

Macro-moths 2013

Melissa & Andy Banthorpe

Introduction

The year got off to a slow start as spring was cold, with the first warm day only in mid-April. Many recorders reported low counts and numbers of species. There was a reasonable summer with a hot, dry period in mid-July. During this period in July many recorders noted new species for their sites, as moths wandered in the hot, dry weather. Autumn was okay and the end of the year was mild. It was a good migrant year, nearly rivalling 2006, with the count of Vestal the best since 1983. The following migrants were recorded this year: Vestal, Gem, Convolvulus Hawk-moth, Death's-head Hawk-moth, Humming-bird Hawk-moth, Four-spotted Footman, Dark Sword-grass, Pearly Underwing, White-point, Tree-lichen Beauty, Scarce Bordered Straw, and Silver Y.

During the year we ran lights in the field at the following places – Bromham Lake NR, Chicksands Wood, Houghton Regis Chalk Pit, The Lodge (RSPB Sandy), Totternhoe Quarry and Whipsnade Zoo.

We are assisted in recording by a network of people regularly running light traps in their gardens. These are at Ampthill, Bedford, Biggleswade (three sites), Blunham, Bromham (two sites), Carlton, Clifton (two sites), Clophill, Dunstable, Eaton Ford, Heath & Reach, Kempston, Leighton Buzzard, Lidlington, Lower Stondon, Luton (two sites), Markyate, Potton (three sites), Renhold, Sandy, Sharnbrook, Shefford, Studham, Toddington, Turvey, Upper Caldecote, Upper Stondon and Wilden (two sites). Some individuals also run portable traps in good habitat in their own locality, which adds to the coverage. In addition, with the kind assistance of Chris Shortall, 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 has taken over identification of the Eaton Bray RIS trap, which is operated by Graham Buss.

There was one new county record this year – Dotted Fan-foot (for details see the review of species below).

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 2013, however, we are keen to receive records for all species including 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.

We have included a few larval records as these are really important – of nearly 30,000 records received for 2013 only 77 were of larvae. We would like to encourage people to search for larvae and submit records for these. Melissa is happy to assist with identification of these and advise on recording methods.

The list follows that of Bradley (2000), however, a new lepidoptera checklist (Agassiz, Beavan & Heckford 2013) was published in December. This will be used in future reports. This checklist has a new numbering system and there are significant changes in the order of a proportion of moths from Bradley's list, due to advances in taxonomic and genetic research.

A list of the macro-moths of VC30 with their current status and a table of expected first and last dates for species in the county are on the Beds Moth Group website www.vc30moths.org.uk or available from the Recorders on request.

Hepialidae

14 Ghost Moth *Hepialus humuli humuli* (L.)

Approximately 100 moths were found at leks around dusk at Totternhoe Quarry on 6th July (GH *et al.*) as part of a joint Beds Moth Group and Wildlife Trust moth-trapping event. This is the largest number of Ghost Moths recorded at one time in the county database.

Zygaenidae

171 Narrow-bordered Five-spot Burnet *Zygaena lonicerae* ssp. *latomarginata* Tutt

For the third year running the yellow form *citrina* was found at the roundabout on Whipsnade Heath. A singleton was seen on 5th July (DGi).

Sesiidae

It was an exceptionally poor year for clearwing records and only two species were recorded in 2013 as follows:

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

There were two records received this year: a singleton at Potton on 29th June (AP conf. AMB & MGB) and a mated pair at Centre Parcs Woburn Forest on 18th July (LD).

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

Just one was reported this year and was found during a Beds Invert Group meeting to Marston Vale Country Park on 18th July (CC, conf. JEC).

Lasiocampidae

1632 Pale Eggar *Trichiura crataegi* (L.)

A singleton was trapped at Turvey Abbey on 19th Sept (BrJM, photo seen by AMB & MGB).

Drepanidae

1647 Barred Hook-tip *Watsonalla cultraria* (Fabr.)

Just one to actinic light at Luton on 23rd July was the only record this year (AG).

Thyatiridae

1652 Peach Blossom *Thyatira batis* (L.)

A single larva found at Sandhouse Lane NR on 19th Sept was the first larval record for the county (REM).

