

# **GMS News**

## **Late Summer 2024**

### **Weeks 19-27**



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## **Editorial**

This issue starts with Evan’s analysis of the GMS quarterly results. And the first chart confirms what most of us will have felt, that 2024 was a very poor year for moths. Not surprisingly, it has also been poor for other insects, giving rise to Butterfly Conservation’s “Butterfly Emergency” campaign.

Next is an important consultation article that could potentially change significantly how we record moth species on GMS night. It was written by Mike Cook, who produces each year the recording forms for each Region. At present, each Region has a different list of GMS species, which amounts to a great deal of work. However, before any decision is taken we want to have the views of our recorders. Above all we value the work done by our volunteer recorders and we don’t want to risk losing you. We are therefore asking all of our recorders to fill in an online form and you can find the link at the end of Mike’s article on Page 17.

As you know, we are very keen that the data we produce is used for the benefit of moths. I’m therefore very pleased to hear that a peer-reviewed paper is in the pipeline. Watch this space!

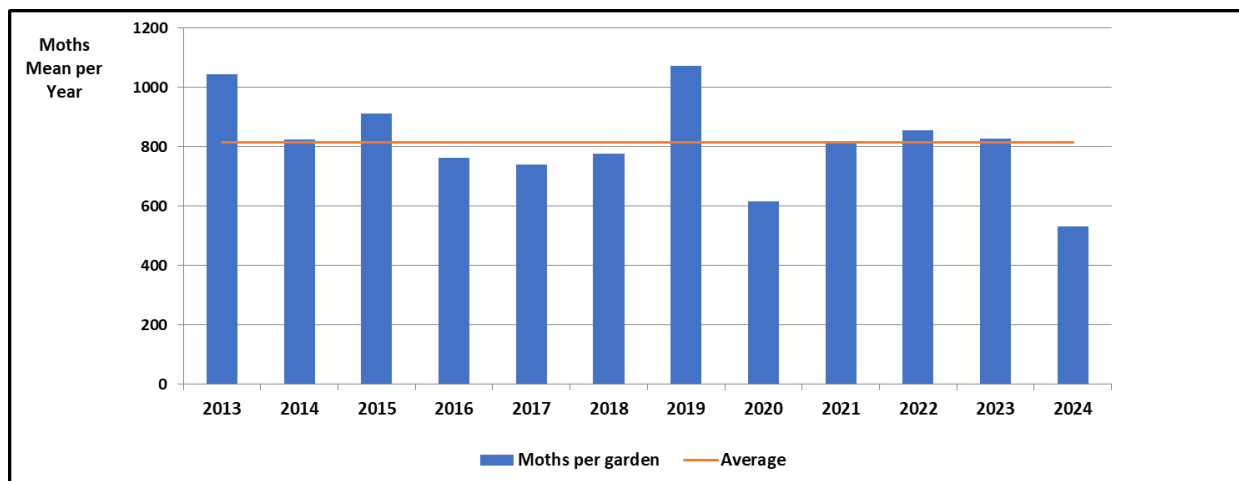
Finally – have a go at the Wordsearch.

## Overview GMS 3rd Quarter 2024

Evan Lynn

This quarter continued the run of disappointing results with the lowest mean number of moths in the last 12 years (fig 1)..

Fig 1. GMS 2024 Q3. Mean Quarterly Moth Numbers 2013 to 2024



July continued June's cooler theme but with occasionally more wet weather. The start of the month was the coldest since 2004. These cool below-average temperatures continued for the first two weeks and low-pressure systems brought through bands of rain in places. Avon, Buckinghamshire, and the Tyne and Wear had their average July rainfall before the 15<sup>th</sup> while some Scottish roads in Peterhead, Elgin and Aberdeen were closed due to flooding.

However, the second half of July brightened up with temperatures in the southeast reaching the high 20s. Other parts did not fare so well with temperatures below average. More settled conditions prevailed for the rest of the month, though there was a threat of thundery weather towards the end.

August began on a warm note, with temperatures above average across the country, but cooled in the second half of the month. The weather was changeable, with scattered showers as well as dry, fine spells. The winds were often from the west or southwest, bringing moist, sometimes warm air from the Atlantic. It began with widespread thunderstorms across central and southern England, bringing heavy downpours and some flooding. Temperatures were above or around average for the first week, and then a warm spell moved in from the 10<sup>th</sup>. The 12<sup>th</sup> saw the highest temperature of the year so far, 34.8°C being recorded in Cambridge, while thunderstorms spread across Scotland, Northern Ireland and northern England. Following this the temperatures returned to around average for many and below average for northern areas. Scotland in particular saw cooler than average temperatures in the second half of the month. On the 22<sup>nd</sup>, the 12<sup>th</sup> named storm of the season arrived, Storm Lilian, bringing strong winds and heavy rain to northern England and Wales and parts of Scotland. The 2023/24 storm season saw the most named storms since the naming system was launched in 2015.

Some of this gloomy weather can be shown in the following Met Office maps with Scotland and the west coast coming off the worst.

Fig 2. Mean Temperature for July & August 2024 (with permission of the Met Office).

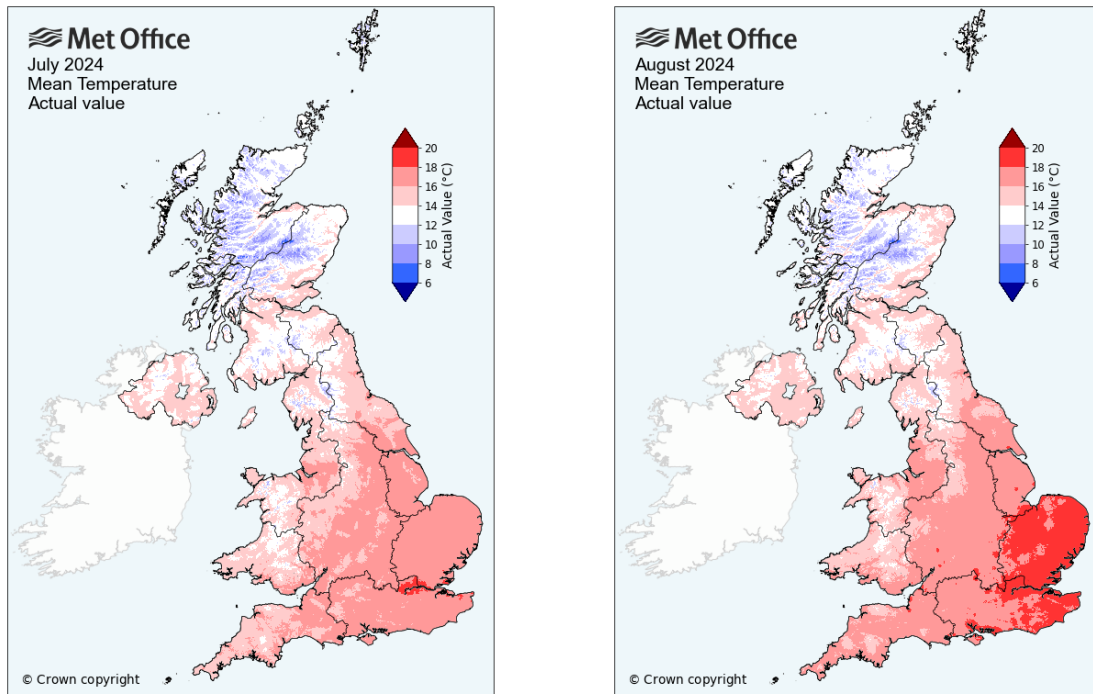


Fig 3. Hours of Sunshine for July & August 2024 (with permission of the Met Office).

