

Micro-moths 2018

Andy & Melissa Banthorpe

Introduction

During the year 14 species were added to the county list: *Micropterix mansuetella*, *Trifurcula headleyella*, *Antispila treitschkiella*, *Nemapogon variatella*, *Ochsenheimeria vacuella*, *Trachypepla contritella*, *Mompha conturbatella*, *Mompha locupletella*, *Ancylis diminutana*, *Cydia illutana*, *Cydia cosmophorana*, *Pammene ignorata*, *Anania fuscalis* and *Spoladea recurvalis*. Amongst these *Trachypepla contritella* was new to Britain. Full details of these can be found in the accounts below.

Review

The following list includes species of interest recorded in VC30 during 2018. Most of the species analysis is based on the 11,673 records for 2018 that had been uploaded to the county database by mid-April 2019. This also includes records from the two Rothamsted traps in the county as David Manning has kindly identified the micro-moths from these where kept.

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 list of the micro-moths of VC30 with their current status is on the Beds Moth Group (BMG) website www.vc30moths.org.uk or available from the Recorders on request. This is based on a national status list and associated supporting documentation that was produced by the Moths Count team at Butterfly Conservation in early 2016.

Micropterigidae

1.002 *Micropterix mansuetella* (Zell.) [Nb] [2]

This was a new addition to the county list. A singleton was found on 25th May in King's Wood Heath & Reach (SRP, conf. AMB). It was the remaining species in the genus and was expected to be found in the county at some point.

Nepticulidae

4.064 *Trifurcula headleyella* (Stt.) [pRDB2] [44]

This was also added to the county list in 2018. A tiny Nepticulid was swept from *Oregano* etc. on 18th May at Pegsdon Hills (AMB). A subsequent gendet (AMB) proved it was a male of this scarce species, which is a leafminer of Selfheal *Prunella vulgaris*. Its previously known range was from east Kent through to Dorset and Wiltshire, just getting into east Gloucestershire. It has probably been overlooked in Bedfordshire and may have been present for some time.

Heliozelidae

6.002 *Antispila petryi* Martini [159]

This species and the next have been for many years regarded as conspecific under the name of *Antispila treitschkiella*. However, DNA work and research, resulting in a paper published in late

2018 (van Nieuwerkerken *et al.* 2018), makes it clear that both are valid species. *A. petryi* feeds as a leafminer on Dogwood *Cornus sanguinea* and *A. treitschkiella* on Cornelian Cherry *Cornus mas*. All previous records of *A. treitschkiella* (in Arnold *et al.* 1997 as *A. petryi*, to add to the confusion) in the county have now been re-assigned to *A. petryi* because all were noted as feeding on *C. sanguinea*. There are 78 records between 1984 and 2018, with six in 2018.

6.0021 *Antispila treitschkiella* (Fischer von Röslerstamm)

See the comments on the previous species. The first county record of this species was of leafmines in *Cornus mas* on 7th July at Luton Hoo (MS). Subsequently leafmines were found on *C. mas* between 20th July and 22nd October at Bedford; Clifton; Kempston; RAF Henlow; Wrest Park, Silsoe; and Woburn Abbey Gardens (AMB, MGB, HJG & SRP).

Tischeriidae

10.006 *Coptotriche angusticollella* [Nb] (Dup.) [127]

Six tenanted leafmines of this were found on Rose *Rosa* spp. on 20th October in Maulden Wood (AMB & MGB). This was the fourth county record, and all come from a very small area in that wood where it was first found in 1984. It has been found nowhere else in the county.

Tineidae

12.020 *Nemapogon variatella* (Clemens) [pRDB3] [218]

This was added to the county list from a single male that came to MV light on 26th July in Southill (JHM, genet AMB). This, like many in the genus, feeds as a larva on fungi and dead wood and possibly stored grain and dried produce.

Gracillariidae

15.007 *Caloptilia azaleella* (Brants) [285]

Following the record from 2017, leafmines were found again on *Azalea* on 22nd October 2018 in Woburn Abbey Gardens (AMB).

15.027 *Parornix carpinella* (Frey) [Na] [302a]

Five leafmines of this species were found on Hornbeam *Carpinus betulus* on 25th September in King's Wood Houghton Conquest (AMB & MGB). This was the third county record following finds at Chicksands Wood in 2010 and East Hyde in 2011.

