

GMS News

Autumn 2018

Weeks 28-36



Contents

Editorial	Norman Lowe	1
Overview GMS 2018 4 th Quarter	Evan Lynn	2
Down my Way...	David Baker	13
Alderney, Channel Islands	David Wedd	16
Seven Years On...some reflections on moth-catching	Judith Smith	18
Egg boxes and new words	Chris Emblem-English	20
Star Wars Super Wedding	Nonconformist	21
Wordsearch solution	Nonconformist	22
Tailpiece	Norman Lowe	23
Communications & links		23
GMS sponsors		24

Editorial – Norman Lowe

I am pleased to announce that following my appeal for an organiser and a venue for an Annual GMS Conference, I had three replies, as a result of which the Conference will be held at **Bamford, Derbyshire on Sunday 31 March 2019**. Please make a note in your diaries and if you can come, do contact Sally Soady at sally.soady@gmail.com. Whilst we haven't finalised the programme, I can tell you that Zoe Randle of Butterfly Conservation will cover two topics close to our hearts; the new Moth Atlas, and an interactive discussion on how to share our data with County Recorders. Mark Tunmore of Atropos Books and Izumi Segawa of Hachiware will come along as usual with things for you to buy, and we might have a moth equipment dealer as well – details to follow when we have confirmation. I hope that we will have a full house even though the venue will be further north than usual – after all, Mark will be coming all the way from Cornwall! I can also tell you that we are thinking of trying out smaller-scale local summer events on GMS themes and one is almost ready to be publicised. Details will be announced later.

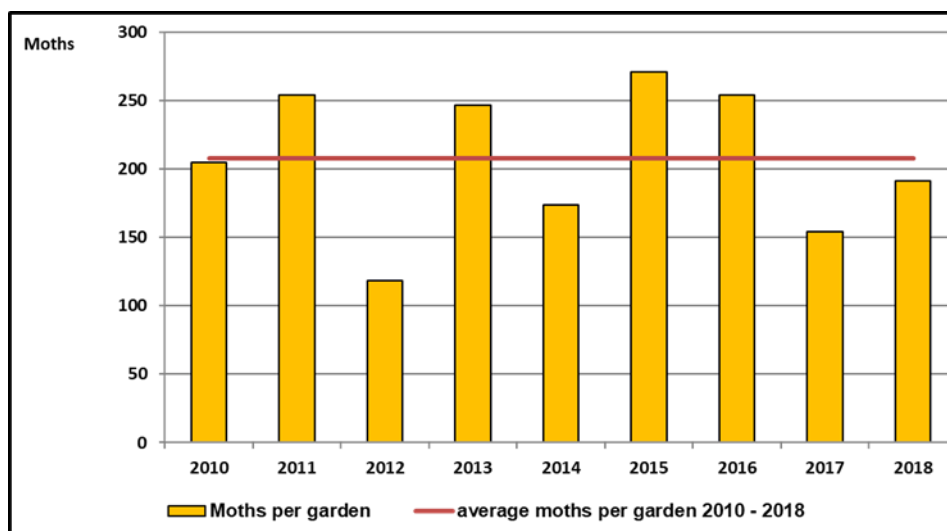
This last Newsletter of 2018 has a particularly varied and interesting set of contributions. First we have our regular analysis by Evan who this time is looking at the long term datasets from each GMS region over the last 9 years, as well as the partial second brood of Heart and Dart. David Baker has built on Heather Young's earlier account of non-moth visitors to traps, showing just how colourful and interesting some of these are. Next we have a look at what's happening on the Channel Islands where David Wedd tells us about an enthusiastic all-age band of recorders. Then Judith Smith recounts her experiences in the seven years since she was promoted from birds to moths. My initial short article on egg-boxes has inspired another contribution, from Chris Emblem-English, who also suggests some expletives to use in fraught situations such as when that really interesting-looking moth flew away! Finally, Nonconformist gives us a rather odd little story which he says contains some hidden moth words. But I found it fun to read the story itself first!

Overview GMS 2018 4th Quarter by Evan Lynn

Yearly Comparisons

The warm summer weather continued well into October with sea temperatures above normal, until a cold snap in late October brought snow and ice to northern areas and unseasonably low temperatures to the rest of the country. Nevertheless, the number of moths caught was well above that for 2017 (Fig 1).

Fig 1. GMS 2010 - 2018 Q4. Average Moth Numbers



When comparing 2017 and 2018 for this quarter (Figs 2 & 3) it can be seen that although daily temperatures were on the whole better in 2017 the average catches this quarter were higher. When compiling the figures, I wasn't sure what to expect as a few recorders from the North West said it was their worst season while recorders in Wales said it was their best. It is apparent that although this chart indicates a rise in numbers there are Twelve Shades of Grey when the individual regions are looked at later on in this report.

Fig 2. GMS 2010 - 2018 Q4. Average Temperatures for 2017 & 2018

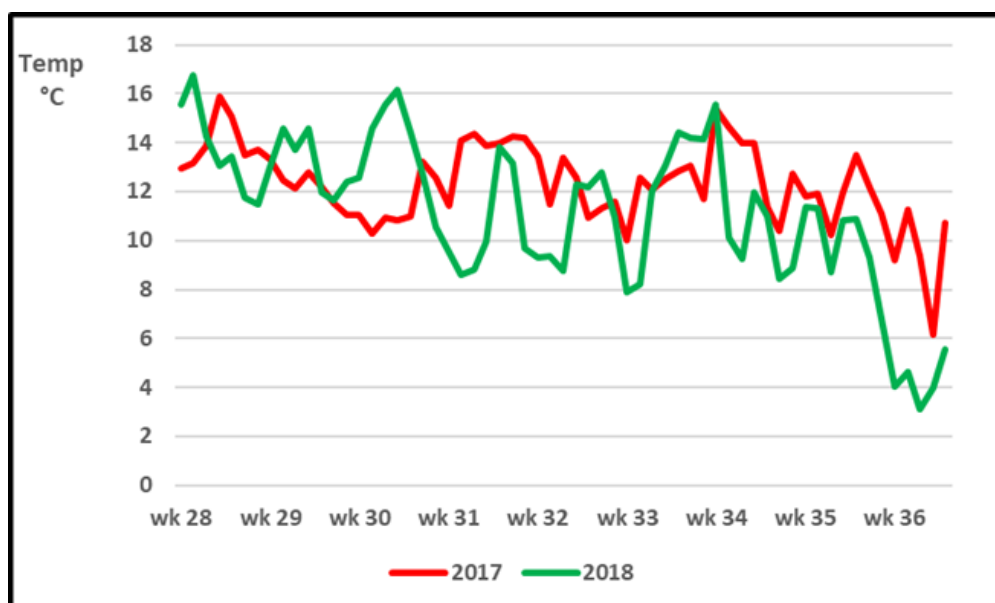
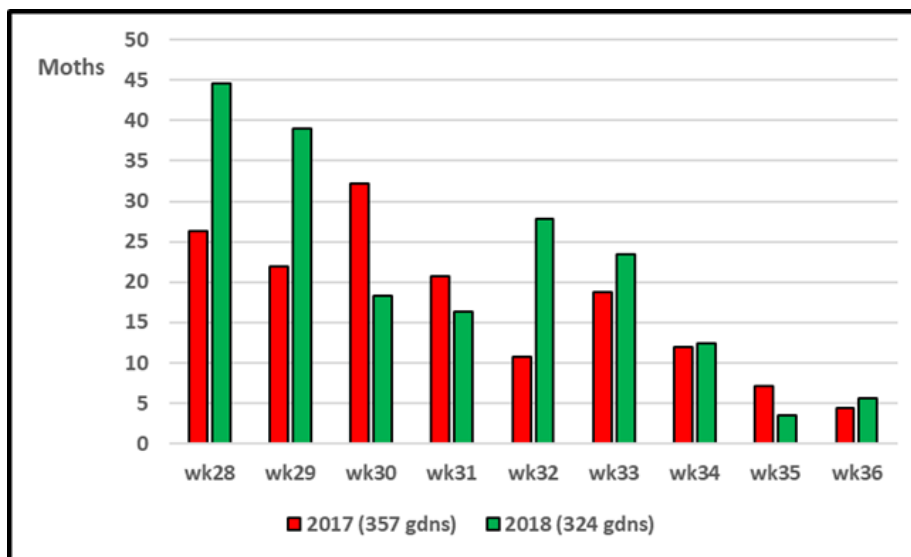


Fig 3. GMS 2010 - 2018 Q4. Average Moth Catches 2017 & 2018



Temperature and Catches

Much of September can be dominated by autumnal storms. This quarter was no exception with the usual run of storms being assisted by Hurricane Leslie and Tropical Storm Helene. Although Leslie remained in the Mid-Atlantic south of the jet stream, escaping waves of energy were picked up by the jet stream bringing cold and wet weather to the west, especially in Scotland as seen in Figs 4 & 5. Similarly, Helene swept in, bringing torrential amounts of rainfall to parts of the west coast. While the storms battered much of the west coast, encroaching high pressure from the East kept the worst of the weather away from the eastern side of the country.

