

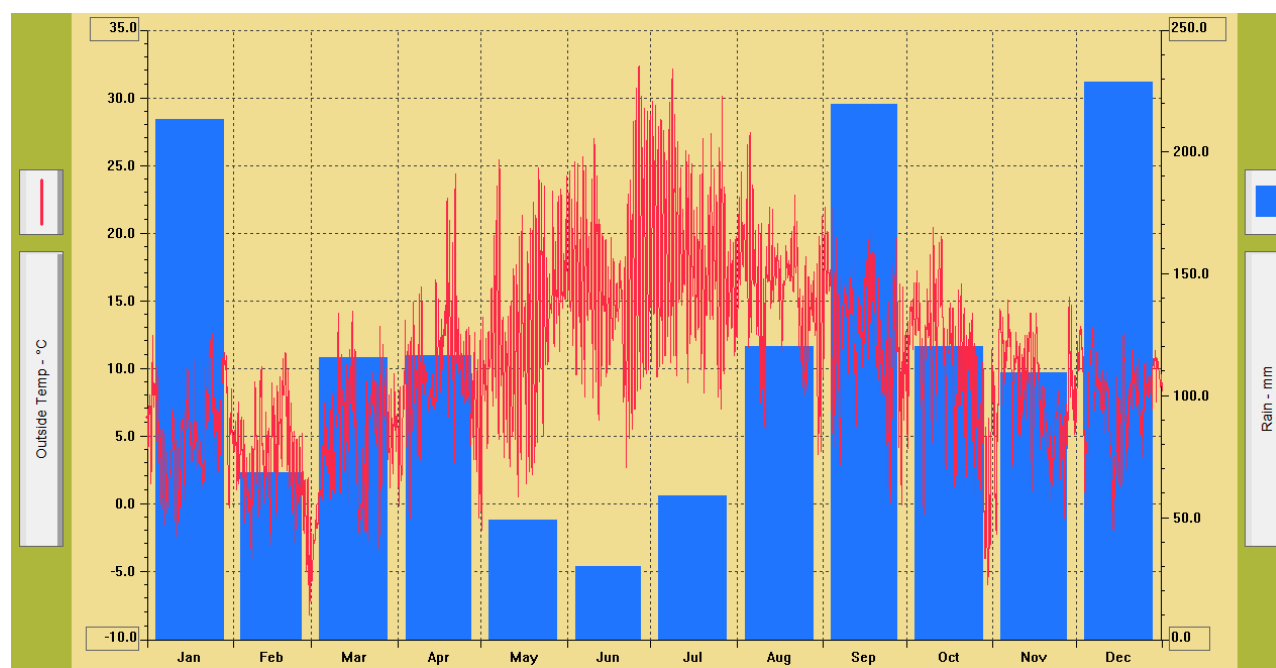
Mothing in Montgomeryshire – 2018 Annual Report

Weather Conditions and the Mothing Year

As always, our weather conditions play a big part in whether our mothing year has been good, indifferent or poor, so below I have given a rundown of our temperature and rainfall in Montgomeryshire throughout the year. Readings were taken at Commins Coch (in the west of the county) and may not fully represent the county as a whole.

As can be seen in the graphic below, the months of January, September and December were very wet indeed with each of these months giving us more than 200mm of rain, (200mm in old money is about 8 inches) and the September figure was about twice the normal average, so this may well have affected the numbers of some of our moth species which emerge at this time (if not the moths, then it probably stopped a lot of us from doing normal trapping). The other nine months of the year gave us more or less the average amount of rainfall.

Once again, like 2017, it wasn't a particularly cold year, with the coldest night time temperature falling to -8.1 on Feb 28th, but this was an exception rather than the rule, in fact the temperature only dipped below freezing on 53 days of the year, which is a quite low figure. We did however have two short lived cold snaps, one in late February and the other in late October, but these didn't affect moth numbers too adversely. The year was of course noticeable for the fairly long heat wave we all experienced. Here in the west of the county this spell ran from the last week of June to more or less the last week of July, during which time I'm sure our moth traps were very busy indeed. The temperature peaked on the 22nd, June with 32.3c and during the heatwave we achieved a temperature of above 30c four times and above 26.5c (80f.) on 20 occasions and it is quite possible that these figures may well have been eclipsed even higher on the eastern side of the county.



