

## Macro-moths 2021

### *Melissa & Andy Banthorpe*

#### **Introduction**

There were two additions to the county list in 2021, Striped Hawk-moth and Radford's Flame Shoulder. In addition, the following migrant moths were seen during the year: *Convolvulus* Hawk-moth, Humming-bird Hawk-moth, Vestal, Gem, Silver Y, Small Mottled Willow, Clancy's Rustic, Delicate, Pearly Underwing and Dark Sword-grass.

The Recorders ran lights, with others, at Sandy on 10th July for National Moth Night, and also ran lights for a 'Creatures of the night' event at Totternhoe for the Wildlife Trust on 6th August. In addition some of the county's moth-ers undertook some field-trapping at various locations in the county.

We were assisted in recording by a network of people who regularly ran light traps/recorded in their gardens in 2021. These were at Barton-le-Clay, Bedford, Biggleswade (two sites), Blunham, Bromham, Clifton, Clophill, Dunstable, Eaton Ford, Heath & Reach, Ickwell Green, Kempston (two sites), Liddington (two sites), Lower Stondon, Luton (two sites), Markyate, Marston Moretaine, Potton, Sandy, Shefford, Shortstown, Stotfold, Tempsford, Toddington, Upper Caldecote and Wootton. Traps were also run fairly regularly at the following locations: Begwary Book (Wyboston), Folly Wood (Liddington), John O'Gaunt Golf Course (Sutton), Marston Vale Millennium Country Park, and West Wood. There was also some occasional trapping done at Flitwick Moor, Home Wood (Northill), Knocking Hoe, Potton Wood, Shocott Spring, Saint Denny's churchyard (Little Barford), Saint Mary the Virgin churchyard (Haynes Church End), Stockgrove CP and The Lodge (RSPB Sandy).

In addition we had access to the records from the Rothamsted Insect Survey (RIS) traps in the county. These were situated at Cockayne Hatley and Eaton Bray. Unfortunately, from 2022 only the Eaton Bray trap will continue to be run; Ian Woiwod who ran the Cockayne Hatley RIS trap is moving out of the county and stopped running the trap at the end of 2021. Ever since it has been run Ian has identified the macro-moths in the trap, and as in previous years Melissa continued to identify the macros in the Eaton Bray trap.

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 2021. 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 was based on the 27,424 records for 2021 that had been uploaded to the county database by mid-April 2022. However, there are a number of datasets that have not been uploaded yet, and a handful that not been received at the time of writing, meaning some of the records were 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 updates having since been published in *The Entomologist's Record and Journal of Variation*. 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](http://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 of Sesiidae were recorded during the year: Raspberry Clearwing, Hornet Moth, Lunar Hornet Moth, Red-tipped Clearwing, Orange-tailed Clearwing, Red-belted Clearwing, Yellow-legged Clearwing, Currant Clearwing and Six-belted Clearwing.

### **Lasiocampidae**

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

Larval webs - 25 in total - were reported from the Duloe/Honeydon/Staploe area, Pertenhall and Souldrop between 8th and 19th June 2021, with larvae also being reported from a Staploe garden during the year.

### **Sphingidae**

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

There were two records in 2021, both from people who had found single adults in their gardens: 26th September in Potton and 29th September in Lidlington.

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

At the end of March 2022, the Recorders were only aware of just ten records of this species in 2021, compared with nearly 50 in 2020. The first one was seen in a garden in Kempston on 1st March, and the last was seen in a garden in Flitwick on 2nd November. All the records were of singletons.

#### **69.015 Striped Hawk-moth** *Hyles livornica* (Esp.) [Migrant] [1990]

This species was added to the county list in 2021 when a singleton was trapped at Leighton Buzzard on 16th September (photo seen by AMB & MGB).

### **Geometridae**

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

There were two records of this migrant moth in 2021: singletons were seen at Ickwell Green and Shortstown on 17th September.

#### **70.202 Early Tooth-striped** *Trichopteryx carpinata* (Borkh.) [1881]

A singleton was trapped at Stockgrove Park on 9th May. This was the first record in the county since one was trapped at Clifton in 2014.

#### **70.043 Chalk Carpet** *Scotopteryx bipunctaria* ([D. & S.] [Nb] [1731]

A singleton was trapped at Heath & Reach on 20th July.

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

There were three records of this species in 2021. One was trapped at Biggleswade on 17th May, which was the first spring record for the county of this migrant; the earliest date Gem was recorded prior to this was one on 13th June, back in 2011. Singletons were also trapped at Ickwell Green on 14th July and 8th September.

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

A singleton was trapped at Upper Caldecote on 6th October.

#### **770.169 Angle-barred Pug** *Eupithecia innotata* (Hufn.) [1848]

A female was trapped at Upper Caldecote on 25th August, with the identity confirmed by genet (AMB). This was the first confirmed record of the species in the county.

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

There were four records received in 2021 as follows: singletons were seen at The Lodge (RSPB Sandy) on 9th, 29th and 31st March and at Flitwick Moor on 4th April.

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

Both records for the year came from Marston Thrift in April; one was seen on the 18th and three on the 24th.

