

**ESSEX MOTH GROUP
ANNUAL NEWSLETTER
2020
COMPILED BY DOUGAL URQUHART**



**MOCHA - WOODFORD GREEN
ROBIN BARFOOT – 31st May 2019**

ESSEX MOTH GROUP
ANNUAL MEETING AND EXHIBITION
THE GREEN CENTRE, WAT TYLER COUNTRY PARK
SATURDAY 22rd FEBRUARY
2020 PROGRAMME

10.30.....**RECEPTION / REFRESHMENTS**

DONATION £10, PAY ON ARRIVAL

10.45.....**WELCOME AND ANNOUNCEMENTS**

DOUGAL URQUHART, ESSEX MOTH GROUP COORDINATOR

11.00.....**GREG BOND** – (FORMER MOTH OFFICER NORFOLK BRANCH B.C.)

MOTHS AND MOTHING IN NORFOLK

12.00.....**JONO FORGHAM** – (ACTIVE NATURAL HISTORIAN AND FORMER TEACHER)

MOTHS OF LITTLE HADHAM PARISH, HERTFORDSHIRE

1.00.....**LUNCH** – CHANCE TO CHAT WITH FRIENDS

2.00.....**GRAHAM EKINS** – MOTHS OF ANDALUCIA AND PORTUGAL

2.30.....**ANDREW RAYBOULD** – MOTH POTTERINGS

3.00.....**GRAHAM BAILEY** – MOTHS OF CANVEY WICK

3.30.....**DOUGAL URQUHART** – SOME MERSEA MOTH CATERPILLARS

3.45.....**DISCUSSION** - VERIFYING ESSEX MOTH RECORDS

4.00.....**LAST REFRESHMENTS** AND A CHANCE TO CHAT WITH FRIENDS

5.00.....**PARK CLOSES – DON'T GET LOCKED IN!**

THANKYOU FOR YOUR CONTINUED SUPPORT AND
GOOD LUCK
WITH THE NEW MOTHING SEASON!

Welcome to the annual meeting of the Essex Moth Group, now into its 23rd year since first starting up in 1996. This is the seventh meeting to be held at the Green Centre at Wat Tyler Country Park after the switch of venue from Lawford in the north of the county. We are indebted to the Essex Field Club for helping to subsidise the cost of hosting this annual meeting. It would be much more expensive for members if it the meeting was held anywhere else in the county.

We thank Peter Harvey of the Essex Field Club for arranging that the Group are able to meet here in the Green Centre, and also for arranging the buffet lunch with the caterers and all the other logistics.

The annual meeting and the newsletter are important to the Essex Moth Group. They both demonstrate the important moth recording work that members carry out across the county of both the common species and the scarcer species too. The annual meeting is the only day-time opportunity where members can meet up with fellow moth enthusiasts to share their experiences and sightings. The newsletter also allows other members to share their account of the previous mothing season, share their sightings as well as their moth images too.

As group co-ordinator, a big thankyou to all those members who have either put together a talk for the meeting, compiled an article for this newsletter, or just attended the meeting at Wat Tyler – in some cases some kind folk have helped with all three! Maybe under the duress of arm-twisting and succumbing to some gentle persuasion, the meeting has a full programme and the newsletter is the usual detailed account. The support has been great and much appreciated throughout the year.

The moths of Essex will appreciate our time and attention!

I trust members will find this newsletter an interesting read. The articles have had very little editing and are read as they were sent in. As chief collator, I've tried to keep the articles compact whilst including the many images sent in and to help keep the length of the whole newsletter down to a minimum number of pages. I've tried to include as many images as possible and apologise if not every one has been shown. All images have been credited, usually to the right-hand side of the page and sometimes with the initials only. I also apologise for any spelling or grammar errors especially with the scientific names. I also apologise for any perceived relaxing of the usual scientific report writing protocol!

If you want to share any other ideas about the Moth Group, you can contact me – Dougal Urquhart as the Moth Group coordinator on 07494866157 or at – dougalurquhart57@gmail.com;
There is an email Yahoo Group on Essex Moths where moth sightings and other topics are posted. As of February 2020, 114 members had joined since 2002. To join this you can either email Brian Goodey at – briangoodey4@gmail.com; Reg Fry at reg.a.fry@btinternet.com; or Tony Prichard at tony.prichard@btinternet.com; One of these moderators will then invite you onto the email forum.

Information about the Essex Moth Group can be found on the Essex Moth Group website at www.essexfieldclub.org.uk/portal/p/Essex+Moth+Group. Help is needed with keeping these pages updated.

At present the moth County Recorder for Essex is Peter Harvey and whilst Peter is more than happy to continue to deal with records, we need a moth specialist to come forward to manage identification requests and organise and promote recording in the county. Contact Peter at: grayspeterharvey@gmail.com;

ESSEX MOTH GROUP FACEBOOK PAGE

The Moth Group Facebook page was started in July 2017 by Simon Wood and has been well used and visited by many members and other moth enthusiasts. Plenty of moth pictures have been posted both of known and unknown identity, providing opportunities for discussion – which is exactly what it is there for.

As of February 2020 the Group had 179 members who had joined.

This is an informal discussion group relating to all things mothy within Essex, UK, VC18 and VC19. All sightings and identification queries are very welcome. When posting a photograph, it would be most helpful to have an idea of the size of the moth, whether at rest or wings-span and of course a date and location for the record.

ESSEX MOTH GROUP ANNUAL MEETING 2019

The Moth Group held its 23rd annual meeting at the Green Centre at Wat Tyler CP on 23rd February 2019 – the sixth year it has now been held at this venue. Numbers attending was around forty and members heard a variety of moth related topics from Essex and further afield.

The main speaker was Lucia Chmurova, the development officer in Kent for Butterfly Conservation, who told us about rearing lepidoptera in Madagascar as well as the Kent's Magnificent Moth Project detailing us on action plans for a number of rare moths. Andy and Melissa Banthorpe the county recorders for Bedfordshire came and told us What's Interesting about Bedfordshire and some of the interesting moths in their county. Richard Dennison showed us a selection of moths from his UK travels, while Graham Bailey told us about the moth highlights in south Essex during 2018. Chris Lewis described his mothing carried out on the Isles of Scilly and moth migrants, lastly Dougal talked about some of the moth changes over recent years at Cudmore Grove Country Park.

ESSEX FIELD CLUB EXHIBITION AND SOCIAL 2019

The Essex Moth Group had a stand at this popular annual exhibition at the Green Centre on Saturday 7th December, manned by Dougal for the sixth year. There were many different stands by different wildlife organisations and there was a turnout of 124 visitors recorded that came to browse the stands – slightly fewer than the previous year. There was the usual tasty buffet lunch and the opportunity to socialise with folk.



2021 – YEAR TO CELEBRATE

Essex Moth Group started in 1996 and will celebrate 25 years in 2021!

Any thoughts and ideas as to how we should mark this achievement, let us know!

ESSEX MOTH DATA

There is an increasing concern at the need for Essex moth records to be properly verified before being input by Peter Harvey into the Essex Field Club database. Discussions need to be had with Moth Group members as to the best way forward for moth records to be checked so that we can be happy with the dataset being accurate. Maybe a small committee needs to be set up to help with the verification process and to set up a formal assessment system for some records. It appears there are a lot of records currently on the system that appear not have had a genital dissection and yet the national criteria require them to have had them. We would like to hear views and thoughts from members as to best way forward.

Other topics that need reviewing is making sure the species list for Essex is up to date. There is also a need to review those species on the Essex Red Data Book list as it is almost twenty years old. Some species have increased in distribution over the last two decades while others have declined and need to be included on the list.

NATIONAL MOTH NIGHT

Moth Night 2020 will be held from Thursday 27th – Saturday 29th August 2020. The focus will be on '**Red Underwing**' moths including the scarce **Dark Crimson** and **Light Crimson Underwings**, the rare recent colonist **Rosy Underwing** and the resident **Red Underwing**, which is widespread in England and Wales and has recently spread to Scotland, Ireland and the Isle of Man.

Moth Night is organised by Atropos, Butterfly Conservation and the Centre for Ecology & Hydrology.

PUBLIC INQUIRY REGARDING LAWFORD TYE FIELD

JOHN HALL

I went to the EMG annual meeting last year and I spoke briefly about the records we had made in Lawford Tye Field and that I would use the Section 41 species at the Public Inquiry in July 2019 where Gladman would try to get Planning Permission for 110 houses on this field. As you know, the Inspector of that Public Inquiry found the information I and Dr Chris Gibson presented to the Inquiry to be "credible and persuasive" and the Inspector cited the Moth records as one of the three main reasons that she REFUSED the Planning Application by Gladman and she DISMISSED Gladman's Appeal for Planning Permission. This is a landmark case being one of the few cases where Section 41 species have carried significant weight at Public Inquiry. Of particular note were our records of **Lunar Yellow Underwing** - the presence of both the adults and the caterpillars, and **Small Heath** butterfly - the presence of both the adults and the caterpillars. I think it is important for you to mention this case to the Essex Moth Group as you will be there. Would you do so please? I hope that you might even get a little cheer from the Annual Meeting of the Essex Moth Group!!

I have been invited to publish our Moth data and the proceedings of the Public Inquiry in the Essex Naturalist later this year, which I will be pleased to do with the assistance of Dr Chris Gibson.

Best wishes to you and all at the Essex Moth Group Annual Meeting
John

A single 125W MV Robinson trap was run throughout the season, with an additional 15W actinic trap operated from the beginning of May until the end of October. No traps were operated from 25 May-1 June or from 27 July-18 August. Noted for their absence were species such as **Vestal** *Rhodometra sacaria*, **The Gem** *Nycterosa obstipata*, **Bordered Straw** *Heliothis peltigera* and **Small Mottled Willow** *Spodoptera exigua* going unrecorded.



Cosmopterix pulchrimella



FISHER'S ESTUARINE MOTH (C.Atkins)

Highlights included *Cosmopterix pulchrimella* 1 on 23 October *Acrobasis tumidana* 2 on 25 July, **Golden Twin-spot** *Chrysodeixis chalcites* on 23 August and **Fisher's Estuarine Moth** *Gortyna borelli* singles trapped on 4 and 25 September, plus an additional 2 found by torchlight on 16 and 19 September.

Table 1. Monthly totals of the more regular immigrant species.

	J	F	M	A	M	J	J	A	S	O	N	D	T
Diamond-back Moth <i>P. xylostella</i>	0	0	0	0	10	499	94	18	32	16	2	0	671
*European Corn-borer <i>O. nubilalis</i>	0	0	0	0	1	4	30	1	1	0	0	0	36
Rusty-dot Pearl <i>U. ferrugalis</i>	0	0	0	0	0	0	2	0	2	4	0	1	9
Rush Veneer <i>N. noctuella</i>	0	0	0	0	0	0	0	0	0	1	0	0	1
Convolvulus Hawk-moth <i>Agrius convolvuli</i>	0	0	0	0	0	0	0	0	1	0	0	0	1
Humming-bird Hawk-moth <i>M. stellatarum</i>	0	0	0	0	1	1	0	0	0	2	0	0	4
Silver Y <i>A. gamma</i>	0	0	0	0	3	17	16	28	3	8	1	0	76
Scarce Bordered Straw <i>Helicoverpa armigera</i>	0	0	0	0	0	0	0	0	3	1	0	0	4
*Tree-lichen Beauty <i>C. algae</i>	0	0	0	0	0	0	29	1	0	0	0	0	30
Delicate <i>M. vitellina</i>	0	0	0	0	0	0	1	0	5	3	0	0	9
Pearly Underwing <i>Peridroma saucia</i>	0	0	0	0	0	0	0	0	1	0	0	0	1
Dark Sword-grass <i>A. ipsilon</i>	0	0	0	0	0	1	1	5	2	1	0	0	10

*Records likely to be associated with local breeding populations.



Acrobasis tumidana



CLANCY'S RUSTIC



DEWICK'S PLUSIA (C.Atkins)

The main local highlights of the season were as follows:

Calybites phasianipennella One on 28 June.

Agonopterix purpurea A single on 21 February.

Agonopterix curvipunctosa One on 14 June.

Depressaria daucella One on 19 July.

Cosmopterix pulchrimella One on 23 October was new for site.

Anarsia innoxia Singles on 29 June and 24 July.

Brachmia inornatella A single record on 24 June.

Platyedra subcinera Two in April.

Coleophora limoniella One on 4 July.

Mompha jurassicella a single indoors on 15 December.

Scythris limbella Two on 11 July.

Crescent Plume *Marasmarcha lunaedactyla* One on 11 July, new for site.

Prochoreutis myllerana One on 17 July, new for site.

Commophila aeneana One on 15 June.

Eucosma metzneriana A total of four during June.

Eucosma conterminana Four during July.

Elegia simiella One on 19 June.

