### Northamptonshire Moths – A Brief Summary of New Species & Noteworthy Records from 2019

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Northamptonshire/VC32 Moth Group website: http://www.northamptonshiremoths.org.uk/home.htm

#### 1. Introduction

This is a brief review of some interesting and noteworthy moth species recorded in Vice County 32, Northamptonshire & The Soke of Peterborough, during the 2019 season. Reports such as this of course rely on recorders diligently submitting their records. As always, I am most grateful to all who submit records for inclusion in the county database, be they extensive in nature or simply casual notes, and the number of those recording moths in the county is increasing all the time.

### WEATHER SUMMARY

Firstly, some fun facts and figures:

- Approximate total number of records received in 2019 = 44,098 (2018 = 51,400; 2017 = 36,620; 2016 = 26,300)
- Number of Species (excludes aggregates) recorded in **2019 = 1,050** (2018 = 1,030; 2017 = 990)
- Approximate number of individual moths recorded in the county in 2019 = 195,200 (2018 = 189,000; 2017 = 121,000),
  which again exceeds the previous year
- This brings the grand total of records in the VC32 database to approx. 590,000

The Top Ten species, based on number of records received, not number of individuals (2018 position in brackets):

Pos.	ABH	B&F	Taxon	Vernacular	Records
1 (1)	73.342	2107	Noctua pronuba	Large Yellow Underwing	1062
2 (2)	73.359	2126	Xestia c-nigrum	Setaceous Hebrew Character	1027
3 (3)	73.317	2089	Agrotis exclamationis	Heart and Dart	744
4 (10)	73.291	2199	Mythimna pallens	Common Wainscot	631
5 (-)	73.345	2109	Noctua comes	Lesser Yellow Underwing	585
6 (-)	73.099	2384	Hoplodrina ambigua	Vine's Rustic	578
7 (-)	73.162	2321	Apamea monoglypha	Dark Arches	578
8 (9)	73.249	2190	Orthosia gothica	Hebrew Character	575
9 (-)	73.244	2187	Orthosia cerasi	Common Quaker	545
10 (6)	70.258	1937	Peribatodes rhomboidaria	Willow Beauty	539

The above reflects a couple of species which seem to have had a "good year". Lesser Yellow Underwing for example had approximately double the number of records in 2019 than 2018, and indeed it's best year on record. A similar trend was seen with Vine's Rustic, with approximately double the records over 2018.

A few moths which seem to have fared less well in 2019 include Straw Dot and Flame Shoulder each with approximately 50% the number of records; Mother of Pearl and Brimstone Moth which both saw significantly fewer records during the year, particularly Mother of Pearl which has only ¼ of the records of 2018. It is always difficult to assign factors to explain these differences, and perhaps the dataset is not sufficiently large to be able to run sensible statistics.

The following sections of this report adhere to the currently accepted UK Moth Checklist published by Agassiz, Beaven & Heckford in 2013, which replaced the previous British Checklist co-authored and subsequently updated by Bradley. I also include, where available for general reference, the former Bradley number in {brackets} and the current national status of each species appears in [square brackets]. The interest in recording micro moths as adults, but also as immature stages (leaf mines, larval cases) has increased again in 2019, which is reflected in the relatively large number of new micro moth VC records, and those recorded fewer than 5 times up to the end of 2018.

### 2. Species New to VC32 in 2019

Eleven species were noted as being new to VC32 during the 2019:

### 4.057 {0085} Stigmella suberivora (Stainton, 1869) [Local]

Two mines were recorded on Holm Oak along a roadside in Aynho on 25.iv.2019 (TP), confirmed by MJH. It appears that VC32 is at the currently known northern edge of its UK distribution. Holm Oak appears not to be widespread around the county too, which may further limit records for this species.

### 12.019 {0219} Nemapogon ruricolella (Stainton, 1849) [Nationally Scarce B]

Following on from experience gained in a well-established woodland site in Hampshire, when the VES lure was not removed and placed back I storage after a failed attempt to record Yellow-legged Clearwing in the evening. *Nemapogon ruricolella* was later seen in numbers at dusk around the lure, and so it was decided to adopt the same method in Northamptonshire. The lures were therefore left in funnel traps overnight in apparently suitable habitat. The moth was recorded on three separate occasions during 2019, all males assembled to the VES pheromone lure. Records as follows: Old Sulehay 22.vi.2019, five males; Holdenby House Estate 27.vi.2019, two males; Weekly Hall Wood 29.vi.2019, single male (all MJH). I strongly suspect that the moth is more widespread than records indicate, and that it probably does not attend light traps in any quantity (or at least, might be easily overlooked).

