VC55 | 2022 Moth Review

Caloptilia honoratella © Mark Skevington

Leicestershire and Rutland Moth Review of 2022

Mark Skevington

Introduction

This is a review of moth species newly recorded in Leicestershire and Rutland (VC55) during 2022, along with brief summaries of some of the more noteworthy records received and an overview of recent colonisers. The review would not be possible without the effort and diligence of the many recorders in the vice-county who submit their moth records, and many thanks are due to all of you. Particular thanks to Andy Mackay, Graham Finch, Paul Palmer and Pete Leonard for their assistance with dissections for other recorders, and to all recorders offering ID assistance via the Facebook group. All photographs within this review are of 2022 individuals in VC55 and are used with thanks and credit to the named photographers.

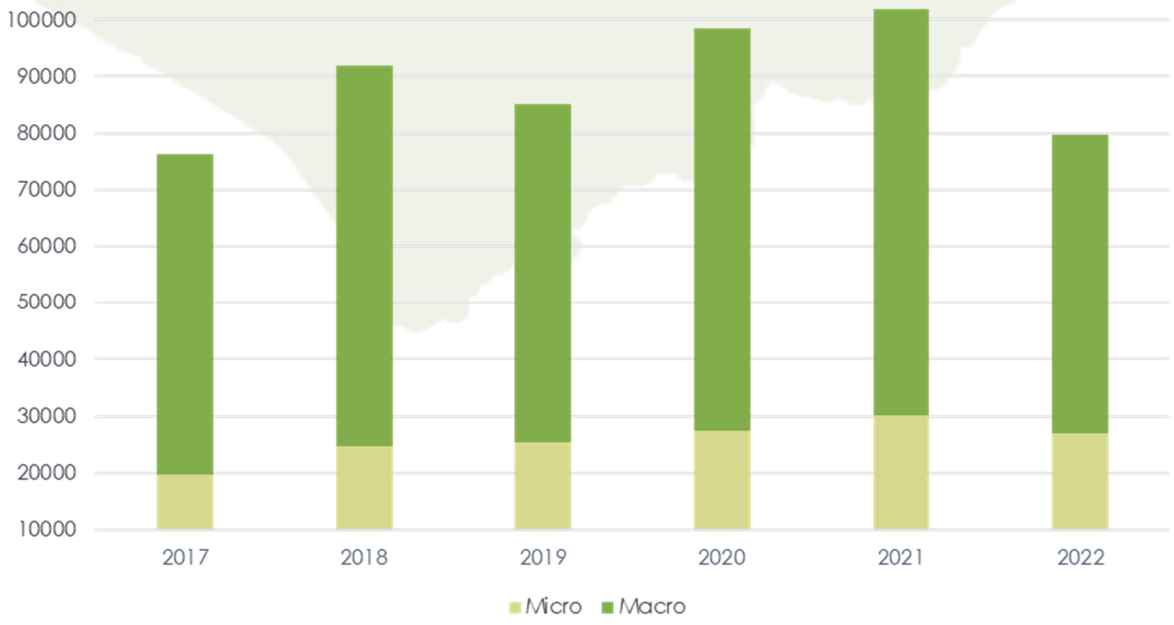
The review is based on all 2022 records received by 28/02/2023, either directly or via online recording systems (predominantly Naturespot and iRecord). If there are any 2022 or indeed earlier records outstanding, it is never too late to submit them to contribute to our understanding of the status and distribution of moth species in VC55.

All 2022 records received have been verified, and all those considered to be acceptable will be passed through to both the Leicestershire and Rutland Environmental Records Centre and the National Moth Recording Scheme.

Some key statistics from the 2022 records:

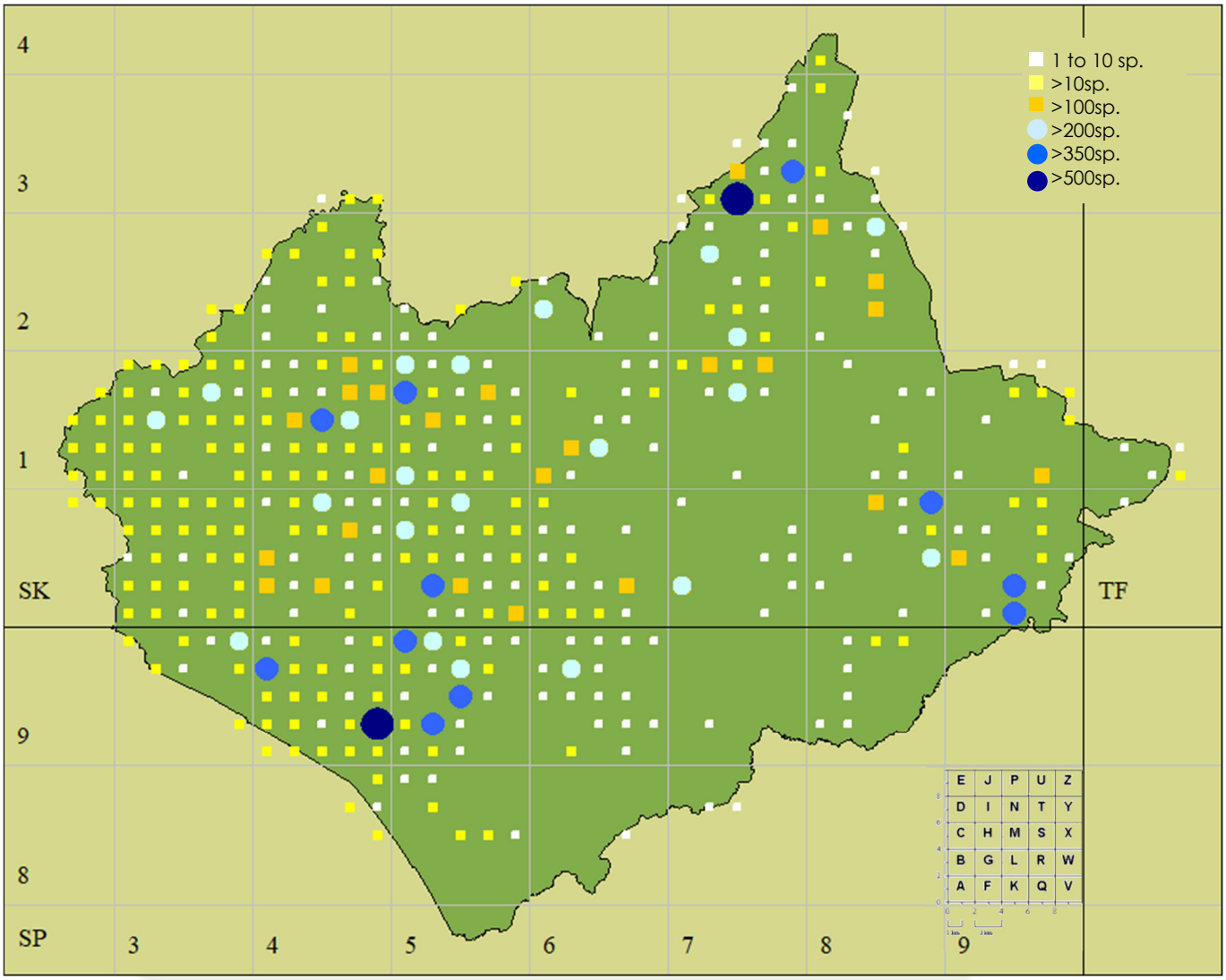
- 79747 records in total: 69049 received directly, 10698 via online systems
- 74613 records of adult moths, of 296881 individuals (from records where counts given)
- 4787 records of leafmines
- 347 records of larvae, larval workings, cases and pupae
- 1069 species recorded: 462 macros & 607 micros (excluding aggregates)
- 285 recorders, with records from 388 tetrads

The total number of records is somewhat fewer than reported in recent annual reviews, however there are undoubtedly records not as yet received. It should be noted that the 2022 dataset is still an impressive number of records compared to similarly sized (and some larger) vice-counties.



With the addition of the 2022 data, the VC55 dataset is now just over 1.16M records.

The map below shows the species density of accepted 2022 records per tetrad. Note that the markers are plotted at the centre of the tetrad, hence records at the borders showing as apparently being outside of VC55.



The large number of tetrads with white and yellow squares are partly influenced by targeted leafmine recording during 2022.

