

BRINSLEY HEADSTOCKS
Heritage & Nature Reserve.

BUTTERFLIES and MOTHS

2017 and 2018

BUTTERFLIES

The mix of unimproved meadow, woodland and hedgerows provide an ideal habitat for a number of butterfly species. The total number of species recorded to date is 21, a very respectable total for a site the size of the Headstocks Nature Reserve. The number of species recorded in 2017 was 15 and for 2018 there were also 15 species recorded.

2017 was an average sort of summer, with high numbers of grassland-specialist butterflies. 2018, however, was an exceptionally hot and dry summer. From early July, the site looked parched and arid. The meadows were mown in mid-July to prevent fires. Consequently, the grassland butterflies suffered, e.g. Meadow Brown records for 2017 were a maximum of 30+, but for 2018 the maximum was only 6. Surprisingly, some species appeared to thrive in the dry conditions, with site records of 6 Small Coppers and 5 Common Blues. The Common Blues were all feeding on nectar in the wildflower meadow to the right of the Headstocks, which the Friends of Brinsley Headstocks had sown in the spring.

SMALL SKIPPER *Thymelicus sylvestris*

The only record for 2017 was of two butterflies of this species on 8th July. There was also only one record in 2018, 4 were seen on 19th July. This species is normally recorded regularly in its flight period, with a maximum of eight recorded in 2015.

ESSEX SKIPPER *Thymelicus lineola*

Not recorded in 2017 or 2018. The first site record for this species was of a single on August 12th 2015. There had been a few sightings of “possibles” in the preceding days, but the identity was confirmed by netting and close examination in an inspection jar.

LARGE SKIPPER *Ochlodes venatus*

There were no records of this species in 2017 and 2018. Normally present in both the long meadow and the headstocks meadow, although not as numerous as small skipper.

BRIMSTONE *Gonepteryx rhamni*

Disappointingly, there were no records of this species in either 2017 or 2018. It is normally seen regularly, particularly in spring, although never in large numbers.

LARGE WHITE *Pieris brassicae*

Normally not very numerous on site, records for 2017 and 2018 were relatively numerous. In 2017, they were first recorded on 2nd May, with a peak of 10 on 8th July. In 2018, they were first recorded on 8th May, with a peak of 5 on 19th July.

SMALL WHITE *Artogeia rapae*

Both 2017 and 2018 were average years for records of this species. In 2017 the first record was on 2nd May and there was a peak of 3 on 8th July. In 2018, the first sighting was on the late date of 17th July, with a peak of 3 on 19th July.

GREEN-VEINED WHITE *Aeshna grandis*

This species was encountered on the majority of site visits in suitable weather, although in smaller numbers than 2016. The first record of the year for 2017 was a relatively early date of 23rd April, with a maximum of 4 seen on 2nd May. Numbers were significantly higher in 2018, with a maximum of 8 seen on 8th May and several counts of 6.

ORANGE-TIP *Anthocaris cardamines*

Normally a common butterfly in April and May, the first record for 2017 was of 5 males on April 11th, with a maximum of 8+ on 18th April. The first record for 2018 was even earlier, on 9th April, but numbers were much reduced, with a maximum of 5.

SMALL COPPER *Lycaena phlaeas*

This is normally a scarce butterfly on the site, which was not seen in 2016. There was a single record in 2017, of one near the Dew pond on 23rd July. There were no records in the early part of 2018, but then a single was seen on 5th September and a site record of 6 were seen on 9th September, scattered around the site.

COMMON BLUE *Polyommatus icarus*

Not recorded in 2016 or 2017. However, the dry summer of 2018 seemed to suit this species, as a site record of 5 (all males) were seen on 19th July. These were all feeding in a wildflower meadow to the right of the Headstocks, which had been grown from seed sowed by the Friends of Brinsley Headstocks in April – biodiversity in action !

HOLLY BLUE *Celastrina argiolus*

Although this species is often seen in gardens in the village, it is not regularly encountered on the Headstocks nature reserve. There were no records for 2017, but a single insect was seen on 8th May 2018.

RED ADMIRAL *Vanessa atalanta*

There were no records of this (often migratory) species in 2016, but there was a single record of two insects seen on 8th July 2017. There was also a single record for 2018, of a single on the late date of 17th October.

PAINTED LADY *Vanessa cardui*

This migratory species was not recorded in 2016, 2017 or 2018.

SMALL TORTOISESHELL *Aglais urticae*

This species was not recorded in 2016, but there was a record of three seen on 11th April 2017. Disappointingly, there were no records in 2018. This is normally a relatively uncommon butterfly on site, but there were good numbers in 2015, with a maximum of eight seen.

PEACOCK *Inachis io*

Numbers of this species in 2017 were very low, with a total of only 3 seen (10 in 2016, 8 in 2015) they were well down on earlier years (e.g. 18 in 2014). In 2018, the situation was slightly better, with 4 seen, all records were of singles.

