Mothing in Montgomeryshire - 2020 Annual Report

General Overview

Well, what a strange year 2020 was for all of us. This awful pandemic which affected everyone in various ways – from those unlucky enough to catch the disease and the incredible burden this put on the NHS and care homes, lockdowns, face masks and social distancing for the rest of us. There was no escape, as we were all engulfed under this dark shroud which had been pulled across the whole world, waiting to see the light at the end of the tunnel. But now, with vaccines being developed at 'break neck speed' there is a fighting chance we can all see a glimmer of light – there is hope. So, how did this all reflect on our mothing?

Mothing Overview

We have all tried to cling onto some kind of normality wherever we can – and for some of us it's recording and studying lepidoptera - and for many more, studying and recording wildlife in general.

The Covid 19 restrictions did affect us quite markedly. Julie Pearce our 'events coordinator' had spent a lot of time and effort putting together our programme for the year only to have all events cancelled just as she was about to publish the programme. Hopefully, some (or all) of the events can be rearranged in the future once restrictions on public meetings have been lifted.

On the plus side (because of a lack of events) Douglas and I ran various Lockdown challenges throughout the year to keep everyone engaged and in the loop. All recorders in the county were informed and kept up to date with these challenges on our 'group Facebook page', our blog and mailing list. Various challenges will also be held during 2021.

Interestingly, the lockdown restrictions did mean that people in general were looking for things they could do at home and this certainly led to a good number of individuals taking up moth trapping. Therefore an influx of records from various sites from around the county and our established recorders did more trapping than in the average year - this rise in recorder numbers, fieldwork and trapping then resulted in an excellent number of 20 new county records for us for the year.

The Moths - New Species Recorded in Montgomeryshire During 2020

There were 12 new micro species recorded, the details are: -

0008 Eriocrania unimaculella - Leaf mine found on birch, Lake Vyrnwy (GBC). This species is infrequently recorded in North Wales (though is likely rather overlooked). Recorded as part of May's 'Mine of the Month' challenge. 02/05/20



Eriocrania unimaculella

- 0011 Eriocrania cicatricella At least ten found mining birch on Middletown Hill (CBo). Subsequently recorded at Lake Vyrnwy (GBC), Berriew (TW), and Aberbechan (JP). No doubt previously overlooked. Recorded as part of May's 'Mine of the Month' challenge. 06/05/20
- 0022 Ectoedemia louisella tenanted leaf-mine was found in the seeds of field maple at Aberbechan (JP&MTT). This is a new record for north Wales. 03/07/20
- 0180 Diplodoma laichartingella recorded by day at Llanfyllin (MDH). A rarely recorded species in north Wales that is likely to be under-recorded as the adults of this family (Psychidae) seldom come to light. 19/06/20



Diplodoma laichartingella

- 0363 Phyllonorycter joannisi leaf mine found at Aberbechan (JP & MTT), creating a 'green island' on a Norway Maple leaf. A sparsely recorded species in North Wales owing to the absence of the (introduced) foodplant from most areas. 06/11/20
- 0590 Perittia obscurepunctella tenanted leaf-mines found on honeysuckle at Middletown (CBo). This is a 'Nationally Scarce B' species but is probably somewhat overlooked. 12/06/20
- 0889 Mompha divisella recorded at Guilsfield (AH & IH) and confirmed by gen det (ANG). A 'Nationally Scarce A' species that feeds on willow-herbs. 19/10/20
- 0974 Argyrotaenia ljungiana recorded at Lake Vyrnwy (GBC). This is unlikely to be a new arrival but more likely to have been previously overlooked due to its upland habitat. 14/05/20
- 1034 Spatalistis bifasciana Came to light at Commins Coch (PRW), a first for North Wales. 30/05/20
- 1117 Ancylis unguicella recorded at Lake Vyrnwy (GBC). A moorland species that is probably somewhat overlooked in the county. 14/05/20



Ancylis unguicella

1292 Calamotropha paludella - this species, which is associated with wetland habitats, came to light at Guilsfield (SOS). It was subsequently recorded by AT (Derwenlas) on 05/08/20. 25/07/20



Calamotropha paludella

1375 Ostrinia nubilalis - came to light at Derwenlas (AT). First record for north Wales. This record probably represents a migrant individual, though the species is now resident in some parts of England and is spreading rapidly. 15/09/20

