

CHESHIRE (VICE COUNTY 58)



MOTH REPORT FOR 2022



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Introduction

What's the point of recording moths? Well, many have commented that the excitement of discovering what has arrived overnight is akin to the feeling of opening presents!

But there is more to it. Thanks to the legions of keen moth recorders, we have a vast database of species records. Our Cheshire data-sets feed into a national collection, and this rich resource is exploited in a variety of ways. Some examples include:

- data collected from the Garden Moth Scheme¹ (GMS) was used to understand the effect of urbanisation on species richness and moth abundance. Many academic articles cite GMS and use the data.
- in a paper² "showing why and where landscape connectivity can help moths expand their range in light of climate change", the authors used "species occurrence data collected by thousands of volunteer recorders" as a baseline against which change could be measured.
- records of moths in Cheshire, at a local level, are being used to illustrate the importance of precious local habitat that might come under threat.

So the accumulation of moth records provides valuable data to make the world a better place. You can't beat that "opening presents" feeling, though, can you?!

In this report:

- A list is provided, itemising all micro-moth species that were recorded three or fewer times during the year as well as all macro-moth species that were recorded five or fewer times.
- The area of VC58 covers at least a part of 49 "hectads" - grid-reference squares of 10km by 10km. A total of 515 species were recorded for the first time in their respective hectads in 2022. These are listed for each hectad, in turn.
- The increased range of thirteen species across the county is illustrated in a set of maps.
- Twenty-six migrant species - those species that have flown or been transported by air-streams from origins outside of the British Isles - were recorded in 2022 in Cheshire and are tabulated. That figure for migrant species in 2022 is double the total of for 2021.
- The top ten increases - and declines - in macro-moth species numbers are listed, comparing records in 2022 with those from the previous two years.

¹ A citizen science project open to anyone interested in recording moths regularly in their garden, anywhere in the UK and Ireland.

² Hodgson, J. A., Randle, Z., Shortall, C. R., & Oliver, T. H. (2022). Where and why are species' range shifts hampered by unsuitable landscapes? *Global Change Biology*, 00, 1–10. <https://doi.org/10.1111/gcb.16220>

The table below shows the number of species and records in Cheshire over the decade from 2013 to 2022. The total number of records submitted in 2021 topped one hundred thousand for the first time, but in 2022 the total was even greater. The number of different species of micro-moths recorded in the county was up to 552, while the number of macro-moth species (460) showed an increase of 25 compared to 2021.

Year	Species			Records		
	Micro's	Macro's	Total	Micro's	Macro's	Total
2013	505	406	911	17,937	44,940	62,877
2014	515	409	924	23,508	53,853	77,361
2015	490	420	910	17,091	47,901	64,992
2016	519	411	930	21,411	44,543	65,954
2017	526	422	948	21,340	51,567	72,907
2018	543	427	970	24,623	54,755	79,378
2019	546	416	962	23,359	48,971	72,330
2020	561	434	995	26,817	64,682	91,499
2021	527	435	962	26,228	75,449	101,677
2022	552	460	1012	29,454	79,126	108,580

Thirteen species of macro-moth that were recorded in 2021 did not appear again in 2022. Conversely, thirty-eight species are on the lists for 2022 that were not seen in Cheshire in 2021.

Macros in 2021, but not 2022	Macros in 2022, but not 2021
Red-tipped Clearwing ; Pine Hawk-moth ; Purple-bordered Gold ; Mullein Wave ; Mallow ; Dark Umber ; Satyr Pug ; Barred Umber ; Brussels Lace ; Grass Emerald ; Four-dotted Footman ; Northern Drab ; White-marked.	Gold Swift ; Lackey ; Convolvulus Hawk-moth ; Death's-head Hawk-moth ; Bedstraw Hawk-moth ; Striped Hawk-moth ; Plain Wave ; Smoky Wave ; Birch Mocha ; Galium Carpet ; Cypress Carpet ; Barred Carpet ; Angle-barred Pug ; Valerian Pug ; Clouded Magpie ; Small Brindled Beauty ; Grey Scalloped Bar ; Clouded Buff ; Wood Tiger ; Four-spotted Footman ; Red-necked Footman ; Marsh Oblique-barred ; Scarce Silver Y ; Bordered Sallow ; Bordered Straw ; Eastern Bordered Straw ; Scarce Bordered Straw ; Small Mottled Willow ; Fen Wainscot ; Tawny Pinion ; Lesser-spotted Pinion ; Northern Deep-brown Dart ; White Colon ; White-point ; Portland Moth ; Light Feathered Rustic ; Heart and Club ; Cream-bordered Green Pea.

Weather Summary for 2022

January was mild - temperatures were often well above historical averages - settled and dry.

February opened with mixed conditions, occasionally windy and rainy, with temperatures often fluctuating above the norm, before turning stormy by the middle of the month.

Day-time temperatures picked up in March, some nights occasionally mild, especially later in the month when we experienced warm, southerly winds. Into April, Arctic air made it colder.

There were a number of rainy episodes in May, but temperatures were mild, although it was rather chilly at the month end.

A period of fine weather at the start of June was quickly followed by a series of rain storms moving up the country. The predicted heatwave lasted all of a few hours, but the bulk of the month enjoyed warm temperatures before finishing with further showers of varying intensity.

The showers continued into July, but gave way to a few hot and muggy days. These were just a foretaste of a more sustained heatwave in the middle of the month. Temperatures of 37.7 degrees C were recorded in Nantwich, a record for Cheshire. Occasional rain interrupted the remainder of July, but the warm, dry weather extended throughout August.

September opened with sporadic rain showers - with some thunder and lightning - before settling down to the last of summer. Overnight temperatures dipped to low single degrees Celsius as heavy rain saw the month out.

October was mild, with frequent rain and occasionally strong winds. Temperatures dipped as we went into November, but soon recovered; the rain continued and the winds strengthened. Mild conditions returned for the remainder of the month, encouraging some recorders to continue running their light-traps into the winter, until sub-zero temperatures in mid-December brought a close to most moth recording for 2022. The year then ended as it began, with temperatures above the norm for the season.

As in 2021, July was the month in which the highest number of different species was recorded by light trapping. The 625 different species trapped in July 2022 exceeded the 597 species in July 2021.

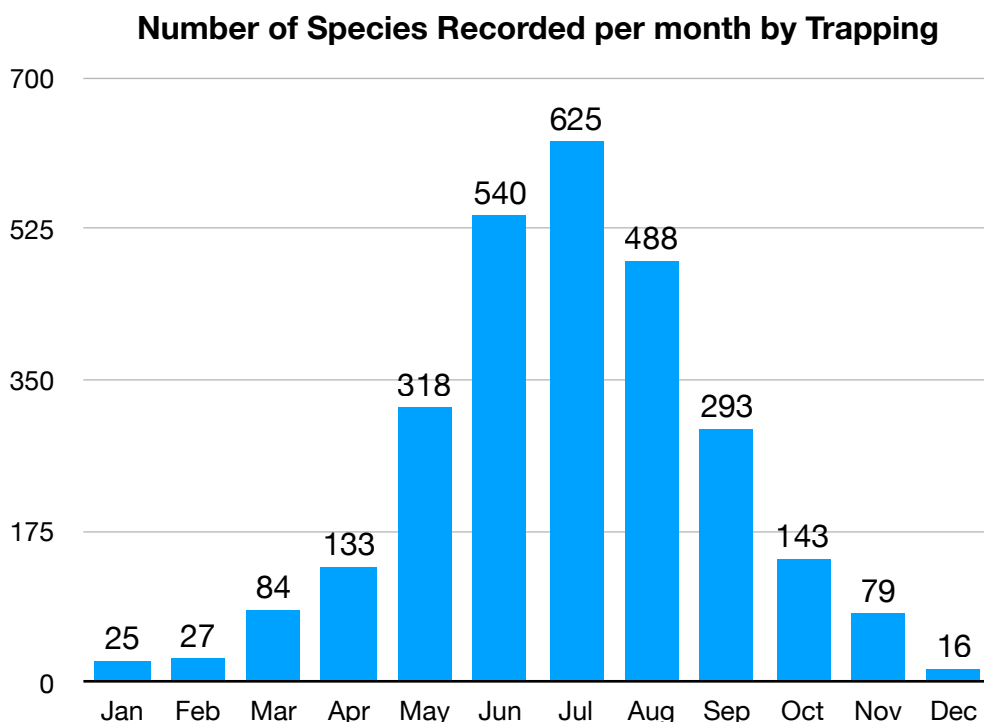


Figure 1: Graph, showing the number of species trapped per month in 2022.

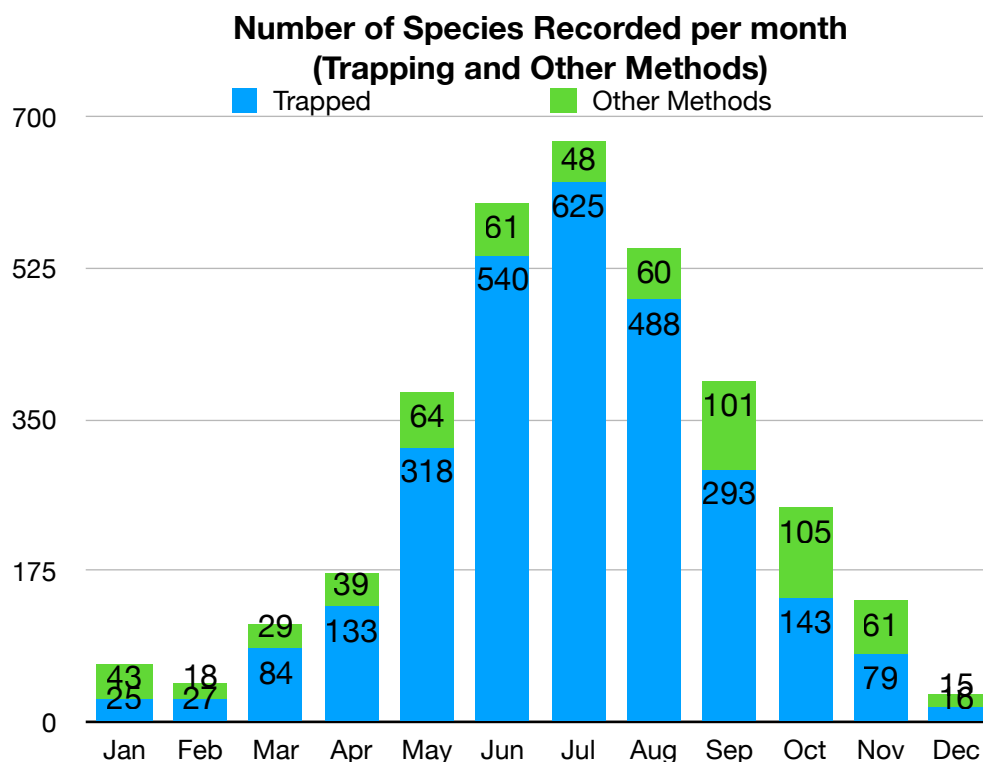


Figure 2: Graph, showing the number of species per month in 2022 (all methods).

The extent to which other methods of observing moths (daytime observations, beating, leaf mines, etc) contributed to the total counts of species can be seen from the graph, above.

Least-recorded Species in 2022

As always, time and effort dictate that this report cannot be a complete analysis of the year's records; it does however itemise all micro-moth species that were recorded three or fewer times during the year as well as all macro-moth species that were recorded five or fewer times.

Throughout what follows, header information relating to each species appears thus:

3.004 Gold Swift *Hepialus hecta* (Linnaeus, 1758)

Which, reading left to right detail:

- Agassiz, Beavan & Heckford species number
- Species' vernacular name
- Species' taxonomic name
- Species' Author(s)

1.004 *Micropterix aruncella* (Scopoli, 1763)

One adult at Carleton Road, Higher Poynton on 27th May (SHH).

2.003 *Eriocrania unimaculella* (Zetterstedt, 1839)

Two larvae with horse-shoe head markings at Tegg's Nose Country Park on 10th May (TW), two mines on silver birch at Park Pit, Poynton on 26th April (SHH) and an adult moth at Linley Lane, Alsager on 14th April (MD).

2.004 *Eriocrania sparrmannella* (Bosc, 1791)

A mine, on birch, at Danes Moss on 30th June (SHH).

2.007 *Eriocrania semipurpurella* (Stephens, 1835)

One on 22nd March and another on 27th March, both males determined by genitalia examination, at Linley Lane, Alsager (MD).

2.008 *Eriocrania sangii* (Wood, 1891)

A male and a female at Linley Lane, Alsager on 27th March (MD) and a male at Carleton Road, Higher Poynton on 5th April (SHH). All were determined by genitalia examination.

3.004 Gold Swift *Phymatopus hecta* (Linnaeus, 1758)

Several at Danes Moss on 16th June (SBr, AE, SHH, DTo, TW), one at Hockenhull Platts on 21st June (CJ) and two at Lamaload on 17th July (SHH).

4.002 *Stigmella lapponica* (Wocke, 1862)

A mine on birch at Danes Moss on 30th June and another (tenanted) at Barnsfold Road, Hawk Green on 7th September (SHH). This was presumably a second generation and, if so, the first time a second generation has been noted in Cheshire. Another mine on birch, with a long angular gallery, egg underside, initial frass green, was recorded at Danes Moss on 2nd October (TW).

4.008 *Stigmella glutinosae* (Stainton, 1858)

A tenanted mine at Gowey Meadows CWT on 26th July (SWH). The larva bore the distinctive prothoracic plate.

4.013 Apple Pygmy *Stigmella malella* (Stainton, 1854)

One mine on Crab Apple, with egg underside, on 21st September, and two mines on apple at on 29th September, all at Tegg's Nose Country Park (TW).

4.024 *Stigmella magdalenae* (Klimesch, 1950)

A mine on rowan at Kerridge Hill on 17th September (TW).

4.041 *Stigmella sorbi* (Stainton, 1861)

A mine on rowan at Tegg's Nose Country Park on 30th June (TW).

4.061 *Stigmella atricapitella* (Haworth, 1828)

A female at Linley Lane, Alsager on 16th June (MD), determined by genitalia examination, and a mine on oak, with egg underside and larva with dark prothoracic sclerites at Hurst Clough on 13th November (SHH).

4.063 *Stigmella roborella* (Johansson, 1971)

A pale yellow larva, with pale brown head, and egg against a vein, at Macclesfield Forest on 17th August (TW).

4.071 *Bohemannia pulverosella* (Stainton, 1849)

One mine on apple at Carleton Road, Higher Poynton on 4th September, one three days later at Barnsfold Road, Hawk Green (SHH) and a number at Alvanley on 13th October (HJ).

4.074 *Etainia sericopeza* (Zeller, 1839)

A mine on samara of Norway maple at Eastham Country Park on 25th September (PH).



4.075 *Etainia louisella* (Sircom, 1849)

Two mines on field maple on the Middlewood Way, Higher Poynton on 28th September (SHH).

Steve Hind

4.085 *Ectoedemia argyropeza* (Zeller, 1839)

Mines on fallen aspen leaves at Hurst Clough on 13th November, at Hyde on 19th November and at Godley the same day (SHH).

6.004 *Heliozela resplendella* (Stainton, 1851)

Two mines on alder at Danes Moss on 15th September (AE, SHH).

7.015 *Nematopogon swammerdamella* (Linnaeus, 1758)

A female, determined by genitalia examination, on the Greenlooms track at Waverton on 20th May (HC), one on 22nd May and another six days later at Linley Lane, Alsager on 28th May (MD).

8.001 *Incurvaria pectinea* (Haworth, 1828)

Approximately ten mines on birch at Danes Moss on 15th September (AE, SHH).

8.003 *Incurvaria oehmanniella* (Hübner, 1796)

A late one at Peckforton Hill on 8th July (MRW).

8.005 *Phylloporia bistrigella* (Haworth, 1828)

One adult at Linley Lane, Alsager on 14th May (MD), mines on downy birch at Carleton Road, Higher Poynton on 24th August (SHH) and mines on birch at Frodsham on 8th October (HJ).

11.001 *Diplodoma laichartingella* (Goeze, 1783)
One at Danes Moss on 30th June (SHH).



Steve Hind



11.007 *Bankesia conspurcatella* (Zeller, 1850)
NEW FOR CHESHIRE. One at Danes Moss on
6th March (AE).

Andrew Emmerson

11.009 *Luffia lapidella* (Goeze, 1783)
At least two hundred cases on a sandstone wall at Chester Road,
Helsby (only the second site for Cheshire) on 15th January
(MJ&GO), followed by a third site, at Lindow Common on 10th
April (BS), where there were at least 20 cases on the trunk of a
large, old birch.

