



North East England Branch



President Sir David Attenborough CH. FRS

DEDICATED TO SAVING WILD BUTTERFLIES AND THEIR HABITATS

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Butterfly Conservation

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Thank you to all who have contributed to this edition of our Newsletter. Our new members might like to know that there are two Newsletters each year and we are always delighted to include any articles, letters, photos or drawings that any member cares to submit.

If you have a question or observation on a butterfly or moth related subject, how about writing to our LETTERS PAGE; or if you are electronic, send an e-mail.

Copy dates are unquestionably:

1st March.....April Edition

1st September.....November Edition

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The Committee of North East England Branch would be very interested to hear from any Members who have ideas and suggestions for site visits, conservation opportunities or anything of interest within the Branch area.

Any Member of the Branch who has a particular skill to offer, and feels able to give their services, would also be welcomed.

A list of Committee members can be found on the back page of this Newsletter.

The Cover Photograph this time is of a Small Heath, taken by Alan Davis and Paul Tankard at Weetslade Country Park

Dunn and Parrack

In 1987 the Northern Naturalists Union published the '*Moths and Butterflies of Northumberland and Durham, Part One: Macrolepidoptera.*' edited by T C Dunn and J D Parrack. This volume, which was followed by a second volume on the Microlepidoptera in 1992, summarised what was known at the time about the distribution of our region's moths and butterflies and provided dot maps at the tetrad scale for the distribution of each of the species known from the two counties.

In the quarter century since publication of this work, the distribution of many species has changed considerably so 'Dunn and Parrack' can no longer be used as a reliable guide to the present distribution and status of our moths and butterflies but it is nevertheless of considerable interest to anyone interested in the changes that have occurred between then and now. Sadly, however, the book is now very difficult to obtain so, with the kind permission of Dr J D Parrack and of the family of the late Mr T C Dunn, we have now placed an electronic copy of the sections of the book that cover the butterfly species onto our web-site so that they may be made available to a new generation of lepidopterists. The link can be found at www.northeast-butterflies.org.uk

The sections dealing with macro moths (text only) have previously been made available elsewhere on the web at www.nemoths.co.uk.



I thought it may be interesting to write an article in the form of diary entries describing some of the highlights of my butterfly and moth year.

14 March. Always a big moment – my first butterfly sightings of the year. Only two; a Peacock in my garden in Newcastle and a Small Tortoiseshell while walking at Havannah Nature Reserve north of Newcastle. No doubt both brought out early from hibernation by the unusually warm March weather.



Left: Hebrew Character

Above: Brown Silver-lines

20 March. I set my moth trap in the garden for the first time this year. My reward was a Common Quaker and a Hebrew Character. These closely related species both over-winter as fully formed adults in an underground cocoon and emerge in early spring. They were followed, a few days later, by a Red-green Carpet. This moth has one generation a year but hibernates as an adult. So it can be seen in the late autumn and again in early spring as it emerges from hibernation to lay eggs. How these early spring moths can fly in the low night time temperatures of March never ceases to amaze me.

20 April. I spent the day searching for Green Hairstreak at Thrunton Woods in Northumberland. There is plenty of suitable looking habitat. Bilberry is common throughout the woods and there are some good open areas of moor land. No success however, but the habitat looks so promising that I'll have to go back next year for another go. There were plenty of Peacocks and Green-veined Whites about. The day was not a write off though; I spotted and photographed a moth amongst the bracken. When I got home I identified it as a Brown Silver-line, a moth whose caterpillars feed on bracken, (yes something actually does eat bracken!). What's more, after confirming the identification with the county recorder, I discovered this date was the earliest it had ever been recorded in Northumberland. Probably the warm dry spring was the reason for the early emergence.

5 May. The start of the Dingy Skipper season. In 2010 I had a brief glimpse of a Dingy Skipper at Weetslade Country Park near Wideopen, it was on the south facing side of the hill, which is a former colliery pit heap. This year I wanted to confirm it as a breeding site. I was not disappointed. I watched two Dingy Skippers for about ten minutes in a territorial battle in a sheltered clearing among the scrub of the hillside. They were weaving around each other so rapidly that they just became a blur making them difficult to follow at times. They then settled on the bare ground for a moment before recommencing the battle. I think this is enough to confirm that they are breeding on the site.

6 May. In search of Dingy Skippers again, this time at Isabella Pit in Blyth and a couple of sites in the Ashington area. Unfortunately, I did not find any, but an interesting moth turned up on the day. I spotted several Grass Rivulets at Bedlington Country Park. Again I was surprised to discover that this date is the earliest the moth has been seen in Northumberland. Again no doubt the warm spring was the reason. But more than this I seemed to have found a rare moth! If you consider the number of Grass Rivulet sightings over the years you would conclude this was a rare moth. According to the Northumberland Moths website, between 2000 and 2008 sightings



Left: Grass Rivulet

Above: Small Sable and Argent

were only in single figures for Northumberland. None was seen in 2009 but thirty-one seen in 2010 and forty-three in 2011. Most of the 2011 sightings were down to me as later in May I counted five at Havannah and twenty-five at Big Waters. So is this moth really rare? Probably not, I think it reflects how few people are looking for them and how under recorded many moths are in our region. I could not believe I had stumbled on a rarity so I started to look in other likely places namely Havannah and Big Waters and quickly found it there. My conclusion is there must be many similar examples in the moth world where there are apparent rarities due simply to under recording. On the same day two distinctive micro-moths *Elachista argentella* and *Ancylis badiana* turned up at Isabella Pit. The former only seven recorded in 2010 and fifteen in 2011. Again I would probably say not a true reflection of its abundance or distribution.