There were 8 new macro species recorded, the details are; -

- 1705 Dwarf Cream Wave came to light at Carreghofa, nr Llanymynech (CSB). 10/07/20
- 1855 Cypress Pug Eupithecia came to light at Llandyssil (MEG). A species that colonised the UK in the 1950s and is spreading through predominantly suburban areas. A second record for North Wales. 29/09/20
- 1987 Bedstraw Hawk-moth A migrant species that is rarely seen inland. Came to light at Guilsfield (SOS). 24/08/20



Bedstraw Hawk-moth

- 1978 Pine Hawk-moth came to light at Llandinam (PVI). This represents the first record for North Wales. 28/05/20
- 2076 Kent Black Arches an individual came to light at Commins Coch (PRW), the first record for north Wales. This is a 'Nationally Scarce B' species that appears to be undergoing rapid range expansion. 30/06/20
- 2085 Archer's Dart came to light at Commins Coch (PRW). This species is locally common along the Welsh coast and is likely to represent a wanderer. 22/08/20
- 2313 Angle-striped Sallow came to light at Rhoslan (SS). A 'Nationally Scarce B' species with very few records in North Wales. 16/08/20



Angle-striped Sallow

2493 Dotted Fan-foot - a rather battered individual came to light at Commins Coch (PRW), a first for Wales. This species was formerly restricted to the South East of England, but is spreading westward. It was recorded in Worcestershire last year. Apparently vagrant individuals such as these may represent the "advance guard" in the species' range expansion. 14/06/20

Notable micro species recorded during the year (where there are 5 or less records in the database).

- 0001 Micropterix tunbergella, Llanfyllin, MDH, 29/05/20, adult to light. 3rd. county record.
- 0001 Micropterix tunbergella, Pantycelyn Llanfyllin, GBC, 06/05/20, adult by day. 2nd. county record.
- 0012 Eriocrania sangii, Aberbechan JP, verified DHB, 10/05/20 Leaf mine on birch tenanted 2nd. county record.
- 0023 Ectoedemia argyropeza, Middletown, CBo, verified DHB, 10/11/20, leaf mine, 3rd. county record.
- 0038 Ectoedemia subbimaculella, Middletown, CBo, verified DHB, 10/11/20, leafmine. 2nd. county record.
- 0038 Ectoedemia subbimaculella, Llanllwchaiarn, JP, verified DHB, 13/11/20, leafmine. 3rd. county record.
- 0038 Ectoedemia subbimaculella, Moelygarth, NiB, 13/11/20, leafmines. 4th. county record.
- 0039 Ectoedemia heringi, Middletown, ČBo, verified DHB, 12/11/20, leaf mine, 2nd. county record.
- 0039 Ectoedemia heringi, Llanllwchaiarn, JP, verified DHB, 13/11/20.Larva in mine. 3rd. county record.
- 0073 Stigmella trimaculella, Llanllwchaiarn, JP, verified, DHB, 08/11/201, leafmine on Black Poplar, 3rd. county record.
- 0200 Psychoides filicivora, Middletown, CBo, verified DHB, 24/05/20, adult by day. 4th. county record.
- 0200 Psychoides filicivora, Middletown, CBo verified DHB, 30/05/20, adult by day, 5th. county record.
- 0228 Monopis weaverella, Middletown, CBo, verified DHB, 26/05/20, adult to light, 3rd. county record.
- 0236 *Tineola bisselliella* Recorded at Commins Coch (PRW). This species of clothes moth had not previously been seen in the county since 2003. 29/05/20. 5th. county record.
- 0289 Caloptilia falconipennella, Middletown, CBo, verified DHB, 25/11/20, leafmine, 4th. county record.
- 0333 Phyllonorycter viminella, Guilsfield, SOS, verified DB, 11/11/20, leafmine, 4th. county record.
- 0437 Swammerdamia caesiella, Commins Coch, PRW, 24/06/20, adult to light. 3rd. county record.
- 0437 Swammerdamia caesiella, Commins Coch, PRW, 25/06/20, adult to light. 4th. county record (possibly the same moth directly above).
- 0437 Swammerdamia caesiella, Commins Coch, PRW, 14/07/20, adult to light, 5th. county record.
- 1205a Spilonota laricana, Commins Coch, PRW, 25/06/20, adult to light. 5th. county record
- 1205a Spilonota Iaricana, Commins Coch, PRW, 16/06/20, adult to light. 4th. county record
- 1241 Grapholita compositella, Fron Heulog, TW, 28/05/20, adult to light, 4th. county record.
- 1284 Dichrorampha vancouverana, Commins Coch, PRW, 24/06/20, adult to light, 3rd. county record.