Ben Smart



11.012 *Psyche casta* (Pallas, 1767)
A case on bramble at Wybunbury Moss on 19th May (JEH).

12.006 *Infurcitinea argentimaculella* (Stainton, 1849)
At least five larval tubes on Lepraria-encrusted oak at Dunham Park, Dunham Massey on 16th
January (BS).

12.012 *Triaxomera parasitella* (Hübner, 1796)
One at Wharton on 20th May (JLa) and four at Pembroke Close, Handbridge on 24th May
(KP).

12.026 **Common Clothes Moth** *Tineola bisselliella* (Hummel, 1823)
One at Macclesfield Railway Station was found alive on a Cross Country train travelling
through Cheshire on 25th March (A&JB). It is not known where the moth had boarded the
train, which had travelled from the south.

12.027 **Case-bearing Clothes Moth** *Tinea pellionella* (Linnaeus, 1758)
A male, determined by genitalia examination, at Badger Bait, Little Neston on 8th June (GJ).

12.037 *Monopis weaverella* (Scott, 1858)
One on 2nd June and another on 16th June at Midgley Lane, Wildboarclough (A&JB).

12.039 *Monopis crocicapitella* (Clemens, 1859)
One on 22nd September and another on 11th October at Bayswater Road, Wallasey (CS), and

one, determined by genitalia examination, at Burton Mere Wetlands RSPB (West) on 16th October (JWR). This species was first recorded in Cheshire in 2012, on Hilbre Island, and only once more before 2022, at Willaston, Nantwich.

14.008 *Bucculatrix cidarella* (Zeller, 1839)

A mine on alder at Danes Moss on 15th September (AE, SHH).

15.004 *Caloptilia elongella* (Linnaeus, 1761)

A mine on alder at Danes Moss on 15th September (AE, SHH). Also, one male and one female, both determined by genitalia examination, at Linley Lane, Alsager on 31 October (MD).



15.012 *Caloptilia semifascia* (Haworth, 1828)

NEW FOR CHESHIRE. One at Kent Close, Bromborough on 23rd July (PH).

Paul Hopkins

15.017 *Calybites phasianipennella* (Hübner, [1813])

One at Knowle Close, Great Sutton on 4th September (MBe).



Mel Bellingham

15.025 *Parornix betulae* (Stainton, 1854)

A female on 16th June and a male on 12th August, determined by genitalia examination, at Linley Lane, Alsager (MD). Also, several (one of which - a male- was determined by genitalia examination) at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW).

15.030 *Parornix scoticella* (Stainton, 1850)

Mines on apple at Alvanley on 13th October (HJ).

15.032 *Parornix finitimella* (Zeller, 1850)

Several mines on blackthorn, the larvae having black legs, at Ashton on 14th October (HJ).

15.036 *Phyllonorycter heegeriella* (Zeller, 1846)
One at Heath Lane Allotment, Little Sutton on 11th August (HJ).

15.046 *Phyllonorycter blancardella* (Fabricius, 1781)
Mines on apple at Ashton on 14th October (HJ).

15.054 *Phyllonorycter viminiella* (Sircom, 1848)
Mine on *Salix cinerea* at Danes Moss on 15th September (AE, SHH).

15.065 *Phyllonorycter esperella* (Goeze, 1783)
Mines on hornbeam at Lea-by-Backford on 6th September and at Great Barrow on 10th October (HJ), and also at Hurst Clough on 13th November (SHH).

15.082 *Phyllonorycter klemannella* (Fabricius, 1781)
Mines on alder at Higher Poynton on 26th October (SHH).

16.002 **Orchard Ermine** *Yponomeuta padella* (Linnaeus, 1758)
An adult among many larvae in five webs at Holford Drive, Winsford between 9th May and 16th May (AH) and larvae in webs covering an extensive area of hawthorn hedge, at Clive, Winsford on 15th May (IJ).

16.004 **Spindle Ermine** *Yponomeuta cagnagella* (Hübner, [1813])
Larvae at Hob Hey Wood, Frodsham on 18th May (MOS) and hundreds in spindle trees in the central reservation, covered with larval web, on the A41 between Hoole and Vicars Cross, Chester on 1st July (HC).



16.014 *Pseudoswammerdamia combinella* (Hübner, 1786)
One at Meadowside, Burwardsley on 9th May (MRW).

Mike Whiteside

17.002 *Ypsolopha nemorella* (Linnaeus, 1758)
One on 11th July and two on 9th August, both at Carleton Road, Higher Poynton (SHH).

17.009 *Ypsolopha sylvella* (Linnaeus, 1767)
One at Kent Close, Bromborough on 23rd July (PH), one at Holly Court, Helsby on 19th September (MJ&GO) and one at Birchall Moss, Hatherton on 28th October (CK).



19.001 *Orthotelia sparganella* (Thunberg, 1788)

One at Chester Zoo Nature Reserve on 28th July (SWH), one at Hockenhull Platts on 13th August (CJ) and one at Carleton Road, Higher Poynton on 13th August (SHH).

Clive Jones

20.006 *Argyresthia dilectella* (Zeller, 1847)

One at Linley Lane, Alsager on 17th June (MD).

20.013 *Argyresthia pygmaeella* ([Denis & Schiffermüller], 1775)

One at Linley Lane, Alsager on 13th June (MD) and one at Wellington Close, Ellesmere Port on 20th July (HJ).

20.018 *Argyresthia spinosella* Stainton, 1849

One at Graham Road, Blacon on 16th June (DD) and one at Benty Heath Lane, Willaston on 22nd June (RS).



21.002 *Lyonetia prunifoliella* (Hübner, 1796)

NEW FOR CHESHIRE. One at Dane Road, Sale on 3rd September (JPS).

John P Shaughnessy

22.003 *Prays ruficeps* (Heinemann, 1854)

One at Kent Close, Bromborough on 29th July (PH) and one at Knowle Close, Great Sutton on 11th August (MBe).

24.001 *Bedellia somnulentella* (Zeller, 1847)

Mines on bindweed at Danes Moss on 15th September, at Higher Poynton on 26th September and at Stockport on 11th October (SHH).

28.004 *Denisia similella* (Hübner, 1796)

Three, at Lamaload, on 17th July (SHH).

28.008 *Metalampra italica* (Baldizzone, 1977)

One at Chester Zoo Nature Reserve on 28th July (SWH; with MB and MJ) and another nearby on the same date (PH; with ED).

28.025 *Pleurota bicostella* (Clerck, 1759)

One at Higher Swineshaw, Stalybridge on 15th June (DW).

32.010 *Agonopterix conterminella* (Zeller, 1839)
One at Bonis Hall Lane, Prestbury on 22nd July (SHH).

32.015 *Agonopterix subpropinquella* (Stainton, 1849)
One at Broadbottom Road, Mottram on 11th April (BU).

32.019 *Agonopterix ciliella* (Stainton, 1849)
Determined by genitalia examination, a male at Carleton Road, Higher Poynton on 10th April (SHH) and another male at Midgley Lane, Wildboarclough on 7th May (A&JB); also, one confirmed from examination of the cilia of the underwing, at Birchall Moss, Hatherton on 30th December (CK).

32.024 *Agonopterix assimilella* (Treitschke, 1832)
An early instar of a larva found inside a gorse stem at Thurstaston Common on 23rd March (PH).

32.029 *Agonopterix umbellana* (Fabricius, 1794)
One at Linley Lane, Alsager on 8th August (MD).

32.030 *Agonopterix nervosa* (Haworth, 1811)
One at Carleton Road, Higher Poynton on 21st July (SHH), one on 4th September and another on 21st September, both at Athol Road, Bramhall (AC).



32.032 *Agonopterix angelicella* (Hübner, [1813])
One at Kent Close, Bromborough on 18th July (PH), one, determined by genitalia examination, at Knowle Close, Great Sutton on 19th July (MBe) and at least two at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW).

Steve Hind

32.035 *Agonopterix yeatiana* (Fabricius, 1781)
One on 17th July, and another four days later, at Pembroke Close, Handbridge (KP)

35.010 *Aproaerema anthyllidella* (Hübner, [1813])
Two on 13th August and one on 8th September at Linley Lane, Alsager (MD).

35.020 *Anarsia spartiella* (Schrank, 1802)
One, determined by genitalia examination, at Wellington Close, Ellesmere Port on 23rd June (HJ) and one, with long, exposed labial palps and tufts at Hightree Drive, Henbury on 17th July (TW).

35.058 *Metzneria metzneriella* (Stainton, 1851)
One at Linley Lane, Alsager on 23rd June (MD), one at Carleton Road, Higher Poynton on 1st July (SHH) and one at Holly Court, Helsby on 12th July (MJ&GO).

35.066 *Monochroa tenebrella* (Hübner, [1817])
A male, determined by genitalia examination, at Linley Lane, Alsager on 16th June (MD).

- 35.071 *Monochroa lucidella* (Stephens, 1834)
One at Shannon Close, Willaston, Nantwich on 11th July (DT).
- 35.085 *Athrips mouffetella* (Linnaeus, 1758)
One at Kingsley on 17th July (PM).
- 35.101 *Gelechia sororculella* (Hübner, [1817])
One at Deansfield Way, Elton on 12th July (SWH).
- 35.129 *Caryocolum viscariella* (Stainton, 1855)
One, determined by genitalia examination, at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW). The only previous record of this species in the county was from 2019, when larvae were found feeding at the tips of stems of Red Campion.
- 35.132 *Caryocolum fraternella* (Douglas, 1851)
Three, determined by genitalia examination, at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW).
- 35.148 *Carpatolechia fugitivella* (Zeller, 1839)
One, determined by genitalia examination, at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW).
- 35.149 *Carpatolechia alburnella* (Zeller, 1839)
One at Dane Road, Sale on 7th July (JPS).
- 35.150 *Carpatolechia notatella* (Hübner, [1813])
A larva on *Salix cinerea* at Danes Moss on 15th September (AE, SHH).
- 35.151 *Carpatolechia proximella* (Hübner, 1796)
Many at Danes Moss on 16th June (SBr, AE, SHH, DTo, TW).
- 35.157 *Recurvaria leucatella* (Clerck, 1759)
One on 5th July (PH; with AMu, PMu and TS), one on 26th July (RL) and one on 28th July (PH; with ED), all at Chester Zoo Nature Reserve.
- 36.0019 *Batrachedra confusella* (Berggren, Aarvik, Huemer, Lee & Mutanen, 2022)
A male on 29th June and another on 13th July at Linley Lane, Alsager (MD) and a female at Carleton Road, Higher Poynton on 11th July (SHH). All were determined by genitalia examination.
- 37.007 *Coleophora flavipennella* (Duponchel, [1843])
One female at Common Lane, Waverton on 17th July (HC) and three (all dead in the trap) at Carleton Road, Higher Poynton on 18th July. All were determined by genitalia examination.
- 37.010 *Coleophora alnifoliae* (Barasch, 1934)
NEW FOR CHESHIRE. A female, determined by genitalia examination, at Linley Lane, Alsager on 5th July (MD).
- 37.016 **Apple and Plum Case-bearer** *Coleophora spinella* (Schrank, 1802)
A male at Wellington Close, Ellesmere Port on 13th July (HJ) and a female at Common Lane, Waverton on 17th July (HC), both determined by genitalia examination.
- 37.028 *Coleophora juncicolella* (Stainton, 1851)
A larva, off heather, at Woodhead by the side of a track from A628 to the Longdendale Trail on 26th March (SHH).
- 37.029 *Coleophora orbitella* Zeller, 1849
A male on 17th June and a female on 21st June, both determined by genitalia examination, at

Linley Lane, Alsager (MD). Also, a larval case on birch at Danes Moss on 2nd October (TW).

37.033 *Coleophora trifolii* (Curtis, 1832)

One at Bayswater Road, Wallasey on 20th July (CS) and one at Deansfield Way, Elton on 3rd September (SWH).

37.035 **Clover Case-bearer** *Coleophora alcyonipennella* (Kollar, 1832)

Two at Carleton Road, Higher Poynton on 14th May (SHH). One, a male, was determined by genitalia examination. There are only three confirmed records of this species in Cheshire, although several more date from the time when it was found to be separate from *Coleophora frischella*.



37.046 *Coleophora deauratella* Lienig & Zeller, 1846

One at Jacksons Brickworks, Higher Poynton on 12th June and one at Carleton Road, Higher Poynton on 11th July (SHH).

Steve Hind

37.049 **Pistol Case-bearer** *Coleophora anatipennella* (Hübner, 1796)

Larvae, at Gowy Meadows CWT, on 3rd September and on 22nd October (SWH) and a mine, with a case and small holes in the leaf, at Helsby on 16th October (HJ).

37.050 *Coleophora albidella* ([Denis & Schiffermüller], 1775)

Several (one determined by genitalia examination) at Danes Moss on 16th June (SBr, AE, SH H, DTo, TW).

37.066 **Larch Case-bearer** *Coleophora laricella* (Hübner, [1817])

A male, determined by genitalia examination, at Linley Lane, Alsager on 3rd June (MD).

37.071 *Coleophora glaucicolella* Wood, 1892

A male, determined by genitalia examination, at Bakestonedale Moor on 10th July (SHH).

37.083 *Coleophora saxicolella* (Duponchel, [1843])

A female, determined by genitalia examination, at Common Lane, Waverton on 17th July (HC).

37.099 *Coleophora striatipennella* (Nylander [1848])

Two males and one female at Danes Moss on 16th June (S Browne, A Emmerson, S H Hind, DTo, T Ward) and a male at Carleton Road, Higher Poynton on 17th June (SHH). All determined by genitalia examination.

37.102 *Coleophora argentula* (Stephens, 1834)

Four cases on yarrow seed heads at Macclesfield Road, Whaley Bridge on 18th September (AS). Several mines on yarrow at Ness on 27th October and cases on yarrow at Lea-by-Backford on 20th September (HJ).



38.018 *Elachista bisulcella* (Duponchel, [1843])

A male, determined by genitalia examination, at Carleton Road, Higher Poynton on 23rd August (SHH). Only the sixth record for Cheshire.

Steve Hind

38.028 *Elachista alpinella* Stainton, 1854
One on 7th June and another on 23rd June at Kent Close, Bromborough (PH). Both determined by genitalia examination. There had been only seven previous Cheshire records.



Paul Hopkins

38.030 *Elachista albifrontella* (Hübner, [1817])

Several (of which one male determined by genitalia examination) at Danes Moss on 16th June (SBr, AE, SHH, DTo, TW) and one at Bayswater Road, Wallasey on 29th July (CS).



38.032 *Elachista apicipunctella* (Stainton, 1849)

One at Bayswater Road, Wallasey on 27th July (CS).

Colin Schofield

38.039 *Elachista maculicerusella* (Bruand, 1859)

One on 15th May and one on 22nd May at Knowle Close, Great Sutton (MBe).

39.003 *Spuleria flavicaput* (Haworth, 1828)

One on 26th June and another two days later, and one on 21st July, all at Birchall Moss, Hatherton (CK).



39.005 *Chrysoclista linneella* (Clerck, 1759)
NEW FOR CHESHIRE. One at Highfield Road, Ellesmere Port on 29th July (PMo).

Paul Morris

40.009 *Mompha sturnipennella* (Treitschke, 1833)
An early one at Holly Court, Helsby on 16th April (MJ&GO).

45.011 **Brindled Plume** *Amblyptilia punctidactyla* (Haworth, 1811)
One at Holly Court, Helsby on 29th June (MJ&GO).

45.019 **Saxifrage Plume** *Stenoptilia millieridactyla* (Bruand, 1861)
One at Midgley Lane, Wildboarclough on 8th July (A&JB), one at Carleton Road, Higher Poynton on 21st July (SHH) and one at Linley Lane, Alsager on 10th September (MD).



45.027 **Scarce Light Plume** *Oxyptilus laetus* (Zeller, 1847)
One at Holly Court, Helsby on 1st July (MJ&GO). The only two previous Cheshire records were from Alsager in 2013 and from Little Neston in 2019.

Mandy Jervis and Glyn Owen

45.028 **Wood Sage Plume** *Capperia britanniodactylus* (Gregson, 1869)
A larva in terminal bud of wood sage, with frass and feeding damage at Midgley Lane, Wildboarclough on 1st May. It pupated around the 14th June and the imago eclosed on 7th July. Another larva in a wilted shoot of wood sage at Dane Valley, Wildboarclough on 14th May (A&JB).



45.041 **Small Goldenrod Plume** *Hellinsia osteodactylus* (Zeller, 1841)

One at Hargrave Avenue, Crewe on 10th July (T&EH) and one at Thornton Avenue, Higher Bebington on 30th July (CD).