2 June. While working with Northumberland Wildlife Trust to control bracken on its reserve at Mill Burn near Elsdon I took the opportunity to record some of the butterflies and moths on the site. There was a good range, over thirty Green-veined Whites, plus a few Orange Tip, Small Heath, Red Admiral and Small Tortoiseshell. I also found some Orange Tip eggs on Cuckoo flower. Of the moths spotted the most interesting for me were Tawny Barred Angle, Clouded Border and Small Argent and Sable none of which I had seen before, plus plenty of Common Wave and Latticed Heath. An interesting micro moth was spotted and photographed by someone else. I identified it from the

photograph at home as a *Microterix aureatella*. According to the Northumberland Moths web site this moth had not been recorded in Northumberland since 1996. However, fifteen have been recorded in 2011 so once again this is probably a reflection of how few people are looking for and recording micro moths.

27 June. There is a feeling that the Small Pearl-bordered Fritillary may be more widespread in Northumberland than previously thought. This year I was searching for possible new sites for the butterfly in Harwood Forest in central Northumberland. Indeed I did discover a new site in a large clearing in the forest. However, I did make quite the most sensational and unexpected discovery while searching: I found a Northern Brown Argus. I managed to net and photograph the butterfly and needless to say I could hardly believe my eyes. This means we have potentially the only known colony of Northern Brown Argus in Northumberland on the edge of Harwood Forest. The markings on the butterfly would suggest it is related to the Scottish specimens rather than the Durham variety. The nearest colonies of the Northern Brown Argus in Scotland is in the Hawick area fully fifty miles away. How this butterfly has turned up here or how it has remained undiscovered for so long is a mystery to me. I hope to conduct a detailed search next year to establish the extent of the colony.

4 July. While on holiday in Keswick in the Lake District I took a day out to take part in the Mountain Ringlet survey organised by the Cumbria branch of Butterfly Conservation. In Britain the Mountain Ringlet is only found high in the mountains of Cumbria and parts of Scotland. At the southern end of Borrowdale there are several areas where the butterfly has been seen and areas where there is potential habitat. I was checking a potential area on a high plateau on a pass leading from Borrowdale to Grasmere. The area was about 600 metres high, windswept, boggy with tussocks of Mat-grass. Not the environment you would normally visit to look for butterflies! However, these hardy creatures do survive in such conditions. I searched for three hours but, despite reasonable weather, I did not find any Mountain Ringlets. It is

said that negative results are as important as positive ones when doing research, but it is much more disappointing believe me! On the mountaintops I did see two Small Heath, so they can survive up there as well.

22 August. Back over to the Lake District, this time helping with a survey of a Marsh Fritillary site near Keswick. The Marsh Fritillary was reintroduced to this site four years ago. The butterfly flies and lays its eggs during June and early July. By late August the caterpillars are growing and are relatively easy to find. This is because up to a hundred caterpillars live communally in spun larval webs on their food plant – Devil's-bit Scabious. So a good way to monitor the butterfly is to search the clumps of Devil's-bit Scabious and count the larval webs. This year we found a record number of webs, over five hundred. This was more than double the number found in 2010. The webs were also found in areas of the site where they had not previously been recorded. This is a very good result for a butterfly that was teetering on the edge of extinction in the Lake District a few years ago. The work the Cumbria branch has done to bring this and other sites back into suitable condition for the butterfly is obviously paying dividends.



All Photographs are by David Stebbings.

**Joint Outing with the Natural History Society of Northumbria (NHSN)
to Bishop Middleham Quarry Nature Reserve**

Ken Dawson

A couple of events, organised by NHSN were included in the last edition of the Newsletter, and on the website. I was away on 19 June, the date of the 'Bugs and Botany' event at Close House, but did go along to the outing to Bishop Middleham on Sunday 10 July.

Steve le Fleming had agreed to be there to represent the Branch, but none of our members attended, other than one person who had also come as a member of the NHSN Botany Group.

It turned out to be ideal for watching butterflies, and it was interesting to learn something about other insects and plants. Ringlets were abundant, and we saw Large Skippers, Comma, Common Blue and Northern Brown Argus. Conditions were good for taking pictures, and I managed to get this one with my modest camera. (You will note that it is the 'Durham' Argus, without the white spot on the forewing that denotes the 'nominate' race.)



Branch members are welcome to attend NHSN outings, and in future, there will be a link via the website.

Where would you go to see butterflies or moths? A variety of different places perhaps spring to mind, ranging from your garden to a local meadow or woodland, but I don't suppose many people will have thought of their local supermarket in this context! Unlikely as it may seem, however, I have got into the habit of regularly checking out my local supermarket for moths, having noticed a while ago that there are often one or two resting on the glass of the large windows at the front of the store.

The store in question is in the Cowgate area of Newcastle at NZ220661 and I have now recorded almost seventy species of moth on its windows, mostly during this year (see table). Of course the supermarket windows are not, by any stretch of imagination, suitable habitat for moths and two factors explain their presence. First, the store lights are left on overnight and the well known attraction of moths to artificial light means that a number of those flying past get diverted towards the window and settle on the glass. Secondly, the store is situated on the edge of a green space known locally as 'the Quarry', which as well as 'amenity turf' includes areas of tree planting with a diverse range of species including willows, poplar, hawthorn, alder, oak, ash, cherry, sycamore, horse-chestnut and others and presumably this is the source of many, if not all of the moths flying near the store.

Most of the species have been recorded just once (in about a year of more or less regular recording) but a small number have occurred more frequently. The top three species recorded were Heart and Dart (seventeen records and fifty-nine individuals), Marbled Beauty (sixteen/thirty) and Riband Wave (eleven/twenty) reflecting their abundance generally in the region. Moths have been recorded at the site in every month of the year except January and December (though future recording will hopefully fill these gaps!).

