

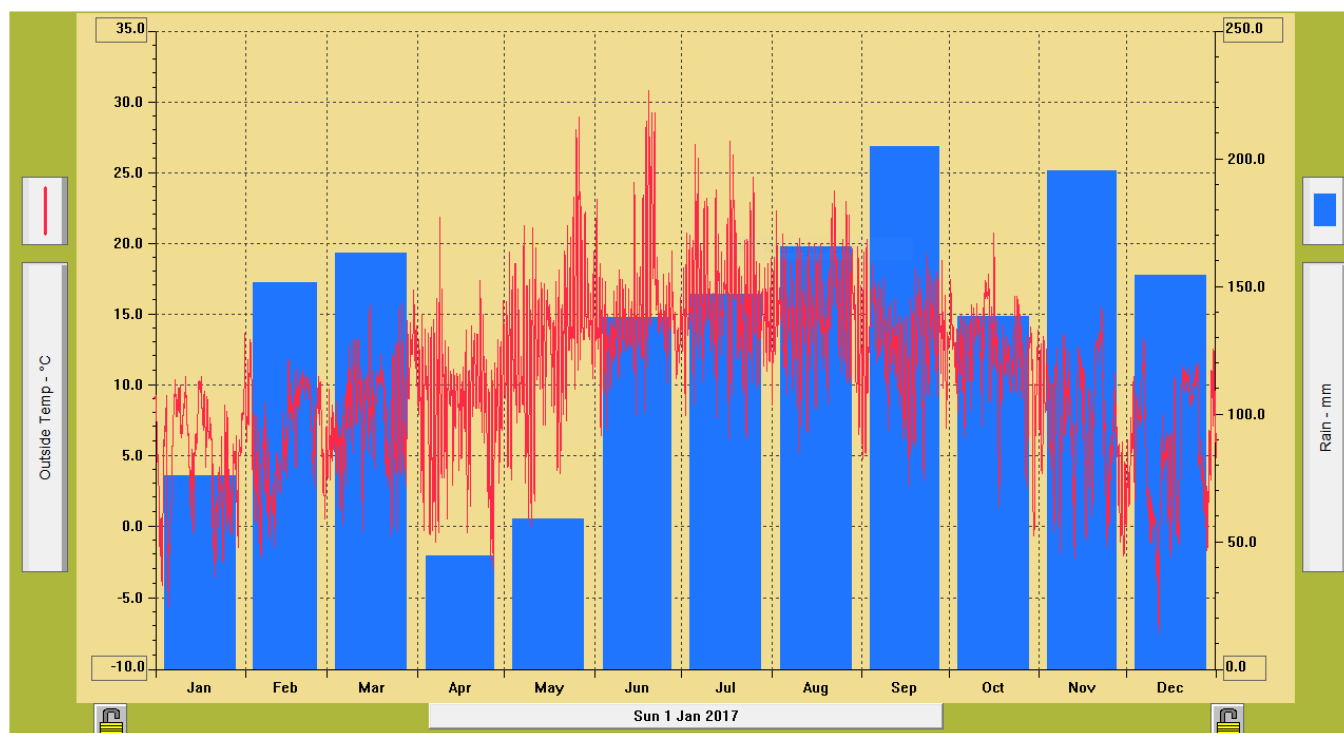
# Mothing in Montgomeryshire – 2017 Annual Report

## Weather Conditions

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 represent the county as a whole.

As can be seen in the graphic below, that apart from January, April and May which were drier than their average, the remaining months were wet or very wet, the wettest being September which drenched us with 204.5mm, which is nearly double the average for that month.

It wasn't a particularly cold year and the mercury only dropped below freezing on 53 days, many of which were only just below zero. The coldest temperature reached -7.4 on December 12<sup>th</sup>. At the other end of the scale the temperature reached 26.5c (80.0f) on eight occasions, the hottest day was 30.8c (87'5f) on the 19<sup>th</sup> June.



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

Points of particular interest are: -

Feb. 22<sup>nd</sup> - the wettest day of the year with 44.96mm.