Clive Donaldson

45.043 **Hemp Agrimony Plume** *Adaina microdactyla* (Hübner, [1813])

One, with a wing-span of 14mm, on 21st May and another, this time only 12.5mm, on 27th August at Dane Road, Sale (JPS). Two larvae, with exit holes in Hemp Agrimony stems, at Macclesfield Road, Whaley Bridge on 16th September (AS).



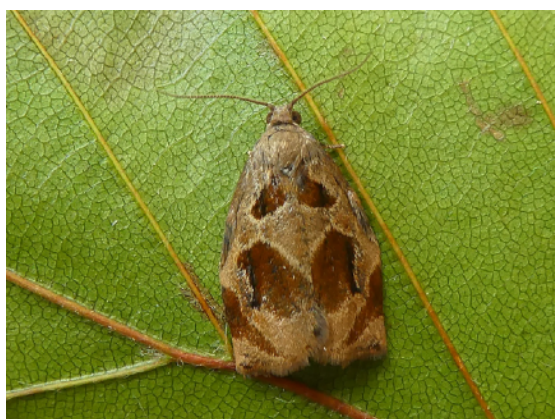
47.006 *Epermenia falciformis* (Haworth, 1828)

One at Woodlands Drive, Chester on 24th August (AN). Only the second record of this species in Cheshire, the first being at Little Neston in 2020.

Alex Neal

49.010 *Philedonides lunana* (Thunberg, 1784)

One netted off heather below Woodhead tunnel on 26th March (SHH).



49.014 **Brown Oak Tortrix** *Archips crataegana* (Hübner, [1799])

One at Pembroke Close, Handbridge on 12th June (KP). This is the first record in Cheshire for over fifty years.

Kevin Peace

49.021 *Ptycholomoides aeriferana* (Herrich-Schäffer, 1851)

One at Weston Grove, Upton, Chester on 17th June (RW) and one at Linley Lane, Alsager on 17th July (MD).

49.022 *Ptycholoma lecheana* (Linnaeus, 1758)
One at Kent Close, Bromborough on 25th May (PH).

49.030 **Carnation Tortrix** *Cacoecimorpha pronubana* (Hübner, [1799])
One at Bayswater Road, Wallasey on 20th July (CS) and one at Birchall Moss, Hatherton on 7th August (CK).



49.033 **Bilberry Tortrix** *Aphelia viburnana*
([Denis & Schiffermüller], 1775)
One at Bosley Cloud on 7th June (JHS).

Jack H Swan

49.035 *Clepsis senecionana* (Hübner, [1819])
At least twenty at Higher Swineshaw, Stalybridge on 14th May and thirty at Slatepit Moor on the same day (DW).

49.050 **Grey Tortrix** *Cnephasia stephensiana* (Doubleday, [1849])
One at Knowle Close, Great Sutton on 8th May (MBe), one at Common Lane, Waverton on 25th June (HC) and one at Linley Lane, Alsager on 5th July (MD). All were male and determined by genitalia examination.

49.057 *Cnephasia longana* (Haworth, 1811)
One at Holly Court, Helsby on 11th July (MJ&GO).

49.061 *Acleris holmiana* (Linnaeus, 1758)
One at Birchall Moss, Hatherton on 11th July (CK)

49.063 *Acleris bergmanniana* (Linnaeus, 1758)
One at Red Rocks, Hoylake on 30th June (TS).



49.078 *Acleris aspersana* (Hübner, [1817])
One at Lamaload on 14th August (SHH,
JWR).

John Rayner

49.090 *Eulia ministrana* (Linnaeus, 1758)

One on 19th May and another three days later at Birchall Moss, Hatherton (CK), with some more seen during the day.

49.110 *Agapeta zoegana* (Linnaeus, 1767)

One at Burton Mere Wetlands RSPB (East) on 22nd June (GJ), one at Linley Lane, Alsager on 5th July (MD) and one at Birchall Moss, Hatherton on 12th August (CK).

49.123 *Aethes beatricella* (Walsingham, 1898)

One, determined by genitalia examination, at Wellington Close, Ellesmere Port on 22nd June (HJ).



49.134 *Cochylis roseana* (Haworth, 1811)
Two at Midgley Lane, Wildboarclough on
18th July (A&JB).

Alison & Julian Borrow

49.137 *Neocochylis dubitana* (Hübner, [1799])

One at Wellington Close, Ellesmere Port on 11th July (HJ) and one at Kingsley on 14th August (PM).

49.172 *Phiaris schulziana* (Fabricius, [1777])

One at Wybunbury on 9th July (RB).

49.188 *Endothenia marginana* (Haworth, 1811)

One at Carleton Road, Higher Poynton on 20th July (SHH).

49.193 *Endothenia quadrimaculana* (Haworth, 1811)

One at Carleton Road, Higher Poynton on 8th July (SHH) and one at Dane Road, Sale on 19th July (JPS).

49.211 *Ancylis myrtillana* (Treitschke, 1830)

One at Midgley Lane, Wildboarclough on 7th May (A&JB).

49.225 *Spilonota laricana* (Heinemann, 1863)

One, determined by genitalia examination, at Lamaload on 17th July (SHH).

49.231 *Epinotia brunnichana* (Linnaeus, 1767)

One, determined by genitalia examination, at Hazel Grove Golf Club on 20th July (JWR).

49.242 *Epinotia nanana* (Treitschke, 1835)

One, determined by genitalia examination, at Badger Bait, Little Neston on 17th June (GJ).

49.244 *Epinotia subocellana* (Donovan, 1806)

Several at Danes Moss on 16th June (SBr, AE, SHH, DTo, TW).

49.245 *Epinotia tetraquetra* (Haworth, 1811)

One on 19th May and one three days later at Linley Lane, Alsager (MD).

49.251 *Epinotia rubiginosana* (Herrich-Schäffer, 1851)

One on 16th June and another the next day at Linley Lane, Alsager (MD).



49.252 *Epinotia tedella* (Clerck, 1759)

One on 14th May and another on 22nd May at Carleton Road, Higher Poynton (SHH).

Steve Hind



49.261 *Crocidosema plebejana* (Zeller, 1847)
NEW FOR CHESHIRE. One at Naseby Road, Congleton on 10th November (JHS).

Jack H Swan

49.272 *Eucosma tripoliana* (Barrett, 1880)
One, determined by genitalia examination, at Wellington Close, Ellesmere Port on 21st July (HJ).

49.283 *Gypsonoma aceriana* (Duponchel, [1843])
One at Bayswater Road, Wallasey on 13th July (CS) and one at Countess of Chester Country Park on 16th July (PSm).

49.285 *Epiblema scutulana* ([Denis & Schiffermüller], 1775)
One on 21st May, another on 10th June and a third on 17th June at Midgley Lane, Wildboarclough (A&JB).

49.288 *Epiblema foenella* (Linnaeus, 1758)
One on 17th July and another a day later at Back Lane, Shavington (RB)
one at Holly Court, Helsby on 19th July (MJ&GO).



Mandy Jervis and Glyn Owen

49.289 *Epiblema costipunctana* (Haworth, 1811)
One, determined by genitalia examination, at Wellington Close, Ellesmere Port on 18th July (HJ).

49.313 *Dichrorampha acuminatana* (Lienig & Zeller, 1846)
One, with the trap near tansy, at Carleton Road, Higher Poynton on 4th June (SHH). One at Heath Lane Allotment, Little Sutton on 10th August and one at Wellington Close, Ellesmere Port on 24th August (HJ). All were determined by genitalia examination.

49.315 *Dichrorampha simpliciana* (Haworth, 1811)

One, flushed from mugwort at Basford on 9th September and determined by genitalia examination (JPB).

49.318 *Dichrorampha vancouverana* (McDunnough, 1935)

One on 17th July and another the next day at Back Lane, Shavington (RB).

49.319 *Dichrorampha flavidorsana* (Knaggs, 1867)

One off tansy at Carleton Road, Higher Poynton on 16th July (SHH).

49.320 *Dichrorampha alpinana* (Treitschke, 1830)

Two at Jacksons Brickworks, Higher Poynton on 12th June (SHH), one at Macclesfield Road, Whaley Bridge on 13th June (AS) and one at Highfield Road, Ellesmere Port on 1st July (PMo). All were seen on ox-eye daisy.



Paul Morris

49.332 *Cydia coniferana* (Saxesen, 1840)

One at Linley Lane, Alsager on 17th July (MD).

49.334 *Cydia cosmophorana* (Treitschke, 1835)

One, to a CUL lure, at Linley Lane, Alsager on 7th June (MD).

49.351 *Grapholita lunulana* ([Denis & Schiffermüller], 1775)

Five at Danes Moss on 8th May (DH-T, AM).

49.357 **Plum Fruit Moth** *Grapholita funebrana* (Treitschke, 1835)

One, to a FUN lure, between 18:15-19:10 hours at Carleton Road, Higher Poynton on 13th June (SHH). The lure was left out overnight, but no further moths were caught. One, also to a FUN lure, at Badger Bait, Little Neston on 17th June (GJ) and one, determined by genitalia examination, at Linley Lane, Alsager on 7th July (MD).

49.358 *Grapholita tenebrosana* (Duponchel, [1843])

Two, to an ARG lure overnight, at Carleton Road, Higher Poynton on 10th June (SHH). One male was determined by genitalia examination. The only previous Cheshire records were from Alsager in June 2012 and Higher Poynton in June 2019.

49.363 *Pammene argyrana* (Hübner, [1799])

Two, to an ARG lure, at Linley Lane, Alsager on 30th April (MD).

49.365 *Pammene albuginana* (Guenée, 1845)

One, to a MOL lure, and determined by genitalia examination, at Kent Close, Bromborough on 22nd April (PH). The only previous Cheshire records were also from this recorder, in May 2020.

49.366 *Pammene obscurana* (Stephens, 1834)

One, to an ARG lure, at Linley Lane, Alsager on 2nd May (MD).



49.371 *Pammene rhediella* (Clerck, 1759)
One at Hall Field Coppice, Alsager on 24th
April (DRS).

Dave Skingsley

52.012 **Yellow-legged Clearwing** *Synanthedon vespiformis* (Linnaeus, 1761)
All attracted to VES lures. One at Carleton Road, Higher Poynton between 14-16:00 hours on
10th June (SHH), one at Linley Lane, Alsager on 21st June (MD) and three at Kent Close,
Bromborough arriving between 4pm - 6pm on 11th July (PH), bringing the total number of
Cheshire records to ten.

52.014 **Six-belted Clearwing** *Bembecia ichneumoniformis* ([Denis & Schiffermüller], 1775)
One at Ellesmere Port on 15th June and another at Port Sunlight River Park two days later
(HJ). Thirty-two were counted at Ashton's Flashes, Northwich on 22nd June (CRA).

62.007 *Cryptoblabes bistriga* (Haworth, 1811)
One at Badger Bait, Little Neston on 11th June (GJ).

62.012 *Matilella fusca* (Haworth, 1811)
One at Lower Swineshaw, Stalybridge on 8th July (DW), one at Dane Road, Sale on 21st
August (JPS) and a female, determined by genitalia examination, at Linley Lane, Alsager on
30th August (MD).



62.023 *Pempelia palumbella* ([Denis &
Schiffermüller], 1775)
One at Tencherfield, Nantwich on 17th June
(MH) and one at Neston Drive, Chester on
18th July (PSm).

Mike Holmes



62.024 *Rhodophaea formosa* (Haworth, 1811)
One at Bulkeley Hill on 17th June (MRW).
Only the fourth in Cheshire since it was first recorded, in Shavington in June 2010.

Mike Whiteside

62.032 *Nephterix angustella* (Hübner, 1796)
NEW FOR CHESHIRE. One at Newton Lane, Tattenhall on 12th August (KH).



Kate Hughes



62.047 *Assara terebrella* (Zincken, 1818)
One at Macclesfield Road, Whaley Bridge on 29th July (AS). The only previous record in Cheshire was from Hazel Grove in May 2017.

Angie Seymour

62.057 *Phycitodes maritima* (Tengström, 1848)
One, determined by genitalia examination, at Wellington Close, Ellesmere Port on 11th July (HJ).

62.059 *Phycitodes saxicola* (Vaughan, 1870)
One, determined by genitalia examination, at Knowle Close, Great Sutton on 27th July (MBE).

62.062 **Indian Meal Moth** *Plodia interpunctella* (Hübner, [1813])
One at Back Lane, Shavington on 4th August (RB).

62.065 *Ephestia woodiella* Richards & Thomson, 1932

One at Knowle Close, Great Sutton on 2nd June (MBe), one at Shannon Close, Willaston, Nantwich on 13th June (DT) and one at Linley Lane, Alsager on 21st June (MD). All determined by genitalia examination.



63.002 *Loxostege sticticalis* (Linnaeus, 1761)

One at Highfield Road, Hazel Grove on 2nd September (JWR).

John Rayner

63.007 *Pyrausta purpuralis* (Linnaeus, 1758)

One at Bayswater Road, Wallasey on 13th August (CS) and one at Deansfield Way, Elton on 15th August (SWH).

63.014 *Sitochroa palealis* ([Denis & Schiffermüller], 1775)

One at Bayswater Road, Wallasey on 25th July (CS).



Colin Schofield

63.046 *Duponchelia fovealis* (Zeller, 1847)

One at Kensington Road, Cheadle Heath, Stockport on 10th July (DH-T).



63.048 *Palpita vitrealis* (Rossi, 1794)
One at Knowle Close, Great Sutton on 21st August (MBe), one at Farr Hall Drive, Heswall on 26th October (JJ) and another on the same day at Holly Court, Helsby (MJ&GO).

Mandy Jervis and Glyn Owen

63.117 **Ringed China-mark** *Parapoynx stratiotata* (Linnaeus, 1758)
One at Tarvin on 11th June (RW).



66.003 **Lackey** *Malacosoma neustria* (Linnaeus, 1758)
One at Kent Close, Bromborough on 10th June (PH). Only the second record in Cheshire in 120 years, following the five from 1903 or earlier.

Paul Hopkins

66.008 **Fox Moth** *Macrothylacia rubi* (Linnaeus, 1758)
One on 9th May and another five days later at Midgley Lane, Wildboarclough (A&JB).



69.004 **Convolvulus Hawk-moth** *Agrius convolvuli* (Linnaeus, 1758)
One at Manor Park, Middlewich on 26th July (PBe), one at Carleton Road, Higher Poynton on 25th August (SHH), one at Nantwich on 11th September (MHo) and one at Back Lane, Shavington on 23rd September (RB). Also, a larva at Sandbach Flashes on 3rd August (DR).

Steve Hind



69.005 Death's-head Hawk-moth
Acherontia atropos (Linnaeus, 1758)
One larva on the Bottoms Lane track at Chester Meadows on 24th August (Joy Worden) and another larva at Nursery Road, Alsager on 1st September (MHD).

Muriel Dale

69.014 Bedstraw Hawk-moth *Hyles gallii* (Rottemburg, 1775)
One at Linley Lane, Alsager on 11th August (MD).



69.015 Striped Hawk-moth *Hyles livornica* (Esper, [1804])
One at Cedarways, Appleton Park, Warrington on 17th May (CW), one at Francis Road, Frodsham on 21st May (TK) and one at Arden House, Duckington on 22nd May (FMcC). These bring the total number of Cheshire records for this species to twenty, eleven of which pre-dated the middle of the twentieth century.

Clive Washington

70.006 Dwarf Cream Wave *Idaea fuscovenosa* (Goeze, 1781)
One on 29th June and another six days later at Badger Bait, Little Neston (GJ). Also, two at Bayswater Road, Wallasey on 3rd July (CS), two at Burton Mere Wetlands RSPB (East) on 11th July (GJ) and one at Wallasey on 24th August (TEG).



Colin Schofield

70.027 Cream Wave *Scopula floslactata* (Haworth, 1809)
One at Chester Zoo Nature Reserve on 28th July (IC; with SD, AMu, PMu and SRY).



70.032 **Birch Mocha** *Cyclophora albipunctata* (Hufnagel, 1767)
One at Countess of Chester Country Park on 16th July (PSm). This - the first record in Cheshire in over ten years - brings the total number of records for the county to seven.

Peter Smith

70.041 **July Belle** *Scotopteryx luridata* (Hufnagel, 1767)

A female, determined by genitalia examination, (with a central forewing dot closer to the second cross-line than to the third) at Midgley Lane, Wildboarclough on 2nd June (A&JB). This species has now been recorded twenty times at various points along a line towards the northern edge of the county, from the Wirral through Frodsham, Delamere and Wilmslow, to Higher Poynton and Wildboarclough.



Alison & Julian Borrow

70.046 **Oblique Carpet** *Orthonama vittata* (Borkhausen, 1794)

One at Pembroke Close, Handbridge on 16th June (KP).

