

Macro-moths 2019 (provisional report)

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Introduction

The winter of 2018/2019 has been described as being milder than average, though the coldest weather of the winter occurred at the end of January. February, on the other hand, was unseasonably mild, with some species emerging early. The spring was rather wet at times, though there were some sunnier days around Easter and towards the end of May. June was rather wet and cool to begin with but by the end of the month temperatures were back to the seasonal norm. Most of July was warm but, unfortunately, rain put paid to the summer trapping event for the Wildlife Trust at Totternhoe Quarry. Much of the August weather was unsettled, though it got rather hot towards the end of the month. The autumn started relatively warm with sunny days but the rest of the season was fairly unsettled. There was also quite a lot of rain about. The year ended with December not being that warm but frost and snow free.

There were four additions to the county list - Spurge Hawk-moth, Devon Carpet, Dark Crimson Underwing and Striped Lychnis. In addition the following migrant moths were also seen during the year: Convolvulus Hawk-moth, Humming-bird Hawk-moth, Bedstraw Hawk-moth, Vestal, Silver Y, Bordered Straw, Scarce Bordered Straw, Small Mottled Willow, Delicate and Dark Sword-grass.

During the year the Recorders ran lights in the field at the following places: Bromham Mill, Marston Vale Millennium Country Park (MVMCP) and The Lodge (RSPB Sandy).

We were assisted in recording by a network of people regularly running light traps/recording in their gardens in 2019. These were at Barton-le-Clay, Biggleswade (two sites), Blunham, Bromham, Clifton, Clophill, Dunstable, Eaton Ford, Heath & Reach, Houghton Regis, Kempston (two sites), Leighton Buzzard, Lidlington (two sites), Lower Stondon, Luton, Markyate, Marston Moretaine, Potton (two sites), Sandy, Shefford, Southill, Toddington, Upper Caldecote, Upper Stondon, Wilden and Wootton. Traps were also run regularly at the following locations: Home Wood (Northill), John O'Gaunt Golf Course (Sutton), Lidlington graveyard, MVMCP and The Lodge (RSPB Sandy).

In addition we have access to the records from the Rothamsted Insect Survey (RIS) traps in the county. These are situated at Cockayne Hatley and Eaton Bray. Ian Woiwod continues to operate and identify the macro-moths from the Cockayne Hatley RIS trap, and Melissa identifies the macros from the Eaton Bray RIS trap, which is operated by Graham Buss.

The recording boundary for moths in Bedfordshire is that of the Watsonian Vice-county 30. For more details of this see the article in the 2009 Journal (Banthorpe 2010).

Review

The following list includes species of interest recorded in VC30 during 2019. We are keen to receive records for all species, even those regarded as very common, as without these records the dataset is incomplete and we will not be able to track future changes in abundance and distribution.

Most of the species analysis is based on the 25,514 records for 2019 that had been uploaded to the county database by mid-April 2019. However, a couple of datasets are not in yet, and some records have been gleaned from emails and other sources.

The list is based on that of Agassiz, Beavan & Heckford (2013), which was a revised taxonomic list and numbering system of British Lepidoptera. This list has subsequently been updated and corrected; the new version can be downloaded via the Natural History Museum's website. The number in square brackets refers to a species' Bradley-Fletcher number (Bradley 2000), which were used in previous reports.

A checklist of the macro-moths of VC30 with their current status and acceptable flight-date ranges is on the Beds Moth Group (BMG) website www.vc30moths.org.uk or available from the Recorders on request. This is usually updated annually. Our records are also scrutinised at a national level, so please note that your records may well be rejected if you have not provided

sufficient evidence. This also applies for commoner species outside their acceptable flight-date range.

Sesiidae

The following species were recorded during the year: Raspberry Clearwing, Hornet Moth, Orange-tailed Clearwing, Red Belted Clearwing, Yellow-legged Clearwing, Currant Clearwing and Six-belted Clearwing.

Lasiocampidae

66.002 Pale Eggar *Trichiura crataegi* (L.) [1632]

A singleton was trapped in Lidlington on 30th August.

66.005 Small Eggar *Eriogaster lanestris* (L.) [Nb] [1633]

Occupied larval webs were reported on 24th May at Keysoe, on 2nd June near Pertenhall, on 7th June at Staploe, on 9th June at Souldrop, on 15th June at Honeydon, and on 21st June at Riseley.

Sphingidae

69.004 Convolvulus Hawk *Agrius convolvuli* (L.) [Migrant] [1972]

The only one reported in 2019 was a rather soggy and tatty specimen found on a wet pavement around 11pm on 12th October in Potton.

69.010 Humming-bird Hawk-moth *Macroglossum stellatarum* (L.) [Migrant] [1984]

There were at least 33 records of this species in 2019. The first one was seen in the afternoon of 13th February, flying around a light inside the reception area of the Luton Road Dunstable branch of Supertyres. The species was then not recorded until one was seen on 22nd April at Knocking Hoe. The last sighting was also of a singleton, which was seen on 22nd October in Bromham.