Fig 4. Rainfall for September & October 2018 (with permission of the Meteorological Office).

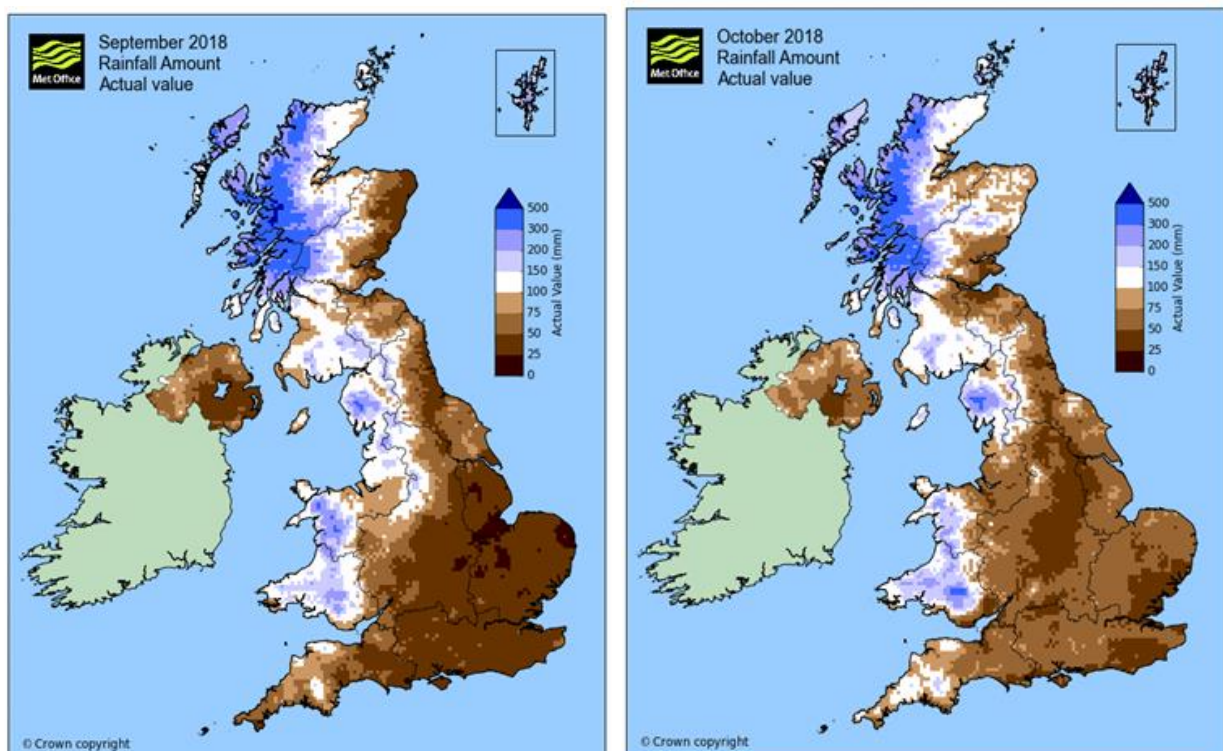
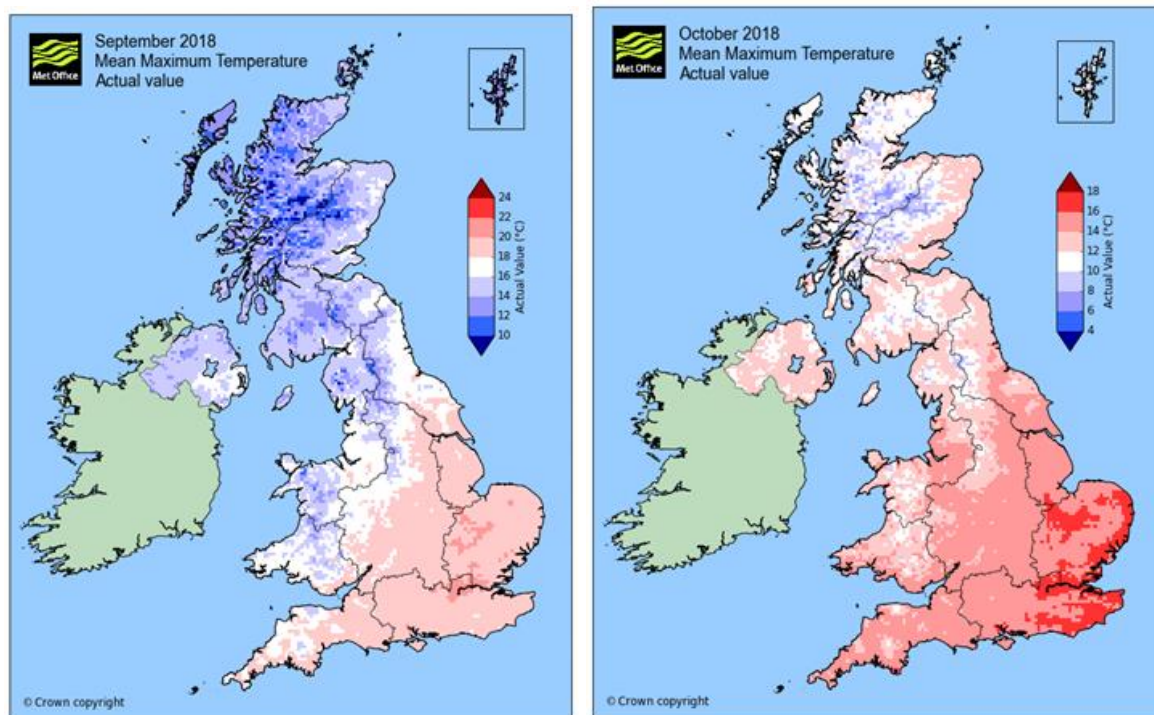


Fig 5. Mean Daily Maximum Temperatures for September & October 2018 (with permission of the Meteorological Office).



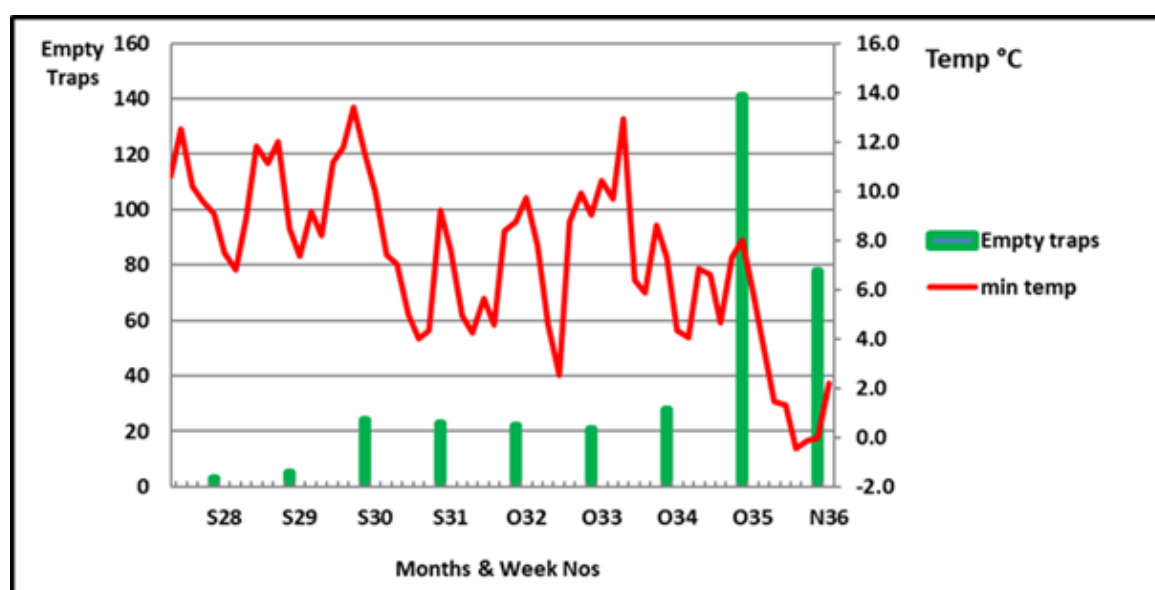
Perhaps these charts show why our recorder in Dumfries has not caught any moths this quarter, citing cold weather and heavy rain. Also the lack of rain in the Sheffield area explains why Ladybower Reservoir is showing its archaeological history.

