GMS News

Late Summer 2023

Weeks 19-27

Contents

Editorial

Once more we look back on a Quarter of unusual weather. After a sweltering June, July and August were cold and wet, but Evan tells us that moth numbers were close to average over the past 12 years. However, the periods of cold weather and high winds meant that there were more occasions of empty traps than usual. Large Yellow Underwing was again in the top position taken at around four times the number of the second placed Common Rustic agg.

Evan then looks at some individual species. Garden Grass-veneer was recorded in very high numbers in the previous Early Summer Quarter, peaking towards the end but continued to be recorded through the early part of the present Quarter. But one of the extra benefits of regular trapping for GMS is that it occasionally throws up something exciting, in this case the rare *Uresiphita gilvata* which made an unexpected though very welcome appearance on the Lleyn Peninsular in North Wales.

Some species cause all sorts of trouble when trying to identify them in the moth trap. The Square-spot Rustic is one, being present in large numbers, obscurely marked and variable. One well-known moth enthusiast regards it as his least favourite moth but Evan puts the spotlight on it including tips on its identification.

Next, Audrey Turner gives an account of watching Vapourer moths living out their life cycle in her garden. I remember seeing these cocoons and eggs quite commonly many years ago in London when walking to lectures as an undergraduate.

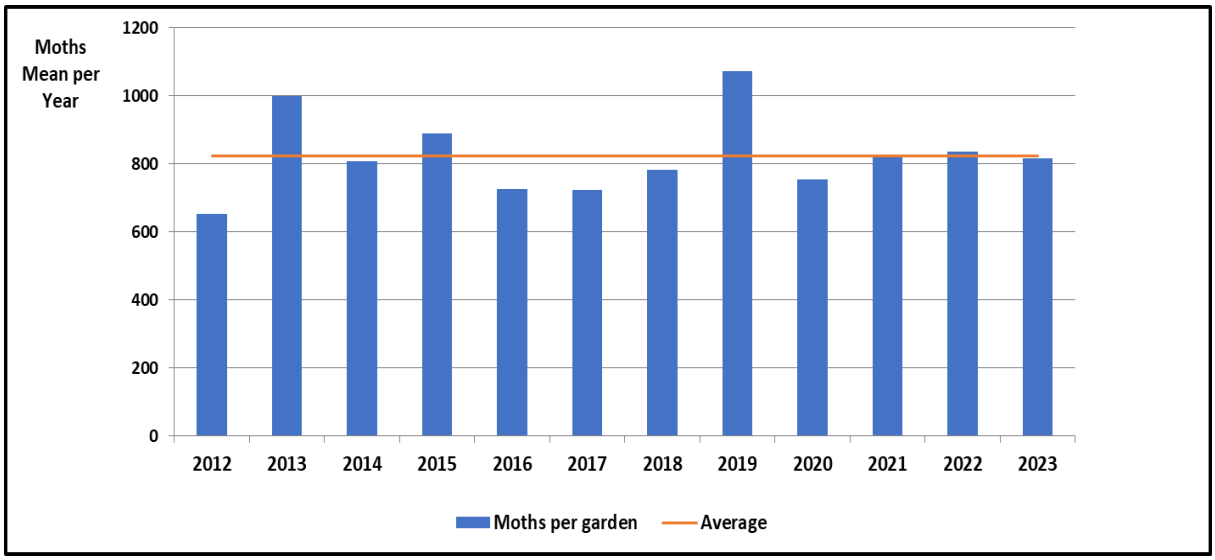
We finish with our usual puzzles from Nonconformist. I was able to do most of the clues in the Squiral fairly easily except for one which took some head-scratching!.

Overview GMS 2023 3rd QUARTER

Evan Lynn

Following on from a good second quarter the number of moths caught has been better than expected considering the recovery from some potentially damaging dry months and the leftover-overs from the Caribbean hurricane season. Despite all, this quarter is just down on the last two previous years but is ahead of six of the previous nine years (Fig 1).

Fig 1. GMS 2023 Q3. Mean Quarterly Moth Numbers 2012 to 2023.

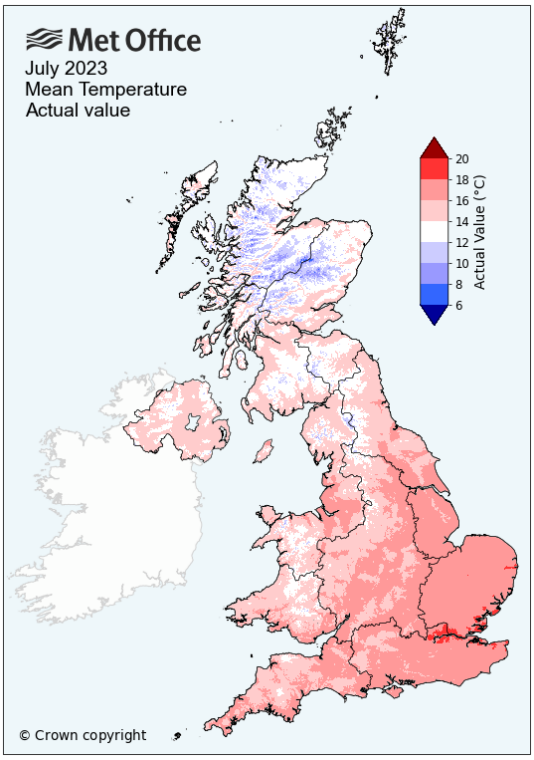


After June's weather began to gradually deteriorate, July was a wet month with low pressure systems crossing the country. There was a minor respite in the second week as a ridge of extended high pressure brought warm air up from the tropics. After that, it was back to low pressures with one on the 15th bringing strong winds to most areas with the Needles on the Isle of Wight reaching 79 mph. Then a series of fronts brought heavy rain with parts of Wales and Ireland having over 75 mm of rain and a weather station on Dartmoor recorded 110.9 mm in 24 hours.

August continued in the same depressing way. Storm Antoni swept across bringing strong winds and heavy rain, followed by a short spell of warm air from the continent before storm Betty brought more rain and wind. This set the scene for the rest of the month with windy wet conditions.

The most notable happenings of July and August can be summarised in these monthly charts. It can be seen that there was a clear north west to south east divide (figs 2 to 4). The lightning strike maps (fig. 5) seem to show that there are large numbers but for some reason I don't see many in my corner of mid Wales.

Fig 2. Mean Maximum Temperature for July & August 2023 (with permission of the Met Office).



