

Macro-moths 2018

Melissa & Andy Banthorpe

Introduction

Temperatures were all over the place in spring with some unseasonably hot days in April, reaching the high 20s, but also some really rather cold and wet conditions at other times. Towards the end of May things began to hot up and warm, sometimes very hot days continued throughout the summer and into September. The hot weather encouraged a number of people to get out and about and record clearwings, making 2018 the best year yet for records of this group of species. The beginning of October was also unseasonably warm before normal autumnal weather kicked in. Late December was also quite mild. The milder weather in the autumn and winter contributed to a smattering of records of late-flying moths, and also some of the late-winter species made early appearances in December.

There were two additions to the county list – Oak Processionary and Marbled Clover. In addition the following migrant moths were also seen during the year: *Convolvulus* Hawk-moth, Humming-bird Hawk-moth, Vestal, Gem, Silver Y, Scarce Bordered Straw, Pearly Underwing and Dark Sword-grass.

During the year the Recorders ran lights in the field at the following places: Carthage Golf Course and Totternhoe Old Quarry.

We were assisted in recording by a network of people regularly running light traps/recording in their gardens in 2018. These were at Barton-le-Clay, Bedford (two sites), Beeston, Biggleswade (two sites), Blunham (two sites), Bromham, Clifton (two sites), Clophill, Dunstable, Eaton Bray (not the RIS trap site), Eaton Ford, Heath & Reach (two sites), Houghton Regis, Kempston (two sites), Leighton Buzzard, Lidlington (two sites), Lower Stondon, Luton, Markyate, Marston Moretaine, Potton (three sites), Sandy, Sharnbrook, Shefford, Southill, Stotfold, Toddington, Upper Caldecote, Upper Stondon, Wilden and Wootton (two sites). Traps were also run regularly at the following locations: Aspley Wood, Home Wood (Northill), John O'Gaunt Golf Course (Sutton), Marston Vale Millennium Country Park (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 2018. 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 34,175 records for 2018 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.

Hepialidae

3.004 Gold Swift *Phymatopus hecta* (L.) [16]

There were two records in 2018: two were trapped in Home Wood (Northill) on 30th May, and one was found in Potton Wood on 8th July.

Cossidae

50.001 Goat Moth *Cossus cossus* (L.) [Nb] [162]

A singleton was trapped at Potton on 18th June, and was the first record of an adult in the county since 2009.

Sesiidae

52.001 Raspberry Clearwing *Pennisetia hylaeiformis* (Lasp.) [369a]

All seven sightings in 2018 involved pheromone lures. The species was recorded at Biggleswade allotments, including 18 on the 27th July, Pegnut Wood (Potton), and in gardens in Potton and Sandy.

52.002 Hornet Moth *Sesia apiformis* (Cl.) [Nb] [370]

Adults were reported at Potton, Pegnut Wood, Sandy and Wrestlingworth, with only one recorded as coming to a pheromone lure (Potton). Exuviae were recorded at Sandy.

52.003 Lunar Hornet Moth *Sesia bembeciformis* (Hb.) [371]

A singleton was discovered by chance on Biggleswade Common on 9th July. This was only the fourth record of an adult moth in the county, the last being in 2016 at Heath & Reach.

52.008 Red-tipped Clearwing *Synanthedon formicaeformis* (Esp.) [Nb] [380]

The species was recorded five times in 2018, at the following locations: Biggleswade allotments, Biggleswade Common and Sandy. All were of singletons to lure.

52.010 Orange-tailed Clearwing *Synanthedon andreaeformis* (Lasp.) [Nb] [378]

There were 15 records of Orange-tailed Clearwing in 2018 from the following locations: Bedford, Biggleswade (two sites), Blunham, Cockayne Hatley, Eaton Ford (two sites), Girtford Lakes, John O'Gaunt Golf Course, Lower Alders, Potton, Spanoak Wood, Sutton, The Lodge (RSPB Sandy) and Upper Caldecote. All except the sighting at Sutton involved a pheromone lure. The maximum recorded were six in a garden in Biggleswade on 26th June.

52.011 Red-belted Clearwing *Synanthedon myopaeformis* (Borkh.) [Nb] [379]

There were nine records in 2018. Adults to lure were seen at Biggleswade (two sites), John O'Gaunt Golf Course, Lower Stondon, Mowsbury Hill, Sandy, Upper Caldecote and Waterloo Thorns, where five were seen on 25th June. Five exuviae were found on a Crab Apple in Bedford on 18th July.

52.012 Yellow-legged Clearwing *Synanthedon vespiformis* (L.) [Nb] [374]

A singleton was found in the polytunnel at The Lodge (RSPB Sandy) on 26th June, and a single male came to a pheromone lure in a Sandy garden on 30th June.