Looking at the weather and catches in more detail, Figures 6 & 7 show how temperature had an effect on the weekly catches. The cold snap at the end of October in week 35 curtailed moth activity for almost half the numbers of recorders in the scheme.

Fig. 6. GMS 4th Quarter 2018. Total Moth Numbers and Average Daily Temperatures



Fig. 7. GMS 4th Quarter 2018. Empty Traps and Average Minimum Temperatures



Statistics

This quarter has brought some surprises with large increases in the numbers of many moths in comparison to that of 2017. Much of this is probably due to the warm weather continuing well into October. Table 1 shows that losers include the Light Brown Apple Moth, Common Marbled Carpet and Red Green Carpet. On a personal level I have had a very poor year for the Light Brown Apple Moth which last year appeared on numerous occasions.

Table 1. GMS Q4 2018. Top 20 Core Species

Position		Top 20 Species	Mean Per Trap		Change
2017	2018		2017	2018	
1	1	Large Yellow Underwing	25.3	39.4	14.2
2	2	Lunar Underwing	12.5	16.8	4.3
3	3	Setaceous Hebrew Character	9.9	10.3	0.4
8	4	Beaded Chestnut	4.5	9.3	4.8
6	5	Lesser Yellow Underwing	6.9	9.1	2.2
5	6	Square-spot Rustic	7.5	9	1.6
9	7	Black Rustic	4.2	6.5	2.3
4	8	Light Brown Apple Moth	8	6	-2
10	9	November Moth agg.	3.9	4.6	0.7
57	10	Shuttle-shaped Dart	0.5	3.8	3.4
14	11	Yellow-line Quaker	2.6	3.4	0.8
7	12	Common Marbled Carpet	5.4	3.1	-2.2
44	13	Vine's Rustic	0.7	3	2.3
24	14	Green-brindled Crescent	1.4	2.6	1.3
17	15	Silver Y	2.2	2.6	0.4
18	16	Red-line Quaker	1.9	2.3	0.4
21	17	Rosy Rustic	1.5	2.3	0.8
61	18	Turnip Moth	0.4	2.1	1.8
11	19	Red-green Carpet	3.2	2.1	-1.2
16	20	Blair's Shoulder-knot	2.3	1.9	-0.4
Number of gardens			357	324	

More information about these species is given in Table 2 below. Sub-table A refers to the number of days when a species appeared in a trap – not the total number of individuals recorded. For example, the Large Yellow Underwing in Table 2 was seen more times in 2017 than in 2018, yet paradoxically in Table 1 it had a lower average number possibly meaning that it has been appearing in larger numbers on these occasions this year. The red squares in Table 2 below assist in recognising which moths dropped in numbers this year.

The maximum number of moths caught in a region in 2017 and 2018 is shown in sub-tables B & C showing how moth numbers vary with different parts of the country.

Table 2. GMS Q4 2018. Top 20 Core Species – Records and Regional Information

Sub-Table A				Sub-Table B		Sub-Table C	
		No of records (Not totals)		Region with max number		Region with max number	
Top 20		Red (see Table 1)					
Species	2017		2018	2017		2018	
Large Yellow Underwing	1309		1263	1911	SE	2216	SW
Lunar Underwing	674		687	1742	SE	1113	SW
Setaceous Hebrew Character	833		606	626	EE	916	EE
Beaded Chestnut	416		489	367	EE	540	EE
Lesser Yellow Underwing	854		788	434	SE	596	EM
Square-spot Rustic	737		613	566	SE	554	SE
Black Rustic	554		585	333	EE	506	EE
Light Brown Apple Moth	1073		739	393	EM	367	EM
November Moth agg.	426		406	317	WA	336	WA
Shuttle-shaped Dart	137		491	39	EE	304	EE
Yellow-line Quaker	387		411	268	WA	185	IR
Common Marbled Carpet	870		532	478	WA	215	WA
Vine's Rustic	134		213	79	SE	398	EE
Green-brindled Crescent	297		384	142	WA	239	WA
Silver Y	530		492	170	WA	145	NW
Red-line Quaker	410		421	196	WA	155	WA
Rosy Rustic	259		272	110	NE	262	IR
Turnip Moth	102		301	31	SE	382	EE
Red-green Carpet	538		356	238	WA	155	NW
Blair's Shoulder-knot	403		324	178	EM	165	NW
		324	Gardens	2018			
		357	Gardens	2017			

The top ten moths for each region are listed in Table 3. The Large Yellow Underwing keeps the top spot for eight regions losing out to the November Moth agg. in Scotland and the Feathered Ranunculus in the Channel Islands.

Table 3. GMS Q4 2018. Top 10 Regional Core Species

Scotland (27)	Mean	North East (22)	Mean	North West (42)	Mean
November Moth agg.	6.0	Large Yellow Underwing	6.7	Large Yellow Underwing	33.3
Silver Y	4.9	Yellow-line Quaker	4.8	Lesser Yellow Underwing	8.6
Yellow-line Quaker	3.6	Rosy Rustic	4.0	November Moth agg.	5.2
Chestnut	3.5	Silver Y	3.8	Light Brown Apple Moth	4.5
Red-line Quaker	3.0	Light Brown Apple Moth	3.4	Copper Underwing agg.	4.0
December Moth	2.6	November Moth agg.	3.0	Blair's Shoulder-knot	3.9
Black Rustic	2.4	Red-green Carpet	2.9	Yellow-line Quaker	3.8
Rosy Rustic	2.3	Lesser Yellow Underwing	2.5	Red-green Carpet	3.7
Common Marbled Carpet	2.1	Set Hebrew Character	2.3	Silver Y	3.5
Square-spot Rustic	2.0	Square-spot Rustic	2.2	Shuttle-shaped Dart	3.4
Yorks & Humber (16)	Mean	Ireland (24)	Mean	East of England (34)	Mean
Large Yellow Underwing	51.1	Beaded Chestnut	18.0	Large Yellow Underwing	47.8
Beaded Chestnut	28.6	Large Yellow Underwing	12.4	Lunar Underwing	31.9
Lesser Yellow Underwing	13.2	Rosy Rustic	10.9	Set Hebrew Character	26.9
Lunar Underwing	10.3	Set Hebrew Character	10.7	Beaded Chestnut	15.9
Light Brown Apple Moth	8.6	Square-spot Rustic	10.3	Square-spot Rustic	15.4
Shuttle-shaped Dart	9.5	November Moth agg.	9.4	Black Rustic	14.9
Brown-spot Pinion	6.4	Light Brown Apple Moth	8.3	Lesser Yellow Underwing	13.9
Set Hebrew Character	5.7	Yellow-line Quaker	7.7	Vine's Rustic	11.7
Blair's Shoulder-knot	5.5.3	Common Marbled Carpet	5.7	Turnip Moth	11.2
Square-spot Rustic	3.6	Black Rustic	5.5	Shuttle-shaped Dart	8.9
East Midlands (31)	Mean	West Midlands (27)	Mean	Wales (43)	Mean
Large Yellow Underwing	59.5	Large Yellow Underwing	56.0	Large Yellow Underwing	35.4
Lunar Underwing	29.7	Lunar Underwing	27.3	Beaded Chestnut	8.7
Set Hebrew Character	21.4	Black Rustic	18.0	Set Hebrew Character	8.3
Lesser Yellow Underwing	19.2	Lesser Yellow Underwing	11.6	November Moth agg.	7.8
Light Brown Apple Moth	11.8	Beaded Chestnut	11.1	Square-spot Rustic	7.0
Beaded Chestnut	11.5	Square-spot Rustic	8.4	Lesser Yellow Underwing	6.1
Square-spot Rustic	8.5	Light Brown Apple Moth	4.3	Lunar Underwing	5.8
Shuttle-shaped Dart	7.0	Shuttle-shaped Dart	4.1	Green-brindled Crescent	5.6
Black Rustic	6.6	Copper Underwing agg.	3.4	Spruce Carpet	5.1
Vine's Rustic	4.3	Common Marbled Carpet	3.3	Common Marbled Carpet	5.0
South East (21)	Mean	Southwest (34)	Mean	Channel Islands (2)	Mean
Large Yellow Underwing	56.0	Large Yellow Underwing	65.2	Feathered Ranunculus	39.0
Lunar Underwing	41.4	Lunar Underwing	32.7	Set Hebrew Character	38.5
Black Rustic	26.4	Square-spot Rustic	13.2	Vine's Rustic	35.0
Lesser Yellow Underwing	11.9	Set Hebrew Character	12.6	Square-spot Rustic	34.0
Beaded Chestnut	10.2	Beaded Chestnut	11.0	Shuttle-shaped Dart	33.5
Square-spot Rustic	7.5	Lesser Yellow Underwing	9.6	Black Rustic	27.0
Light Brown Apple Moth	5.1	Light Brown Apple Moth	7.5	Delicate	25.5
Shuttle-shaped Dart	4.8	Black Rustic	6.2	L-album Wainscot	23.0
Copper Underwing agg.	4.5	Common Marbled Carpet	5.5	Brimstone Moth	22.5
Common Marbled Carpet	4.0	Vine's Rustic	4.6	Willow Beauty	16.5