Oncocera semirubella Single on 22 July.

Pempelia genistella one on 8 July.

Acrobasis tumidana Two on 25 July, new for site.

Ancylosis oblitella Single on 28 June followed by three in July, two in August and two in September.

Homoesoma nebulella Singles on 8 and 10 September, new for site.

Anerastia lotella Singles on 14 and 26 June.

Evergestis limbata A single on 11 September.

Pediasia contaminella A total of seven during July.

Hummingbird Hawk-moth *M. stellatarum* One trapped on 2 October.

Sloe Carpet *A. distinctata* A total of four recorded between 17 & 25 April.

Latticed Heath *C. clathrata* an impressive 880 between 5 July and 4 September, with counts of 266, 371 on 28-29 August respectively.

Rest Harrow *Aplasta ononaria* Single on 23 August.

Dotted Fan-foot *M. cribrumalis* Singles on 26 June and 3 July.

Plumed Fan-foot *P. plumigeralis* Singles on 14, 17 and 22 July.

Waved Black *P. fuliginaria* A single on 22 July.

Golden Twin Spot *Chrysodeixis chalcites* One on 23 August, new for site.

Dewick's Plusia *M. confusa* Singles on 5 and 18 July.

Reed Dagger *Simyra albovenosa* Singles on 28 and 30 April, followed by a further on 24 July.

The Wormwood *C. absinthii* One on 25 July.

Star-wort *Cucullia asteris* Six between 13 and 23 July.

Toadflax Brocade *C. lunula* Nine larva on 25 August on Common Toadflax *Linaria vulgaris*.

Clancy's Rustic *Caradrina kadenii* Singles on 19 and 30 September.

Fisher's Estuarine Moth *Gortyna borellii* Two trapped on 4 and 25 September were new for site. An unexpected addition to site list. There is a colony approximately one kilometre to the south west.

Small Ranunculus *H. dysodea* Eight singles between 5 and 23 July.

L-album Wainscot *Mythimna l-album* Two on 22 June followed by six in July, nine in August and one in September.

Obscure Wainscot *Leucania obsoleta* A total of 11 through June.

Sand Dart *Agrotis ripae* A single on 28 June followed by another on 8 July.

Lunar Yellow Underwing *N. orbona* Singles on 10 July and 16, 22 September.

Kent Black Arches *M. albula* One on 8 July with a further three on 11 July.



PLUMED FANFOOT



Calybites phasianipennella

(C. Atkins)

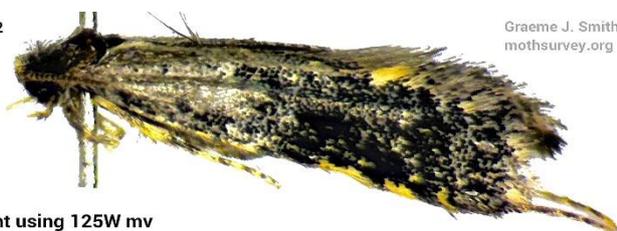
The night of 25 July produced two **Southern Migrant Hawker** *Aeshna affinis*. One in a 125v mv and the other in a 15w actinic, with the first of the year, a male having been seen on 21 July and the maximum count of eight seen on 23 July.

SECOND BRITISH RECORD OF SCARCE DARK CLOTHES MOTH

CLIVE RICHES

I potted a micromoth which I thought might be *Nemapogon falstriella* during a moth evening at Hockley Wood, Thorrington in North Essex at TM08832135 on 8th August 2019. After posting a photo on the Facebook UK Micro Moth ID group page there was provisional confirmation from Douglas Boyes, Martin Honey and Ben Sale, but genitalia confirmation was required - the species resembles *Psychoides filicivora* from which separated only by dissection of the genitalia (<https://www.hantsmoths.org.uk/species/0221a.php>). The specimen was sent to Graeme Smith who very kindly provided confirmation and permission to publish his genitalia photograph here.

CR7162



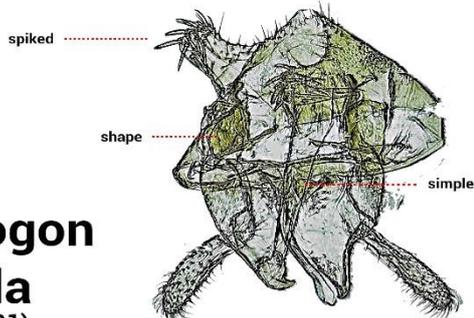
Graeme J. Smith
mothsurvey.org

Caught using 125W mv light over sheet in Hockley Wood, Frating, Essex, TM088213. 8viii19 [00:15Hrs]. Clive Riches

Perhaps only the second record for the U.K. after the first was recorded in Ipswich, 12 years ago to the day!

Composite record shot of male *Nemapogon falstriella* with genitalia. Photographs © Graeme Smith

12.0221
(0221a)
Nemapogon
falstriella
(Bang-Haas, 1881)



This is the second confirmed UK record for *Nemapogon falstriella*, which is included as an adventive species in Agassiz et al. (2013), a suspected rare immigrant, or perhaps accidentally imported, from mainland Europe. The first individual found in this country was taken on 8 August 2007 in a poly-tunnel at Ipswich Golf Course, Purdis Heath (Sherman & Clifton 2009).



Nemapogon falstriella caught Hockley Wood 7th August 2019

Male *Nemapogon falstriella* from Hockley Wood. Photograph © Clive Riches

This article was first published in the Essex Naturalist No 36 (New Series) 2018/2019.

WEST MERSEA BACK-GARDEN

DOUGAL URQUHART

Moth trapping took place in the Firs Chase back garden on fifty nights during 2019 between 22 March and 24th November. No trapping occurred whilst away on holiday during three weeks in June and three weeks in September. The majority of evening sessions concluded around 1am, to allow neighbours some sleep! A total of 183 macro moth species was recorded.



SCARLET TIGER



SMALL ELEPHANT HAWKMOTH



SMALL RANUNCULUS

The first productive spring night was on 25th May when forty species of macro were recorded including **Coronet, Pale Tussock, Lime Hawkmoth** and **Cream-bordered Green Pea**, also *Coleophora amethystinella*. The most striking moth of the year was a **Scarlet Tiger** on 30th June - first record for Mersea Island, also that night **Festoon**, five **Elephant Hawkmoths** and *Evergestis limbata*. On the 8th July the first **Clancy's Rustic** for the Island, as well as **Small Elephant Hawkmoth, Fen**

Wainscot and a **Boxworm Moth**. More interest the following night with **Small Ranunculus**, **Cypress Carpet**, **Orange Moth**, **Pine Hawkmoth**, **Festoon** and two **Tree-lichen Beauties**. A **Leopard**, two **Orange Moths**, **Small Elephant Hawkmoth**, **Fen Wainscot**, **Scarce Silver Lines** and an *Evergestis limbata* were found on the 11th July. Thirty **Least Carpets** caught the eye on 16th becoming more common these days, another **Pine Hawkmoth**, four **Box moths**, *Dasycera oliviella* and *Evergestis limbata*.



Dasycera oliviella



Evergestis limbata



MERVEILLE DU JOUR

Two **Pine Hawkmoths** were on the 23rd along with a **Fen Wainscot** and **Black Arches**, while 170+ **Diamond-backed Moths** was a notable arrival on the 1st August. The first **Gypsy Moth** for the garden was noted on 2nd August, also seen were **Black Arches**, **Vapourer**, 2 **Coronets** and a **Saltmarsh Plume**. **Tree-lichen Beauties** peaked at 23 on the 4th August with **Gypsy Moth** being noted again. An **Old Lady**, **Webb's Wainscot**, **Cream-bordered Green Pea** and **Marbled Beauty** were on the 24th August. A high garden count of 250+ **Latticed Heaths** were noted on the 27th August, also **Marbled Beauty**, **Small Ranunculus**, **Webb's Wainscot**, **Fen Wainscot** along with *Palpita vitrealis*.



VESTAL



CLANCY'S RUSTIC



WEBB'S WAINSCOT – (Pics DU)

The seventh garden record of *Evergestis limbata* for the season was on the 2nd September. Autumn highlights were more **Clancy's Rustics** with singles on 4th, 8th and 20th October but three on 5th October – a sign maybe there's a local breeding population nearby, following the first sighting in early July. A **Delicate** was seen on 4th and 5th October, followed by a **Vestal** on 15th and then a **Merveille du Jour** on the 20th October. The season concluded with a **December Moth** and a **Diamond-backed Moth** on the 24th November.

Having retired as ranger for Cudmore Grove Country Park in early 2019, I returned on 21st August for a mothing evening with my successor Richard Sharp. On a clear and still evening 40 species of macro were logged from three traps set up in the overflow car park area. The highlight was a single **Large Thorn** resting on the outside of a trap (Pictured right), also **Dark Swordgrass**, **Pine Hawkmoth** and a count of 300+ **Latticed Heaths**.



Several **Toadflax Brocade** caterpillars were feeding on purple toadflax in the West Mersea Feldy View Cemetery on 28th June. Pictured left



A **Convolvulus Hawkmoth** was photographed by local fisherman Daniel French in his West Mersea garden on 22nd August

In East Mersea a **Sloe Carpet** was seen in the East Mersea garden of Marion Potifar on 26th March.

Pics D.U.

TIPTREE HEATH

Over a dozen folk including Moth Group members and Friends of Tiptree Heath met on Wednesday 24th July for the annual moth evening on Tiptree Heath. Weather conditions were very favourable for a change with a warm and still evening producing 122 species of moth. A couple of traps were brought along by Andrew Raybould and a couple were mine. Notable and ERDB species noted were **Festoon**, *Dasycera oliviella*, *Acleris cristana*, *Calamotropha paludella*, *Pempelia genistella*, **Beautiful Hook-tip** and **Waved Black**. Other interesting ones were **Leopard**, **Oak Eggar**, **Small Rivulet**, **Pine Hawkmoth**, **Rosy Footman**, three **True Lover's Knots** which came in near midnight, **Coronet**, **Mouse Moth**, **Old Lady**, **Scarce Silver Lines** and **Olive**. As always, the Moth Group is grateful to Joan Pinch for arranging access onto the Heath.



TIPTREE MOTHING



TRUE LOVER'S KNOT (DU)



Acleris cristana (A.R.)

The Middlewick Ranges in Colchester is a large site of acid grassland, sandy and gorse scrub and lines of mature hedgerows and trees, including abundant Elm. Its uncertain future led me to carry out a few trapping sessions in 2019, from late June to September, using a 15W actinic. The sandy area behind 'the Butts' was productive for micros, with records of *Pempelia genistella*, *Synaphe punctalis*, *Teleiopsis diffinis* and *Batia lambdella*. Also trapped here was a **Rosy Footman** (*Miltochrista miniata*) and a single **Toadflax Brocade** (*Calophasia lunula*), which complimented the caterpillars found on the abundant foodplant. Forays with torchlight revealed two **Fox Moth** caterpillars (*Macrothylacia rubi*). A male *Epichnopterix plumella* was found during the day, along with a **Cream-spot Tiger** (*Arctia villica*).



GRASS EMERALD



LUNAR YELLOW UNDERWING

(R.Smith)

Trapping' with an impromptu UV lamp on a drum in an adjacent garden captured some of the above, but also a **Grass Emerald** (*Pseudoterpna pruinata*); a gorse-feeder that appears to be decreasing in the county. Late August and September trapping in grassland recorded a single **Feathered Gothic** (*Tholera decimalis*), and small numbers of **Autumnal Rustic** (*Eugnorisma glareosa*) and **Lunar Yellow Underwing** (*Noctua orbona*). Thanks to Simon Wood for identifying the latter species. Autumn forays with torchlight revealed a particularly productive patch of Broom alongside the Mersea Road with up to 14 **Streak** moths (*Chesias legatella*) seen on 23rd November. The last sighting being a single on 22nd December. Surprisingly, this moth could not be located by torchlight anywhere elsewhere on the site.

*Pempelia genistella*

STREAK

(R.Smith)

My feeling is that this could be a much more productive site using larger traps. There is an obvious need to avoid night-time firing times and these are published just prior to the start of each month. Simply search for 'East of England firing times'. Please contact Rob Smith at windvane@btinternet.com for parking and more information.

This series of surveys continued the work carried out during the very successful 2018 Bioblitz organised by Sven Wair of the Colchester Natural History Society in association with Iain Perkins, the MoD Ecologist. As far as I am aware there have been no other surveys since those by Brian Goodey 20 years ago.

Access was possible once a month on the day when dredging for Oysters was scheduled by local fishermen. 4 surveys were carried out between April and August with strong winds in September and early October causing those surveys to be cancelled. I am very grateful to the following who helped with the surveys, Dougal Urquhart, Andrew Raybould, Steve Rolls and Alec Undrill.