1655 Poplar Lutestring *Tethea or or* ([D. & S.]

There was just one record this year – a singleton to MV light at Chicksands Wood on 7th June (AMB & MGB).

Geometridae

1662x Orange/Light Orange Underwing *Archiearis* sp.

If the critical identification features cannot be seen to separate the two species, records will be assigned to the aggregate group. Undetermined singletons were seen at Potton Wood on 20th Apr (IPW) and at Home Wood, Northill on 23rd Apr (JTRS); they were the only records received for this species group.

1689 Mullein Wave *Scopula marginepunctata* (Goeze)

A singleton trapped at Bromham on 21st June was the second confirmed county record of this species (PA, conf. AMB). The first confirmed record was in 2005 in the Cockayne Hatley RIS trap (IPW), plus there is an unverified record listed in the Victoria County History (1904) with no details.

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

There were 15 Vestals recorded in 2013, the best year for the species since 1983 when 20 were reported. The records came from the following sites: Leighton Buzzard 22nd July and 6th Oct (AW); Upper Caldecote 1st Aug, 16th and 21st Sept (MB); Blunham 9th Sept (PH); Potton 20th Sept (WG); Clophill 22nd Sept (RC); Bromham 2nd Oct (PA); Cockayne Hatley RIS 4th and 31st Oct (IPW); two at Luton 4th Oct (AG); and Ravensden 5th Oct (GD).

1720 Gem *Orthonama obstipata* (Fabr.) [Migrant]

Singletons were trapped at Luton 1st Aug (AG), Luton (second site) 5th Oct (HJG) and Upper Caldecote 8th Oct (MB).

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

As in previous years this species was again reported from a garden in Heath & Reach (MH). In addition one was recorded in a Leighton Buzzard garden on 18th July (AW). The only other record was of ten to MV light at Houghton Regis ChP on 2nd Aug (AMB & MGB). Adults of this species can be easily found during the day, and the lack of any records from other known sites can only be due to under-recording. We would encourage people to look for this species, on the chalk downland and quarry sites, in its flight period and submit records, preferably with a supporting photograph.

1739 Wood Carpet *Epirrhoe rivata* (Hb.)

There were four reported this year: one was trapped at Biggleswade on 22nd July (SCB conf. AMB & MGB) and three were in the Cockayne Hatley RIS trap – 24th July, 2nd Aug and 4th Aug (IPW).

1757 Spinach *Eulithis mellinata* (Fabr.)

Only two records were accepted this year, both at Potton, on 5th and 7th July (WG). Photographic evidence was provided and these are the first confirmed records since 2010. Other records have been received in recent years and some were published in previous reports, however, no supporting evidence was provided despite it being a check species and in few instances its confusion species Barred Straw had not been recorded at the same site. It is thought the moth

is declining in the UK but just hanging on in Bedfordshire, so we wish to monitor it and make sure it is being correctly identified. For the time being we will not accept further Spinach records without evidence.

1788 Scarce Tissue *Rheumaptera cervinalis* (Scop.)

A rather worn and slightly battered individual came to actinic light at Upper Caldecote on 23rd May (MB, conf. AMB). This was the only record in 2013 and the first since one in 2011.

1792 Dark Umber *Philereme transversata* ssp. *britannica* Lempke

A single larva found on Buckthorn at Bison Hill on 23rd May (AMB & MGB) was the first larval record for the county.

1794 Sharp-angled Carpet *Euphyia unangulata* (Haw.)

Singletons were trapped at Eaton Ford 17th July (AAL, conf. BD) and The Lodge (RSPB Sandy) 22nd July (SCB, conf. from photo AMB & MGB). The moth was believed to be possibly extinct in the county as the last record was of one trapped at King's Wood Heath & Reach on 13th Aug 1987 (VWA).

1843 Thyme Pug *Eupithecia distinctaria* ssp. *constrictata* Guen. [Nb]

A small pug came to MV light at a joint Beds Moth Group and Wildlife Trust event at Totternhoe Quarry on 6th July. It was thought it might be Thyme Pug at the time and the identity was confirmed later by gendet (AMB & MGB, gendet AMB). This is only the second county record, the other being two specimens in the J.C.F.Fryer collection from Sharpenhoe collected on 25th June 1948.

