11
Green-veined White	19 Apr	5 Oct	10 Apr	1 Oct	5 Apr	1 Oct	8 Mar 11	28 Oct 11
Clouded Yellow			8 Jun	22 Aug	6 Oct	6 Oct	23 May 06	15 Oct 00
Brimstone	21 Jul	4 Sep	26 May	26 Sep	2 Apr	18 Oct	2 Apr 15	18 Oct 15
Wall	20 Apr	8 Oct	16 Apr	27 Sep	1 May	1 Oct	4 Apr 07	12 Nov 11
Speckled Wood	26 Apr	12 Nov	23 Jan	1 Nov	6 Apr	17 Nov	23 Jan 14	17 Nov 15
Large Heath	7 Jul	22 Jul	18 Jun	17 Jul	3 Jul	6 Jul	4 Jun 96	14 Aug 96/12
Small Heath	31 May	29 Sep	23 Apr	9 Oct	14 May	15 Oct	22 Apr 11	28 Oct 11
Ringlet	25 May	18 Sep	6 Jun	25 Aug	10 Jun	6 Sep	14 May 12	2 Oct 01
Meadow Brown	6 Jun	3 Oct	3 Jun	30 Sep	28 May	2 Oct	4 Apr 99	14 Oct 95
Gatekeeper							14 Jul 06	2 Sep 10
Marbled White	9 Jul	7 Aug	30 Jun	12 Sep	29 Jun	27 Aug	22 Jun 11	12 Sep 14
Grayling	9 Jul	27 Aug	8 Jul	5 Aug	1 Jul	24 Aug	18 Jun 11	11 Sep 05
Small Pearl-bordered Fritillary	16 Jun	24 Jul	6 Jun	29 Jul	7 Jun	24 Jul	15 May 11	21 Aug 07
Dark Green Fritillary	4 Jul	30 Aug	17 Jun	31 Aug	16 Jun	27 Sep	7 Jun 06	9 Sep 12
Red Admiral	3 Jun	9 Dec	12 Feb	3 Nov	2 Apr	25 Nov	23 Jan 06	28 Dec 07
Painted Lady	31 May	30 Oct	15 Apr	12 Oct	15 Apr	1 Nov	27 Mar 11	7 Nov 03
Peacock	3 Apr	29 Dec	25 Feb	4 Dec	4 Jan	16 Dec	4 Jan 15	29 Dec 13
Small Tortoiseshell	30 Jan	14 Nov	4 Feb	3 Nov	19 Jan	10 Dec	1 Jan 05	27 Dec 05
Camberwell Beauty							6 Jul 06	10 Sep 06
Comma	13 Apr	14 Nov	11 Mar	1 Nov	22 Mar	17 Dec	3 Feb 07	17 Dec 15
Small Copper	16 Apr	30 Oct	8 Apr	5 Oct	1 May	4 Oct	26 Mar 12	30 Oct 13
Purple Hairstreak	19 Jul	2 Sep	9 Jul	31 Aug	14 Jul	22 Aug	4 Jul 11	12 Sep 05
Green Hairstreak	2 May	25 Jun	27 Apr	11 Jun	19 Apr	16 Jun	29 Mar 12	27 Jul 98/08
White-letter Hairstreak	14 Jul	13 Aug	3 Jul	4 Aug	7 Jul	26 Aug	15 Jun 11	28 Aug 96/08
Holly Blue	27 Apr	28 Aug	24 Apr	4 Sep	21 Apr	16 Sep	26 Mar 12	21 Oct 06
Brown Argus			31 May	31 May	30 Jun	4 Sep	23 Apr 11	21 Oct 12
Northern Brown Argus	6 Jun	3 Aug	11 Jun	2 Sep	26 May	12 Aug	19 May 11	2 Sep 12/14
Common Blue	3 Jun	8 Oct	20 May	3 Oct	23 Apr	17 Oct	15 Apr 11	26 Oct 08
Essex Skipper					27 Jul	8 Aug	27 Jul 15	8 Aug 15

New earliest and latest dates in 2015 are shown in bold print.

Other species: High Brown Fritillary – 30 July 2006, Long-tailed Blue – 12/13 March 2009, 23 July 2013 and 4 December 2014.

**TETRAD OCCUPANCY IN NORTH EAST ENGLAND -
COMPARISONS FOR THE
BUTTERFLIES OF THE NEW MILLENNIUM PROJECT (PHASES 2, 3, 4 & 5)**