Red trace denotes temperature in C. Blue columns denote monthly rainfall.

Main points of particular interest of the weather year were: -

Hottest day – June 19th – the temp. reached 30.8c – the hottest June day since 2004.

Coldest night – December 12th – the temp dipped to -7.4c, the coldest night of the year.

Highest mean temperature (daily) – was equal on two occasions, 2nd. and 8th. July with 21.1c.

Coldest mean temperature (daily) – was -3.7 on 1st. March.

Highest mean temperature (month) was July with 17.9c.

Coldest mean temperature (month) was February with 3.1c.

Wettest day – Feb. 22nd. - the wettest day of the year with 44.96mm.

Wettest month – September had the wettest month with 204.5mm.

In general, the yearly rainfall of 1636mm was a bit above the yearly average.

Driest month - April had the driest month with 44.5mm.

The mean temperature for the year was 10.3c, slightly above average.

May 26th - was the hottest day in May I've recorded since 2004 – the temp. reached 28.9c.

The chart below shows the temperature and rainfall extremes for each month at Commins Coch.

Month	High temp.	Date	Low temp.	Date	Mean temp. month	Max. daily rain in mm	Date	Monthly rain in mm
Jan	13.7	31	-5.6	5	4.8	11.7	6	75.9
Feb	13.2	2	-2.1	6	6.3	45.0	22	151.4
Mar	16.8	30	-0.6	23	8.2	33.5	17	163.1
Apr	21.9	8	-2.9	27	8.5	15.2	14	44.5
May	28.9	26	0.0	10	13.1	9.9	15	58.9
Jun	30.8	19	6.5	3	15.2	27.9	5	137.7
Jul	27.2	17	6.2	23	15.9	24.6	30	147.1
Aug	23.7	22	5.3	10	14.6	29.2	17	165.4
Sep	20.4	2	3.0	17	12.6	24.6	11	204.5
Oct	20.8	16	-0.6	30	12.1	23.1	20	138.2
Nov	15.6	22	-2.1	13	7.0	28.4	21	195.3
Dec	13.3	7	-7.4	12	5.3	36.3	13	154.2

The Moths - New Species Recorded During 2018

New species recorded in the county were on the low side again during 2018, but we did manage to record six new species, three micro and three macros.

Details of new micro species recorded

292 *Povolnya leucapennella*: one came tight at Commins Coch, (PRW), 08-12-18.

403 *Argyresthia glabratella*: one came to light at the Hafren Forest, (DG), 04-07-18.

621 *Elachista subalbidella*: three individuals came to light at Cors Dyfi (MMG event) and confirmed by dissection (DHB), 02-06-18.