Of course, this is really just a curiosity with little significance for the conservation of the species concerned. Nevertheless, it does highlight the issue of light pollution as a possible contributor to the decline of some moth species. During daylight hours I recorded moths that had settled on the glass the previous night having interrupted the activities – such as mate hunting and feeding – that they might otherwise have been engaged in and at least some individuals remained in the same place over more than one day and night. The numbers involved were tiny and certainly could not by themselves have had any impact on populations of the moths, but in a wider context it has been suggested^{1,2,3,4} that the huge number of artificial lights which brighten our night skies may have a detrimental effect on urban moth populations.

Various ways in which moths and other insects may be adversely affected by artificial lighting have been proposed, including direct injury on contact with lamps, exposure to heightened levels of predation due to the clumping of moths by lights (I have, for example, seen bats and nightjars clustering around street lamps in Africa to feed on the moths, neuropterans and other attracted insects), and disruption of other aspects of behaviour such as feeding, mating, egg-laying and even the timing of emergence from one life-cycle stage to the next. In some circumstances the numbers of insects affected by light may be prodigious; Haussmann estimated that the lamps illuminating a monument in southern Italy attracted around five million macro-moths annually and even here in North-east England I have witnessed clouds of moths flying around large elevated floodlights on warm summer nights.

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- Butterfly Conservation: Light Pollution and Moths. Information Sheet.
- Haussman, A (2001): The geometrid moths of Europe. Vol 1. Apollo Books.

Table: species recorded at Cowgate store

Scientific name	Common name
<i>Hepialus humuli</i>	Ghost Moth
<i>Hepialus sylvina</i>	Orange Swift
<i>Hepialus lupulinus</i>	Common Swift
<i>Hepialus fusconebulosa</i>	Map-winged Swift
<i>Homannophila pseudopratella</i>	Brown House Moth
<i>Diurnea fagella</i>	
<i>Agonopterix heracliana</i>	
<i>Alucita hexadactyla</i>	Twenty-plume Moth
<i>Chrysoteuchia culmella</i>	Garden Grass-veneer
<i>Dipleurina lacustrata</i>	
<i>Aphomia sociella</i>	Bee Moth
<i>Emmelina monodactyla</i>	
<i>Poecilocampa populi</i>	December Moth
<i>HabroSYne pyritoides</i>	Buff Arches
<i>Tethea ocularis</i>	Figure of Eighty
<i>Alsophila aescularia</i>	March Moth
<i>Idaea aversata</i>	Riband Wave
<i>Xanthorhoe montanata</i>	Silver-ground Carpet
<i>Xanthorhoe fluctuata</i>	Garden Carpet
<i>Chloroclysta truncata</i>	Common Marbled Carpet
<i>Hydriomena impluviata</i>	May Highflyer

<i>Eupithecia linariata</i>	Toadflax Pug
<i>Eupithecia exiguata</i>	Mottled Pug
<i>Eupithecia centaureata</i>	Lime-speck Pug
<i>Eupithecia vulgata</i>	Common Pug
<i>Gymnoscelis rufifasciata</i>	Double-striped Pug
<i>Selenia tetralunaria</i>	Purple Thorn
<i>Odontopera bidentata</i>	Scalloped Hazel
<i>Crocallis elinguaria</i>	Scalloped Oak
<i>Ourapteryx sambucaria</i>	Swallow-tailed Moth
<i>Colotois pennaria</i>	Feathered Thorn
<i>Phigalia pilosaria</i>	Pale Brindled Beauty
<i>Biston strataria</i>	Oak Beauty
<i>Peribatodes rhomboidaria</i>	Willow Beauty
<i>Alcis repandata</i>	Mottled Beauty
<i>Furcula furcula</i>	Sallow Kitten
<i>Eilema lurideola</i>	Common Footman
<i>Agrotis segetum</i>	Turnip Moth
<i>Agrotis exclamationis</i>	Heart and Dart
<i>Agrotis puta</i>	Shuttle-shaped Dart
<i>Noctua pronuba</i>	Large Yellow Underwing
<i>Noctua comes</i>	Lesser Yellow Underwing
<i>Xestia baja</i>	Dotted Clay
<i>Melanchra pisi</i>	Broom Moth
<i>Cerapteryx graminis</i>	Antler Moth
<i>Orthosia cerasi</i>	Common Quaker
<i>Orthosia munda</i>	Twin-spotted Quaker
<i>Orthosia gothica</i>	Hebrew Character
<i>Mythimna ferrago</i>	Clay
<i>Mythimna comma</i>	Shoulder-striped Wainscot
<i>Lithophane hepatica</i>	Pale Pinion
<i>Lithophane leautieri</i>	Blair's Shoulder-knot
<i>Antitype chi</i>	Grey Chi

<i>Agrochola circellaris</i>	Brick
<i>Xanthia icteritia</i>	Sallow
<i>Cryphia domestica</i>	Marbled Beauty
<i>Amphipyra berbera</i>	Svensson's Copper Underwing
<i>Amphipyra tragopoginis</i>	Mouse Moth
<i>Phlogophora meticulosa</i>	Angle Shades
<i>Cosmia trapezina</i>	Dun-bar
<i>Apamea monoglypha</i>	Dark Arches
<i>Oligia strigilis</i> agg.	Marbled Minor agg.
<i>Mesapamea secalis</i> agg.	Common Rustic agg.
<i>Hydreaea micacea</i>	Rosy Rustic
<i>Diachrysia chrysitis</i>	Burnished Brass
<i>Autographa gamma</i>	Silver-Y
<i>Catocala nupta</i>	Red Underwing
<i>Zanclognatha tarsipennalis</i>	Fan-foot



Ghost moth (male) – one of the species recorded at the Cowgate store.

Photo. J Wallace.



The present day Weetslade Country Park (NZ248723 – NZ275728) is about five km. north of Newcastle-upon-Tyne and situated in North Tyneside between Wideopen to the west and Burradon to the east. It lies on a strategic wildlife corridor adjacent to Gosforth Part SSSI extending to the district border. The old pit heap and surroundings provide an interesting artificial ecosystem in which to study any changing fortunes of different species of butterflies in relation to changes in land usage.