1870 Chimney Sweeper *Odezia atrata* (L.)

There was an amazing count of c.1000 in the meadows at Flitwick Moor on 22nd June, the annual invertebrate day (AMB, MGB, WP & IPW).

1879 Seraphim *Lobophora halterata* (Hufn.)

There was just one record in 2013 of a singleton to MV light at Bedford on 1st June (AY & TY).

1881 Early Tooth-striped *Trichopteryx carpinata* (Borkh.)

One to MV light at Heath & Reach on 8th May (MH, conf. AMB & MGB) was only the sixth county record, and the first since seven were recorded at Stockgrove Country Park in 2009 on a Beds Moth Group meeting.

1882 Small Seraphim *Pterapherapteryx sexalata* (Retz.)

Singletons were trapped at Upper Caldecote 12th July (MB, conf. AMB & MGB) and Sandy 26th July (JS, conf. AMB & MGB). They are the first records since 2009 when the Recorders caught five during a Beds Moth Group meeting at Flitwick Moor.

1894 Latticed Heath *Chiasmia clathrata clathrata* (L.)

Amongst the 15 records of this species submitted for 2013 was one individual of the form *albuguttata* Fettig, which turned up in the Cockayne Hatley RIS trap on 30th July (IPW).

1911 Large Thorn *Ennomos autumnaria* (Werneb.)

There was just one individual recorded this year, which came to light at Upper Caldecote on 7th Sept (MB).

1912 August Thorn *Ennomos quercinaria* (Hufn.)

Singletons were trapped at Potton 26th July (FW & RW), Clophill 14th Aug (RC) and Whipsnade Zoo 28th Aug (AMB & MGB).

Sphingidae

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

There were two records this year: one found alive in a conservatory in Potton on 24th Sept (BMA & RMa) and one found dead in a garden in Tempsford in November (DP).

1973 Death's-head Hawk-moth *Acherontia atropos* (L.) [Migrant]

One was found dead in a garden in Flitwick on 3rd Dec (DS). This is the first record since two were reported in 1996.

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

There were 21 records of adults this year. The first adult of 2013 was at Studham on 30th April (CRBB) and the last was at Potton on 10th Sept (WG). A maximum of two were seen at Potton on 28th Aug (WG). In addition two larval records were received from Maulden Church Meadow: one larva was found on 21st July and three on the 22nd July, though one of these was in the same place as the one found on the 21st (SR).

1991 Elephant Hawk-moth *Deilephila elpenor* (L.)

Larvae were found feeding on Himalayan Balsam *Impatiens glandulifera* at Flitwick Moor on 22nd Aug and 4th Sept (GB). This is a new foodplant for this species in Bedfordshire. From the county database it has also been recorded in the county feeding on the following plants: bedstraw sp., Bogbean, Fuchsia, and willowherb spp.

Arctiidae

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

Three were trapped in the county last year: two at The Lodge (RSPB Sandy) 25th June (CCa) and one at Upper Caldecote 23rd July (MB). They represent the fifth and sixth county records following on from one seen in Potton Wood in 2009.

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

A singleton in the Cockayne Hatley RIS trap on 19th July (IPW) was the only one recorded in the county in 2013 and the first since three were seen in June 2011.

2051 Four-spotted Footman *Lithosia quadra* (L.) [Migrant]

Colonel S.H.Kershaw made note of having trapped one at Aspley Heath on 31st July 1946 but the specimen was not seen when his collection was checked. On 2nd Oct 2013 one male came to light at Bromham (PA, conf. AMB & MGB) and this becomes the first confirmed record of this species for the county. Amazingly, two further males were then trapped at Kempston on 4th Oct (MJP, conf. AMB & MGB) and the Recorders managed to see all three on the same day!

2061 Buff Ermine *Spilosoma luteum* (Hufn.)

An individual showing aberrant markings on just one forewing and part of the thorax was trapped at Lower Stondon on 3rd July (AMB & MGB). The markings on the right forewing were similar to the known form ab. *eboraci* Tugwell 1894 (Martin Honey pers. comm.).