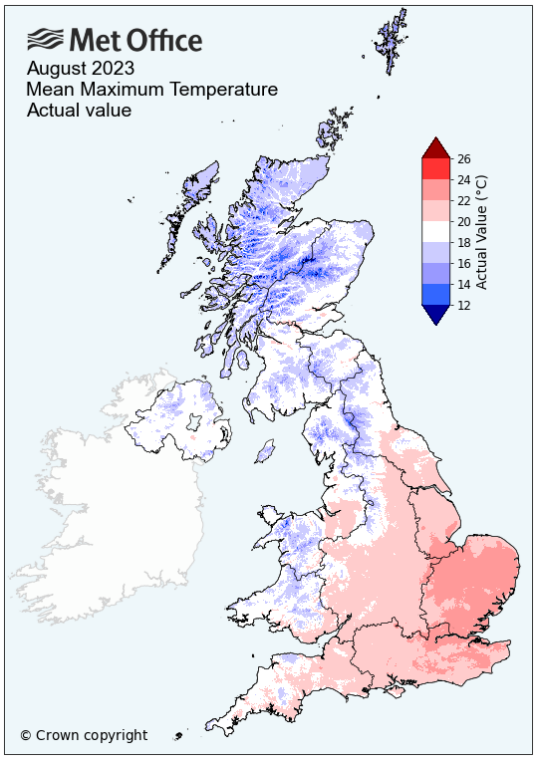
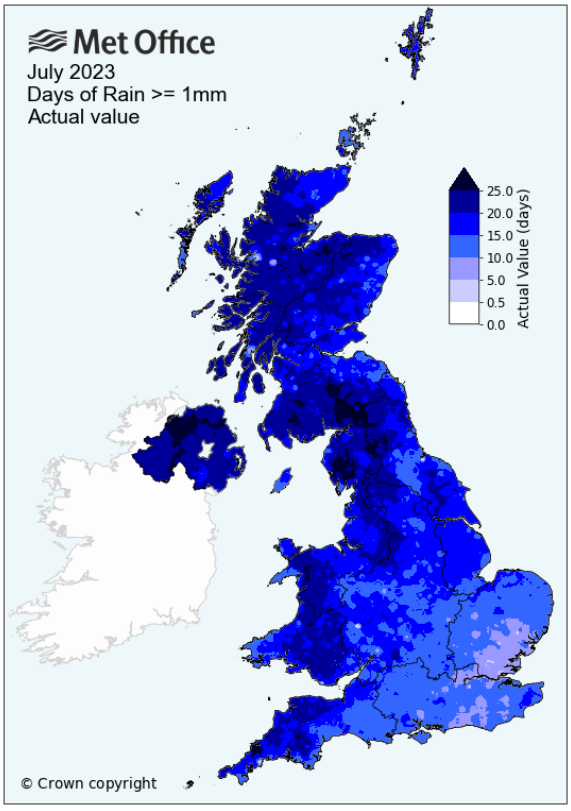


Fig 3. Days of Rainfall > 1 mm for July & August 2023 (with permission of the Met Office).



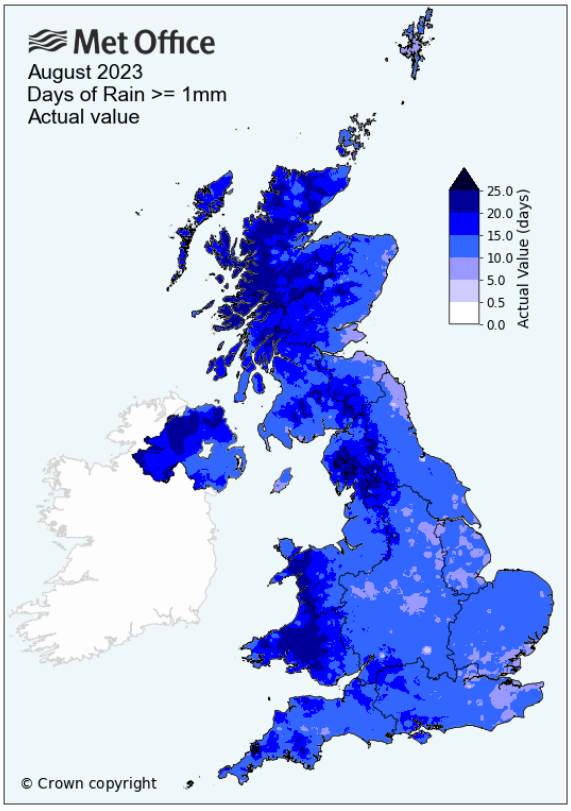
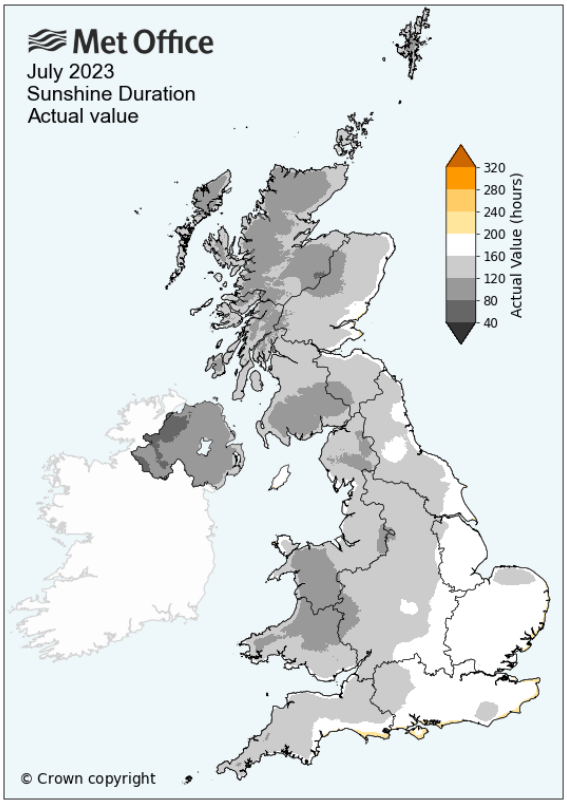


Fig 4. Hours of Sunshine for July & August 2023 (with permission of the Met Office).



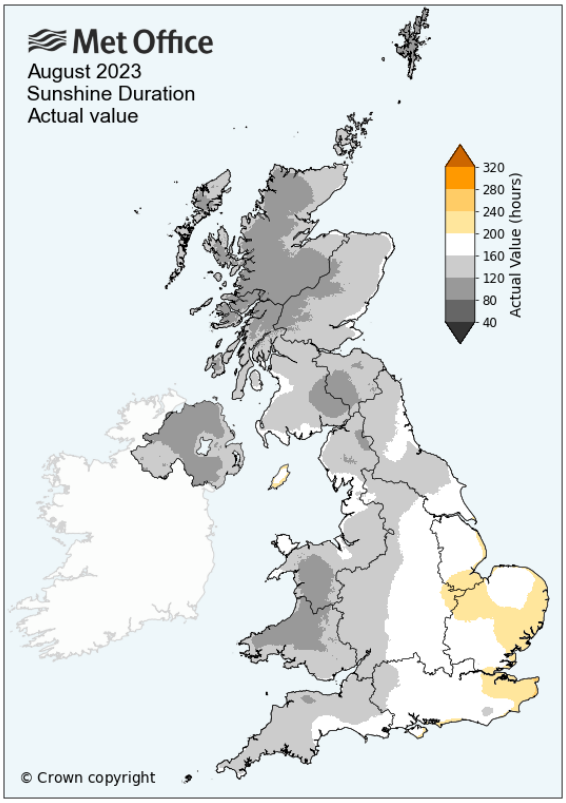
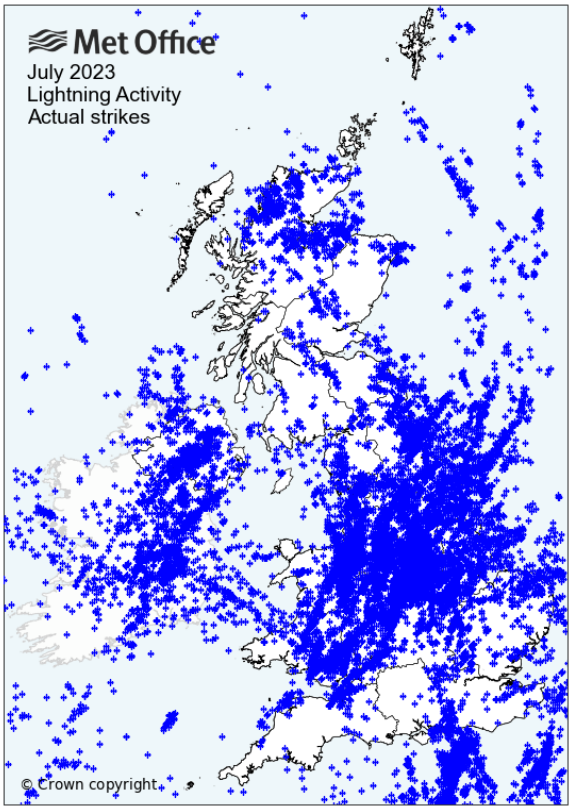
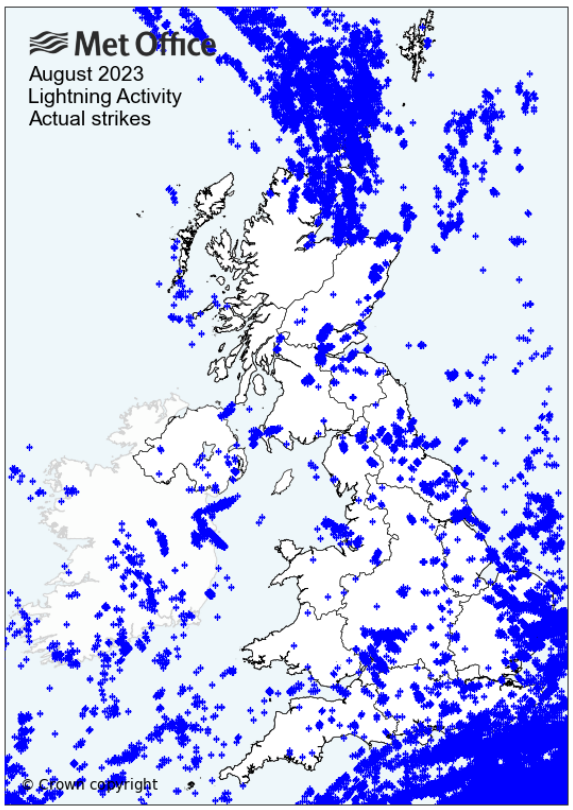