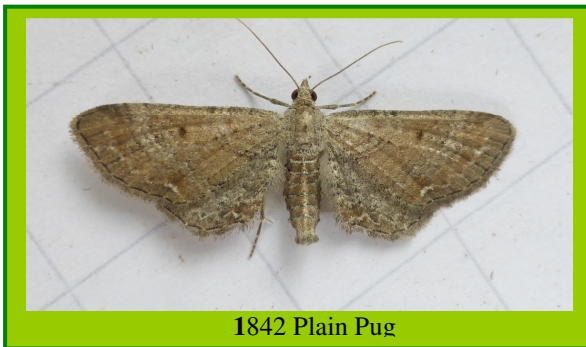
403 *Argyresthia glabratella*

Other notable micro species recorded during the year

- 0081 *Stigmella hemargyrella*: One came to light at Machynlleth (AIS), 18-07-18.
0084 *Stigmella ruficapitella*: Larva, daytime obs. Tylwch Cwm Fron Farm (BM), 18-11-18.
0113 *Stigmella sakhalinella*: Larva, daytime obs. Old Churchstoke (TM) 07-08-18
0254 Laburnum Leaf Miner *Leucoptera laburnella*: One came to light at Llanfyllin (MDH), 10-08-18.
0309 *Deltaornix torquillella*: One came to light at Ardleen (PT), 30-05018.
0333 *Phyllonorycter viminella*: one netted, at Old Churchstoke (TM), gen det (ANG), 20-05-18.
0401 *Argyresthia laevigatella*: One came to light at Llanymynech Rocks (MMG event), 16-06-18.
0583 *Coleophora tamesis*: One came to light at Cors Dyfi (MMG event), gen det (DHB), 06-06-18.
0620 *Elachista gangabella*: One came to light at Llanymynech Rocks (MMG event), 16-06-18, gen det (DHB).
0636 *Denisia similella*: adult netted, Fedw-ddu, RSPB Lake Vyrnwy (GBC), 26-07-18.
0652 *Alabonia geoffrella*: one at Dolforwyn Woods (PR), 29-05-18.
0783 *Bryotropha boreella*: one came to light at Hafren Forest (DAG), 04-07-18.
0856 *Anarsia spartiella*: one came to light at Hafren Forest (DAG), 04-07-18.
0887 *Mompha lacteella*: One came to light at Pantycelyn, Llanfyllin (GBC), 11-08-18.
0936 *Cochylimorpha straminea*: One came to light at Llanymynech Rocks (MMG event), 16-06-18.
0968 *Cochylis nana*: One recorded at light at Middletown (DHB), 02-06-18.
1037 *Acleris holmiana*: Recorded at light on two occasions at Guilsfield (SOS), 17-07-18 & 23-07-18.
1111a *Bactra lacteana*: One came to light at Cors Dyfi (MMG event) 06-06-18.
1241 *Grapholita compositella*: daytime obs. Llanfair Caereinion, (AH), 27-07-18.
1285 *Dichrorampha plumbana*: Daytime obs. Middletown (DHB), 03-06-18.
1404 *Spoladea recurvalis*: One came to light at Commins Coch (PRW), 12-10-18.
1421 Large Tabby *Aglossa pinguinalis*: recorded at light on three occasions; Guilsfield (SOS) 04-08-18, Old Churchstoke, (TM) 17-06-18 & 21-06-18.
1426 Lesser Wax Moth *Achroia grisella*: one came to light at Old Churchstoke (TM) 17-07-18.

Details of new macro species recorded

- 1842 Plain Pug *Eupithecia simpliciatata*: one came to light at Guilsfield (SOS) 14-07-18.
1890 Sharp-angled Peacock *Macaria alternata*: One came to light at Commins Coch (PRW), 21-08-18.
2391 Silky Wainscot *Chilodes maritima*: several recorded at Cors Dyfi for an (MMG event), 02-06-18.



Other notable macro species recorded during the year

- 0382 Six-belted Clearwing *Bembecia ichneumoniformis*: 5 attracted to a pheromone trap at Llanymynech Rocks (DHB), 15-07-18.
1667 Blotched Emerald *Comibaena bajularia*: One came to light at Middletown (DHB), 16-06-18.
1689 Mullein Wave *Scopula marginepunctata*: One came to light at Commins Coch (PRW), 22-08-18.
1709 Satin Wave *Idaea subsericeata*: One came to light at Llanymynech Rocks (MMG event), 16-06-18.
1813 Haworth's Pug *Eupithecia haworthiata*: One came to light at Llanymynech Rocks (MMG event), 16-06-18.
1825 Lime-speck Pug *Eupithecia centaureata*: One came to light at Old Churchstoke (TM) 28-05-18.

2031 White Satin Moth *Leucoma salicis*: Recorded at light on two occasions at Old Churchstoke (TM) 16-06-18 & 07-07-18.

2131 Square-spotted Clay *Xestia stigmatica*: Four came to light at Llanfyllin (MDH), 07-08-18.

2159 Dog's Tooth *Lacanobia suasa*: One came to light at Cors Dyfi (MMG event) 06-06-18, and another came to light at Derwenlas (AT), 31-05-18.

2164 Broad-barred White *Hecatera bicolorata*: One came to light at Newtown (PE), 02-06-18 and another came to light at Pantycelyn, Llanfyllin (GBC), 26-06-18.

2167 Tawny Shears *Hadena perplexa*: One came to light at Llanidloes (RB), 01-06-18.

2275 Dusky-lemon Sallow *Cirrhia gilvago*: One came to light at Llanidloes (RB), 04-10-18.

2312 Olive *Ipimorpha subtusa*: One came to light at Llanfyllin (GBC) 05-08-18.

2319 Lunar-spotted Pinion *Cosmia pyralina*: This record came to light at Old Churchstoke (TM) is only the second county record, 02-07-18.

