

## Micro-moths 2020

### Andy & Melissa Banthorpe

#### Introduction

During the year 11 species were added to the county list: *Bucculatrix ulmifoliae*, *Phyllonorycter pastorella*, *Phyllocnistis citrella*, *Lyonetia prunifoliella*, *Prays ruficeps*, *Scrobipalpa ocellatella*, *Coleophora amethystinella*, *Oxyptilus distans*, *Epinotia cinerea*, *Epinotia grandaevana* and *Pammene agnotana*. Full details of these can be found in the accounts below.

#### Review

The following list includes species of interest recorded in VC30 during 2020. Most of the species analysis is based on the 11,231 records for 2020 that had been uploaded to the county database by mid-April 2020. This also includes only easily identifiable species from the Eaton Bray II Rothamsted trap as Andy has not had time to dissect the rest yet. A total of 623 micro-moth species were recorded in the county in 2020 compared with 581 in 2019 and 595 in 2018.

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 list of the micro-moths of VC30 with their current status 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 based on a national status list and associated supporting documentation that was produced by the Moths Count team at Butterfly Conservation in early 2016.

#### Nepticulidae

##### 4.020 *Stigmella paradoxa* (Frey) [Nb] [82]

Following on from the re-finding this species in the county in 2019, the site was checked again in 2020 and leafmines were found in Hawthorn *Crataegus* sp. near Barton-le-Clay on 30th July (AMB & MGB).

##### 4.051 *Stigmella poterii* (Stainton) [Nb] [59]

Two tenanted leafmines of this species in Salad Burnet *Sanguisorba minor* were found at Sharpenhoe on 29th September (AMB). These were the first records in the county since 1986.

#### Bucculatricidae

##### 14.011 *Bucculatrix ulmifoliae* Hering [274a]

New to VC30 in 2020. A surprise find in Home Wood, Northill, on 12th September, whilst looking for leafmines of various species, were mines of this species on a 'smooth leaved' elm *Ulmus* sp. (AMB & MGB). New to Britain in 2007 (Langmaid *et al* 2007) with leafmines found on a planted non-native elm 'Sapporo Autumn Gold', which is a hybrid of Siberian Elm *U.pumila* and Japanese Elm *U.davidiana* var. *japonica*, we had not expected to find this species in Bedfordshire. Contact was made with Brian Eversham who, on receiving samples of three elms from the site that had mines, identified the trees as '*Ulmus minor* ssp. *minor* of Stace (Stace, C.A. 2019. *New Flora of the British Isles*. (4th edition) Leicester: C&M Publishing), close to *U.peninsularis* Armstrong & Sell, 2018 (in Sell, P. & Murrell, G. 2018. *Flora of Great Britain and Ireland*. Volume 1 Cambridge: Cambridge University Press)'. A total of 30+ leafmines were found on two visits (12th and 20th September) plus moulting cocoonets. In addition, whilst recording leafmines at Fairfield, near Arlesey, on 18th October AMB found ten mines of *B.ulmifoliae* on elm regrowth in a copse. This was also a smooth-leaved elm. Material was collected from this and also sent to Brian, who reported his identification of the elm as '*Ulmus minor* ssp. *minor* of Stace, *U.serratifrons* Armstrong & Sell, 2018'. The species is now known from nine Vice-counties in southeast England, and full details

along with a review of the national status were published in an entomological journal (Banthorpe 2021).

### Gracillariidae

#### 15.047 *Phyllonorycter hostis* Triberti [327]

Until recently there had only been a single record of this in the county and there is little detail of that. It was recorded under its old name of *P.cydoniella* as found in Bedfordshire by Ian Watkinson though the site or date is unknown (DVM in Arnold *et al* 1997). In addition adults of this species are identical to those of *P.blancardella* so dissection is required to separate the two. A male was bred from a leafmine on Wild Service Tree *Sorbus torminalis* collected from Maulden Wood on 8th October 2018 (AMB & MGB, gendet AMB). This was not dissected until 2020, and hence previously unreported. In addition three males were bred from leafmines on Crab Apple *Malus sylvestris* collected in Marston Thrift on 4th July 2020; a single adult male was also collected from the same tree on the same date (AMB & MGB, gendet AMB).