The purpose of the present article is briefly to review the history of the former colliery and provide details of the species of butterflies that occur there based on personal observations made (1) in 1996 and 1997, after the demolition of the former colliery and dismantling of the associated mineral line and sidings and (2) between 2006 and 2010, following the more recent reclamation work and the opening of the site to the general public as a Country Park. It is hoped that these butterfly records will enable others to assess any changes in the butterfly population that might occur as the reclaimed site matures in future years.

History of Weetslade Colliery: The Lizzie Pit at Weetslade was sunk in 1900 and opened in 1903. Initially privately owned, it was taken over by the National Coal Board in 1947. The mine produced coal for the household, manufacturing and steam markets and at its peak employed more than a thousand workers, although in 1964 near the time of closure, there were only eight hundred and ninety-six, of which seven hundred and eighty-six were below ground. The pit was served by a mineral railway and a series of sidings. A small waste heap by the pit was overshadowed by the main pit heap, which is the prominent feature remaining today. The colliery was closed in 1966 and following its subsequent demolition and dismantling of the rail

system, the whole area became derelict. Proposals that the site should be used as a rubbish tip were opposed by the local community and abandoned. The site was eventually restored by the North East Development Agency with funding from the National Coalfields Programme and ownership handed over to the Land Restoration Trust. The reclaimed area was opened to the public by David Bellamy, in June 2006 and the Northumberland Wildlife trust was engaged to run the site, Weetslade Country Park, at a local level. The present day County Park occupies about forty-four hectares.

Personal Observations. (1) Pre-reclamation 1996 – 1997

Although the main old pit heap, at a height of ninety-five metres above sea level, has been a familiar landmark, it was not until 8 July 1996 that I decided to visit the site in search of butterflies. At the time, conditions underfoot were somewhat hazardous, with numerous hollows in the area of grassland and wild flowers, including Ragwort, Bird's-foot Trefoil and thistles, to the south of the old pit heap, with half buried remnants of large lumps of concrete and protruding pieces of metal. In the upper part of the main heap there was extensive earth erosion resulting from off-road motor cycling and the eastern side comprised exposed old pit waste material. At the base of the heap there was a drainage ditch with scrub, including Gorse and bramble with some trees, even the occasional Apple tree. Between the southern side of the main heap and Sandy Lane (then the B131), there was a smaller heap with scrub and trees including some Pedunculated Oak. The overall impression was one of derelict "brownfield" site with varying potential habitats – bare ground, grassland and wooded area. At this first visit I was pleasantly surprised to find six different species of butterflies: Large Skipper, Large White, Common Blue, Painted Lady, Meadow Brown and Small Heath. Apart from sighting a stray individual Small Heath at Tynemouth Estuary west of Knott's Flats on 14 June 1992, this was the first time I had recorded Small Heath within the boundaries of North Tyneside.

Having discovered several Small Skipper butterflies at the neighbouring Big Waters Nature Reserve, Newcastle-upon-Tyne on 3 and 4 August 1996, I was prompted to revisit Weetslade on 4 August in the hope that the Small Skipper might occur there too. This proved to be the case and I noted nineteen male and female Small Skipper flying and nectaring on the flowers of Ragwort and thistles in the grassland, particularly on the southern and eastern sides of the main spoil heap. This proved to be the first record of Small Skipper within North Tyneside. Also present were Common Blue, Small Tortoiseshell, Meadow Brown and Small Heath.

At the times of these two visits to Weetslade there were also many Narrow-bordered Five-spot Burnet moths including mating pairs. At the time of a third visit on 8 September 1996 the weather was dull and windy with minimal sunshine, but amongst the six species recorded, three – Small White, Green-veined White and Wall Brown, were additional to those seen earlier. That day I also found four Poplar Hawk-moth Larvae and one Puss Moth Larva feeding on Willow on the eastern side of the heap (NZ257 723). Interestingly, three of the Poplar Hawk-moth larvae were of the red-spotted variety (Ellis, 1993,1996). Examination of a few small Pedunculated Oak trees growing near the minor pit heap (NZ257 723) revealed several galls – Knopper galls induced by the gall wasp *Andricus queercusalicis* and Artichoke galls induce by the gall wasp *Andricus fecundator*.

In 1997 when I visited the site in mid-May and in late July, the heap and immediate surroundings were little changed, but I recorded two additional species – Orange Tip and Red Admiral and found greater numbers of Small Skipper, Common Blue, Meadow Brown and Small Heath. Overall, during the five visits made in the pre-reclamation period of 1996–1997 I recorded at least five hundred and eighty-eight butterflies comprising thirteen different species. At the time the only published distribution maps of the individual species of butterflies in

North-east England were those of Dunn & Parrack (19860 and Cook (1990). Of the thirteen species recorded in 1996–1997 at Weetslade, twelve were in new tetrads (2Km x 2Km squares), the single exception being the Wall Brown.