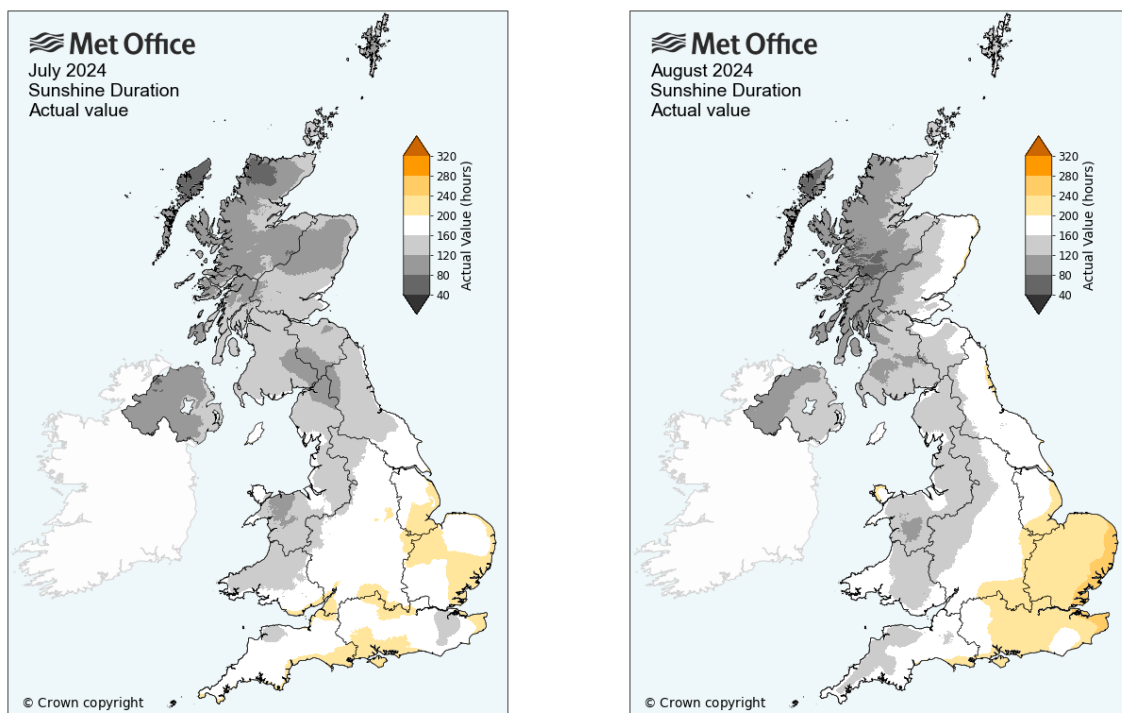


Fig 4. Days of Rainfall >10 mm for July & August 2024 (with permission of the Met Office).

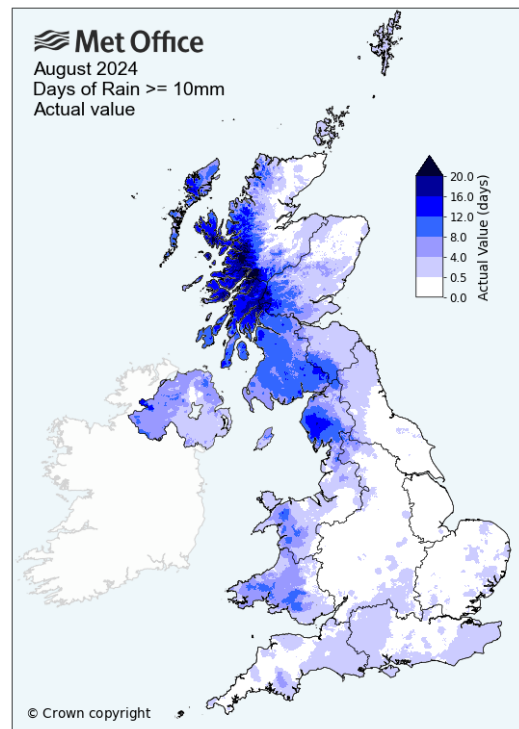
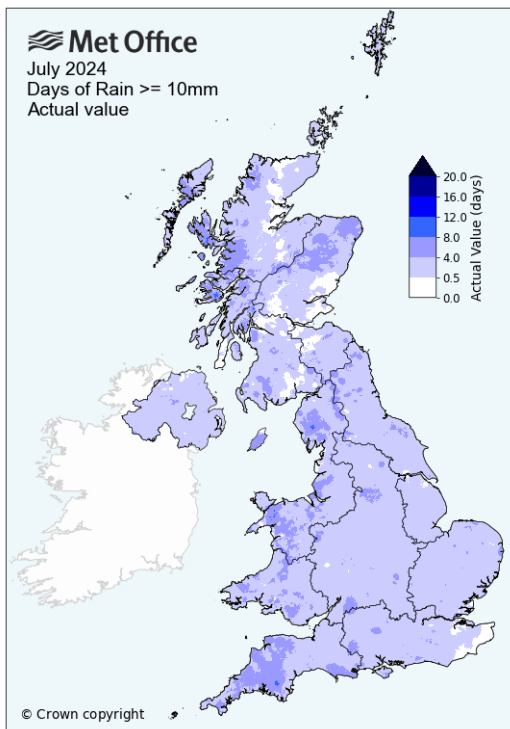
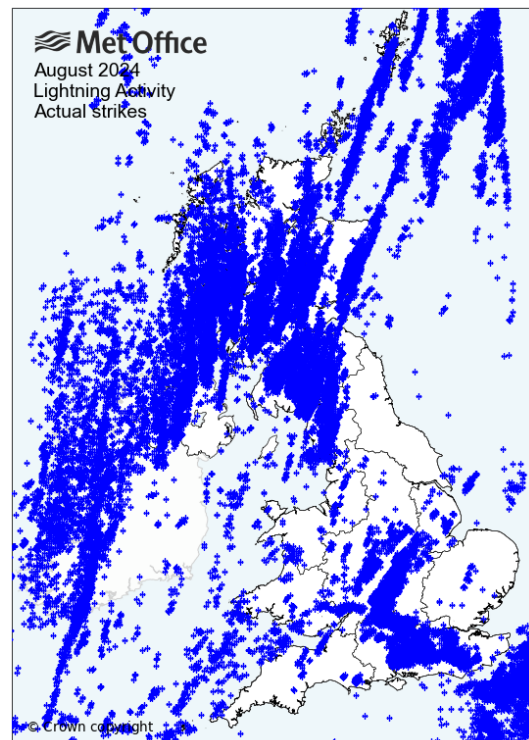
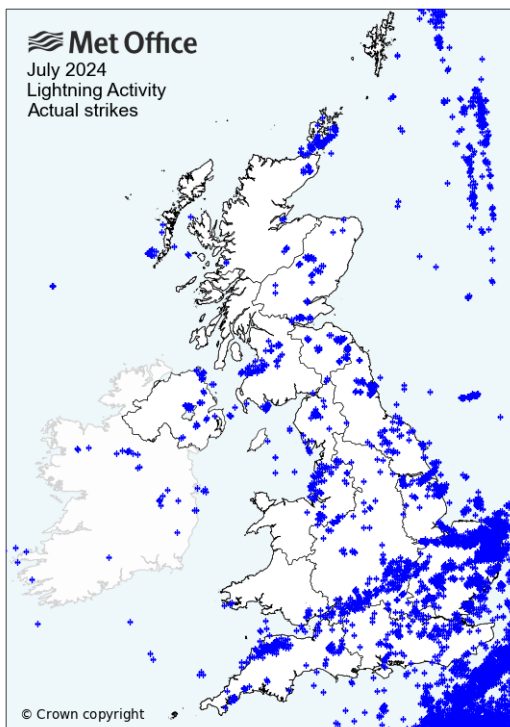


Fig 5. Lightning Strike Activity for July & August 2024 (with permission of the Met Office).