### 12.044 {0212} Haplotinea insectella (Fabricius, 1794) [Nationally Scarce B]

A single example of this species was recorded in a garden light trap in Oundle on 27.viii.2019 (PH). ID was confirmed by dissection (MJH). The larvae of this species are believed to feed on stored grain products, as well as rotting wood and probably fungi thereon. It seems to have an incomplete distribution across the UK suggesting that it is likely to be under-recorded, as seldom comes to light in the adult stage.

#### 15.0862 {0364b} Phyllonorycter pastorella (Zeller, 1846) [None]

A single mine was discovered on Salix along a footpath beside the Nene at Thrapston on 22.x.2019 (MJH). The species is reportedly spreading west and north (I believe recently first reported in neighbouring VC31/Hunts) and might well turn up at other locations in the county in the coming years.

### 35.0191 {N/A} Anarsia innoxiella Gregersen & Karsholt, 2017 [Rare]

A single adult was taken in a light trap in Horton Woods on 28.vi.2019 (JS). ID was confirmed by examination of the genitalia. Discovery of this species in the UK was formally announced in 2017, after belief that *Anarsia lineatella* was being over-reported (larvae of *A. lineatella* is known to feed internally on various fruits such as apricots, peaches, etc). *A. innoxiella* larvae feed on Acer spp. and adults attend light. All *Anarsia* species should therefore be retained for dissection to confirm identification, especially as *A. spartiella* has yet to be added to the VC32 list.

### 35.127 {0825a} Tuta absoluta (Meyrick, 1917) [Adventive]

There was a single unconfirmed record of this species made in 2018, but the specimen was not retained and thus had to be excluded from the county dataset. The moth was however confirmed on two occasions in 2019, both as adults to garden light traps, thus: Thrapston 31.vii.2019 (MJH) and Far Cotton, Northampton 15.ix.2019 (MC, det MJH). Those growing tomatoes at home or on allotments would be advised to inspect their plants for mines present in stems, leaves and fruit as further records will almost certainly be derived from these sources.

### 48.005 {0386} Tebenna micalis (Mann, 1857) [Migrant]

A migrant species related to the almost ubiquitous *A. fabriciana* (AKA Nettle Tap), recorded once in a Kingsthorpe garden, Northampton, 28.viii.2019 (PS). The adult moth is sometimes seen flying on sunny days and nectaring and thus worth looking out for during the summer months.

### 49.093 {0922} Phtheochroa schreibersiana (Frölich, 1828) [pRDB1]

This species appears at best to be highly elusive! There seems to be a general dearth of records in evidence for the species, not only within the UK, but across N. Europe. Old records appear from VC31/Hunts in the mid-19<sup>th</sup> Century and from VC29/Cambs, particularly at Wicken Fen, up to the early 20<sup>th</sup> Century. Recorded more recently in VC24/Bucks in 2010. The single VC32 record was of an adult to a garden light trap on 01.vi.2019 (DC). The adult moths reportedly rest high up in the canopy, but may be observed lower down after heavy rain! They do also fly at dusk and so working suitable habitat (larvae feed on Elms, Black Poplar and Bird Cherry) at such time might yield further examples.

### 49.190 {1101} Endothenia ustulana (Haworth, 1811) [Nationally Scarce B]

Another Nationally Scarce moth was added to the VC32 list when a single adult was taken in a garden light trap in Oundle on 07.vii.2019 (PH). The moth was retained until the end of the season and subject to dissection. ID was thus confirmed (MJH). The larvae feed on Bugle (*Ajuga*), but is also reported from garden cultivars. Adults are more often encountered by day, flying actively in afternoon sunshine.

