BRINSLEY HEADSTOCKS

Heritage & Nature Reserve.

BUTTERFLIES and MOTHS

2019

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 2019 was 17.

2019 was notable for a record number of Peacock butterflies, with a count of 30+ feeding on knapweed flowers in the Long Meadow. We were also fortunate to observe 5 Painted Lady butterflies, also feeding on knapweed.

SMALL SKIPPER Thymelicus sylvestris

There were two records of this species in 2019: two were seen on July 4th and two on July 17th. 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 2019. 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 two records of this species in 2019: a single on July 4th and three on July 17th. This was encouraging, as there were no records 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 2019. It is normally seen regularly, particularly in spring, although never in large numbers.

LARGE WHITE Pieris brassicae

This species was unusually scarce in 2019, with only one record, a single on July 4th. Normally not very numerous on site, although numbers in 2017 and 2018 were much higher.

SMALL WHITE Artogeia rapae

Numbers in late summer of this species were unusually high, with a maximum of six on August 20th. The first sighting of the year was of a single on May 15th.

GREEN-VEINED WHITE Aeshna grandis

This species was encountered on the majority of site visits in suitable weather, although in smaller numbers than 2018. The first record of the year was for 2019 was a relatively early date of 23rd April, with a maximum of 4 seen on 2nd May.

ORANGE-TIP Anthocaris cardamines

Normally a common butterfly in April and May, the first record for 2019 was of a single male on May 3rd, which was three weeks later than normal. Numbers soon increased, however, and a relatively high count of twelve were seen on May 15th.

SMALL COPPER Lycaena phlaeas

This is normally a scarce butterfly on the site, but a maximum of six were seen in 2018. Disappointingly, this superb little insect was not seen in 2019.

COMMON BLUE Polyommatu sicarus

There were three records of this species in 2019, all records relate to single insects. The first was seen on the early date of May 30th, investigating the plentiful Birds-foot Trefoil adjacent to the car park. Further sightings were on July 7th and August 20th. This species was not recorded in 2016 or 2017, although a site record of five were seen on 19th July 2018.

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 was a single record for 2019, on 29th July.

RED ADMIRAL Vanessa atalanta

There were far more records of this species in 2019 than for several years. There were three sightings of singles between July and October, but three were seen on 17th July.

PAINTED LADY Vanessa cardui

Following three blank years (2016, 2017 & 2018) 2019 proved to be an "irruption" year for this migratory species, with a wonderful sight of five of this species feeding on Knapweed flowers in the Long Meadow.

SMALL TORTOISESHELL Aglais urticae

This species commonly has "blank" years, when none are recorded (e.g. 2015 and 2018), so a single record of two insects on 4th July was encouraging.

PEACOCK Inachis io

2019 proved to be a record-breaking year for this species. The first record for the year was on the very early date of 20^{th} March. There were two further records of singles, but on 29^{th} July an amazing total of thirty plus were seen in the Long Meadow, feeding on Knapweed. The average number seen for the last five years was eight, to put this record into context.

COMMA Polygonia c-album

An early sighting on 24th March showed promise of a good year, but sightings petered out, with a single seen on 4th July and three on 17th July.

SPECKLED WOOD Pararge aegeria

Normally a fairly common butterfly in summer, but only 6 were seen in 2019 (first date 23rd April). Coincidentally, 6 were also seen in 2017 and the first date was also 23rd April!

GATEKEEPER Pyronia tithonus

Recorded as a fairly common butterfly in 2000/2002, but may be scarcer now. The numbers seen in 2019 were much higher than previous years, with a maximum of 20+ on 29th July9

MEADOW BROWN Maniola jurtina

A common butterfly in summer, which relishes the meadow habitat of the reserve. The numbers seen in 2019 were fairly average, although much higher than the very hot, dry summer of 2018. There were 20+ on 4th July, 26 on 17th July and 30+ on 29th July.

SMALL HEATH Coenonympha pamphilus

Not recorded in 2019. 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 2019. Encouragingly, there were counts of 30+ on both 4th July and 17th July. In contrast, the maximum count in 2018 was only 4, due to the hot, dry summer.