Notable macro species recorded during the year (where there are 5 or less records in the database).

- 0371 Lunar Hornet Moth RSPB Lake Vyrnwy GBC 21/07/20, by day. 3rd. county record.
- 0373 Currant Clearwing, Llandinam, PI, verified PRW, 08/06/20, adult by day, 5th. county record.
- 0373 Currant Clearwing, Aberbechan, JP, verified PRW, 30/05/20, pheromone Lure, 4th. county record.

- 1680 Maiden's Blush, Rhos-y-Brithdir, SS, verified PRW, 16/08/20, adult to light, 4th. county record.
- 1771 Juniper Carpet Guilsfield AH & IH, 22/10/20, adult to light verified PRW, 3rd. county record.
- 1972 Convolvulus Hawk-moth Recorded at Llandyssil (MEG). This is first county record in twenty years of this uncommon immigrant 21/08/20. 3rd. county record.
- 1972 Convolvulus Hawk-moth, recorded in Welshpool (GJ) on the 27/09/20. 4th. county record.
- 2145 Nutmeg An individual came to light at Llandyssil (MEG): the first county record since 1988. 03/08/20, 3rd. county record.
- 2412 Silver Hook, Llandinam, PI, verified PRW, 25/06/20, adult to light. 4th. county record.

Key to all recorders

MDH – Mike Haigh JP – Julie Pearce MTT – Mark Thomas GBC – Gavin Chambers CBo – Clare Boyes DHB – Douglas Boyes PRW – Peter Williams AH – Alastair Hotchkiss IS – Isobelle Hotchkiss MEG – Meurig Garbutt PVI – Paul Irving NiB – Nick Burton SOS – Sue Southam SS – Simon Spencer CSB - Clare Backshall AT- Alan Tadman TW – Tim Ward GJ - Gwenno Jones

End of Year Statistics for 2020

Summary of end of year statistics; figures in parenthesis show 2019 totals.

• Numbers of records were up for the year, macros were up by over 6,000 records, which will be due to increase recorders and trapping and the micros were up as well by nearly 400 records, due in no small part by the increased leaf mine records we received for the year.

• The breakdown is: - we added a total of 20,942 (14,567) of records to our database. The share between macro and micro records was; 18,306 (12,275) macro and 2,636 (2,292) micros. We now have 241,335 (220,393) macro records and 40,624 (37,988) micro records, giving us a grand total of 281,959 (258,381) records in the database.

• Total number of species now held in our database is 536 (528) macro species and 672 (660) micro species giving us a total of 1208 species recorded in the county.

• Total species recorded in 2020 was 424 (406) macro species, 18 species up on 2019 and 294 (272) micro species, 22 species up on 2019, giving a grand total of 718 (678) species for the year – a rise of 40 species on the previous year.

The following charts show the 2020 rank of the top five species in various categories recorded in Montgomeryshire.

<u>Please note</u> the previous year's rank/records are shown in parenthesis and a dash indicates that the species was not in top five the previous year. BF Log numbers shown in brackets, 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 species 'by records' for the year.

Rank	Log No.	Macro Species	Records	R	ank	Log No.	Micro Species	Records
1 (2)	73.342 (2107)	Large Yellow Underwing	432 (208)	1	(4)	63.067 (1338)	Eudonia lacustrata	105 (73)
2 (4)	73.317 (2089)	Heart & Dart	342 (199)	2	2 (-)	63.025 (1376)	Anania hortulata	100 (-)
3 (-)	70.226 (1906)	Brimstone Moth	325 (-)	3	(2)	63.08 (1293)	Chrysoteuchia culmella	96 (78)
4 (-)	72.019 (2061)	Buff Ermine	270 (-)	4	+ (-)	63.037 (1392)	Udea olivalis	79 (-)
5 (3)	73.329 (2102)	Flame Shoulder	268 (200)	5	(5)	63.064 (1334)	Scoparia ambigualis	77 (72)

In the macro moths the Large Yellow Underwing took over the top spot from the Hebrew Character which doesn't even show in the top five species. No spring species did well in this category, it was a poor spring for trapping. Heart & Dart moves up to second place and the Brimstone Moth and Buff Ermine move into the top five.