PHASE 4 Tetrads in 2012 (% of all 505 recorded tetrads)	PHASE 4 Tetrads in 2013 (% of all 526 recorded tetrads)	PHASE 4 Tetrads in 2014 (% of all 579 recorded tetrads)	PHASE 5 Tetrads in 2015 (% of all 664 recorded tetrads)	Species	Phases 2, 3, 4 and 5 (2000 – 2015) (% of all 1863 recorded tetrads)
210 (42%)	285 (54%)	336 (58%)	340 (51%)	Green-veined White	1356 (73%)
260 (51%)	274 (52%)	300 (52%)	347 (52%)	Small Tortoiseshell	1236 (66%)
249 (49%)	236 (45%)	304 (52%)	289 (43%)	Peacock	1210 (65%)
191 (38%)	232 (44%)	220 (53%)	271 (41%)	Meadow Brown	1084 (58%)
158 (31%)	124 (24%)	250 (43%)	248 (37%)	Red Admiral	1083 (58%)
165 (33%)	243 (46%)	190 (33%)	204 (31%)	Large White	1011 (54%)
167 (33%)	262 (50%)	226 (39%)	200 (31%)	Small White	948 (51%)
161 (32%)	154 (29%)	175 (30%)	190 (29%)	Orange-tip	927 (50%)
178 (35%)	197 (37%)	212 (37%)	243 (37%)	Ringlet	911 (49%)
34 (7%)	78 (15%)	79 (14%)	123 (19%)	Painted Lady	817 (44%)
134 (27%)	174 (33%)	144 (25%)	111 (17%)	Wall	655 (35%)
93 (18%)	100 (19%)	122 (21%)	145 (22%)	Small Heath	667 (36%)
108 (21%)	134 (27%)	123 (21%)	190 (29%)	Small Skipper	628 (34%)
78 (15%)	117 (22%)	135 (23%)	139 (21%)	Comma	607 (33%)
85 (17%)	116 (22%)	87 (15%)	87 (13%)	Small Copper	591 (32%)
97 (19%)	117 (22%)	109 (19%)	142 (21%)	Common Blue	608 (33%)
73 (14%)	81 (15%)	95 (16%)	106 (16%)	Large Skipper	450 (24%)
164 (32%)	195 (37%)	245 (42%)	246 (37%)	Speckled Wood	527 (28%)
44 (9%)	46 (9%)	43 (7%)	43 (6%)	Dingy Skipper	193 (10%)
31 (6%)	14 (3%)	19 (3%)	27 (4%)	Holly Blue	140 (8%)
22 (4%)	21 (4%)	20 (3%)	71 (8%)	Dark Green Fritillary	140 (8%)
10 (2%)	12 (2%)	16 (3%)	11 (2%)	White-letter Hairstreak	112 (6%)
5 (1%)	3 (0.6%)	6 (1%)	2 (0.3%)	Large Heath	96 (5%)
13 (3%)	13 (2%)	15 (3%)	16 (2%)	Purple Hairstreak	93 (5%)
-	-	5 (1%)	1 (0.1%)	Clouded Yellow	85 (5%)
9 (2%)	6 (1%)	12 (3%)	10 (2%)	Green Hairstreak	81 (4%)
8 (2%)	13 (2%)	15 (3%)	28 (4%)	Small Pearl-bord. Fritillary	75 (4%)
6 (1%)	12 (2%)	8 (1%)	15 (2%)	Grayling	56 (3%)
2 (0.4%)	2 (0.4%)	6 (1%)	6 (1%)	Brimstone	43 (2%)
6 (1%)	10 (2%)	7 (1%)	11 (2%)	Northern Brown Argus	26 (1%)
2 (0.4%)	-	1 (0.2%)	3 (0.4%)	Brown Argus	12 (0.6%)
1 (0.2%)	1 (0.2%)	1 (0.2%)	3 (0.4%)	Marbled White	13 (0.6%)
-	-	-	-	Gatekeeper	8 (0.4%)
-	-	-	-	Camberwell Beauty	7 (0.4%)
			15 (2%)	Essex Skipper	15 (0.8%)
31	30	32	33	Tetrads	1863
				Species	

Occupancy figures for the previous phases, (1995-1999, 2000-2004, 2005-2009) are given in previous reports. Other species: High Brown Fritillary - 1 tetrad in 2006, Long-tailed Blue - 1 tetrad in each of 2009, 2013 and 2014.

SUBMITTING MOTH RECORDS IN 2016

Over 1,200 species of moth have been recorded in our region, some common and widespread, others represented by very few, or in some cases, only a single record. Submitting records of moths helps to improve our understanding of the distribution and abundance of these fascinating insects and to enable potential problems they may be experiencing to be detected. Separate databases are maintained for Durham and Northumberland and records should be submitted to the appropriate recorder depending on where they are made. In all cases the following information should be recorded:

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

Durham (Vice County 66)

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

Keith Dover

4 Lindisfarne Avenue
 Chester-le-Street, Co. Durham
 Email: <mailto:k.dover879@btinternet.com>

Tim Barker

Tap and Spile, 27 Front Street
 Framwellgate Moor, Durham
 Email: tim@tapandspile.co.uk

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

Northumberland (Vice County 67 and Vice County 68)

Records should be submitted to the moth recorder for Northumberland,

Tom Tams 191 Links Road, Tynemouth, Northumberland. Tel: 0191 272 8499

e-mail: tomsphotos@hotmail.co.uk or recorder@northumberlandmoths.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 without being harmed).

SUBMITTING BUTTERFLY RECORDS IN 2016

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 submitting your records. For those without a home computer, the existing yellow paper casual record sheets will continue unchanged. However 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-2012	Large White	7	
2	Name/s of recorder/s	NZ196858	Morpeth (riverside)	24-Sep-2012	Peacock	2	Very worn
3	Name/s of recorder/s	NZ2514	Baydale Beck Darlington	1-Jul-2012	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. Please do not include spaces in the grid reference.

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

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

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

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

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

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

A blank spreadsheet, with the date formatted, is available, if required, from the recorders. Electronic records are most easily sent as an email attachment. However, you can also send them in by post on memory stick or CD. The deadline for records to be included, and credited, in the 2016 Annual Report is 30 November 2016.

Depending on where you live, please send all your records to either:

DURHAM

Steve Le Fleming or
 7 Albert Street,
 Durham, DH1 4RL
 0191 386 7309
 lsklef@aol.com

NORTHUMBERLAND

Michael Perkins
 71 Broadway West, Gosforth
 Newcastle, NE3 2NH
 07584 242 321
 mailto:mjp514@yahoo.co.uk

If you live in Durham please send all your electronic records to:

Ian Waller: aeshna@hotmail.com

To avoid records being lost on the internet, we will try to acknowledge all emails within 14 days. If you do not hear from us please telephone us.

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Butterfly Conservation

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