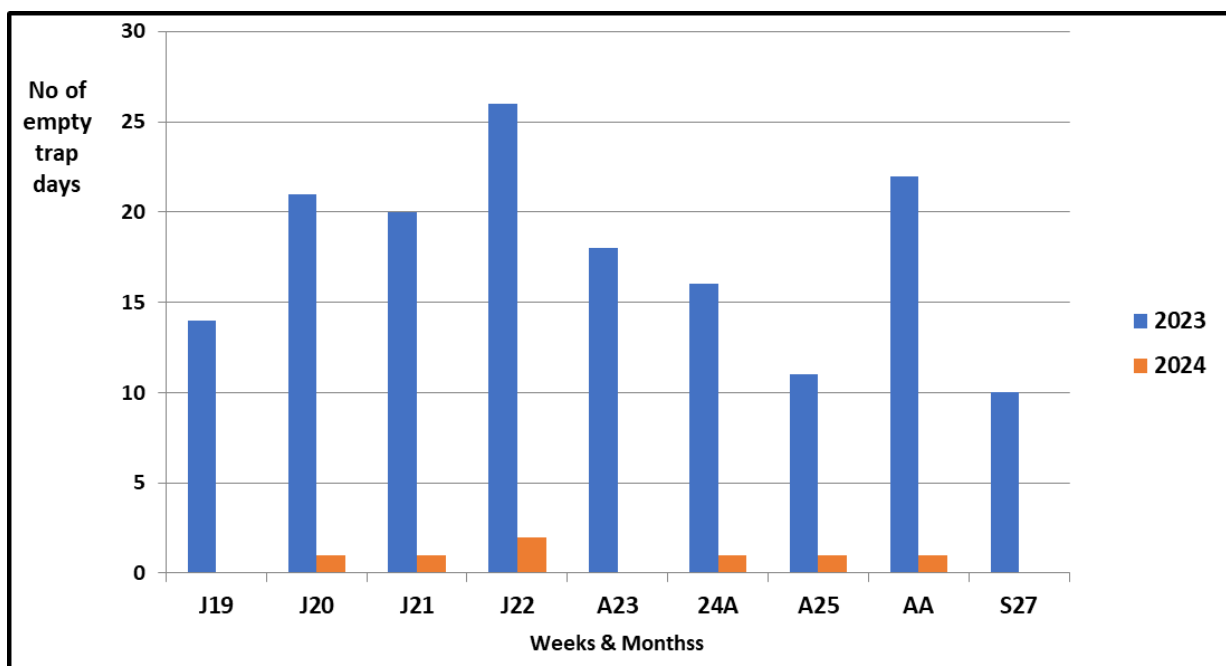
The weather patterns we have been experiencing - heavy rain and high temperatures - over the last few years have undoubtedly taken a toll on the insect populations. This year has seen a notable absence of insects for at least part of the year. Other people have suggested that high temperatures make a leaf hard to digest. This quarter we were puzzled over a much smaller than normal second-generation Silver Y. I asked a fellow recorder who was going on a David Brown course at Halsway Manor to consult him on the matter and this was his reply:

“In answer to your question, there was a lot of discussion on David's course about small second generations. The consensus seems to be that they were small, either because of a poor larval food supply or because time was running out so they pupated earlier than they normally would. Presumably, that means they'd have to pupate at an earlier instar than normal.”

So, whichever is the main cause, it is not good news for the insects, especially considering the increased number of EU-banned pesticides in use since Brexit.

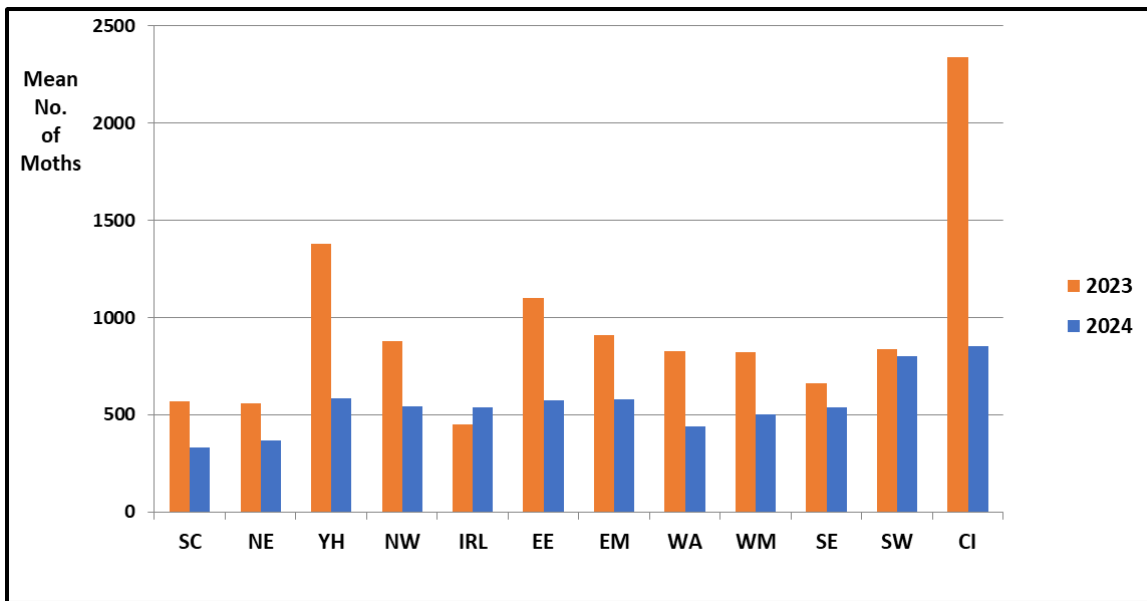
After seeing the poor catches this quarter one bit of good news was that the number of empty traps was down on that of last year (fig 6).

Fig 6. GMS 2024 Q3. Number of Empty Traps in 2023 & 2024



Unfortunately, this good news doesn't last long when looking at the relative regional catches of 2023 & 2024 (fig 7).

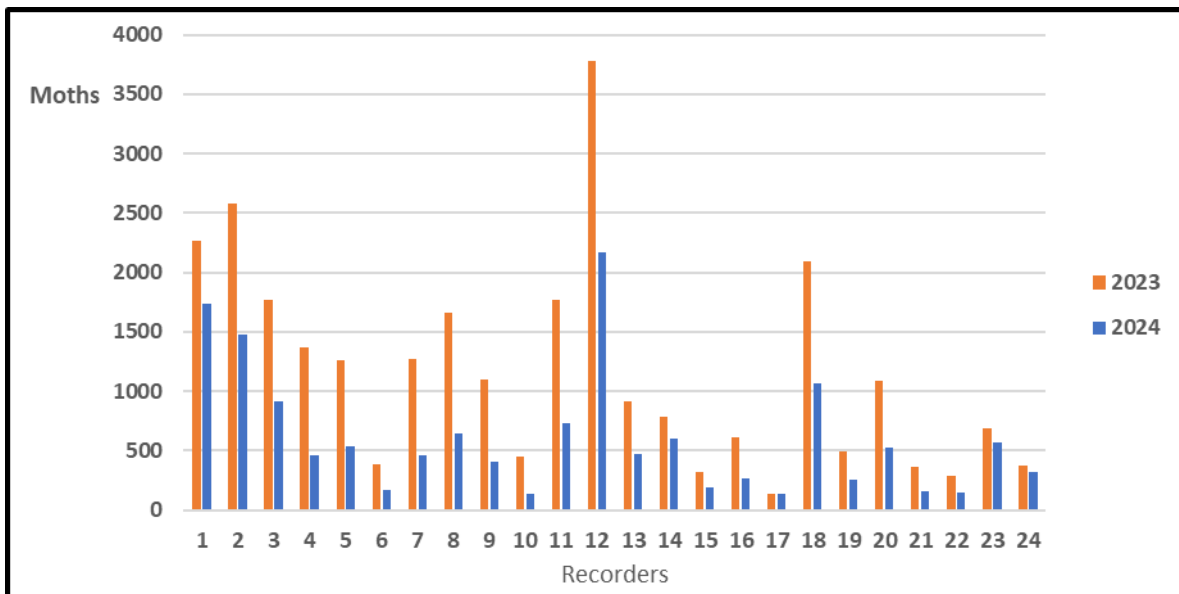
Fig 7. GMS 2024 Q3. Comparison of 2023 & 2024 Regional Catches



Each region apart from Ireland fared worse this year. The interesting result is the Channel Islands where there is only one recorder, thus avoiding the mean calculation damping effect where another's poor ones weigh down one recorder's good catches.