#### 15.087 *Phyllonorycter comparella* (Duponchel) [Na] [365]

With only four previous records, it is good to report that leafmines of this species were found in *Populus* sp. at six new sites in 2020.

#### 15.0862 *Phyllonorycter pastorella* (Zeller) [316a]

New to VC30 in 2020. This species was reported new to Britain as recently as 2014 (Freed 2015). It is a leafminer of narrow-leaved willows *Salix* sp. and it was expected that it would turn up in VC30 soon. A leafmine was found on *Salix fragilis* at Bedford Embankment on 6th September (TF). Following on from this, leafmines were found in *S.fragilis* at Priory CP on 21st September (AMB) and along Willington cycletrack on 25th October (AMB & MGB).

#### 15.088 *Phyllonorycter sagittella* (Bjerkander) [pRDB2] [366]

Tenanted leafmines were found in Aspen *Populus tremula* at a previous and also new site in Maulden Wood on 9th June and 7th October (AMB & MGB).

#### 15.0931 *Pylocnistis citrella* Stainton [366b]

This is a non-native species whose larvae are sometimes imported with *Citrus* trees and fruit. Leafmines of this were found in a plant of *Citrus sinensis* in a garden centre at Willington on 14th August (AMB & MGB).

### Yponomeutidae

#### 16.022 *Cedestis subfasciella* (Stephens) [443]

Six larvae of this species were found mining needles of Scot's Pine *Pinus sylvestris* at The Lodge (RSPB Sandy) on 14th February (SRP). The only previous larval record was at Potton Wood back in 1985.

#### 16.023 *Ocnerostoma piniariella* Zeller [Nb] [444]

The second county record of this species was a female bred from a larva found in a needle of Scot's Pine *Pinus sylvestris* at Millennium Wood, Southill, on 8th March; the adult was dissected to prove the ID (JHM, gendet AMB). The only previous record was an adult at Eaton Ford in 2008.

#### 16.024 *Ocnerostoma friesei* Svensson [445]

Following on from records in 2013 and 2017, this species was found as a larva in a spinning between needles of Scots Pine *Pinus sylvestris* at The Lodge (RSPB Sandy) on 14th February (SRP). In addition two females came to a light trap in Biggleswade on 19th May (LRB, gendet AMB).

## **Lyonetiidae**

### **21.002 *Lyonetia prunifoliella* (Hübner) [pRDB1] [262]**

New to VC30 in 2020. Six leafmines and actively feeding larvae of this species were found in the leaves of Blackthorn *Prunus spinosa* regrowth at Marston Thrift on 4th July (AMB & MGB). Subsequently, five recently-vacated leafmines were found at Upper Stondon on 10th September (AMB & MGB), one tenanted leafmine in a hedgerow at Northill on 12th September (AMB & MGB) and mines and feeding signs in Home Wood, Northill, on 20th September (AMB). It is likely that larvae and mines will be present at other sites in the county and should be looked for in early July and early September.

## **Praydidae**

### **22.003 *Prays ruficeps* (Heinermann) [448a]**

New to VC30 in 2020. Undoubtedly this species has been overlooked in the past. There is a dark form of *Prays fraxinella* that still shows some of the markings of that species in shades of very dark grey/black. *P. ruficeps*, however, has uniform dark wings with a contrasting yellowish-orange head. Unfortunately the genitalia of the two species are identical though DNA work proves they are separate species and dissection does then id to this pair. Therefore, the following three records were identified by visual means: a female at Upper Caldecote on 18th August (MB, gendet AMB), a male and female at Lidlington on 15th September (SRP, gendet AMB), and one at Biggleswade on 23rd June (LRB conf. AMB).

## **Oecophoridae**

### **28.029 *Trachypepla contritella* (Walker)**

There were two records of this species in 2020, from Eaton Ford on 26th June (2) and 1st August (RIB).

## **Lypusidae**

### **30.001 *Agnoea flavifrontella* ([Denis & Schiffermüller]) [Nb] [661]**

The fourth county record of this species came to a light trap in Tempsford on 24th May (GA & VB, gendet DLB). Previous records were in 1982, 2014 and 2018.