259 species and 4 Aggs were logged, of those fully identified 131 were Macros and 128 Micros. 12 species were confirmed by Genital Dissection. Of those trapped one was classed as Nationally Scarce A, 12 as Nationally Scarce B and 48 as Local. 19 are on the ERDB. Several species have not been recorded for a number of years: 2011-2, 2012-1, 2014-1, 2015-1, 2017-5 while **Mere Wainscot** was last recorded in 2006. The saltmarsh Gelechiid, *Scrobipalpa samadensis* was last recorded by Emmet at Fingringhoe EWT in 1973. Other interesting coastal species included **Crescent-striped, Saltern Ear, Garden and Cream-spot Tigers, Rosy Wave, Fox and Emperor Moths, Sharp-angled Peacock, and Crescent**. It is clear that Fingringhoe Ranges (MoD) has a number of important resident species that are either absent or scarce elsewhere in the County. It is likely that other significant species await to be discovered, especially on the saltmarsh and extensive *Phragmites* beds further to the east. The site would also benefit from surveying in September, October and November.

The sites chosen were saltmarsh, unimproved grassland and areas of Blackthorn (*Prunus spinosa*) and Hawthorn (*Crataegus:sp*) scrub. The grassland being grazed by cattle or sheep. Traps used on the saltmarsh were battery powered 20 watt actinic and 2X2 watt LEDs. At the other sites 125 and 250 Watt MVs as well as Actinics powered by generators. Surveys started at dusk and continued until 01.00.

Records of notable species for Essex are listed below, those highlighted were trapped on saltmarsh:

- 35.040 *Bryotropha terrella*, GD, ERDB 17/7/2019
- 35.046 *Bryotropha senectella* GD, Nationally Local 17/7/2019
- 35.079 *Eulamprotes wilkella*, ERDB, Nationally Scarce B 17/07/2019
- 35.081 *Eulamprotes atrella*, Nationally Local, 17/07/2019
- 35.114 *Scrobipalpa instabilella***, GD, Nationally Scarce B, 17/07/2019; last Essex record 2015
- 35.115 *Scrobipalpa nitentella***, GD, Nationally Scarce B, 17/07/2019
- 35.116 *Scrobipalpa obsoletella*** GD, Nationally Scarce B, 17/07/2019; Last Essex record 2011
- 35.118 *Scrobipalpa ocellata*, Beet Moth**; GD, Nationally Scarce B, 17/07/2019; last Essex record 2015
- 35.119 *Scrobipalpa samadensis***, GD, Nationally Scarce B, 17/07/2019; Last Essex record 1973.
- 35.137 *Recurvaria leucatella*, ERDB, Nationally Local, 17/07/2019.
- 37.047 *Coleophora amethystinella*, ERDB, pRDB2, 20/05 & 17/06/2019.
- 37.104 *Coleophora adpersella*, Nationally Scarce B, 17/07/2019.
- 38.005 *Elachista triatomea*, Nationally Local, 17/06/2019; Last Essex record 2010.
- 45.009 *Gillmeria ochradactyla*, **Tansy Plume**; ERDB, Nat Scarce B, 17/06/2019.
- 49.103 *Phalonidia affinitana***, GD, Nationally Local, 17/6 & 17/7/2019; Last Essex record 2015
- 49.121 *Aethes tesserana*, Nationally Local, 17/07/2019.
- 49.123 *Aethes beatricella*, Nationally Local, 17/06/2019.
- 49.132 *Cochylidia implicitana*, Nationally Local, 15/08/2019.
- 49.180 *Piniphila bifasciana*, Nationally Local, 17/07/2019.
- 49.194 *Bactra lancealana***, GD, 17/6 & 17/7/2019.
- 49.197 *Bactra robustana***, GD, 17/6 & 17/7/2019; ERDB, Nationally Scarce B.
- 49.219 *Thiodia citrana***, Nationally Scarce B, 17/06 & 17/07/2019. Last Essex Record 2017.
- 49.237 *Epinotia signatana*, Nationally Local. 17/07/2019.
- 49.272. *Eucosma tripoliana***, Nationally Local, 17/07/2019.
- 49.357 *Grapholita funebrana*, Nationally Local, 17/07/2019.
- 53.001 *Apoda limacoles*, **Festoon**, ERDB, 17/07/2019.
- 62.002 *Aphomia zelleri*, ERDB, Nationally Scarce A, 17/07/2019.

- 62.053 *Ancylosis oblitella*, Nationally Scarce B, 15/08/2019.
 62.070 *Synaphe punctalis*, Nationally Local, 17/06 & 17/07/2019.
 63.022 *Anania crocealis*, Nationally Local, 17/06/2019.
 63.075 *Eudonia pallida*, ERDB, Nationally Local, 17/07/2019.
 63.077 *Chilo phragmitella*, Nationally Local, 17/07/2019.
 63.079 *Calamatropha paludella*, ERDB, Nationally Local, 17/07/2019.
 63.092 *Agriphila selasella*, Nationally Local, 15/08/2019.
 63.120 *Schoenobius gigantella*, ERDB, Nationally Local, 17/07/2019.
 63.121 *Donacaula forficella*, Nationally Local, 17/07/2019.
 66.088 *Macrolythacia rubi*, **Fox Moth**, 20/05 & 17/06/2019.
 68.001 *Saturnia pavonia*, **Emperor Moth**, 17/04/2019.
 70.015 *Idea emarginata*, **Small Scallop**, Nationally Local, 17/07/2019.
 70.028 *Scopula emutaria*, **Rosy Wave**, ERDB, 23/05 & 17/06/2019.
 70.212 *Macaria alternata*, **Sharp-angled Peacock**, Nationally Local, 20/05, 17/06 & 17/07/2019.
72.011 *Lymantria dispar*, **Gypsy Moth**, 15/08/2019.
 72.026 *Arctia caja*, **Garden Tiger**, ERDB, 17/07/2019.
 72.027 *Arctia villica*, **Cream-spot Tiger**, Nationally Local, 17/06/2019.
 72.037 *Thumatha senex*, **Round-winged Muslin**, 17/07/2019.
 72.069 *Laspeyria fexula*, **Beautiful Hook-tip**, ERDB, Nationally Local, 17/06 & 17/07/2019.
 73.119 *Helotropha leucostigma*, **Crescent**, Nationally Local, 15/08/2019.
73.126 *Amphipoaea fucosa*, **Saltern Ear**, GD, ERDB, Nationally Local, 15/08/2019.
73.128 *Amphipoaea oculatea*, **Ear**, 15/08/2019.
 73.137 *Arenostoia phragmitidis*, **Fen Wainscot**, Nationally Local, 17/07/2019.
 73.145 *Photedes fluxa*, **Mere Wainscot**, ERDB, 17/07/2019, Last recorded 2006.
73.161 *Apamea oblonga*, **Crescent Striped**, ERDB, 17/07/2019.
 73.263 *Lacanobia w-latinum*, **Light Brocade**, Nationally Local, 20/05 & 17/06/2019.
 73.300 *Mythimna l-album*, **L-Album Wainscot**, ERDB, 17/07/2019.
 73.302 *Leucania obsoleta*, **Obscure Wainscot**, Nationally Local, 17/07/2019.



Fingringhoe Ranges moth trap locations, *Crataegus* and *Spinosa* scrub and saltmarsh



FOX MOTH



EMPEROR MOTH



GARDEN TIGER (G.E.)



© Graham Ekins Photography

CRESCENT STRIPED



© Graham Ekins Photography

SALTERN EAR



© Graham Ekins Photography

MERE WAINSCOT



© Graham Ekins Photography

ROSY WAVE



© Graham Ekins Photography

FESTOON



© Graham Ekins Photography

Thiodia citrana



© Graham Ekins Photography

Phalonidia affinitana



© Graham Ekins Photography

Elachista triatomea



© Graham Ekins Photography

***Scrobipalpa ocellata*, Beet Moth**



© Graham Ekins Photography

Scrobipalpa instabilella



© Graham Ekins Photography

Scrobipalpa nitentella



***Coleophora adpersella* (G.Ekins)**

Mark Hansen and I carried out a moth and saproxylic Beetle survey at the above location on the 24th July 2019. Research indicates that this estate has never been surveyed for moths or other invertebrates. The area is a very special one with mature Scot's Pines (*Pinus sylvestris*), Hornbeam (*Carpinus betulus*) Coppice and a number of veteran Pedunculate Oak trees (*Quercus robur*). It also has unimproved grassland regularly grazed by sheep with several scarce grasses present. An area of Gorse (*Ulex europaeus*) on a hillock amongst the grassland also provides additional habitat diversity. In the valley between the sheep fields are 2 lakes surrounded by *Salix*, Sedges, Bulrush (*Typha latifolia*) and a variety of other marshland plant species.

One 250 watt Mercury vapour trap was set up in the organic walled kitchen garden by the greenhouse, (TL772062), a battery powered 20 watt actinic by the Lower or West Lake (TL771060) and a 125 watt MV below the Pines at the edge of Hall Wood (TL771061) and a 250 watt MV by the wood store at the edge of Hall Wood (TL770061). Trapping was carried out from 21.30 until 01.30 using mains and a portable generator. A total of 221 moth species were identified plus 5 aggs. 17 species were classified as Essex Red Data, this is an unusually high proportion of the total catch and indicates the importance of this location for Lepidoptera within Essex. Nationally, 3 were classed as Nationally Scarce A, 6 Nationally Scarce B and 41 classed as Local.

In Essex over the last 100 years large areas of unimproved grassland have been lost. Furthermore most grazing is now on grassland that is enriched reducing dramatically the botanical diversity. Areas of mature pines are scarce while the Hornbeam coppice and ancient oaks provide specialised habitat diversity. Thus the habitats surveyed are very special ones with several species now primarily restricted to coastal grassland and wetland or ancient woodland. I have listed below species that are habitat specific and were identified during the survey. Further visits are planned during 2020.

Ancient woodland

28.020 *Dasycera oliviella* (Essex RDB, Nat. Scarce A)

72.041 **Four-spotted Footman** (1 of 6 sites in VC18)

49.005 *Epagoge grotiana*

74.007 **Scarce Silver-lines**

72.035 **Rosy footman**

63.102 *Catoptria falsella* (Essex RDB)

28.008 *Metalampra italica* (1 of 3 sites in VC18, very recent UK colonist)

Gorse & Heathland

62.002 *Pempelia genistella* (Nat Scarce B)

35.028 *Brachmia blandella*

Bracken & Ferns

63.1181 *Nusotima nitidalis* (Rare from New Zealand arrived with Ferns; 1 of 3 sites in VC18)

Pines

62.061 *Vitula biviella* (Nat Scarcer A)

49.180 *Piniphila bifasciana* (1 of 6 sites in VC18)

49.306 *Rhyacionoa pinicolana* (1 of 4 sites in VC18)

69.007 **Pine Hawk-moth** (6 trapped below mature Scot's Pines)

49.304 *Clavigesta purdeyi* (1 of 4 post 1990 sites in VC18)

Unimproved dry grassland

62.058 *Phycitodes binaevella*

49.318 *Dichrorapmpa vancouverana*

63.109 *Pediasia contaminella* (Essex RDB)

63.112 *Platytes alpinella* Essex RDB, Nat Scarce B)

62.070 *Synaphe punctalis* (Nationally Local)

35.031 *Helcystogramma rufescens*

62.021 *Oncocera semirubella* (Essex RDB, Nat Scarce B)

Wetland areas - 49.148 *Apotomis lineana* (1 other site in VC18, Essex RDB, Nat Scarce B)

773.141 **Brown-veined Wainscot** (Scarce Essex & Nationally)

72.052 **Dotted Fan-foot** (Essex RDB)

Field Maple

35.019 *Anarsia innoxiiella* (Nat Scarce A)

17.012 *Ypsolopha sequella*

49.375 *Pammene regiana* (1 of 6 sites in VC18)

70.148 **Maple Pug** (Essex RDB)

63.079 *Calamatropha paludella* (Essex RDB)

63.120 *Schoenobius gigantella* (Essex RDB)

73.100 **Silky Wainscot** (Essex RDB)

73.137 **Fen Wainscot**

72.037 **Round-winged Muslin**



Metalampra italica



Dasycera oliviella



Nusotima nitidalis



Ypsolopha sequella



Pempelia genistella



Platytes alpinella

(G.Ekins)



Synaphe punctalis



PINE HAWK-MOTH



FOUR-SPOTTED FOOTMAN



Brachmia blandella



MAPLE PUG



BROWN-VEINED WAINSCOT



Recurvaria leucatella



ONCOCERA SEMIRUBELLA

Oncocera semirubella

(G.Ekins)

35, Church Road, Boreham CM33BN

Due to being away for extended periods and moth surveying elsewhere in the County the number of nights trapped at 65 was reduced at Boreham cf to recent years. However, the settled weather in June and July resulted in some excellent catches and this helped to boost the numbers to 429 species for the year. Of these 44 were NFS (New for Site) of which 37 were Micros, a significant number of these being confirmed by GD (Genital Dissection). By the end of the year the Boreham species list had reached 833, all these being identified as adults. A Micro trapped under one of our apple trees on the 27th June proved by GD to be New for Essex, *Grapholita lobarzewskii*, a Nationally Scarce A species.