This effect can be shown by comparing individual recorders for the East of England, for example, in both years. Recorders that didn't manage to meet the deadline this quarter were removed. Like the Channel Islands, you can see how each recorder fared between the two years (Fig 8). Perhaps these recorders can identify themselves. Answers on a postcard, please.

Fig 8. GMS 2024 Q3. Comparison of Individual Catches in the East of England 2023 & 2024



Much has been said in the media about the weather this year. Regarding temperatures, both years' weekly catches corresponded to temperature fluctuations at very different levels (Fig 9 & 10).

Fig 9. GMS 2024 Q3. Mean Catches 2023 & 2024

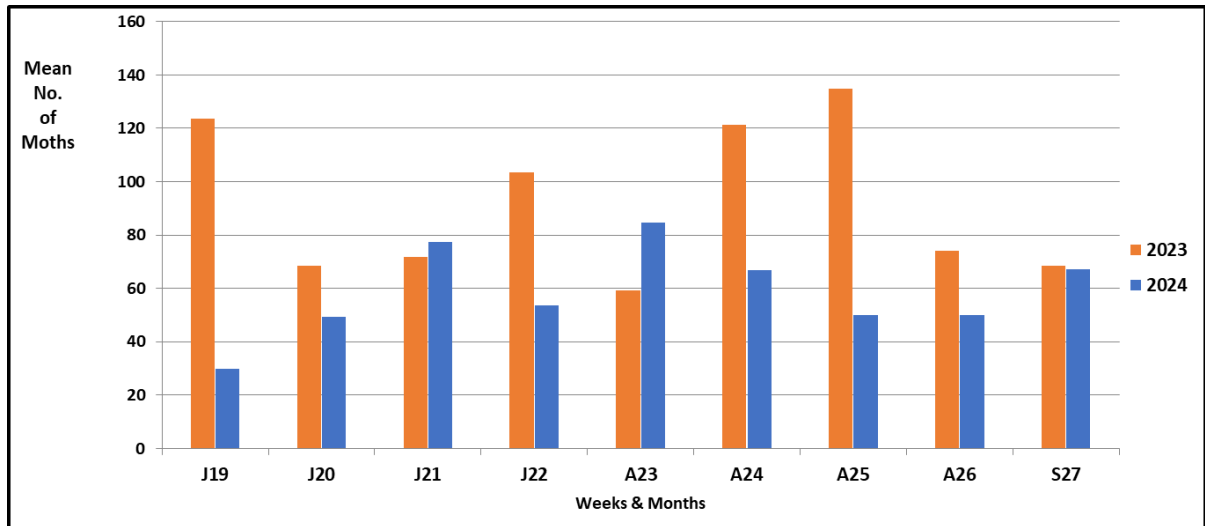
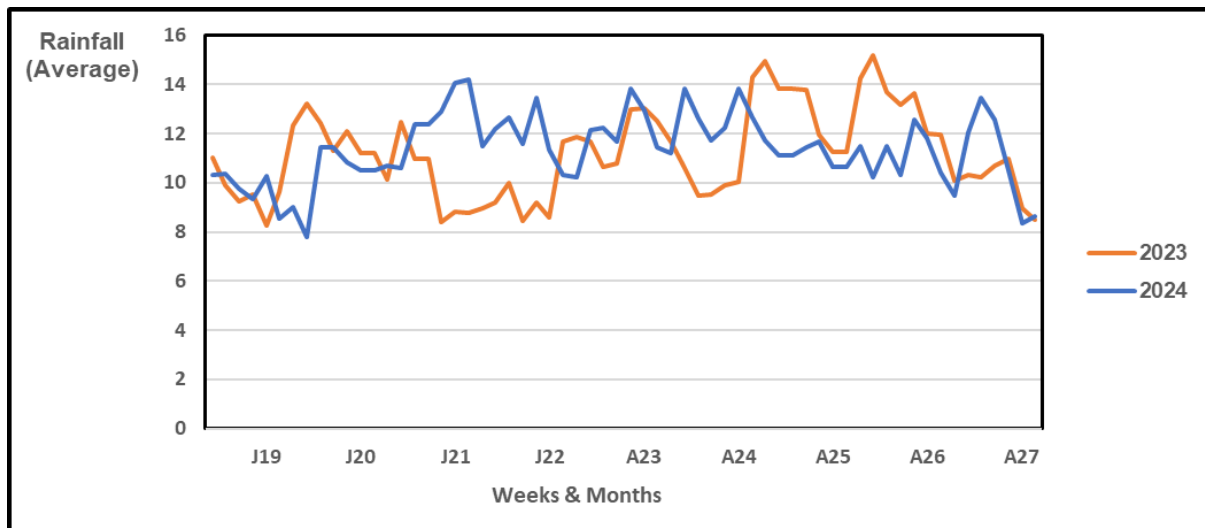


Fig 10. GMS 2024 Q3. Average Temperatures 2023 & 2024



## Statistics

Fortunately, you are not often greeted with depressing walls of green and yellow showing how poorly this year has performed compared to last year (table 1). I initially questioned my figures when looking at the Large Yellow Underwing, which is a stalwart in the food chain. I then consulted Norman's figures for Wales, which were compiled independently of mine, and sadly I was correct. Looking back at the quarter we rarely saw this moth and curiously we saw more of the Lesser Yellow Underwing. Several recorders have commented on how few Garden Grass-veneer (now Garden Grass-moth) were seen.

Table 1. GMS 2024 Q3. Top 20 Core Species

Position		Top 20	Mean Per Trap			Catching		
2023	2024	Species	2023	2024	Change	Frequency (%. of gdns)		
			298 Gardens	280 Gardens		2023	2024	Difference
1	1	Large Yellow Underwing	172.5	52.0	-120.48	100	95	-5
2	2	Common Rustic agg.	43.2	21.9	-21.26	98	95	-4
7	3	Common Footman	39.2	19.1	-20.06	84	83	-1
4	4	Uncertain/Rustic agg.	32.2	15.3	-16.93	91	84	-8
10	5	Riband Wave	31.8	15.1	-16.78	94	91	-3
6	6	Dark Arches	24.5	14.1	-10.41	97	90	-7
5	7	L. B-b Yellow Underwing	20.5	14.0	-6.50	95	88	-7
8	8	Setaceous Hebrew Character	18.0	13.5	-4.51	78	76	-2
3	9	Garden Grass-veneer	17.1	12.7	-4.36	79	75	-4
13	10	Square-spot Rustic	16.3	12.1	-4.16	90	87	-2
19	11	Brimstone Moth	15.1	11.1	-4.02	82	83	1
24	12	Dingy Footman	14.1	9.1	-4.92	56	56	1
22	13	Flame Shoulder	13.5	8.9	-4.58	76	72	-4
17	14	Light Brown Apple Moth	13.4	8.7	-4.68	75	70	-5
18	15	Willow Beauty	12.2	8.2	-4.05	85	78	-6
16	16	Mother of Pearl	10.9	7.2	-3.69	81	71	-9
14	17	Lesser Yellow Underwing	10.7	6.9	-3.82	93	82	-11
9	18	Heart and Dart	10.6	6.9	-3.69	90	79	-12
15	19	<i>Agriphila tristella</i>	10.1	6.5	-3.60	73	69	-5
21	20	<i>Agriphila straminella</i>	10.0	5.6	-4.40	57	59	2