### 49.351 {1252} Grapholita lunulana ([Denis & Schiffermüller], 1775) [Nationally Scarce B]

A single adult was recorded by day in the old quarry area of Spanhoe Airfield, 13.v.2019 (RF). The moth was dissected to confirm ID (MJH). This record appears to be at the southern edge of the known UK distribution and would appear to prefer open grassy habitats containing Vetches (larval pabulum). The adults of this species are rarely encountered, being difficult to disturb from vegetation, but otherwise may be seen flying on sunny afternoons.

### 62.033 {1435} Acrobasis tumidana ([Denis & Schiffermüller], 1775) [Migrant]

A scarce immigrant to the UK, let alone to the Midlands! The moth was recorded in a garden light trap in Kingsthorpe, Northampton on 29.vii.2019 (PS) and later confirmed by dissection (MJH).

### 3. Significant and Noteworthy Records

Below therefore, are some species of note which were recorded during 2019. The list is by no means comprehensive, but rather a pick of the pops!

(NB: UK status has not been reviewed/published for a few years, and some species below which are marked as Migrant or Rare Migrant are now believed to be resident in the country. These have been marked with an \*)

#### 2.004 {0009} Eriocrania sparrmannella (Bosc, 1791) [Local]

A single tenanted mine was discovered whilst searching Birch at Old Sulehay Quarry on 06.vi.2019 (MJH). This is the 5<sup>th</sup> VC32 record and first since 2004. The moth appears to be well-distributed throughout the UK and likely under-recorded locally.

### 4.040 {0074} Stigmella assimilella (Zeller, 1848) [Local]

Another 5<sup>th</sup> VC32 record, again as a leaf mine. Found on a Poplar leaf on 07.xi.2019 at Kings Sutton (TP), whilst searching leaf litter.

### 7.004 {0144} Nemophora fasciella (Fabricius, 1775) [Nationally Scarce A]

This species is so far only reported from a single site in Northants, being on rough ground in Kingsthorpe, Northampton. This year adults were noted there on 25.vi.2019 (PS). Further records may be gleaned from working areas where Black Horehound exists (larval foodplant), and looking for these brightly coloured moths in flight on sunny days over the foodplant.

### 8.005 {0128} Phylloporia bistrigella (Haworth, 1828) [Local]

Taken as an adult in a light trap as part of a wider BioBlitz in Yardley Chase on 01.vi.2019 (JS), representing only the 3<sup>rd</sup> county record. The moth appears to be widespread across the UK, preferring open woodland and heaths with a liking for small Silver and Downy Birch. May also be seen flying around Birch on sunny days.

### 10.002 {0124} Tischeria dodonaea Stainton, 1858 [Local]

Only added to the VC32 list in 2014, a 3<sup>rd</sup> county record was noted as a leaf mine on Oak at Middleton Cheney on 30.ix.2019 (TP). Leaf mines of this species are quite distinctive and well worth looking for in Autumn. The species appears to be quite widespread through the southern half of the UK.

### 12.006 {0203 Infurcitinea argentimaculella (Stainton, 1849) [Local]

Another species with a disjointed distribution over the UK, probably given that the adults are rarely seen. Two larval tubes were seen amongst lichens on a mature Oak trunk in Old Sulehay wood on 13.v.2019 (MJH), this being the 4<sup>th</sup> county record. The larval tubes are quite distinctive and appear to be mainly on areas of blue-green lichens (*Lepraria* spp.).

### 14.007 {0271} Bucculatrix albedinella (Zeller, 1839) [Local]

The 5<sup>th</sup> VC32 record was noted as a leaf mine on Wych Elm at Grafton Park Wood on 17.x.2019 (MJH).

### 15.017 {0296} Calybites phasianipennella (Hübner, [1813]) [local]

An adult of this distinctively-marked moth was taken in a garden light trap in Peterborough on 24.vii.2019 (DC). Of interest is that two of the previous VC32 records also originate from within Peterborough (2011). This seems strange given that the larval foodplants are quite varied, including various Sorrels, Docks, Black Bindweed and Yellow Loosestrife, which are present in many locations in the county. The moth certainly seems to prefer damp habitats (including damp woodland), but also gardens and field margins.