September had the wettest month with 204.5mm.

April had the driest month with 44.5mm.

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

June 19<sup>th</sup> – the temp. reached 30.8c – the hottest June day since 2004.

December 12<sup>th</sup> – the temp dipped to -7.4c, the coldest night of the year.

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

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

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 2017

New species recorded in the county were lower again during 2017, but we did manage to record seven new micro and one new macro species.

#### Details of new micro species recorded

0145 *Nemophora minimella*: swept during the day at Llanymynech Hill (ANG & JEG) 09/07/17.

0289 *Caloptilia falconipennella*: one came to light at Middletown. This is the first record of this 'Nationally Scarce B' species for north Wales. Confirmed by gen det. (DBo) 14/03/17.

0337 *Phyllonorycter hilarella*: leaf mines found on goat willow at The Breidden (*Salix caprea*) were reared. (ANG & JEG) 09/11/16.



0442 *Cedestis gysselella*: came to light at Commins Coch (PRW) 03/08/17

0783 *Bryotropha boreella*: two recorded at Hafren Forest and confirmed by gen det (DBo). This 'Nationally Scarce B' species is usually associated with high moorland and has only relatively recently been discovered in Wales 05/07/17.

0914 *Scythris crassiuscula*: found by day at Llanymynech Hill (ANG, JEG) 08-07-17 and confirmed by gen det (ANG).

1001 *Lozotaeniodes formosana*: one came to light at Middletown (DBo). The species is said to be spreading rapidly as a resident and may possibly also turn up as an immigrant 01/07/17.



*Lozotaeniodes formosana*



*Phyllonorycter hilarella*

#### **Details of new macro species recorded**

**1843** Thyme Pug *Eupithecia distinctaria*: recorded at Llanymynech Rocks (GO). This is a species associated with calcareous soils 01-07-17.

#### **Other notable species recorded during the year**

0276 *Bucculatrix demaryella*: One came to light at Bryn yr Ysbyty (DBo & PRW) and was confirmed by gen det. This species is probably under-recorded and was last seen in the county in 1980. 03/07/17.

1680 Maiden's Blush *Cyclophora punctaria*: One came to light at Middletown (DBo). This is the first time this species of oak woodland has been seen in the county since 1998. 16/08/17.

1815 Cloaked Pug *Eupithecia abietaria*: Three came to light at Hafren Forest (DBo). This species had not been seen in the county since the 1980s. It is associated with non-native conifers so may be present in other plantations across the county 05-07-17.

1823 Netted Pug *Eupithecia venosata*: This striking species came to light at Llanymynech Rocks (GO). It had not been seen in the county for over 100 years. The moth is associated with calcareous soils where the larvae feed on bladder campion (*Silene vulgaris*) 25/05/17.

2159 Dog's Tooth *Lacanobia suasa*: One came to light at Cors Dyfi reserve (DBo); the third county record and first since 2004 07/08/17.



Cloaked Pug  
*Eupithecia abietaria*



Dog's Tooth  
*Lacanobia suasa*



Netted Pug  
*Eupithecia venosata*

#### **Key to the above recorders**

ANG – Andrew Graham, JEG – Janet Graham, PRW – Peter Williams, Dbo - Douglas Boyes,  
GO – Greg Osborn

## End of Year Statistics

Summary of end of year statistics; figures in parenthesis show 2016 totals.

- Numbers of records were much improved during 2017 after a very poor 2016, and we managed to add a total of 18,071(10,147) records to our database. The share between macro and micro was; 15,449 (8773) macro and 2,622 (1,374) micro. We now have 191,540 (176,091) macro records and 32,910 (30,288) micro records, giving us a grand total of 224,450 (206,379) records in the database.
- Total number of species now held in our database is 525 (522) macro species and 649 (642) micro species giving us a total of 1171 species recorded in the county.
- Total species recorded in 2017 was 428 macro species and 282 micro species, giving a grand total of 710 (627) species for the year – a vast improvement on the previous year.

The following charts show the 2017 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 for the year.