Post-Reclamation 2006–2010: I did not visit the site again until after the reclamation work had been completed a decade later. This was on 30 June 2006, shortly after the site had been officially opened to the public by David Bellamy, on 17 June 2006. The site had been much transformed and I was shocked by the extent of the work that had been carried out on the old pit heap and it's surroundings. The former rough grassland, wild flowers and scrub to the south of the pit heap, where Small Skipper and Common Blue had been recorded a decade earlier, had been levelled and mostly buried beneath several feet of soil. To the east, earth levelling had partially destroyed the former scrub and grassland habitat, although recent re-seeding with acid and neutral grassland species, including Bird's-foot Trefoil, had been undertaken. On this occasion I recorded only eight butterflies comprising of five species. All these butterflies were in the least disturbed parts of the site, near the old drainage ditch at the base of the heap on the southern and eastern aspects and by the long-standing footpath between Wideopen and High Weetslade along the course of the former mineral line. A further visit three weeks later, on 21 July 2006, revealed a much more hopeful situation, when, in the immediate surroundings of the heap that had been least disturbed, I recorded one hundred and fifty-two butterflies comprising seven species. Particularly pleasing was the presence of the Small Copper, a species which I had not seen there in 1996–1997. Of the thirty-four Small Copper recorded, most were alongside the drainage ditch on the eastern aspect towards the farm at High Weetslade. A third visit in 2006 on 1 September was somewhat unrewarding on account of the poor weather conditions. Only forty-three individual butterflies were

recorded comprising of four species, but this included twenty-nine Wall Brown.

Each year between 2007 and 2010, I visited the site on from two to four occasions, in order to cover the spring, summer and autumn flight periods. During this time the habitat improved and various seeded wildflowers flourished, including Bird's-foot Trefoil and Sorrel, the larval foodplants of the Common Blue and Small Copper, respectively. The former wet area at the rear of the east end of the tip had dried out with diminished numbers of flowering Northern Marsh Orchid, although the Willows recovered. At the western end of the heap and alongside the new drainage reed ponds several species occurred, including Wall Brown. The eastern aspect, alongside the drainage ditch near the farm at High Weetslade remained the favoured area for several species. The only additional species found was the Comma in 2007 and 2008. Since the Comma was rarely seen in Northumberland prior to the mid-1990's (Ellis,1999(b)) it is not surprising that none had been seen at the old pit heap until then.

Reference to the table shows that overall in the five year post-reclamation period 2006 to 2010, I recorded sixteen different species of butterflies and that over the pre- and post-reclamation years of observation there were more than one thousand, five hundred and ninety-six individuals amongst the sixteen species.

I have not surveyed the exposed mid to upper slopes or the summit of the old pit heap, although I have witnessed several species flying up the hillside. Clearly, the numbers of species and individual butterflies encountered will depend on the time of any visits in relation to the various flight periods, as well as the weather conditions. One individual cannot expect to obtain a complete picture of the butterfly population at a given location and there are almost certainly additional species, which have been recorded by others visiting Weetslade old pit

heap and the immediate surroundings. Since the site lies on a wildlife corridor, there is potential for further colonisation, not only from surviving populations of various butterfly species in the immediate neighbourhood, but also from further afield. Anyone prepared to systematically and regularly monitor the reclaimed site over the coming years could make a valuable contribution to our understanding of how butterflies respond to changes in the environment.



Weetslade Old Pit Heap before reclamation work: photographed from the southern aspect 21 July 1997. From Hewitt Ellis' collection.

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Small Copper(Mawson)



Wall Brown (Beaven)

EDITOR'S NOTE. Hewitt Ellis provided a detailed table of the butterflies he had recorded, unfortunately I was unable to replicate it here. The table can be found on the Web-site edition of this Newsletter www.northeast-butterflies.org.uk

Update On Weetslade Old Pit Heap 2011

Since the foregoing account was completed, I have had the oportunity to revisit the site during 2011 on three occasions. Details of the dates and numbers of individual species of butterfly recorded are summarised in the Table. To date in 2011, one hundred and sixty-three butterflies comprising foourteen different species were recorded, including one species, the Speckled Wood, which I had not previously seen at the site. The Speckled Wood was seen by trees near the old

railway bridge at the west side of the pit heap. (NZ249 724). This brings the total number of species recorded at the site to seventeen.

Number of Species of Butterfly recorded at Weetslade Old Pit Heap in 2011

Butterfly Species	1 May	3 June	5 Aug	Total
Small Skipper			7	7
Large Skipper		19		19
Large White	1		5	6
Small White	1		8	9
Green Veined White	3		4	7
Orange Tip	2			2
Small Copper	10	1	10	21
Common Blue		9		9
Small Tortoiseshell	1	1	1	3
Peacock	4	1	6	11
Wall Brown	4		5	9
Meadow Brown			33	33
Small Heath		7	19	26
Speckled Wood		1		1
Number of Species	8	7	10	14
Number of Butterflies	26	39	98	163



Speckled Wood (Beaven)

Weetslade Country Park: A new Butterfly Transect

Alan Davis and Paul Tankard

Weetslade Country Park was created on a former colliery/pit heap, just north of Gosforth Park and about four miles from Newcastle city centre. Abandoned in 1967, the site was allowed to naturally regenerate and in the 1990's was designated as a Site of Nature Conservation Interest. The main feature of the site is a hill rising to ninety-five metres above sea level from which, fine views can be had northwards towards the Cheviot Hills and eastwards towards the coast. The summit hosts a striking piece of sculpture known as 'The Drillhead' which reflects the industrial and mining heritage of the local area. Covering an area approximately forty-four ha., the restoration project has given careful consideration to not only the landscaping of the site but also the integration of open space, wildlife habitats and recreational facilities. Funding was made available through the English Partnerships, National Coalboard's Programme.

Open areas have been seeded with both acid and neutral grassland species interspersed with mixed scrub and woodland planting including Hawthorn, Birch, Alder, Dog Rose, Goat Willow and Rowan. Around the western and northern boundaries there are three small ponds with associated reed beds. A network of footpaths, bridleways and cycle tracks runs through the site and these provide excellent access to a wide variety of visitors. The Country Park was officially opened in June 2006 by Professor David Bellamy and in May 2007 the site was finally handed over by One North East to the Land Restoration Trust. Currently, the site is managed by the Northumberland Wildlife Trust with help from a team of enthusiastic volunteers.