52.013 Currant Clearwing *Synanthedon tipuliformis* (Cl.) [Nb] [373]

There were three sightings in 2018: one was seen in a Potton garden on 10th June; ten came to a pheromone lure at Biggleswade allotments on 11th June; and a mating pair were seen in a garden in Luton on 15th June.

52.014 Six-belted Clearwing *Bembecia ichneumoniformis* (D. & S.) [Nb] [382]

There were four records received in 2018: a singleton was found at Bison Hill on 16th July; and adults came to lure at Barton Hills on 22nd June, Sharpenhoe Clappers on 10th July and Stratton Park Balancing Lake on 2nd July, where 40 were recorded.

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

A singleton was trapped in a Sandy garden on 30th August.

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

There were three records received of active webs this year: one on 20th May at Thurleigh Airfield; one on 12th June at Wilden; and three on 15th June in hedgerows near Honeydon. There was also a further record of two larvae on 7th June at Sharnbrook Summit.

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

Four singletons were reported in 2018 as follows – trapped on 18th August in Leighton Buzzard; found on 23rd August on a shop windowsill in Ampthill; filmed on 3rd September nectaring on flowers at dusk in a Meppershall garden; and found on 14th September in the morning in a garden in Brickhill (Bedford).

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

There were 44 records of this species in 2018. The first was seen on 5th April when one flew out of a greenhouse in Stotfold in sunny weather. The species was then not recorded until one was seen on 3rd July at Luton Hoo. The last sighting was also of a singleton, which was seen on 9th November feeding on delphiniums mid-afternoon in a garden in Biggleswade. The maximum number recorded was two – on 18th July at Whipsnade Downs; on 26th July at Woburn; and on 22nd August at The Lodge (RSPB Sandy).

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

Singletons of this migrant species were recorded on 16th October in the Cockayne Hatley RIS trap and at Tempsford.

70.043 Chalk Carpet *Scotopteryx bipunctaria* ssp. *cretata* (Prout) [Nb] [1731]

There was just one record of this species in 2018, which was of 20 trapped on 27th July at Totternhoe Old Quarry. The Recorders were running lights here as part of a local Wildlife Trust event.

70.047 Gem *Nycterosea obstipata* (Fabr.) [Migrant] [1720]

A singleton was recorded on 17th October at The Lodge (RSPB Sandy), having been attracted to building lights.

70.083 Cypress Carpet *Thera cupressata* (Geyer) [1771a]

One was trapped on 30th November at Marston Moretaine, which was the third record for the county.

70.119 Dark Umber *Philereme transversata* (Hufn.) [1792]

Following the first larval record of this species in 2013, it was good to have a further four larval records (all singletons) in 2018. All were found on buckthorn species by three observers. The records, all from May were as follows: 13th out the back of Lower Stondon; 14th at Barton Hills LNR; 19th at Pegsdon Hills; and 24th at Warden Hill.

70.121 Scallop Shell *Rheumaptera undulata* (L.) [1789]

One was an unexpected surprise in a trap on 1st July at Kempston, which brings the number of records in the county to ten.

There was also a record of this species in 2017 – a singleton to light on 7th July at Toddington, which for various reasons had not got entered into the county database and hence overlooked.

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

Having been added to the county list in 2017 from Clophill, a singleton was attracted to light at the same site on 17th August this year.

70.161 Golden-rod Pug *Eupithecia virgaureata* Doubl. [1851]

There were two records in 2018, both of singletons in a light trap on 10th and 14th July at Sharnbrook. Both individuals were gendetted to confirm the identity.

70.164 Pauper Pug *Eupithecia egenaria* (H.-S.) [RDB] [1824]

This species was added to the county list in 2014 and there had not been any further records until 2018, when a male was trapped on 2nd June at Luton. It was identified by a gendet.

70.172 Thyme Pug *Eupithecia distinctaria* (H.-S.) [RDB] [1843]

This species was recorded again at Totternhoe Old Quarry, this time on 15th June when ten came to light. The previous record, the second for the county, also came from this site in 2013.

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

The species was recorded twice in 2018 – on 16th March at Cooper's Hill and on 26th March at The Lodge (RSPB Sandy).

70.247 Pale Brindled Beauty *Phigalia pilosaria* ([D. & S.]) [1926]

A singleton was recorded on 4th December at Upper Caldecote, which was about four weeks earlier than expected (beginning of January). The earliest this species has been recorded is 15th November, back in 2014. This early record was supported by a photograph as was the 2018 record.

70.267 Great Oak Beauty *Hypomecis roboraria* ([D. & S.]) [Nb] [1943]

One trapped on 11th June at The Lodge (RSPB Sandy) was quite a surprise, since the previous record came from 2006. The 2018 record was the tenth for the county.

70.287 Annulet *Charissa obscurata* ([D. & S.]) [1964]

The species was recorded again at Totternhoe Old Quarry in 2018, with 15 trapped on 27th July during a “Creatures of the Night” event for the local Wildlife Trust. This is the only site where Annulet has been seen recently.