The top ten most productive tetrads by species:

Tetrad	Species	Records
SK73K	552	5652
SP49W	546	6706
SP59G	462	3510
SK51D	443	1227
SK73W	430	1161
SK90L	412	1036
SP59M	394	2561
SP59E	386	3606
SP49D	384	5116
SK50G	383	4073

The most widely recorded species by tetrads (micros / macros, aggregates excluded):

Code	Taxon	Vernacular	Tetrads
4.045	Stigmella aurella		160
21.001	Lyonetia clerkella	Apple Leaf Miner	154
4.012	Stigmella aceris		147
15.028	Parornix anglicella		133
10.003	Coptotriche marginea		122
15.052	Phyllonorycter corylifoliella		113
4.042	Stigmella plagicolella		111
15.064	Phyllonorycter coryli	Nut Leaf Blister Moth	96
15.089	Cameraria ohridella		89
49.039	Epiphyas postvittana	Light Brown Apple Moth	76
63.080	Chrysoteuchia culmella	Garden Grass-veneer	76
15.084	Phyllonorycter acerifoliella		73
4.010	Stigmella microtheriella		72
15.029	Parornix devoniella		70
15.043	Phyllonorycter oxyacanthae		69
63.038	Patania ruralis	Mother of Pearl	68
15.090	Phyllocnistis saligna		66
10.001	Tischeria ekebladella		65
49.166	Celypha lacunana		63
63.025	Anania hortulata	Small Magpie	63

Code	Taxon	Vernacular	Tetrads
73.342	Noctua pronuba	Large Yellow Underwing	82
69.010	Macroglossum stellatarum	Humming-bird Hawk-moth	81
72.031	Tyria jacobaeae	Cinnabar	81
70.226	Opisthograptis luteolata	Brimstone Moth	77
70.059	Camptogramma bilineata	Yellow Shell	76
73.359	Xestia c-nigrum	Setaceous Hebrew Character	76
73.291	Mythimna pallens	Common Wainscot	75
70.258	Peribatodes rhomboidaria	Willow Beauty	73
72.002	Rivula sericealis	Straw Dot	73
70.016	Idaea aversata	Riband Wave	71
73.162	Apamea monoglypha	Dark Arches	71
73.329	Ochropleura plecta	Flame Shoulder	69
70.235	Ennomos fuscantaria	Dusky Thorn	68
72.045	Eilema lurideola	Common Footman	68
73.317	Agrotis exclamationis	Heart and Dart	68
73.325	Agrotis puta	Shuttle-shaped Dart	68
72.044	Eilema griseola	Dingy Footman	67
73.345	Noctua comes	Lesser Yellow Underwing	67
73.357	Xestia xanthographa	Square-spot Rustic	67
70.061	Epirrhoe alternata	Common Carpet	66

The most abundant species by number of records (micros / macros, aggregates excluded):

Code	Taxon	Vernacular	Records	Individuals
49.039	Epiphyas postvittana	Light Brown Apple Moth	1630	8624
63.080	Chrysoteuchia culmella	Garden Grass-veneer	634	12292
63.089	Agriphila tristella		499	4137
28.010	Hofmannophila pseudospretella	Brown House-moth	441	875
63.095	Agriphila geniculea		433	5128
63.025	Anania hortulata	Small Magpie	425	969
49.166	Celypha lacunana		421	1131
41.002	Blastobasis adustella		419	5182
63.115	Acentria ephemerella	Water Veneer	406	8579
63.081	Crambus pascuella		399	1741
45.044	Emmelina monodactyla	Common Plume	387	581
63.038	Patania ruralis	Mother of Pearl	365	1874
63.093	Agriphila straminella		364	4632
62.001	Aphomia sociella	Bee Moth	356	644
63.006	Pyrausta aurata		317	872
63.067	Eudonia lacustrata		285	1154
21.001	Lyonetia clerkella	Apple Leaf Miner	282	109
49.077	Acleris variegana	Garden Rose Tortrix	274	449
28.024	Tachystola acroxantha		270	728
28.009	Endrosis sarcitrella	White-shouldered House-moth	266	404

Code	Taxon	Vernacular	Records	Individuals
73.342	Noctua pronuba	Large Yellow Underwing	1401	13190
73.325	Agrotis puta	Shuttle-shaped Dart	1199	5687
70.226	Opisthograptis luteolata	Brimstone Moth	1085	4078
73.359	Xestia c-nigrum	Setaceous Hebrew Character	968	8658
70.258	Peribatodes rhomboidaria	Willow Beauty	961	2743
73.291	Mythimna pallens	Common Wainscot	870	6489
73.345	Noctua comes	Lesser Yellow Underwing	846	3839
73.329	Ochropleura plecta	Flame Shoulder	828	2487
73.099	Hoplodrina ambigua	Vine's Rustic	827	6217
73.317	Agrotis exclamationis	Heart and Dart	827	5051
70.016	Idaea aversata	Riband Wave	752	4740
73.162	Apamea monoglypha	Dark Arches	715	5771
73.348	Noctua janthe	Lesser Broad-bordered Yellow U'wing	635	6245
73.357	Xestia xanthographa	Square-spot Rustic	613	5731
70.141	Gymnoscelis rufifasciata	Double-striped Pug	603	1257
73.267	Lacanobia oleracea	Bright-line Brown-eye	580	1425
70.049	Xanthorhoe fluctuata	Garden Carpet	560	865
73.249	Orthosia gothica	Hebrew Character	549	2120
72.002	Rivula sericealis	Straw Dot	528	2008
73.131	Luperina testacea	Flounced Rustic	524	3932

New to VC55

During 2022 there were 23 species newly recorded in VC55 (20 micros, 3 macros), representing an excellent mix of anticipated arrivals and complete surprises via a range of recording methods.

01.002 | **Micropterix mansuetella** (Zeller, 1844)
Matthew Berriman photographed moths during a daytime visit to Stretton Wood on 15/05/2022, which were identified as this species by Andy Mackay. Matthew returned on 23/05/2022 to try for better photos, finding another couple in the same area. Pay close attention to these small pollen-munchers, perhaps there are further colonies lurking undetected: the dark head distinguishes this from all other Micropterix spp. in VC55.

07.007 | **Adela cuprella** ([Denis & Schiffermüller], 1775)
This widespread but local species is one of the earliest of the Adelidae on the wing each year, and perhaps under-recorded due to a habit of flying high over the tops of flowering Salix sp. trees. Tim Sexton found a colony over sallows at Rutland Water on 24/03/2022 and went to the trouble of making a c15ft extension pole for his net enabling him to capture one for photography.

15.0131 | **Caloptilia honoratella** (Rebel, 1914)
Although only a relatively recent addition to the British List in 2016, this species does appear to have been spreading quickly along the east coast and home counties and was perhaps expected to turn up here in VC55 at some point. However, one appearing in Mark Skevington's Whetstone trap on 03/10/2022 was certainly sooner than could have been anticipated.
The appearance of this individual, confirmed as a female via dissection, means it is all the more necessary to implement a recent National recommendation: recording of all Acer-feeding Caloptlia spp. as leafmines / cones is now considered to be unreliable, and all such spp. need to be reared and potentially dissected to confirm. This includes Caloptilia rufipennella, Caloptilia semifascia, Caloptilia honoratella and Caloptilia hemidactyla.

15.060 | **Phyllonorycter ulicicolella** (Stainton, 1851)
There were potential records of mines of this species on Gorse in 2021, though they were inconclusive from the photos supplied and there was no confirmation of larval activity. Further records in 2022 have now ensured that this species can be formally added to the VC55 list, with both tenanted mines and a mine reared through to adult. Sue Timms found mines at Billa Barra, Markfield on 17/01/2022, Hicks Lodge on 22/01/2022 and Albert Village Lake on 23/01/2022. Sue noted that the mines were both tricky to find, and that Western Gorse appeared to be preferred. Mines were also found at Lount NR by Mark Hammond on 10/04/2022, from which an adult was successfully reared by Keith Tailby. Sue re-found mines at Billa Barra on 14/12/2022, and further records are expected at least from the north-west.