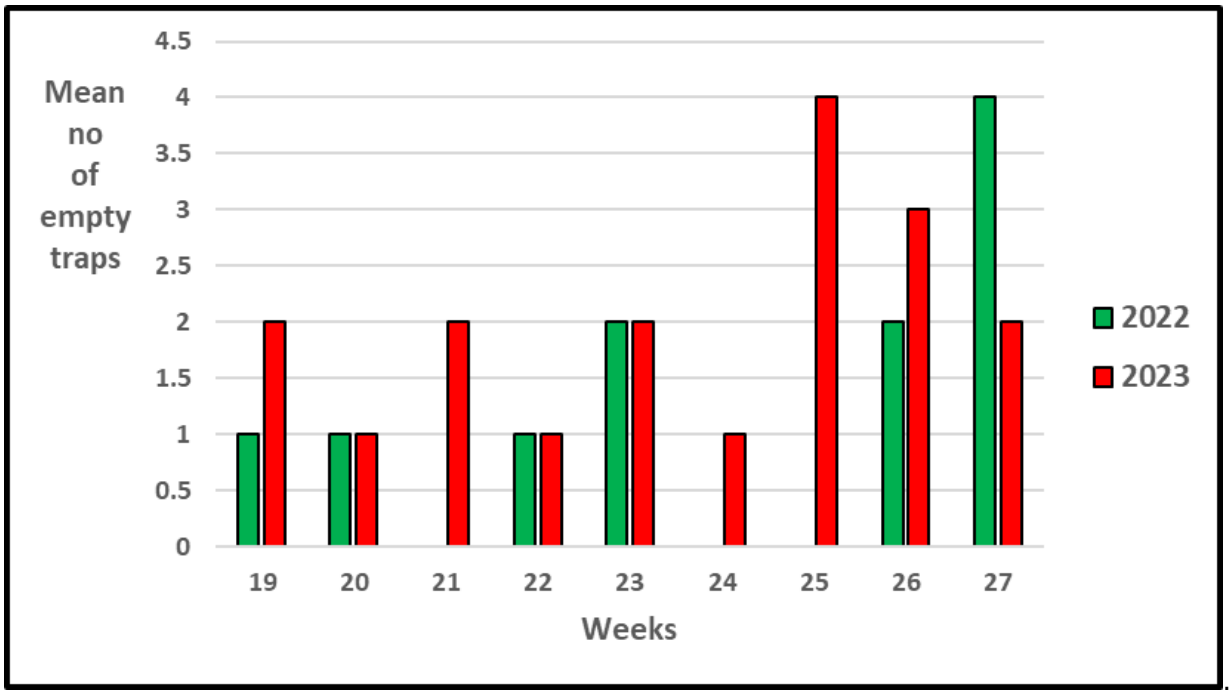
Fig 5. Actual Lightning Strikes for July & August 2023 (with permission of the Met Office).





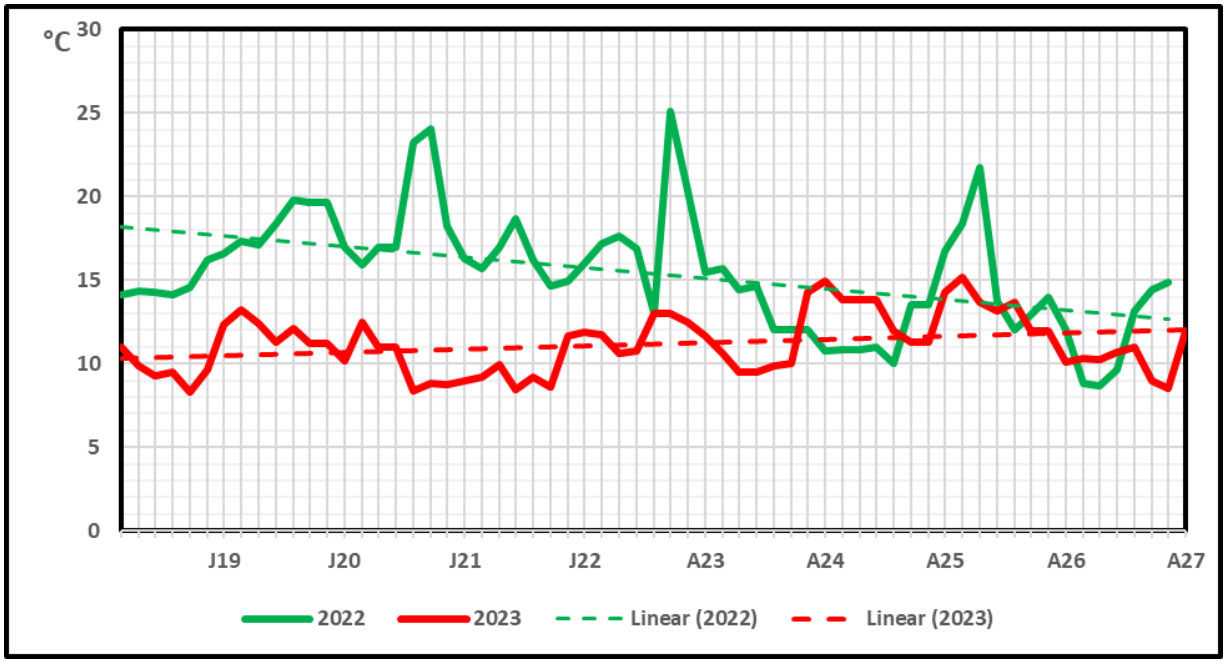
The number of empty traps this year was higher than last - 18 compared to 11 (fig 6).