The following table summarises the trapping in 2019.

Month	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec	Total
Nights trapped	8	9	0	0	12	12	3	3	9	5	4	65
NFY Species	25	22	0	0	205	122	24	7	15	6	3	429
New species Macro	1				3	2	1		1			8
New species Micro		1			17	15	8					41

The early part of the year was quiet for migrants but things improved from July with **Small Marbled** on the 6th July accompanied by a **Dark Sword Grass**. 2019 proved to be the best year on record for the latter with a total of 6 by the end of October. The pretty Micro *Cydia amplana*, although still considered a migrant nationally must surely be established locally with 9 logged this summer, numbers have steadily increased since the first record in 2014. *Udea ferrugalis* and *Nomophila noctuella* were unusually scarce with just 2 each in October. 2 **Clancy's Rustics** on the 6th October may well be of local origin although the conditions were ideal for migration.

Coastal species continued to appear here in Boreham with **Saltmarsh Plume** on the 5th August, our 9th record, the first *Coleophora salicorniae* on the 5th August and the very attractive *Coleophora limoniella* on the 11th July. The food plants being respectively *Salicornia* and Sea-lavender (*Limonium vulgare*).

Recent changes

After the first records of **Jersey Tiger** in 2018, 3 more were recorded in July and August suggesting they are now established locally. **Toadflax Brocade** and **Tree-lichen Beauty** both reached double figures. The beautiful *Metalampra italica* first recorded in 2018 was followed by 5 more in 2019. The same for *Anarsia innoxia* which also must be established locally with 15 logged this summer with a peak of 5 on the 6th July. **Box Tree Moths** continue to increase dramatically with 100 logged after the first records as recently as 2017. Lastly **Cyprus Carpet**, a new species in 2015 and now trapped regularly between June and November.

New species recorded in 2019

Microlepidoptera (GD=identification confirmed by Genital Dissection)

04.078 *Ectoedemia septembrella* 26/06/2019 GD; Last Essex record 2012.

04.090 *Ectoedemia subbimaculella* 2/06/2019

10.001 *Tischeria ekebladella* 2/06/2019

14.007 *Bucculatrix albedinella* 2/08/2019 GD Nationally classed as Local.

16.010 *Zelleria hepariella* 5/08/2019 GD

17.011 *Ypsolopha ustella* 10/07/2019 GD Nationally classed as Local.

20.002 *Argyresthia glabratella* 24/07/2019 GD 1 other Essex record in 2013; **Nat Scarce B.**

32.019 *Agonopterix ciliella* 26/3/2019; Last Essex record in 2012.

35.085 *Athrips mouffetella* 23/07/2019

35.094 *Aroga velocella* 28/06/2019; Nationally classed as Local.

35.096 *Chionodes fumatella* 4/5/08/2019 GD; Last Essex record 2016; **Essex RDB**

36.001 *Batrachedra praeangusta* 30/06/2019

- 37.003 *Coleophora limoniella* 11/07/2019 ; Last Essex record 2017; **Nat Scarce B**
 37.007 *Coleophora flavipennella* 5/07/2019 GD
 37.008 *Coleophora adjectella* 11/07/2019 GD; 1st Record for VC19; **Nationally pRDB2.**
 37.011 *Coleophora badiipennella* 24/07/2019 GD; Nationally classed as Local.
 37.017 *Coleophora prunifoliae* 5/07/2019 GD; **Essex RDB; Nat Scarce B.**
 37.049 *Coleophora anatipennella* 5/07/2019 GD; Nationally classed as Local.
 37.066 *Coleophora laricella* 22/06/2019 GD; Last Essex record 2015.
 37.069 *Coleophora caespititiella* 29/06/2019 GD
 37.070 *Coleophora tamesis* 5/08/2019 GD, 3rd post 1990 record and 1st since 2005.
 37.108 *Coleophora salicorniae* 5/08/2019 GD; **Nationally Scarce B**
 38.045 *Elachista utonella* 30/06/2019 GD; 2nd Essex record, last 2005; **Nat Scarce B.**
 40.011 *Mompha langiella* 24/07/2019 GD; **Essex RDB**, 2 other sites.
 45.023 **Crescent Plume** *Marasmarcha lunaedactyla* ; 6/07/2019; Nationally Scarce.
 49.021 *Ptycholomoides aeriferanus* 6/07/2019
 49.022 *Ptycholoma lecheana* 2/06/2019
 49.051 *Cnephasia asseclana*, **Flax Tortrix** 26/06/2019 GD
 49.150 *Apotomis betuletana* 4/08/2019
 49.295 *Notocela /Epiblema roborana* 23/06/2019
 49.297 *Notocela / Epiblema rosaecolana* 25/06/2019
 49.303 *Clavigesta sylvestrana* 24/07/2019 GD; 2nd Essex record, last in 2002.
 49.318 *Dichrorampha vancouverana* 2/08/2019; Nationally classed as Local.
49.356 *Grapholita lobarzewskii* 27/06/2019 GD New For Essex; Nationally Scarce A.
 62.025 *Dioryctria sylvestrella* 25/06/2019; nationally Scarce B.
 62.070 *Synaphe punctalis* 11/07/2019 ; Nationally classed as Local.
 63.059 *Evergestis limbata* 29/06/2019; **Nationally Scarce B.**

Macrolepidoptera

- 70.111 **Small White Wave** 22/06/2019
 70.146 **Haworth's Pug** 24/06/2019; **Essex RDB**
 70.246 **Small Brindled Beauty** 22/2/19; Nationally classed as Local.
 72.063 **Blackneck** 24/06/2019; Nationally classed as Local.
 73.093 **Clancy's Rustic** 6/10/2019 ; Primarily a scarce migrant.
 73.119 **Crescent** 4/08/2019; Nationally classed as Local.
 73.149 **Brown-veined Wainscot** 26/07/2019; Nationally classed as Local.



Coleophora limoniella



Coleophora salicorniae



CRESCENT PLUME



***Grapholita lobarzewskii* - New for Essex**



HAWORTH'S PUG



BLACKNECK

(G.E.)



SMALL MARBLED WAINSCOT



CRESCENT



BROWN-VEINED WAINSCOT



Cydia amplana



Clavigesta sylvestrana



Mompha langiella



Elachista utonella



Coleophora tamesis



***Coleophora adjunctella* (rarely photographed)**



SMALL BRINDLED BEAUTY



***Dichrorampha vancouverana*
(G.Ekins)**

Well 2019 has passed by, and what a year it was! It has been a thrilling and exciting 12 months and I find it unbelievable, the moths that turned up in my small back garden.



BACK GARDEN, EIGHT ASH GREEN



SMALL RANUNCULUS

Let me set the scene by giving you the size and the surrounding area and habitat. I live in a semi-detached house in North Essex "VC19", on the edge of Colchester. My back yard is 30ft long by 27ft wide and within this area is a standard garage, 1400ltr oil tank and a 6 x 4 shed (Lepidoptera House). At the bottom of the garden is a small stream, which generally runs all year. Adjacent to this stream are some very large gardens in the region of 300ft long, with large properties at the top. All these large gardens have dividing hedges and various trees, many very large and ancient. The gardens are very diverse, some down to grass, others half with vegetable plots and the remainder running fairly wild. The trees range from hawthorns, oak, ash, lime, plane and various fir trees, fruit trees and many different shrubs. Beyond these gardens and properties are allotments, football and cricket fields and wild heathland, with stands of trees, many of which are oaks. So plenty of scope for a wide range of moths plus we are not far from the coast, possibly 8 to 10 miles as the crow flies.

Over the year I set my 40w trap 206 times and recorded 7302 moths, with over half, as you would expect, turning up in June, July and August.



BEAUTIFUL HOOK-TIP



CYPRESS CARPET



Dasycera oliviella (A.Undrill)

In the early months of the year I trapped the usual, expected species. On 19th March I recorded my first Essex red data species for the year, 2260 **Dotted Chestnut**. The next ERD was a 1959 **Sloe Carpet** on 8th April. Then on 22nd April I had a 0409a *Argyresthia trifasciata*, with the following night a 2480 **Buttoned Snout**. On 13th June 0650 *Dasycera oliviella* turned up. 2 nights later 0871a *Oegoconia caradjai* was recorded. 1474 *Ephestia unicolora* was trapped on 22nd June, 0844 *Syncopacma larseniella* was caught on 25th June. 28th June yielded a 2473 **Beautiful Hook-tip**. Whilst on 29th June 2 uncommon moths turned up, 1356a *Evergestis limbata* and 0173 *Apoda limacodes*. 17th July 0877 *Stathmopoda pedella* was recorded and on 30th July 2165 **Small Ranunculus** was caught. 1316 *Catoptria falsella* called in 3rd September and on 2nd October 2202 **L-album Wainscot** paid a visit.



1316 *Catoptria falsella*



1356a *Evergestis limbata*



0173 Festoon



2202 L-album Wainscot

Catoptria falsella

Evergestis limbata

FESTOON

L-ALBUM WAINSCOT

All the above mentioned are either ERD or nationally scarce, which indicates how pleased I was with what turned up. As I was on 6th August with a 0642a *Metalampra italicica* and 24th September a 1855 **Cypress Pug**.

My garden life list now stands at 527, which has astounded me and as there are still several more common moths not yet seen hopefully the list will grow. One moth, the **Cypress Carpet** 1771a, I am pleased to report was trapped 23 times, which obviously indicates I have a very healthy colony in my area. In 2018 it was trapped 8 times.



0871a *Oegoconia caradjai*



0877 *Stathmopoda pedella*



0844 *Syncopacma larseniella*

(A.Undrill)

I would like to take this opportunity to thank all those moth people who keep a watch on Facebook and whose help I have found invaluable and who have validated many of my records, and to those who run trappings in areas in Essex, a real insight to their inspiration and dedication.

I look forward to 2020 with bated breath!

2019 arrived with an impressive start, Essex records for January and February 105 moths of 20 species my best returns over the last 10 years. Was this to be a fore taste for the following months? I was to be very ably assisted by Alec Undrill over that period with 6 lifers, so yes it went to be my best year, albeit November and December were down on both counts by 50% compared to 2018.



BEAUTIFUL GOLDEN Y



GYPSY MOTH



RED UNDERWING

Highlights for me over the year included the following:- An **Angle Shades** on 11th January some 11 weeks earlier than any previous record here. **Cream-bordered Green Pea** 2418, **Orange Sallow** 2271, **Gothic** 2136. **Gypsy Moth** 2034 and *Cydia strobilella* 1254 as per Rolls S. **Blotched Emerald** 1667, **Blackneck** 2466, **Lunar Marbled Brown** 2015, *Nephopterix angustella* 1465 as per Cooper L. *Mompha lacteella* 0887 as per Sale B. *Schoenobius gigantella* 1328 and *Chrysoclista lineella* 0903 as per Williams P. **Dotted Chestnut** 2258, **Pink-barred Sallow** 2273. **Toadflax Brocade** 2223 as per Urquhart D.



TOADFLAX BROCADE



VESTAL

(A.Sibley)

My thanks to all those gentlemen mentioned above for their invaluable assistance, what with the new Atlas book and the County Moth Groups on the internet, the quality and availability of information has never been better as we go forward

10 Munson Mill Close, Wimbish. Mobile: 07581 178 707.

This year I was able to get out 3 mobile traps:

1. A Skinner running a 15W urban actinic bulb running off a small generator.
2. A home-made Robinson with a 12W Blacklight running off a car battery.
3. A second home-made Robinson with a halogen car bulb running off a car battery.

They were used at home in Wimbish, at my mum's house (an established garden in Wimbish), on Carver Barracks airfield, Saffron Walden Museum, Bridge End Gardens and on Chalky Meadow, Thaxted. A meeting was arranged to set up in Wimbish Church, but the weather prevented it from going ahead.

I trapped on approximately 5 nights at Carver Barracks airfield. One balmy night I set up one trap in the environmental area there. There were so many moths I had to close the trap down- it was simply too much for one person to handle. If anyone wishes to join me this summer, please do get in touch!

The Museum and Bridge End Gardens were not as successful as hoped for with my traps, although we had a loan of a Robinson one our first night of trapping in May which yielded good numbers of common moths. After consideration, I have now purchased a mercury vapour bulb to try at these sites this year.

The session in August on Chalky Meadow, Thaxted was arranged with Wild Thaxted (a group set up to save Chalky Meadow) and yielded an unusual surprise -two wasp spiders had set up their webs each within a metre of two of the traps! But there were only the usual suspects in the traps.