15.0862 | **Phyllonorycter pastorella** (Zeller, 1846)
Another recent arrival, this species was first discovered in the UK in the gardens of Buckingham Palace in 2014. It is a leafminer of long-leaved Salix spp., notably Weeping Willow, Crack Willow and hybrids. Hazel Graves found mines at Aylestone Meadows on 18/09/2022, albeit the ID was not confirmed until a week later when Mark Skevington found further mines at a different part of the Aylestone Meadows complex on 24/09/2022 and managed to rear adults that emerged on 27/09/2022. Further mines were found at sites in Burbage by Graham Calow, Measham by Sue Timms and Leicester by Peter Smith, and it is likely that in time this will prove to be widespread through the vice-county. The mines are relatively large, with a distinct crease on the underside.

21.002 | **Lyonetia prunifoliella** (Hübner, 1796)
This species was formerly resident in parts of southern and central England, but was considered extinct with no reliable records since c1900. Since c2007 it has started to reappear in several counties, and recently appears to be spreading widely and quickly enough that VC55 records seemed inevitable. The first was taken at light in Shepshed by Elspeth Cranston on 01/09/2022, which was confirmed via dissection. Records of the distinctive leafmines on Prunus spp. followed, found by Ted Gaten at Thurlaston on 04/10/2022 and Sue Timms at Snarestone on 29/10/2022. The adult should be distinctive enough to be readily separated from the abundant Lyonetia clerkella, at least when fresh and undamaged.

Micropterix mansuetella © Matthew Berriman

Adela cuprella © Tim Sexton

Phyllonorycter ulicicolella © Sue Timms

Phyllonorycter ulicicolella © Keith Tailby

Phyllonorycter pastorella © Mark Skevington

Phyllonorycter pastorella © Mark Skevington

Lyonetia prunifoliella © Ted Gaten

Lyonetia prunifoliella © Ted Gaten

28.008 | **Metalampra italica** Baldizzone, 1977
Formerly considered endemic to Italy, this species has been spreading which may in part be due to accidental introductions. It was first recorded in the UK in Devon in 2003 and seems to have spread quite widely since then. The first records for VC55 were singles to Ted Gaten's Thurlaston light trap on both 16/07/2022 and 17/07/2022. The second individual was a little worn, and clearly different given that the first was still retained at that time.

28.013 | **Crassa tinctella** (Hübner, 1796)
This Nationally Scarce species is closely related to and superficially similar to the very common Crassa unitella, but it flies earlier in the year and is much less likely to be recorded away from quality woodland. One came to Pete Leonard's light in Barkestone Wood on 09/05/2022, and the early date was key to prompting Pete to retain the slightly worn individual for dissection.

35.061 | **Ptocheuusa paupella** (Zeller, 1847)
Visiting recorder Richard Walker deployed a light trap over two nights in his relative's Groby garden, with the catch including a micro on 09/08/2022 that he posted to social media for help with the ID that was duly identified as this species. This species is locally common south and east of the 'Wash to Severn' line, becoming notably scarcer further north and west. It mainly feeds on Common Fleabane, with the larval feeding signs on the florets being distinctive.

35.117 | **Scrobipalpa atriplicella** (Fischer von Röslerstamm, 1841)
Prior to 2022, there were three records for this species from 1991, 2005 & 2006. However, none are supported by specimens or were confirmed by dissection, and they cannot be verified. With the large-scale arrival of Scrobipalpa ocellatella (see below) it was perhaps inevitable that the scrutiny of retained specimens could reveal similar species with Scrobipalpa atriplicella being the most likely candidate. Two were identified amongst the many retained specimens; both taken at light at Harby by Pete Leonard, on 02/09/2022 and 09/09/2022.

35.118 | **Scrobipalpa ocellatella** (Boyd, 1858)
During the late summer and autumn, VC55 was at the forefront of an unprecedented dispersal event for this species. It was previously considered to be a local coastal species along the south coast and south Wales, feeding on Sea Beet. In 2020 there was a notable movement into Bedfordshire and to a lesser extent Huntingdonshire, followed in 2021 by inland records in Suffolk and Cambridgeshire suggesting the establishment of inland breeding colonies, perhaps on cultivated sugar beet. During what must have been a huge dispersal in 2022 saw records as far north as Scotland and across to Somerset. Larval feeding on sugar beet was detected, including in Leicestershire. The first record in VC55, before any National movement had been noted, came from Sproxton on 29/07/2022; Pete Leonard took one at light that was speculatively identified as this species by Mark Skevington and retained for dissection. Just over a week later, and completely unexpectedly, Mark Skevington took further individuals in Whetstone on three consecutive nights 08/08/2022 – 11/08/2022, and on the back of this alerted both the National Gelechiid Recording Scheme organiser, Stephen Palmer, and internet recording groups. Further records came from the same period and continued throughout August and September. In total there were 66 records involving at least 160 individuals, with 22 records confirmed by dissection and many others supported by clear photographs. The latest records came on 20/09/2022 with singles at both Harby and Luffenham Heath GC. It will be very interesting to see whether there are further records here in 2023.

35.129 | **Caryocolum viscariella** (Stainton, 1855)
Virtually all of the Caryocolum spp. are difficult to identify on external characters alone, so one taken at light at The Drift near to Croxton Kerrial on 18/07/2022 by Graham Finch and Keith Tailby was duly retained for dissection. It was confirmed as this Nationally Scarce species, which has a much more restricted distribution than the main foodplant, Red Campion.

37.019 | **Coleophora trigeminella** Fuchs, 1881
One of several Coleophora spp. collected from Adam Poole's Broughton Astley light trap turned out to be this species via dissection. Despite the larval foodplants including hawthorn, apple, cherry and Rowan, this is a Nationally Scarce species that is mainly found in the south-east.

Lyonetia prunifoliella © Elspeth Cranston

Metalampra italica © Ted Gaten

Crassa tinctella © Pete Leonard

Ptocheuusa paupella © Richard Walker

Scrobipalpa ocellatella © Mark Skevington

Scrobipalpa ocellatella © Mark Skevington

Coleophora trigeminella © Adam Poole

Coleophora kuehnella © Graham Finch

37.028 | Coleophora juncicolella Stainton, 1851
A larval case was found in sweepings from Heather collected at Warren Hills on 31/03/2022 by Mark Hammond. The larval cases are only c4-5mm and closely resemble Heather sprigs, so collecting sweepings and watching out for moving sprigs is perhaps the best method of looking for and recording this species.

37.029 | Coleophora orbitella Zeller, 1849
Two Coleophora sp. taken at light at a private site in Charnwood on 17/06/2022 by Graham and Anona Finch were confirmed as this Nationally Scarce species via dissection. The larvae feed on both Birch and Alder.

37.051 | Coleophora kuehnella (Goeze, 1783)
This is one of the 'pistol-case' Coleophora sp. that would need dissection to confirm as an adult. It appears to be locally distributed, despite feeding on deciduous Oak spp. Graham Finch found the distinctive case of this species near to an orchard in Ketton on 08/09/2022.

38.049 | Elachista stabilella Stainton, 1858
This is one of several similar Elachista spp. that are difficult to reliably identify as adults. One taken at light in Harby on 08/07/2022 by Pete Leonard was confirmed via dissection, and surprisingly there was a further record of one to light in Broughton Astley on 11/08/2022 by Adam Poole, again confirmed by dissection. This species feeds on various grasses.

49.348 | Grapholita pallifrontana Zeller, 1845
Melanie Penson discovered this species at Ketton Quarry on 27/05/2022, confirmed the next day by Mark Skevington. This species is unlikely to be found anywhere away from the foodplant, Wild Liquorice, which is in itself relatively rare in the vice-county. The larvae feed within the seed pods, and Melanie found a further colony by searching pods on 17/09/2022 at Ryhall, very close to the vice-county border.

49.373 | Pammene spiniana (Duponchel, [1843])
This is a Nationally Scarce species despite the foodplants being very common, hawthorn and blackthorn. It may be distinctive when fresh, but there are similar spp. One was taken at light by Ron Follows at Luffenham Heath on 24/08/2022, which was confirmed via dissection.

