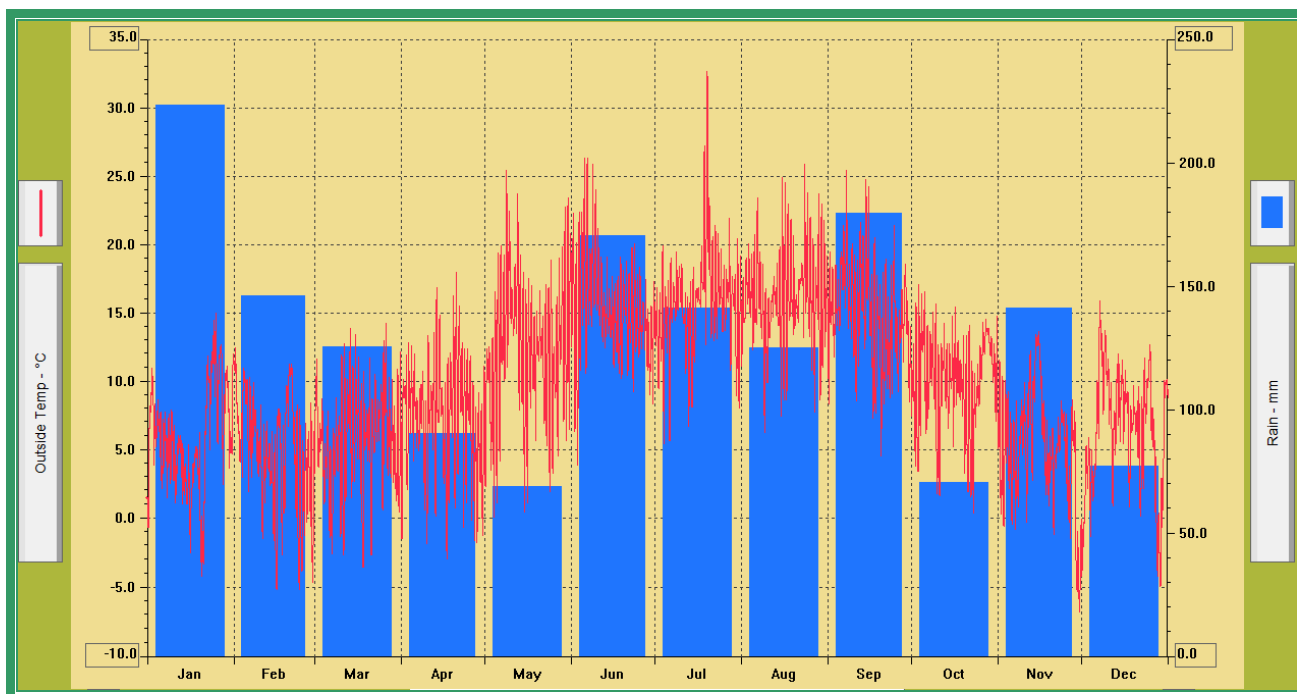


Mothing in Montgomeryshire – 2016 Annual Report

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.

Generally speaking, in relation to the weather, it was quite an inconsistent mothing year. After a very wet January the next few months were consistently drier and we had to wait until May before the mercury hit 20c. The summer months in general were quite wet, with just average temperatures, but in the middle of July we had a mini heat-wave and the temperature reached 32.6c (30c and above is rare in mid Wales). Rainfall in October and December was well below average, although, November was pretty wet again and, apart from a couple of dips, the temperature held up pretty well until the end of the year.



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

Points of particular interest are:-

Jan. 25th - 15c, the highest January temperature since 2004

Jul. 19th - 32.6c, the highest temperature of the year (second highest temperature recorded since 2004).

Dec. 7th - 15.9c, the second highest December temperature since 2004.

Nov. 30th - minus 6.7c, the coldest night of the year.

Feb. 20th - the wettest day of the year with 38.6mm.

January had the wettest month with 223mm.

May had the driest month with 68.8mm.

In general the yearly rainfall of 1558.3mm was a bit above the yearly average.