We had been visiting the site on a fairly regular basis over the previous couple of years and it became quite obvious that the site attracted a

good range of butterflies. These were no doubt attracted by the presence of flowering plants such as Yarrow, Birds-foot Trefoil, Common Knapweed, Oxeye Daisy, Ragged Robin plus various species of Vetch and Thistle. At the end of each year Butterfly records were sent to the County Recorder and in 2010 we started to think about setting up a butterfly transect which could be monitored on a regular basis. With both of us living only five minutes drive away from Weetslade and also retired from work, we could visit at a moments notice and also share the task of recording. We had also been involved in a variety of different types of survey work for the Northumberland and Tyneside Bird Club as well as the British Trust for Ornithology so we had some idea of what we were taking on. With assistance from Dave Stebbings [Conservation Officer (Northumberland)] and Dan Chapman [Northumberland Wildlife Trust Warden] we set about choosing a suitable route that took in all the various types of habitat present. Eventually this was finalised at just over two Km. long and sub-divided into seven separate sections, each supporting a different type of habitat. During the winter of 2010/2011 the paperwork was completed and sent to Brian Denham [Transect Co-ordinator for the UK Butterfly Monitoring Scheme]. All that we could do then was to sit back and wait for April when, 'fingers crossed,' we could start.



Dingy Skipper



Small Heath

We got off to a flying start and on 6 April recorded one Small Tortoiseshell and a Peacock on Section Four which we anticipated would be a very productive part of the transect, being sheltered from

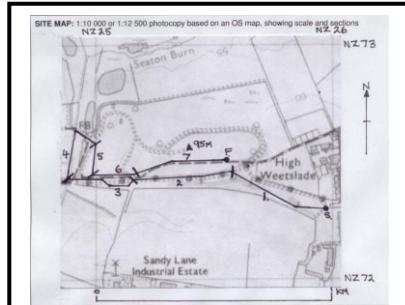
the worst of the wind and an excellent sun trap. With a good early spring, we then enjoyed seven successive weeks of fine weather and recorded varying numbers of Small White, Green-veined White, Orange Tip, Small Copper, Peacock, Wall Brown, Small Tortoiseshell. The main highlight of this period was seeing a single Dingy Skipper, the presence of which we had been alerted to by Dave Stebbings, who had spotted one the previous week. As luck would have it, this tiny and highly camouflaged butterfly decided to indulge in a brief flight as we were walking through Section Two and a tick was duly placed on the recording sheet. In early May, a spell of cold, wet and windy weather prevented us from completing a transect walk and thus we had our first zero count. However the sunshine of early June produced our first sightings of Large Skipper, Common Blue, Meadow Brown and Small Heath. Early July saw Large Whites joining the Small White, while Small Skippers started to show themselves in good numbers. As temperatures rose to over 20c in mid-July, the numbers of Meadow Brown and Small Heath steadily increased and on the 15 July we recorded our highest total – ninety butterflies of eight species. The highlight of August was a single Comma, the first we had seen on the site. A spell of inclement weather once again prevented us from making a count in Week Twenty-two, and then numbers started to drop off during September, the final month of the survey. Our final count during the last week of the month produced only a single Red Admiral and four Common Blues despite the unexpected ‘Indian Summer’ that gave the weather forecasters much joy to report.

Overall, we feel that we have had a very successful year with six hundred and thirty individual butterflies of seventeen different species recorded. The most common species were Meadow Brown with two hundred and eleven seen, followed by one hundred and eleven Small Heath, however only one Painted Lady was spotted which reflected the national picture. During the previous year’s reconnaissance we had been delighted to find a single Speckled Wood – a species which recently has become more common in our area – but we were very

disappointed not to find one during the survey period.

Weetslade Country Park offers easy access and a walk around can be recommended to anyone interested in Natural History with much to observe and enjoy throughout the year. Apart from the delights of watching butterflies and many day-flying moths, there are good opportunities to see a variety of wildlife. Throughout the year we have identified over seventy species of bird including regular sightings of Buzzard, Kestrel and Sparrowhawk, numerous Skylark and Yellowhammer plus five species of Warbler. One of the ornithological highlights was a Green Woodpecker 'yaffling' noisily from the hill-slope during a visit in May.

The site can be easily accessed from the roundabout on the A189 where it meets the A1056 [Sandy Lane and Killingworth Way. Car parking can be found just off the B1505 Great Lime Road near High Weetslade Farm. Here there are handy picnic benches and the first of a number of notice boards on the site giving details of the Country Park layout plus events and activities organised by the Northumberland Wildlife Trust. Information regarding birds, wildflowers, dragonflies and butterflies that are present at various seasons is also on display. Finally if you do decide to visit this charming little oasis of peace and quiet on the edge of Tyneside, please don't forget to send records of any butterfly sightings to Roger Norman and also pass on details any other interesting or unusual observations to Dan Chapman at the Northumberland Wildlife Trust



On 11 July 2010, the Natural History Society of Northumbria (NHSN), held a field outing on the ‘Spatchells’, at Tyne Riverside, Prudhoe – a joint entomology/botany initiative, led by Dr. Gordon Port of Newcastle University. As the site is good for butterflies, I approached NHSN to ask if it might be open to B.C. members, and it was subsequently added to the Branch website. Dave Stebbings and I joined the group, with a view to planning practical work to benefit Dingy Skippers *Erynnis tages* (DS).

The Spetchells chalk banks form one of only a handful of Dingy Skipper sites now left in the Tyne Valley. The species has abandoned favoured (sheltered) locations where the larval food plant, Birdsfoot Trefoil, *Lotus corniculatus*, has disappeared due to vegetation overgrowth. However, the butterfly has moved to other sites where the Trefoil is plentiful, but being on top of the mounds, they are more exposed to the elements. We believe that selective tree removal, also scrub and ground vegetation clearance might improve, extend and possibly restore the habitat. It is hoped that we can organise volunteer work-parties and follow-up, starting this winter. The site owners, Northumberland County Council, are supporting the proposal, and the Woodlands Officer has given background information and offered practical help.