49.3771 | Pammene juniperana (Millière, 1858)
Completely by chance, a pheromone trap with the NI lure [Trichoplusia ni] had been left unattended in Mark Skevington's Whetstone garden during the day on 23/08/2022. On retrieving the trap at dusk, a tiny moth was noted to be active within which on inspection appeared to be Pammene juniperana, a moth only added to the British List in 2018. At the time of capture there had been a handful of subsequent records, all in 2022 all some way south of VC55. It was duly confirmed as a male via dissection. The larval foodplant is Juniper, and it remains to be seen whether cultivated varieties are being used and how far this species may spread.

52.009 | Sallow Clearwing | Synanthedon flaviventris (Staudinger, 1883)
A pheromone trap with the relatively new SAL lure was speculatively deployed at a private site in the north-west by Keith Tailby. After no response, the trap was left in-situ and periodically checked. It was found to have attracted Sallow Clearwing on 09/07/2022, albeit they were dead at the time the trap was recovered in the evening and not suitable for setting at the time of verification. Within the UK, this species is only known to respond to the pheromone in even years so it will be 2024 before further efforts to record this are viable.

73.251 | Silver Cloud | Egira conspicillaris (Linnaeus, 1758)
Unlike many species that are recorded in VC55 for the first time, this one would not have appeared on anyone's list of possible species. It is Nationally Scarce and has long been restricted to an area centred around the Severn Valley with no signs of recent spread. Although it seems to be unfussily polyphageous in captivity, and does not have a special habitat preference, the natural larval foodplant is still unconfirmed. One turning up in John Tinning's Queniborough trap on 04/05/2022 was therefore completely unexpected and it would seem unlikely to be followed by further records.

73.300 | **L-album Wainscot** | **Mythimna l-album** (Linnaeus, 1767)
This distinctive wainscot was previously restricted to the southern coastal counties, with recent colonisation into Wales and Suffolk. However, it has started turning up further inland including records in neighbouring counties and was perhaps likely to appear here. The first duly arrived in a Luffenham Heath trap operated by Ron Follows on 20/09/2022. Whether this will become a more regular or widespread wanderer remains to be seen, however it is unlikely to be overlooked in anyone's trap.


Grapholita pallifrontana © Mark Skevington


Pammene juniperana © Mark Skevington


Silver Cloud © John Tinning


L-album Wainscot © Ron Follows


Cloaked Carpet © Mark Skevington

First post-VCH Records

The Victoria County Histories of Leicestershire (1907) and Rutland (1908) included lists of moth species with very basic summary details as having occurred in VC55. These include a number of species that have not occurred at any time since the VCH were published, and many that cannot be verified via historic specimens and should be considered as doubtful. The first modern records of species listed within the VCH have long been referred to as the first post-VCH records.

70.064 | **Cloaked Carpet** | **Euphyia biangulata** (Haworth, 1809)
This species is predominantly found in damp woods and hedgerows in the south and west of England and Wales and appears to have declined in recent years. It is listed as having been recorded in Gumley by Rev. A. Matthews [Bouskell & Headly 1891] and in both Gumley and Wigston [VCHL 1907], historic references that cannot be validated with no specimens available. One recorded to light in Quorn on 12/09/2022 by Anthony Plummer was as unexpected as it is notable and is the first verified VC55 record.

Selected Highlights

The following are a small selection of the notable records and other highlights from the year for species previously recorded in VC55. Clearly it is not possible cover high numbers of species in this review, and those selected here are arbitrary in many respects. Interesting migrants and updates on recent colonists are covered separately.

12.031 | **Tinea columbariella** Wocke, 1877
One of several nondescript brown Tineids that cannot be identified reliably on external characters. One to light in Harby on 21/06/2022 (Pete Leonard) was confirmed by dissection and is just the second VC55 record.

12.044 | **Haplotinea insectella** (Fabricius, 1794)
As the species above, almost entirely. One to light in Harby on 02/09/2022 (Pete Leonard) was also confirmed by dissection and is also just the second VC55 record.

28.022 | **Alabonia geoffrella** (Linnaeus, 1767)
Perhaps one of the greatest looking micros, and certainly one that many would be only too pleased to find. It is however very scarce in VC55, or at least the records suggest that; it could be that despite the spectacular markings it is being missed whilst day-flying around woodland margins and mixed hedgerows. Prior to 2022 there were four records from two sites: Rutland Water in 2005 and 2009, and the Shenton Estate in 2010. There were further records from both sites during 2022 (Tim Sexton, Stephen & Ros Smith), and also one from Piper Wood near Shepshed (Michael Buckley).


© Stephen Smith


© Margaret McLoughlin

28.023 | **Harpella forficella** (Scopoli, 1763)
Another very attractive micro, and one that was new to Britain in 2011. The only VC55 record prior to 2022 came from The Outwoods in 2012, which was the third British record. There have since been further records in the south, but the status and number of records is unclear. It was very surprising that a series of records came from a private site in Charnwood between 29/06/2022 and 17/07/2022 (Margaret McLoughlin, Graham Finch) suggestive of a local colony.

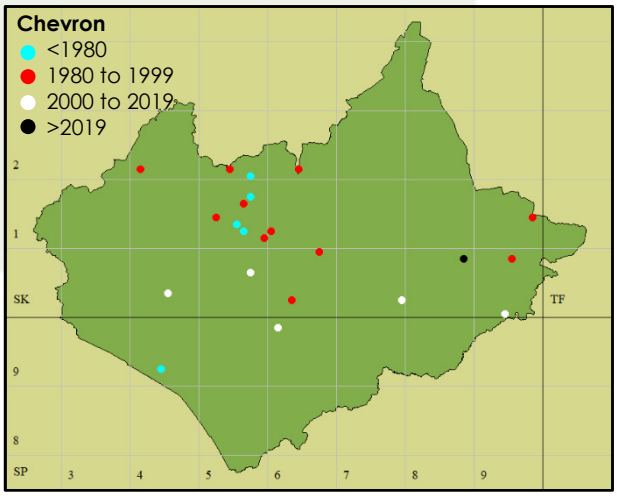
29.002 | **Diurnea lipsiella** ([Denis & Schiffermüller], 1775)
The records indicate that this species is much scarcer in VC55 than its common congener Diurnea fagella, but that may partly be due to it flying late in the year as many recorders are winding down their efforts, along with being a preference for oak woodland. There were just four records between 1982 and 2006, three from Ulverscroft and one from Greetham Near Wood. There were four records from Charnwood Lodge between 2015 and 2017, and one from Luffenham Heath GC in 2015. Another gap in records followed until two from different parts of Normanton Thorns on the same night in 2021. Four records from four sites in 2022 was out of the ordinary:

Date	Recorder	Site	Total
18/10/2022	Graham Finch	Charnwood Lodge	5
24/10/2022	Sue Timms	Bradgate Park	1
27/10/2022	Pete Leonard	Barkestone Wood	2
29/10/2022	Ron Follows	Rutland Water	5

45.028 | **Capperia britanniodactylus** (Gregson, 1869)
There are just two previous records for this Nationally Scarce plume moth, in 1996 and 2012. Given the distribution of the foodplant, Wood Sage, it is perhaps unlikely to be found outside of Charnwood. Two were recorded on the same night from different parts of Charnwood Lodge on 21/06/2022 (Margaret McLoughlin, Stuart Moffatt).

49.232 | **Epinotia maculana** (Fabricius, 1775)
This Nationally Scarce tortrix feeds on Aspen, and especially if worn can be fairly nondescript. The first two records came from Pickworth Great Wood in 1995 and 2005, and the next two from Cloud Wood in 2006 and 2011. One to light at Luffenham Heath on 03/10/2022 (Ron Follows) was confirmed by dissection.

70.090 | **Chevron** | **Eulithis testata** (Linnaeus, 1761)
This species has never been common in VC55; 37 of the 48 records prior to 2022 are from before 1989, and of those 18 are from one Rothamstead trap in Prestwold in 1975. There were five records in the 1990s, and just three between 2005 and 2013. Three records in 2018 may have sparked hope, but there are no further records until one at Rutland Water on 22/07/2022 (Ron Follows). Note that the map shows the most recent records for each monad, earlier records from the same monad may exist.



70.164 | **Pauper Pug** | **Eupithecia egenaria** Herrich-Schaffer, 1848
There were two records during 2022, both confirmed via dissection: one at Barkestone Wood on 21/05/2022 (Pete Leonard) and one at Sapcote on 02/06/2022 (Graham Calow). There are four previous records for this Nationally Scarce Lime-feeder: Barnsdale Gardens in 2008, Swithland Wood in 2015, Sapcote in 2017 and Queniborough in 2020.