## **Depressariidae**

### **32.028 *Agonopterix palorella* (Zeller) [Nb] [700]**

Only the second county record came to light at Pegsdon Hills on 11th August (RIB, AG & SRP, det. AMB from photo). Interestingly, this was exactly 13 years to the day since the first county record - at the nearby Barton Hills on 11th August 2007 (AMB & MGB, det. DVM).

## **Gelechiidae**

### **35.053 *Isophrictis striatella* ([Denis & Schiffermüller]) [Nb] [729]**

The first larval record of this species for the county was of a single larva found in a seedhead of Tansy *Tanacetum vulgare* in 2020, which was found along the river Ivel bank at Blunham on 21st September (AMB & MGB). Seedheads were collected and then inspected closely under a microscope. In addition, there were two records of adults - from Home Wood, Northill, on 31st July (BS, gendet AMB) and from Southill on 9th August (JHM, gendet AMB).

### **35.061 *Ptocheuusa paupella* (Zeller) [748]**

The first larval record of this species for the county was of a single larva found in a flowerhead of Fleabane *Pulicaria dysenterica* at Marston Vale Millennium CP on 29th July (AMB). This was found by looking for a raised brown line in the florets; the larva was found feeding underneath on the developing seeds. There were also three records of adults in 2020 - at Brogborough Lake on 18th June (SRP, gendet AMB), Lower Stondon on 16th August (AMB & MGB, gendet AMB) and Ampthill Park on 25th August (AMB).

**35.066 *Monochroa tenebrella* (Hübner) [735]**

The second county record was of a male to a light trap in Biggleswade on 3rd July (LRB gendet AMB). The previous record was at Eaton Bray in 2015. The larvae feed on Sheep's Sorrel *Rumex acetosella*.

**35.107 *Psoricoptera gibbosella* (Zeller) [859]**

The second and third county records came to light traps in Home Wood, Northill, on 31st July (BS, conf. AMB from photo) and 7th August. The only other record was at Maulden Wood back in 2002.

**35.118 *Scrobipalpa ocellatella* Beet moth (Boyd) [Nb] [814]**

New to VC30 in 2020. This species is really a coastal one in Britain with occasional inland records. Its foodplants are Sea Beet *Beta maritima* and Beet *Beta vulgaris*. Interestingly the first three were males all on the same night, 15th September, at Upper Caldecote (MB gendet AMB), Baker's Wood (JHM & RIB, gendet AMB) and Sandy (RAC & AMJS, gendet AMJS). This was a night when the species was also caught in neighbouring VC31 (Huntingdonshire). A fourth male came to a light trap in Biggleswade on 17th September (LRB, gendet AMB).

**35.147 *Carpatolechia decorella* (Haworth) [Nb] [767]**

The third and fourth county records of this were at Sandy on 11th April (RAC & AMJS, det. M.Shurmer) and a female at Home Wood, Northill, on 31st July (BS, gendet AMB)

**Coleophoridae**

**37.042 *Coleophora saturatella* Stainton [pRDB3] [545]**

After a record of an adult at The Lodge (RSPB Sandy) in 2019, one was netted in the daytime at the same site on 4th July this year (BS, gendet G.Smith). In addition, a larval case was found on Broom *Cytisus scoparius* at The Pinnacle, Sandy, on 13th March (AMB & MGB). This is the first record of the larval case in the county since Raymond Uffen found them at the same site in 1971.

**37.047 *Coleophora amethystinella* Ragonot [pRDB2] [520]**

New to VC30 in 2020. A male was netted whilst dusking at Totternhoe Knolls on 16th June (SCB, gendet AMB). The larvae feed in a portable case made from a seed pod of Smooth Tare *Vicia tetrasperma*.

**Elachistidae**

**38.010 *Elachista bedellella* (Sircom) [Nb] [616]**

The second county record of this tiny grey moth was a male netted whilst dusking at Totternhoe Knolls NR on 16th June (SRP, gendet AMB).

**38.028 *Elachista alpinella* Stainton [Nb] [599]**

A male of this species was swept at Marston Thrift on 16th May (SRP, gendet AMB). This was the fourth for the county following records in 1997 (two sites) and 2009.