<i>Agriphila tristella</i>	=	Common Grass-moth
<i>Agriphila straminella</i>	=	Straw Grass Veneer

Taking these a step further, table 2 shows the maximum numbers of this year's top 10 moths caught in any one night, together with their region and date for both years. The largest value for each moth is highlighted – blue for 2023 and orange for 2024. Our congratulations to these recorders, and also to the unseen others, who caught nearly just as many.

As described in the Top 20 table, the Garden Grass-veneer has dropped in both overall numbers and maximum catch, though it was still a long morning job for this one recorder.

Table 2. GMS 2024 Q3. Maximum Single Catch of the 2024 Top 10 Core Species

Top 10	2023	Region	Date	2024	Region	Date
Large Yellow Underwing	1014	NW	18/08/2023	388	NW	01/09/2024
Common Rustic agg.	137	NE	28/07/2023	94	IRL	10/08/2024
Common Footman	87	SW	18/07/2023	109	SW	26/07/2024
Dark Arches	134	EM	07/07/2023	88	EM	01/08/2024
Riband Wave	39	SE	07/07/2023	52	EM	19/07/2024
Uncertain/Rustic agg.	72	WA	14/07/2023	38	SE	12/07/2024
LB-b Yellow Underwing	221	SC	19/08/2023	66	SW	15/08/2024
Set Hebrew Character	148	EM	27/08/2023	157	EM	31/08/2024
Garden Grass Grass-veneer	400	WM	07/07/2023	150	SE	02/08/2024
Square-spot Rustic	48	IRL	01/09/2023	51	EE	15/08/2024

Bringing these down to regional level, table 3 lists the top 10 core moths for each region with the Garden Grass-veneer only appearing in seven of the regions. Micro-moths (italicised) are given their new vernacular names at the bottom of the table.

Table 3. GMS 2024 Q3. Regional Top 10 Core Moths

Scotland (21)			North East (26)			Yorks & Humber (16)		
Mean	%		Mean	%		Mean	%	
Large Yellow Underwing	54.1	19.4	Large Yellow Underwing	93.8	28.4	Large Yellow Underwing	90.1	17.8
Dark Arches	26.7	9.6	Dark Arches	22.3	6.8	Common Emerald	30.2	6.0
Common Rustic agg.	18.3	6.6	Lesser Yellow Underwing	16.5	5.0	Dark Fruit-tree Tortrix	19.4	3.8
Lesser Yellow Underwing	14.0	5.0	Common Rustic agg.	16.1	4.9	Common Rustic agg.	18.1	3.6
L.B-b Yellow Underwing	13.2	4.7	Square-spot Rustic	11.4	3.5	Dark Arches	15.7	3.1
Dotted Clay	10.3	3.7	L.B-b Yellow Underwing	9.4	2.8	Garden Grass-veneer	15.1	3.0
<i>Agriphila tristella</i>	8.9	3.2	Common Footman	8.3	2.5	Riband Wave	13.9	2.7
True Lover's Knot	8.8	3.1	Garden Grass-veneer	7.8	2.4	Setaceous Hebrew Character	13.4	2.7
Square-spot Rustic	6.4	2.3	Willow Beauty	6.5	2.0	July Highflyer	12.4	2.4
Smoky Wainscot	5.7	2.0	Uncertain/Rustic agg.	6.4	1.9	<i>Crambus pascuella</i>	12.3	2.4
North West (33)			Ireland (20)			East of England (26)		
Mean	%		Mean	%		Mean	%	
Large Yellow Underwing	80.8	16.9	Common Rustic agg.	52.7	10.3	Common Footman	19.6	4.2
Common Rustic agg.	30.5	6.4	Large Yellow Underwing	38.1	7.4	Setaceous Hebrew Character	19.5	4.2
Riband Wave	24.1	5.0	L.B-b Yellow Underwing	24.4	4.8	Garden Grass-veneer	16.8	3.6
Dark Arches	16.5	3.5	Dark Arches	23.1	4.5	Light Brown Apple Moth	16.0	3.5
L.B-b Yellow Underwing	12.8	2.7	Square-spot Rustic	19.1	3.7	<i>Crambus pascuella</i>	15.2	3.3
Light Brown Apple Moth	10.8	2.2	Small Square-spot	16.3	3.2	Square-spot Rustic	14.0	3.0
Common Footman	10.5	2.2	Heart and Dart	14.5	2.8	Scarce Footman	13.3	2.9
<i>Agriphila straminella</i>	10.2	2.1	Smoky Wainscot	14.0	2.7	Cloaked Minor	11.7	2.5
Uncertain/Rustic agg.	9.3	1.9	Uncertain/Rustic agg.	12.4	2.4	Uncertain/Rustic agg.	10.8	2.3
Garden Grass-veneer	9.2	1.9	Riband Wave	10.8	2.1	Common Wainscot	10.7	2.3
East Midlands (37)			West Midlands (17)			Wales (28)		
Mean	%		Mean	%		Mean	%	
Vernacular	62.5	11.1	Riband Wave	27.0	5.4	Large Yellow Underwing	44.3	2.2
Large Yellow Underwing	28.1	5.0	Common Rustic agg.	19.9	4.0	Common Footman	25.9	1.9
Common Footman	27.2	4.8	Brimstone Moth	17.6	3.5	Dingy Footman	18.9	1.9
Setaceous Hebrew Character	26.5	4.7	Uncertain/Rustic agg.	16.4	3.3	Uncertain/Rustic agg.	18.7	1.9
Riband Wave	23.4	4.2	Common Footman	15.9	3.2	Brimstone Moth	17.8	1.6
Common Rustic agg.	22.4	4.0	Dark Arches	13.4	2.7	Flame Shoulder	15.2	1.5
Dark Arches	21.4	3.8	<i>Crambus pascuella</i>	12.4	2.5	Riband Wave	14.6	1.4
Uncertain/Rustic agg.	18.1	3.2	Straw Dot	11.2	2.2	Common Rustic agg.	12.7	1.3
L.B-b Yellow Underwing	16.5	2.9	Garden Grass-veneer	10.9	2.2	Heart and Dart	11.4	1.3
Garden Grass-veneer	15.0	2.7	Light Brown Apple Moth	8.6	1.7	L.B-b Yellow Underwing	10.7	1.2
South East (30)			Southwest (25)			Channel Islands (1)		
Mean	%		Mean	%		Mean	%	
Garden Grass-veneer	29.6	6.5	Common Footman	53.0	2.7	Common Rustic agg.	63.0	8.6
Riband Wave	25.2	5.5	Large Yellow Underwing	43.8	2.3	Flame Shoulder	48.0	6.5
Common Rustic agg.	23.2	5.1	Uncertain/Rustic agg.	33.0	2.2	Rusty-dot Pearl	46.0	6.3
Common Footman	21.4	4.7	Brimstone Moth	30.1	2.0	Rush Veneer	22.0	3.0
Uncertain/Rustic agg.	20.3	4.4	Dingy Footman	27.4	1.9	Bright-line Brown-eye	22.0	3.0
Setaceous Hebrew Character	15.6	3.4	Common Rustic agg.	27.4	1.8	Square-spot Rustic	22.0	3.0
<i>Crambus pascuella</i>	14.7	3.2	L.B-b Yellow Underwing	24.1	1.8	Dark Arches	19.0	2.6
Square-spot Rustic	14.3	3.1	Flame Shoulder	23.5	1.6	Shuttle-shaped Dart	19.0	2.6
Dark Arches	13.7	3.0	Setaceous Hebrew Character	23.5	1.6	L.B-b Yellow Underwing	18.0	2.4
Large Yellow Underwing	12.9	2.8	Mother of Pearl	20.2	1.5	Uncertain/Rustic agg.	16.0	2.2