### 15.026 {0302} Parornix fagivora (Frey, 1861) [Local]

The 3<sup>rd</sup> county record was noted in a garden light trap in Oundle on 22.vii.2019 (PH) and confirmed by later dissection (MJH). As its name suggests, the larvae feed on Beech and the species is generally fairly common in the southern half of the UK.

### 15.037 {0318} Phyllonorycter tenerella (Joannis, 1915) [Local]

This Hornbeam-feeder has only been recorded on four occasions prior to 2019. The 5<sup>th</sup> VC record was noted as an active mine on Hornbeam on Farthinghoe NR on 08.ix.2019 (TP).

### 16.018 {0439} Swammerdamia compunctella Herrich-Schäffer, 1855 [Nationally Scarce A]

A 2<sup>nd</sup> county record of this rather delicately-marked moth was taken in a light trap in Yardley Chase on 01.vi.2019 (JS).

### 16.023 {0444} Ocnerostoma piniariella Zeller, 1847 [Nationally Scarce B]

The 3<sup>rd</sup> county record was of a single adult taken at light in Salcey Forest on 24.viii.2019 (MJH, one of the moth group field trips). Identification was confirmed by dissection. This pine-feeder is possibly under-recorded given that it is small and almost unicolorous as an adult, and hence easy to miss and even easier to dismiss!

### 28.008 {0642a} *Metalampra italica* Baldizzone, 1977 [Migrant\*]

This species appears to be spreading quite quickly through the UK. It was first recorded in VC32 in 2017, once again in 2018, and on no less than four occasions in 2019. Records are thus: Thrapston garden trap on 24.vi.2019 (MJH); Brackley garden light trap on two occasions – 04.vii.2019 & 24.vii.2019 (TH); Kettering garden light trap on 29.vii.2019 (RS).

#### 32.026 {0698} Agonopterix kaekeritziana (Linnaeus, 1767) [Local]

A further interesting record following the rearing-through of larvae in terminal spinnings found on Knapweed. The larva was collected from Castor Hanglands on 20.vi. 2019 (MJH). This is the 2nd modern, post-2000 record for the species, which rarely puts in an appearance to light traps. Another species which is likely to be under-recorded as a result.

### 32.028 {0700} Agonopterix pallorella (Zeller, 1839) [Nationally Scarce B]

Following on from successfully finding a larva and rearing it to adult in 2018, a further larval spinning amongst the terminal leaves of Knapweed was retained from a track leading into Fermyn Woods on 01.vi.2019 (MJH). This proves to be the 4<sup>th</sup> VC32 record. Adults do attend light traps but require care separating worn examples from its congeners.

### 35.049 {0780} Bryotropha similis (Stainton, 1854) [Local]

A single male adult was taken in a garden light trap in Thrapston on 25.viii.2019 (MJH). ID was confirmed by dissection. This is the 5<sup>th</sup> VC32 record.

### 35.070 {0742} Monochroa lutulentella (Zeller, 1839) [Nationally Scarce B]

This species was recorded on two separate occasions during 2019 – despite not being recorded prior to this since 1999. 2019 records were both confirmed by dissection, being 03.vii.2019 at Yardley Chase (JS) and Ring Haw on 21.vii.2019 (RF).

### 35.073 {0737} Monochroa palustrellus (Douglas, 1850) [Nationally Scarce B]

First added to the county list in July 2018, a further singleton was recorded to light in Oundle on 28.vii.2019 (PH), and thus the  $2^{nd}$  VC32 record. The species feeds on Docks and displays a southerly distribution in the UK.

### 36.002 {0879} Batrachedra pinicolella (Zeller, 1839) [Nationally Scarce B]

The 2<sup>nd</sup> county record of this Norway Spruce/Pine feeding species was obtained at light in Northampton on 10.vii.2019 (JS). The moth has a wide distribution in the UK and may be under-recorded due to its unwillingness to come to light.

### 37.034 {0517a} Coleophora frischella (Linnaeus, 1758) [Nationally Scarce B]

Confirmed by dissection, a single adult was taken at light in Yardley Chase 04.vii.2019 (JS), being the 4<sup>th</sup> VC32 record to date. Larvae feed upon Clovers, and possibly Knapweeds, Thistles and Scabious.