The records received from each region for the quarter are compared in Table 4 below. The minimum and maximum moth numbers caught by any one recorder both within and between regions over the nine-week period vary considerably, yet with some similarities, possibly reflecting location, type of trap and/or the individual micro climates. There are a few very low total catches including the zero catch in Scotland referred to earlier. Remember that it is the range of these catches that provide the average for a region.

The number of gardens per region varies from 2 in the Channel Islands to 43 in Wales while the trapping effort (moth trap nights) is remarkably consistent showing the goodwill and enthusiasm of the recorders even when poor catches are recorded.

The third table shows the preferred night for trapping. It is always hoped that people will trap on the Friday but work, social and family commitments have to be taken into account to maintain their interest.

Table 4. GMS Q4 2018. Regional Statistics

Region	Gardens	Moths Total	Moths Mean	Moths	
				Min	Max
SC	27	1782	66	0	213
NE	22	1532	70	8	375
Y&H	17	3470	204	11	571
NW	42	5273	126	2	453
IRL	24	3930	164	21	780
EE	34	10111	297	18	911
EM	31	7752	250	24	501
WA	43	7502	174	16	560
WM	27	5474	203	11	888
SE	21	5115	244	11	927
SW	34	8254	243	61	498
CI	2	1663	831.5	819	844

Moth Trap Nights		
Possible	Actual	%
243	211	87
198	184	93
153	148	97
378	347	92
216	202	94
306	284	93
279	269	96
387	354	91
243	227	93
189	179	95
306	285	93
18	18	100

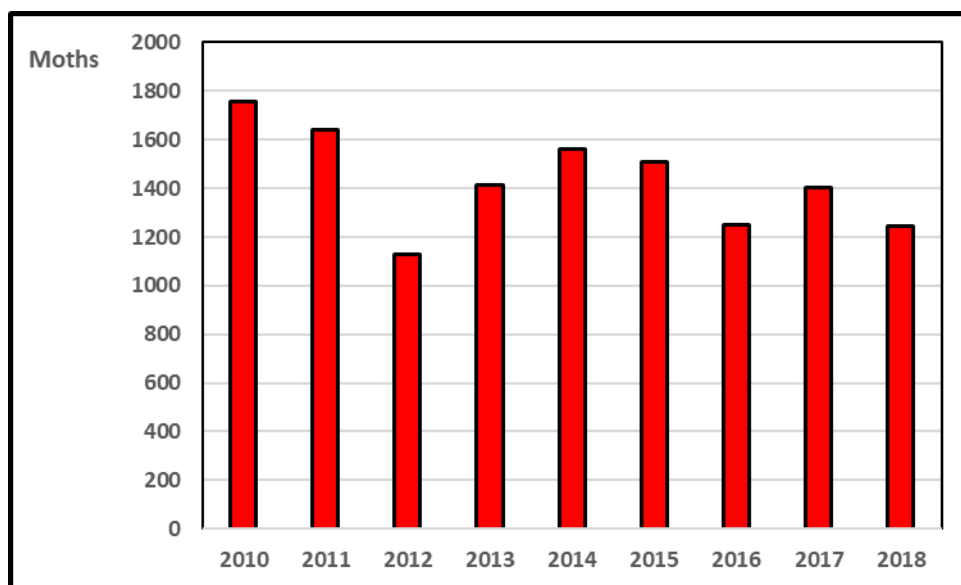
Night?	Tues	Wed	Thurs	Fri	Sat	Sun	Mon
Days	195	147	269	1440	318	209	120
Percent	7	5	10	53	12	8	4

Regional Moth Numbers

Following queries about poor results from a few recorders in the North West who have said that it has been one of their worst years, I was asked to provide data to support or refute this. Conversely, recorders in Wales have said it has been one of their best 4th quarters for a few years.

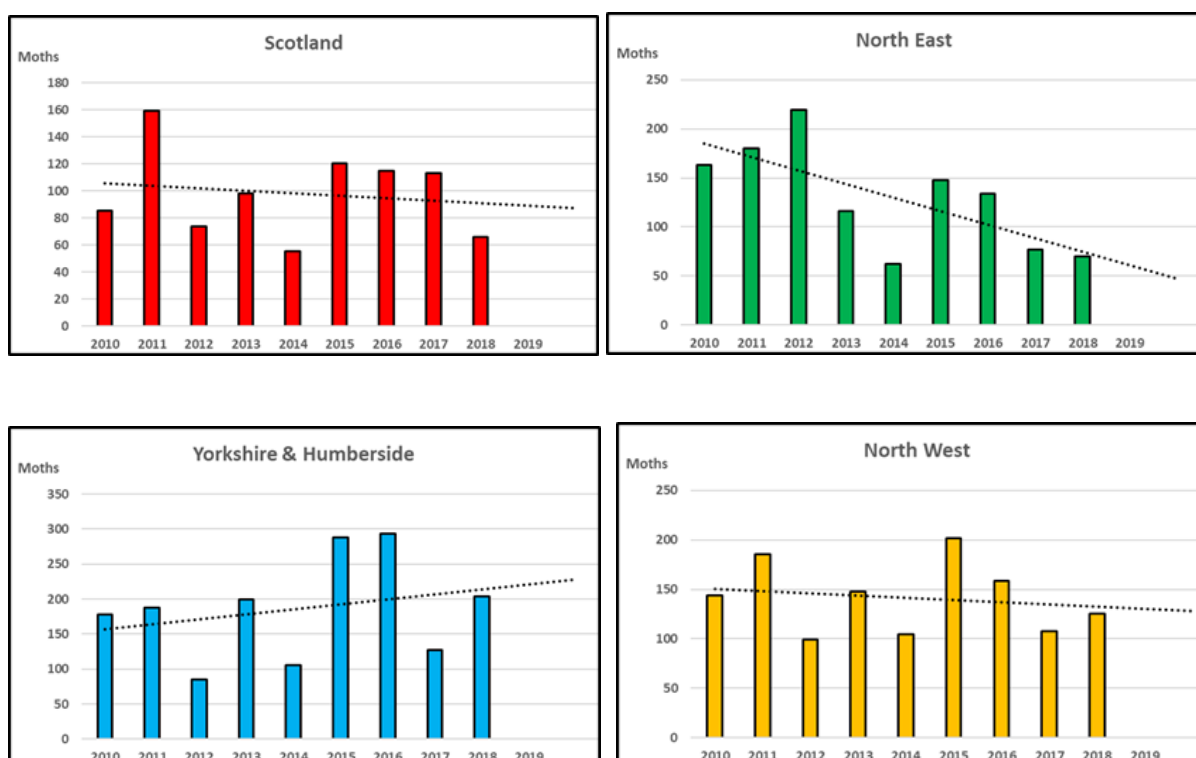
Although this report is concerned with this quarter, an overview of the whole GMS year might help answer a few queries (Fig 8). In comparison to 2017 there was a significant fall in numbers.