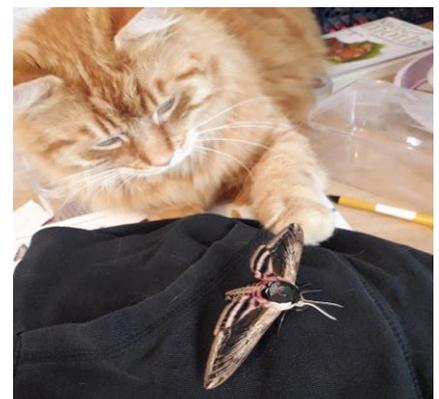
At home we caught our first **Jersey Tigers** this year, a first for this garden too as we've only been here 3 years. We caught a **Netted Pug** at home on 1st June. It came to the Skinner box whilst in my back garden. And we had a **Kent Black Arches** at the beginning of July (confirmed G. Ekins).



JERSEY TIGER



KENT BLACK ARCHES



PRIVET HAWKMOTH

What I loved most about trapping at home was that my moth trapping buddy was never far away. I haven't put the trap out at home since he died, my last record show that 26th July 2019 was the last night we trapped together.



NETTED PUG



MOTHING BUDDY (F.Hutchings)

2019 was the second full year of trapping in Hazeleigh Woods, an oak/hazel woodland on the edge of Maldon. A total of 527 moth species plus a further 14 'aggregate' species were recorded in 2019, as well as 24 species of butterfly. In all 32,414 individuals were logged.

Trapping took place from late February through to late November with the traps usually out 1-2 times per week from May-September.

Below, Essex Red Data species are marked with an Asterix *.



SMALL BLACK ARCHES



DARK CRIMSON UNDERWING (S.Wood)

The site's speciality, **Small Black Arches*** *Meganola strigula*, had a good year, appearing on 11 nights and totalling 105 individuals. Turning to the other resident macro species and considering those that are listed as vulnerable (VU), near threatened (NT) and endangered (EN) in the latest UK Red List (2019), total (first number in brackets) and nights (second number) recorded were: **Oak Hook-tip** VU (30/4); **Frosted Green** NT (70/10); **Oak Lutestring** EN (257/9); **Pale Eggar** VU (15/6); **Lackey** VU (173/13); **Maple Pug*** EN (7/3); **Latticed Heath** NT, (3,362/20); **Dusky Thorn** NT (2/2); **Pale Brindled Beauty** VU (35/2); **Mottled Umber** VU (30/3); **Dark Crimson Underwing*** NT (2/2); **Sprawler** VU (71/3); **Sallow** NT (2/2); **Beaded Chestnut** NT (7/3); **Autumnal Rustic** (1/1). Included in the above is **Dark Crimson Underwing**; with three records since September 2018, the species is now almost certainly a resident of the wood. The record of 3,362 **Latticed Heath** included a quite incredible 2,280 on 26th August.

A provisional Red Data List of micro species was published in 2012 (Davis, T.). The following species, recorded in Hazeleigh in 2019, are all on this provisional list. Six *Lyonetia prunifoliella* were trapped; this species was considered extinct in the UK until very recently but appears to be recolonising. Six *Coleophora amethystinella* were also trapped whilst a single *Proutia betulina* was found on a tree trunk on 26th April.

Scarce species that turned up in good numbers were (total/nights in brackets): *Dasycera oliviella* (29/12); *Pseudotelphusa scalella* (22/7); *Choristoneura diversana* (38/6); **Festoon*** (38/7); *Elegia similella* (25/7). Other scarce species that occurred during 2019 were *Parectopa ononidis*, *Agnoea flavifrontella*, *Telechrysis tripuncta*, *Pexicopia malvella*, *Monochroa palustrellus*, *Eulamprotes wilkella*, *Caryocolum blandella*, *Dystebenna stephensi*, *Mompha divisella*, *Pammene splendidulana*, *Pammene giganteana*, *Oncocera semirubella*, *Ancylosis oblitella*, *Eudonia delunella*, *Pediasia contaminella*, **Yarrow Pug*** *Eupithecia millefoliata*, **Sloe Carpet*** *Aleucis distinctata*, **Waved Black*** *Parascotia fuliginaria*, **Beautiful Hook-tip*** *Laspeyria flexula*, **Webb's Wainscot*** *Globia sparganii*, **Dotted Chestnut*** *Conistra rubiginea*, **L-album Wainscot*** *Mythimna l-album* and **Kent Black Arches*** *Meganola albula*.

Both **Yellow-legged*** *Synanthedon vespiiformis* and **Red-belted Clearwing*** *Synanthedon myopaeformis* were attracted to pheromone lures on single dates with 1-2 individuals only.

Larval case of *Proutia betulina*
covered with assorted fragments.
Found on a trunk of a tree in
Hazeleigh Wood on 26th April.

(Pic - Simon Wood)



Migrants did not occur in great numbers, but they were higher than in 2018. There were only 13 **Silver Y** *Autographa gamma* across the year, and **Diamond-back Moths** totalled 111. **Rusty Dot Pearl** *Udea ferrugalis* and **Rush Veneer** *Nomophila noctuella*, numbered just two and three respectively.

Hummingbird Hawkmoths *Macroglossum stellatarum*, which were absent in 2018, occurred on three occasions and two **Small Mottled Willow** *Spodoptera exigua* also made it into the Hazeleigh traps for the first time. Whilst the status of the **Oak Processionary** *Thaumetopoea processionea* trapped on 6th August is uncertain, it may be a migrant or a wanderer within the country, it is clear that the **Gypsy Moth** *Lymantria dispar* is now firmly established in the wood; a total of 23 came to light this year. With a further four records this year, it is clear that *Catoptria venellus* is also a resident of the wood.

The rarest migrants were real corkers! A single **Vestal** *Rhodometra sacra* occurred on 16th October, whilst the most spectacular was the **Clifden Nonpareil** *Catocala fraxini* that Maureen found on the morning of 5th September sitting on the footpath in front of her. The rarest migrant, however, was a single *Acrobasis tumidana*, picked out from amongst the hundreds of *Acrobasis repandana*, on 25th July, just the third Essex record according to the EFC website. **Sandhill Rustic*** *Luperina nickerlii* wandered from the coast on 4th August (one – on exactly the same date as last year's record) and 26th August (two). And finally, another surprise was a **Dotted Footman** *Pelosia muscerda* which put in an appearance on 25th July. In the UK this species is restricted to the Norfolk Broads, so this was almost certainly a migrant; a few others turned up in Suffolk at the same time.



CLIFDEN NONPAREIL



DOTTED FOOTMAN

(S.Wood)

As far as adventives, two new species occurred, singles of the now widespread **Box-tree Moth** *Cydalima perspectalis* and the still rare *Musotima nitidalis* which occurred on DATE.

The top five most numerous species were (total/nights): **Latticed Heath** *Chiasmia clathrata*, 3,362/20; *Acrobasis repandana*, 2,230/17; *Chrysoteuchia culmella*, 1,923/18; *Tortricoides alternella*, 1,391/4; **Small Quaker** *Orthosia cruda*, 1,099/12.

The five species that appeared on the most nights were (nights/total): **Large Yellow Underwing** *Noctua pronuba* and **Setaceous Hebrew Character** *Xestia c-nigrum*, 28/602; **Diamond-back Moth** *Plutella xylostella*, 26/111; *Celypha lacunana*, 24/100; *Tischeria ekebladella* 21/180 and **Large Fruit-tree Tortrix** *Archips podana*, 21/149.



Musotima nitidalis



Acrobasis tumidana

(S.Wood)

The species list for the site now stands at 618 moths (plus a further 16 'aggregate' species) and 24 butterflies; not at all bad considering regular trapping did not begin until 2018.

And talking of butterflies, 22 species were recorded in the wood in 2019 including the first **Purple Emperor** *Apatura iris*, **Silver-washed Fritillary** increased notably from just a single last year (first recent record) and were noted egg-laying for the first time and **White-letter Hairstreak** *Satyrrium w-album* had a very good year.

My thanks go to Maureen and John Bissell, the owners of the wood, for their hospitality.

Twenty-eight sessions at home yielded a year total of 397 species (7500 moths) of which 31 were new to the garden and paddocks. Of the new species for the site 5, were macros; **Pebble Hook-tip**, **Gypsy Moth**, **Jersey Tiger**, **Old Lady** (in the bathroom) and **Small Rufous**. Included in the 31 new species was **Rose Plume** (*Cnaemidophorus rhododactyla*) on 12th July, which is designated Na, and presumably a vagrant. 2019 saw 10 Nb species with **Cream-bordered Green Pea** trapped on four separate occasions, between 1st June and 4th August, for the 5th year out of the last 6. A single **Kent Black Arches** was recorded for the 5th year in a row (5th July) and two **Jersey Tigers** were recorded on 4th August, reflecting it's spread across south east England. **Lunar Yellow Underwing** was recorded twice in September (12th/21st), also for the 5th year out of the last 6. A single **L-Album Wainscot** was recorded on September 21st for the third year in a row, again reflecting the increase across Essex. Thankfully last year's Hornet numbers were not repeated with never more than 3 or 4 at a time in 2019.



CREAM-B. GREEN PEA



SMALL RUFIOUS



JERSEY TIGER



ROSE PLUME (A.R.)



SMALL SCALLOP

*Psyche casta*

WHITE SATIN

*Rhodophaea formosa* (AR)

The garden list now stands at 660.

A further 8 sites in Essex were visited during 2019, a couple in nearby fields and woods during the day, and a couple of trapping sessions at the Essex Wildlife Trust reserves of Phyllis Currie NR and Sandylay Wood NR, which are close to home. Group sessions, which are always very enjoyable included Fingringhoe Ranges (MOD), Tiptree Heath, Carver Barracks and Old Hall Marshes (RSPB Reserve) where 8 **Sloe Carpets** were trapped in 3 hours.

Further afield I went with Graham Ekins (and others) to Andalusia Spain on Dave Grundy's excellent moth break (May), to Snowdonia for 4 days trapping and daytime foraging on a David Brown course (July) and a day-course looking at moths trapped the night before at Wicken Fen (June) by Dave Grundy. All very enjoyable and many moths not seen in Essex.

2019 was another very good year for immigrant lepidoptera, but once again the weather brought extremes of both drought and flood. Only 289 mm of rainfall had been recorded by the end of September and yet remarkably a further 243 mm fell during the final three months.

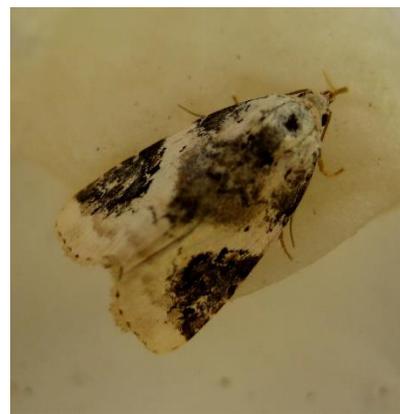
The season got off to a great start with two **Red Admirals** nectaring at *Elaeagnis* blossom on New Year's Day. The first **Peacock** appeared on the 14th of February followed by a **Brimstone** on the 15th, two **Commas** on the 24th and a **Small Tortoiseshell** the following day. An almost certain **Painted Lady** was seen on the 26th; a day of unprecedented February warmth. Sadly, in stark contrast to 2018 there were only three **Large Tortoiseshell** sightings. A reduction in the time available for observations may have played a part but clearly there was also a very significant decline. Our earliest ever **Dewick's Plusia** was in the trap on the 31st of May and on the 2nd of June our second ever *Agrotera nemoralis* came to the light. The first of no less than seventy *Catoptria verellus* was seen on the 19th of June and on the 21st two very early **Clancy's Rustics** appeared.



CLIFDEN NONPAREIL – 9th Aug.



CLIFDEN NONPAREIL – 8th Sept.



SHINING MARBLED

July highlights included **Lunar Yellow Underwing** on the 9th, our first **Dotted Rustic** since 1994 on the 23rd and a male **Brussels Lace** (a new species for Bradwell) on the 26th. Throughout August **Painted Ladies** were abundant and interesting immigrants such as **Vestal**, **Scarce Bordered Straw**, **Oak Processionary** and **Gypsy Moth** appeared. A superb **Clifden Nonpareil** was in the trap on the 9th of August and on the 18th, **Shining Marbled** was added to the Bradwell list. It was good to see another **Clifden Nonpareil** in the trap on the 8th of September but on the 22nd 80 **Hornets** were not such a welcome sight! The night of the 12th October saw our first ever record of the fern feeding pyralid *Musotima nitidalis* and there were single **Oak Rustics** on the 15th and 22nd of the month. A small, late, influx of immigrants was notable on the 26th of November and these included the years only example of the **Gem**. Finally, although it may no longer be unusual to see a few autumn species lingering well on into December, a **Red-line Quaker** as late as the 28th was certainly something I did not expect.