15.045 *Phyllonorycter mespilella* (Hb.) [Nb] [325]

As in 2013 and 2017, leafmines of this species were found in Conference Pear *Pyrus communis* on 3rd September at Upper Caldecote (MB). This remains the only site in the county where this species has been found.

Yponomeutidae

16.024 *Ocnerostoma friesei* Svensson [445]

This was reported new to the county last year. However, an older record was subsequently submitted, from 20th May 2013 at The Lodge (RSPB Sandy) (RSPB, genet DLB).

Ypsolophidae

17.016 *Ochsenheimeria vacculella* Fischer von Röslerstamm [Na] [253]

A singleton of this species was found on 22nd June by beating at a site in Luton (MGT), and was new for the county. The species is known elsewhere as an agricultural pest as the larvae feed on coarse grasses and wheat etc. causing wilting.

Glyphipterigidae

19.006 *Glyphipterix forsterella* (Fabr.) [394]

With only two previous records of this species, both from Flitwick Moor, it was good to have two further records in 2018. A singleton was found on 25th May at King's Wood Heath & Reach (SRP), a new site, and four were swept on 26th May at Flitwick Moor (AMB).

Argyresthiidae

20.002 *Argyresthia glabratella* (Zell.) [Nb] [403]

The third county record of this very plain member of the genus came to light on 30th May in Home Wood, Northill (MB & BS, gendet AMB).

Oecophoridae

28.024 *Tachystola acroxantha* (Meyrick) [656]

With all three previous records coming from the same site in Biggleswade, it was good that the two records this year came from other sites. One was trapped on 9th May at Slip End (CS) and another singleton was trapped on 15th November at Kempston (HJG).

28.029 *Trachypepla contritella* (Walk.)

This species was recorded as new to Britain and is by far the most interesting species to occur in the county this year. One came to MV light on 23rd June in Eaton Ford (RIB det. S.Nash, conf. R.Hoare). During research for a paper on this occurrence (Banthorpe 2019) a previously unidentified micro-moth from 4th July 2012 at another Eaton Ford site (AAL) was finally discovered to be the same species. Thus the 2012 specimen becomes the first British record. Four more were recorded just across the Great Ouse on 2nd and 7th July in Eynesbury (Huntingdonshire VC31) (BD). The species is a native of New Zealand and to the best of our knowledge has not been recorded anywhere else in Europe. The identity was confirmed in consultation with Robert Hoare from New Zealand, and by a visit to the Natural History Museum London by AMB to compare the 2018 example with the type specimens from New Zealand which reside in the collection there. The larval foodplants are hanging mosses in the genus *Weymouthia* or possibly *Papillaria*, both being very similar. It is unknown how the species arrived in the UK, maybe with plants from New Zealand.



Trachypepla contritella

Melissa Banthorpe

Lypusidae

30.001 *Agnoea flavifrontella* ([D. & S.]) [Nb] [661]

The third county record of this cryptic species was beaten from foliage whilst looking for larvae on 26th May at Flitwick Moor (MGB, gendet AMB). First recorded at Stotfold in 1982, it was then found in Studham in 2014. The larvae feed on dead leaves.

Depressariidae

32.020 *Agonopterix curvipunctosa* (Haw.) [pRDB3] [711]

A male of this species came to light on 4th July at Home Wood, Northill (BS, gendet AMB) and was only the second county record. The first was from Totternhoe Knolls back in 2006.

Gelechiidae

35.0191 *Anarsia innoxiiella* Gregersen & Karsholt [857a]

For information on this species please refer to the 2017 micro-moth report but it is worth noting that 14 specimens were caught in 2018 between 11th June and 19th July.

35.020 *Anarsia spartiella* (Schr.) [856]

A female of this species came to MV light on 13th July at Aspley Wood (SRP, gendet AMB) just inside VC30. The previous four records come from Cranfield in 1982, Sharnbrook in 1985, Cockayne Hatley in 1996 and Eaton Ford in 2013. The larvae feed on Broom *Cytisus*, Dyer's Greenweed *Genista tinctoria* and Gorse *Ulex*.