Fig 6. GMS 2023 Q3. Average Number of Empty Traps 2022 & 2023



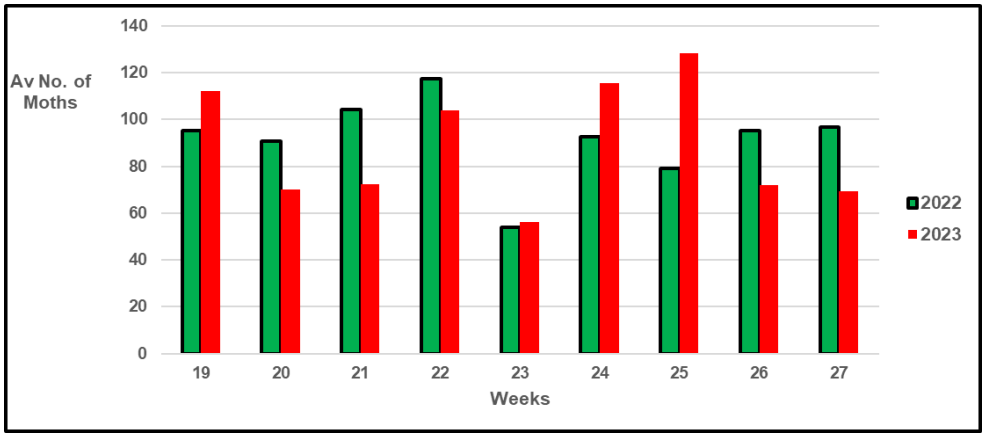
Perhaps this was due in part to the differences in minimum temperatures between the two years (fig 7) together with windy conditions from the series of depressions passing over.

Fig 7. GMS 2023 Q3. Mean Minimum Temperatures 2022 & 2023



This is also shown in the average number of moths for the two years, again suggesting that the weather may have been the main controlling factor (fig 8).

Fig 8. GMS 2023 Q3. Average Number of Moths 2022 & 2023



The performance of the top 20 core moths is listed here in table 1 with the Large Yellow Underwing coming in at pole position which agrees with our own catch of 53 of them. This was good for our garden but is chicken feed for the recorder in Yorkshire who caught 2269. Apart from this moth there has been quite a bit of shifting in positions with, for example the Common Rustic agg. moving up from tenth to second place and the Setaceous Hebrew Character moving down from third to tenth place.

Table 1. GMS 2023 Q3. Top 20 Core Species

Position		Top 20	*Mean Per Trap*				**Catching** Frequency (%. of gdns)		
2022	**2023**	Species	**2022** 330 Gardens	**2023** 279 Gardens	Change		**2022**	**2023**	Difference
1	**1**	Large Yellow Underwing	142.2	169.3	27.1		100	**86**	-13
10	**2**	Common Rustic agg.	31.4	42.7	11.3		85	**86**	1
7	**3**	Garden Grass-veneer	33.7	37.5	3.8		95	**72**	-23
4	**4**	Uncertain/Rustic agg.	39.4	32.4	-7.0		94	**78**	-16
8	**5**	LB-b Yellow Underwing	33.7	31.3	-2.4		97	**81**	-17
6	**6**	Dark Arches	35.9	24.7	-11.2		90	**84**	-7
12	**7**	Common Footman	24.1	19.9	-4.2		92	**71**	-21
2	**8**	Heart and Dart	47.1	16.7	-30.4		76	**77**	1
13	**9**	Riband Wave	21.8	15.8	-6.1		78	**80**	2
3	**10**	Setaceous Hebrew Character	46.5	15.7	-30.8		83	**66**	-17
22	**11**	Vine's Rustic	15.9	15.3	-0.6		73	**42**	-31
9	**12**	Square-spot Rustic	33.0	13.7	-19.3		95	**77**	-18
21	**13**	Lesser Yellow Underwing	17.5	13.2	-4.3		60	**79**	19
19	**14**	*Agriphila tristella*	19.5	12.6	-6.9		85	**65**	-20
20	**15**	Common Wainscot	18.9	12.4	-6.5		82	**56**	-26
5	**16**	Light Brown Apple Moth	37.6	10.6	-26.94		77	**67**	-10
41	**17**	Mother of Pearl	8.2	10.4	2.2		50	**67**	17
18	**18**	Shuttle-shaped Dart	19.9	10.3	-9.6		76	**61**	-15
23	**19**	Willow Beauty	15.6	10.2	-5.3		65	**71**	6
16	**20**	Brimstone Moth	21.2	9.8	-11.4		88	**70**	-17

The second section shows the percentage frequency of gardens visited and that for the Large Yellow Underwing has dropped by 13 percent even though it has had an upward change of 27.1. This apparent contradiction is explained by fewer gardens recording these moths but they were caught in larger numbers. Although it shows that in 2022 this moth was in 100% of the gardens, the process of percentage rounding down has concealed the fact that one garden had no Large Yellow Underwing.

Table 2 shows these moths together with their previous five & ten year averages and moths that exceed both these are highlighted in red. This doesn't necessarily mean that they are the best, as averages chop off the top and bottom figures. The second half of this table therefore shows the highest mean for any particular year.

Table 2. GMS 2023 Q3. Top 20 Core Species with their 5 and 10 Year Averages

Vernacular	2023	5 years	10 years
Large Yellow Underwing	**170**	113	115
Common Rustic agg.	**43**	26	29
Garden Grass-veneer	**37**	22	19
Uncertain/Rustic agg.	**32**	24	19
L B-b Yellow Underwing	**31**	24	25
Dark Arches	**25**	26	25
Common Footman	**20**	14	14
Heart and Dart	**17**	21	17
Riband Wave	**16**	15	16
Setaceous Hebrew Character	**16**	23	16
Vine's Rustic	**15**	10	7
Square-spot Rustic	**14**	18	17
Lesser Yellow Underwing	**13**	13	12
Agriphila tristella	**13**	14	14
Common Wainscot	**12**	8	5
Light Brown Apple Moth	**11**	15	12
Mother of Pearl	**10**	9	10
Shuttle-shaped Dart	**10**	9	7
Willow Beauty	**10**	9	9
Brimstone Moth	**10**	11	10

Year	Top Mean
2019	160
2015	51
2019	39
2022	39
2013	43
2019	49
2022	24
2022	46
2013	23
2022	46
2022	16
2022	33
2022	17
2014 & 2022	19
2022	19
2022	37
2013	18
2022	20
2022	15
2022	21