### 37.050 {0532} Coleophora albidella ([Denis & Schiffermüller], 1775) [Local]

First recorded in 2018 near Corby as an adult to light, a 2<sup>nd</sup> county record was found in larval stage on *Salix caprea* at the opposite end of the county at Farthinghoe NR, 20.vi.2019 (TP). The mine was reared and the adult confirmed by dissection (MJH). It is reported that adults may also be recorded by sweeping the foodplant during the day.

### 37.063 {0544} Coleophora albicosta (Haworth, 1828) [Common]

A 3<sup>rd</sup> VC32 record (and first since modern, post-2000 record) was of an adult netted during the day at Middleton Cheney on 15.v.2019 (TP). Dissection showed it to be a male. Despite being common in the UK as a whole, the species is perhaps unsurprisingly rare in the county, as the larvae feed exclusively on the seed pods of Gorse, which although dotted around the county, is often seen as the occasional isolated bush.

### 38.003 {0592} Stephensia brunnichella (Linnaeus, 1767) [Nationally Scarce B]

This rather attractive moth was seen for only the 2<sup>nd</sup> time in the county at Old Sulehay Quarry whilst surveying for *Grapholita* pallifrontana on 06.vi.2019 (MJH). It was netted nearby from low-growing vegetation adjacent to the Wild Liquorice patch under observation. Only one other record exists for the county, being from Ashton Wold in 1907! Larvae mine the leaves of

Wild Basil and therefore it is worth checking calcareous grassland sites in the county for further records, such as those limestone areas in and around Collyweston Quarry and Barnack Hills and Holes.

#### 38.022 {0594} Elachista gleichenella (Fabricius, 1781) [Local]

Oddly the 4<sup>th</sup> VC32 record came as an adult in a light trap in Weekley Hall Woods on 29.vi.2019 (MJH). Normally this very attractive species is encountered by day and appears to be widespread in the UK. Larvae feed on Sedges and Rushes and may be encountered further along the sunnier rides of our woodlands.

#### 40.005 {0889} Mompha divisella Herrich-Schäffer, 1854 [Nationally Scarce A]

A 5<sup>th</sup> county record was of a single adult moth potted indoors at Thrapston on New Year's Day, 01.i.2019 (MJH). Whilst clearly an *Mompha* species, it was expected to turn out to be something like *M. jurassicella*, which has been recorded in this fashion on several occasions. The dissection showed it to be a female *M. divisella*. The previous record in VC32 was from 1941. The larva mines the stems of Wilowherbs and the adult is known to hibernate in sheltered places over the winter months.

### 40.007 {0889a} Mompha bradleyi Riedl, 1965 [Nationally Scarce B]

Another 5<sup>th</sup> VC32 record was taken in a light trap in Weekley Hall Woods on 29.vi.2019 (MJH), with ID being confirmed by dissection.

### 40.011 {0880} *Mompha langiella* (Hübner, 1796) [Local]

This was a very unexpected bonus, netted by day on a short walk along a track near Fermyn Woods on 12.v.2019 (MJH). The 3<sup>rd</sup> VC32 record, recorded previously in 1909 and 1910. Known to feed on Enchanter's Nightshade, and possibly on Willowherbs, the moth appears to be quite widespread in the UK, so may be under-recorded locally.

### 49.085 {1050} Acleris kochiella (Goeze, 1783) [Local]

A single moth was taken at light in Easton Hornstocks on 31.vii.2019 (RF), and thus the 4<sup>th</sup> VC32 record of this Elm-feeding species. The adult can be confused with its congener, *A. logiana*, and but the larvae create a very distinctive feeding pattern on Elm and thus further records might be gleaned this way.

### 49.228 {1153} Epinotia sordidana (Hübner, [1824]) [Nationally Scarce B]

The 2<sup>nd</sup> modern, post-2000 record, and 5<sup>th</sup> all-time county record of this species was of four adults taken at light in Easton Hornstocks on 04.x.2019 (RF). Nationally Scarce but widespread throughout the UK, the larvae create a distinctive leaf-roll on Alder and adults may be recorded at dusk or to light in suitable habitat. Note though that adults must be dissected to confirm ID.

#### 49.300 {1209} Pine Bud Moth Pseudococcyx turionella (Linnaeus, 1758) [Nationally Scarce B]

The 4th county record came as an adult to light at Fineshade on 23.v.2019 (RF), and dissected to confirm identity.