35.080 *Eulamprotes unicoloriella* (Dup.) [Nb] [732]

Three males and one female to MV light on 15th June at Totternhoe Old Quarry (AMB & MGB, gendet AMB) represented the fourth county record. The larvae are believed to feed on St John's-wort *Hypericum* species.

35.098 *Gelechia scotinella* H.-S. [pRDB2] [801]

With two previous records, both from the Cockayne Hatley RIS trap in 2010 and 2013, it was a surprise to receive three in one year. Singletons were trapped on 25th June (LRB, MB & BS, gendet AMB) and 4th July (BS, gendet AMB) at Home Wood, Northill, and on 13th July at Aspley Wood (SRP, gendet AMB). The larvae feed on Blackthorn *Prunus spinosa*.

35.150 *Carpatolechia notatella* (Hb.) [768]

A female to light on 15th June at Totternhoe Old Quarry (AMB & MGB, gendet AMB) was the fourth county record.

Elachistidae

38.025 *Elachista atricomella* Stt. [pRDB2] [597]

Despite being regarded nationally as common, this species had not been recorded in the county since 2009. Therefore one on 25th May at Arlesey Glebe Meadow (AM) was a nice find.

Momphidae

40.001 *Mompha conturbatella* (Hb.) [885]

This was an addition to the county in 2018. One to MV light on 15th June at Totternhoe Old Quarry (AMB & MGB) immediately stood out as being large for a *Mompha* and proved to be this species. The larvae feed on Rosebay Willowherb *Chamaenerion angustifolium*.

40.009 *Mompha sturnipennella* (Treit.) [Nb] [891]

This species is very similar to the very common *Mompha subbistrigella*, though it is larger and has some extra markings that only show when fresh hence dissection is often required to prove its identity. Two to a light trap on 3rd August in Biggleswade (SCB) were very fresh and clearly identifiable from photographs. These were the fifth county record, following singletons at Biggleswade and Sandy in 2012 and Eaton Bray in 2014. The larvae feed on Rosebay Willowherb *Chamaenerion angustifolium*.

40.011 *Mompha langiella* (Frey) [880]

Leafmines of this species were found in willowherb *Epilobium* spp. on 1st September at Duck End NR (AMB & MGB). This was only the fifth county record, following mines at Maulden Wood in 2005 (two dates) and 2011 and King's Wood Heath & Reach in 2014.

40.013 *Mompha locupletella* (Hb.) [882]

This was the second species of *Mompha* to be added to the county list in 2018. An adult was swept on 2nd June at Flitwick Moor (ARO, conf. AMB). This was a pleasing addition of a colourful member of this genus. The larvae are leafminers of willowherbs *Epilobium* species.

Scythrididae**43.007 *Scythris limbella* (Fabr.) [pRDB3] [918]**

Following on from the first county record at Biggleswade in 2015, there were two this year. A singleton was trapped on 24th July at a second Biggleswade site (SCB) plus one was trapped on 5th August at the original site (LRB).

Tortricidae**49.009 *Capua vulgana* (Frölich) [1007]**

Following the addition of this to the county list in 2012, three individuals of this species came to light on 30th May in Home Wood, Northill (MB & BS).

49.094 *Phtheochroa sodaliana* (Haw.) [Nb] [923]

The third county record of this species came from a light trap on 11th June in Luton (AG), the same site as the first county record in 2014. It is a surprise that more have not been found, as the foodplant (the fruit of Purging Buckthorn *Rhamnus cathartica*) is common on the chalk and scattered elsewhere in the county. In the 2017 report a record from 2008 was mentioned but this was from Blow's Downs, which, although in the administrative county of Bedfordshire, is in VC20 (Hertfordshire).

49.129 *Cochylidia rupicola* (Curt.) [959]

Ten years on from the first record, one came to MV light on 11th July at The Lodge (RSPB Sandy) (AE *et al.*). The moth should be looked for amongst stands of its foodplant Hemp Agrimony *Eupatorium cannabinum*.

49.209 *Ancylis diminutana* (Haw.) [1119a]

A male to MV light on 30th May in Home Wood, Northill (MB & BS) was the first county record. The identity was confirmed by gendet (AMB). The larvae feed on Sallow *Salix* species.