70.047 **Gem** *Nycterosea obstipata* (Fabricius, 1794)

One at Bower Road, Hale on 19th July (AR).

70.048 **Red Carpet** *Xanthorhoe decoloraria* (Esper, [1806])

One at Midgley Lane, Wildboarclough on 23rd July (A&JB) and another there six days later (A&JB, JO). There have only been five Cheshire records of this species this century, all from the north-east of the county.



Alison & Julian Borrow

70.063 **Galium Carpet** *Epirrhoe galiata* ([Denis & Schiffermüller], 1775)
One at Midgley Lane, Wildboarclough on 8th July (A&JB).



Alison & Julian Borrow

70.068 **Beautiful Carpet** *Mesoleuca albicillata* (Linnaeus, 1758)
One at Linley Lane, Alsager on 9th July (MD) and one at Kent Close, Bromborough on 18th July (PH).



70.069 **Dark Spinach** *Pelurga comitata* (Linnaeus, 1758)
One on 29th July and another three days later at Holly Court, Helsby (MJ&GO). Also, one on 9th August and another the next day at Upton Road, Moreton (GC) and one at North Parade, Hoylake on 12th August (S&JE).

Mandy Jervis and Glyn Owen

70.083 **Cypress Carpet** *Thera cupressata* (Geyer, [1831])
One at Pembroke Close, Handbridge on 13th November (KP), which becomes only the third record for Cheshire.



Kevin Peace

70.108 **Pale November Moth** *Epirrita christyi* (Allen, 1906)
A male, determined by genitalia examination, at Linley Lane, Alsager on 27th October (MD), brings the total of records for Cheshire to six.

70.109 **Autumnal Moth** *Epirrita autumnata* (Borkhausen, 1794)
A male, determined by genitalia examination, at Linley Lane, Alsager on 17th October (MD). Also, by examination of the octavals, two at Brockholes Wood, Crowden on 20th October (CHe) and three at Swallows Wood, Hollingworth on 10th November (SBa, CHe & SHe, BU).



70.110 **Small Autumnal Moth** *Epirrita filigrammaria* (Herrich-Schäffer, 1846)
One, while checking heather flowers along the roadside, at The Street, Goyt Valley on 31st August (SHH, JWR), one at Lower Swineshaw Scout Hut, Stalybridge on 17th September and one at Lower Swineshaw, Stalybridge on 24th September (DW).

David Walsh

70.115 **Welsh Wave** *Venusia cambrica* (Curtis, 1839)
One at Kennel Wood, Lyme Park on 19th July (NE) and one, possibly from an unusual second brood, at Brockholes Wood, Crowden on 20th October (CHE).



70.139 **Barred Carpet** *Martania taeniata* (Stephens, 1831)
NEW FOR CHESHIRE. One at Woodlands Drive, Chester on 29th July (AN).

Alex Neal

70.143 **Sloe Pug** *Pasiphila chloerata* (Mabille, 1870)
One at Kent Close, Bromborough on 23rd June (PH).



70.159 **Cypress Pug** *Eupithecia phoeniceata* (Rambur, 1834)
One at Holly Court, Helsby on 15th August (MJ&GO), and one at Knowle Close, Great Sutton on 4th September (MBe). First recorded in Cheshire in 2019, this species now has eight records.

Mel Bellingham

70.163 **Larch Pug** *Eupithecia lariciata* (Freyer, 1841)
A male on 1st June and a female on 18th July at Midgley Lane, Wildboarclough (A&JB). Also, a male at Bonis Hall Lane, Prestbury on 22nd July (SHH). All were determined by genitalia

examination.

70.164 Fletcher's Pug or Pauper Pug *Eupithecia egenaria* (Herrich-Schäffer, 1848)
One on 8th May, and another six days later. Also, a female, determined by genitalia examination, on 17th June. All at Linley Lane, Alsager (MD). The total number of records for Cheshire now stands at seven.



70.166 Plain Pug *Eupithecia simpliciatata* (Haworth, 1809)
One at Linley Lane, Alsager on 19th July (MD), one at Vernon Avenue, Wallasey on 21st July (TWa) and another on the same day at Holly Court, Helsby (MJ&GO).

Mandy Jervis and Glyn Owen



70.169 Angle-barred Pug *Eupithecia innotata* (Hufnagel, 1767)
One at Huddersfield Road, Stalybridge on 5th June (DW). Also, one on 13th July, one on 25th July and another on 27th July at Birchall Moss, Hatherton (CK).

David Walsh



70.181 Valerian Pug *Eupithecia valerianata* (Hübner, [1813])
An early sighting was made at Oaklands Drive, Heswall on 22nd May (MB). Also, one at Meadowside, Burwardsley on 24th June (MRW) and one at Hockenhull Platts on 29th June. Seven larvae on Common Valerian flower-heads were observed there on 2nd July and a further eight - of at least two different instars - two days later (CJ).

Clive Jones

70.195 Streak *Chesias legatella* ([Denis & Schiffermüller], 1775)
One on 21st October and another on 27th October at Linley Lane, Alsager (MD), one at Bourne Street, Wilmslow on 21st October (TL) and one at Birchall Moss, Hatherton on 24th October (CK).

70.203 Orange Underwing *Archiearis parthenias* (Linnaeus, 1761)
One flying around birch trees at Tegg's Nose Country Park on 23rd March (TW), one seen in the birches at Macclesfield Road, Whaley Bridge on 25th March (AS) and one, resting on a birch sapling close to ground level, at Thurstaston Common on 23rd April (GJ).



70.206 **Clouded Magpie** *Abraxas sylvata* (Scopoli, 1763)
One at Kent Close, Bromborough on 16th July (PH) and one at Keswick Avenue, Gatley on 19th July (DJS).

David J Shaw



70.246 **Small Brindled Beauty** *Apocheima hispidaria* ([Denis & Schiffermüller], 1775)
One at Newton Lane, Tattenhall on 12th March (KH). The first in Cheshire for thirty years.

Kate Hughes

70.264 **Satin Beauty** *Deileptenia ribeata* (Clerck, 1759)
One on 13th June, another on 5th July and a third on 10th July, all at Linley Lane, Alsager (MD). Also, one at Lamaload on 17th July (SHH).



Steve Hind



70.292 **Grey Scalloped Bar** *Dyscia fagaria* (Thunberg, 1784)
One at Higher Swineshaw, Stalybridge on 15th June (DW).

David Walsh

70.295 **Grass Wave** *Perconia strigillaria* (Hübner, [1787])

Two on 1st June, four on 2nd June and five on 7th June, all at Abbots Moss (PB).

70.303 **Little Emerald** *Jodis lactearia* (Linnaeus, 1758)

One at Birchall Moss, Hatherton on 21st May (CK), one at Carleton Road, Higher Poynton on 25th May (SHH), and one at Shrigley Road, Bollington on 28th June (GS).

71.007 **Poplar Kitten** *Furcula bifida* (Brahm, 1787)

One at Highfield Road, Hazel Grove on 8th May (JWR), one at Randle Bennett Close, Elworth on 20th May (PFA), two at Badger Bait, Little Neston on 2nd June (GJ) and one at Shannon Close, Willaston, Nantwich on 21st July (DT).

71.010 **Marbled Brown** *Drymonia dodonaea* ([Denis & Schiffermüller], 1775)

One at Meadowside, Burwardsley on 3rd May (MRW). This is the ninth record for Cheshire, five of which have come from this site.

72.007 **Beautiful Snout** *Hypena crassalis* (Fabricius, 1787)

One at Midgley Lane, Wildboarclough on 7th June (A&JB), two at Walkerwood Reservoir, Stalybridge on 11th June (DW), one at Bulkeley Hill on 16th June (MRW), another the same day at Farr Hall Drive, Heswall (JJ) and at Broadbottom Road, Mottram on 18th June (BU).

72.023 **Clouded Buff** *Diacrisia sannio* (Linnaeus, 1758)

Seen at Flaxmere on 11th June (MHw) and on 15th June (PBr).

72.025 **Wood Tiger** *Parasemia plantaginis* (Linnaeus, 1758)

One at Tegg's Nose Country Park on 2nd June (TW).

72.042 **Red-necked Footman** *Atolmis rubricollis* (Linnaeus, 1758)

One at Bickley Moss on 9th June (DK).

72.060 **Marsh Oblique-barred** *Hypenodes humidalis* (Doubleday, 1850)

Eleven at Wybunbury on 1st July, then over five hundred there on 9th July (RB), with similar numbers ten days later (BB, SVT). Several at Danes Moss on 28th July (SBr, AE, SHH, DJM, JWR, TW).



72.076 **Clifden Nonpareil** *Catocala fraxini* (Linnaeus, 1758)

One at Thurstaston on 2nd September (MT), one the next day at Dane Road, Sale (JPS) and one at Tarporley on 16th September (JG). One on 17th September and another on 28th September at Meadowside, Burwardsley (MRW).

Mike Whiteside

So, 2022 added another 50 per-cent onto the total number of Cheshire records of this species; eight of the other ten pre-dated the middle of the last century.

Matt Thomas



73.037 **Dark Dagger** *Acronicta tridens* ([Denis & Schiffermüller], 1775)

Both determined by genitalia examination, a male at Kent Close, Bromborough on 11th July (PH) and another male at Knowle Close, Great Sutton on 18th July (MBe). Also, two larvae at Ince Park on 26th August (DD).

73.042 **Light Knot Grass** *Acronicta menyanthidis* (Esper, 1798)

One at Lower Swineshaw Scout Hut, Stalybridge on 14th May (DW).

73.047 **Coronet** *Craniophora ligustri* ([Denis & Schiffermüller], 1775)

Seen at Upton, Chester on 5th July (PR) and also at Linley Lane, Alsager on 17th July (MD). The total number of records for Cheshire now stands at seven.

73.053 **Chamomile Shark** *Cucullia chamomillae* ([Denis & Schiffermüller], 1775)

One at Wistaston on 2nd May (JL).



73.065 **Sprawler** *Asteroscopus sphinx* (Hufnagel, 1766)

One at Newton Lane, Tattenhall on 27th October (KH) and two at Common Lane, Waverton on 11th November (HC).

Helen Coan

73.070 **Bordered Sallow** *Pyrrhia umbra* (Hufnagel, 1766)

One at Bridgend, Mickle Trafford, Chester on 19th July (MB).



73.075 **Eastern Bordered Straw** *Heliothis nubigera* (Herrich-Schäffer, 1851)

NEW FOR CHESHIRE. One at Holly Court, Helsby on 17th June (MJ&GO).

Mandy Jervis and Glyn Owen



73.087 **Small Mottled Willow** *Spodoptera exigua* (Hübner, [1808])

One at Dane Road, Sale on 13th August (JPS), one at Newton Lane, Tattenhall on 20th August (KH) and one at Midgley Lane, Wildboarclough on 29th October (A&JB).

John P Shaughnessy



73.100 **Silky Wainscot** *Chilodes maritima* (Tauscher, 1806)

One at Pembroke Close, Handbridge on 12th June (KP), one at Graham Road, Blacon on 17th June (DD), one at Farr Hall Drive, Heswall on 11th July (JJ), six at Burton Mere Wetlands RSPB (East) on 15th July (GJ) and three, recorded separately, at Chester Zoo Nature Reserve on 28th July (SWH; with ED), (SRD; with JTr and CW) and (IC; with SD, AMu, PMu and SRy).

John Jakeman

73.118 **Haworth's Minor** *Celaena haworthii* (Curtis, 1829)

One, nectaring on thistle, at Heyden Moor on 7th September (KG) and one at Turf Pits, Stalybridge on 8th September (DW).



Ken Gartside

73.126 **Saltern Ear** *Amphipoea fucosa* (Freyer, 1830)

Two on 30th July and six on 21st August at Badger Bait, Little Neston (GJ)

Those that were determined by genitalia examination were all male.

73.127 **Large Ear** *Amphipoea lucens* (Freyer, 1845)

Four, of which three were determined by genitalia examination, at Lower Swineshaw Quarry on 10th August (CHe, SHH, JWR, BU, DW).

73.128 **Ear Moth** *Amphipoea oculea* (Linnaeus, 1761)

One male at Danes Moss on 28th July (SBr, A E, SHH, DJM, JWR, TW), five (of which the three determined by genitalia examination were male) at Bakestonedale Moor on 3rd August (SHH) and one female at Badger Bait, Little Neston on 12th August (GJ). Each record was determined by genitalia examination.

73.141 **Brown-veined Wainscot** *Archanara dissoluta* (Treitschke, 1825)

Three at Burton Mere Wetlands RSPB (East) on 15th July (GJ).

73.151 **Webb's Wainscot** *Globia sparganii* (Esper, 1789)

For the second year in a row, one at Verdin Close, Moulton, on 23rd July (PB). The total number of Cheshire records now stands at four.

73.174 **Tawny Marbled Minor** *Oligia latruncula* ([Denis & Schiffermüller], 1775)

One male on 10th May, one on 24th May and another on 16th June at Knowle Close, Great Sutton (MBE). A male was also recorded at Wellington Close, Ellesmere Port on 20th May (HJ) and several - of which the specimen determined by genitalia examination was a female - at Danes Moss on 16th June (SBr, AE, SHH, DTo, TW). Each record was determined by genitalia examination.

73.183 **Dusky-lemon Sallow** *Cirrhia gilvago* ([Denis & Schiffermüller], 1775)

One at Linley Lane, Alsager on 5th September (MD) and one at Newton Lane, Tattenhall on 17th September (KH).



73.207 **Golden-rod Brindle** *Xylena solidaginis* (Hübner, [1803])

All at Higher Swineshaw, Stalybridge: one on 10th August (CHe, SHH, JWR, BU, DW), two roosting on wire staples on fence posts on 13th August, four more on 19th August and another two on 29th August (DW).

David Walsh

73.211 Angle-striped Sallow *Enargia paleacea* (Esper, 1791)

One at Broadbottom Road, Mottram on 30th July (BU), one on 12th August and one on 17th August at Lower Swineshaw, Stalybridge, and another at Huddersfield Road, Stalybridge on 14th August (DW), bringing the total number of records for Cheshire to thirteen, nine of which have come in the last three years.

Bill Underwood



73.215 Lesser-spotted Pinion *Cosmia affinis* (Linnaeus, 1767)

One at Common Lane, Waverton on 17th July (HC) and at least one at Handbridge, Chester on 19th July (Jon Wainwright).

Helen Coan



73.220 Minor Shoulder-knot *Brachylomia viminalis* (Fabricius, [1777])

Two at Marthall Lane, Ollerton on 18th July (CJC).

Carly Jo Curbishley



73.231 Deep-brown Dart *Aporophyla lutulenta* ([Denis & Schiffermüller], 1775)

An early one at Birchall Moss, Hatherton on 25th July (CK), one at Tilston on 11th August (MRW) and one at Linley Lane, Alsager on 23rd September (MD).



73.232 **Northern Deep-brown Dart**
Aporophyla lueneburgensis (Freyer, 1848)
Two at Moss Lane, Mobberley on 12th
August (JT).

Jonathan Tugwood



73.234 **Brindled Ochre** *Dasypolia templi*
(Thunberg, 1792)
One at Midgley Lane, Wildboarclough on
23rd September (A&JB). The species has
been recorded at this site in five out of the
last six years, but nowhere else in that time.

Alison & Julian Borrow



Alida Heston

73.246 Lead-coloured Drab *Orthosia populeti*
(Fabricius, 1781)

One at Foxfield Lane, Winsford on 22nd March (AH), and one on the same day at Linley Lane, Alsager (MD). Also, one at Marthall Lane, Ollerton on 6th April (CJC) and one at Heatley Lane, Heatley, near Aston on 18th April (EH).



Mike Dale



73.275 White Colon *Sideridis turbida*
(Esper, 1790)

Two on 4th June, one on 7th June and a third on 12th June at Bayswater Road, Wallasey (CS). These are the first Cheshire records of the species since 2000; they bring the total for the county to 24.

Colin Schofield

73.282 **Varied Coronet** *Hadena compta* ([Denis & Schiffermüller], 1775)

One at Back Lane, Shavington on 10th June (RB), one on 12th June, one on 14th June and another three days later at Shannon Close, Willaston, Nantwich (DT). These bring the total number of records for Cheshire to 23.



73.290 **Brown-line Bright-eye** *Mythimna conigera* ([Denis & Schiffermüller], 1775)

One on 8th July, another on 23rd July (A&JB) and a third at Midgley Lane, Wildboarclough on 29th July (A&JB, JO).