69.013 Spurge Hawk-moth *Hyles euphorbiae* (L.) [Migrant] [1986]

This was added to the county list in 2019, when one was trapped on 3rd August at Wootton.

69.014 Bedstraw Hawk-moth *Hyles gallii* (Rott.) Migrant [1987]

In late July there was a large influx of this species into the UK and it was hoped that some of the regular trappers in the county would catch one. In fact only one was reported, and it was a chance find. A singleton flew into a house in Luton late on in the evening of 2nd August and was caught and photographed in a pint glass before being released.

Geometridae

70.023 Mullein Wave *Scopula marginepunctata* (Goeze) [1689]

A singleton trapped on 23rd August at Tempsford, was the third confirmed record for the county and the first since 2013.

70.032 Birch Mocha *Cyclophora albipunctata* (Hufn.) [1677]

A singleton was trapped on 21st May at Clifton (ID confirmed by Recorders), which was the first record since 2006.

70.038 Vestal *Rhodometra sacraria* (L.) [Migrant] [1716]

There were three records in 2019: one swept on 9th July at The Lodge (RSPB Sandy); one trapped on 21st August at Lidlington, and one trapped on 4th October at Sandy.

70.070 Mallow *Larentia clavaria* (Haw.) [1745]

Amongst the 39 records received, was one of a larva found on 9th June in a garden in Kempston (conf. MGB). It was feeding on a Musk Mallow x domesticated mallow hybrid. The only other

larval record in the county comes from 1930, when Frank Horsler recorded 24 feeding on Hollyhock in his garden in Luton.

70.092 Spinach *Eulithis mellinata* (Fabr.) [1757]

A singleton was trapped on 9th June at Kempston (conf. from photo MGB), which is the first in the county since 2017.

70.104 Devon Carpet *Lampropteryx otregiata* (Metc.) [Nb] [1751]

One to MV light on 23rd August at Stockgrove CP was a new addition to the county list.

70.159 Cypress Pug *Eupithecia phoeniceata* (Ramb.) [1855]

Singletons were recorded at Clophill on 27th August and 15th September, in the Eaton Bray RIS trap on 26th August, and at Upper Caldecote on 18th September.

70.174 Pinion-spotted Pug *Eupithecia insigniata* (Hb.) [Nb] [1820]

Just one was trapped in 2019, on 14th May at Leighton Buzzard.

70.211 Peacock Moth *Macaria notata* (L.) [1889]

A striking aberrant form fitting *infuscaria*, which was described by Rebel in 1910, was trapped on 21st August at Sandy.

70.203 Orange Underwing *Archiearis parthenias* (L.) [1661]

Singletons were recorded on 26th March at Cooper's Hill, and on 29th March and 5th April at The Lodge (RSPB Sandy).

70.204 Light Orange Underwing *Boudinotiana notha* (Hb.) [Nb] [1662]

There were five records received in 2019. Four of these came from Potton Wood - a total of ten were seen on 24th March, at least three on 25th March and six on 29th March. The other record was of a singleton on 28th March in King's Wood Heath & Reach.

Notodontidae

71.001 Oak Processionary *Thaumetopoea processionea* (L.) [2022]

Only two -both males - were recorded in 2019: 4th August in Upper Caldecote and 10th August in Southill.

71.009 Lobster Moth *Stauropus fagi* (L.) [1999]

This is not a common moth in the county and there were only two records in the county in 2019. An adult was trapped on 24th June in Shefford, and a lucky observer in Aspley Wood found a larva there on 28th August. This is the only larval record in the county database; but Arnold *et al.* (1997) has the the foodplants beech and oak starred suggesting the species had already been found as a larva in the county.

Erebidae

72.011 Gypsy Moth *Lymantria dispar* (L.) [Vagrant/Accidental] [2034]

There were four records of this species in the county in 2019. All the records were of singletons, as follows: 1st and 4th August in Markyate and 8th August in Luton and The Lodge (RSPB Sandy).

72.030 Jersey Tiger *Euplagia quadripunctaria* (Poda) [Nb] [2067]

It was surprising that given the numbers of Jersey Tigers seen over the past few years, there had been no reports of larvae. This changed on 15th May 2019, when a single larva was found in a flower bed at The Higgins Bedford while the observer was doing some weeding. Unfortunately, it was not actually found eating anything.

72.076 Clifden Nonpareil *Catocala fraxini* (L.) [2451]

There were three records of this species in 2019. The first of the year was found in a bathroom on the 28th August in Hulcote, the second individual was found on a house wall in the daytime on 24th September in Ampthill, and lastly a singleton was trapped on 6th October at Sandy. This moth was the first to be seen in the county by several Beds moth-ers, including the Recorders.

72.081 Dark Crimson Underwing *Catocala sponsa* (L.) RDB2 [2455]

This was a surprise addition to the county list. A singleton was trapped on 5th August at Upper Caldecote.