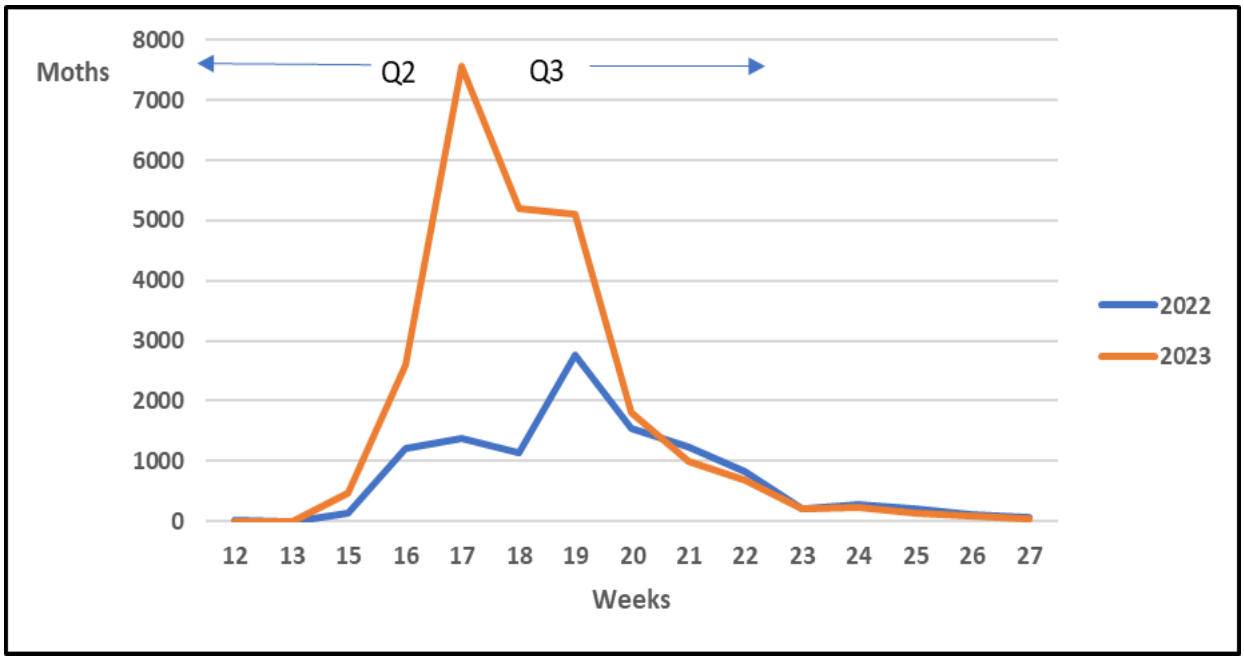
Coming down to regional level, table 3 lists their top 10 moths with the number of recorders shown in brackets. The Large Yellow Underwing keeps the top spot everywhere apart from the Channel Islands where it is pushed down to number 17. It was especially dominant in some areas such as the North East where it accounted for almost 45% of all the core species.

Table 3. GMS 2023 Q3 Regional Top 10 Moths

Scotland (22)	Mean	%	North East (28)	Mean	%	North West (33)	Mean	%
Large Yellow Underwing	142.9	30.4	Large Yellow Underwing	238.5	44.8	Large Yellow Underwing	326.4	41.4
Dark Arches	36.3	7.7	Common Rustic agg.	32.4	6.1	Common Rustic agg.	50.2	6.4
Common Rustic agg.	30.8	6.5	Dark Arches	24.5	4.6	Garden Grass-veneer	31.5	4.0
L B-b Yellow Underwing	27.2	5.8	Garden Grass-veneer	23.3	4.4	LB-b Yellow Underwing	31.2	4.0
Lesser Yellow Underwing	25.7	5.5	Common Footman	17.4	3.3	Dark Arches	27.1	3.4
Agriphila tristella	19.5	4.1	Bird-cherry Ermine	17.1	3.2	Bird-cherry Ermine	23.7	3.0
Bird-cherry Ermine	11.0	2.3	Lesser Yellow Underwing	16.3	3.1	Lesser Yellow Underwing	18.4	2.3
Square-spot Rustic	9.6	2.0	LB-b Yellow Underwing	11.5	2.2	Heart and Dart	18.0	2.3
Garden Grass-veneer	9.0	1.9	Uncertain/Rustic agg.	10.6	2.0	Uncertain/Rustic agg.	15.0	1.9
Dotted Clay	8.1	1.7	Square-spot Rustic	10.4	2.0	Mother of Pearl	13.3	1.7
Yorks & Humber (20)	Mean	%	Ireland (19)	Mean	%	East of England (31)	Mean	%
Large Yellow Underwing	382.4	36.2	Large Yellow Underwing	52.0	11.6	Large Yellow Underwing	85.3	9.5
Common Rustic agg.	65.3	6.2	Common Rustic agg.	48.1	10.7	Uncertain/Rustic agg.	48.2	5.3
Garden Grass-veneer	50.5	4.8	LB-b Yellow Underwing	34.7	7.8	Vine's Rustic	45.5	5.1
Blastobasis adustella	47.4	4.5	Square-spot Rustic	25.6	5.7	Garden Grass-veneer	45.5	5.0
Agriphila straminella	35.5	3.4	Lesser Yellow Underwing	19.6	4.4	Turnip Moth	43.4	4.8
Dark Arches	32.4	3.1	Light Brown Apple Moth	15.6	3.5	Common Wainscot	41.0	4.5
Setaceous Hebrew Character	28.9	2.7	Heart and Dart	13.1	2.9	Shuttle-shaped Dart	36.0	4.0
LB-b Yellow Underwing	26.7	2.5	Dark Arches	12.6	2.8	Setaceous Hebrew Character	33.8	3.8
Uncertain/Rustic agg.	25.8	2.4	Uncertain/Rustic agg.	12.4	2.8	LB-b Yellow Underwing	33.0	3.7
Common Footman	23.0	2.2	Rosy Rustic	12.1	2.7	Common Rustic agg.	28.9	3.2
East Midlands (23)	Mean	%	West Midlands (16)	Mean	%	Wales (29)	Mean	%
Large Yellow Underwing	178.7	18.8	Large Yellow Underwing	189.4	24.6	Large Yellow Underwing	151.7	18.7
Garden Grass-veneer	68.2	7.2	Garden Grass-veneer	76.1	9.9	Heart and Dart	57.2	7.0
Uncertain/Rustic agg.	46.9	4.9	Common Rustic agg.	48.7	6.3	Uncertain/Rustic agg.	48.4	6.0
Dark Arches	45.5	4.8	LB-b Yellow Underwing	39.6	5.2	Common Rustic agg.	37.3	4.2
Common Rustic agg.	43.5	4.6	Uncertain/Rustic agg.	34.9	4.5	Garden Grass-veneer	34.0	4.2
LB-b Yellow Underwing	39.0	4.1	Setaceous Hebrew Character	25.9	3.4	Common Footman	32.1	3.9
Setaceous Hebrew Character	36.8	3.9	Dark Arches	23.0	3.0	LB-b Yellow Underwing	31.7	3.9
Common Wainscot	25.9	2.7	Heart and Dart	21.3	2.8	Dark Arches	21.8	2.7
Riband Wave	24.5	2.6	Riband Wave	17.7	2.3	Flame Shoulder	20.3	2.5
Vine's Rustic	21.8	2.3	Square-spot Rustic	14.6	1.9	Brimstone Moth	18.7	2.3
South East (32)	Mean	%	Southwest (25)	Mean	%	Channel Islands (1)	Mean	%
Large Yellow Underwing	44.2	7.3	Large Yellow Underwing	94.2	10.9	Common Rustic agg.	216	10
Garden Grass-veneer	41.2	6.8	Uncertain/Rustic agg.	60.6	7.0	Shuttle-shaped Dart	187	9
Uncertain/Rustic agg.	36.0	6.0	Common Footman	54.8	6.4	Vine's Rustic	145	7
Common Rustic agg.	34.4	5.7	Common Rustic agg.	54.8	6.3	Garden Grass-veneer	138	6
Vine's Rustic	28.2	4.7	LB-b Yellow Underwing	47.6	5.5	Uncertain/Rustic agg.	138	6
Riband Wave	27.9	4.6	Garden Grass-veneer	29.5	3.4	Flame Shoulder	112	5
LB-b Yellow Underwing	27.3	4.5	Vine's Rustic	28.8	3.3	Ruby Tiger	106	5
Shuttle-shaped Dart	17.0	2.8	Brimstone Moth	25.8	3.0	Rusty-dot Pearl	96	4
Dark Arches	16.5	2.7	Mother of Pearl	20.1	2.3	Heart and Dart	86	4
Common Wainscot	16.3	2.7	Willow Beauty	19.4	2.2	Setaceous Hebrew Character	81	4

The Garden Grass-veneer took the pole position in the top 20 last quarter and so I thought that it might be interesting to see how it compared with that of last year over Q2&Q3. The flight seasons were almost identical but the overall numbers this year in the second quarter overwhelmed those of 2022.