The mean temperature for the year was 10c, 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	15.0	25	-4.2	20	6.0	30.5	26	223.0
Feb	12.6	1	-5.1	16	4.8	38.6	20	146.0
Mar	14.3	26	-3.5	18	5.8	26.2	1	125.5
Apr	18.0	20	-2.9	17	7.2	16.3	11	90.4
May	25.5	8	0.2	4	12.5	10.2	27	68.8
Jun	26.3	5	3.9	3	15.3	18.8	19	170.2
Jul	32.6	19	5.6	4	15.6	26.4	16	141.0
Aug	25.9	23	6.3	9	16.0	28.7	21	125.0
Sep	25.4	7	4.6	20	14.9	29.2	3	179.6
Oct	17.1	3	0.5	23	10.0	19.3	17	70.6
Nov	13.7	15	-6.7	30	5.2	28.2	21	141.2
Dec	15.9	7	-4.9	29	6.4	14.7	8	77.0

The Moths - New Species Recorded

Once again the number of new species recorded in the county fell away, but we still managed to add 12 species to the list, 3 macro and 9 micro.

Details of new micro species recorded



1254 ~ *Cydia strobilella*

0038 *Ectoedemia subbimaculella*, a leaf mine found on oak on Breidden Hill (ANG & JEG) 08/11/2016
 0090 *Stigmella tiliae* leaf mine found on a mature lime tree on Breidden Hill (ANG & JEG) 24/09/2016
 0273 *Bucculatrix thoracella* leaf mine found on a mature lime tree on Breidden Hill (ANG & JEG) 24/09/2016



1436 ~ *Acrobasis repandana*

0275 *Bucculatrix bechsteinella* a leaf mine found on hawthorn.

Llanymynech Hill (ANG & JEG.) Sept' 2016

0336 *Phyllonorycter dubitella*, leaf mines on goat willow (tenanted) on Breidden Hill (ANG & JEG) 24/09/2016



1517 ~ *Adaina microdactyla*

1254 *Cydia strobilella* associated with coniferous trees, was found at Llanfechain (PGC) 08/05/2016

1436 *Acrobasis repandana* one came to light at Commins Coch (PRW); the first record for north Wales. The species is associated with oak trees 23/07/2016

1441 *Oncocera semirubella* an individual was caught on a warm night in Middletown (DBo). This 'nationally scarce



1441 ~ *Oncocera semirubella*

B' species is reputedly expanding its range so this might represent a resident individual. However, it is more likely to be a migrant. The moth was caught during a period of migratory activity and this species is known to travel from continental Europe in large numbers 23/07/2016

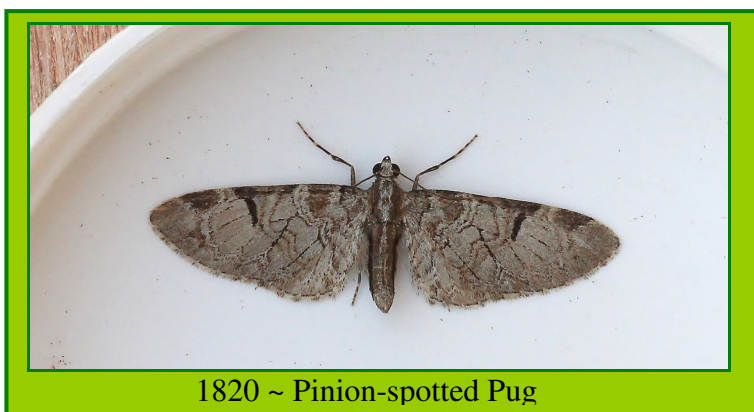
1517 *Adaina microdactyla* came to light (AT). The foodplant for the species is hemp-agrimony
16/06/2016

Details of new macro species recorded

0382 Six-belted Clearwing *Bembecia ichneumoniformis*, 'nationally scarce B' is typically found in brownfield sites in North Wales. Fitting this trend, the species was seen at Llanymynech Rocks (BF)
14/07/2016

1771 Juniper Carpet *Thera juniperata*, came to light at Aberbechan (JP & MTT) 20/10/2016

1820 Pinion-spotted Pug *Eupithecia insigniata* this 'nationally scarce B' species is usually restricted to southern and central England. This record from Llandyssil (MEG) probably represents the first for Wales
18/05/16



Key to the above recorders

ANG – Andrew Graham
JEG – Janet Graham
PGC - Patrick Clement
PRW – Peter Williams
DBo - Douglas Boyes
AT – Alan Tadman
BF – Bryan Formstone
JP – Julie Pearce
MTT – Mark Thomas
MEG - Meurig Garbutt

End of Year Statistics

Summary of end of year statistics; figures in parenthesis show 2015 totals.