70.297 Grass Emerald *Pseudoterpna pruinata* (Hufn.) [1665]

Three were trapped during 2018: two on 29th June in Dunstable and a singleton at Aspley Wood (inside the VC30 boundary).

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

This species was added to the county list in 2018. It was entirely unexpected, if rather unwanted – the larvae have irritating hairs which can cause skin rashes and respiratory problems. It should be noted, however, that none of the records were of larvae and all related to males, and as yet there is no evidence of breeding in the county.

All ten records came from a very short period in July and were most likely wanderers during the hot weather. The first were trapped on the 24th, with singletons at Eaton Ford and Luton. These were followed by three records on the 25th – two at Upper Caldecote and singletons at two sites in Biggleswade; three records on the 26th – eight at Biggleswade, three at Southill and one at Upper Caldecote; and singletons on the 27th at Eaton Ford and Lower Stondon.



Two of the Oak Processionary moths trapped during July

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Erebidae**72.019 Buff Ermine** *Spilosoma lutea* (Hufn.) [2061]

Amongst the records received for this species in 2018, was one of a larva found indoors on 20th August at Pulloxhill eating Spider Plant *Chlorophytum comosum*. Buff Ermine is a polyphage but this was certainly an interesting foodplant for it. The Recorders asked on the Moths.eu Facebook group if anyone had recorded this species eating *C.comosum*. Martin Honey kindly checked the Natural History Museum hosts database and got back to the Recorders saying the plant is not listed for Buff Ermine (pers. comm.).

72.042 Red-necked Footman *Atolmis rubricollis* (L.) [2039]

There were two records in 2018. A singleton was trapped on 5th June at The Lodge (RSPB Sandy), and one was seen in Chicksands Wood on 21st June.

72.047 Hoary Footman *Eilema caniola* (Hb.) [Nb] [2045]

There were three recorded in 2018, all to light traps and all gendotted to confirm the ID. A male on 3rd August and a female on 18th September were trapped at Upper Caldecote, and there was also a male trapped on 5th August at Southill.

72.066 Waved Black *Parascotia fuliginaria* (L.) [Nb] [2475]

Two were trapped in 2018, both in July: one on the 6th at Aspley Wood and one on 11th July at Markyate.

Noctuidae

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

A singleton was trapped on 16th July in Luton.

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

There were 461 records of this species received in 2018. The first of the year, a singleton, was trapped on 26th April at Luton, and the last was also a singleton, trapped on 31st December at Potton. The maximum recorded were 19 seen on the evening of 4th July nectaring on Lavender and Duke of Argyll's Tea Plant outside Lower Stondon Baptist Chapel.

73.033 Figure of Eight *Diloba caeruleocephala* (L.) [2020]

This species was trapped three times in 2018, with seven on 10th October and one on 5th November at Home Wood, Northill, and one on 22nd October at Upper Caldecote. These were the first recorded since 2013.

73.072 Marbled Clover *Heliothis virescens* (Hufn.) [RDB] [2401]

A singleton trapped on 5th August at Sandy was a surprise addition to the county. It was probably a wanderer, in the heat, from the Breckland population.



The Marbled Clover trapped in August *Melissa Banthorpe*

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

Singletons were trapped in 2018 on 17th October at Upper Caldecote and 15th November in Eaton Bray.

73.141 Brown-veined Wainscot *Archonara dissoluta* (Treat.) [2371]

This species was recorded again in MVMCP, with a singleton trapped on 14th July.

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

This was the best year yet for records of this species, with eight records received all involving singletons. The first was trapped on 16th November at Biggleswade and the last on 29th December at Upper Caldecote. The species also turned up at Potton, which was a new site for it.

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

The year 2018 was also good for this species, with seven records. The first, both singletons, were trapped on 21st July at Sandy and Tempsford – both new sites for this species. The last, two, were trapped on 4th August at the same site in Tempsford. The species was also trapped at Biggleswade, John O'Gaunt Golf Course and Upper Caldecote, and recorded in the Cockayne Hatley RIS trap – all sites where it has been recorded before.

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

A singleton was trapped on 1st December at Southill, the second record for the county following one in 2017.

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

There were two records in 2018: a singleton was trapped on 18th June at The Lodge (RSPB Sandy), and two were trapped on 16th July in a garden in Sandy near to The Lodge.

73.307 Pearly Underwing *Peridroma saucia* (Hb.) [Migrant] [2119]

A singleton was trapped on 20th September at Upper Caldecote.

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

In 2018, 27 records were received for this species. The first, a singleton, was trapped on 18th July at Luton, and the last, also a singleton, was trapped on 9th December. The maximum recorded was three on 25th October at Upper Caldecote.

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.

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