Noctuidae

73.010 Dewick's Plusia *Macdunnoughia confusa* (Steph.) [2436]

Singletons were trapped on 11th and 18th Spetember at Upper Caldecote, and on 4th October at Sandy.

73.015 Silver Y *Autographa gamma* (L.) [Migrant] [2441]

There were at least 151 records of this species received in 2019. The first of the year, a singleton, was trapped on 6th January at Kempston, and the last was also a singleton, trapped on 4th November at Blunham. The maximum recorded was five, trapped on 23rd July at Upper Caldecote.

73.050 Wormwood *Cucullia absinthii* (L.) Nb [2211]

A singleton trapped on 31st July at Clophill was the first record since 2017.

73.057 Striped Lychnis *Cucullia lychnitis* Ramb. [Na] [2219]

The addition of this species to the county list in 2019 was a complete surprise. All three records were of larvae. During the day of 8th August, 11 larvae were found on Dark Mullein on an arable reversion strip of a farm near Barton-le-Clay. This was a chance find by the observers. In the evening the Recorders went up to check these and to see if there were any more. One more larva was found bringing the day's total to 12. After getting in contact with the farm, through the Wildlife Trust, the Recorders were able to get on private areas of the farm to look at some more reversion strips containing Dark Mullein. Subsequently, a further 30 larvae were found on 11th August. It is quite possible that this species has been present in the county for some time but has been overlooked. The plan is that the Recorders will go back in 2020 to check on numbers.

73.074 Bordered Straw *Heliothis peltigera* ([D. & S.]) [Migrant] [2403]

A singleton was trapped on 27th August at Upper Caldecote. This was the first since 2015.

73.076 Scarce Bordered Straw *Helicoverpa armigera* (Hb.) [Migrant] [2400]

There we three records in 2019, all of singletons, as follows: 1st September at Upper Caldecote and 2nd and 18th September at Biggleswade.

73.087 Small Mottled Willow *Spodoptera exigua* (Hb.) [Migrant] [2385]

Singletons were trapped on 16th February at Kempston and on 1st August at Potton. These were the first since 2017.

73.196 Black-spotted Chestnut *Conistra rubiginosa* (Scop.) [Migrant/recent colonist] [2259a]

There were 11 records received in 2019. The first was trapped on 15th February at Upper Caldecote and the last was trapped on 29th December at Biggleswade. The maximum was two, trapped on 22nd December at Biggleswade. This is the first time more than singletons have been trapped in the county. The species also turned up The Lodge (RSPB Sandy), which was a new site for it.

73.214 White-spotted Pinion *Cosmia diffinis* (L.) [pRDB] [2317]

Singletons were trapped on 23rd July at Home Wood, Northill; on 25th July at Upper Caldecote; and on 26th July and 6th August at John O'Gaunt Golf Course, Sutton.

73.223 Oak Rustic *Dryobota labecula* (Esp.) [2246a]

One was trapped on 1st December at Upper Caldecote, which was a new site for it.

73.257 Beautiful Yellow Underwing *Anarta myrtilli* (L.) [2142]

There was one record in 2019; a singleton was seen on 13th August at The Lodge (RSPB Sandy).

73.295 Delicate *Mythimna vitellina* (Hb.) [Migrant] [2195]

Two individuals were trapped in 2019; on 11th July at Sandy and on 1st August at Shefford. These are the first since 2017.

73.327 Dark Sword-grass *Agrotis ipsilon* (Hufn.) [Migrant] [2091]

In 2019, seven records were received for this species. All were of singletons. The first was trapped on 16th July at Luton, and the last was trapped on 28th September at Upper Caldecote.

73.344 Lunar Yellow Underwing *Noctua orbona* (Hufn.) [Nb] [2108]

There were five records in 2019, as follows: on 25th March at The Lodge (RSPB Sandy); on 25th June, 11th July and 31st August at Stratford Road, Sandy; and on 16th September at Upper Caldecote.

73.350 Great Brocade *Eurois occulta* (L.) [Migrant] [2137]

A singleton was trapped on 3rd August at Biggleswade, which was the first since one in 2017.

Nolidae

74.002 Kent Black Arches *Meganola albula* ([D. & S.]) [2076]

There were two records in 2019 of singletons, as follows: on 23rd July in the Cockayne Hatley RIS trap and on 25th July at Pegsdon Hills.

Migrant records are forwarded to the appropriate editor for inclusion in the Immigration of Lepidoptera to the British Isles Report for the *Entomologists Record and Journal of Variation*.

All records are held by the Bedfordshire and Luton Biodiversity Recording and Monitoring Centre and updated regularly. In addition the dataset is forwarded to the National Moth Recording Scheme annually.

References

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Melissa and Andy Banthorpe are the Society's joint Recorders for all Moths, a position they have held in an honorary capacity since 2016.