Fig 9. GMS 2022-233. Weekly Numbers of Garden Grass Veneer



In previous reports I have compared maximum one-night catches with the previous year. This time I decided to play with the figures for this quarter and see if they could cause any bias with the total GMS results for this year (table 4). To do this you will need to look at their effect on the percentage catch of all moths both regional and total GMS to come up with an answer. Our congratulations to these recorders, and also to the unseen others, who caught nearly as many.

Table 4. GMS 2023 Q3. Top 10 Species Maximum Catches 2023

Reg & Core Moths	2023 Max catch	Date	Region	Regional %	GMS Total %
Large Yellow Underwing	1014	18/08/2023	NW	38	21
Garden Grass-veneer	245	07/07/2023	WM	10	5
Common Wainscot	245	24/08/2023	EE	4	2
Lesser Broad-bordered Yellow Underwing	221	19/08/2023	SC	5	4
Heart and Dart	200	07/07/2023	WA	7	2
Bird-cherry Ermine	200	11/08/2023	NE	3	1
Turnip Moth	157	17/08/2023	EE	4	1
Blastobasis adustella	152	04/05/2023	Y&H	4	1
Common Rustic agg.	137	28/07/2023	NE	6	5
Dark Arches	134	07/07/2023	EM	5	3

All the trap nights and catches completed by the recorders are summarised in Table 5. The minimum and maximum moth numbers caught in this nine-week period vary considerably, possibly reflecting location, type of trap and/or the individual micro-climates. The minimum catches range from 65 to 248 and the maximum between 1241 and 5891, while the trapping effort (Moth Trap Nights) is very high as per usual.

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

Table 5. GMS 2023 Q3. Regional Statistics

Region	Gardens	Moths			
		Total	Mean	Min	Max
SC	22	11817	537	81	1666
NE	28	15822	565	132	1501
Y&H	20	23530	1177	174	5891
NW	33	28693	869	213	3499
IRL	19	8964	472	65	1241
EE	31	31670	1022	134	3783
EM	23	22516	979	206	2494
WA	29	23682	817	175	2462
WM	16	12378	774	79	1448
SE	32	21927	685	92	1686
SW	25	23517	941	248	3072
CI	1	2336	N/A	N/A	N/A

Moth Trap Nights		
Possible	Actual	Percent
198	180	91
252	237	94
180	162	90
297	279	94
171	157	92
279	264	95
207	199	96
261	243	93
144	135	94
288	278	97
225	218	97
9	9	100

Weekday Trap Nights							
Night	Tues	Wed	Thurs	Fri	Sat	Sun	Mon
Days	18	62	314	1101	308	159	106
Percent	1	3	15	53	15	8	5

Additional Species

As mentioned in previous reports, one part of the form which is often ignored is the lower section where you are invited to add moths which are not on the core/regional list (table 6). The number of entries this quarter has been high as expected for this time of the year. There were 4188 rows of data coming from all of the regions giving a total of 15154 moths of 629 species. Some of these may be duplicated several times when one recorder identifies it as the species whilst others record it as a sp. or an agg (table 6). The list itself shows five such ones with *Yponomeuta* sp, *Yponomeuta padella* agg, Apple Ermine, Apple Orchard Ermine and Orchard Ermine. Whether they are all the same or different, it is not up to me to adjudicate.

Table 6. GMS 2023 Q3. Top 20 Additional Species

_Latin/Vernacular	Total	SC	NE	Y&H	NW	Irl	Wa	WM	EM	EE	SE	SW
Boxworm Moth	850	1	1	17	0	1	74	4	39	118	239	356
Eudonia mercurella	619	26	10	0	0	63	304	6	59	44	0	107
Eudonia lacustrata	425	64	R	R	R	64	168	6	37	20	16	50
Bird-cherry Ermine	578	R	R	R	R	5	76	2	123	372	R	R
Ear Moth agg.	543	373	20	0	0	134	4	0	1	2	9	0
Jersey Tiger	437	0	0	0	0	0	18	0	0	126	293	0
Blastobasis adustella	436	12	0	0	0	285	95	11	33	0	0	0
Willow Ermine	336	0	1	15	0	0	4	1	44	113	4	154
Water Veneer	319	R	R	R	0	R	R	175	114	0	28	2
Cnephasia agg.	12	0	0	R	0	0	8	0	0	1	2	1
Acrobasis advenella	286	22	37	64	0	4	39	27	16	21	32	24
Bryotropha terrella	237	7	1	95	0	6	15	0	11	41	9	52
Black Arches	218	0	0	0	0	0	187	2	6	23	0	0
Yponomeuta sp.	169	0	0	0	0	0	0	0	0	169	0	0
Yponomeuta padella agg.	37	0	0	28	0	9	0	0	0	0	0	0
Tree-lichen Beauty	163	0	0	1	0	0	0	0	20	101	40	1
Apple Ermine	153	0	4	1	0	0	30	1	3	0	2	112
Apple/orchard ermine	137	0	4	0	0	8	8	2	59	0	11	45
Euzophera pinguis	136	0	0	0	0	0	38	5	36	11	0	46
Coronet	136	0	2	1	0	1	44	8	44	36	0	0
Orchard Ermine	132	1	5	2	0	0	12	1	2	0	1	108

The star of this section, at least as far as Margery Griffin, living near Pwllheli, North Wales is concerned, is the scarce migrant *Uresiphita gilvata*. This unassuming Pyralid resembles a Large Yellow Underwing in flight with a wingspan of 27-37 mm and has been occasionally seen previously in southern regions in September to October. Apart from pure luck being involved, Pwllheli has an advantage, being on the Lleyn Peninsula which sticks out into the Irish Sea acting like the south coast catching northward-moving insects.