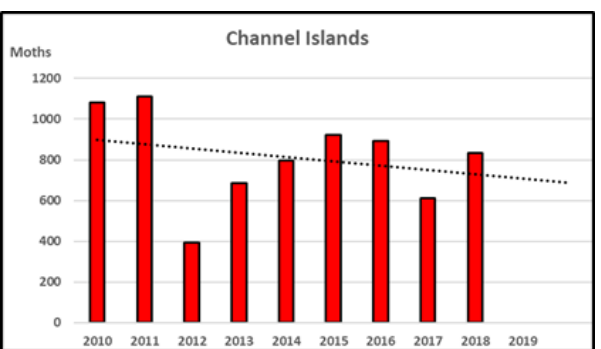
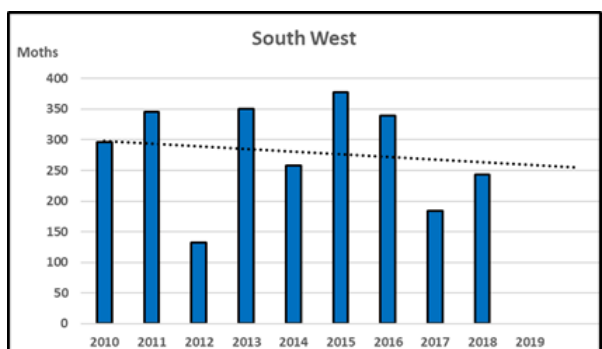
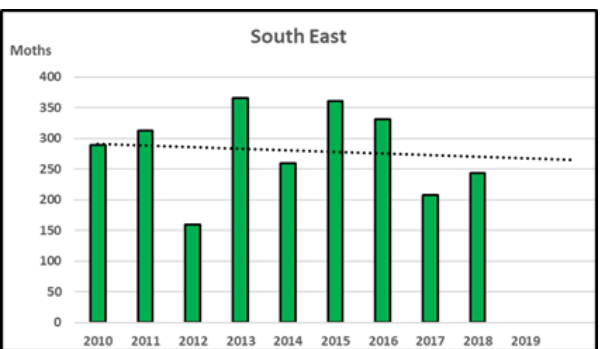
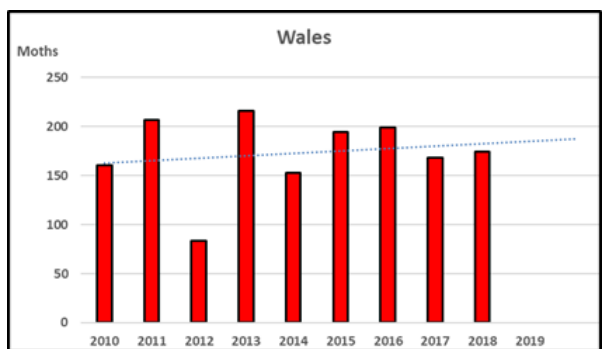
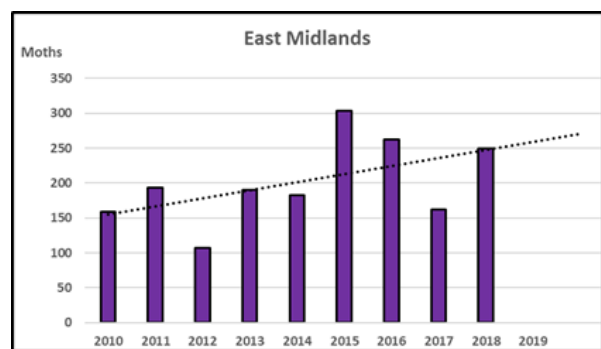
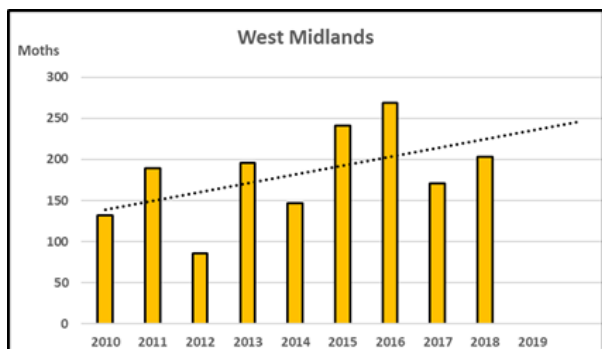
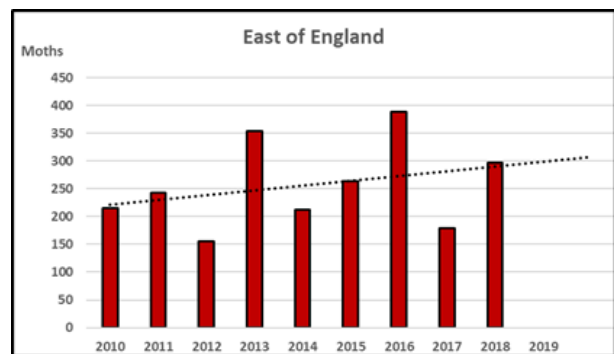
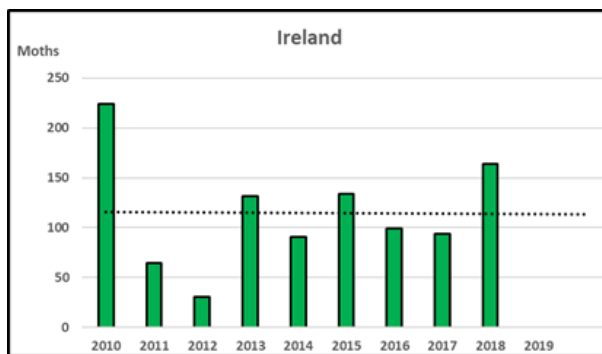
Fig. 8. GMS 2018. Number of Moths per Garden 2010 – 2018



Looking at the regional results for this 4th quarter there have been mixed outcomes with some regions doing better than others. Figure 9 shows histograms for the 12 regions including a trend line predicting one possible scenario for next year. Over the 9 years the trend is upwards for Yorkshire and Humberside, East of England, West Midlands, East Midlands and Wales and downwards for Scotland, North East England, North West England, South West England, South West England and the Channel Islands, and level for Ireland. Whilst this is interesting, we'd need a statistician to comment on significance or otherwise.

Fig. 9. GMS 4th Quarter. Average Number of Moths per Region – 2010 -2018





Heart and Dart

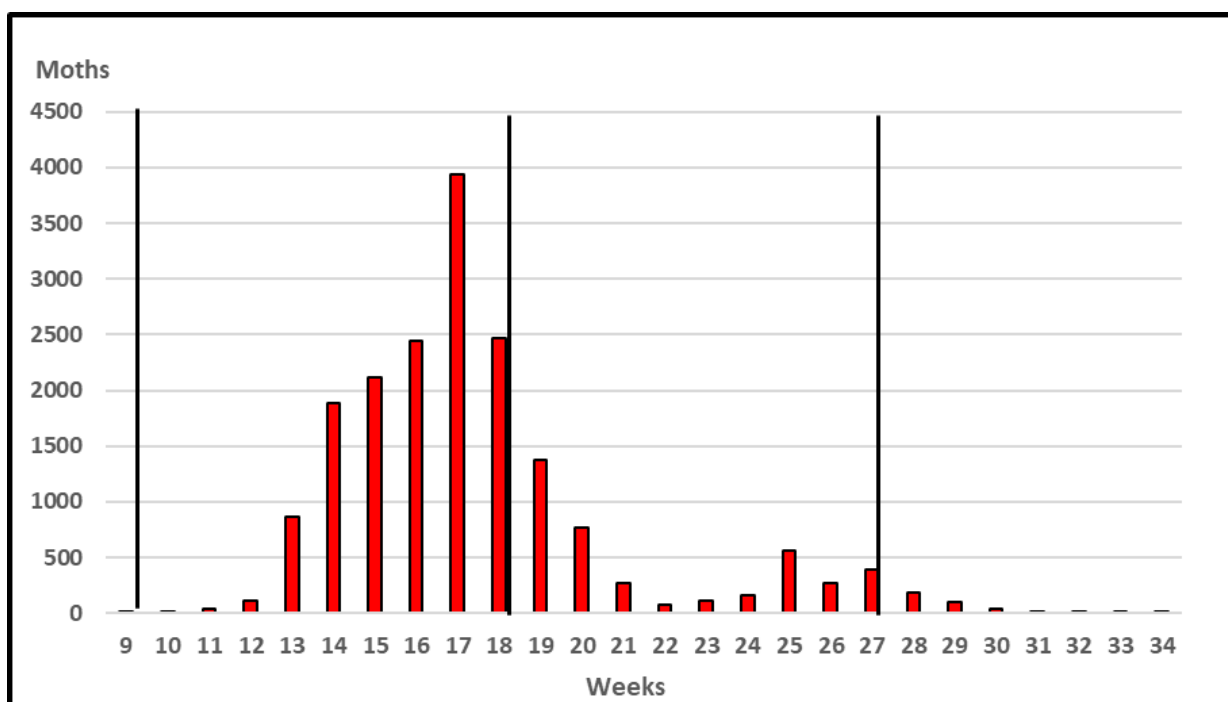
Several coordinators have remarked on an increased number of species with out of season flight times. In some cases, these are moths, spurred on by the warm weather, with a second generation. For example, the White Ermine, normally a one generation moth, has turned up in two regions this quarter.