<i>Agriphila tristella</i>	=	Common Grass-moth
<i>Agriphila straminella</i>	=	Straw Grass-moth
<i>Crambus pascuella</i>	=	White-banded Grass-moth

All the trap nights and catches completed by the recorders are summarised in Table 4. The minimum and maximum moth numbers caught in these nine weeks vary considerably, possibly reflecting location, type of trap, and/or the individual micro-climates. The minimum catches range from 28 to 195 and the maximum between 977 and 4081, while the trapping effort (Moth Trap Nights) is very high as usual.

The third section shows the preferred night for trapping. Although Friday is the official night three nights on either side are acceptable, as everyone hopefully has a life apart from mothing.

Region	Gardens	Moths			
		Total	Mean	Min	Max
SC	21	6943	331	28	978
NE	26	9529	367	81	1027
Y&H	16	9383	586	81	1438
NW	33	17942	544	116	1680
IRL	20	10735	537	64	1478
EE	26	14909	573	132	2166
EM	37	21347	577	159	1571
WA	28	12253	438	148	1020
WM	17	8552	503	78	1158
SE	30	21347	712	89	1596
SW	25	20057	802	195	4081
CI	1	854	N/A	N/A	N/A

Moth Trap Nights		
Possible	Actual	Percent
189	151	80
234	222	95
144	140	97
297	281	95
180	166	92
234	219	94
333	321	96
252	240	95
153	148	97
270	263	97
225	208	92
9	9	100

Weekday Trap Nights	Tues	Wed	Thurs	Fri	Sat	Sun	Mon
Number of Nights	33	79	208	1400	399	176	73
Percent	1	3	9	59	17	7	3

The high figure of 4081 in the South West caught my interest and so to give an example of the catches involved this recorder's top ten nights using a 125-watt MV are listed below with repeat dates. My congratulations for the good work involved in counting them all. Repeat dates are shaded.

Table 5. GMS 2024 Q3. One Recorder's Seven Top Nights of Moth Catches in The South West

Moth	Quantity	Date
Common Footman	52	19/07/2024
Mother of Pearl	34	19/07/2024
Common Footman	77	24/07/2024
Dingy Footman	51	24/07/2024
Dingy Footman	109	30/07/2024
Common Footman	63	30/07/2024
Mother of Pearl	45	30/07/2024
Rosy Footman	38	30/07/2024
Mother of Pearl	50	11/08/2024
L. B-b Yellow Underwing	34	11/08/2024
Flame Shoulder	32	11/08/2024
L. B-b Yellow Underwing	66	15/08/2024
Mother of Pearl	62	15/08/2024
Dingy Footman	55	15/08/2024
L. B-b Yellow Underwing	42	23/08/2024
Large Yellow Underwing	115	31/08/2024
Set. Hebrew Character	60	31/08/2024
Brimstone Moth	59	31/08/2024
Silver Y	42	31/08/2024
Square-spot Rustic	41	31/08/2024
Mother of Pearl	36	31/08/2024
Flame Shoulder	34	31/08/2024
Angle Shades	33	31/08/2024

As mentioned in previous reports, one part of the form that is often ignored is the lower section where you are invited to add moths that are not on the core/regional list. This does make the collecting and recording more interesting and the recording form can be converted to a column format for your regional recorder if so wished.

Some regional coordinators have difficulty interpreting the entries due to the several unique ways the recorders enter the names/codes, occasionally incorrectly. To that end, I have had to develop a few devious solutions that speed up the interpretation.

This quarter's number of entries has been high as expected for this time of the year. There were 3024 rows of data coming from all of the regions giving a total of 10019 moths of 614 species. Some of these may be duplicated several times when one recorder identifies it as the species while others record it as a sp. or an agg. The vernacular names for the micro species are only added once a recorder sends it in and the library entry is adjusted. Only names used in the New Field Guide are used and a translation table of their names is provided

The Orchard/Apple/Bird-cherry Ermine tops the list and this entry covers several entries including Y padella, Y malinellus, Y sp. & Y agg. My apologies to those who identified the correct species but compiling them avoids taking up several lines of the table. The Water Veneer which often comes to light in large numbers comes second but would have been first if it was not a regional in the East of England. The Jersey Tiger, which is mainly a southern species, actually made a presence in Cardiff! Finally, the Hawthorn Knot-horn (*Acrobasis advenella*) was widespread in singletons but two recorders in Ireland and Wales caught 9 & 13 respectively in one night.

Table 6. GMS 2024 Q3. Top 20 Additional Species

	Total	CI	EE	EM	IRE	NE	NW	SCO	SE	SW	WAL	WM	Y&H
<b>Orchard/Apple/Bird-cherry agg.</b>	1701	0	359	257	0	4	14	0	20	521	0	379	147
<b>Tawny/Little Grey</b>	340	0	10	22	0	29	144	0	13	33	0	18	71
<b>Water Veneer</b>	456	0	R	11	0	0	114	0	325	4	0	2	0
<b>Jersey Tiger</b>	363	R	60	0	0	0	0	0	303	R	0	0	0
<b>Common Masoner</b>	70	0	0	3	0	0	51	0	0	0	0	16	0
<b>Garden Grey</b>	150	1	46	18	0	7	18	0	1	49	0	10	0
<b>Boxworm Moth</b>	170	R	0	34	0	R	55	0	R	R	0	33	48
<b>Hawthorn Knot-horn</b>	133	1	10	16	0	11	38	0	21	10	0	3	23
<b><i>Argyresthia goedartella</i></b>	43	0	5	0	0	4	2	0	23	2	0	1	6
<b>Coronet</b>	118	R	86	11	0	0	0	0	R	R	0	21	0
<b>Common Grey</b>	27	0	6	1	0	9	6	0	0	1	0	4	0
<b>Apple Leaf Miner</b>	34	0	22	0	0	R	R	0	5	4	0	3	0
<b>Maple Button</b>	73	0	0	8	0	0	42	0	13	8	0	2	0
<b>Black Arches</b>	51	0	37	5	0	0	0	0	R	R	0	9	0
<b>Ear Moth agg.</b>	21	0	1	1	0	1	8	0	7	0	0	2	1
<b>Red Twin-spot Carpet</b>	24	R	R	1	0	R	0	0	16	R	0	7	0
<b><i>Synaphe punctalis</i></b>	71	2	7	0	0	0	0	0	25	37	0	0	0
<b>Muslin Footman</b>	43	0	0	0	0	R	R	R	43	R	0	0	0
<b>Willow Ermine</b>	66	0	24	0	0	1	4	0	0	18	0	2	17
<b>Beautiful Plume</b>	64	1	4	8	0	3	1	0	18	16	0	13	0

New Names		Scientific Names
Tawny/Little Grey	=	<i>Eudonia lacustrata</i>
Common Masoner	=	<i>Blastobasis adustella</i>
Common Grey	=	<i>Scoparia ambigualis</i>
Maple Button	=	<i>Acleris forsskaleana</i>
Willow Ermine	=	<i>Yponomeuta rorrella</i>
Orchard Ermine	=	<i>Yponomeuta padella/malinellus agg</i>
Hawthorn Knot-horn	=	<i>Acrobasis advenella</i>
Apple Leaf Miner	=	<i>Lyonetia clerkella</i>
Garden Grey	=	<i>Eudonia mercurella</i>

### **Riband Wave (*Idaea aversata*)**

This small member of the Geometridae is widespread throughout England, lowland Scotland, Wales, Ireland, the Isle of Man and the Channel Islands. Its distribution trend shows a small but significant increase (10%) since 1970 but its abundance shows little overall change. (Atlas of Britain and Ireland's Larger Moths).