### 49.356 {1249} Grapholita lobarzewski (Nowicki, 1860) Nationally Scarce A

To date, this moth has only been recorded from three sites in the county, but this note shows how readily they attend pheromone lures. An amazing 51 adult males were assembled in one night at an allotment site in Northampton, using the lure in a funnel trap on 20.vi.2019 (SM).

### 52.001 {0369a} Raspberry Clearwing Pennisetia hylaeiformis (Laspeyres, 1801) [Unknown]

Added to the county list in 2018 and currently only recorded from a single site in the county, the 3<sup>rd</sup> VC32 record was attracted to synthetic pheromone lure in a Duston garden on 22.vii.2019 (SM). This species may be further recorded where mature Raspberry canes may be found, such as established gardens and allotments – and thus the moths recorded with the use of pheromone lure.

### 62.010 {1449} Elegia similella (Zincken, 1818) [Nationally Scarce B]

A 3<sup>rd</sup> county record was of an adult to light in Horton Wood on 28.vi.2019 (JS), a location at which it was recorded in 2017. Northants represents the northern edge of its currently known UK distribution.

### 62.053 {1467} Ancylosis oblitella (Zeller, 1848) [Nationally Scarce B]

4<sup>th</sup> county record, and first since 1999, a single adult was taken to a garden light trap in Wollaston on 03.viii.2019 (AP), confirmed by dissection (MJH). A moth associated with waste-ground, field margins, disturbed ground, whose larvae feed on Goosefoot.

### 62.059 {1484} Phycitodes saxicola (Vaughan, 1870) [Local]

Closely related and easily confused with *P. maritima*, and possibly over-looked locally. This was the 4<sup>th</sup> county record, of a male attending a garden light trap in Oundle on 09.vii.2019 (PH), confirmed by dissection (MJH). The UK distribution is generally coastal, but also inland on chalky or limestone grassland.

Added to the county list in 2018, the 2<sup>nd</sup> VC record was of an adult taken in a garden light trap in Cogenhoe on 27.viii.2019 (DS). The species is known to be expanding its range northwards and so I imagine further sightings will be made in the coming years.

### 72.073 {2408} Small Marbled Eublemma parva (Hübner, [1808]) [Migrant]

This migrant species appeared in many locations across the country during 2019, so it was pleasing to have a single VC32 record from a garden light trap in Kingsthorpe, Northampton on 13.vii.2019 (PS). This was only the 5<sup>th</sup> time the moth has been recorded in the county.

### 72.076 {2451} Clifden Nonpareil Catocala fraxini (Linnaeus, 1758) [Migrant\*]

I think if there is to be a "VC32 Moth of the Year", then this is a very strong candidate. Formerly resident in the UK, then for many years only known as a migrant to these shores, it started to re-establish itself in some southern counties a few years ago. Since then it has started to extend its UK range but I don't think anyone could predict what happened in 2019. The species seemed to appear almost everywhere in the southern half of the UK, including some sites having numerous sightings including multiples on one night. VC32 also had its fair share! From a single record from "around the turn of the 20<sup>th</sup> Century", whose exact site was not known, 2019 saw 17 individuals recorded on 15 separate occasions (two records are of two individuals – on both occasions in Fineshade, a month apart). The records ranged from 25.viii.2019 in Old Stratford (AVH) to 18.x.2019 at Fineshade (RF).

### 73.010 {2436} Dewick's Plusia Macdunnoughia confusa (Stephens, 1850) [Rare migrant\*]

Recorded for the first time in 2018 with three separate records, a further sighting, and thus 4<sup>th</sup> VC32 record, came as an adult to a garden light trap in Oundle on 10.ix.2019 (PH). Currently the species is still listed as a rare migrant, but the evidence certainly indicates colonisation in the southern half of the UK, further supported by these Northants records.