Alison & Julian Borrow



73.297 **White-point** *Mythimna albipuncta* ([Denis & Schiffermüller], 1775)

One on Prince Road, nectaring on ivy, on a bridge over the Middlewood Way at Higher Poynton on 28th October (SHH) and one the next day at Badger Bait, Little Neston (GJ). The only previous record in Cheshire was dated between 1961 and 1993, and there is some doubt about whether it was over the border in VC59 South Lancashire!

Graham Jones



73.308 **Portland Moth** *Actebia praecox* (Linnaeus, 1758)

One on 10th August and another eight days later at Bayswater Road, Wallasey (CS), bringing the total number of Cheshire records for this species to nineteen. The only other sighting in the last fifty years was in 2020, in New Brighton.

Colin Schofield



73.316 **Light Feathered Rustic** *Agrotis cinerea* ([Denis & Schiffermüller], 1775)

One at Midgley Lane, Wildboarclough on 22nd May and another there three days later (A&JB). The species has been recorded only once before in Cheshire, also at Wildboarclough.

Alison & Julian Borrow



73.320 **Heart and Club** *Agrotis clavus*
(Hufnagel, 1766)
One at Knowle Close, Great Sutton on 22nd
June (MBe).

Mel Bellingham

73.324 **Crescent Dart** *Agrotis trux*
(Hübner, [1824])
One at Graham Road, Blacon on 11th July
(DD), one at Kingsley on 12th July (PM)
and one at Upton, Chester on 18th July (PR).
Of the six previous Cheshire records, two
were from a century ago, and more than
thirty years elapsed between the next three.
Now, we have had five in three years.



Paul Miller

74.011 **Cream-bordered Green Pea** *Earias
clorana* (Linnaeus, 1761)
NEW FOR CHESHIRE. Recorded at
Flaxmere on 11th June (MHw).



Mike Hows

Records of some species did not meet the criteria for inclusion in the previous section, but are worthy of further comment. Some of these are mentioned below.

The Cheshire Moth Report for 2021 documented an increase, from a very low base, in the number of records of some macro-moths. The following table gives an update for 2022.

73.085 Marbled Green <i>Nyctobrya muralis</i>	Recorded seven times in 2021, at New Brighton and at Wallasey. The only previous record was of two specimens on a wall at Chester in 1899.	Eight records at Wallasey, in July and August 2022.
65.003 Barred Hook-tip <i>Watsonalla cultraria</i>	In three years, the number of Cheshire records almost doubled. The seven records in 2021 were all in the east of the county.	Eleven more records from May to September 2022, spreading north and south (see map).
73.059 Toadflax Brocade <i>Calophasia lunula</i>	Nine of the ten records in 2021 were in the area around Crewe and Nantwich, but a specimen was also observed in September in Ellesmere Port.	All eight records, from May to August 2022, were from the area just south of Crewe.
70.055 Large Twin-spot Carpet <i>Xanthorhoe quadrifasiata</i>	First recorded in Cheshire in 2006, at Alsager. Sighted nine times in 2021, from Burwardsley to Marple, taking the total number of records in Cheshire to 41.	Nineteen records, from late June and July. The range appears to have extended towards the further reaches of the county (see map).
72.010 Black Arches <i>Lymantria monacha</i>	There had been only fourteen records in Cheshire, up to 2019. The total by 2021 had reached 44, predominantly from the south and west of the county.	Almost a 50% increase in the Cheshire total, the 21 records in 2022 came in July and August.
72.049 Orange Footman <i>Eilema sororcula</i>	The ten records in 2021 took the total for Cheshire to 52.	From Alsager to Heswall, and points in between, there were 22 records from May to July 2022.
52.014 Six-belted Clearwing <i>Bembecia ichneumoniformis</i>	Recorded eight times in 2021, not only around the Northwich flashes, but also at Ellesmere Port and Thurstaston, making 58 Cheshire records in all.	Only three records in 2022, from Ellesmere Port, Port Sunlight and Ashton's Flashes; see "Least Recorded Species".
70.104 Devon Carpet <i>Lampropteryx otregiata</i>	Two records were conspicuous among the thirteen in 2021: the observations at Burton Mere Wetlands and at Wybunbury were the only ones away from the more usual stamping ground of Wildboardclough, Lyme Park and Higher Poynton. The Cheshire total then stood at 62.	Sixteen records from May to September 2022, those from Hockenhull Platts, Waverton, Wybunbury Moss and Alsager were the only ones outside of the north-east of the county.
70.264 Satin Beauty <i>Deileptenia ribeata</i>	The number of Cheshire records went up by over 18 per cent, five of the seven records in 2021 coming from Alsager.	Only three records in 2022, from Alsager and Lamaload; see "Least Recorded Species".
70.110 Small Autumnal Moth <i>Epirrita filigrammaria</i>	After a gap of two years, 2021 brought a similar percentage increase in the total number of records, all from its stronghold of the eastern hills.	Only three records in 2022, from Goyt Valley and Lower Swineshaw, Stalybridge; see "Least Recorded Species".
70.036 Maiden's Blush <i>Cyclophora punctaria</i>	Of the 65 Cheshire records, 38 were dated between the 1800's and 1973; the majority were from Delamere Forest. Fifteen new records were added in the two years to 2021; the nine in 2021 were distributed widely throughout the county.	In 2022, the species was recorded 23 times, in May and in August and September, at various sites reflecting the ongoing wide distribution in the county.

Amongst other species recorded in 2022 was 72.041 **Four-spotted Footman** *Lithosia quadra*. Only recorded six times previously this century, it was observed on eight occasions in 2022, all in July.

Also a July species, 70.146 **Haworth's Pug** *Eupithecia haworthiata* was seen seven times in 2022. Most of the historic records were from the north-east of Cheshire, then more recently

from Burwardsley, but in 2022 the species was noted only in the north-west of the county, from Helsby and Chester to Wallasey.

Continuing the theme of species seen seven times, only in July in 2022, and only in the north-west of Cheshire, 73.137 **Fen Wainscot** *Arenostola phragmitidis* is a reed-bed moth, which had been recorded here just twenty times previously.

Stalybridge and Mottram-in-Longendale in July yielded seven adult records of 73.021 **Scarce Silver Y** *Syngrapha interrogationis*. With the addition of larva of the species at Woodhead in March, the total for Cheshire now stands at 31.

The distribution map for 72.029 **Scarlet Tiger** *Callimorpha dominula* shows how the species is spreading, but only in the west of Cheshire. The county total is now 49, with twelve records of adult moths and two of larvae in 2022.

Although the eight records of 70.037 **Clay Triple-lines** *Cyclophora linearia* were scattered around the county, the distribution map shows that the species has started to show up in the north-east of Cheshire. The total of records now stands at 47.

From June to August 2022, 73.322 **Archer's Dart** *Agrotis vestigialis* was recorded twelve times in Wallasey and Hoylake, taking the total for Cheshire to 71.



Following what was described as an “unprecedented irruption”, there were no fewer than ten records in August and September of **35.118 Beet Moth** *Scrobipalpa ocellatella*, which was **NEW FOR CHESHIRE**. The sightings were mainly in the north-east of the county, from Whaley Bridge to Sale, although there was also a cluster around Wybunbury (SJ64) and one was noted as far west as Kingsley (SJ57).

John Rayner

The first appearance of **49.086 Acleris logiana**, also **NEW FOR CHESHIRE**, was in Alsager, in March. There were further sightings, in Sale in July, and Hatherton in November, as well as Alsager again in October.



John P Shaughnessy

First recorded in Cheshire in 2021, **15.011 Caloptilia falconipennella** now has six records here to its name. The seven records in 2022, all but one to a SKI pheromone lure, add to the three since **49.356 Grapholita lobarzewskii** was first recorded in Nantwich in 2018.

Increases and Declines in Numbers of Macro-moth Species

Much of this report has concentrated on least recorded species and rarities. It might be worth giving some thought to changes in reported numbers of the commoner moths. The tables below show the top ten increases - and declines - in macro-moth species, comparing records in 2022 with those from the previous two years. Only those species that have been recorded over 2,500 times in Cheshire history were selected for this analysis.

I suspect that statisticians would balk at taking only three years into consideration, so no attempt here is made to draw firm conclusions, or to speculate on reasons for apparent changes.

Table 1: Ten Biggest Declines 2020 to 2022 (Over 2,500 All-time records)

Rank	ABH Code	Common Name	2020	2021	2022	2022v2020 (%)	2022v2021 (%)
1	73.015	Silver Y	1643	837	758	-53.86%	-9.44%
2	72.031	Cinnabar	313	229	158	-49.52%	-31.00%
3	70.093	Barred Straw	192	244	119	-38.02%	-51.23%
4	72.013	Yellow-tail	274	286	178	-35.04%	-37.76%
5	73.022	Gold Spot	226	243	157	-30.53%	-35.39%
6	70.241	Scalloped Oak	553	537	403	-27.12%	-24.95%
7	73.092	Mottled Rustic	343	326	256	-25.36%	-21.47%
8	69.016	Elephant Hawk-moth	620	604	474	-23.55%	-21.52%
9	72.024	Ruby Tiger	227	129	176	-22.47%	36.43%
10	70.079	Spruce Carpet	224	193	175	-21.88%	-9.33%

Table 2: Ten Biggest Declines 2021 to 2022 (Over 2,500 All-time records)

Rank	ABH Code	Common Name	2020	2021	2022	2022v2020 (%)	2022v2021 (%)
1	74.003	Short-cloaked Moth	116	216	105	-9.48%	-51.39%
2	70.093	Barred Straw	192	244	119	-38.02%	-51.23%
3	70.100	Green Carpet	403	699	419	3.97%	-40.06%
4	72.053	Fan-foot	378	557	335	-11.38%	-39.86%
5	70.029	Blood-Vein	217	370	224	3.23%	-39.46%
6	72.013	Yellow-tail	274	286	178	-35.04%	-37.76%
7	73.022	Gold Spot	226	243	157	-30.53%	-35.39%
8	70.049	Garden Carpet	1014	1449	985	-2.86%	-32.02%
9	70.305	Common Emerald	145	202	139	-4.14%	-31.19%
10	72.031	Cinnabar	313	229	158	-49.52%	-31.00%

Table 3: Ten Biggest Increases 2020 to 2022 (Over 2,500 All-time records)

Rank	ABH Code	Common Name	2020	2021	2022	2022v2020 (%)	2022v2021 (%)
1	70.255	Dotted Border	33	100	93	181.82%	-7.00%
2	73.334	Small Square-spot	394	850	988	150.76%	16.24%
3	73.114	Small Angle Shades	111	254	262	136.04%	3.15%
4	70.133	Small Rivulet	107	177	245	128.97%	38.42%
5	73.358	Six-striped Rustic	98	156	224	128.57%	43.59%
6	73.154	Dusky Brocade	92	139	204	121.74%	46.76%
7	70.141	Double-striped Pug	504	778	1112	120.63%	42.93%
8	73.274	Cabbage Moth	115	182	230	100.00%	26.37%
9	73.016	Beautiful Golden Y	70	118	138	97.14%	16.95%
10	65.005	Pebble Hook-tip	101	168	196	94.06%	16.67%

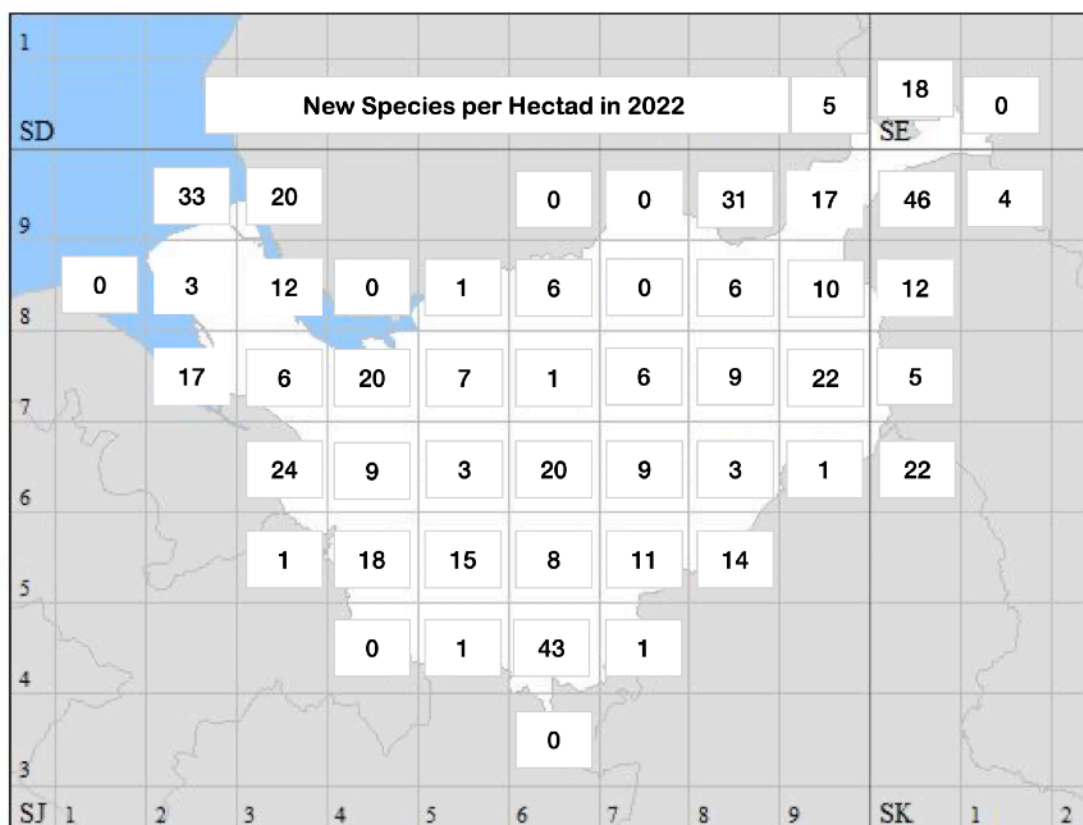
Table 4: Ten Biggest Increases 2021 to 2022 (Over 2,500 All-time records)

Rank	ABH Code	Common Name	2020	2021	2022	2022v2020 (%)	2022v2021 (%)
1	73.156	Clouded-bordered Brindle	106	96	187	76.42%	94.79%
2	73.343	Broad-bordered Yellow Underwing	216	209	372	72.22%	77.99%
3	3.002	Common Swift	99	62	105	6.06%	69.35%
4	73.325	Shuttle-shaped Dart	1041	1047	1749	68.01%	67.05%
5	73.233	Black Rustic	159	175	289	81.76%	65.14%
6	70.156	Brindled Pug	285	248	393	37.89%	58.47%
7	73.154	Dusky Brocade	92	139	204	121.74%	46.76%
8	73.333	Ingrailed Clay	191	208	299	56.54%	43.75%
9	73.358	Six-striped Rustic	98	156	224	128.57%	43.59%
10	70.141	Double-striped Pug	504	778	1112	120.63%	42.93%

Species new for their respective 10km squares in 2022

Here is a summary of the species that were new for their respective 10km squares in 2022. A further 517 new hectad records were added during 2022 (up from 462 in 2021).

Some determined field work in the Stalybridge area paid dividends with the recording of 46 new species in the SK09 square. Nearly as many were new to the SJ64 square in the south of the county, which saw 43 species that had not previously been recorded there. The Wirral coastline again proved fruitful with 33 new species in SJ29 (and 20 around New Brighton in neighbouring SJ39), whilst 31 new species were encountered in SJ89, around Sale.



Some of the squares are only partially in VC58 and although species may have been recorded in adjacent counties, they are new for our side of the boundary. The following are listed in the Agassiz, Beavan & Heckford taxonomic order for each 10km square.

SD90

Red-barred Tortrix *Ditula angustiorana*; *Clepsis senecionana*; **Rush Veneer** *Nomophila noctuella*; **Haworth's Minor** *Celaena haworthii*; **Autumnal Rustic** *Eugnorisma glareosa*.

SE00

Exapate congelatella; **Spruce Carpet** *Thera britannica*; **Red-Green Carpet** *Chloroclysta siterata*; **Autumn Green Carpet** *Chloroclysta miata*; **Autumnal Moth** *Epirrita autumnata*; **Welsh Wave** *Venusia cambrica*; **Tissue** *Triphosa dubitata*; **Feathered Thorn** *Colotois pennaria*; **Scarce Umber** *Agriopsis aurantaria*; **Mottled Umber** *Erannis defoliaria*; **Scarce Bordered Straw** *Helicoverpa armigera*; **Angle Shades** *Phlogophora meticulosa*; **Red-line Quaker** *Leptologia lota*; **Yellow-line Quaker** *Leptologia macilenta*; **Grey Shoulder-knot** *Lithophane ornitopus*; **Merveille du Jour** *Griposia aprilina*; **Black Rustic** *Aporophyla nigra*; **Oak Nycteoline** *Nycteola revayana*.