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

It was a good year for Jersey Tiger with seven reported during the year as follows: Kempston 1st, 7th and 11th Aug (all singletons and different individuals) (MJP); Bedford 3rd Aug (yellow form) (NWA & RWA); Cockayne Hatley 3rd Aug (BMA & RMA); Bromham 10th Aug (yellow form) (MaH & MiH) and Bromham (second site) 1st Sept (yellow form) (PA).

2068 Scarlet Tiger *Callimorpha dominula* (L.)

Two adults were disturbed from comfrey, during work to clear Himalayan Balsam in part of Flitwick Moor on 9th July (SJ, det. RC). Adults were also reported flying in a garden in Heath & Reach on several days during the summer but no specific dates were provided (MH).

2069 Cinnabar *Tyria jacobaeae* (L.)

A count of 300 larvae on ragwort at Pegnut Wood on 26th July (DOM) was particularly noteworthy. There were seven other records of larvae in 2013 and the only other count made was of one at Chawston Lakes on the 21st June (NDW). It is always good to give counts, if possible, as it gives an indication of abundance.

Noctuidae

2081 White-line Dart *Euxoa tritici* (L.)

A notable count of 77 to actinic light on the 'old heath' at The Lodge (RSPB Sandy) on 10th Aug (AMB & MGB) is the highest in the county database.

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

A singleton to light at Upper Caldecote on 31st Oct (MB) was the only record in 2013. It was a female and laid eggs; four larvae survived to pupation and two adults emerged in Jan 2014.

2126 Setaceous Hebrew Character *Xestia c-nigrum* (L.)

Of the ten highest trap counts of this species in the county database, seven were in September 2013. The five highest counts are as follows: 391 at Turvey Abbey 2nd Sept 2013 (BrJM); 239 in the Sandy I RIS trap 30th Aug 1970 (RSPB); 220 at Turvey Abbey 4th Sept 2013 (BrJM); 200 at Turvey 5th Sept 2013 (HAS) and 199 at Turvey Abbey 9th Sept 2013 (BrJM).

2142 Beautiful Yellow Underwing *Anarta myrtilli* (L.)

There were three records for this in 2013, all from the 'old heath' at The Lodge (RSPB Sandy). A singleton was trapped on 26th July (MB & LB); an adult was seen during the day on 6th Aug (CCA) and a larva was found on the 8th Aug (RE).

2171 Marbled Coronet *Hadena confusa* (Hufn.)

The only record in 2013 was of one trapped at Biggleswade on 12th June (LB).

2177 Hedge Rustic *Tholera cespitis* ([D. & S.])

This moth seems to have had a good year with eight having been recorded from the following locations: Lower Stondon 9th Aug (AMB & MGB); The Lodge (RSPB Sandy) 10th Aug (2) (AMB & MGB); Clophill 26th Aug and 12th Sept (RC) and Luton 30th Aug, 1st and 3rd Sept (AG). These are the first records since two were recorded in 2010.

2194 White-point *Mythimna albipuncta* ([D. & S.]) [Migrant]

Singletons were trapped at Upper Stondon 30th Aug (JE); Clophill 4th Sept (RC); Upper Caldecote 8th and 12th Sept (MB); Lower Stondon 21st Sept (AMB & MGB) and Potton 4th Oct (FW & RW).

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

This species has been turning up annually since 2010 in the county but generally as singletons; one at Biggleswade on 25th July (LB) was the only record for 2013.

2214 Chamomile Shark *Cucullia chamomillae* ([D. & S.])

A singleton to light at Biggleswade on 16th June (LB) was the only record in 2013.

2223 Toadflax Brocade *Calophasia lunula* (Hufn.) [RDB]

This species has been increasing in numbers since it was added to the VC30 list in 2010. In 2013 the Recorders received 22 records of this, all bar one coming from either Biggleswade (17 records from one site LB) or Luton (4 records split between two sites AG & HJG). The other record came from Upper Caldecote on 6th July (MB), which was a new site for the species.

2260 Dotted Chestnut *Conistra rubiginea* ([D. & S.])

This species is also increasing in the county but not quite as quickly as Toadflax Brocade. It was new to VC30 in 2007, and 2013 saw the most records (7) in a year of it so far. It was recorded from Clophill 14th Apr (RC); Cockayne Hatley RIS trap 14th (2) and 15th Apr (IPW); Potton 14th Apr (WG); Upper Caldecote 22nd Apr (MB); Sandy 24th Apr (KF) and Biggleswade 5th May (LB).

