

BRINSLEY HEADSTOCKS
Heritage & Nature Reserve.

BUTTERFLIES and MOTHS

2016

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 2016 was 14 (down from 18 in 2015).

Recording was very difficult in 2016, as major path improvements on site from May until July made access difficult due to the heavy machinery used.

The cold, wet spring also had an impact on early-flying species and once again the early cutting of the hay in the meadows curtailed the breeding success of the grassland butterflies.

SMALL SKIPPER *Thymelicus sylvestris*

The only record for the year was of two insects of this species seen on July 24th 2016. 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 2016. 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*

As in the last two years, there was only a single record of this species in 2016, when one was seen on July 5th. Normally present in both the long meadow and the headstocks meadow, although not as numerous as small skipper.

BRIMSTONE *Gonepteryx rhamni*

There were two records of this species in 2016, both in April and May (as in 2015). The first record was on April 13th, one was in Vine Wood and one was seen on May 17th.

LARGE WHITE *Pieris brassicae*

Normally not very numerous on site, records for the year were well up. The first was a single on June 1st, with two further records of 6+ (July 24th and July 27th)

SMALL WHITE *Artogeia rapae*

Sightings were well up on 2015. The first record was a single on April 19th 2016 and numbers slowly increased, with counts of three on June 6th and August 17th.

GREEN-VEINED WHITE *Aeshna grandis*

This species was encountered on the majority of site visits in suitable weather. The first record of the year was on May 6th 2016 (two), and the latest record was on August 17th (four). A maximum count was of eight on May 17th (maximum count in 2015 was four).

ORANGE-TIP *Anthocaris cardamines*

Normally a common butterfly in April and May, the first record for 2016 was of 8+ males and 2 females on May 6th (compared to the first record for 2015 of April 14th). A pair were observed mating in Vine Wood on May 6th. Six males were seen on May 17th and there were no further records (due to lack of site visits).

SMALL COPPER *Lycaena phlaeas*

Not recorded in 2016. There were a number of sightings in the latter part of the 2015 season, but this species was very scarce nationally in 2016.

COMMON BLUE *Polyommatus icarus*

Not recorded in 2016. There was just one record of this insect in 2015 – a single male in the Headstocks meadow on August 5th. This mirrors the only sighting in 2014, which was on August 6th. Prior to 2014, this species was not recorded in 2013, 2012 or 2011.

HOLLY BLUE *Celastrina argiolus*

Two records of this species in 2016, both of singles, on August 17th and September 4th. The only record for 2015 was of a single adjacent to the Headstocks on August 11th. There were no records in 2014 and only single records for 2012 & 2013. With plenty of ivy on site and a plan to plant more holly, this species will hopefully increase.

RED ADMIRAL *Vanessa atalanta*

There were no records of this (often migratory) species in 2016. This was disappointing, as there are normally a few records every year (although there were no records in 2015 either).

PAINTED LADY *Vanessa cardui*

This migratory species was not recorded in 2016.

SMALL TORTOISESHELL *Aglais urticae*

This species was not recorded in 2016. 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 2016 just exceeded the 2015 total (10 in 2016, 8 in 2015) they were well down on earlier years (e.g. 18 in 2014). The first butterfly record for the year was of this species, a single in Vine Wood on February 11th. Records were then regular throughout the spring and summer, mainly of one or two at a time. The final record for the year was of a single on August 13th.

COMMA *Polygonia c-album*

Only seven specimens of this insect were seen in 2016,(5 in 2015) compared to fourteen seen in one day in 2013 !. However, the numbers probably represent an average year, as four were seen in 2014 and none at all in 2011. The first record for 2016 was of two on July 20th and five were seen on July 22nd.

SPECKLED WOOD *Pararge aegeria*

A fairly common butterfly in summer, with numbers comparable to 2015. The first record was May 17th. The second brood then emerged in September, with an impressive twelve on 4th.

GATEKEEPER *Pyronia tithonus*

Recorded as a fairly common butterfly in 2000/2002, but may be scarcer now. The numbers seen in 2015 were worryingly low, the only records being two on July 24th and two on July 28th.

MEADOW BROWN *Maniola jurtina*

A common butterfly in summer, which relishes the meadow habitat of the reserve. The numbers were well up on 2015. Peaks of 50+ were seen on July 5th 2016 and July 22nd: 40+ were seen on July 24th : 30+ on July 20th and 20= on July 28th. The last record for the year was of two on August 17th.

SMALL HEATH *Coenonympha pamphilus*

Not recorded in 2015. 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. 10+ were recorded on July 5th 2016 and 20+ on July 22nd. There was only a single record, of one insect in 2015, with peak counts in 2014 of 4, 6+ in 2013 and 10+ in 2012. An interesting record in 2016 was of two insects of this species perched on floating vegetation in the middle of Brinsley Brook pond.

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 papilonaria</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>Campptogramma 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 exiguata</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 agg</i> |
| Middle-barred Minor | <i>Oligia fasciuncula</i> |
| Rosy Minor | <i>Mesoligia literosa</i> |

| | |
|---------------------------|-----------------------------------|
| Common Rustic egg | <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> |