49.242 *Epinotia nanana* (Treit.) [Nb] [1145]

There were only two previous records of this in the county, back in 1985 and 1992. Therefore it was good to have three records in 2018 – on 25th June (MB, LRB & BS) and 4th July (BS) in Home

Wood, Northill, and on 6th July in Lower Stondon (AMB & MGB). All were males, which were gendetted by AMB. The foodplants are spruce *Picea* species.

49.253 *Epinotia fraternana* (Haw.) [Nb] [1143]

One in a moth trap on 3rd June in Kempston (HJG, det. AMB) was only the second record for the county of this scarce species. The previous record was at Eaton Ford in 2006. The larvae feed on spruce *Picea* species.

49.267 *Eucosma fulvana* Steph. [1200b]

This species falls into a group of three particularly hard-to-separate *Eucosma* species, of which *E.hohenwartiana* is commonly recorded in the county and *E.parvulana* has not yet been recorded. The males are not separable on gendet, only females. There are 12 previous records dating between 1992 and 1998, so after a long gap it was good to have one on 26th July in the Eaton Bray II RIS trap (GBu, gendet DVM).

49.329 *Cydia illutana* (H.-S.) [pRDB3] [1266a]

Two males trapped on 30th May in Home Wood, Northill (MB & BS, gendet AMB) were the first record for the county. The larvae feed in the seeds of the cones of coniferous trees.

49.330 *Cydia conicolana* (Heylaerts) [Nb] [1269]

The third county record (following two in 2016) was of a male to a light trap on 3rd June in Lower Stondon (AMB & MGB, gendet AMB). The larvae feed in the cones of pine *Pinus*, mainly Scots Pine *P.sylvestris*.

49.332 *Cydia coniferana* (Saxesen) [Nb] [1268]

A male to a light trap in Luton on 15th June (AG, gendet AMB) was only the fourth county record of a species whose larvae feed under the bark of pine *Pinus* and spruce *Picea* species.

49.334 *Cydia cosmophorana* (Treit.) [Nb] [1267]

The first county record was of a female to a light trap on 27th July in Lower Stondon (AMB & MGB, gendet AMB). Like the previous two species the larvae feed on conifers, in this case on resinous nodules and galls on the bark of Scots Pine *Pinus sylvestris*.

49.339 *Cydia servillana* (Dup.) [Nb] [1256]

One found in the daytime on 25th May in King's Wood Heath & Reach (SRP, conf. AMB) was only the second for the county, following the first at Eaton Ford in 2012. The larvae feed inside a twig of willow *Salix* spp. causing a gall.

49.348 *Grapholita pallifrontana* Zell. [pRDB3] [1243]

Following the work on this species in 2017, more surveys were carried out in 2018. This resulted in records from eight sites between 26th May and 7th June. The three new sites were – Bedford near the Sea Cadets Hut at Longholme; near Cranfield; and one of the roadside nature reserves at Ireland. Continuing presence was observed at five other known locations.

49.350 *Grapholita caecana* Schläger [pRDB3] [1240]

This species continues to be recorded at its only known Bedfordshire site of Totternhoe Old Quarry. On 15th June one was found while dusking (AW, det. AMB) and five more came to MV light (AMB & MGB, det. AMB).

49.361 *Pammene ignorata* Kuznetsov [pRDB2] [1228a]

This is a rare species in the country that seems to be slowly increasing its range, so it was good that it has now been added to the county list. A female came to MV light on 30th May in Home Wood, Northill (MB & BS, gendet AMB).

49.382 *Strophedra nitidana* (Fabr.) [1222]

The fifth county record was of one trapped on 25th June at Home Wood, Northill (LRB, MB & BS).

Pyralidae**62.010 *Elegia similella* (Zinck.) [Nb] [1449]**

Following the addition of this to the county fauna in 2017, one came to a light trap on 6th June in Southill (JHM, det. AMB).

Crambidae**63.016 *Anania fuscalis* ([D. & S.]) [1386]**

Following a re-assessment of this species in the county, the 1989 record from Clifton mentioned in Arnold *et al.* was removed from the county list due to several reasons. However, the species is definitely now confirmed as present in the county, as a very worn male came to MV light on 15th June in Totternhoe Old Quarry (AMB & MGB, gendet AMB). In this county the foodplant is Yellow Rattle *Rhinanthus minor*. It should be searched for wherever this plant occurs in numbers, and can be found in the afternoon and evening.