Here, perhaps I might explain a bit about the Spetchells site, in the context of its historic and industrial past, and also summarise habitat changes that have developed on what still remains a ‘brownfield’ site within the boundary of the Tyne Riverside Country Park.

The word ‘Spatchells’ appears on early edition O.S. maps, on what was originally ‘haugh’ land, subject to flooding by the river. I’m told that there is a term ‘spectchelling’, which describes a form of revetment,

which could have been carried out to ‘manage’ the flow of water. The name has subsequently been adopted for the banks of industrial chalk that exist today. The chalk (calcium carbonate) was deposited as a waste product from an ICI fertiliser works, operating after World War II, in response to the ‘Dig for Britain’ campaign, to produce more home-grown food. After working ceased in 1967, the bare chalk banks were considered an eyesore, and a source of wind-blown dust, so work was undertaken to cover them with top-soil, turf and trees. Public access to and within the site was improved in the late 1970s/early ‘80s, and the Country Park was established shortly afterwards. In 1991, the County Council announced proposals to sell some of the chalk to a Tees-side company for the purpose of neutralising acid. Local residents and visitors alike were outraged by this idea, and the Council eventually abandoned it.



Bench erected in 1980s will good views at that time.



Good Dingy Skipper habitat with adjacent gorse.

Surface material was ‘imported’ to the site, e.g. topsoil and turf, to cover the bare chalk. (I have read that some of this may have come from the Cotswolds, which might explain the occurrence of plant species not found elsewhere in the county.)

In 1976, trees were planted in defined ‘blocks’. These included Ash *Fraxinus excelsior*, False Acacia *Robinia pseudoacacia* and Swedish

Whitebeam *Sorbus intermedia*. The latter is in the form of a sizeable 'thicket' on top of the bigger mound, whereas the False Acacia has virtually disappeared. As a relatively short-lived leguminous species, it served to fix nitrogen in the soil. The Ash, in particular, has grown and self-seeded prolifically. Gorse *Ulex europaeus*, is widespread on top of the mounds. Whilst this provides valuable shelter, it also encroaches on the open areas favoured by Dingy Skipper. A prostrate form of *Cotoneaster* also covers sizeable areas. This is of little value to wildlife, and should be removed. On the south-facing slopes, Ash and other invasive trees, as well as bracken, have encroached, and Mouse-ear Hawkweed *Hieracium pilosella* forms carpets across one site that had held a population of Dingy Skipper.

The Spetchells are also home to many moth species, and Tom Tams, the county recorder, has supplied a list of these. He informed me that it is the only Northumberland site for a particular species, *Pyrausta aurata*. He also mentioned that *H. Pilosella* is a host for several moth species. Initially, we plan to do a site visit, when people with specialist knowledge will be able to give advice. As well as those with practical and scientific backgrounds, we hope to involve local people with an interest in the site. The 'Friends of Prudhoe Woods' will be approached initially.

The pictures help to describe the Spetchells site, and attempt to illustrate some of the issues that need to be tackled. I intend to do a follow-up to this item, reporting back on what we have been doing. Look out for this in the next newsletter.

Photographs by Ken Dawson.



Welcome to the following new members of North East England Branch.

Miss E Anderson	Newcastle-upon-Tyne
Mrs J M Anderson	Ponteland
Mr S and Mrs K Anderson	Ryton
Ms H E Armstrong	Cramlington
Mr S Austin	Houghton-le-Spring
Mr G W & Mrs A Baker	Sunderland
Mr M C T Baldwin	Hexham
Mr D Barlow	Billingham
Mr A Barron	South Shields
Mrs M J & Mr D J Bartrum & Family	Morpeth
Mr G Beckwith	Durham
Mrs M E Bellamy	Bishop Auckland
Mr A J Brannon	Langley Park, Durham
Ms E Brims	Heddon-on-the-Wall
Mr N Clark	Chester-le-Street
Mr P A & Mrs J Copley	Morpeth
Mr A Ferguson	Middlesbrough
Mr H Findlay	Barnard Castle
Ms Z Finlay (who has since married and I have amended her name, but forgotten it. My apologies Zoe)	
Miss C Freiesleben	Hexham
Mrs H G Grahamslaw	Alnwick
Mr K S Gunning & Mrs S Sarker	Darlington
Mr M Harris	Sunderland
Mr A S Hart	Bedlington
Miss M C Hayward-Lahmers	Darlington
Mr D Hind	North Shields
Mr M Horner	Morpeth
Mr D & Miss E Jacklin	Riding Mill
Mr M Lloyd	Seaton Delaval

Mrs H McDonald	Newcastle-upon-Tyne
Ms H Makepeace	Morpeth
Mr J P May	Darlington
Mr M Nattrass	North Shields
Mr D Nisbet & Dr R Marshall	Durham
Mr D J & Mrs A Paul	Berwick-on-Tweed
Dr M & Mrs B Payne	Cornwall
Mr G C Pollinger	Ryton
Mr D Race	Bishop Auckland
Ms K Ramm	East Boldon
Mr S Reid	Gateshead
Miss G S & Mr P Riseborough	Wallsend
Mrs C Ross	Durham
Ms P D M Snaith	Hamsterley
Miss J Stewart	Ryton
Miss K Swanston & Mr A Newton	Gateshead
Ms E Taylor	Morpeth
Mr M & Ms V Townsend & Family	Alnwick
Mr D W R Turnbull	Alnwick
Mrs L Wallace	Consett
Mr K Walton	Durham
Mr S Whibley	Ryton

And a warm welcome back to:

Mrs E A Keogh	Stockton-on-Tees
Mr S Livingston	Spennymoor
Mrs G Osborne	Alnwick
Miss A H Rogers	Newcastle-upon-Tyne

Wow! We must be doing something right! I have had a notification from Butterfly Conservation Head Quarters in Lulworth. This tells me that North East England Branch is the fastest growing Branch in the country. We have a 22% growth in membership from September 2010

to September 2011. Our membership now officially stands at two hundred and eighty-one individuals. I am so impressed – keep telling all your friends. This, however, has been a poor season for some of us. My own garden butterfly count is way down on last year's, I am disappointed with my figures. Don't forget to send in your sighting records to Steve le Fleming and Roger Norman. They would like them by 30 November at the latest, please. Details are on page Thirty-five. Please also note that we now have a method for recording the moths in our area (see page thirty-four for contacts).