In the macro moths the Flame Shoulder took the top spot and pushed the Large Yellow Underwing into second place, with the Hebrew Character moving up from fifth to third. In the micros *Anania hortulata* moved up from second to first place and there were three new entries into the top five *Pleuroptya ruralis*, *Chrysoteuchia culmella*, and *Udea olivalis*.

Rank	Log No.	Macro Species	Records	Rank	Log No.	Micro Species	Records
1 (3)	73.329 (2102)	Flame Shoulder	282 (247)	1 (=2)	63.025 (1376)	<i>Anania hortulata</i>	144 (51)
2 (1)	73.342 (2107)	Large Yellow Underwing	269 (205)	2 (-)	63.038 (1405)	<i>Pleuroptya ruralis</i>	102 (-)
3 (5)	73.249 (2190)	Hebrew Character	252 (139)	3 (-)	63.080 (1293)	<i>Chrysoteuchia culmella</i>	97 (-)
4 (4)	70.097 (1764)	Common Marbled Carpet	231 (149)	4 (-)	63.037 (1392)	<i>Udea olivalis</i>	81 (-)
5 (2)	70.226 (1906)	Brimstone Moth	227 (167)	5 (=2)	49.166 (1076)	<i>Celypha lacunana</i>	78 (44)

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

Quantities in the macro moths are greatly up on 2016 and in the macro moths the Large Yellow Underwing, still holds top spot. Two species new to the top five are Mottled Umber and Buff Footman. In the micros all five species are new to the top five with *Chrysoteuchia culmella* taking the top spot.

Rank	Log No.	Macro Species	Counts	Rank	Log No.	Micro Species	Counts
1 (1)	73.342 (2107)	Large Yellow Underwing	2326 (1720)	1 (-)	63.080 (1293)	<i>Chrysoteuchia culmella</i>	547 (-)
2 (3)	73.249 (2190)	Hebrew Character	1431 (583)	2 (-)	63.038 (1405)	<i>Pleuroptya ruralis</i>	436 (-)
3 (4)	73.329 (2102)	Flame Shoulder	1222 (487)	3 (-)	16.001 (424)	<i>Yponomeuta evonymella</i>	271 (-)
4 (-)	70.256 (1935)	Mottled Umber	1212 (-)	4 (-)	41.002 (873)	<i>Blastobasis adustella</i>	257 (-)
5 (-)	72.043 (2049)	Buff Footman	1158 (-)	5 (-)	63.025 (1376)	<i>Anania hortulata</i>	253 (-)

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

The top five macro and the micro species are the same as 2016.

Rank	Log No.	Macro Species	All records	Rank	Log No.	Micro Species	All records
1 (1)	73.342 (2107)	Large Yellow Underwing	3158 (2884)	1 (1)	63.064 (1334)	<i>Scoparia ambigua</i>	1004 (949)
2 (2)	73.329 (2102)	Flame Shoulder	2923 (2638)	2 (2)	63.038 (1405)	<i>Pleuroptya ruralis</i>	1003 (901)
3 (3)	70.226 (1906)	Brimstone Moth	2634 (2404)	3 (4)	63.067 (1338)	<i>Eudonia lacustrata</i>	917 (856)
4 (4)	73.249 (2190)	Hebrew Character	2581 (2329)	4 (3)	63.089 (1305)	<i>Agriphila tristella</i>	895 (851)
5 (5)	70.097 (1764)	Common Marbled Carpet	2533 (2301)	5 (5)	49.166 (1076)	<i>Celypha lacunana</i>	856 (777)

## The 2017 Moth Group Events – MMG

During the year we held 8 events throughout the county, all of which were well attended. Full reports for 2017 can be seen on the 'events' page of the web site, but here are some of the year's highlights: -

**Early April event** - Our first event of the year at **Dolforwyn Woods Nature Reserve** got us off to a good start with 30 species being recorded, 9 of which were new site records. The best species was a **Mottled Grey**, a species predominantly found on the western side of the county.