- Numbers of records in general were down during 2016, but we did manage to add a total of 10,147 (14,304) records to our database. The share between macro and micro was; 8773 (11,973) macro and 1374 (2,331) micro. We now have 176,091 (167,345) macro records and 30288 (28,855) micro records, taking us past the 200,000 barrier and giving us a grand total of 206,379 (196,200) records in the database.
- Total number of species now held in our database is 524 (521) macro species and 642 (631) micro species giving us a total of 1166 species recorded in the county.
- Total species recorded in 2016 was 383 macro species and 244 micro species, giving a grand total of 627 species for the year. For various reasons this is well over a hundred species down on last year, but one of the chief reasons is, that Douglas, one of our main recorders was rather restricted with trapping due to his studies.

The following charts show the 2016 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.

Once again the Large Yellow Underwing holds top spot in the macro moths, with the Brimstone Moth, Common Marbled Carpet and Hebrew Character entering the top five. In the micro moths *Endrosis sarcitrella* has been deposed from top spot and is now only fourth, *Eudonia lacustrata* now holds top spot.

Rank	Log No.	Macro Species	Records
1 (1)	73.342 (2107)	Large Yellow Underwing	247 (205)
2 (-)	70.226 (1906)	Brimstone Moth	167 (-)
3 (2)	73.329 (2102)	Flame Shoulder	162 (183)
4 (-)	70.097 (1764)	Common Marbled Carpet	149 (-)
5 (-)	73.249 (2190)	Hebrew Character	139 (-)

Rank	Log No.	Micro Species	Records
1 (2)	63.067 (1338)	Eudonia lacustrata	51 (90)
=2 (-)	49.166 (1076)	Celypha lacunana	44 (-)
=2 (4)	63.025 (1376)	Anania hortulata	44 (70)
4 (1)	28.009 (648)	Endrosis sarcitrella	41 (92)
5 (-)	63.064 (1334)	Scoparia ambigualis	38 (-)

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

Quantities in the macro moths are generally down, but, in the macro moths the Large Yellow Underwing, which holds top spot, has bucked the trend and has actually increased its total. Two species new to the top five are Flame Shoulder and Common Quaker.

In the micros *Endrosis sarcitrella* holds onto top spot with a huge total of 1960 moths; this is mainly due to Douglas adding the records from his bird nest project for his university degree. Also due to his project he added substantial numbers to three other species in the top five – all of which have rather slanted the year's figures towards species which live and feed in birds' nests. I'm sure things will get back to normal next year. One other point worth mentioning is that *Plutella xylostella* is in at number 4, this is due to the influx of this species from the continent that the UK has been experiencing during the year.

Rank	Log No.	Macro Species	Counts
1 (2)	73.342 (2107)	Large Yellow Underwing	1720 (1408)
2 (1)	73.317 (2089)	Heart & Dart	772 (1627)
3 (3)	73.249 (2190)	Hebrew Character	583 (1139)
4 (-)	73.329 (2102)	Flame Shoulder	487 (-)
5 (-)	73.244 (2187)	Common Quaker	435 (-)

Rank	Log No.	Micro Species	Counts
1 (4)	28.009 (648)	Endrosis sarcitrella	1960 (234)
2 (-)	12.036 (227)	Monopis laevigella	1871 (-)
3 (-)	28.010 (647)	Hofmannophila pseudospretella	538 (-)
4 (-)	18.001 (464)	Plutella xylostella	270 (-)
5 (-)	62.001 (1428)	Aphomia sociella	264 (-)

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

The order of the macros is the same as last year and in the micros, *Eudonia lacustrata* and *Agriphila tristella*, at three and four, have changed places respectively.