73.050 | **Wormwood** | **Cucullia absinthii** (Linnaeus, 1761)
There are more larval records for this species than adults. In the 1950s, there were both larvae and adults recorded at Evington Golf Course, and more recently there was a colony near to Syston with larvae recorded between 1999 and 2005, and a colony on waste ground in the Belgrave area between 2012 and 2014 with an earlier larval record nearby from 1999. Records of adults to light are very few: one in Harby on 16/07/2022 (Pete Leonard) was the first record away from sites with larval records since one at Barrowden in 2000.


© Pete Leonard

73.091 | **Rosy Marbled** | **Elaphria venustula** (Hübner, 1790)
One was recorded at a private site in Charnwood on 29/06/2022 (Graham and Anona Finch), which becomes only the third record and third site for this species, all of singles to light and all recorded by Graham! Previous records were at Swithland Wood on 20/06/2014 and Bradgate Park on 17/06/2017. This species is mainly found in southern and south-eastern England, with odd records away from there considered to be wanderers. However three records in the Charnwood area seems to suggest a local population. The larval foodplant is thought to be Creeping Cinquefoil and Tormentil, but that is not as yet proven.

73.235 | **Feathered Ranunculus** | **Polymixis lichenea** (Hübner, [1813])
There is just one previous record for this species, from Preston in 1998. This is a predominantly coastal species, and very local at a small number of inland colonies including in Derbyshire. Records away from the coast and known colonies are thought to be wanderers. A series of records over five nights in one Ansty trap involving at least two individuals (Mike Higgott) was exceptional. The first was on 13/10/2022, presumably the same individual on 14/10/2022, two on 17/10/2022 which included one with a damaged wing, and presumably the same two on 18/10/2022. Where these arrived from is intriguing to say the least.


© Mike Higgott

Migrants

2022 was a favourable year for migrants, both primary and those presumed to have bred from them. The summary here excludes White-point which now appears to be resident in VC55, and both Diamond-back Moth and Silver Y which appear in numbers regularly.


Humming-bird Hawk-moth © Adey Baker

Code	Taxon	Vernacular	Records
63.002	Loxostege sticticalis		6
63.031	Udea ferrugalis	Rusty-dot Pearl	75
63.048	Palpita vitrealis		1
63.052	Nomophila noctuella	Rush Veneer	240
69.004	Agrius convolvuli	Convolvulus Hawk-moth	12
69.005	Acherontia atropos	Death's-head Hawk-moth	2
69.010	Macroglossum stellatarum	Humming-bird Hawk-moth	147
69.015	Hyles livornica	Striped Hawk-moth	5
70.038	Rhodometra sacraria	Vestal	40
70.047	Nycterosea obstipata	Gem	2
72.073	Eublemma parva	Small Marbled	1
73.074	Heliothis peltigera	Bordered Straw	20
73.076	Helicoverpa armigera	Scarce Bordered Straw	10
73.087	Spodoptera exigua	Small Mottled Willow	7
73.295	Mythimna vitellina	Delicate	2
73.307	Peridroma saucia	Pearly Underwing	5
73.327	Agrotis ipsilon	Dark Sword-grass	48

63.002 | **Loxostege sticticalis** (Linnaeus, 1761)

Prior to 2022, there was just a single previous record of one at Rutland Water in August 2002. There was distinct influx into the UK during early September, during which there were six records of singles.

Date	Recorder	Site
02/09/2022	Graham Finch	Cloud Wood
02/09/2022	Pete Leonard	Harby
02/09/2022	Ted Gaten	Thurlaston
03/09/2022	Andrew Johnson	Dadlington
06/09/2022	Pete Leonard	Scalford
07/09/2022	Graham Calow	Sapcote

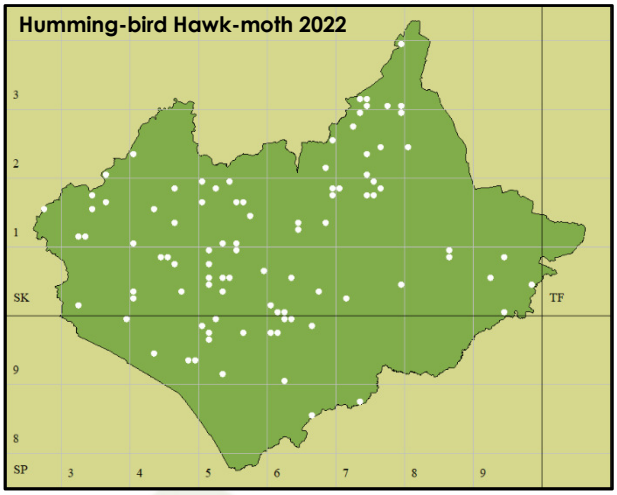
69.005 | **Death's-head Hawk-moth** | **Acherontia atropos** (Linnaeus, 1758)

This impressive and enigmatic migrant is one that every recorder longs to find in their traps, however the reality seems to be that you are more likely to see one if you are a non-recorder growing potatoes! Almost all of the pre-2022 records relate to casual finds of adults, some attracted to domestic or industrial lighting, or of larvae. This year was the same story with a group of larvae found feeding on potato plants at Branston in late August by Mary Bircham and Ron Wells (per Pete Leonard), and an adult found on a doorstep apparently attracted to domestic lighting in Thrussington on 10/11/2022 (per Lee Kimpton).

69.010 | **Humming-bird Hawk-moth** | **Macroglossum stellatarum** (Linnaeus, 1758)

Whilst far from the rarest migrant to VC55, 2022 brought high numbers which on review make this the third best year with 147 records (vs 176 in 2015 and 164 in 2003, all other years <100 records). Whilst adults were widespread and noted regularly throughout the summer and autumn, the only larval record was of one found on Lady's Bedstraw by Sue Timms at Bagworth on 26/07/2022. High numbers are perhaps ever more likely with climate change, and it has been seen that it is becoming increasingly adept at surviving British winters.


Humming-bird Hawk-moth © Sue Timms



69.015 | **Striped Hawk-moth** | **Hyles livornica** (Esper, [1804])
Prior to 2022 there were four records of this striking hawk-moth, all of singles in 1964, 2003, 2006 and 2015. In was also mentioned in the VCH Leicester as having occurred but with no date or detail. This perhaps helps to give context to the unprecedented six records in 2022, which coincided with an excellent year for this species Nationally.

Date	Recorder	Site
02/06/2022	Rod Baker	Wigston Magna
17/05/2022	Andrew Taylor	Oakham
13/08/2022	Ted Gaten	Thurlaston
10/07/2022	Sam Pitt Miller	Asfordby Hill
13/08/2022	Dylan Pugh	Melton Mowbray
14/07/2022	Kitty Meeks	Wigston


© Ted Gaten

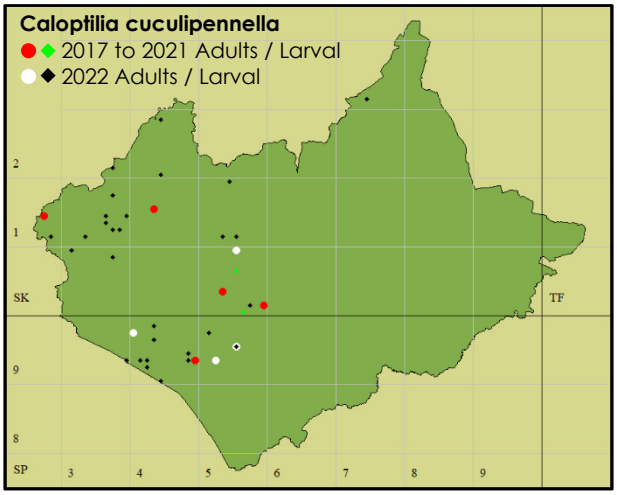
72.073 | **Small Marbled** | **Eublemma parva** (Hübner, [1808])
There are five pre-2022 records, all of singles, in 2006, 2015, 2017 and x2 in 2019. There was one recorded this year in Quorn on 07/07/2022 by Anthony Plummer.