2367 Haworth's Minor *Celaena haworthii*: One came to light at Lake Vyrnwy (GBC), 09-08-18.

2466 Blackneck *Lygephila pastinum*: One came to light at Llanidloes (AS), 13-07-18.



2159 Dog's Tooth



2319 Lunar-spotted Pinion

Key to the above recorders

PRW – Peter Williams, DHB - Douglas Boyes, DG – Dave Grundy, SOS – Sue Southam, TM – Trisha Marlow, AS – Alan Sibley, PE – Phil Evans, GBC – Gavin Chambers, RB - Richard Becker, PR – Paul Roughley, PT – Peter Terry, AIS – Alan Salter, BM – Ben Mullen, ANG – Andrew Graham, AH - Alastair Hotchkiss

End of Year Statistics for 2018

Summary of end of year statistics; figures in parenthesis show 2017 totals.

- Numbers of records were mixed for the year, macro records were down by over 1,600, but the micros were up by over 2,800.
- The breakdown is: - we added a total of 16,580 (18,071) macro records to our database. The share between macro and micro was; 15,449 (8773) macro and 2,779 (2,622) micro. We now have 208,120 (191,540) macro records and 35,689 (32,910) micro records, giving us a grand total of 243,809 (206,379) records in the database.
- Total number of species now held in our database is 528 (525) macro species and 652 (649) micro species giving us a total of 1180 species recorded in the county.
- Total species recorded in 2018 was 429 macro species (one up on 2017) and 288 micro species (six up on 2017) giving a grand total of 717 (710) species for the year – a small improvement on the previous year.

The following charts show the 2018 rank of the top five species in various categories recorded in Montgomeryshire. Please note the previous year's totals are shown in parenthesis, BF Log numbers shown in brackets and a dash indicates that the species was not in top five the previous year. As usual I have separated the macro (left hand charts) from the micro moths (right hand charts) so that you get a better overview of how both groups are doing.

The two charts below show the top five most numerous records (species) for the year.

Rank	Log No.	Macro Species	Records	Rank	Log No.	Micro Species	Records
1 (2)	73.342 (2107)	Large Yellow Underwing	274 (269)	1 (1)	63.025 (1376)	Anania hortulata	100 (144)
2 (1)	73.329 (2102)	Flame Shoulder	270 (282)	2 (2)	63.038 (1405)	Pleuroptya ruralis	92 (102)
3 (5)	70.226 (1906)	Brimstone Moth	239 (227)	3 (-)	63.089 (1305)	Agriphila tristella	83 (-)
4 (-)	73.317 (2089)	Heart & Dart	239 (-)	4 (5)	49.166 (1076)	Celypha lacunana	79 (78)
5 (-)	73015 (2441)	Silver Y	228 (-)	5 (-)	63.064 (1334)	Scoparia ambigualis	79 (-)

In the macro moths the Large Yellow Underwing took over the top spot and the Flame Shoulder was pushed into second place. The Brimstone Moth moved up to third and new entries of Heart & Dart and the Silver Y entered the top five into fourth and fifth places.

In the micros *Anania hortulata* and *Pleuroptya ruralis* kept first and first and second places, and there were two new entries into the top five, *Agriphila tristella* and *Scoparia ambigualis*.

The next two charts show the top five species by the quantities trapped.

Rank	Log No.	Macro Species	Counts	Rank	Log No.	Micro Species	Counts
1 (1)	73.342 (2107)	Large Yellow Underwing	2499 (2326)	1 (-)	63.093 (1304)	Agriphila straminella	838 (-)
2 (2)	73.249 (2190)	Hebrew Character	1531 (1431)	2 (-)	63.089 (1305)	Agriphila tristella	353 (-)
3 (-)	70.222 (1902)	Brown Silver-line	1207 (-)	3 (3)	16.001 (424)	Yponomeuta evonymella	328 (3)
4 (3)	73.329 (2102)	Flame Shoulder	1170 (1222)	4 (1)	63.080 (1293)	Chrysoteuchia culmella	313 (1)
5 (-)	72.044 (2044)	Dingy Footman	1119 (-)	5 (2)	63.038 (1405)	Pleuroptya ruralis	308 (2)

Quantities in the macro moths are generally up on 2017 figures in the macro moths, with the Large Yellow Underwing, still holding top spot. Two species new to the top five are Brown Silver-line and Dingy Footman. In the micros there has been some interesting movement with *Agriphila straminella* and *Agriphila Tristella* moving into first and second places from nowhere, which means the top three species from 2017 have moved into the bottom three places.