Our next event was at **Deri Woods Nature Reserve** in **late April**. The weather conditions for this event was fairly cool therefore the total species count was only 23, but it was good to get a couple of **Dwarf Pug** recorded, a species which can be rather thin on the ground in some years.

The **late May** event was at a new site for us on the banks of **Lake Vyrnwy**. The weather conditions were quite foul at times with drizzle and murky visibility, but the 10 people you turned out for the event weren't disappointed as we managed to bag 63 species (one of our higher counts for the year), the best probably being the **Welsh Wave** and the **Dwarf Pug**.



In the **late June Event** we were once again at **Coed Y Dinas Nature Reserve**. The mild conditions ensured that the 12 people who turned up were treated to our best species count for the year of 108 (41 micro and 67 Macro) and 34 of these were new site records. The notable species were **Double Lobed**, **Dingy Shears**, **Southern Wainscot**, **Obscure Wainscot**, **Clay triple-lines**, **Scallop Shell** and ***Batrachedra praeangusta***.

Our **Late July Event** was at **CAT (Centre for Alternative Technology)** where we had our best turn out of the year for any event with 28 people attending. We were once again targeting the 'nationally scarce A' species of the **Barred Carpet** and we weren't to be disappointed as we recorded 10 individuals. In all we recorded 76 species of which the **Bordered White** and ***Agonopterix conterminella*** were worth an extra mention.



The **Mid August Event** was held at **Pont Llogel SSSI** where the fairly mild conditions gave us a reasonable bag of 65 species (17 micro and 48 macro) where 23 were new site records. Notable species were; Clay Triple-lines, Wood Carpet, Blue-bordered Carpet and the best species of the night was the Barred Chestnut a scarce and local species in the county where 8 were recorded.

Our **Mid September** event was at **Cors Dyfi Nature Reserve**, one of the sites we visit annually. Unfortunately, it was a cool evening with light drizzle which kept the number of species down to 23. Notable species were the **Pale Pinion** and a new site record of ***Agonopterix ocellana***, the best species of the evening was definitely a new site record of an **Orange Sallow** which had previously been recorded at three other sites in the county.



Orange Sallow from Cors Dyfi



Mating Red-green Carpet from Llandinam Gravels

Our final event of the year was the 'Moth Night, event in **Mid October** at **Llandinam Gravels Nature Reserve**, the theme of the event was species attracted to ivy, but we were where also targeting migrant species. The evening was fairly mild and overcast which enabled us to record a very respectful (for the time of year) 29 species, 20 of which were new site records. The best records of the evening were probably the **Brick** and **Dark Chestnut**, both of which can be quite elusive species in the county. Unfortunately, no migrants were recorded at the event.

**Please note** Our new programme of events for 2018 can now be found in the 'Events' area of the website. Please come along and support us wherever you can.

#### **Footnote regarding events from 2018 season**

As many of you are aware, due to ongoing health problems, 2017 has been my last year of organising and running our public mothing events. As for the public events from 2018 we have formed a small group from our regular moth-ers which we are calling our 'events team' who will oversee and run the events from then on. The team comprises of Douglas Boyes (who will be doing the administrative side of things as well as helping with the events when available) and Paul Roughley and Gavin chambers who will be the main 'hands on' team at the events. I'm sure they'll all do a great job and I hope you'll all carry on supporting them.

#### **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 28/04/2017 to 31/12/17**

### **Cash in bank**

28/04/2017.....£102.06

### **Expenditure**

Butterfly Conservation bid for Barred Carpet..... £27.00  
CWCS web charges.....47.98  
To be returned on next statement - accidently taken from account..... 8.49  
Total expenditure during the year.....£83.47

### **Income**

Easyfundraising... .. £64.47  
Donation..... 45.00  
Total income during the year.....£109.47

### **Summary**

**Cash in bank at 28/04/2017**.....£102.06  
**Total income during the year**..... 109.47  
**Returned monies accidently taken from account**.....41.99  
**Sub Total**..... £253.52  
**Total expenditure during the year**.....- 83.47  
  
**Account balance in the MMG bank account**.....£170.05

### **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.

**In Conclusion** 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.

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 2018.

Peter.