Rank	Log No.	Macro Species	All records
1 (1)	73.342 (2107)	Large Yellow Underwing	2884 (2637)
2 (2)	73.329 (2102)	Flame Shoulder	2638 (2476)
3 (3)	70.226 (1906)	Brimstone Moth	2404 (2237)
4 (4)	73.249 (2190)	Hebrew Character	2329 (2190)
5 (5)	70.097 (1764)	Common Marbled Carpet	2301 (2152)

Rank	Log No.	Micro Species	All records
1 (1)	63.064 (1334)	Scoparia ambigualis	949 (912)
2 (2)	63.038 (1405)	Pleuroptya ruralis	901 (864)
3 (4)	63.067 (1338)	Eudonia lacustrata	856 (806)
4 (3)	63.089 (1305)	Agriphila tristella	851 (816)
5 (5)	49.166 (1076)	Celypha lacunana	777 (733)

The 2016 Moth Group Events – MMG



0287 ~ *Caloptilia robustella*

During the year we held 8 events throughout the county, all of which were well attended.

Full reports for 2016 can be seen on the events page of the web site, but here are some of the year's highlights:-

Mid March event - Our first event of the year at **Coed y Dinas Nature Reserve** was fairly run of the mill in coolish



0797 ~ *Neofaculta ericetella*

conditions. We did however manage to record 8 species, which were all new site records.

Early April event on this occasion we were at the **Coed Pendugwm Nature Reserve**, the weather was dry and cold, but we did record 8 species, the best being a **White-marked**, a new species for the site.

Mid May event at **Cors Dyfi Nature Reserve** was dry, but a chilly breeze got up during the evening, which did rather put the dampers on things. Only 33 species were recorded during the evening, however, we did manage to bag three new site records – The micro moth **Neofaculta ericetella** and two macro species, a **Broken-barred Carpet** and a **Small seraphim**. As usual, this event was well attended with 25 people turning up.

The **Mid June Event** was a joint event with Montgomeryshire Wildlife Trust (who was doing bat detecting) at **Dolforwyn Woods Nature Reserve**. This was Butterfly Conservation's 'Moth Night', the theme of which was Hawk Moths. It was a very mild evening with the temperature not falling below 14c. In all, 54 species were recorded, which included 10 new species for the site; the best of these being the fairly uncommon **Little Emerald**. The 'Moth Night' theme of Hawk moths yielded three species – **Poplar Hawk-moth**, **Lime Hawk-moth** and the **Elephant Hawk-moth**. The 10 people who attended the event had an excellent evening.



1674 ~ Little Emerald



1647 Barred Hook Tip

The **Mid July Event** was at the **Bro Dyfi Community Garden**. This was a new venue for us and we had high hopes of a good species list, unfortunately, the weather didn't play ball and it rained throughout the event. However, despite the poor conditions, we did manage to bag 54 species and the 15 people present were treated to three excellent records for the county as a whole – the uncommon **Wood Carpet**, the scarce **Cloaked Minor** and a rather nice micro, the **Large Tabby Aglossa pinguinalis** which had only been recorded on three previous occasions, all on the eastern side of the county.

The **Early August Event** at Llandinam Gravels. The best outing of the year for number of species recorded – over 100 species potted. The pick of the bunch was **Psoricoptera gibbosella** 2nd county record, **Achroia grisella** 3rd county record, **Caloptilia robustella** 7th county record, **Barred Hook-tip** 10th county record. Other noticeable species were **Barred Chestnut** and a **Dingy Shears**.

In **Early September** we trapped at Pont Llogel, one of our favorite sites. We had a good mixed bag, which included several early autumn species. The star of the show however was definitely the 2nd site record of the **Barred Chestnut**, a very illusive species in the county.

Our final event of the year was at **Llanymynech Rocks** where we were hoping to find some migrant activity. However, it wasn't migrants which took centre stage it was the excellent discovery of a small population of **Feathered Ranunculus**. Now, whether this is a stable or a transitory population we've yet to find out, but the site will be trapped throughout the 2017 season, so perhaps by the end of the year we'll be able to answer this nagging question.



2255 Feathered Ranunculus

Please note Our new programme of events for 2017 can now be found in the 'Events' area of the website. Please come along and support us wherever you can.

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 during the past 12 months up to 28/04/17

Expenditure

LCN – web page domain charges--.....	£10.74
Pemberley Books – Field Guide to the Moths of Great Britain and Ireland.....	44.81
Total expenditure during the year.....	£55.55

Income

Easyfundraising... ..	£68.57
Donation.....	£40.00
Total income during the year.....	£108.57

Account balance in the MMG bank account..... **£144.05**

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 thanks goes to Douglas Boyes for maintaining our Stop Press and Blog throughout the year.

Thanks to those members of the MMG 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 2017.

Peter.