Agrotera nemoralis



LATTICED HEATH
-aberration



PAINTED LADY (S.Dewick)
-pale aberration

MARSH FARM COUNTRY PARK -



CREAM-SPOT TIGER
seen 25th May



BROWN-TAIL larval tent,
seen 21st April



EMPEROR larva on bramble
Seen on 8th June



Dasycera oliviella– 19/5
Garden Remembrance S.W.F.



KNOT GRASS larva – 1/7
Paper Mill Lock, Lt Baddow



DUSKY SALLOW – 28/7
RHS Hyde Hall

GARDEN OBSERVATIONS IN ALBERT ROAD, SOUTH WOODHAM FERRERS

Bee Moth 25/5, Mint Moth 9/6, Cream Wave 23/6, Yellow Shell 24/6, Least Carpet 30/6, Heart and Dart 9/7, Toadflax Brocade adult 25/7, Toadflax Brocade larva 11/8, Box Moth 20/9.



Dichrorampha alpinana



Epiblema cirsiaria



LARGE TABBY (C.Rawlings)

In the early part of 2019 I obtained consent from the Essex Wildlife trust (David Harris – warden and Marc Outen - area manager) to do some moth-trapping in the nature reserve at Pound Wood. (I also obtained consent to trap in the adjacent Tile Wood – but did not do so during 2019)

Pound Wood is a 22 hectare area of ancient semi-natural woodland in the Daws Heath Conservation Zone. The main tree species are Hornbeam (*Carpinus betulus*), Oak (*Quercus* spp), Sweet Chestnut (*Castanea sativa*) and Wild Service (*Sorbus torminalis*) with an understory dominated by bramble (*Rubus fruticosus*), bluebell (*Hyacinthoides non-scriptus*) and wood anemone (*Anemone nemorosa*). Coppiced, open areas and rides have allowed the spread of Rosebay Willowherb (*Chamaenerion angustifolium*), Yellow Archangel (*Lamium galeobdolon*), Angelica (*Angelica sylvestris*), Wood Spurge (*Euphorbia amygdaloides*) and Cow-wheat (*Melampyrum pratense*). There is one (?2) permanent pond but the area is largely dry, the watercourses only flowing after heavy rain.

In 2019 I did 7 nights of trapping, using similar locations on each occasion to set 2 135W mercury vapour Robinson traps and 2 15W actinic Heath traps. (I also experimented with a Funnel trap with a circular 22W synergetic bulb, but found that it retained very few moths). The main hazard to moth-trapping in Pound Wood was/is the large population of hornets (*Vespa crabro*). During the summer most traps contained some and on one occasion I counted 78 in one Robinson trap. Great care was needed in processing the catch – I felt that I had got away lightly with only one sting in the year. On most occasions I did some ‘dusking’ with a torch and net and I also made several daytime visits to look for leaf-mines and day-flyers.

Trapping dates, moth counts and species counts were as follows:

Date	01/05	23/05	30/06	11/07	23/07	17/08	27/08
Moths	95	149	668	761	1035	259	270
Species	30	69	151	150	189	87	73

The total number of species identified (so far) was **390** (18 of which were new for me).

Scarcer species were recorded as follows:

- 10.006 *Coptotriche angusticolella* (NS-B) 1 on 11/07/2019
- 15.002 *Caloptilia cuculipennella* (NS-A, Essex RDB) 1 on 23/07/2019, ?4th Essex record
- 15.027 *Parornix carpinella* (NS-A, Essex RDB) 1 on 01/05, 1 on 23/07, 2 on 17/08/2019 (all gen.det.)
- 15.054 *Phyllonorycter mespilella* (NS-B) 1 on 27/08/2019, ?4th Essex record (gen.det.)
- 17.008 *Ypsolopha alpella* (Essex RDB) 1 on 27/08/2019
- 21.002 *Lyonetia prunifoliella* (making a comeback from presumed extinction) 1 on 27/08/2019, ?1st Essex record
- 28.001 *Bisigna procerella* (RDB) 1 on 30/06, 4 on 11/07, 3 on 23/07/2019, ?3rd+ Essex records
- 28.020 *Dasycera oliviella* (NS-A, Essex RDB) 1 on 30/06, 2 on 11/07, 4 on 23/07/2019
- 35.0191 *Anarsia innoxella* (status uncertain) 1 on 23/07/2019



Figure 1 *Coptotriche angusticolella*



Figure 1 *Caloptilia cuculipennella*



Figure 3 *Parornix carpinella*



Figure 2 *Phyllonorycter mespilella*



Figure 3 *Lyonetia prunifoliella*



Figure 4 *Bisigna procerella*



Figure 5 *Dasycera oliviella*

- 35.073 *Monochroa palustrellus* (NS-B) 1 on 30/06/2019
35.107 *Psoricoptera gibbosella* (Essex RDB) 1 on 23/07, 1 on 17/08/2019
37.077 *Coleophora lasella* (NS-B) 1 on 23/05/2019 (gen.det.)
38.022 *Elachista gleichenella* (Essex RDB) 1 on 30/06/2019 (gen.det.)
42.002 *Stathmopoda pedella* (NS-B, Essex RDB) 1 on 23/07/2019
49.014 *Archips crataegana* (Essex RDB) 1 on 30/06/2019
49.087 *Acleris literana* (Essex RDB) 2 on 23/05, 1 on 23/07/2019
49.256 *Epinotia cinereana* (status uncertain due to relatively recent split from *E.nisella*, not yet recorded on Essex Field Club site) 1 on 27/08/2019
49.363 *Pammene argyrana* (Essex RDB) 4 on 01/05/2019



Figure 6 *Elachista gleichenella*



Figure 7 *Epinotia cinereana*

- 53.001 *Apoda limacodes* (**Festoon**) (NS-B, Essex RDB) 10 on 30/06, 20 on 11/07, 10 on 23/07/2019
62.010 *Elegia similella* (NS-B, Essex RDB) 1 on 11/07/2019
62.021 *Oncocera semirubella* (NS-B, Essex RDB) 1 on 23/07, 1 on 27/08/2019
62.022 *Pempelia genistella* (NS-B, Essex RDB) 1 on 23/07/2019
63.103 *Catoptria verellus* (formerly rare migrant, probably now resident, Essex RDB) 2 on 11/07, 1 on 23/07/2019
63.112 *Platytes alpinella* (NS-B, Essex RDB) 1 on 23/07/2019
70.153 *Eupithecia plumbeolata* (**Lead-coloured Pug**) (NS-B, Essex RDB) 1 on 23/05, 2 on 11/07/2019 (all gen.det.)
73.300 *Mythimna l-album* (**L-album Wainscot**) (NS-B, Essex RDB) 2 on 30/06/2019
74.002 *Meganola albula* (**Kent Black Arches**) (NS-B, Essex RDB) 1 on 23/07/2019



Figure 8 *Catoptria verellus*



Figure 9 **Lead-coloured Pug**

In 2019 moth-trapping occurred on only 6 nights:

Date	Site	Grid ref	No. of moths	No. of species
20 th April	Sharpsness Head	TQ989887	17	4
18 th May	Sharpsness Head	TQ989887	261	53
25 th May	East Newlands	TR032947	538	82
1 st June	Bennetts Butt	TR042943	557	100
10 th August	East Newlands	TR032947	240	52
24 th August	Sharpsness Head	TQ989887	1116	91

7 species were new for Foulness. This brings the total number of species of Lepidoptera for which I have a record of occurrence on Foulness to **645**.

I have a photographic voucher for nearly all of these species. These and others are presented on my moth website britishlepidoptera.weebly.com.

Scarce species recorded in 2019 are shown in bold in the cumulative list presented below:

Status Uncertain:

35.0191 *Anarsia innoxia* – 1 on 24/06/2017

This species was confirmed to be British, in a paper published in March 2017, based on a specimen from my garden in Westcliff-on-sea, trapped on 01/07/2015, and presented on my moth website – more information at <https://britishlepidoptera.weebly.com/0191-anarsia-innoxia.html>

Red Data Book species (Nationally Endangered, Vulnerable or Rare)

35.082 *Eulamprotes immaculatella* – 1 on 05/08/2012 – S England & N Scotland – FIRST FOR ESSEX

37.047 *Coleophora amethystinella* – 1 on 08/05/11 – previously only known to occur in North Essex (and 1 record from Hampshire), this was the first Essex record South of the Blackwater. At least 10 netted by day from grasses in the Bennets Butt rides on 22/05/2016 and at least 20 on 04/06/2016; 6 on 27/05/2017; 1 to light on 20/05/2018, 1 netted at dusk and 1 to light on 02/06/2018; **70 netted in the Bennetts Butt rides on 25/05 and 40 on 01/06/2019.**

37.079 *Coleophora aestuariella* – 1 on 01/08/2015 – saltmarsh in SE.England (possibly only the 3rd record for Essex)

49.271 *Eucosma rubescana* – 1 on 08/06/2008 – saltmarsh in Kent, Essex & Suffolk

49.274 *Eucosma metzneriana* – 1 on 27/06/2015 – recent colonist, possibly breeding in Kent (possibly 7th record for Essex); 1 on 11/06/2016; 1 on 24/06/2017

49.369 *Pammene agnotana* - 1 on 12/05/2012 – recent colonist with few British records – First for Essex

70.296 *Aplasta ononaria* (Rest Harrow) – 1 on 09/08/2015 – breeds very locally in Kent, occasional migrant (possibly 5th record for Essex); 9 on 03/08/2018, 1 on 11/08/2018, 1 on 18/08/2018; **7 on 24/08/2019**

73.027 *Deltote bankiana* (Silver Barred) – 1 on 13/06/2009; 1 on 10/07/2010; 2 on 30/06/2013; 1 on 07/06/2014; 1 on 04/07/2015

73.132 *Luperina nickerlii* (Sandhill Rustic) – 2 on 15/08/2015; 2 on 13/08/2016; 1 on 26/08/2017; 6 on 03/08/2018, 4 on 11/08/2018, 5 on 18/08/2018; 6 on 08/09/2018; **4 on 24/08/2019**

Nationally Scarce A (found in 30 or fewer 10km squares of the National Grid)

07.004 *Nemophora fasciella* – 1 on 11/06/2016 (potted by day on New England Island at ~TQ973906) – S&E.England

35.029 *Brachmia inornatella* – 1 on 13/06/2015 – fens & marshes in SE.England

38.043 *Elachista scirpi* 1 on 14/07/2013 – saltmarsh in England and Wales

45.022 *Cnaemidophorus rhododactyla* 1 on 21/07/2018 – hedgerows with rose in SE England

66.004 *Malacosoma castrensis* (Ground Lackey) – 1 on 10/07 and 31/07/2010; 1 on 19/08/2012 - Saltmarsh in SE England

70.201 *Trichopteryx polycommata* (Barred Tooth-striped) – 1 on 03/04/10; 5 on 07/04/2018, 1 on 14/04/2018 - prefers areas with chalky soils.

Nationally Scarce B (31-100 10km squares of the National Grid) or Uncommon in Essex (UE):

04.012 *Stigmella aceris* 1 on 22/09/2013. UE and probably NS-B but status uncertain. This tiny moth with forewing length 2.2mm was first recorded in Britain in 1949, second record 1971, several subsequent records and now seems to be spreading but still scarce. It is on the Essex Field Club's Red Data List, which shows 14 previous Essex records.