63.030 *Paratalanta hyalinalis* (Hb.) [Nb] [1374]

A female came to MV light on 27th July at Totternhoe Old Quarry (AMB & MGB, gendet AMB). This was very pleasing as the only previous record was from Col S.H.Kershaw at Totternhoe Knolls way back on 17th June 1947. The larvae feed on Common Knapweed *Centaurea nigra* and Great Mullein *Verbascum thapsus*, and the moths, like the previous species, could have been overlooked as when worn they are poorly marked.

63.047 *Spoladea recurvalis* (Fabr.) [Migrant] [1404]

The first and second county records of this scarce autumn migrant came from singletons trapped on 15th October at Biggleswade (LRB) and 16th October at Tempsford (GA & VB).

63.122 *Donacaula mucronella* ([D. & S.]) [Nb] [1330]

One to a light trap on 19th June in Biggleswade (LRB, conf. AMB) was only the fourth county record.

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, as in 2016 this started accepting micro-moth records.

References

- Agassiz, D.J.L., Beavan, S.D. & Heckford, R.J. 2013 *Checklist of the Lepidoptera of the British Isles*. Royal Entomological Society
 Arnold, V.W., Baker, C.R.B., Manning, D.V. & Woiwod, I.P. 1997 *The Butterflies and Moths of Bedfordshire*. Bedfordshire Natural History Society

- Banthorpe, A.M. 2019 *Trachypepla Contritella* (Walker, 1864) (Lep.: Oecophoridae) new to Britain. *Entomologist's Record and Journal of Variation* 131 9–12
- Bradley, J.D. 2000 *Checklist of Lepidoptera recorded from the British Isles*. Second Edition (revised)
- Davis, A.M. 2012 *A Review of the Status of Microlepidoptera in Britain*. Butterfly Conservation, Wareham. Butterfly Conservation Report No. S12–02
- van Nieuwerkerken, E.J., Lees, D.C, Doorenweerd, C., Koster, S. (J.C.), Bryner, R., Schreurs, A., Timmermans, M.J.T.N, & Sattler, K. 2018 Two European *Cornus* L. feeding leafmining moths, *Antispila petryi* Martini, 1899, sp. rev. and *A. treitschkiella* (Fischer von Röslerstamm, 1843) (Lepidoptera, Heliozelidae): an unjustified synonymy and overlooked range expansion. *Nota Lepidopterologica* 41(1) pp 39–86

Acknowledgements

Records and support gratefully acknowledged from the following:

P.Almond, L.Alton, G.Anderson (GA), C.R.B.Baker, K.Balmer, R.I.Bashford (RIB), S.C.Blain (SCB), V.Booth (VB), S.Braybrooke, R.A.Brind, D.L.Buckingham (DLB), K.Burgess, Lionel Burgess (LRB), Louie Burgess, K.Burgess, M.Burgess (MB), G.Buss (GBu), C.Campbell, L.Carman, R.A.Cartwright, G.Castle, R.Christopher, P.Cook, B.Cooke, A.Day, J.Day, I.K.Dawson, A.De Winter, M.De Winter, B.Dickerson (BD), A.Donnelly, A.Edwards (AE), J.England, W.George, D.Girvan, P.Gosling, A.J.Green, Greensand Trust, H.J.Griffiths (HJG), A.Grimsey (AG), M.J.Hammond, J.Harding-Morris (JHM), M.Hawkes, B.Henwood, L.J.Hodgkins, P.Holden, P.Howard, D.Inward, I.Kelly, J.R.Langmaid, R.Lawrence, M.Ledlie, R.Lyons Sinclair, D.V.Manning (DVM), R.McIlwrath, A.Millar (AM), T.Morgan, L.Murphy, Natural England, A.R.Outen (ARO), M.J.Palmer, A.Parker, J.Pitts, S.R.Plummer (SRP), S.Raven, B.Sale (BS), J.T.R.Sharrock, C.Shorthall (CS), A.Skinner, B.Squires, M.Sterling (MS), M.G.Telfer (MGT), S.Thompson, M.J.Watt, A.Whitney (AW), The Wildlife Trust for Bedfordshire, Cambridgeshire, and Northamptonshire, N.D.Willits, E.Wilson, R.Wilson, Woburn Safari Park, I.P.Woiwod, R.Wynde, A.Yates and T.Yates.

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