Heart and Dart

The Heart and Dart is one moth that has had an exceptionally good season as shown in Figure 10 with a smaller flight season in the third quarter tailing off into the 4th quarter. Although known to have a small second brood, this moth has excelled itself this year with a strong second brood.

Fig 10. GMS 2018. Heart and Dart Flight Period



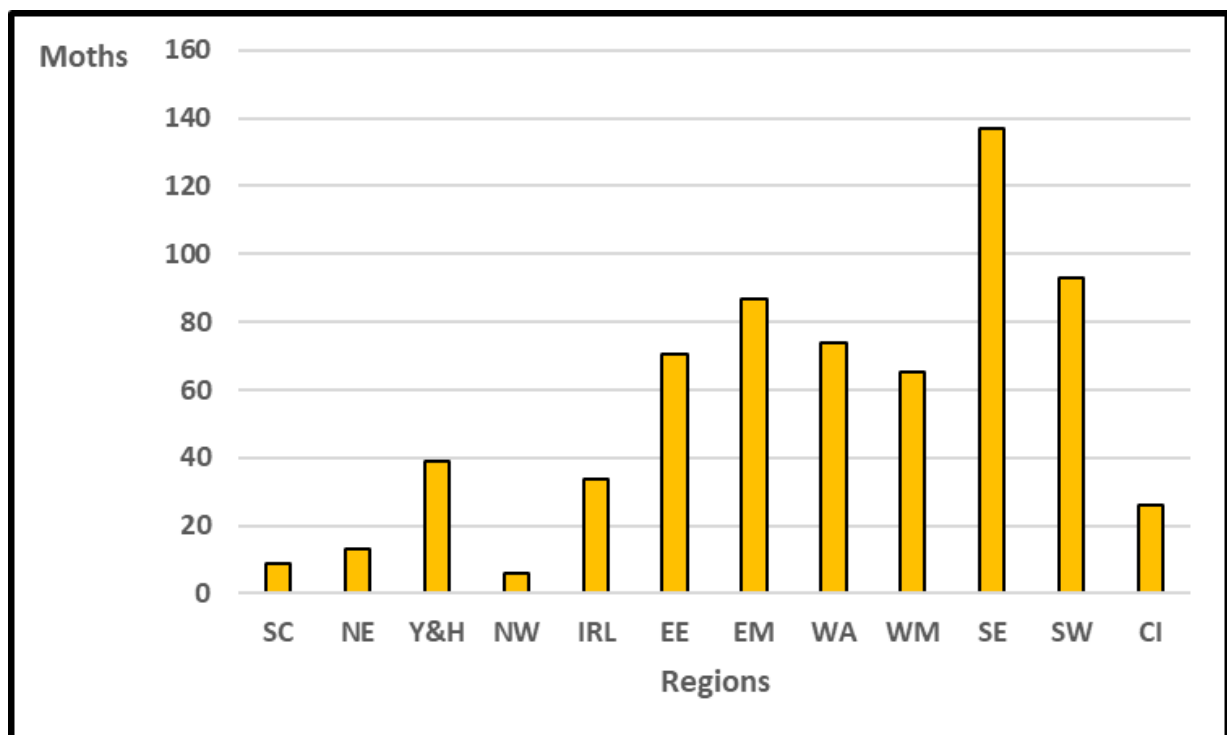
Its progress into the 4th quarter is shown (Fig 11) with numbers rapidly tailing off within three weeks but with one survivor even being found in week 34 in the Yorkshire and Humberside region.

Fig 11.GMS 2018. 4th Quarter Heart and Dart

week	28	29	30	31	32	33	34	35	36
SC		1							
NE	2								
Y&H	4	3					1		
NW	1	6		1					
IRL	2		2	1					
EE	1	4			2				
EM	15	6			4	2			
WA	88	55	28		1				
WM	12	12	1	1	2	1			
SE	6	4	1	1		2			
SW	38	6	2	1	1				
CI	2	1							
Total	180	98	34	5	10	5	1	0	0

Finally, Figure 12 shows the average number of Heart and Dart for 2018 throughout the GMS region with numbers increasing in central and southern areas while the Channel Islands have a more continental influence in terms of moth species.

Fig 12.GMS 2018. Heart and Dart Regional Distribution



Down my Way... by David Baker

I read, with interest, the article sent in by Heather Young entitled “By the Way” in the Late Summer GMS News and decided to have a look back at the images I have kept over the years showing “visitors” which have been found in, or adjacent to, the moth trap at home. It soon turned out to be a much bigger job than I would have thought.

I am sure that we all find beetles, bugs, flies, wasps and even the odd bird in the traps, but like Heather I wonder how many of us record, and or photograph, them. I have already written (Spring 2017) about the caddisflies which I record, sending images and specimens to our local caddis specialists for entry into the national records. I do the same with ichneumon wasps but find there is a limit to just how much recording etc. one can do.

One of the biggest problems for me is not knowing how common, or rare, are the species found. We moth-trappers all have, I am sure, copies of many books on identification of Lepidoptera but is it as easy to find good identification details of other species of small insects? Well, I do have a good number of books on insects, including ladybirds, shieldbugs, beetles, bees, flies etc. but I still have difficulty at sorting all of them out without resorting to microscopic inspection of their private parts. Mind you, I do need the services of our County Recorders at times to do this for the odd moth or two each year. Hopefully my attempts at identification of the following species will be correct.

As a starter, let’s look at beetles! Several species of beetle have visited the traps but the most interesting for me are the Wasp Beetle, Black-bellied Diving Beetle, Black Sexton Beetle and the long-named Greater Thorn-tipped Longhorn Beetle.



Wasp Beetle



Black-bellied Diving Beetle



Black Sexton Beetle



Greater Thorn-Tipped Longhorn Beetle

What attracts these beetles into a small semi-rural garden with no ponds and only a few selected small trees? Presumably it is pure chance? Several other species have been recorded including Cockchafer which I assume to be *Melolontha melolontha* (Common) and not *M. hippocastani* (Northern or Forest). I will have a closer look at the rear-end next year, Heather!

The beetle family also includes ladybirds and these are regular visitors. More of the Harlequin ladybirds are now being found but I still do get a few of our own native species, such as 2-spot, 14-spot and Orange ladybirds which deserve a better showing here.



2-spot ladybird



14-spot ladybird



Orange ladybird



Harlequin ladybird

The Harlequins (*Harmonia axyridis*) are so variable and are split into 3 forms within the single species. All ladybirds have voracious larvae which I have found in the garden but not, thankfully, inside the trap itself.



14-spot ladybird larva



Harlequin larva



Harlequin pupa

When discussing “creepie-crawlies”, as they are often referred to, most folk would place beetles and bugs in the same group but they are very different in character. I do occasionally find one

or two species of bug in the trap and in general they seem to be doing no harm. However, the next image shows a near relative of the assassin bug which I believe to be a Field Damsel Bug. It is a predatory bug and is feeding upon the carcass of *Epiphyas postvittana* (Light Brown Apple Moth). Whether the moth was already deceased or killed by the bug is unknown. The adjacent bug is a Capsid Bug, probably *Pantilius tunicatus*.



Field Damsel Bug



Capsid Bug

To complete the theme of bugs I turn to Shieldbugs. The Hawthorn Shieldbug is the most common visitor throughout the summer months and close inspection is required to differentiate them from the less frequent Birch Shieldbug.



Hawthorn Shieldbug



Birch Shieldbug



Green Shieldbug



Forest or Red-legged Shieldbug

The Green Shieldbug is a once only visitor for me but the Forest or Red-legged Shieldbug are more widespread and have made several visits over the years. (To be continued)

Alderney, Channel Islands by David Wedd



Alderney

Alderney is a very small island, just 3 miles by 1.5, with a population of about 2,000. It is the third largest of the Channel Islands (Jersey and Guernsey are much bigger) and is the nearest of the islands to both England and France. It also has a range of astonishingly varied habitats. It seems remarkable that somewhere so small can offer grassland, woodland, sandy and rocky shores, sea cliffs, fresh-water lakes and a range of attractive parks and gardens. It is a very beautiful island.