It was first described by Carl Linnaeus in 1758. "Riband" in its vernacular name, meaning ribboned, refers to the banded form of this wave. Of its scientific name *Idaea* is the genus of all the wave moths. Emmet in his book stated it is related to Mount Ida from which the gods and goddesses watched the battles of the Trojan War. The species name *aversata* means below or under, which here refers to the more prominent appearance of the discal spot on the lower surface of the wing.

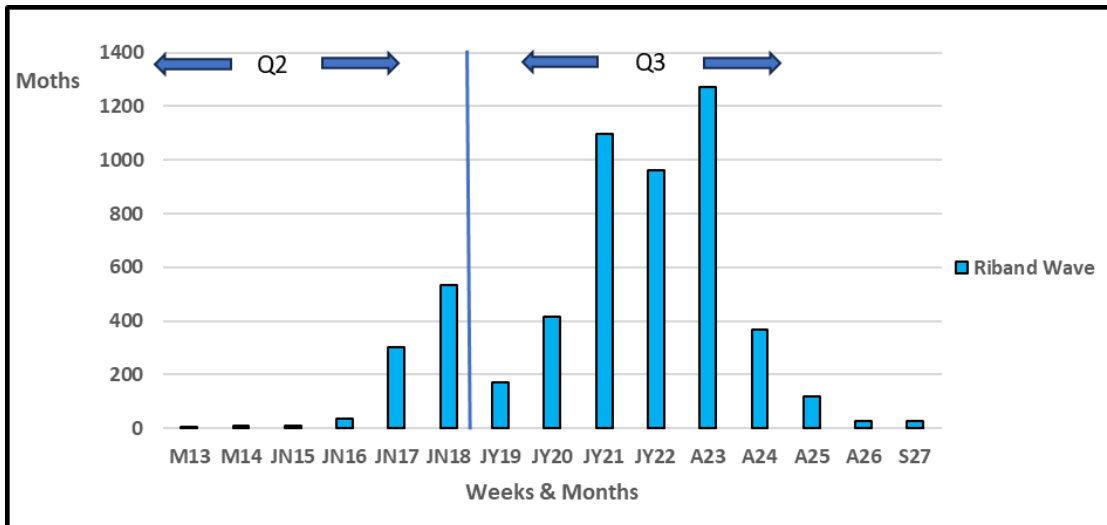
This species has a wingspan of 30-35 mm. The forewings are long and tapered with the leading edge strongly arched to the tip. Its ground colour is fawn to sandy brown and peppered, sometimes heavily, with blackish scales giving it a slightly rough appearance. There are three cross-lines and a helpful feature is the third cross-line which has a distinct kink near the leading edge. Two main forms exist which are equally abundant. The ribband form has a dark grey cross-band and may be more numerous in shaded, closed canopy woodland with the plain form (*f. remutata*) occurring in more open areas (Majerus 1998).



Its flight season is June to August with an occasional partial second generation (September to October). It comes to light, often in large numbers, and visits flowers from dusk such as Creeping Thistle.

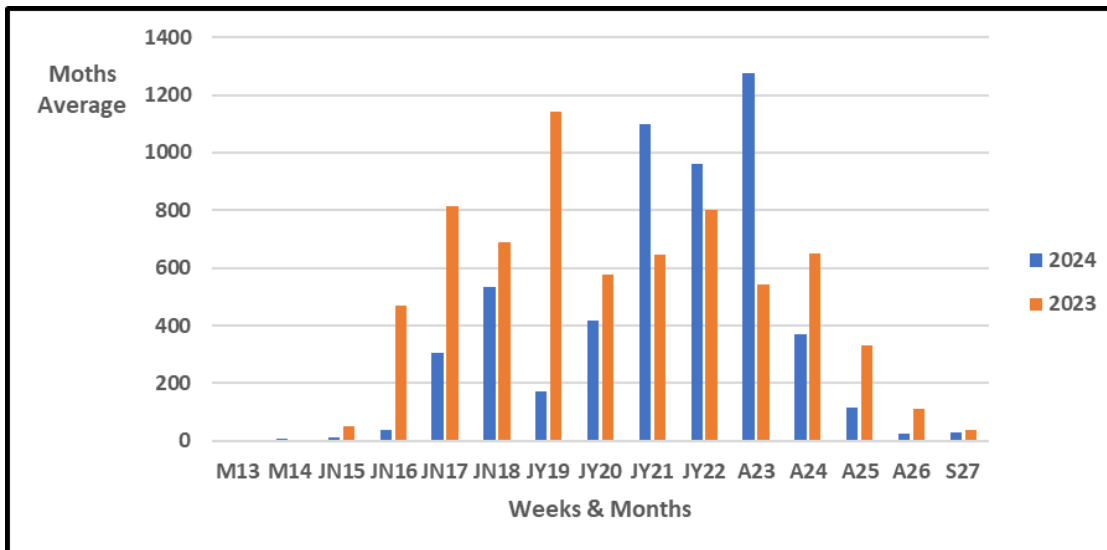
It is an almost ubiquitous species found in many different habitats. The larvae feed on a range of low-growing herbaceous plants including bedstraws, wood avens, primrose, dandelion and docks. It then overwinters as a small larva (July to May) and later pupates in a "slight" cocoon near the ground in plant debris

Fig 11. GMS 2024 Flight Period of the Riband Wave 2024



As seen earlier, the numbers for this month dropped by 16% from last year (Table 1). A rolling average chart shows the story, whereby the total for each week is divided by the number of Riband Wave recorders in that week (Fig 12). The 2023 numbers exceeded those of 2024 apart from weeks 21 to 23.

Fig 12. GMS 2024 Flight Period of the Riband Wave 2023 & 2024



***The case for moving to a single species list that will be used by all GMS regions***

**Mike Cook**

This possibility first occurred to me this summer when I was trying to assist Steve Roberts who is assessing the usefulness of the GMS database to statisticians. Steve asked about changes to the species lists over the years.

I have been preparing all GMS recording forms since 2013, and I have archived all the forms I have prepared, so we were solid back to 2013. To try and fill in the gaps since Dave Grundy started the GMS in 2006, we consulted current and previous National and Regional Coordinators, and even some participants from the early years who still participate. With a lot of help, we eventually managed to fill most of the gaps.

What brought the problem into focus was when one of my participants asked why one of the species she had caught wasn't on the North East form. (This is a frequent question; our participants enjoy participating in the GMS and they want to record the moths they catch!). When I checked, I found that the species in question was on the Scottish form and on the Yorkshire form, but not on the North East form. We were bracketed, where is the sense in that.