COMMA *Polygonia c-album*

Only two specimens of this insect were seen in 2017, compared to fourteen seen in one day in 2013 ! The situation in 2018 was much improved, with 2 being seen on 9th April and a maximum count of 7 on 19th July.

SPECKLED WOOD *Pararge aegeria*

Normally a fairly common butterfly in summer, but only 6 were seen in 2017 (first date 23rd April). A much better year in 2018, but the maximum seen was 5 (on 15th May), much reduced from the numbers seen in a normal year.

GATEKEEPER *Pyronia tithonus*

Recorded as a fairly common butterfly in 2000/2002, but may be scarcer now. The numbers seen in 2017 were actually greater than those seen in 2016, but a maximum count of 6 was less than what could be expected in a normal year. July 2018 was very hot and dry and numbers were consequently reduced. However a maximum count of 5 on 19th July wasn't too bad.

MEADOW BROWN *Maniola jurtina*

A common butterfly in summer, which relishes the meadow habitat of the reserve. The numbers seen in 2017 were much less than the previous year (when the maximum count was 50+), but a maximum count of 30+ on two dates in July were respectable. The hot summer of 2018, however, was a disaster for this species, with a maximum of only 6 seen.

SMALL HEATH *Coenonympha pamphilus*

Not recorded in 2017 or 2018. The only site record to date is of a single insect on 20th September 2010.

RINGLET *Aphantopus hyperantus*

This species appeared to be declining on site, but good numbers were seen in 2016 and the trend continued in 2017, with a maximum of 20+ seen on 8th July. Numbers for 2018 were, predictably, well down due to the hot weather. A maximum count of 4 was made on 19th July.

MOTHS

Prior to 2015, only 6 species of moth had been recorded on site. These were mainly day-flying species and the odd nocturnal species accidentally disturbed in the daytime.

All this changed on July 10th 2015, when a nocturnal evening was arranged on the site, which featured a moth-trapping session organised by DaNES (Derbyshire and Nottinghamshire Entomological Society). They considered that a total of 80 species trapped on the night would be a good result, but a total of 113 species were actually trapped !

Four species which had previously been recorded on site were not seen on the trapping session (due to the fact that they are primarily day-flying species). These are shown below, with the species recorded in the trapping session being shown in the table which follows.

The total species of moth now recorded on site is 117.

SIX-SPOT BURNET *Zygaena filipendulae*
CHIMNEY SWEEPER *Odezia atrata*
LUNAR MARBLED BROWN *Drymonia ruficornis*
DARK-BARRED TWIN-SPOT CARPET *Xanthorhoe ferrugata*

Common Name	Taxon
Ghost Swift	<i>Hepialus humuli</i>
Common Swift	<i>Hepialus lupulinus</i>
Pebble Hook-tip	<i>Drepana falcataria</i>
Peach Blossom	<i>Thyatira batis</i>
Buff Arches	<i>Habrosyne pyritoides</i>
Large Emerald	<i>Geometra papilionaria</i>
Common Emerald	<i>Hemithea aestivaria</i>
Small Fan-footed Wave	<i>Idaea biselata</i>
Small Dusky Wave	<i>Idaea aversata</i>
Riband Wave	<i>Idaea aversata</i>
Flame Carpet	<i>Xanthorhoe designata</i>
Large Twin-spot Carpet	<i>Xanthorhoe quadrifasiata</i>
Silver-ground Carpet	<i>Xanthorhoe montanata</i>
Shaded Broad-bar	<i>Scotopteryx chenopodiata</i>
Small Argent and Sable	<i>Epirrhoe tristata</i>
Common Carpet	<i>Epirrhoe montanata</i>
Yellow Shell	<i>Camptogramma bilineata</i>
Purple Bar	<i>Cosmohoe ocellata</i>
Barred Straw	<i>Eulithis pyraliata</i>
Small Phoenix	<i>Ecliptopera silaceata</i>
Common Marbled Carpet	<i>Chloroclysta truncata</i>
Barred Yellow	<i>Cidaria fulvata</i>
Green Carpet	<i>Colostygia pectinataria</i>
July Highflyer	<i>Hydriomena impluviata</i>
Rivulet	<i>Perizoma affinitata</i>
Small Rivulet	<i>Perizoma alchemillata</i>
Sandy Carpet	<i>Perizoma flavofasciata</i>
Foxglove Pug	<i>Eupithecia pulchellata</i>
Wormwood Pug	<i>Eupithecia absinthiata</i>
Mottled Pug	<i>Eupithecia exigua</i>
V-Pug	<i>Chloroclystis v-ater</i>
Green Pug	<i>Pasiphila rectangulata</i>
Dingy Shell	<i>Euchoeca nebulata</i>
Clouded Border	<i>Lomaspilis marginata</i>
Latticed Heath	<i>Chiasmia clathrata</i>