**38.042 *Elachista serricornis* Stainton [Na] [626]**

The third county record was of two females swept from sedges at Flitwick Moor on 28th May (leg & gendet AMB). Both previous records came from 2012, at Clifton and Flitwick Moor.

**Parametriotidae**

**39.004 *Dystebenna stephensi* (Stainton) [Na] [907]**

Following the addition of this species to the county list in 2019, one came to light at Upper Caldecote on 11th August (MB, conf. AMB).

## **Pterophoridae**

### **45.021 *Stenoptilia zophodactylus* (Duponchel) [1507]**

A male to actinic light at Sandy Smith NR on 15th July (RIB, gendet AMB) was the first record for 13 years and only the fifth record for the county.

### **45.026 *Oxyptilus distans* Breckland Plume (Zeller) [Nb] [1491]**

New to VC30 in 2020. This was an unexpected addition to the county fauna in 2020. There were two records, both of males, in garden light traps at Biggleswade on 21st May (SCB, gendet AMB) and Blunham on 26th August (AG, gendet AMB).

## **Pterophoridae**

### **48.002 *Prochoreutis myllerana* (Fabricius) [Nb] [388]**

The fifth county record was a male to actinic light in a garden at Upper Caldecote on 18th July (MB, gendet AMB). There must be an overlooked population of skullcap *Scutellaria* sp. nearby.

## **Tortricidae**

### **49.055 *Cnephasia communana* (Herrich-Schäffer) [1018]**

Most of the *Cnephasia* species are impossible to tell apart except by dissection, so many moth trappers do not retain them and are therefore only recorded from a few sites. This species, however, seems to be genuinely rare in the county; a male netted in Potton Wood on 12th July (leg & gendet DLB) was only the third record for the county.

### **49.129 *Cochylidia rupicola* (Curtis) [959]**

The third and fourth county records both came from daytime recording - at Upper Caldecote on 10th July (MB) and Duck End NR, Maulden, on 29th July (SRP). The previous records were in 2008 and 2018.

### **49.256 *Epinotia cinereana* (Haworth) [1138a]**

New to VC30 in 2020. A male came to actinic light at Upper Caldecote on 31st July (MB, gendet AMB). Until a paper was published splitting this as a species in its own right (Mutanen *et al* 2012), this species was treated as a uniformly greyish form of *Epinotia nisella*. If *E.cinereana* is suspected then identification can only be made by dissection.

### **49.291 *Epiblema grandaevana* (Lienig & Zeller) [pRDB2] [1181]**

New to VC30 in 2020. This is a very large species for a tortrix and quite distinctive. A male came to actinic light at Biggleswade on 2nd June (SCB, gendet AMB).

### **49.300 *Pseudococcyx turionella* (Linnaeus) [Nb] [1209]**

The fifth county record came to light in a Biggleswade garden on 7th May (LRB). This is the third record at this site following on from records in 2011 and 2014, with records in 1989 and 2011 coming from other sites in the county.

### **49.347 *Grapholita compositella* (Fabricius) [1241]**

The first larval record for the county of this species was of two larvae found in seedheads of Red Clover *Trifolium pratense* near Lower Stondon on 9th September (MGB). There were also three records of adults in 2020 too.

### **49.369 *Pammene agnotana* Rebel [pRDB1] [1226]**

New to VC30 in 2020. A male was swept during the daytime at Upper Caldecote on 11th April (LARB & MB, gendet AMB). It may be that as an early flier in the year, this species may be under-recorded. It should be looked for in oak *Quercus* woodlands in April.

## Pyralidae

### 62.013 *Moitrelia obductella* (Zeller) [pRDB3] [1444]

Following on from the addition of this species to the county list in 2019, it was again recorded at Pegsdon Hills in 2020. On 11th August an excellent count of 40 were noted during light-trapping at the site (RIB, AG & SRP, conf. AMB). In addition one, no doubt a wanderer from the chalk, came to MV light at Clophill on 31st July (RC, conf. AMB).