### **History**

- In 2003, Dave Grundy started the Garden Moth Scheme (GMS), initially just for moth recorders in his own region (the West Midlands).
- By 2006, Dave started to roll out the scheme to other regions by recruiting a Regional Organiser in each region.
- Regions either started out with their own species list or used the West Midlands list initially while developing their own.
- By 2009 there were 12 regions, each with its own species list.
- In 2015, after a major review of the 12 regional species lists, a 13<sup>th</sup> "Core" species list was added. This was composed of the species that were on all 12 of the regional species lists

### **Current Species Lists**

There are currently 12 regions in the GMS. The number of species recorded by each region are:

<b>Region</b>	<b>Number of species recorded</b>
Channel Islands	329
South East England	320
South West England	331
East of England	324
East Midlands	301
West Midlands	275
Wales	271
Ireland	285
Yorkshire	377
North East England	349
North West England	307
Scotland	318
Species recorded in all 12 regions	258
Total number of species recorded by the GMS	455

## **Proposal**

- All regions should use a single summer GMS form, with a species list comprised of the 455 species currently on the species list for any of the 12 regions.
- The Winter GMS form should stay unchanged with the current 80 species.
- The Core Species form should be abandoned completely.

## **Points in favour**

- Statistical analysis of data across all regions will be simpler and more accurate if we all work with the same species list.
- Analysis of distribution changes of a single species will be possible for all 455 species instead of the 258 core species as at present. This will become ever more important with species moving north, possibly due to climate change, and eventually perhaps those same species starting to disappear from the south.
- There would be less frustration for participants who identify a moth only to find that it is not on their GMS form.
- Mapmate users will not notice a difference, they will carry on as usual. Incidentally, I have often wondered how many of our participants use Mapmate. I'm going to add that question to the Google form to find out!
- It would be much faster to prepare just 2 recording forms each year (one manual and one Mapmate) rather than 25 as at present (2 for each of the 12 regions plus 1 core form). I confess to being biased on this one as my job is to prepare the forms.
- I might find it easier to find a successor to train in preparing the forms if there were only two of them. 25 forms to prepare each winter might seem a bit daunting!

## **Points against**

- Having more species on the recording form may discourage people from joining the GMS or encourage current participants to leave the scheme. My personal view is that the time taken to process the catch depends on the number of moths caught, not on the time taken to enter them on the recording form.
- Having more species on the form might lead to more mistakes. My answer to this one is that we all try and identify the moth using the Field Guides, a county or national moth website or (for guidance only) an app like Obsidentify. We might also photograph the moth and seek help from friends or on social media. Only having identified it would we look at the recording form.

We wouldn't make this change if it meant losing a lot of participants. Please let us know what you think by completing this Google form. If you are unable/unwilling to complete the form, you can email me at [michael\\_j\\_cook@btinternet.com](mailto:michael_j_cook@btinternet.com)

<https://forms.gle/73Q6qyvF3Q7QriHw8>

Mike Cook  
Regional GMS Coordinator for North East England.

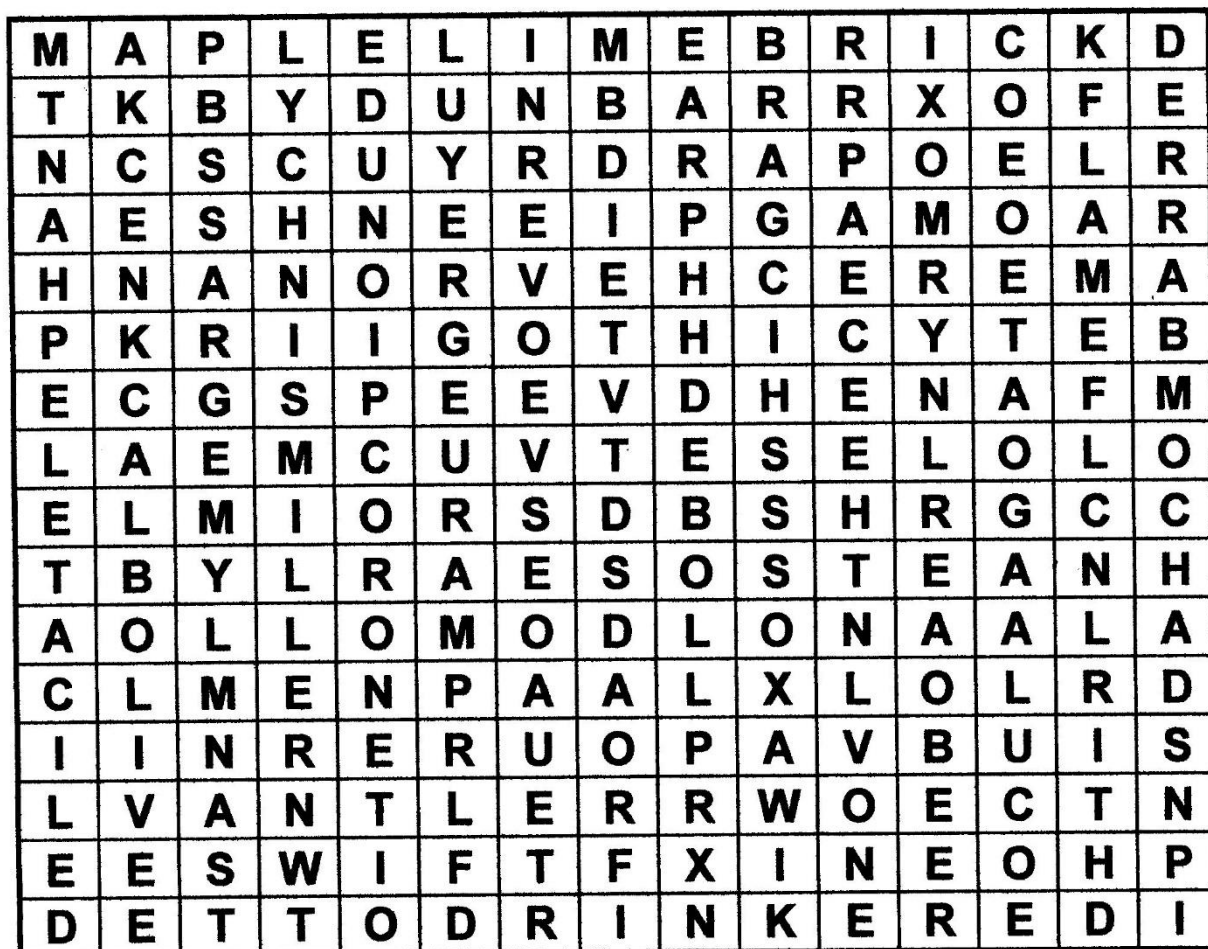
## Puzzle Corner

### Nonconformist

#### Wordsearch No.7

There are fifty words of 3 or more letters hidden in this square which relate to the vernacular names for moths.

These words can be horizontal, vertical or diagonal and in any direction.



When you have found all the words there will be a number of squares which have not been used. These will form an anagram of another moth to keep you company.

Good hunting!

Nonconformist.

## Communications & Links.

We have a new **GMS Website** which can now be found at

<https://gardenmothscheme.org.uk/>

In it are 5 Sections:

Home – the introduction

Information – lists the Regional Coordinators and gives some help with identification

Communications - includes past newsletters

Links – how to access our Facebook material and a link to UK Moths

Downloads - access to the regional recording forms and instructions.

**Facebook Page** - <https://www.facebook.com/GardenMothScheme>

**Facebook Group** - <https://www.facebook.com/groups/438806469608527/> - currently with more than 2900 Members (not all active GMS participants) – open membership – all recording forms, instructions and micro-moth identification guides are available in the Files section.

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MapMate is a biological recording system designed for enthusiasts to record, map, analyse and share their natural history sightings. It was originally developed for moth recording and has now expanded to include most of the UK fauna and flora. It is being used by some 20,000 individuals and institutions in the UK including very large groups like the RSPB and the Botanical Society of the British Isles.

[www.mapmate.co.uk](http://www.mapmate.co.uk)