North East England Branch Annual General Meeting

**The Annual General Meeting of Butterfly Conservation
North East England Branch will take place at
The Durham Wildlife Trust Centre at Rainton Meadows
Houghton-le-Spring**

**On Saturday 18 February 2012 at 2.00pm.
It is hoped that Paul Kirkland, Director Scotland,
will be available to talk at the meeting.**

**Agenda: Reports from the Chair, Treasurer,
Conservation Officers, and Recorders
Election of Committee Members**

Any Other Business.

**Any item of concern should be submitted to the Chair
within twenty-one days of the meeting.**

Butterfly Conservation Safety Note

As with any other activity, there are hazards in the countryside and everyone taking part in a Field Trip or Working Party has a responsibility, for their own safety and that of others. We always ensure that our events present no greater hazard than any other walk in the countryside, but please note and act on the following:

1. The leader will provide a briefing on the trip before setting out, with details of any known hazards, and will give advice on what to do in an emergency. Please listen carefully.
2. At the briefing, let the leader know if a) you have a mobile telephone and are able to take it with you on the walk, and b) if you have a first aid qualification.
3. Wear appropriate clothing and footwear. Stout shoes are a minimum requirement for any walk.
4. In sunny weather take a hat, use sun cream or protection for exposed skin. Make sure that you have adequate food and liquid to drink with you.
5. When on a walk, look out for any hazards – rabbit holes, fallen or hanging branches, barbed wire, boggy areas etc.
6. Children are welcome on our walks, but if under the age of 16 must be accompanied by at least one adult for two children. It is the responsibility of the accompanying adult(s) to ensure that the trip is within the children's capability.
7. Dogs are normally welcome on our walks, but must be kept under control.
8. If you are uncertain about any details of the trip, ring the leader/contact in advance. If you decide to leave the trip early, please tell the leader.
9. Take care at all times and above all ENJOY YOURSELF.

How to Submit Moth Records



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

In all cases the following information should be recorded:

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

Durham (Vice County 66)

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

Keith Dover

4 Lindisfarne Avenue
Chester-le-Street, Co. Durham
e-mail: k.dover879@btinternet.com

Tim Baker

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

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

Northumberland (Vice County 67 and Vice County 68)

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

e-mail: tomsphotos@hotmail.co.uk or recorder@northumbrianmoths.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 2011 – 2012

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.

There will be two ways of sending your records in. For those without a home computer, the existing yellow paper casual record sheets will continue unchanged. However, if you have a PC, the Branch would urge you to send in your records using a spreadsheet such as Microsoft Excel. 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-2011	Large White	7	
2	Name/s of recorder/s	NZ196858	Morpeth (riverside)	24-Sep-2011	Peacock	2	Very worn
3	Name/s of recorder/s	NZ2514	Baydale Beck Darlington	1-Jul-2011	Comma	1	<i>Hutchinsoni</i> form

Column A – Recorder/s names.

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

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

Column D – Date (please try to follow the format shown) **This is really important.**

Column E - The name of the species seen.

Column F - The number seen. The actual number is preferred rather than the letter system. For larva (L), ova (O), pupa (P) or mating (M) records, please use the code letter provided, optionally adding numbers seen.

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

Optionally, you can add a habitat code to column H if you wish.

A single database is maintained covering both counties. A blank spreadsheet, with the date formatted, is available by contacting the recorders, or from the website. Electronic records are most easily sent as an email attachment. However, you can also send them in by post on CD or memory stick. The deadline for records to be included, and credited, in the 2011 Annual Report is 30 November 2011. Depending on where you live, please send records to either:

DURHAM

Steve Le Fleming

 7 Albert Street
Durham,
DH1 4RL

 0191 386 7309

 lsklef@aol.com

NORTHUMBERLAND

Roger Norman

 1 Prestwick Gardens, Kenton
Newcastle-upon-Tyne,
NE3 3DN

 0191 285 8314

 roger@norman784.plus.com

North East England Branch Serving Committee Members for 2011

Branch Organiser, Secretary and Treasurer

Steve Kirtley, Tel: 01325 460198
Email: stephen@skirtley.fsnet.co.uk

Moth Recorder

Keith Dover, Tel: 0191 388 9640
Email: k.dover879@btinternet.com

Butterfly Recorder Northumberland

Roger Norman, Tel: 0191 285 831
Email: roger@norman784.plus.com

Butterfly Recorder Durham

Steve le Fleming. Tel: 0191 386 7309
Email: lsklef@aol.com

Transect Co-ordinator

Brian Denham, Tel: 01325 263499
Email: brian.denham@ntlworld.com

Committee Members

Peter Webb. Tel: 01833 650772 Ken Dawson. Tel: 01661 852928
Email: apwebb@uwclub.net Email: kdaw27@uwclub.net

Robert Woods

Email: rwoods1163@aol.com

Butterfly Conservation Regional Office (Northern England)

Dave Wainwright. Butterfly Conservation, Low Barns, Witton-le-Wear
Bishop Auckland, County Durham DL14 0AG
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Website

[www.northeast-butterflies.org.uk.](http://www.northeast-butterflies.org.uk)

Butterfly Conservation

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