Vallee moth trap

It is no surprise therefore that Alderney is a wildlife haven. It is famous for its blonde hedgehogs and its seabirds, especially the two gannet colonies, and the puffins and storm petrels on the tiny island of Burhou. There are also more than a thousand species of wildflower, some of them rare in the UK mainland. The insect population is staggeringly huge, with beetles and dragonflies far beyond what one might expect. Butterflies are abundant, with the expected common species to be seen in dozens in Alderney, but also UK rarities like Glanville Fritillary can be found all over the island, while some migrant or even extinct British species like Large Tortoiseshell and Long-tailed Blue appear annually in varying numbers and sometimes breed.

Apparently Alderney has recorded more moth species than anywhere else of similar area in the British Isles. This is in part due to the island's varied habitats, but also to the fact that the migration routes from southern Europe and Africa use Alderney as a convenient midway halt, and whenever the wind is from the south or south-east, we can expect unusual bird species, and uncommon moths in the light traps.

We have 14 light trap sites around the island but only six traps, so for most of the year we use three of these in varying localities, with the other three operated by entomological friends who come over in the warmer months. Since we joined the Garden Moth Scheme, we have been tied to using one site regularly, at my home in the Valley, where the small roadway runs between parkland and woodland, with some marvellous scenic gardens. This year a second trap has been used regularly for GMS, at Millers Orchard, a big garden that really is an orchard, on the edge of St Anne's village. Poppy and Theo Gauvain, who run it, are the children of Alderney Wildlife Trust's Manager and his wife, so their interest and enthusiasm is no surprise, but their stamina and organisation is remarkable, especially since when they started Poppy was eight and Theo six. We have not heard of any other youngsters as young as this actually running a trap for GMS.



Poppy and Theo with Convolvulus Hawks



Spurge Hawk

Both Jersey and Guernsey have excellent naturalists, several of whom run moth traps. We can only hope that in the next few years some will join GMS. We find it disappointing that a few important lepidopterists on the UK mainland do not feel that moth records from the Channel Islands should be included in British lists. A rather lame reason offered is that we are 'too far south' and 'too far from UK', to which one can reply that Alderney is nearer to England than the Shetlands are to Scotland, while maybe there is a touch of envy when our tiny island gets a string of what UK considers extreme rarities each year; (this summer we had our first records of Druid and Oleander Hawk, while Poppy and Theo had Spurge Hawk.) We must make it clear

that the 'objectors' are in a minority, and that key figures like Paul Waring, Richard Lewington and Mark Tunmore are both supportive and helpful.



Oleander Hawk



Druid

Our moths are everywhere. Even the bunkers and tunnels left from the German Occupation in the War, are used by our moth fauna as hibernation sites. Last week (early December) I counted 78 Bloxworth Snouts in a single tunnel. Often it is more.

SEVEN YEARS ON...some reflections on moth-catching by Judith Smith



Peach Blossom

After retiring as the local county bird recorder in 2011, I had time to re-engage with moths. I'd flirted with them in the 80s but didn't have a light trap. At that time I had invested in a copy of Skinner but found the illustrations, pinned out to show the underwings, difficult to relate to the moths I had in the hand.

In 2011, I had moved to a bungalow at the edge of the village of Abram, part of Wigan. The house is strategically placed between the two compartments of the Abram Flashes SSS1, designated for its ornithological assemblages of lowland wet grassland, and formed by mining subsidence. At the end of the garden is the Leeds-Liverpool Canal (Leigh Branch), raised up from the surrounding land with marshes at the base of the bankings. Willow and hawthorn succession from long-overgrown allotments, with several apple trees, adjoins the marshy ground at the back of the house, with a silted-up stream and older trees – hawthorn, willow, Lombardy poplars, lime and apple – opposite.

My own garden, at the side of the house, has vegetable and fruit plots, a lawn with flower beds, borders, and a row of mature trees nearly 40 years old – birch, lime, horse chestnut and a sycamore hybrid. Nearby farmland is pasture for cows or silage. With this varied habitat, I hoped to attract a good selection of moths to my new Skinner trap, and to be able to identify them with Waring and Townsend's *Field guide to the moths of Great Britain and Ireland* – to which I added Sterling and Parsons' *Field Guide to the micro moths of Great Britain and Ireland* and, later, Manley's *British moths* (2nd ed.). So in March 2012 I joined the Garden Moth Scheme, to bring some discipline to my moth-catching...

I was soon floundering in what in birdwatching terms would be called LBJs (Little Brown Jobs). During my many years as county bird recorder, I had met several birdwatchers who were either accomplished moth-ers, or who had even abandoned birds for moths. I'd noticed that there were three of my birdwatching contacts mentioned in the acknowledgements of either (or both) Waring and Sterling. My pleas for help were heard by Kevin McCabe, primarily a micro-moth expert, and over the years since I've got into the habit of sending him photos of my queries, which he has quickly identified or put me right. He also submits my records for me, from the GMS forms I complete. Fortunately I seem to be getting a bit better at ID over this last couple of years, so haven't had to plague him quite as much! One of the problems with moths is that they are only around in the summer, so when you are of a certain age like me, it's easy to forget the salient ID points of those difficult-to-identify LBJs year to year. The term "horses for courses" comes to mind – like birds, moths are confined to their particular habitats, but unlike birds they are also only seen at certain times of year. I'd love to find a local moth list arranged by date – there used to be one on the Lancashire moth site but it's been deleted.

To date my life list stands at 346, but this includes 50 micro moths which only have Latin names (as opposed to micros with English names). I don't take this total too seriously because I'm a beginner and may have mis-identified species, particularly in the early years. Below, I've put together a few figures which might be of interest:

Species seen in:

All 7 years	53
6 years	39
5 years	30
4 years	27
3 years	40
2 years	48
1 year	109 (36 of these were micros with Latin names only subject to the proviso above)

Year	2012	2013	2014	2015	2016	2017	2018
Species caught	113	185	174	160	196	191	181
Year	2012	2013	2014	2015	2016	2017	2018
Total no. caught	569	1048	1084	889	1273	1259	1438**

** included 227 Water Veneers which I may have overlooked in previous years as "not moths"!

My observer effort was similar in all years, but best in 2018 when I didn't miss any weeks. My commonest moths (over 50 individuals, and excluding the Water Veneers) in 2018, with 2017 totals in brackets, were as follows:

Clouded Border 65 (60)
Straw Dot 78 (44)
Common Quaker 72 (21)
Hebrew Character 50 (37)
Smoky Wainscot 81 (41)
Large Yellow Underwing 70 (56)

In 2017, I had 50 Setaceous Hebrew Characters, but only 34 in 2018.

I don't have many rarities but those that are listed as Local in the Lancashire Moth Group list (macros) are as follows: (figures in brackets are number of years out of 7 seen)

August Thorn (2)
Beautiful Hook-tip (6)
Brown-veined Wainscot (1)
Butterbur (4)
Chocolate-tip (2)
Dark Brocade (1)
Dingy Footman (4)
Obscure Wainscot (1)
Red Twin-spot carpet (1)
Silky Wainscot (2)
Silver Hook (2)
Small Marbled (1)

I haven't seen Butterbur in recent years, no doubt because the Canal & River Trust thought fit to spray out all the Butterbur on the canal towpath nearby. Silver Hook is a moth I particularly like, with Chocolate-tip not far behind.

Of the showy moths, I get four hawk moths (Poplar, Elephant, Eyed and Lime), the first two in good numbers and the last being intermittent. Peach Blossom is my all-time favourite moth, though, seen in four years. My main dislike (I suspect with many other people) is Large Yellow Underwing. So here's to another 7 years, hopefully with improved ID skills! My grateful thanks to my mentor Kevin – I don't know how I would have managed without you! And thanks to those who run the scheme and produce all the newsletters and reports.

Egg-boxes and new words by Chris Emblem-English

I use a Skinner Trap with halved 30-egg trays arranged in a similar manner to that described by Peter Terry in the Q3 newsletter. A quarter-tray is tucked behind each row of three half-trays, the facing rows being separated by a horizontal tray on the base. The trays in each corner diverge from the middle one, my rationale being that the gaps created might give better access for moths to get behind them and settle down. The horizontal tray gets soggy in bad weather but it stabilises the set-up and often seems to be the place where most Large Yellow Underwings find refuge. Having seen Peter's example it's no doubt worth experimenting with a strip of something absorbent on top of it. This is the only arrangement I've tried with this trap; if a load of 6-egg boxes had come my way first instead of trays I guess I'd have come up with something different.