SJ27

Phyllonorycter emberizaepenella; *Phyllonorycter nicellii*; *Coleophora peribenanderi*; *Coleophora paripennella*; *Aethes rubigana*; *Epinotia nanana*; *Grapholita lobarzewskii*; **Plum Fruit Moth** *Grapholita funebrana*; *Grapholita janthinana*; *Cryptoblabes bistriga*; *Eudonia pallida*; *Calamotropha paludella*; **Large Twin-spot**

Carpet *Xanthorhoe quadrifasiata*; **Blue-bordered Carpet** *Plemyria rubiginata*; **Bordered Straw** *Heliothis peltigera*; **Scarce Bordered Straw** *Helicoverpa armigera*; **White-point** *Mythimna albipuncta*.

SJ28

Palpita vitrealis; **Valerian Pug** *Eupithecia valerianata*; **Orange Footman** *Eilema sororcula*.

SJ29

Incurvaria masculella; *Monopis crocicapitella*; *Caloptilia populetorum*; *Crassa unitella*; *Bryotropha domestica*; *Coleophora albicosta*; *Elachista atricomella*; *Elachista albifrontella*; *Elachista apicipunctella*; *Mompha subbistrigella*; *Bactra lancealana*; *Ancylis achatana*; *Rhyacionia pinicolana*; *Pammene aurita*; *Calamotropha paludella*; *Agriphila selasella*; **Spruce Carpet** *Thera britannica*; **Small Phoenix** *Ecliptopera silaceata*; **Red-Green Carpet** *Chlorochysta siterata*; **Brindled Pug** *Eupithecia abbreviata*; **Oak-tree Pug** *Eupithecia dodoneata*; **Freyer's Pug** *Eupithecia intricata*; **Early Tooth-striped** *Trichopteryx carpinata*; **Pale Prominent** *Pterostoma palpina*; **Chocolate-tip** *Clostera curtula*; **Beautiful Hook-tip** *Laspeyria flexula*; **Copper Underwing** *Amphipyra pyramidea*; **Marbled Green** *Bryopsis muralis*; **Vine's Rustic** *Hoplodrina ambigua*; **Fen Wainscot** *Arenostola phragmitidis*; **Twin-spotted Quaker** *Anorthoa munda*; **Small Ranunculus** *Hecatera dysodea*; **Least Black Arches** *Nola confusalis*.

SJ35

Nemophora degeerella.

SJ36

Opostega salaciella; *Argyresthia spinosella*; **Cherry Fruit Moth** *Argyresthia pruniella*; *Brachmia blandella*; *Bryotropha terrella*; *Bryotropha affinis*; *Mompha ochraceella*; **Beautiful Plume** *Amblyptilia acanthadactyla*; *Lozotaenia forsterana*; *Clepsis consimilana*; *Lobesia abscisana*; *Ancylis badiana*; *Gypsonoma aceriana*; *Pammene aurita*; **Rusty-dot Pearl** *Udea ferrugalis*; **Water Veneer** *Acentria ephemerella*; **Birch Mocha** *Cyclophora albipunctata*; **Clay Triple-lines** *Cyclophora linearia*; **Dingy Shell** *Euchoeca nebulata*; **Haworth's Pug** *Eupithecia haworthiata*; **Maple Pug** *Eupithecia inturbata*; **Blackneck** *Lygephila pastinum*; **Obscure Wainscot** *Leucania obsoleta*; **Crescent Dart** *Agrotis trux*.

SJ37

Monopis crocicapitella; *Calybites phasianipennella*; *Phyllonorycter heegeriella*; *Coleophora lineolea*; **Cypress Pug** *Eupithecia phoeniceata*; **Marbled White Spot** *Protodeltote pygarga*.

SJ38

Etainia sericopeza; *Caloptilia semifascia*; *Phyllocnistis saligna*; *Cedestis subfasciella*; *Ypsolopha sylvella*; *Ypsolopha vittella*; *Prays ruficeps*; *Elachista alpinella*; *Elachista canapennella*; **Lackey** *Malacosoma neustria*; **Haworth's Pug** *Eupithecia haworthiata*; **Four-spotted Footman** *Lithosia quadra*.

SJ39

Willow Ermine *Yponomeuta rorrella*; *Swammerdamia pyrella*; **Ash Bud Moth** *Prays fraxinella*; *Batia lunaris*; *Diurnea fagella*; *Mirificarma mulinella*; *Scrobipalpa costella*; **Red-barred Tortrix** *Ditula angustiorana*; *Hedya salicella*; *Lobesia abscisana*; *Pammene fasciana*; **Large Twin-spot Carpet** *Xanthorhoe quadrifasiata*; **Haworth's Pug** *Eupithecia haworthiata*; **Plain Pug** *Eupithecia simplicata*; **Treble-bar** *Aplocera plagiata*; **White-pinion Spotted** *Lomographa bimaculata*; **Pale Prominent** *Pterostoma palpina*; **Scarlet Tiger** *Callimorpha dominula*; **Four-spotted Footman** *Lithosia quadra*; **Bordered Straw** *Heliothis peltigera*.

SJ45

Glyphipterix fuscoviridella; *Mompha epilobiella*; *Blastobasis lacticolella*; **Chequered Fruit-tree Tortrix** *Pandemis corylana*; *Cydia splendana*; *Pyrausta aurata*; *Calamotropha paludella*; *Crambus pascuella*; **Striped Hawk-moth** *Hyles livornica*; **Vestal Rhodometra** *sacrararia*; **Scarlet Tiger** *Callimorpha dominula*; **Muslin Footman** *Nudaria mundana*; **Round-winged Muslin** *Thumatha senex*; **Bordered Straw** *Heliothis peltigera*; **Vine's Rustic** *Hoplodrina ambigua*; **Cloaked Minor** *Mesoligia furuncula*; **Deep-brown Dart** *Aporophylla lutulenta*; **Scarce Silver-lines** *Bena bicolorana*.

SJ46

Ectoedemia heringi; *Agonopterix scopariella*; *Epermenia falciformis*; **Brown Oak Tortrix** *Archips crataegana*; *Pempelia palumbella*; *Nephoterix angustella*; **Cypress Carpet** *Thera cupressata*; **Barred Carpet** *Martania taeniata*; **Small Brindled Beauty** *Apocheima hispidaria*.

SJ47

Luffia lapidella; *Phyllocnistis saligna*; *Metalampra italica*; *Anarsia spartiella*; *Gelechia sororcullella*; *Carpatolechia decorella*; *Chrysoclista linneella*; *Mompha jurassicella*; **Yarrow Plume** *Gillmeria pallidactyla*; **Brindled Plume** *Amblyptilia punctidactyla*; **Scarce Light Plume** *Oxyptilus laetus*; *Eucosma tripoliana*; *Dichrorampha alpinana*; *Dichrorampha petiverella*; *Phycitodes maritima*; **Haworth's Pug** *Eupithecia*

haworthiata; **Lunar Marbled Brown** *Drymonia ruficornis*; **Scarlet Tiger** *Callimorpha dominula*; **Eastern Bordered Straw** *Heliothis nubigera*; **Obscure Wainscot** *Leucania obsoleta*.

SJ54

Red-necked Footman *Atolmis rubricollis*.

SJ55

Phyllonorycter platani; *Pseudoswammerdamia combinella*; *Teleiopsis diffinis*; *Mompha ochraceella*; *Cochylichroa atricapitana*; **Cherry Bark Tortrix** *Enarmonia formosana*; *Rhodophaea formosa*; *Pyrausta despicata*; *Evergestis pallidata*; **Valerian Pug** *Eupithecia valerianata*; **Clifden Nonpareil** *Catocala fraxini*; **Vine's Rustic** *Hoplodrina ambigua*; **Red Sword-grass** *Xylena vetusta*; **Obscure Wainscot** *Leucania obsoleta*; **Pearly Underwing** *Peridroma saucia*.

SJ56

Stigmella ulmivora; **Scarlet Tiger** *Callimorpha dominula*; **Clifden Nonpareil** *Catocala fraxini*.

SJ57

Phyllocnistis saligna; **Beet Moth** *Scrobipalpa ocellatella*; *Coleophora paripennella*; *Gypsonoma oppressana*; **Maple Pug** *Eupithecia inturbata*; **Marbled White Spot** *Protodeltote pygarga*; **Cream-bordered Green Pea** *Earias clorana*.

SJ58

Plain Wave *Idaea straminata*.

SJ64

Willow Ermine *Yponomeuta rorrella*; *Ypsolopha alpella*; *Ypsolopha sylvella*; *Ypsolopha ustella*; *Glyphipterix thrasonella*; *Argyresthia semifusca*; **Ash Bud Moth** *Prays fraxinella*; **Hawthorn Moth** *Scythropia crataegella*; *Agonopterix ocellana*; *Agonopterix propinquella*; *Agonopterix ciliella*; *Hypatima rhomboidella*; *Psoricoptera gibbosella*; **Beet Moth** *Scrobipalpa ocellatella*; *Teleiodes vulgella*; *Teleiodes luculella*; *Stenolechia gemmella*; *Blastodacna hellerella*; *Mompha subbistrigella*; **Variigated Golden Tortrix** *Archips xylosteana*; *Pandemis cinnamomeana*; *Acleris holmiana*; *Acleris sparsana*; *Acleris logiana*; *Eulia ministrana*; *Eudemis profundana*; *Apotomis turbidana*; *Apotomis betuletana*; *Epinotia ramella*; *Grapholita compositella*; *Pammene aurana*; **Lesser Wax Moth** *Achroia grisella*; **Wax Moth** *Galleria mellonella*; **Box-tree Moth** *Cydalima perspectalis*; *Scoparia subfusca*; **Barred Hook-tip** *Watsonalla culttraria*; **Maiden's Blush** *Cyclophora punctaria*; **Large Twin-spot Carpet** *Xanthorhoe quadrifasiata*; **Tissue** *Triphosa dubitata*; **Bordered Straw** *Heliothis peltigera*; **Straw Underwing** *Thalophila matura*; **White-line Dart** *Euxoa tritici*; **Oak Nycteoline** *Nycteola revayana*.

SJ65

Argyresthia trifasciata; **Ash Bud Moth** *Prays fraxinella*; *Agonopterix propinquella*; *Monochroa lucidella*; *Teleiodes luculella*; **Small Goldenrod Plume** *Hellinsia osteodactylus*; *Pammene aurana*; **Lempke's Gold Spot** *Plusia putnami*.

SJ66

Willow Ermine *Yponomeuta rorrella*; *Agonopterix arenella*; *Celypha striana*; **Codling Moth** *Cydia pomonella*; **Leopard Moth** *Zeuzera pyrina*; **Wax Moth** *Galleria mellonella*; **Box-tree Moth** *Cydalima perspectalis*; *Calamotropha paludella*; *Vestal Rhodometra sacraria*; **Mottled Grey** *Colostygia multistrigaria*; **Brindled Beauty** *Lycia hirtaria*; **Black Arches** *Lymantria monacha*; **Dark Spectacle** *Abrostola triplasia*; **Mullein** *Cucullia verbasci*; **Scarce Bordered Straw** *Helicoverpa armigera*; **Orange Sallow** *Tiliacea citrago*; **Pale Pinion** *Lithophane socia*; **Olive** *Ipimorpha subtusa*; **Lead-coloured Drab** *Orthosia populeti*; **Obscure Wainscot** *Leucania obsoleta*.

SJ67

Black Arches *Lymantria monacha*.

SJ68

Anania crocealis; **Box-tree Moth** *Cydalima perspectalis*; **Striped Hawk-moth** *Hyles livornica*; **Clay Triple-lines** *Cyclophora linearia*; **Narrow-winged Pug** *Eupithecia nanata*; **Black Arches** *Lymantria monacha*.

SJ74

Manchester Treble-bar *Carsia sororiata*.

SJ75

Opostega salaciella; *Psyche casta*; **Willow Ermine** *Yponomeuta rorrella*; *Oegoconia quadripuncta*; *Acleris literana*; *Dichrorampha simpliciana*; *Dichrorampha vancouverana*; **Death's-head Hawk-moth** *Acherontia*

atropos; **Lempke's Gold Spot** *Plusia putnami*; **Tawny Pinion** *Lithophane semibrunnea*; **Glaucous Shears** *Papestra biren*.

SJ76

Tinea semifulvella; *Caloptilia betulicola*; **Willow Ermine** *Yponomeuta rorrella*; *Elachista argentella*; *Eupoecilia angustana*; **Convolvulus Hawk-moth** *Agrius convolvuli*; **Vestal** *Rhodometra sacraria*; **Poplar Kitten** *Furcula bifida*; **Pearly Underwing** *Peridroma saucia*.

SJ77

Ypsolopha alpella; *Cydia fagiglandana*; *Pammene giganteana*; *Catoptria falsella*; **Maiden's Blush** *Cyclophora punctaria*; **Marbled White Spot** *Protodeltote pygarga*.

SJ85

Agonopterix umbellana; *Monochroa tenebrella*; *Coleophora alnifoliae*; **Variigated Golden Tortrix** *Archips xylosteana*; *Acleris logiana*; *Cydia coniferana*; *Grapholita lobarzewskii*; *Pammene argyrana*; *Pammene aurana*; **Currant Clearwing** *Synanthedon tipuliformis*; **Devon Carpet** *Lampropteryx oregiata*; **Pale November Moth** *Epirrita christyi*; **Mother Shipton** *Callistege mi*; **Coronet** *Craniophora ligustri*.

SJ86

Agonopterix propinquella; *Crociosema plebejana*; *Gypsonoma sociana*;

SJ87

Caloptilia falconipennella; *Batia lunaris*; *Anarsia spartiella*; *Coleophora mayrella*; *Hedya ochroleucana*; **Drinker** *Euthrix potatoria*; **Pinion-streaked Snout** *Schranksia costaestrigalis*; **Lempke's Gold Spot** *Plusia putnami*; **Northern Deep-brown Dart** *Aporophyla lueneburgensis*.

SJ88

Luffia lapidella; *Psoricoptera gibbosella*; *Duponchelia fovealis*; **Barred Hook-tip** *Watsonalla cultraria*; **Clay Triple-lines** *Cyclophora linearia*; **Large Twin-spot Carpet** *Xanthorhoe quadrifasiata*.

SJ89

Phyllocnistis saligna; *Lyonetia prunifoliella*; *Brachmia blandella*; **Beet Moth** *Scrobipalpa ocellatella*; *Stenolechia gemmella*; *Coleophora peribenanderi*; *Mompha propinquella*; *Stathmopoda pedella*; *Acleris logiana*; *Endothenia quadrimaculana*; *Epinotia solandriana*; **Rush Veneer** *Nomophila noctuella*; *Agriphila selasella*; **Oak Hook-tip** *Watsonalla binaria*; **Barred Hook-tip** *Watsonalla cultraria*; **Drinker** *Euthrix potatoria*; **Large Twin-spot Carpet** *Xanthorhoe quadrifasiata*; **Grey Pine Carpet** *Thera obeliscata*; **Maple Pug** *Eupithecia inturbata*; **Lime-speck Pug** *Eupithecia centaureata*; **Scorched Wing** *Plagodis dolabraria*; **August Thorn** *Ennomos quercinaria*; **September Thorn** *Ennomos erosaria*; **Iron Prominent** *Notodonta dromedarius*; **Clifden Nonpareil** *Catocala fraxini*; **Small Mottled Willow** *Spodoptera exigua*; **Vine's Rustic** *Hoplodrina ambigua*; **Pale Pinion** *Lithophane socia*; **Centre-barred Sallow** *Aethmia centrago*; **White-line Dart** *Euxoa tritici*; **Garden Dart** *Euxoa nigricans*.

SJ96

Wood Sage Plume *Capperia britanniodactylus*.

SJ97

Stigmella roborella; *Opostega salaciella*; *Diplodoma laichartingella*; *Bankesia conspurcatella*; **Common Clothes Moth** *Tineola bisselliella*; *Caloptilia robustella*; *Agonopterix angelicella*; *Anacamptis blattariella*; *Caryocolum visciella*; *Batrachedra praeangusta*; *Coleophora orbitella*; *Coleophora striatipennella*; **Yarrow Plume** *Gillmeria pallidactyla*; *Acleris aspersana*; *Hedya salicella*; **Box-tree Moth** *Cydalima perspectalis*; *Calamotropha paludella*; **Maple Pug** *Eupithecia inturbata*; **Satin Beauty** *Deileptenia ribeata*; **Chocolate-tip** *Clostera curtula*; **Round-winged Muslin** *Thumatha senex*; **Bordered Straw** *Heliothis peltigera*.