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 10^{th} 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	Hepialus humuli
Common Swift	Hepialus lupulinus
Pebble Hook-tip	Drepana falcataria
Peach Blossom	Thyatira batis
Buff Arches	Habrosyne pyritoides
Large Emerald	Geometra papilonaria
Common Emerald	Hemithea aestivaria
Small Fan-footed Wave	Idaea biselata
Small Dusky Wave	Idaea aversata
Riband Wave	Idaea aversata
Flame Carpet	Xanthorhoe designata
Large Twin-spot Carpet	Xanthorhoe quadrifasiata
Silver-ground Carpet	Xanthorhoe montanata
Shaded Broad-bar	Scotopteryx chenopodiata
Small Argent and Sable	Epirrhoe tristata
Common Carpet	Epirrhoe montanata
Yellow Shell	Camptogramma bilineata
Purple Bar	Cosmohoe ocellata
Barred Straw	Eulithis pyraliata
Small Phoenix	Ecliptopera silaceata
Common Marbled Carpet	Chloroclysta truncata
Barred Yellow	Cidaria fulvata
Green Carpet	Colostygia pectinataria
July Highflyer	Hydriomena impluviata
Rivulet	Perizoma affinitata
Small Rivulet	Perizoma alchemillata
Sandy Carpet	Perizoma flavofasciata
Foxglove Pug	Eupithecia pulchellata
Wormwood Pug	Eupithecia absinthiata
Mottled Pug	Eupithecia exiguata
V-Pug	Chloroclystis v-ater
Green Pug	Pasiphila rectangulata
Dingy Shell	Euchoeca nebulata
Clouded Border	Lomaspilis marginata
Latticed Heath	Chiasmia clathrata
Scorched Wing	Plagodis dolabraria
Brimstone	Opisthograptis luteolata
Lilac Beauty	Apeira syringaria
Scalloped Oak	Crocallis elinguaria
Swallow-tailed Moth	Ourapteryx sambucharia
Peppered Moth	Biston betularia
Willow Beauty	Peribatoites rhomboidaria
Mottled Beauty	Alcis repandata
Engrailed	Ectropis bistortata
Bordered White	Bupalus piniaria
Common White Wave	Cabera pusaria

Common Wave	Cabera exanthemata
Clouded Silver	Lomographa temerata
Light Emerald	Campaea margaritata
Lime Hawk	Mimas tiliae
Elephant Hawk	Deilephila elpenor
Pebble Prominent	Notodonta ziczac
Common Footman	Eilema lurideola
Buff Ermine	Spilosoma luteum
Short-cloaked Moth	Nola cucullatella
Turnip Moth	Agrotis segetum
Heart and Dart	Agrotis exclamationis
Flame	Axylia putris
Flame Shoulder	Ochropleura plecta
Large Yellow Underwing	Noctua pronuba
Lesser Yellow Underwing	Noctua comes
Ingrailed Clay	Diarsia mendica
Purple Clay	Diarsia brunnea
Setaceous Hebrew Character	Xestia c-nigrum
Double Square-spot	Xestia triangulum
Shears	Hada plebeja
Cabbage Moth	Mamestra brassicae
Dot Moth	Melanchra persicariae
Bright-line Brown-eye	Lacanobia oleracea
Clay	Mythimna ferrago
Smoky Wainscot	Mythimna impura
Common Wainscot	Mythimna pallens
Shoulder-striped Wainscot	Mythimna comma
Shark	Cucullia umbratica
Sycamore	Acronicta aceris
Miller	Acronicta leporina
Dark Dagger agg	Acronicta tridens agg
Small Angle Shages	Euplexia lucipara
Dunbar	Cosmia trapezina
Dark Arches	Apamea monoglypha
Light Arches	Apamea lithoxylaea
Clouded-bordered Brindle	Apamea crenata
Clouded Brindle	Apamea epomidon
Slender Brindle	Apamea scolopacina
Double Lobed	Apamea ophiogramma
Marbled Minor agg	Oligia strigalis agg
Middle-barred Minor	Oligia fasciuncula
Rosy Minor	Mesoligia literosa
Common Rustic agg	Mesapamea secalis agg
Uncertain	Hoplodrina alsines
Mottled Rustic	Caradrina morpheus
Scarce Silver-lines	Bena bicolorana
Green silver-lines	Pseudoips prasinana

Burnished Brass	Diachrysia chrysitis
Silver-Y	Autographa gamma
Beautiful Golden-Y	Autographa pulchrina
Plain Golden-Y	Autographa jota
Spectacle	Abrostola tripartita
Beautiful Hook-tip	Laspeyria flexula
Straw Dot	Rivula sericealis
Snout	Hypena proboscidalis
Fanfoot	Zanclognatha tarsipennalis
Small Fan-foot	Herminia grisealis
Water Veneer	Acentria ephemerella
Mother of Pearl	Pleuroptya ruralis
Small Magpie	Anania hortulata
Mint Moth	Pyrausta aurata
Olive Pearl	Udea olivalis
Bee Moth	Aphomia sociella
Barred Fruit Tree Tortrix	Pandemis cerasana
Bramble-shoot Moth	Notoceliauddmanniana
Knapweed Conch	Agapeta zoegana
Green Oak Tortrix	Tortrix viridana
Yellow Conch	Agapeta hamana