**Erebidae**

**72.038 Four-dotted Footman** *Cybosia mesomella* (L.) [2040]

A singleton was trapped at Shocott Spring on 1st July, the first record in the county since one was trapped at Flitwick Moor in 2014.

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

There were at least 12 seen in 2021 from the following locations: Blunham, Bromham, Cockayne Hatley (2), Ickwell Green (4), Lower Shelton, Sandy, Tempsford and The Lodge (RSPB Sandy).

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

Singletons were trapped at Biggleswade on 10th August and 8th September; and at Upper Caldecote on 13th August.

**Noctuidae**

**73.002 Dark Spectacle** *Abrostola triplasia* (L.) [2449]

Amongst the records of this species submitted in 2021 was one of a larva found beneath Golden Hop in Bedford on 11th October (ID conf. from photo by AMB & MGB). This was the first larval record for the county.

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

There were at least 237 records of this species in 2021, which included two of larvae. The first adult of the year was trapped on 18th January, the last were trapped at Liddington and Shortstown on 13th November. Five, which was the maximum recorded at a time, were trapped at Biggleswade on 7th June, and seen at Sharpenhoe Clappers on 2nd August and Totternhoe old quarry on 6th August. The two larval records came from Lower Stondon, where a singleton was found eating Small Teasel *Dipsacus pilosus* (and later normal Teasel *Dipsacus fullonum* in captivity) on 20th July, and Streatley, where one was swept from vegetation on 28th August.

**73.047 Coronet** *Craniophora ligustri* ([D. & S.]) [2291]

There were at least 98 records of this species in 2021, which included two of larva. An early instar was found at Potton Wood on 19th August, which was the first larval record for the county. Two days later, on the 21st, a much larger instar was found on Ash *Fraxinus excelsior* at Southill Park.

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

The only records of this species in 2021 were of larvae. A single larva found eating Mugwort *Artemisia vulgaris* on the side of the road near to Meppershall Water Tower (coming from Upper Stondon) was a chance find on 22nd August. This was the first larval record since 2017. Four larvae were then found the next day feeding on Mugwort, following diligent searching of the plants by a different recorder at Sandy Smith NR. The Recorders know from experience that there is a great amount of Mugwort at that site.

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

The Recorders, with kind permission from the landowner, checked Dark Mullein plants again near Barton-le-Clay for larvae in 2021. On 23rd July 338 larvae were seen; this was a significant increase on the previous year. There also appeared to be a lot more Dark Mullein plants present at the site too.

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

One was trapped at Tempsford on 2nd July.

**73.093 Clancy's Rustic** *Caradrina kadenii* (Freyer) [2387a]

There were two records in 2021: singletons were trapped at Upper Caldecote on 13th September and Biggleswade on 5th October.

**73.201 Pale Pinion** *Lithophane socia* (Hufn.) [2236]

The eight adults recorded in the year were all trapped at one site, Ickwell Green, between 16th March and 18th September. In addition a single, late-instar larva was found at Sandy on 10th July on Dogwood *Cornus sanguinea*. This is the first record of a larva for the county.

**73.109 Straw Underwing** *Thalpophila matura* (Hufn.) [2303]

Amongst at least 253 records of this species received in 2021 were two of larvae. Both were of singletons and found in gardens - Blunham on 26th October (ID AMB), which was the first larval record for the county, and Kempston on 5th November (conf. AMB).

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

There were five records in 2021, which all came to light traps in August and were all singletons as follows: Biggleswade and John O'Gaunt golf course on 10th, in the Cockayne Hatley RIS trap on 12th, Tempsford on the 14th and Ickwell Green on the 18th.

**73.243 Blossom Underwing** *Orthosia miniosa* ([D. & S.]) [2183]

There were at least ten records of this species in 2021, which included a larva found at Pegnut Wood on oak *Quercus* sp. on 7th June (conf by AMB from photo). This was the first larval record for the county; the species was added to the county list in 2011.

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

Three individuals were trapped in the county in 2021 as follows: Upper Caldecote on 22nd September and 7th October, and Ickwell Green on 6th October.

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

There was one record of this species in 2021 - a singleton was trapped at Shortstown on 19th September.

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

There were at least 17 records of this species in 2021, and all were singletons. The first was trapped at Shortstown on 22nd May and the last was trapped at Ickwell Green on 31st October.

**73.330 Radford's Flame Shoulder** *Ochropleura leucogaster* (Frey.) [Migrant] [2102a]

This species was added to the county list in 2021. There was one confirmed record of a singleton, trapped at Ickwell Green on 13th November, which was seen by the County Recorders. In addition, a good candidate for this species was trapped at Blunham on 6th October. Unfortunately the specimen had been released because it had initially been considered to be a Flame Shoulder; it had been photographed but that did not show a key feature for separating Radford's from the normal Flame Shoulder.

**73.322 Archer's Dart** *Agrotis vestigialis* (Hufn.) [2085]

Singletons were trapped at Heath & Reach (two different locations) on 18th and 20th August, the first records for the county for a few years.

**73.356 Heath Rustic** *Xestia agathina* (Dup.) [2135]

Singletons were trapped at Upper Caldecote and Ickwell Green on 10th September.

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 hold in an honorary capacity, having taken on the macros in autumn 2006 and the micros as well in spring 2016.***