The last two charts show the top five all time records in our database.

Rank	Log No.	Macro Species	All records	Rank	Log No.	Micro Species	All records
1 (1)	73.342 (2107)	Large Yellow Underwing	3427 (3158)	1 (2)	63.038 (1405)	Pleuroptya ruralis	1095 (1003)
2 (2)	73.329 (2102)	Flame Shoulder	3190 (2923)	2 (1)	63.064 (1334)	Scoparia ambigualis	1078 (1004)
3 (3)	70.226 (1906)	Brimstone Moth	2870 (2634)	3 (3)	63.067 (1338)	Eudonia lacustrata	983 (917)
4 (4)	73.249 (2190)	Hebrew Character	2756 (2581)	4 (4)	63.089 (1305)	Agriphila tristella	978 (895)
5 (5)	70.097 (1764)	Common Marbled Carpet	2728 (2533)	5 (5)	49.166 (1076)	Celypha lacunana	934 (856)

The top five macro and the micro species are the same as 2017.

The 2018 Moth Group Events – MMG

During the year we held 8 events throughout the county, all of which were well attended. Full reports for 2018 can be seen on web site blog.

News as regards the 'Events team'

As many of you will know, Douglas Boyes had taken on the role of 'Events Coordinator', but due to the pressure of his university studies he has decided to stand down at the end of the 2018 season, so may I take moment to thank Douglas for coordinating events during 2018 and wish him well with his studies. Douglas will continue managing both our 'Stop Press' and 'Blog'.

I have now asked one of our regular MMG members Julie Pearce if she would take on the post of events coordinator from the beginning of the 2019 season and she has graciously accepted the post. I'm sure that she will do a great job for us, thanks Julie.

Current members of the 'events team' are Julie Pearce, Mark Thomas, Paul Roughley, Gavin Chambers and Phil Mcgregor.

MMG Fundraising

I would like to thank all those who have helped to put some funds in our kitty during the last year via donations and 'Easyfundraising'. Running a website, updating reference books and the upkeep of the mothing kit has to be paid from somewhere, so every bit of funding raised is very much appreciated.

To all those who sometimes shop on the internet but have not yet used 'Easyfundraising', please do so, as it costs you nothing extra to go via 'Easyfundraising' and you may be able to purchase your goods even cheaper with some of the deals on offer. If you use the Montgomeryshire Moths link at the bottom of our home page, you can contribute to our funds - every little bit helps!

MMG cash flow from 01/01/18 to 31/12/18

Cash in bank - Start Balance 30/01/2018.....	£165.05
Expenditure	
Anglian Lepidoptera.....	£78.60
Total expenditure during the year.....	<u>£78.60</u>
Income	
Total income during the year.....	£103.33
Total income + cash in bank.....	£268.38
Total expenditure during the year.....	- 78.60
End balance at 31/12/18.....	<u>£189.78</u>

The Website

There haven't been any major changes to the website during that year, but it carries on being an excellent tool for id and for keeping an eye on events, the Blog, and the Stop Press for any interesting and new species as they are recorded, and, just generally, promoting everything 'mothy' the best way we can.

Finally, I would, again, like to say a big thank you to Mike Haigh for all his hard work during the year with the website, and for updating and maintaining our database. Also, many thanks to Douglas Boyes for his sterling work in maintaining our blog and the Stop Press and to Julie Pearce for taking on the duties of 'events coordinator'.

Thanks to those members of the MMG (and out of the county moth-ers) who have brought along their traps to boost our trapping potential at events and to those who have helped with setting up and packing away the kit. Of course, a final note of thanks to anyone who brought along cake and other goodies to the events which we all very much enjoy.

Lastly, thanks to all you moth-ers out there for using the MMG facilities, when all said and done, that's what makes it work

I hope we all have a great mothing year in 2019.

Peter.