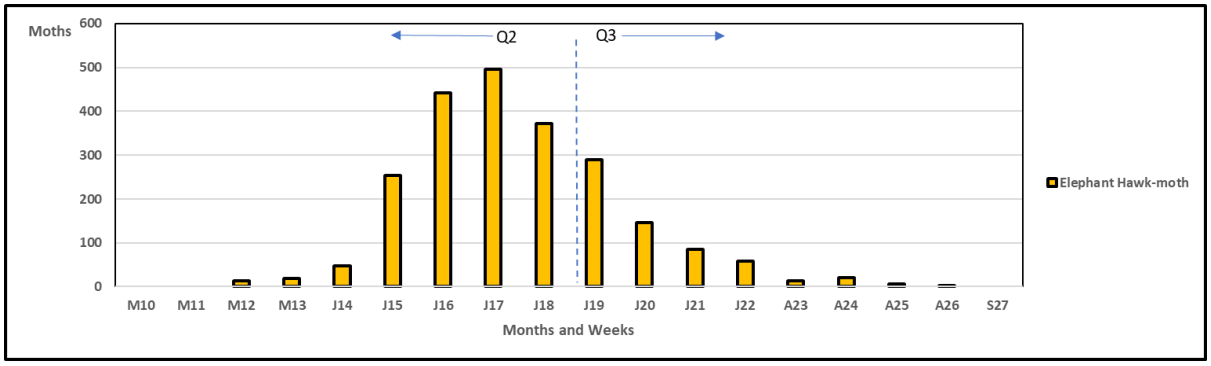
The Boxworm Moth tops this chart once again and table 7 shows its distribution with the greatest density in the East of England, Southeast and Southwest. I have noticed increasing numbers of Boxworm (Box Tree) pheromone traps in garden centres in an attempt to reduce their numbers which I believe is somewhat ironic as it was the garden centres themselves which were a major factor in its spread around the country. We had a request from a friend near Portsmouth asking what this beautiful moth was. On being told what its name was she was less enchanted with the moth.

Table 7 GMS 2023 Q3. Boxworm/Box Tree Moth Regional Distribution

SC	1
NE	1
Y&H	17
IRL	1
WA	74
WM	4
EM	39
EE	118
SE	239
SW	356

Following on from last quarter where the Elephant Hawk-moth was left suspended at week 18, its full flight season is shown here (fig 10).

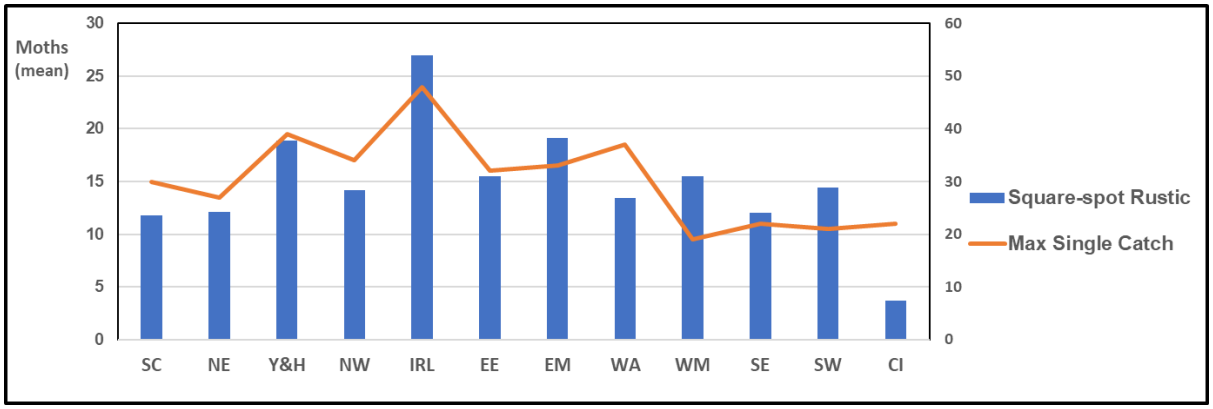
Fig 10. GMS 2023 Q2 & Q3 Elephant Hawk-moth Flight Season



Square-spot Rustic (Xestia xanthographa)

This widespread and abundant Noctuid moth is found throughout Britain, Ireland, the Isle of Man and the Channel Islands (Fig 11). There has been a large rise in abundance (105%) and a small but significant increase in distribution since 1970 (Atlas of Britain and Ireland's Larger Moths).

Fig 11. GMS 2023 Q3 Square-spot Rustic Regional Distribution

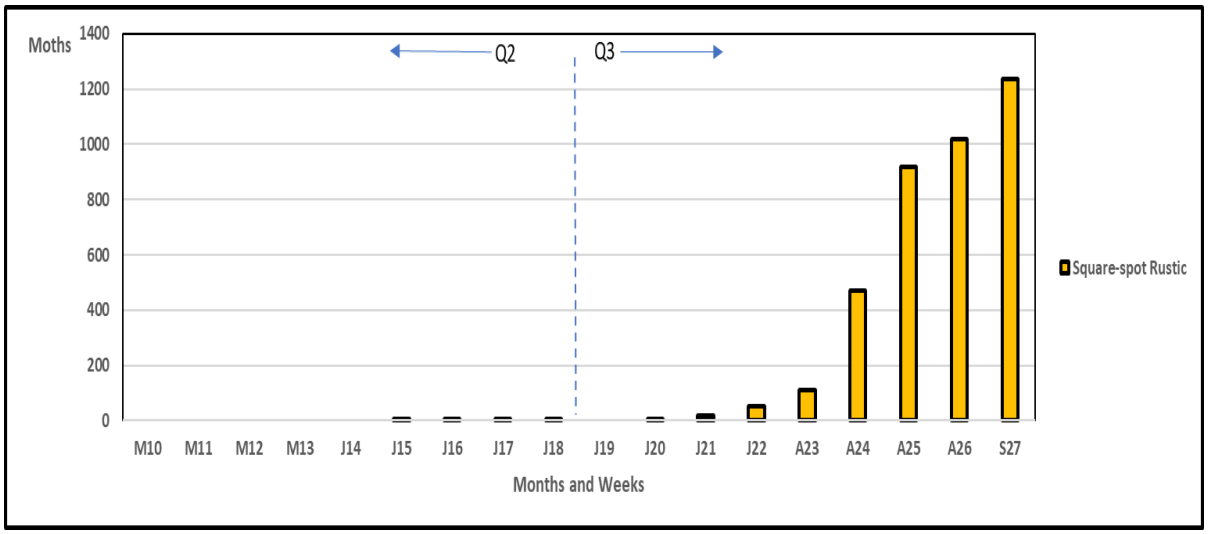


Its vernacular name “Square-spot” refers to its rather square kidney mark and “Rustic” possibly implies its deep reddish-brown/terracotta colour. Its scientific name “Xestia” is from the Greek for polished or smooth referring to the glossy forewings of some members of this genus and “xanthographa”, also from the Greek, for yellow marking indicating the yellowish filling of the oval and kidney marks.

Many colour forms of this moth exist which can make identification difficult but the pale or pale-outlined square kidney mark, often darker in the trailing half, is a conspicuous diagnostic feature. In addition, fine dark cross-lines are usually visible sometimes forming a series of small dark dots or dashes.

It has one generation flying from late July to early October, peaking late August to early September (fig 12). It overwinters as a larva where it feeds at night from September through to April, but only during mild weather. Once fully grown in March it spends up to six weeks in an underground cocoon before pupating.

Fig 12. GMS 2023 Q2 & Q3 Square-spot Rustic Flight Season



It can be found in all types of grassland including gardens, waste ground, pasture and woodland rides, but not at high altitude. It feeds mainly on grasses but also on herbaceous plants such as plantains and cleavers.

Vapourer Moths in my Garden

Audrey Turner

Earlier this year my husband put in a drinking platform for the birds that visit the garden, we have a pond that's used by Hedgehogs etc, but we wanted something off the ground for the birds as there are a few feral cats around. The platform is a fence post with a bit of spare kitchen worktop attached with a dish of water on top.

Late morning on the 5th of September I was looking out the window when I spotted a male Vapourer Moth flying around the platform for a few seconds before disappearing underneath it. When he didn't fly straight out, I mentioned what I'd seen to my husband, and we went to take a look.