2276 Pale-lemon Sallow *Xanthia ocellaris* (Borkh.) [Na]

There was just one record this year, with one to light at Upper Caldecote on 2nd Oct (MB).

2281 Alder Moth *Acronicta alni* (L.)

There were two records of adult moths this year – two trapped at Chicksands Wood on 7th June (AMB & MGB) and one trapped at Studham on 18th June (CRBB) – plus a final instar larva was a lucky find in Wilstead Wood for KB on 10th Aug.

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

Singletons were recorded at Waterloo Thorns 12th July (DB); Halsey Wood 15th July (HAS); Turvey Abbey 21st July (BrJM) and Markyate 21st and 22nd July (DGi). These are the first records since 2006.

2292 Tree-lichen Beauty *Cryphia algae* (Fabr.) [Migrant]

There were six of these recorded in 2013 as follows: Biggleswade 24th July and 7th Aug (LB); Luton 25th July (AG); Upper Caldecote 7th and 23rd Aug (MB) and Potton 14th Aug (WG).

2312 Olive *Ipimorpha subtusa* ([D. & S.])

Singletons were trapped at Upper Caldecote 15th July (MB) and Biggleswade 16th July (SCB).

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

Yet again this species was recorded at Upper Caldecote in 2013, with singletons on 21st and 28th Aug (MB). It has now been recorded here in four out of the last five years – it was not recorded in 2010.

2391 Silky Wainscot *Chilodes maritimus* (Tausch.)

The sixth county record of this species was trapped at Eaton Ford on 20th July (AAL), the first since one was trapped at Chicksands Wood in 2010.

2397 Small Yellow Underwing *Panemeria tenebrata* (Scop.)

There are still under 50 records of this species in the county database. Since 2003 it has not been recorded every year, and when it has there have only been a couple of records. Following this

pattern, just two were recorded this year at Sandhouse Lane NR on 27th May (REM) and Yelow New Wood on 4th June (DVM).

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

There was only one record in 2013, from Upper Caldecote on 22nd Oct (MB). The best year for records of this species is still 2006 – another migrant year – when 28 records of 38 individuals were received.

2439 Gold Spot *Plusia festucae* (L.)

A singleton was trapped at Upper Caldecote on 4th Sept (MB).

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

The first recorded Silver Y of the year was one at Bromham on 2nd June (MaH & MiH) and the last were singletons on 11th Nov at Biggleswade (LB) and Clifton (RM). The maximum count was 45 at Potton Wood on 13th Aug (IPW).

2449 Dark Spectacle *Abrostola triplasia* (L.)

Singletons were recorded at Turvey Abbey on 13th July (BrJM) and Lower Stondon on 1st Oct (MGB). These are the first records since 2009, when one was recorded at Studham. It is surprising that this is not more common in the county – there are only 17 records in the database.

2462 Mother Shipton *Callistege mi* (Cl.)

Surprisingly, there were only two records of this species in 2013 with singletons at Old Warden Tunnel on 4th June (KB) and in the meadow at Flitwick Moor on 22nd June (IPW).

[**2465 Four-spotted** *Tyta luctuosa* ([D. & S.]) [Na]

Yet again, there were no records of this species this year. It was last recorded in 2009.]

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

There was only one record of this species in 2013, and that was of one in the Cockayne Hatley RIS trap on 7th Aug. It is the first since one was found in the Eaton Bray RIS trap in 2010, and there have been just four others recorded.

2493 Dotted Fan-foot *Macrochilo cribrumalis* (Hb.) [Nb]

This species was new to the county in 2013 and two moths were recorded. The first was trapped in Clophill on 13th July (RC, conf. AMB & MGB), which expired and the Recorders have the specimen. The other, a male, was caught in the Cockayne Hatley RIS trap on 17th July (IPW, gendet DVM).

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 when requested.

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Melissa and Andy Banthorpe are the Society's joint Recorders for Macro-moths, a position they have held in an honorary capacity since late 2006.