### 62.053 *Ancylosis oblitella* (Zeller) [Nb] [1467]

With only one previous record in the county, in the RIS trap at Shuttleworth in 1976, it was good to finally get further records this year. Both were females to actinic light - at Upper Caldecote on 31st July (MB, gendet AMB) and Kempston on 15th September (HJG, gendet AMB). The larvae feed on goosefoots *Chenopodium* species.

## Crambidae

### 63.026 *Loxostege sticticalis* (Linnaeus) [1368]

The second county record of this migrant was from Biggleswade on 16th July (SCB, conf. AMB). The first record came from the Cockayne Hatley RIS trap in July 1995.

### 63.054 *Cydalima perspectalis* (Walker) [1409a]

The first larval record of this species in the county was of ten larvae on Common Box *Buxus sempervirens* hedging at Aspley End, Shillington, on 13th August (RK). All the other records for the year, 104, were of adults, which were recorded between 17th June and 2nd October. The total number of records for the county now stands at 159. There were only 35 records in 2019, 16 in 2018, two in 2017 and one in 2013, so the increase is notable. It is a pest of box species and along with Box Blight is causing a lot of problems for growers of this plant and its native population.

Migrant records are forwarded to the appropriate editor for inclusion in the Immigration of Lepidoptera to the British Isles Report for the *Entomologist's 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

- 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. 2021 The finding of leafmines of *Bucculatrix ulmifoliae* Hering, 1931 (Lep.: Nepticulidae) in Bedfordshire and its current status in the UK. *Entomologist's Record and Journal of Variation* 133 17-19
- 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
- Freed, T. 2015 *Phyllonorycter pastorella* (Zeller, 1846) (Lep.: Gracillariidae) in London: a species new to Britain. *Entomologist's Record and Journal of Variation* 127, 1-10
- Langmaid, J.R., Collins, G.A. & Porter, J. 2007 *Bucculatrix ulmifoliae* M. Hering, 1931 (Lep.: Bucculatricidae) resident in England. *Entomologist's Record and Journal of Variation* 119 195-201
- Mutanen, M., Aarvik, L., Landry, J-F., Segerer, A.H. & Karsholt, O. 2012 *Epinotia cinerea* (Haworth, 1811) *bona* sp., a Holarctic tortricid distinct from *E.nisella* (Clerck, 1759)

(Lepidoptera: Tortricidae: Eucosmini) as evidenced by DNA barcodes, morphology and life history. *Zootaxa* 3318 1-15 [www.mapress.com/zootaxa/](http://www.mapress.com/zootaxa/)

### ***Acknowledgements***

Records and support gratefully acknowledged from the following:

P.Almond, G.Anderson, M.Athorn, K.Balmer, I.Barber, D.Barnes, R.I.Bashford (RIB), F.Bassett, R.Bennett, S.C.Blain, V.Booth, D.L.Buckingham (DLB), Lionel Burgess (LRB), Louie Burgess (LARB), M.Burgess (MB), G.Buss, C.Campbell, L.Carman, R.A.Cartwright, G.Castle, N.Cecconi, R.Christopher (RC), A.Coates, C.Coleman, D.Connors, R.Cousins, J.Curd, A.Day, J.Day, B.Dickerson, B.Eversham, M.Fowlie, T.Freed (TF), A.Garner, W.George, D.Girvan, Greensand Trust, A.J.Green, S.Green, H.J.Griffiths (HJG), A.Grimsey, J.Harding-Morris (JHM), M.Harrow, P.Howard, T.Jenkins, R.Knock (RK), J.R.Langmaid, M.Ledlie, D.V.Manning (DVM), J.Lowen, M. & M.McClure, J.Milne, J.Moore, T.Morgan, P.Nash, Natural England, D.J.Odell, A.R.Outen, M.J.Palmer, S.Palmer, J.Pitts, C.W.Plant, S.R.Plummer, W.Powell, S.Roberts, B.Sale (BS), C.Shorthall, A.M.J.Skinner (AMJS), B.Smart, S.Thomas, E.Thompson, H.Thompson, S.Thompson, S.Warrington, A.Whitney, The Wildlife Trust for Bedfordshire, Cambridgeshire, and Northamptonshire, N.D.Willits, I.P.Woiwod, R.Wynde and P.Young.

***Andy and Melissa 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.***