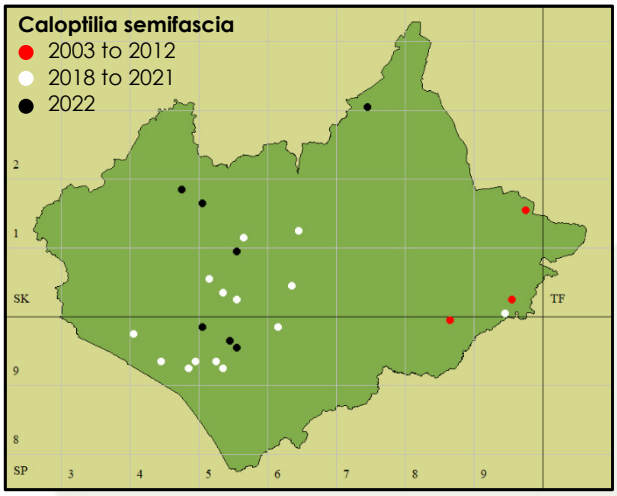
Recent Colonists

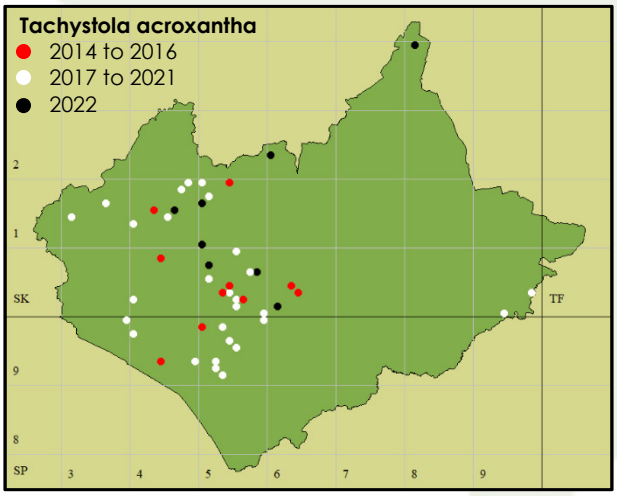
A summary of some (not all) of the species that have arrived in the last few years and appear to be successfully and widely establishing or have dramatically expanded their range. Note that maps in this section reflect the year/range of the first record for each monad, there may be subsequent records, but the intent is to show progression in the distribution. The years/ranges will vary by species for the same reason.

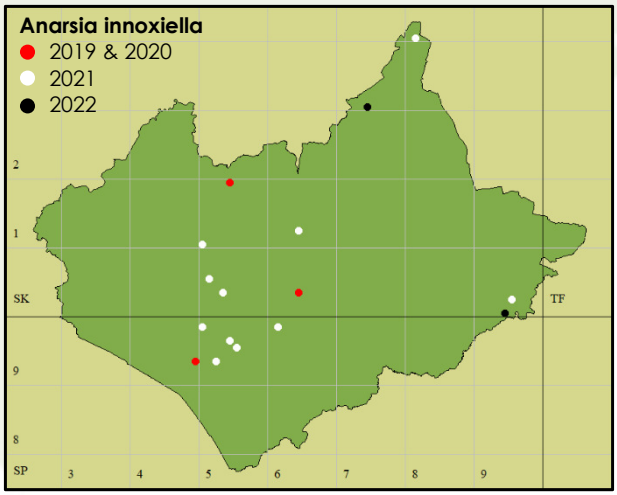
15.002 | **Caloptilia cuculipennella** (Hübner, 1796)
There were no confirmed records of this Ash and Privet feeder until 2017, after which there was a total of six records of adults and six records of larval mines or cones prior to 2022. During 2022, there has been a very clear expansion in records with five of adults and no less than 29 of mines or cones. It is not at all clear if this is genuinely a recent colonist, or perhaps just scarce to light and the larval workings had not previously been looked for.

15.012 | **Caloptilia semifascia** (Haworth, 1828)
The first confirmed VC55 record came in 2003, followed by single records in 2006 and 2012, all in Rutland. However as with the preceding species, there has been a marked upturn in recent years suggestive of rapid colonisation. There were five records in 2018, four in 2019, 11 in 2020 and 16 in 2021, all of adults and almost all in or west of the City. During 2022, there were 29 records from 12 sites. The larval working cannot be reliably separated from other Acer-feeding spp.





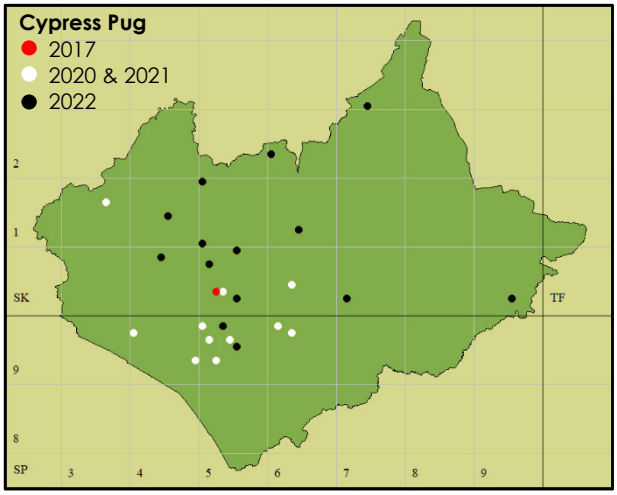




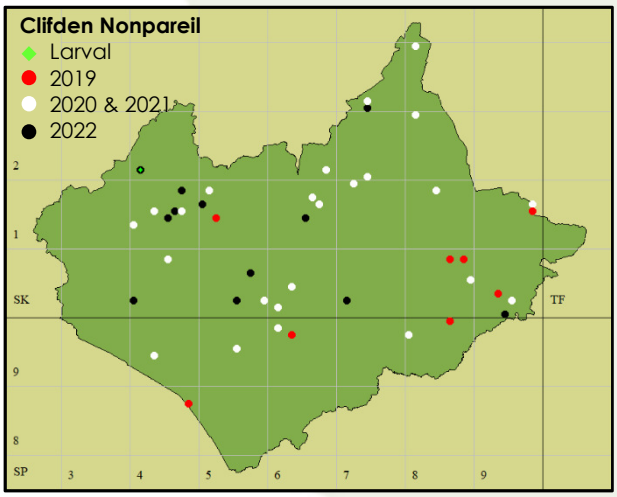
28.024 | **Tachystola acroxantha** (Meyrick, 1885)
After two records in 2014, and then two more in 2015, there was a dramatic increase to 33 records in 2016 and there has been no drop off from thereon. During 2022 there were 270 records, however there are still very few records in east Leicsestershire and Rutland.

35.0191 | **Anarsia innoxiella** Gregersen & Karsholt, 2017
This species was not named until 2017, after having been cryptically hidden within records of Anarsia lineatella, and it is perhaps coincidental that it has been spreading north and west from the former south-eastern range in recent years. It was first recorded here in 2019, with a couple of records in 2020 and a strong expansion in 2021 with 25 records. During 2022 there were 16 records from seven sites, albeit only two new sites.

70.159 | Cypress Pug | Eupithecia phoeniceata (Rambur, 1834)
One in Kirby Muxloe in 2017 was the first fully confirmed record for VC55, after two records from 1999 were found to be unsupported and could not be verified. There were no further records until 2020, but the spread from then has been remarkable. There were 27 records from 20 sites during 2022.



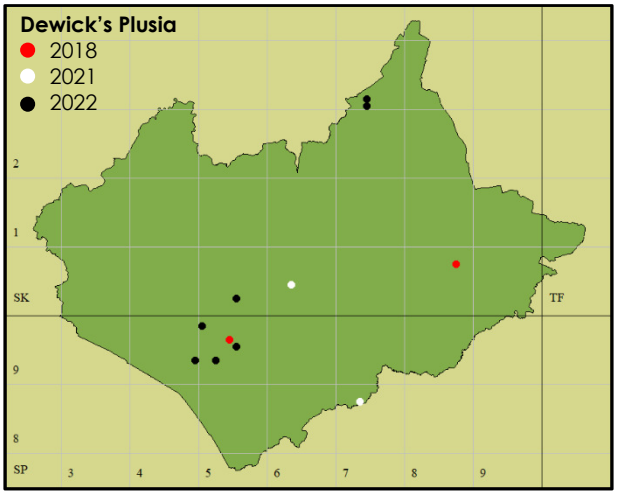
72.076 | Clifden Nonpareil | Catocala fraxini (Linnaeus, 1758)
There is a specimen in the Leics. collection from 1902, and three vague records from the first half of the 20th Century, but the provenance and veracity of these early records is debateable. The recent colonisation from 2019 is certainly not up for debate and matches a National pattern. There were 23 records from 16 sites during 2022, but no further larval records.