12.040 *Monopis imella* (NS-B) 1 on 01/06/2019

27.002 *Oegoconia caradjai* (NS-B) 1 on 28/07/2018

32.044 *Depressaria douglassella* (NS-B) 2 on 26/08/2017

35.073 *Monochroa palustrellus* (NS-B) 3 on 14/07/2013, 1 on 21/07/2013; 2 on 12/07, 1 on 19/07/2014, 2 on 27/06/2015, 2 on 04/07/2015, 2 on 15/08/2015, 1 on 16/07/2016

37.003 *Coleophora limoniella* (NS-B) 1 on 14/07/2013 – saltmarsh in SE England

37.091 *Coleophora deviella* (NS-B) 1 on 23/07/11; 1 on 19/07, 1 on 26/07/2014 – saltmarsh in SE England

37.104 *Coleophora adpersella* (NS-B) 1 on 05/08/2012 – S.England; 1 on 03/08/2018

49.116 *Aethes williana* (NS-B) 1 on 25/05/2019

49.122 *Aethes dilucidana* (NS-B) 2 on 03/08/2018, 1 on 11/08/2018; 1 on 25/05/2019

49.219 *Thiodia citrana* (NS-B) 2 on 28/06/2008, 1 on 01/07/2008, 2 on 04/07/2009, 4 on 14/07/2013, 2 on 21/07/2013, 2 on 27/06/2015

49.278 *Gypsonoma minutana* (NS-B) 1 on 21/07/2018

49.380 *Pammene gallicana* (NS-B) 1 on 19/07/2014

52.002 *Sesia apiformis* (Hornet Moth) (NS-B) 1 on 25/07/09 to HOR lure; 1 on 11/06/2011 on poplar trunk; 1 on 06/07/2019 to HOR lure – SE England

52.014 *Bembecia ichneumoniformis* (Six-belted Clearwing) (NS-B, Essex RDB) 2 on 06/07/2019 to API lure



Figure 10: Six-belted Clearwing

- 62.021 *Oncocera semirubella* (NS-B, Essex RDB)** 1 on 04/07/2009; 1 on 10/07, 1 on 17/07, 1 on 31/07, 3 on 07/08/2010; 1 on 06/08/2011; 1 on 20/07/2013; 4 on 12/07, 2 on 19/07, 4 on 26/07/2014; 1 on 27/06, 1 on 14/07, 1 on 01/08, 1 on 15/08/2015; 2 on 13/08/2016; 6 on 24/06, 2 on 29/07, 10 on 26/08/2017; 4 on 21/07, 10 on 03/08, 10 on 18/08, 20 on 08/09/2018; **2 on 24/08/2019**
- 62.053 *Ancylosis oblitella* (NS-B)**, 1 on 31/07 and 07/08/10; 1 on 06/08/2011; 1 on 26/08/2017; 20 on 03/08/2018, 2 on 11/08/2018; 3 on 18/08/2018; 3 on 08/09/2018; **4 on 24/08/2019** - Saltmarsh
- 63.014 *Sitochroa palealis* (NS-B) 1 on 23/07/06, 1 on 05/08/07, 1 on 12/08/07, 1 on 20/07/08, 2 on 19/08/2012; 3 on 19/07, 3 on 26/07/2014 – S England and East Anglia
- 63.109 *Pediasia contaminella* (NS-B) 1 on 30/07/11, 1 on 01/08/2015; 1 on 28/07/2018 – S England
- 63.110 *Pediasia aridella* (NS-B) 1 on 27/06/2015 – saltings S&E England
- 63.112 *Platytes alpinella* (NS-B) 2 on 19/07/2014 – coastal dunes and shingle beaches S&E.England
- 66.012 *Gastropacha quercifolia* (Lappet) (UE) 1 on 5,19/07/08; 4 on 03/07/10, 6 on 10/07/10, 1 on 17/07/10, 2 on 31/07/10, 2 on 21/07/2013; 10 on 12/07, 10 on 19/07/2014, 8 on 04/07/2015, 8 on 16/07/2016; 12 on 24/06/2017; 1 on 21/07/2018
- 70.028 *Scopula emutaria* (Rosy Wave) (NS-B)** – 1 on 13/06/09; 2 on 03/07/10; 2 on 03/09/2011; 2 on 30/06/2013, 1 on 14/07/2013; 1 on 30/08/2014; 1 on 13/06/2015, 2 on 27/06/2015, 1 on 04/07/2015; 1 on 29/07/2017, 2 on 26/08/2017; 3 on 03/08/2018, 3 on 18/08/2018; **1 on 25/05, 6 on 24/08/2019**
- 70.057 *Catarhoe rubidata* (Ruddy Carpet) (NS-B); 1 on 27/06/2015
- 70.161 *Eupithecia virgaureata* (Golden-rod Pug) (UE); 1 on 18/08/2018
- 70.186 *Eupithecia millefoliata* (Yarrow Pug) (NS-B) 1 on 26/07/2014 – coastal from Dorset to Essex; 1 on 16/07/2016; 1 on 03/08/2018
- 70.232 *Ennomos autumnaria* (Large Thorn) (NS-B) 2 on 01/09/08, 1 on 13/09/2008, 1 on 02/09/2012 – SE England
- 72.021 *Spilosoma urticae* (Water Ermine) (NS-B) 1 on 21/06/08 - coastal areas in SE England
- 73.035 *Simyra albovenosa* (Reed Dagger) (NS-B) 2 on 26/07/08; 1 on 31/07 & 07/08/10; 2 on 21/07/2018 – reeds

73.055 *Cucullia asteris* (Star-wort) (NS-B) 1 on 30/06/07, 1 on 05/07/08, 2 on 26/07/08, 1 on 04/07/09; 1 on 22/05, 10/07 & 17/07/10; 1 on 30/07/2011, 2 on 05/08/2012; 10 on 14/07/2013, 6 on 21/07/2013; 1 on 12/07, 8 on 19/07, 4 on 26/07, 2 on 16/08/2014; 2 on 27/06/2015; 1 on 16/07/2016; 3 on 24/06/2017, 2 on 29/07/2017; 6 on 21/07/2018; **1 on 10/08/2019** – saltmarsh

73.082 *Cryphia algae* (Tree-lichen Beauty) (Formerly a rare migrant, currently breeding in SE.England) 1 on 13/08/2011, 2 on 18/08/2012, 3 on 26/07/2014; 10 on 21/07/2018, 10 on 28/07/2018, 2 on 03/08/2018; **4 on 10/08/2019**

73.087 *Spodoptera exigua* (Small Mottled Willow) – 2 on 04/07/2015, 1 on 01/08/2015, 2 on 15/08/2015 – an uncommon migrant that had a bumper year in 2105

73.151 *Globia sparganii* (Webb's Wainscot) (NS-B) 1 on 07/09/2008; 1 on 21/07/2018, 1 on 03/08/2018 – S&E coasts

73.161 *Apamea oblonga* (Crescent Striped) (NS-B) 1 on 05/07/08, 1 on 04/07/09; 1 on 10/07/10; 3 on 23/07, 1 on 30/07/2011; 1 on 21/07/2013; 1 on 12/07, 2 on 19/07, 2 on 26/07/2014; 4 on 27/06/2015, 10 on 04/07/2015; 3 on 21/07/2018– saltmarsh

73.183 *Cirrhia gilvago* (Dusky-lemon Sallow) (UE) 1 on 06/10/07

73.197 *Conistra rubiginea* (Dotted Chestnut) (NS-B) - 1 on 07/04/2018

73.248 *Orthosia opima* (Northern Drab) (UE). 3 on 14/04/07, 1 on 21,28/04/07; 3 on 26/04/08; 1 on 10/04/10, 2 on 24/04/10, 13 on 01/05/10; 1 on 07/04/2018

73.292 *Mythimna favicolor* (Mathew's Wainscot) (NS-B) 1 on 28/06/08 – saltmarsh; 1 on 03/07/10, 2 on 10/07/10; 2 on 27/06/2015; 1 on 03/08/2018, 1 on 11/08/2018, 1 on 18/08/2018

73.300 *Mythimna l-album* (L-album Wainscot) (NS-B) 1 on 15,22,29/09/07, 3 on 21/06/08, 2 on 05/07/08, 2 on 20/09/08, 1 on 13/06/09, 1 on 19/09/09; 1 on 03/07, 17/07, 31/07, 18/09, 02/10/10 and 3 on 09/10/10; 1 on 11/06, 03/09, 10/09, 2 on 17/09/2011, 12 on 16/09/2012; 1 on 22/09/2013; 2 on 03/10/2015; 2 on 24/09/2016; 2 on 24/06/2017; 1 on 08/09/2018; **1 on 01/06/2019**

74.002 *Meganola albula* (Kent Black Arches) (NS-B) 1 on 07/07/07; 3 on 04/07/09; 2 on 26/06/10, 3 on 03/07/10, 2 on 10/07/10; 6 on 14/07/2013; 1 on 12/07, 1 on 20/09/2014; 1 on 27/06/2015, 6 on 04/07/2015; 4 on 16/07/2016; 3 on 24/06/2017 - S&SE coasts

Scarce Migrants

49.343 *Cydia amplana* (Vagrant Piercer) – 1 on 03/08/2018 – first recorded in Britain in 1990, 5 previous Essex records according to Essex Field Club website

72.030 *Euplagia quadripunctaria* (Jersey Tiger) – 1 on 11/08/2018

73.076 *Helicoverpa armigera* (Scarce Bordered Straw) – 4 on 26/08/2017

More common species new to Foulness in 2019

12.039 *Monopis crocicapitella*

15.017 *Calybites phasianipennella*

49.022 *Ptycholoma lecheana*

49.367 *Pammene fasciana*

The highlight of my year was undoubtedly a **Mocha** on 31 May which seems to be a first for SW Essex, additionally a dozen or so new species have been added to my garden list –



MOCHA

Macros - **Suspected** 23 June , **Obscure wainscot** 2 July, **Sprawler** 31 Oct,
Delicate 24 Sept, **Small clouded brindle** 3 July

Micros - *Argyresthia semifusca* 20.020 1 June
Argy Curvella 20.015 23 June
Epagoge grotiana 49.005 3 July
Calybitis phasianipenella 150.17 29 Aug (var *quadripunctella*)

Potential pest species – Only 9 **Gypsy Moths** trapped down from 13 in 2018 and 40 the year before with **Oak Processionary** 16 against 19 in 2018.

I am pleased to say that **Jersey Tigers** are still around in good numbers 125, even though some neighbours have unfortunately increased their lawn size at the expense of nettles and brambles.

The **Box Moth** *C. perspectalis* were also down in numbers with only 79 taken. Box hedging in gardens near me has also been flourishing again after several years of devastation, I suspect the gardeners have discovered their growth improves with the use of an insecticide.

The hot spell in summer probably accounted for a large increase in **White points** although not many **Silver Y 's** recorded.

L- Album wainscots and *T. acroxantha* numbers were still increasing but the Lichen feeders, again, quite low almost certainly due to the host trees being cut down by “tidy neighbours.”



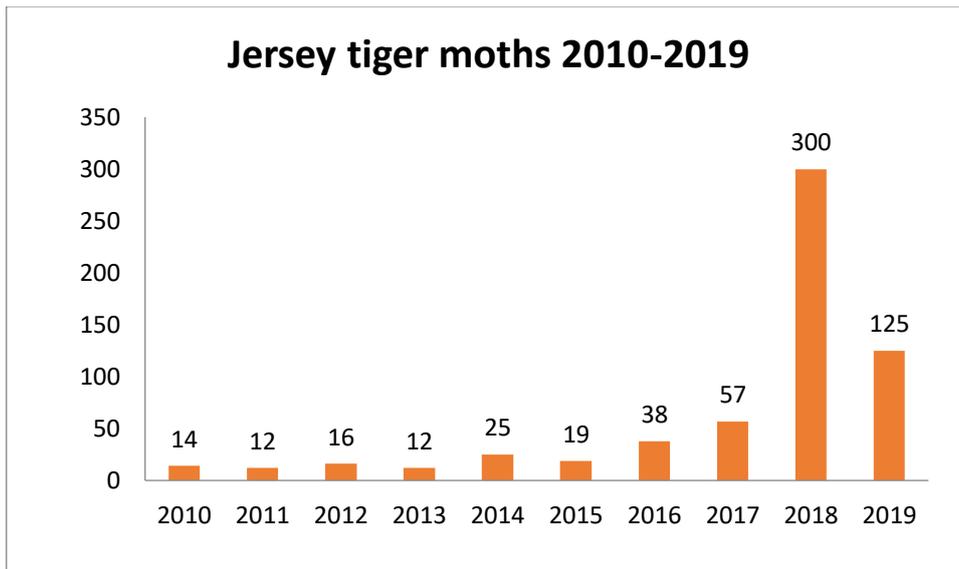
OBSCURE WAINSCOT



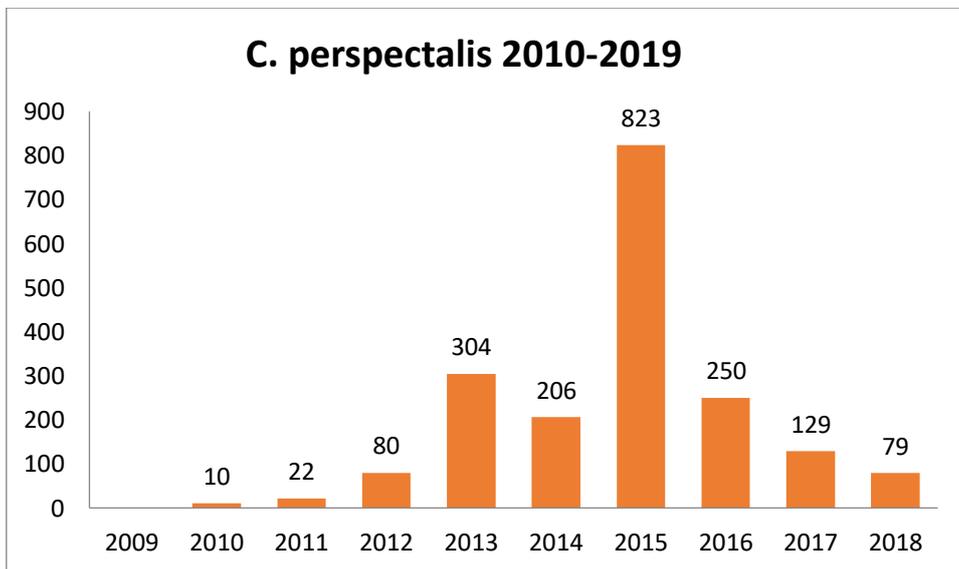
SPRAWLERS

(R.Barfoot)

JERSEY TIGER



BOX MOTH



The year of 2019 proved to be yet another excellent one generally for the local moth populations, and I was fortunate to experience nearly four complete months in south Essex, from late June until mid-October. This allowed me to accomplish a reasonable overall picture of how the moth fauna was performing during the most important period of the year for them.