Initially we spotted the male apparently resting near the top of the fence post, which is about 5 feet tall, but quickly spotted a flightless female resting on the remains of her cocoon. Female Vapourer Moths have a fairly short life. They emerge from their cocoons and emit pheromones which draw in the male moth. They then mate, the female lays eggs, usually on the remains of her cocoon, then the female dies just a couple of days later.


After taking some photos of the moths, we had to go out, but when we got back about 3 hours later, we checked under the platform and the male had gone, but the female was still there, and she had laid a couple of hundred eggs on the remains of her cocoon. We kept checking over the next few days, the female didn't appear to move at all, however when we looked on the 9th of September, there was no sign of the female, just the eggs. We had a look around on the grass below the platform, but there was no sign of her.


The eggs are still there, we check them every day, and they will overwinter and hatch in May. Presumably they will then have to drop off the fence post and search out suitable food which is a wide range of deciduous trees and shrubs. To get to where she pupated, the female caterpillar must have travelled from whichever foodplant she used, crossed an area of grass, then climbed about 5 feet up the fence post.

It seems an open, exposed place to pupate or lay eggs, but it's in the angle between the post and the wood on top and it would be really tricky for a bird to reach. It's also on the side of the post nearest the house and so quite sheltered from wind, rain or too much sun, it's about 5 feet off the ground so protected against even the worst snow we get here in Aviemore, so it's a better position than it first appears.

We shall keep checking the eggs periodically and see how they fare over the winter and hope to see them hatch in May.

Puzzle Corner

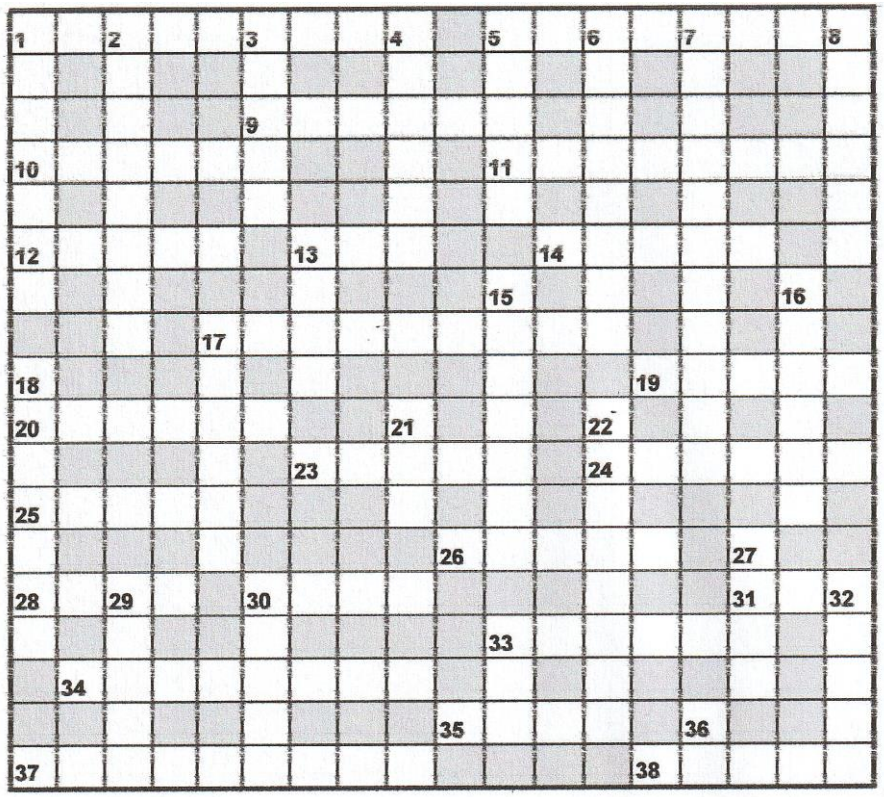
Nonconformist

Squiral Solution

H	E	R	A	L	D	U	N	B	A	R	R	A
N	E	T	T	E	D	I	N	B	U	R	G	N
I	H	I	M	A	R	C	H	E	S	T	H	N
M	P	N	I	N	G	O	T	H	I	N	O	U
R	A	I	E	S	P	I	N	A	C	U	S	L
E	R	H	H	K	L	A	H	C	I	T	T	E
G	E	S	C	R	A	B	A	N	N	U	R	T
N	S	I	T	N	E	K	C	O	S	S	E	T
A	S	E	L	L	I	E	V	R	E	M	A	U
R	T	S	A	E	L	B	E	R	T	N	E	C

Lepidoptera Crossword 22

As usual the answers are a part, or all, of the common name of a British Macro-moth as given in the Field Guide to the Moths of GB&I with the exception of one which I leave you to find.



Clues across.
1.A Bosnian sign of disapproval used to parry Serb comments about plants.
5.When her skin is all hot and marked should we try to make Beth cold again.
9.When buying his car Cedric searched the adverts but could not find many he liked.
10.Do blue flowers attract pairs of moths better than others.
11.First Brit from the North East County Council lays down the rules for this countryman.
12.Henry nips around to escape from a thorny situation.
13.No moths! Sounds as though it was because of a damp morning.
14.Give him a go to find the final stage of development.
17.After arriving from miles away do we let the Raver tell his tales of wandering.
19.One could mediate about nothing but it's still a small creature.
20.The workman during his quarrel limits himself to returning to his dusty situation.
23.Perhaps we could use Aldi Urdu to bring back an old religious leader.
24.Nonconformist issues another flimsy challenge?
25.Well favoured part of an umbrella Yorkshire folk turn to their use.
26.Forget the rough tracks and use a second class, but wide, thoroughfare.
28.Sounds like third man Harry had an early meeting with Royalty on the south coast....
30.... and the Royal contingent turned things all to pot.
31.Found evenly spread when repairs have been done to your trap?
33.Is this a grey, or even dark, implement we see before us? Apologies to Bill S.
34.When we chose our moth-trap we were hoping for small yellowish visitors.
35.To see one up in the skies just arrange your sights a bit.
37.To replace your damaged lawn you could claim home insurance for your plants as well.
38.A condition of clothing, or something of it's ilk, you would be happy with.

Clues Down
1.Do short doctors hide when seeing patients of this shade?
2.The very old Welsh dweller used to travel on uni-rails to get around....
3..... or possibly use other excess extremes to travel here!
4.Perhaps we would have to see Roy go to war to find his ration of milfoil...
5.... or even prescribe echelon planting to encourage this sort of growth.
6.This large specimen has to be laden with ore to enable it to find this plant.
7.Will allowing Bing to croon cool us down to retain a uniform shading.
8.An immigrant hopefully sorted and even stored in a particular area of Britain.
13.In olden times a wandering musician would return in dull, shabby clothing.
15.Will Les join the old York railway company? Little, or no, chance!
16.Sounds as though this species belongs to its female sibling.
17.Two consecutive newcomers and the third is a real belter!.
18.University Master leader, possibly a jewel from Ireland.
21.Several small species with particularly universal generic names to help us initially.
22.Knock knock:- An unknown visitor wearing northern garters?
27.A vascular plant, but I infer nothing more at this stage.
29.Hoorah! Come on someone's bringing in our drink.
30.Is an acre ample enough to hold the provider of this.
31.Out of practice? Well no, trust your instincts and solve it.
33.Today's digital antiword?
38.A species which flies in reverse?

Communications & Links.

GMS Website - http://www.gardenmoths.org.uk/ - the Communications section gives information on the regional coordinators; the Downloads section provides access to Identification Guides, Annual Reports and Newsletters, as well as all 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 2700 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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