SJ98

Etainia louisella; **Beet Moth** *Scrobipalpa ocellatella*; *Batrachedra confusella*; *Blastobasis rebeli*; *Acleris literana*; **Yellow-legged Clearwing** *Synanthedon vespiformis*; *Loxostege sticticalis*; **Four-spotted Footman** *Lithosia quadra*; **Small Ranunculus** *Hecatera dysodea*; **White-point** *Mythimna albipuncta*.

SJ99

Stigmella atricapitella; *Nemophora minimella*; *Acrocercops brongniardella*; *Phyllonorycter lantanella*; *Agonopterix subpropinquella*; *Pandemis cinnamomeana*; *Celypha striana*; *Pammene regiana*; *Eudonia angustea*; **Barred Hook-tip** *Watsonalla cultraria*; **Clay Triple-lines** *Cyclophora linearia*; **Streamer** *Anticlea derivata*; **Tissue** *Triphosa dubitata*; **Lilac Beauty** *Apeira syringaria*; **Marbled White Spot** *Protodeltote pygarga*; **Brown Rustic** *Rusina ferruginea*; **Barred Sallow** *Tiliacea aurago*.

SK06

Fomoria septembrella; *Caloptilia betulicola*; *Paraswammerdamia nebulella*; *Hyapatima rhomboidella*; *Glyphipterix fuscoviridella*; *Argyresthia retinella*; *Agonopterix ciliella*; *Blastobasis lacticolella*; **Many-plumed Moth** *Alucita hexadactyla*; *Cochylis roseana*; *Eucosma hohenwartiana*; *Pyrausta aurata*; **Rusty-dot Pearl** *Udea ferrugalis*; **Rush Veneer** *Nomophila noctuella*; *Evergestis pallidata*; **Larch Pug** *Eupithecia lariciata*; **Waved Umber** *Menophra abruptaria*; **Puss Moth** *Cerura vinula*; **Small Mottled Willow** *Spodoptera exigua*; **Barred Sallow** *Tiliacea aurago*; **Light Feathered Rustic** *Agrotis cinerea*; **Short-cloaked Moth** *Nola cucullatella*.

SK07

Small Elephant Hawk-moth *Deilephila porcellus*; **Common Marbled Carpet** *Dysstroma truncata*; **Double-striped Pug** *Gymnoscelis rufifasciata*; **Pale Tussock** *Calliteara pudibunda*; **Setaceous Hebrew Character** *Xestia c-nigrum*.

SK08

Limnaecia phragmitella; **Beet Moth** *Scrobipalpa ocellatella*; *Coleophora argentula*; *Stathmopoda pedella*; **Hemp Agrimony Plume** *Adaina microdactyla*; **Cyclamen Tortrix** *Clepsis spectrana*; *Assara terebrella*; *Agriphila geniculea*; **Large Twin-spot Carpet** *Xanthorhoe quadrifasciata*; **Yellow-barred Brindle** *Acasis viretata*; **Scarce Footman** *Eilema complana*; **Red Sword-grass** *Xylena vetusta*.

SK09

Tachystola acroxantha; *Pleurota bicostella*; *Agonopterix alstromeriana*; *Bryotropha senectella*; *Agapeta hamana*; *Aethes cnicana*; **Bramble Shoot Moth** *Notocelia uddmanniana*; *Pammene aurita*; *Matilella fusca*; *Eudonia pallida*; *Crambus pascuella*; **Scalloped Hook-tip** *Falcaria lacertinaria*; **Chinese Character** *Cilix glaucata*; **December Moth** *Poecilocampa populi*; **Small Elephant Hawk-moth** *Deilephila porcellus*; **Small Fan-footed Wave** *Idaea biselata*; **Blood-Vein** *Timandra comae*; **Red Twin-spot Carpet** *Xanthorhoe spadicearia*; **Northern Winter Moth** *Operophtera fagata*; **Autumnal Moth** *Epirrita autumnata*; **Golden-rod Pug** *Eupithecia virgaureata*; **Scorched Wing** *Plagodis dolabraria*; **Feathered Thorn** *Colotois pennaria*; **Scarce Umber** *Agriopis aurantiaria*; **Grey Scalloped Bar** *Dyscia fagaria*; **Buff-tip** *Phalera bucephala*; **Pale Tussock** *Calliteara pudibunda*; **Buff Ermine** *Spilosoma lutea*; **Dingy Footman** *Eilema griseola*; **Scarce Footman** *Eilema complana*; **Marbled White Spot** *Protodeltote pygarga*; **Light Knot Grass** *Acronicta menyanthidis*; **Knot Grass** *Acronicta rumicis*; **Copper Underwing** *Amphipyra pyramidea*; **Crescent** *Helotropha leucostigma*; **Rosy Rustic** *Hydraecia micacea*; **Large Ear** *Amphipoea lucens*; **Common Rustic** *Mesapamea secalis*; **Brick** *Sunira circellaris*; **Dark Chestnut** *Conistra ligula*; **Angle-striped Sallow** *Enargia paleacea*; **Suspected** *Parastichtis suspecta*; **Glaucous Shears** *Papestra biren*; **Shoulder-striped Wainscot** *Leucania comma*; **Least Yellow Underwing** *Noctua interjecta*; **Green Silver-lines** *Pseudoips prasinana*.

SK19

Philedonides lunana; **Emperor Moth** *Saturnia pavonia*; **Mottled Beauty** *Alcis repandata*; **Scarce Silver Y** *Syngrapha interrogationis*.

Migrant Species in 2022

The following table shows the species of migrant moths that were recorded in Cheshire in 2022.

ABH	Common Name	Taxon	Records	Moths	Earliest Date	Latest Date
18.001	Diamond-back Moth	<i>Plutella xylostearna</i>	247	320	12-Apr	25-Dec
28.008	-	<i>Metalampra italica</i>	1	1	28-Jul	28-Jul
41.005	-	<i>Blastobasis rebeli</i>	5	7	16-Jul	11-Aug
45.027	Scarce Light Plume	<i>Oxyptilus laetus</i>	1	1	1-Jul	1-Jul
49.086	-	<i>Acleris logiana</i>	4	4	22-Mar	18-Nov
63.002		<i>Loxostege sticticalis</i>	1	1	2-Sep	2-Sep
63.031	Rusty-dot Pearl	<i>Udea ferrugalis</i>	86	98	15-Jul	19-Nov
63.046	-	<i>Duponchella fovealis</i>	1	1	10-Jul	10-Jul
63.048	-	<i>Palpita vitrealis</i>	3	3	21-Aug	26-Oct
63.052	Rush Veneer	<i>Nomophila noctuella</i>	184	238	23-Jun	14-Nov
69.004	Convolvulus Hawk-moth	<i>Agrius convolvuli</i>	5	5	26-Jul	23-Sep
69.005	Death's-head Hawk-moth	<i>Acherontia atropos</i>	2	2	24-Aug	1-Sep
69.010	Humming-bird Hawk-moth	<i>Macroglossum stellatarum</i>	106	108	1-Jan	27-Oct
69.014	Bedstraw Hawk-moth	<i>Hyles gallii</i>	1	1	11-Aug	11-Aug
69.015	Striped Hawk-moth	<i>Hyles livornica</i>	3	3	17-May	22-May
70.038	Vestal	<i>Rhodometra sacraria</i>	12	12	21-Jun	31-Oct
70.047	Gem	<i>Nycterosea obstipata</i>	1	1	19-Jul	19-Jul
72.041	Four-spotted Footman	<i>Lithosia quadra</i>	8	8	15-Jul	29-Jul
72.076	Clifden Nonpareil	<i>Catocala fraxini</i>	5	5	2-Sep	28-Sep
73.015	Silver Y	<i>Autographa gamma</i>	758	999	12-Apr	30-Nov
73.074	Bordered Straw	<i>Heliothis peltigera</i>	21	21	28-May	10-Sep
73.075	Eastern Bordered Straw	<i>Heliothis nubigera</i>	1	1	17-Jun	17-Jun
73.076	Scarce Bordered Straw	<i>Helicoverpa armigera</i>	13	13	30-Jul	1-Nov
73.087	Small Mottled Willow	<i>Spodoptera exigua</i>	3	3	13-Aug	29-Oct
73.307	Pearly Underwing	<i>Peridroma saucia</i>	11	12	2-Jun	29-Oct
73.327	Dark Sword-grass	<i>Agrotis ipsilon</i>	69	77	22-Jan	19-Nov

Two of the Rush Veneer records were larvae (17th September and 4th October), as were the Convolvulus Hawk-moth on 4th August and both of the Death's-head Hawk-moth records. Four Humming-bird Hawk-moth larvae were recorded (27th and 31st July; 10th and 28th August) and also a pupa 16th October, and there was one record of a Silver Y larva (8th June).

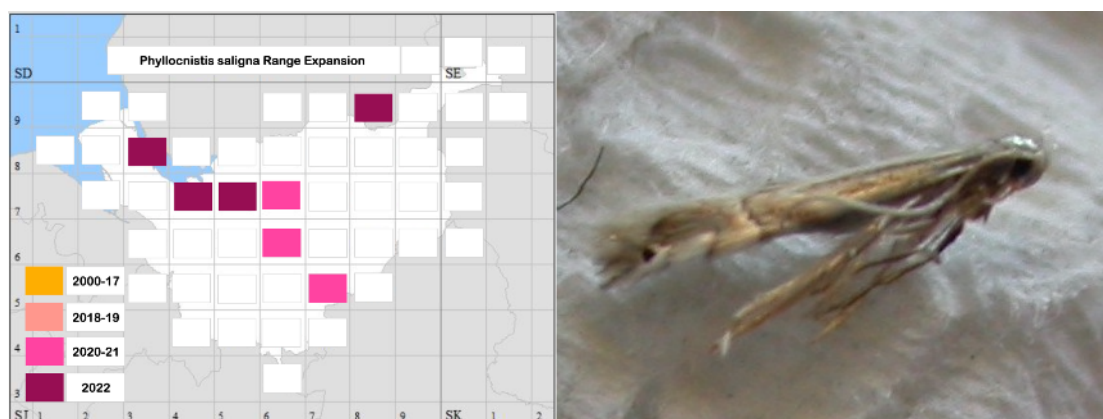
Increased Distribution in 2022

Several species were new to four or more hectads in 2022.

The apparent spread of some of these species across the county is illustrated in this set of maps. It is not easy to state whether it is indicative of a trend to wider geographical distribution or simply a consequence of increased recording.

15.090 *Phyllocnistis saligna* (Zeller, 1839)

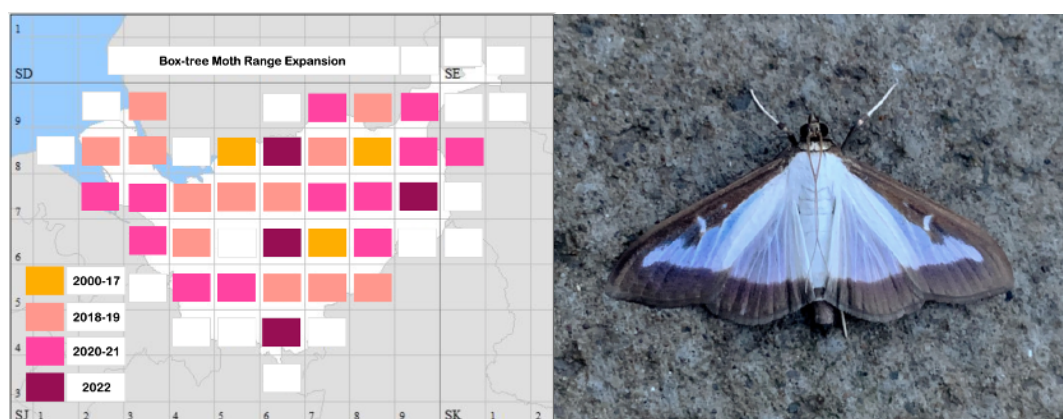
Adult moths came to light at Bromborough, Helsby, Kingsley and Sale. Leaf mines were recorded at Dibbinsdale, Helsby and Frodsham Marsh.



John P Shaughnessy

63.054 Box-tree Moth *Cydalima perspectalis* (Walker, 1859)

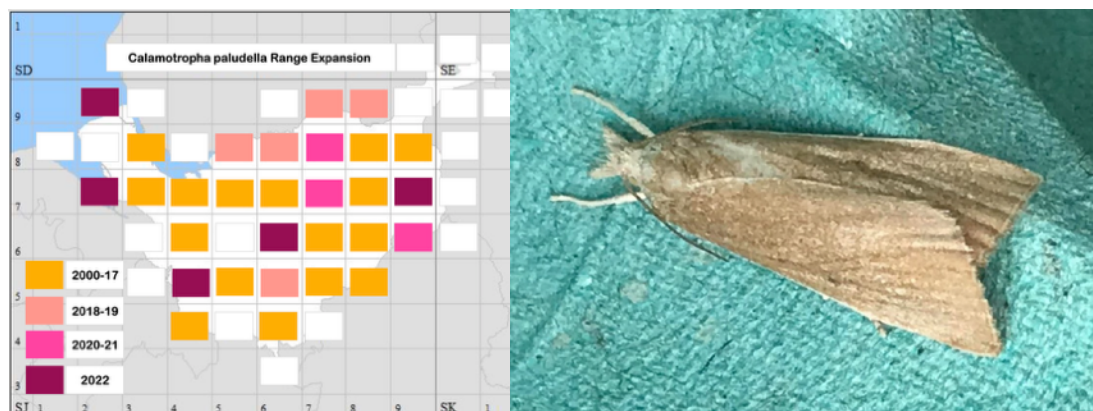
The species has consolidated its appearances down the middle of the county.



Carly Jo Curbishley

63.079 Calamotropha paludella (Hübner, [1824])

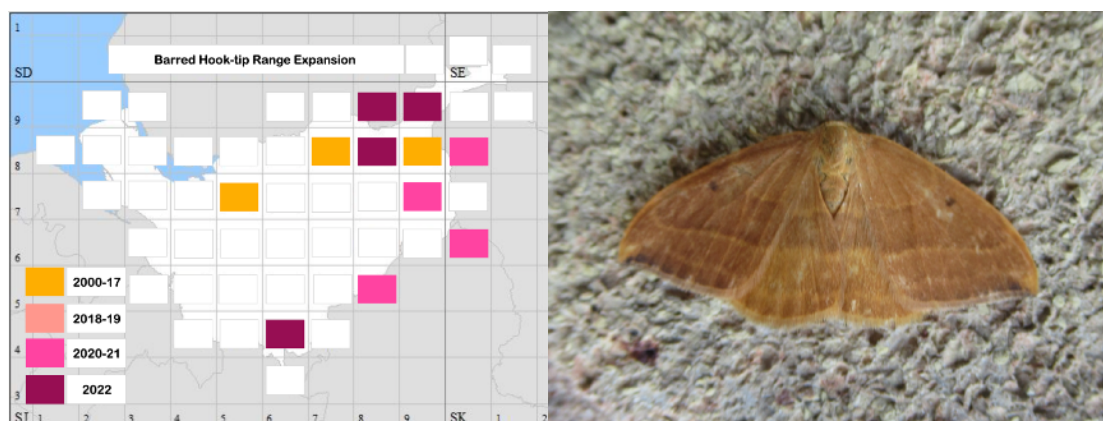
The Cheshire Moth Atlas reported that the species was “still spreading after arriving in 2004”. The map shows how that spread has continued, with sightings in 2022 at Little Neston, Wallasey, Duckington, Winsford and Danes Moss.



Fraser McConnell

65.003 Barred Hook-tip Watsonalla cultraria (Fabricius, 1775)

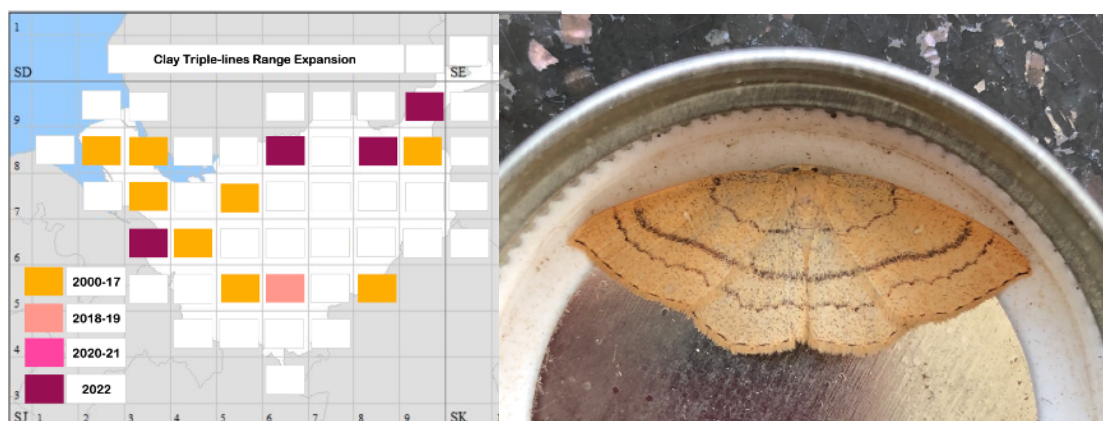
New sightings at Sale, Gatley and Romiley in the north-east of Cheshire, as well as at Hatherton in the south, have followed the records in the east in 2020-21.