In the micros *Eudonia lacustrata* moves into top spot from fourth place and *Anania hortulata* moves straight into the top five into second place as does *Udea olivalis* into fourth place.

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

Rank	Log No.	Macro Species	Counts	R	ank	Log No.	Micro Species	Counts
1 (4)	73.317 (2089)	Heart & Dart	3744 (1965)	1	(1)	63.080 (1293)	Chrysoteuchia culmella	663 (1037)
2 (2)	73.342 (2107)	Large Yellow Underwing	3553 (2415)	2	2 (2)	63.093 (1304)	Agriphila straminella	506 (572)
3 (1)	72.043 (2049)	Buff Footman	1695 (2581)	3	(3)	63.067 (1338)	Eudonia lacustrata	371 (563)
4 (3)	73.249 (2190)	Hebrew Character	1648 (2358)	4	l (-)	63.064 (1304)	Scoparia ambigualis	277 (-)
5 (-)	72.044 (2044)	Dingy Footman	1288 (-)	5	5 (-)	7.006 (0150)	Adela reaumurella	274 (-)

Quantities recorded for the macro moths were rather mixed again when viewed against 2019 figures. Heart & Dart had an excellent year moving up from fourth to first place and its count was nearly doubled from last year's figure. Large Yellow Underwing stayed in second place, again, with increased numbers and the Dingy Footman was new in at fifth place. Despite a poor spring the Hebrew Character managed to stay in the top five into fourth place. Dingy Footman was new in at number five.

The top three species remained unchanged (interestingly all down on the 2019 figures), but new in at four and five were *Scoparia ambigualis and Adela reaumurella* respectively. Quantities in general do look to be rather down on 2019 figures.

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	4063 (3635)	1 (1)	63.038 (1405)	Pleuroptya ruralis	1254 (1187)
2 (2)	73.329 (2102)	Flame Shoulder	3658 (3390)	2 (2)	63.064 (1334)	Scoparia ambigualis	1228 (1151)
3 (3)	70.226 (1906)	Brimstone Moth	3355 (3030)	3 (3)	63.067 (1338)	Eudonia lacustrata	1161 (1056)
4 (4)	73.249 (2190)	Hebrew Character	3223 (2975)	4 (4)	63.089 (1305)	Agriphila tristella	1107 (1053)
5 (5)	70.097 (1764)	Common Marbled Carpet	3127 (2863)	5 (5)	63.08 (1293)	Chrysoteuchia culmella	1073 (977)

The top five species in our database 'By records' were unchanged for both the macro and micro moths.

The 2020 Moth Group Events - MMG

No public events were held during the 2020, due to covid restrictions.

News as regards the 'Events team'

I'm sure Julie Pearce (our events coordinator) will look at getting some events up and running again once all the lockdown restrictions have been lifted, hopefully sometime in 2021, so, something to look forward to.

One of our 'events team', Gavin Chambers has moved back to Scotland, therefore on behalf of the MMG I would like to thank Gavin for all his help with the events team over the years, and I'm sure we all wish him well in his new post of Galloway Reserves Warden.

Current members of the 'events team' are Julie Pearce, Mark Thomas, Douglas Boyes, Paul Roughley, Phil Mcgregor and Peter Williams.

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 of our website, you can contribute to our funds - every little bit helps!

MMG cash flow from 01/01/20 to 31/12/20

Cash in bank - Start Balance 01/01/2020£130.40
<u>Outgoings</u>
LCN.com (web domain payment)£47.94
Total expenditure during the year <u>£47.94</u>
Income (and a refund)
Donations£60.00
Easy fundraising£17.35
Outstanding refund paid£68.99
Total income + cash in bank£276.74
Total expenditure during the year47.94
End balance at 31/12/20 <u>£228.80</u>

The Website

There weren't any major changes to the website during the 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.

So, I would again, like to say a big thank you to Mike Haigh for all his continued 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' and for overseeing our Facebook group page and finally thanks go to all the other members of the 'Events Team', who were poised to go into action – had there been any events.

Lastly, thanks to all you moth-ers out there for sending us your records each year and I hope that using the MMG facilities has proved helpful to you all.

I hope we all have a great mothing year in 2021.

Peter.