Scorched Wing	<i>Plagodis dolabraria</i>
Brimstone	<i>Opisthograptis luteolata</i>
Lilac Beauty	<i>Apeira syringaria</i>
Scalloped Oak	<i>Crocallis elinguaris</i>
Swallow-tailed Moth	<i>Ourapteryx sambucharia</i>
Peppered Moth	<i>Biston betularia</i>
Willow Beauty	<i>Peribatoites rhomboidaria</i>
Mottled Beauty	<i>Alcis repandata</i>
Engrailed	<i>Ectropis bistortata</i>
Bordered White	<i>Bupalus piniaria</i>
Common White Wave	<i>Cabera pusaria</i>
Common Wave	<i>Cabera exanthemata</i>
Clouded Silver	<i>Lomographa temerata</i>
Light Emerald	<i>Campaea margaritata</i>
Lime Hawk	<i>Mimas tiliae</i>
Elephant Hawk	<i>Deilephila elpenor</i>
Pebble Prominent	<i>Notodonta ziczac</i>
Common Footman	<i>Eilema lurideola</i>
Buff Ermine	<i>Spilosoma luteum</i>
Short-cloaked Moth	<i>Nola cucullatella</i>
Turnip Moth	<i>Agrotis segetum</i>
Heart and Dart	<i>Agrotis exclamationis</i>
Flame	<i>Axylia putris</i>
Flame Shoulder	<i>Ochropleura plecta</i>
Large Yellow Underwing	<i>Noctua pronuba</i>
Lesser Yellow Underwing	<i>Noctua comes</i>
Ingrailed Clay	<i>Diarsia mendica</i>
Purple Clay	<i>Diarsia brunnea</i>
Setaceous Hebrew Character	<i>Xestia c-nigrum</i>
Double Square-spot	<i>Xestia triangulum</i>
Shears	<i>Hada plebeja</i>
Cabbage Moth	<i>Mamestra brassicae</i>
Dot Moth	<i>Melanchra persicariae</i>
Bright-line Brown-eye	<i>Lacanobia oleracea</i>
Clay	<i>Mythimna ferrago</i>
Smoky Wainscot	<i>Mythimna impura</i>
Common Wainscot	<i>Mythimna pallens</i>
Shoulder-striped Wainscot	<i>Mythimna comma</i>
Shark	<i>Cucullia umbratica</i>
Sycamore	<i>Acronicta aceris</i>
Miller	<i>Acronicta leporina</i>
Dark Dagger agg	<i>Acronicta tridens agg</i>
Small Angle Shages	<i>Euplexia lucipara</i>
Dunbar	<i>Cosmia trapezina</i>
Dark Arches	<i>Apamea monoglypha</i>
Light Arches	<i>Apamea lithoxylaea</i>
Clouded-bordered Brindle	<i>Apamea crenata</i>

Clouded Brindle	<i>Apamea epomidon</i>
Slender Brindle	<i>Apamea scolopacina</i>
Double Lobed	<i>Apamea ophiogramma</i>
Marbled Minor agg	<i>Oligia strigalis</i> agg
Middle-barred Minor	<i>Oligia fasciuncula</i>
Rosy Minor	<i>Mesoligia literosa</i>
Common Rustic agg	<i>Mesapamea secalis</i> agg
Uncertain	<i>Hoplodrina alsines</i>
Mottled Rustic	<i>Caradrina morpheus</i>
Scarce Silver-lines	<i>Bena bicolorana</i>
Green silver-lines	<i>Pseudoips prasinana</i>
Burnished Brass	<i>Diachrysia chrysitis</i>
Silver-Y	<i>Autographa gamma</i>
Beautiful Golden-Y	<i>Autographa pulchrina</i>
Plain Golden-Y	<i>Autographa jota</i>
Spectacle	<i>Abrostola tripartita</i>
Beautiful Hook-tip	<i>Laspeyria flexula</i>
Straw Dot	<i>Rivula sericealis</i>
Snout	<i>Hypena proboscidalis</i>
Fanfoot	<i>Zanclognatha tarsipennalis</i>
Small Fan-foot	<i>Herminia grisealis</i>
Water Veneer	<i>Acentria ephemerella</i>
Mother of Pearl	<i>Pleuroptya ruralis</i>
Small Magpie	<i>Anania hortulata</i>
Mint Moth	<i>Pyrausta aurata</i>
Olive Pearl	<i>Udea olivalis</i>
Bee Moth	<i>Aphomia sociella</i>
Barred Fruit Tree Tortrix	<i>Pandemis cerasana</i>
Bramble-shoot Moth	<i>Notoceliaudmanniana</i>
Knapweed Conch	<i>Agapeta zoegana</i>
Green Oak Tortrix	<i>Tortrix viridana</i>
Yellow Conch	<i>Agapeta hamana</i>