David J Shaw

70.037 Clay Triple-lines Cyclophora linearia (Hübner, [1799])

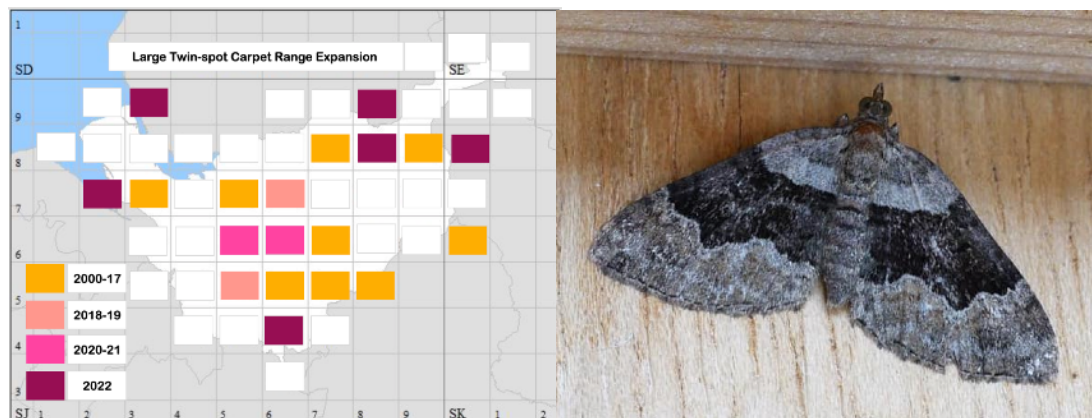
Observed in 2022 in Chester, Warrington, Bramhall and Stalybridge.



Clive Washington

70.055 Large Twin-spot Carpet *Xanthorhoe quadrifasiata* (Clerck, 1759)

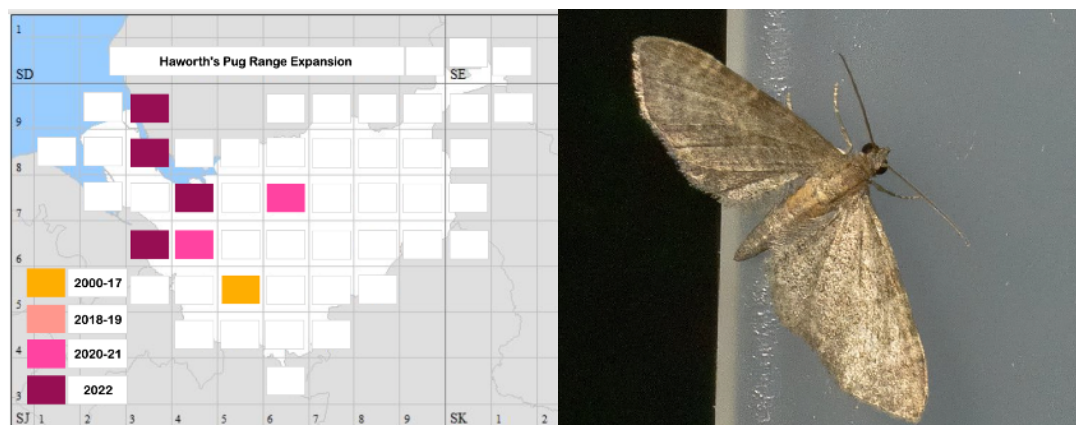
Since 2017, the number of records has more than tripled. With sightings in 2022 at Wybunbury and Hatherton, Little Neston and Wallasey, Gatley, Sale and Whaley Bridge, the range appears to have extended towards the further reaches of the county.



Paul Miller

70.146 Haworth's Pug *Eupithecia haworthiata* (Doubleday, 1856)

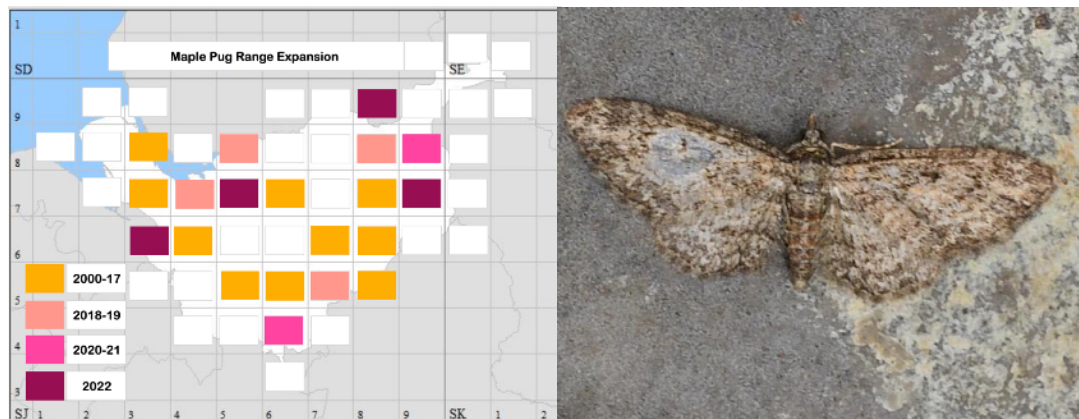
Of the seventeen previous records in Cheshire, twelve were firmly in the 20th Century. Haworth's Pug has apparently headed west, being observed in 2022 in Blacon, Helsby, Higher Bebington and Wallasey.



Dean Davies

70.148 Maple Pug *Eupithecia inturbata* (Hübner, [1817])

In *Pug Moths of North-west England*, Brian Hancock took the view that an increase in records in 2016 and 2017 “suggests a northward spread, rather than just being due to increased recognition”. That trend has continued, with the latest sightings at Blacon, Kingsley, Sale and Danes Moss.



Paul Miller

72.029 Scarlet Tiger *Callimorpha dominula* (Linnaeus, 1758)

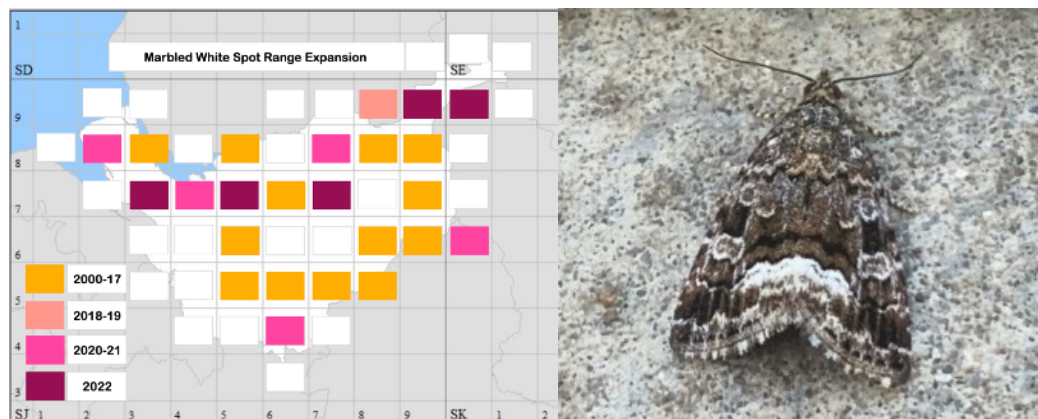
East Cheshire is proving inhospitable, Scarlet Tiger preferring Wallasey, Ellesmere Port, Kelsall and Duckington in 2022.



Alex Neal

73.024 Marbled White Spot *Protodeltote pygarga* (Hufnagel, 1766)

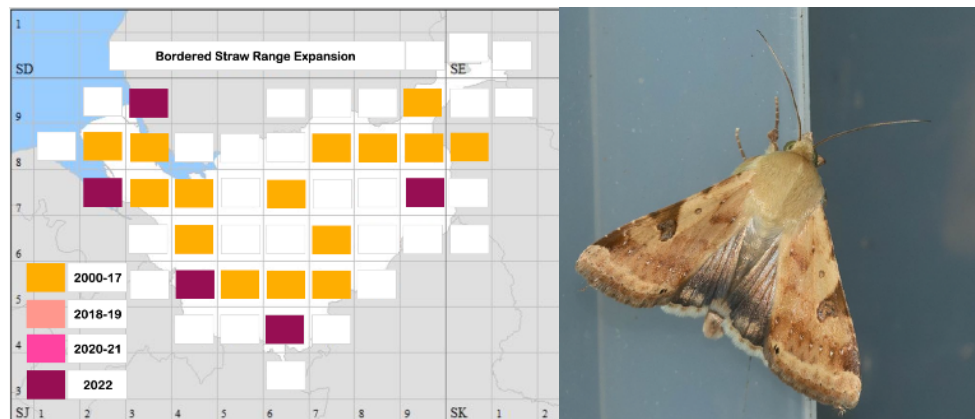
Only recorded in Cheshire three times before 2010, this species was seen in 2022 in the north of the county, from Great Sutton through Flaxmere and Ollerton to Stalybridge.



Carly Jo Curbishley

73.074 Bordered Straw *Heliothis peltigera* ([Denis & Schiffermüller], 1775)

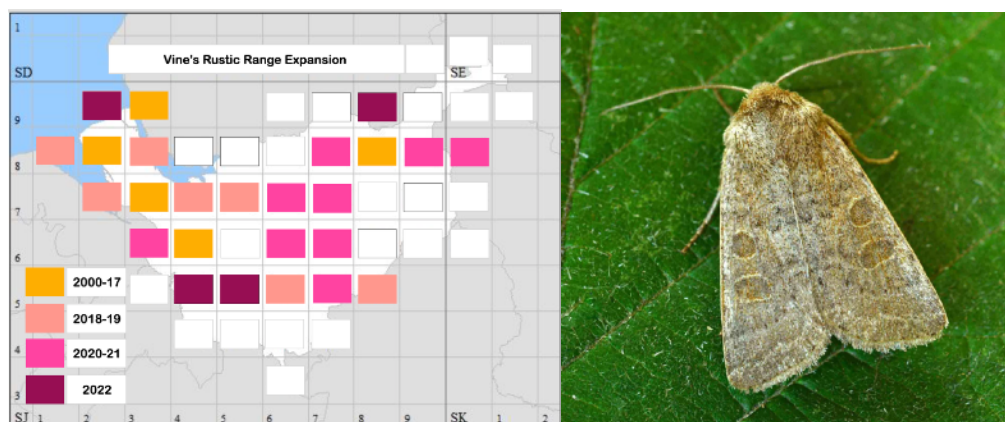
This immigrant species was seen in Cheshire this century most often in 2006 and 2015, after which there were only two records until 2022, when it was recorded for the first time at Wallasey (not recorded there since 1903), Little Neston, Duckington, Wynbunbury and Danes Moss.



Dean Davies

73.099 Vine's Rustic *Hoplodrina ambigua* ([Denis & Schiffermüller], 1775)

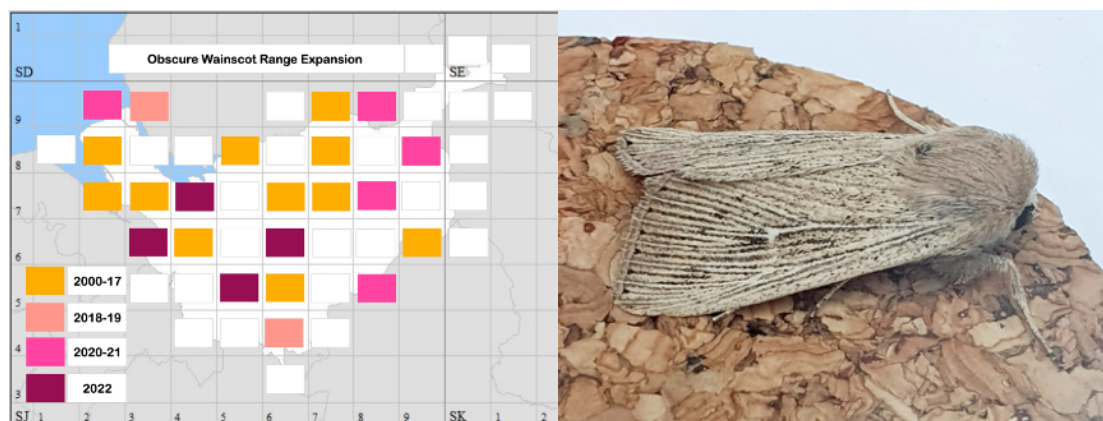
In commenting that this species was “increasing”, the Cheshire Moth Atlas was prescient; it was recorded 441 times in Cheshire in 2022.



Greg Osborn

73.302 Obscure Wainscot *Leucania obsoleta* (Hübner, [1803])

There has been a seven-fold increase in the number of records of the Obscure Wainscot since 2009. Previously described as “very rare” in Cheshire, the species has now been seen at Lache (Chester), Helsby, Burwardsley and Moulton.



Mandy Jervis and Glyn Owen

Errata from the Moth Report for 2021

To date, no errors in the Moth Report for 2020 have been brought to the attention of the author. Unfortunately, the same cannot be said for the report from 2021!

- The Crambid at Timperley on 24th July 2021 should have been labelled as *Anania terrealis*, not *Anania fuscalis*. This was a mistake by the report writer, not by the original recorder.
- Among the species listed as new for the SJ89 square in 2021 was *Celypha striana*. It has since become clear that a record of the species from 2019 had been overlooked.
- In the annual report of 2021, the section “Species new for their respective 10km squares” was, of course, for 2021 and not for 2020.

Cheshire Moth Recorders for 2022

C Rupert Adams **CRA**, Robert Adderley, Carole Adshead, Chloe Aldridge, Josh Allen, J W N Andrews, Sara Arathoon, Mark Arnold, Rebecca Ashworth, Peter F Atherton **PFA**, Ralph Atherton, Ben Atkinson, Shane Atkinson, S Bailey **SBA**, Nigel A Ball, Thomas Banks, Marion Barlow **MB**, Nigel Baskerville, Paul Bebbington **PBe**, Steven Bell, Bill Bellamy **BB**, Mel Bellingham **MBe**, Mal Bennett, Roger Benson **RB**, Andy Bissitt, David Bissitt, David Bissitt, Robert Bithell, Robert Bodels, Dave Booth, Mike Boothman **MB**, Alison & Julian Borrow **A&JB**, Dan Bradley, T Brand, Peter Brash **PBr**, Paul Brewster **PB**, Sarah Bridson, Colin Brooks, Simon Browne **SBr**, John P Bryan **JPB**, Sue D Budd, Emma Burgess, Paul Burt, Dave Butler, Sue Byron, Jacqueline Carter, Andrew Charlton **AC**, Angela Jane Chilton, Julian H Clarke, David Claxton, Phoebe Claxton, Helen Coan **HC**, Andrew Coatsworth, Marjorie Coles, Milly Collins, Stephen P Collins, Richard Comont, Allan Conlin, Graham 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Thomas E Giles **TEG**, Jed Goode, Alison Green, David G Green, Heather & Les Green, Morgan Green, Stuart Green, Des Greene, Jane Herrell Grey, Paul Griffiths, Martin Grimes, Dave Hackett, Tim & Elma Halliday **T&EH**, Sheelagh Halsey, Phil J Hampson, A Handford, Julia Harding, Robert W Harding, Grace C Hardy, Peter B Hardy, Andy Harmer, Ben Harris, Martyn Harris, Dave Harrop, Toby Hart, Jake Hartley, Sheena Hatton, Claire Healey, Gary Hedges, Christian Heintzen **CHe**, S Heintzen **SHe**, Waldemar Heise, J Hesketh, Alida Heston **AH**, Jane E Hewitt **JEH**, Debra Heydon, Dave Higginson-Tranter **DH-T**, Paul Martin Hill, Rod Hill, Keith Hiller, P F Hillyer, Roy Hilton, Zac Hinchcliffe, Steve H Hind **SHH**, Elizabeth Hollinshead **EH**, Mike Holmes **MH**, Steve W Holmes **SWH**, Nicki Holt, Matthew Hopkins **MHo**, Paul Hopkins **PH**, Steve Houghton, Mike Hows **MHw**, Kate Hughes **KH**, Peter Hugo, Andy Ingham, Terry Instone, John Jakeman **JJ**, Ian Jeffrey **IJ**, Andrew 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