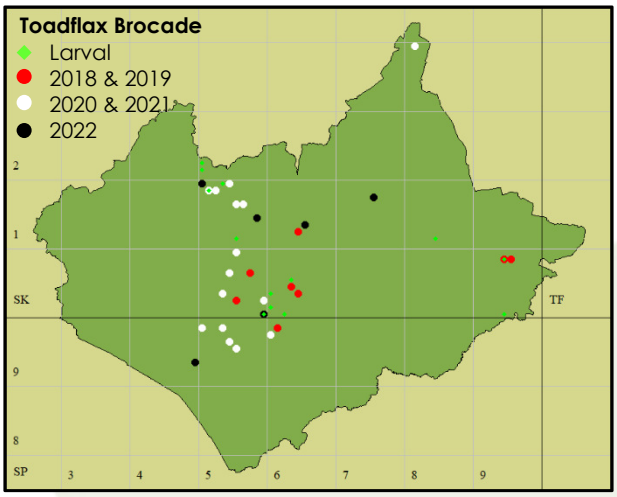


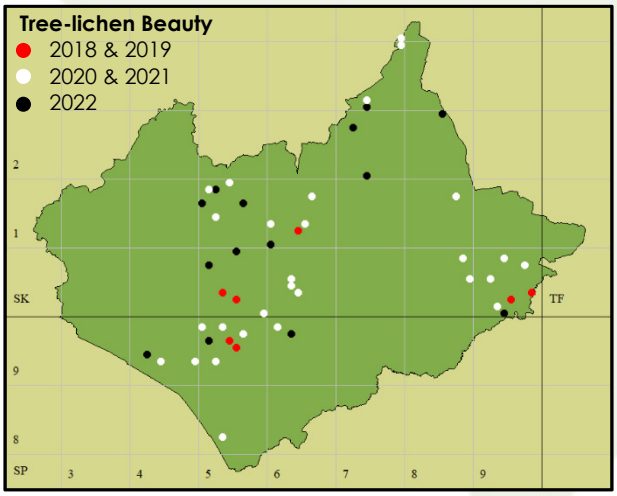
73.010 | Dewick's Plusia | Macdunnoughia confusa (Stephens, 1850)
This was very much an unexpected species when there were two records in 2018, and there were no further records until three in 2021, but by then it was clearly becoming an established colonist east and south of VC55 and it is clearly in the early stage of establishing itself here. During 2022 there were 29 records from eight sites, including records to the NI pheromone lure (for Trichoplusia ni). However no less than 19 of the records were at one site.

73.059 | Toadflax Brocade | Calophasia lunula (Hufnagel, 1766)
The first three records came in 2018, and there have been larval records in every year in addition to adults at light. There were 15 records during 2022, compared to 24 in 2020 and 34 in 2021, and it does not as yet seem to be established east of the City.

73.082 | Tree-lichen Beauty | Cryphia algae (Fabricius, 1775)
After the first record in 2018, there were nine in 2019, 30 in 2020 and 60 in 2021. During 2022 there were 64 records of 130 individuals from 27 sites.

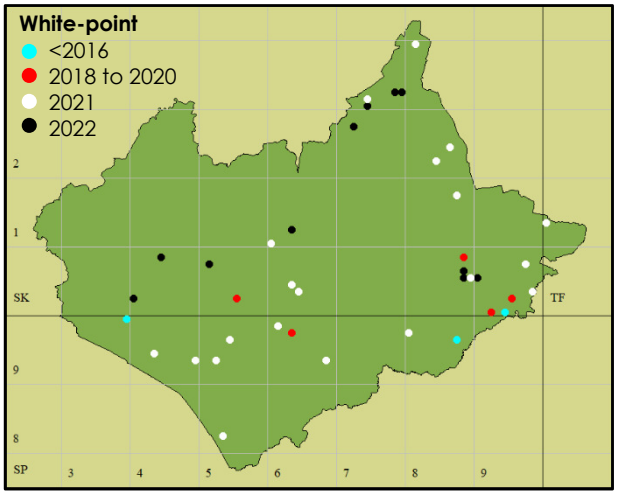


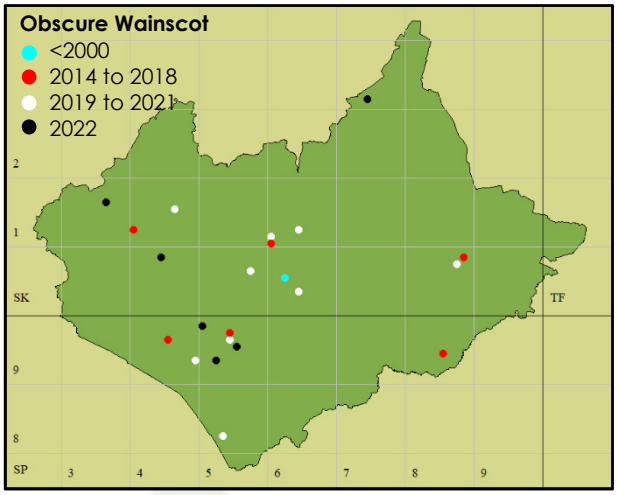




73.297 | **White-point** | **Mythimna albipuncta** ([Denis & Schiffermüller], 1775)
Records of singles in 1998, 2006 and 2008 all came from two sites in Rutland close to the Northants border, and were considered to be likely migrants, as were further singles in 2014 and 2015. There was a total of nine records between 2018 and 2020, but during 2021 there was a very marked increase with 43 records, and there were 60 during 2022.

73.302 | **Obscure Wainscot** | **Leucania obsoleta** (Hübner, [1803])
This species was VCH listed in both Leicestershire and Rutland, though no specimens are known. A single record from Leicester in 1976 was almost certainly a wanderer. From 2014 there have been increasingly regular records, predominantly from Rutland Water and other sites with reedbeds (Watermead CP North, Kelham Bridge and Narborough Bog). It is now starting to appear more widely in garden traps, typical of dispersal from well-established colonies.





Pheromone Luring

A couple of prompts for those actively deploying pheromone lures.

The LUN lure intended for Lunar Hornet Moth has been found to be effective for **Triaxomasia caprimulgella**, for which there is a sole VC55 record (Bradgate Park 2017). It would be well worth targeting this species overnight in the summer in mature woodlands around the county.

We still await the appearance of **Raspberry Clearwing** in VC55, so don't forget to waft that HYL lure around allotments and PYO farms in late July / early August.

Both Pammene gignateana and Pammene suspectana have proven to be far commoner than may have been expected prior to the use of various pheromone lures (notably MOL, SUS, FUN, ARG), however we have not as yet seen any pheromone lure records for either **Pammene albuginana** (for which there are no confirmed VC55 records) or **Pammene splendidulana** (just one record to light in 1990). But they are almost certainly here and about so keep trying.

During 2022, a total of 25 species were recorded to pheromone lures – either as the intended target species or completely inadvertently. The table that follows excludes records of Dewick's Plusia where a pheromone lure was used in conjunction with light trapping.