### 73.082 {2292} Tree-lichen Beauty Cryphia algae (Fabricius, 1775) [Rare migrant\*]

The species was first recorded in VC32 in 2006 with a singleton which was very likely at the time to be a primary migrant. No other records were noted until 2017 when it was recorded on two occasions, reflecting a gradual expansion of its range in the south of the UK. 2018 saw it recorded on eight occasions, with ten individuals. 2019 results indicate that the moth has established itself in the county. It was recorded on 30 occasions between 21.vii.2019 and 25.viii.2019, covering 49 individuals. One Cogenhoe garden recorded 26 during the year (DS) with a count of 8 on 03.viii.2019

#### **Pheromone Lure VES**

Pheromone lures have been employed for attracting and recording moths for a number of years now, and the range of lures available seems to grow every year. These are synthetically produced and it is known that on occasion, they attract species other than the intended target. This was certainly the case whilst employing the VES lure during 2019. The lures were therefore left in funnel traps overnight in the hope of recording *N. ruricolella*, which it did on three occasions, as described earlier. Also attracted to the lure during this time: *Nemapogon wolffiella* (22.vi.2019, DS; 27.vi.2019 & 29.vi.2019, MJH), *Paraswammerdamia nebulella* (27.vi.2019, DS) and *Strophedra weirana* (29.vi.2019, MJH). All specimens were subject to dissection to confirm identity.

### 4. Update of UK BAP Species on the VC32 List

Following on from the summary posted last year, here is an update of the UK BAP species in VC32 (limited to those species recorded since 1<sup>st</sup> January 1980 only):

#### 49.348 {1243} Liquorice Piercer Grapholita pallifrontana Zeller, 1845 [pRDB3]

Further targeted fieldwork was conducted to help increase our understanding of this species. The species was recorded eleven times during 2019, but this represented over eighty individuals. Most of the survey work was within the north-east of the vice county, including the Soke of Peterborough, but it is pleasing to also have positive survey results from the south-west of VC32, including Middleton Cheney on 06.vi.2019 and Croughton 21.vi.2019 (both TP). The survey did show that the moth can be present on very small patches of the larval foodplant (Wild Liquorice, *Astragalus glycyphyllos*) with two individuals being recorded on a single, apparently isolated plant, approximately 2Km from another known site.

No VC32 records in 2019.

54.002 {0163} Forester Adscita statices (Linnaeus, 1758) [Local]

No VC32 records in 2019.

70.035 {1679} False Mocha *Cyclophora porata* (Linnaeus, 1767) [Local]

No VC32 records in 2019.

## 70.201 {1880} Barred Tooth-striped Trichopteryx polycommata ([Denis & Schiffermüller], 1775) [Na]

No VC32 records in 2019, despite further targeted survey work using light traps and pheromone lures.

**72.070 {2495} Olive Crescent** *Trisateles emortualis* ([Denis & Schiffermüller], 1775) [RDB3] No VC32 records in 2019.

### 73.031 {2465} Four-spotted Tyta luctuosa ([Denis & Schiffermüller], 1775) [Na]

Only nine individuals were recorded in 2019, five of those from the regular transect survey near Peterborough (PW). Interestingly a repeat record for Helpston was also noted on 24.vi.2019 (MH) – one having been seen previously in 2018. Singletons were also noted at Maxey on 29.v.2019 (PW) and Ring Haw on 21.vii.2019 (RF).

#### 73.149 {2347} Concolorous Photedes extrema (Hübner, [1809]) [RDB3]

Surveys for this moth again yielded good results for this species. A total of 31 records were received for 2019, with over 250 individuals being recorded. Sites with positive results include Fineshade, Wakerley Wood, Ring Haw/Old Sulehay, Swaddywell Pit (with the best single-night count of 111 individuals), Shire Hall, Weekley Hall Wood, Collyweston Great Wood/Easton Hornstocks, Yardley Chase and Bedford Purlieus, along with a smattering of records from gardens which could be of individual moths undertaking dispersal activities.

### 73.214 {2317} White-spotted Pinion Cosmia diffinis (Linnaeus, 1767) [Na]

Only recorded on two separate occasions during 2019, one was from a known location near Polebrook during a Northants Moth Group evening trap session (10 recorded on 03.viii.2019) and the other of a singleton in a garden light trap in Barnack, also on 03.viii.2019 (AM)

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No VC32 records in 2019. A significant effort was made using light traps in and around the location of a previously known colony on a restricted-access woodland site. Several people were involved between 30<sup>th</sup> June and 4<sup>th</sup> July, deploying numerous moth traps. No Heart Moth were recorded during this period. It is interesting to note that the species was recorded in Windsor Great Park on 29.vi.2019, so it seems the local effort was well-timed and within the flight period for the year. Another targeted effort in an established private estate west of Northampton also yielded no Heart Moth, but the weather for the night in question was sub-optimal. Further surveys are planned for 2020.