On a more frivolous note, you might be familiar with the books by Douglas Adams and John Lloyd - *The Meaning of Liff* and *The Deeper Meaning of Liff* - dictionaries of experiences, feelings, objects, etc. for which no words exist but which could be matched to suitably evocative real place names. Of these, a favourite of mine that I can recall is *Great Waking; The panic that sets in when you badly need to go to the lavatory but can't make up your mind about what reading matter to take with you.*

Anyway, thinking about traps and egg boxes also reminded me of the brief feeling of disappointment and self-reproach experienced when I've watched helplessly as an unusual-looking but unidentified moth liberates itself determinedly and irretrievably skywards into the dazzling sunlight, after being accidentally disturbed from its egg box. I wondered, could there be a word somewhere out there on a map to suit this particular frustration? It's harder than I expected to settle on anything but after some searching I felt that *Wisconsin* has something of the right feel to it. Of course, the above situation may coincide with the realisation that one should have relieved one's bladder before embarking on this delicate process; *Baddesley Clinton* perhaps. Just suggestions of course - I wonder if other moth surveyors have felt moved to give it any thought?

Star Wars Super Wedding by Nonconformist

Hidden, but sometimes too obvious, within the following short story are 53 moth related words for you to find. The one word which is almost unavoidable is Ear and, therefore, please ignore it. Other than that the words are either in usual form or reversed within the text.

With Ernie, a week ago today, on our yearly Welsh holiday in Caddru I'd found a confused old pedlar emerging from an unusual Star Wars wedding at a large medieval house. It was set within many acres, centrally located near a two acre pool and as there were no cafes too nearby the food was provided by the local deli caterers.

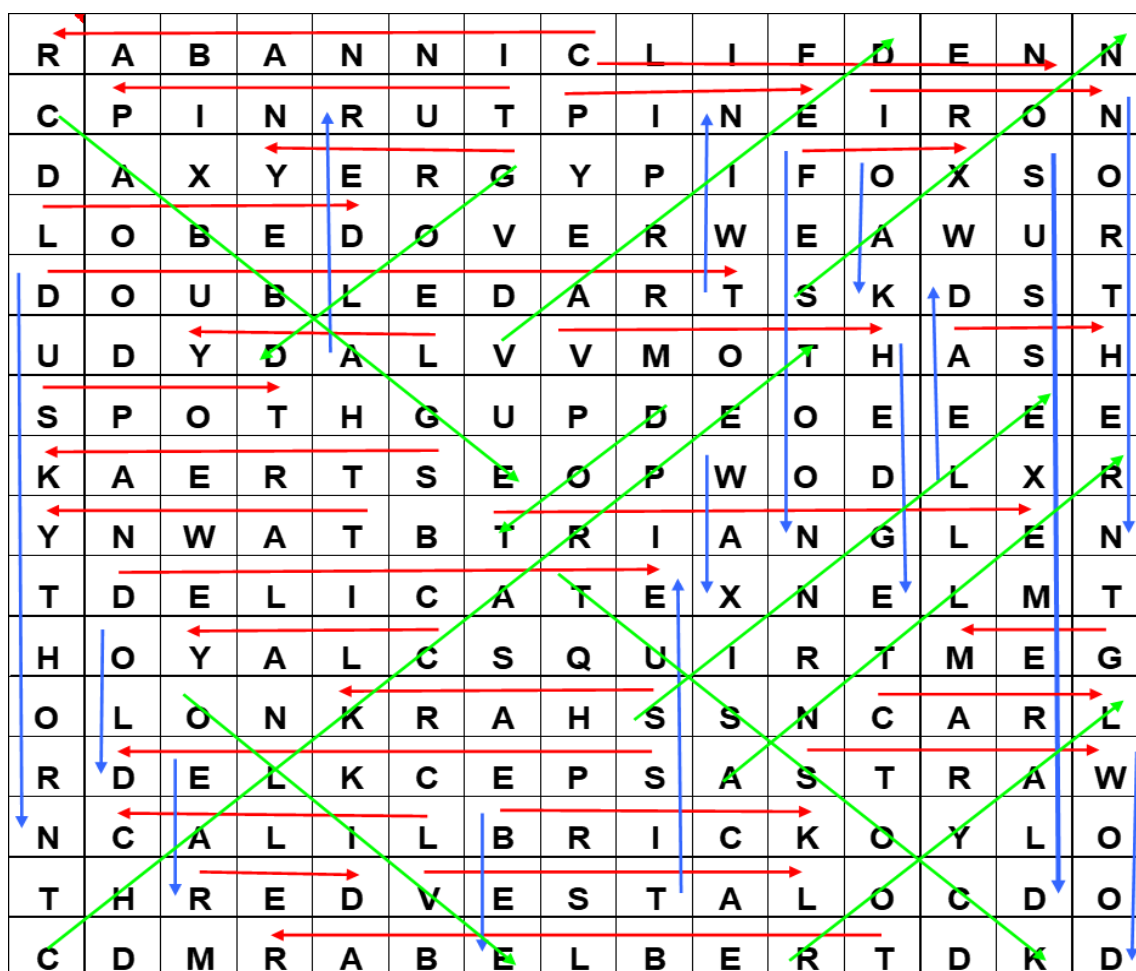
Tom, the pedlar, whose Ma originally came from Dunbar was prone to spin ruthless tall tales, although he is usually a real star, worthy of attention, said he'd found a wasp in a cheese sauce, butter burning on the stove and several small owls looking for ferrets boldly searching for scraps before he had run away from the site. However, I did hear Tom saying that the menu, printed in red, large letters was in Italian and the staff, who worked like slaves, talked in gibberish. The chef said that the tough grey chicken makes an unclear rotten, rubberised, broth eroding the pans, whilst the mackerel warps the cutlery.

Although not before sterling efforts had been made to transfer nine, ten or occasionally a dozen tables in the superb room, Leah, the Princess, and Darth Vader came over to rashly slap petals on the pastry which, they thought, leaves sexy marks using a dirty grey fork. Although I find this utensil very useful, that really is not at issue here as the decorated crust I came across made me look for a nearby alcoholic drink. Ernie, meanwhile, looking for Tom, had left his room with Niel, lummux that he is, running like the devil, or nearly so, shouting "wait a mo, Charlie, tell them Alfred Gold spotted the bold lad yesterday".

All in all, a funny spectacle in winter, which I find very strange, recalling it now.

Word Search solution by Nonconformist

Here's the official answer to last issue's Wordsearch. As usual, Nonconformist and I have had discussions about exactly which words should be included!



Alder	Northern
Antler	Old
Ash	Olive
Bee	Pine
Brick	Red
Cabbage	Royal
Chalk Carpet	Saxon
Cinnabar	Shark
Clay	Single
Clifden	Speckled
Delicate	Spot
Dot	Straw
Double Dart	Streak
Dusky Thorn	Sussex Emerald
Ear	Tawny
Festoon	Treble-bar
Fox	Triangle
Gem	Turnip
Gold	Tussock
Grey	Twin
Hedge	Varied
Iron	Vestal
Lady	V-moth
Lilac	Wood
Lobed	

Tailpiece - Norman Lowe

I'd like to pick up on the contribution by David Wedd who comments on the controversy over whether moths from the Channel Islands should be included in British lists. For our part we have always been clear that the Garden Moth Scheme covers the entire British Isles, and as such does include the Channel Islands (and the whole of Ireland).

Finally, remember to put the date of the GMS Conference date in your diaries. Sunday 31st March 2019.

Happy Christmas and a successful new Year! And feel free to contact me at norman@enviro-consulting.com

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> - we now have over 1100 'Likes'!

Facebook Group - <https://www.facebook.com/groups/438806469608527/> - currently with more than 2200 Members (not all active GMS participants) – open membership – all recording forms, instructions and micro-moth identification guides are available in the Files section

GMS Sponsors

Atropos Books

Online book store and publication of Atropos, the journal for butterfly, moth and dragonfly enthusiasts. Special offers available on the website.

www.atroposbooks.co.uk

The Boat House, Church Cove, Lizard, Cornwall, TR12 7PH
01326 290287 email enquiries@atropos.info

ALS - Anglian Lepidopterist Supplies



For all your equipment requirements from moth traps to pots and generators – quality products at affordable prices. www.angleps.com

Station Road, Hindolveston, Norfolk, NR20 5DE
01263 862068 9am – 5pm Monday to Friday
sales@angleps.com

The Compact 20w Actinic Skinner Moth Trap now available in mains and 12 volt versions. Catch rates outperform any other actinic system and comparable to the Twin 30w Actinic Robinson Trap. See our web site for further details.

MapMate®

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

MapMate continues to support the GMS by providing software and support for the GMS database, and for that we are very grateful.