Code	Taxon	Vernacular	Records
12.047	Psychoides verhuella		2
12.048	Psychoides filicivora		2
15.046	Phyllonorycter blancardella		2
45.010	Amblyptilia acanthadactyla	Beautiful Plume	1
49.356	Grapholita lobarzewskii		2
49.357	Grapholita funebrana	Plum Fruit Moth	4
49.358	Grapholita tenebrosana		1
49.359	Grapholita janthinana		2
49.362	Pammene giganteana		43
49.363	Pammene argyrana		1
49.364	Pammene suspectana		8
49.376	Pammene aurita		1
49.3771	Pammene juniperana		1
52.003	Sesia bembeciformis	Lunar Hornet Moth	11
52.008	Synanthedon formicaeformis	Red-tipped Clearwing	9
52.009	Synanthedon flaviventris	Sallow Clearwing	1
52.010	Synanthedon andrenaeformis	Orange-tailed Clearwing	11
52.011	Synanthedon myopaeformis	Red-belted Clearwing	14
52.012	Synanthedon vespiformis	Yellow-legged Clearwing	7
52.013	Synanthedon tipuliformis	Currant Clearwing	4
52.014	Bembecia ichneumoniformis	Six-belted Clearwing	10
68.001	Saturnia pavonia	Emperor Moth	3
73.010	Macdunnoughia confusa	Dewick's Plusia	1
73.015	Autographa gamma	Silver Y	4
73.348	Noctua janthe	Lesser Broad-bordered Yellow Underwing	1

Recording Notes for 2023

70.050 | **Balsam Carpet** | **Xanthorhoe biriviata** (Borkhausen, 1794)
Please note that there are presently no verified records of Balsam Carpet for VC55, with further unsupported records received in 2022. This species will need formal verification to be (re)added to the VC55 list.

70.052 | **Dark-barred Twin-spot Carpet** | **Xanthorhoe ferrugata** (Clerck, 1759)
It is possible that Dark-barred Twin-spot Carpet is being over-recorded, given that the main quoted feature to separate it from the much commoner Red Twin-spot Carpet (a notch on the costal half of the basal side of the median fascia) is no longer considered to be completely reliable. Please ensure that suspected individuals are photographed; the median fascia really should be dark with no red/purple tones on Dark-barred. Dissection of worn individuals may be necessary to record them accurately.

70.233 | **August Thorn** | **Ennomos quercinaria** (Hufnagel, 1767)
August Thorn is another species that may be being over-recorded from gardens; there is a noticeable lack of records from some of the most active recorders in the field, indicating that it may well be an uncommon species here. Please ensure that suspected individuals are photographed to help get a clearer picture of the status.

73.062 | **Copper Underwing** | **Amphipyra pyramidea** (Linnaeus, 1758)
73.063 | **Svensson's Copper Underwing** | **Amphipyra berbera** Rungs, 1949
It is now fully confirmed that adult Copper Underwing and Svensson's Copper Underwing can only be reliably separated on external characters by the underside of the hindwing. All other external characters on the upperside of the forewing, palps and sides of the abdomen are not useful. All records must state whether the hindwings have been checked, all records with no annotation will be aggregated.

Coming Soon?

Species on the move and newly colonising are becoming the norm. The following are a few species that could turn up here very soon due to recent expansion/arrival:

15.0115 | **Caloptilia fidella** (Reutti, 1853)
Another recent new-to-UK Caloptilia species, although this one at least utilises Hop and has a distinctive larval cone and cocoon to help recording efforts. An adult to light would need dissection.

15.013 | **Caloptilia hemidactyla** ([Denis & Schiffermüller], 1775)
This is another Acer-feeding sp. that could well turn up here and will need dissection to confirm. As our range of Caloptilia spp. increases, the need for dissections to confirm ID also increases.

52.004 | **Dusky Clearwing** | **Paranthrene tabaniformis** (Rottemburg, 1775)
Late in 2022, when the clearwing season was all but over, news that this species had been rediscovered in 2021 was published. A female had been photographed at an undisclosed site in Warwickshire. 2023 will undoubtedly see fervent use of the TAB pheromone lure in suitable sites with poplars and sallows up and down the UK, but clearly it could well be anywhere in the Midlands.

72.030 | **Jersey Tiger** | **Euplagia quadripunctaria** (Poda, 1761)
Once restricted to the Channel Islands and the south coast, now very common in London and further afield and clearly pushing further north and inland with records in neighbouring counties. There have been unsubstantiated claims, but no confirmed VC55 records …. yet!

73.196 | **Black-spotted Chestnut** | **Conistra rubiginosa** (Scopoli, 1763)
First recorded in the UK in 2011, and already becoming standard garden trap fare in several counties not far from us; it really can't be too far off arriving here to make winter-trapping exciting.

73.347 | **Langmaid's Yellow Underwing** | **Noctua janthina** [Denis & Schiffermüller], 1775
This is now turning up at inland traps well away from the south coast, although confirming one will necessitate detailed scrutiny with either a specimen and/or very clear photos showing both the upper and underside of both forewings and hindwings. Dissection will only be useful if the specimen is female.

73.3481 | **Wilson's Yellow Underwing** | **Noctua tertia** von Mentzer, Moberg & Fibiger, 1991
Whilst doubtlessly scrutinising loads of Lesser Broad-bordered Yellow Underwings looking for Langmaid's Yellow Underwing, bear in mind that this newly discovered species is also present in the UK. Again, detailed scrutiny and preferably a dissected female will be necessary.

As this review reaches you, I anticipate that all will be mindful that it is a year since Adrian Russell passed away. Pulling together the records for this review and noting the absence of a significant number that he would typically have raised has been challenging. It has also been an eye-opening period since taking on the CMR role, but one that would have been impossible were it not for his enthusiasm, encouragement, and diligence. A copy of the Obituary that was collectively written and used in part at Adrian's funeral is attached.

This review has been read, checked and re-read, but nevertheless has potential to carry errors for which I am solely responsible. Please also accept my apologies for any omissions.

Mark Skevington
April 2023

vc55cmr@gmail.com

https://www.facebook.com/groups/1509011432652736
https://www.naturespot.org.uk/

Adrian Russell – VC55 Leics. & Rutland CMR
29/10/1956 - 22/04/2022

It is with great sadness and shock that we learned of Adrian Russell's passing on 22nd April after a short illness. Adrian was the CMR for VC55 Leicestershire and Rutland, a role that he had fulfilled in an exemplary manner across four decades.

In his working life, Adrian lead the Environmental Health team at the Leicester City Council. But it was through his role as CMR and his active involvement with local groups, not least the Leicestershire Entomological Society and the East Mids Butterfly Conservation Branch, that many formed long-lasting friendships with him.

Being a County Recorder is as much about people as recording wildlife, and Adrian epitomised this through his talks, events and demonstrations. He brought naturalists together and created an ever-growing community of moth recorders in Leicestershire and Rutland. He always welcomed and supported new recorders and shared his enthusiasm and experience freely, gently leading absolute beginners through the minefield of identification with unfailing courtesy, patience and kindness.

So great was his desire and willingness to engage with new recorders, and to widen the recording coverage within VC55, that he turned his garage into a second-to-none moth trap workshop. His mechanical and electrical skills were remarkable, and he was constantly experimenting with innovative new ideas and prototypes. There are few recorders within VC55 today that have not owned at least one of his custom traps, which he often freely lent out to encourage records.

Adrian always celebrated the successes of others and was careful to avoid the sort of one-upmanship that had put him off birding in his younger years. If someone posted a particularly impressive catch on the county Facebook page, he would often reassure others that he had caught almost nothing that night and other recorders shouldn't be disheartened.

Adrian was fascinated by distribution, abundance and phenology and had a particular passion for historical data - often going to great lengths to verify obscure records or claims that he had come across. He had a very sharp and enquiring mind and would methodically go about researching and unravelling the details. His research skills were quite outstanding, and he would have made an excellent historian. It is incredibly sad that his long-planned book covering the Butterflies and Moths of Leicestershire and Rutland was not completed and published in his lifetime, his main focus and ambition during his retirement.

Many of us enjoyed sharing Adrian's company out and about doing what he enjoyed the most; revelling in moths coming to a sheet or enthusiastically emptying traps from multi-light overnight sessions, often with a gas-stove fuelling us with coffee and breakfast. Even the occasional tricky situation such as a completely flat Land Rover battery in the early hours of the morning in remote woodland, getting locked in at a site, or the Police turning up to investigate reports of bright lights, were always dealt with in his characteristically calm way and with his sense of humour intact.

It is sometimes said of someone that nobody had a bad word to say about them. In the case of Adrian, this is undoubtedly true. He is universally held in the very highest esteem by his friends and acquaintances for his generosity, thoughtfulness, and his considerate and sensitive nature.

We were incredibly lucky in VC55 to have such a hardworking, dedicated and encouraging CMR. But above all, Adrian was a pleasure to spend time with. He will be sorely missed by all who knew him, the moth recording community will be very much the poorer for his loss.

Our thoughts and condolences go to his wife Margaret, his son Ben, his daughter Kate and his wider family.

VC55 Moth Recorders