### 73.259 {2148} Pale Shining Brown Polia bombycina (Hufnagel, 1766) [Nb]

No VC32 records in 2019. Looking at the UK as a whole, there have apparently been no records for the species since 2013, even from previously known strongholds in Oxfordshire and Wiltshire.

#### 5. Migrant Species Recorded in VC32 During 2018

Below is a brief table of known migrant species to have been recorded during 2019:

ABH	B&F	Taxon	Vernacular	Numbers
18.001	0464	Plutella xylostella	Diamond-back Moth	764
48.005	0386	Tebenna micalis		1
62.033	1435	Acrobasis tumidana		1
63.031	1395	Udea ferrugalis	Rusty-dot Pearl	26
63.048	1408	Palpita vitrealis		1
63.052	1398	Nomophila noctuella	Rush Veneer	1
69.004	1972	Agrius convolvuli	Convolvulus Hawk-moth	1
69.010	1984	Macroglossum stellatarum	Humming-bird Hawk-moth	29
69.014	1987	Hyles gallii	Bedstraw Hawk-moth	1
70.038	1716	Rhodometra sacraria	Vestal	5
71.001	2022	Thaumetopoea processionea	Oak Processionary	1
72.041	2051	Lithosia quadra	Four-spotted Footman	2
72.073	2408	Eublemma parva	Small Marbled	1
73.015	2441	Autographa gamma	Silver Y	596
73.076	2400	Helicoverpa armigera	Scarce Bordered Straw	4
73.087	2385	Spodoptera exigua	Small Mottled Willow	1
73.295	2195	Mythimna vitellina	Delicate	3
73.307	2119	Peridroma saucia	Pearly Underwing	1
73.327	2091	Agrotis ipsilon	Dark Sword-grass	12

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#### 8. Appendix

Weather Summary for Northamptonshire for interest. (per Pitsford Weather Station website)

### January

Anticyclonic during the first half with some colder and milder spells. Becoming more unsettled later with two significant ingresses of cold Arctic air introducing some mainly light showers or sleet or snow at times.

#### **February**

Daytime temperatures becoming warmer through the month, recording some of the mildest February days on record towards the end. Overall temperatures not record breaking due to some cold nights, but still significantly above average.

#### March

A month of two halves: unsettled initially with outbreaks of rain and strong winds, but becoming anticyclonic later with some relatively mild days and some good spells of sunshine, but with some chilly nights.

#### **April**

Apart from a brief spell of unsettled weather at either end of the month, April was dominated by a blocking anticyclone over Scandinavia. In common with 2015 and 2017, rainfall was substantially below average.

#### May

A cool and unsettled start to the month, but conditions generally improved with high pressure exerting more of an influence. A cold front introduced a brief incursion of fresher air in the final week

#### June

Very unsettled for the most part with frequent areas of low pressure converging on the UK. Some of the most significant rain was associated with some very slow-moving lows working up from the south fuelled by a continent in the grip of a heatwave. Conditions became more settled in the final week, culminating in a brief incursion of very warm air from the continent on the 29th, the warmest June day locally for 43 years.

#### July

A dry start with some fine summer days during the first week, turning progressively more unsettled during the second half of the month. A notable heat wave during the third week culminated in the warmest July day on record.

#### Διισιιςτ

A fine start with temperatures in the low 20s, but turning rather changeable during the second week with some significant rain. Drier by the end of the third week and a short-lived heatwave before the month ended as it started.

### September

Temperatures remaining generally around average for much of the month and largely dry. Turning more unsettled in the final week.

#### October

A wet month with just a few days of bright sunshine.

### November

Another wet month with above average rainfall and very few sunny days. Flooding issues on many of the county's rivers around mid-month.

#### **December**

Rainfall above average and rather changeable. Generally mild for the time of year.