I have outlined the principal more unusual species noted in my Rayleigh garden, and also at several other sites in south Essex, most notably at Canvey Wick SSSI, which several colleagues and I are beginning to study in greater detail.

MAIN HIGHLIGHTS FROM MY RAYLEIGH GARDEN

MACRO MOTHS

Lead-coloured Drab – 22nd March, 30th March – only my second and third records for my area. **Sloe Carpet** – total of 20 from 22nd March to 24th April, with max. of 7 on 22nd April. **Gold Spot** – 1st June (2). **Blackneck** – singles on 29th June, 1st July, 9th July, 10th July. **Ruddy Carpet** – 4th July. **Brown Scallop** – 5th July. **Small Marbled** – 6th July – my first record of this migrant species. **Reed Dagger** – 17th July. **Obscure Wainscot** – 6th July. **Small Emerald** – 16th July, 29th July. **Waved Black** – 21st July, 4th August. **Lappet** – 22nd July. **Dewick's Plusia** – 23rd July. **Double Lobed** – 24th July. **True Lover's Knot** – 24th July. **Gypsy Moth** – 2nd August. **September Thorn** – 3rd August – my first record locally for over forty years!
Oak Processionary – 9th August, 11th August. **Cypress Pug** – 25th August, 27th August, 2nd September, 20th September. **Jersey Tiger** – 26th August. **Pinion-streaked Snout** – 27th August. **Sandhill Rustic** – 27th August, 3rd September. **Treble-bar** – 31st August – first garden record. **Red Underwing** – 10th September.
Clancy's Rustic – 15th September, 20th September, 26th September (2). **Hedge Rustic** – 21st September. **Merveille du Jour** – 3rd October, 7th October, 3rd November.

MICRO MOTHS

Elegia similella – 29th June, *Agonopterix purpurea* – 4th July, 11th August,
Recurvaria nanella – 9th July, 29th July, 22nd August, *Ancylosis oblitella* – 10th July,
Epinotia signatana – 22nd July, *Zelleria hepariella* – 23rd July, *Pexicopia malvella* – 25th July, *Caloptilia populetorum* – 25th July, *Pediasia contaminella* – 31st July, *Ypsolopha horridella* – 4th August, *Agdistis bennetii* – 11th August (2),
Duponchelia fovealis – 26th August, *Argyresthia semitestacella* – 8th August, 26th August, *Ptocheuusa paupella* – 2nd September,
Box-tree Moth – 100+ - 21st September,



SEPTEMBER THORN

(G.Bailey)



BIRD'S WING



Bisigna procerella



Catoptria verellus



Duponchelia fovealis



Coleophora conspicuella



Anacamptis populella



Homoeosoma sinuella



LEAD-COLOURED DRAB



OAK PROCESSIONARY



Pexicopia malvella



Pseudatemelia subochreella



Roeslerstammia erxebella



SMALL MARBLED



SPINDLE ERMINE



WHITE-LINE SNOUT

During the second half of 2019 several friends and myself carried out a number of moth recording trips to Canvey Wick SSSI, a wonderful location for invertebrate fauna close to the mouth of the Thames estuary. I had ventured out to site on a number of occasions in the past with Don Down and Ben Sale, but had not done any detailed recording for a number of years. Our party commenced our evening recording sessions on the 29th June and amassed an excellent haul of both species and individual moths. During the initial visits to the site I was accompanied by Graham Ekins, Dougal Urquhart and Roger Payne, but I also ventured out to Canvey Wick a number of times by myself when the opportunity arose.

Our initial trip at the end of June was an incredible baptism for both Dougal and Graham as neither had ever visited this part of the world before. Even though they were using their traps either in or close to the car park due to an issue with one of the entrance gates, they were amazed by the sheer quantity of moths. I managed to set up a trap and tripod lamp at a site closer to the heart of the reserve, with the lamps situated on the hard standing that was previously used as a base for the oil storage containers that were built, but never used for purpose.

There were many highlights from this first venture to the site, with many species pitching up in numbers possibly unique in Essex. Among the foremost stars of the show were the **Lappet**, **Obscure wainscot**, **Blackneck**, **Ghost Moth** (female), **Silky Wainscot**, **White Satin** and **Lesser Cream Wave**. The site is a paradise for those interested in the micro moth fauna, and we noted **Crescent Plume**, *Evergestis extimalis*, and *Anania lancealis* amongst a vast haul of other species.

Our next excursion to this brownfield site took place on the 12th July, with access for all of us to the main site. Once again, we were treated to a wonderful evening consisting of superb numbers of a huge variety of moths. One of the best species was the **Small Elephant Hawkmoth**, a first anywhere for myself, but the sheer quantity of moths coming in meant you never quite knew what to expect next! The very localised **Rose Plume** is present here, along with *Platytes alpinella* and *Acleris logiana*. Two more trips were made in July, and amongst the best records were **Dewick's Plusia**, **Crescent**, **Yarrow Pug**, **Bordered Sallow**, *Strathmopoda pedella* and *Carpatolechia alburnella*. On the 29th July some of the more notable species were the **Marbled Green**, **Garden Tiger**, **Gypsy Moth** and *Oidaematophorus lithodactyla*.

I had some really excellent moth records in August, and chief among these must surely be the **Rest Harrow**, with the possibility that this RDB species may possibly be breeding at the location. Other very worthy additions to the list were the **Star-wort**, **Crescent Striped**, **Saltern Ear**, **Gypsy Moth** and the scarce micro *Euzophera cinerosella*. The **Sandhill Rustic** began to make an appearance once into mid-August, along with the migrant *Cydia amplana* and another **Dewick's Plusia**. Late August had **Sharp-angled Peacocks** in abundance, along with **Plumed Fan-foot**, **Gold Spot**, **Barred Rivulet** and a single **Jersey Tiger**. A couple of visits in September continued to reveal new species, including **Feathered Gothic**, **Frosted Orange**, **Autumnal Rustic** (60+ on the 29th) and **Black Rustic**. One final trip to Canvey Wick on 3rd November allowed me to record **December Moths**, *Acleris hastiana* and 27 **Large Wainscots**.

I have yet to venture out to the site to do any recording in the early months of the year, so there is obviously a whole gamut of species yet to be added to the list! Hopefully this will be remedied to some degree this year – work, weather and wife permitting (my own version of www.).

Anyone interested in helping me with this less than onerous task is welcome to join me and help to further reveal the mysteries of this wonderful and diverse habitat.



REST HARROW



LAPPET IMITATING DRINKER!

(G.Bailey)

CANVEY WICK MOTHS

PICTURES GRAHAM BAILEY

		
<i>Carpatolechia alburnella</i>	<i>Caloptilia populetorum</i>	DEWICK'S PLUSIA
		
<i>Anania lancealis</i>	CRESCENT	GROUND LACKEY
		
<i>Evergestis extimalis</i>	<i>Euzophera cinerosella</i>	LESSER CREAM WAVE
		
MARBLED GREEN	<i>Pediasia contaminella</i>	<i>Platytes alpinella</i>
		
ROSE PLUME	SMALL ELEPHANT HAWK	<i>Thiodia citrana</i>

I carried out trapping in my garden on 236 nights during 2019 with either one or two Skinner traps (125W MV; 2x24W Actinic). In addition, I operated funnel traps baited with a variety of pheromone lures in the garden and occasionally at other local sites and carried out limited searches for early stages and leafmines. A total of 429 species were recorded in the garden during the year (447 in 2018, 411 in 2017) with 11 species being added to the garden list and 4 more being new for me in Essex at other sites. Three of these were clearwings attracted to lures and are in addition to the 4 species recorded for the first time in 2018. I was quite impressed to rack up 7 clearwing species in my rather ordinary garden. The garden list now stands at 839 species since recording started in 1996.

New species for the garden in 2019 were:

- 15.016 *Euspilapteryx auroguttella* - 2 to Pheromone Lure Trap with Carnation Tortrix lure on 3rd June.
- 20.015 *Argyresthia curvella* - Single male to Actinic Skinner Trap on 5th July. Confirmed by dissection.
- 32.009 *Agonopterix purpurea* – An adult netted in the garden during the evening of 31st May.
- 37.047 *Coleophora amethystinella* – An adult in the actinic skinner trap on 24th May. Lovely orange eye and lower lashes.
- 40.006 *Mompha jurassicella* – A total of three between 14th and 23rd March. One in flight during the day, one at outside light and one indoors. All confirmed by dissection. Possibly I have overlooked this species in the past, although it does seem to be increasing.
- 49.047 *Eana incanana* – 2 adults in the Actinic skinner trap on 5th and 6th July. Both confirmed by dissection.
- 49.365 *Pammene albuginana* – 2 males to a funnel trap baited with lure for *Grapholita funebrana* (Plum Fruit Moth) on 26th May and 3rd June at approx. 18:00.
- 52.008 *Synanthedon formicaeformis* (Red-tipped Clearwing) – 1 attracted to FOR lure in funnel trap on 2nd June and two more to the same lure on 4th July (between 16:00 and 17:15).
- 52.010 *Synanthedon andreaeformis* (Orange-tailed Clearwing) – A total of 15 attracted to VES (13) or FOR (2) lures in funnel traps between 24th June and 14th July. Despite deploying this lure in 2018 with no success, it was quite a surprise to get such a large number, although they possibly don't fly every year as larvae take more than a year to develop.
- 52.013 *Synanthedon tipuliformis* (Currant Clearwing) – A single adult in a funnel trap baited with TIP lure at 19:00 on 24th June.
- 62.061 *Vitula biviella* – I was quite surprised when the small, drab phycitine that I was dissecting turned out to be this pine-feeding species. First recorded in Kent in 1997 it has now spread up the east coast as far as Suffolk.

New species for me from other sites:

- 4.008 *Stigmella glutinosae* – 2 tenanted mines and 2 vacated on Alder near Magdalen Laver church on 23rd November. Confirmed by examination of the larva.
- 15.050 *Phyllonorycter cerasicolella* – A single mine on Cherry near Magdalen Laver church on 23rd November. Larva still present and feeding.
- 15.054 *Phyllonorycter viminiella* – Tenanted mines on underside of White Willow at Spencer's Farm, Magdalen Laver. Mixture of larvae and pupae. 3 adults of this rather poorly marked species emerged last week.
- 71.001 *Thaumetopoea processionea* (Oak Processionary) – A single larval nest was seen at around 4m up a mature oak near Connaught Water, Epping Forest. An earlier abandoned nest was still visible lower down on the trunk. I have deployed the pheromone lure for this species in the garden but no response to date but I'm expecting to see it soon as it appears to have become quite widespread in the county.

Species Recorded using pheromone lures in funnel traps

177 moths of 40 different species were recorded in funnel traps over the summer. Many of these were 'non-target' species either responding to the lure designed for another species or possibly casual visitors having flown into the trap without being specifically attracted. Strong repeat responses were noted for **Broad-bordered Yellow Underwing** to the lure for the Carnation Tortrix and **Uncertain** to the lure for Dark Swordgrass.

Species	Total	First	Last	Lure
<i>Nemapogon ruricolella</i>	3	26-Jun	30-Jul	VES & HYL
<i>Euspilapteryx auroguttella</i>	2	03-Jun		CAR
<i>Glyphipterix simpliciella</i>	2	25-May	29-May	CUL & BRA
<i>Amblyptilia acanthadactyla</i>	1	30-Jun		MOL
<i>Argyrotaenia ljungiana</i>	1	14-May		CAR
<i>Cacoecimorpha pronubana</i>	2	21-May	01-Jun	CAR
<i>Cnephasia pumicana</i>	2	11-Jul	16-Jul	PRO & HYL
<i>Pseudargyrotoza conwagana</i>	2	27-Jun	27-Jun	HYL & FUN
<i>Celypha rosaceana</i>	1	11-Jul		MOL
<i>Celypha lacunana</i>	1	24-Jun		OAK
<i>Cydia nigricana</i>	3	01-Jun	10-Jul	NIG
<i>Cydia pomonella</i>	2	25-May	30-May	POM
<i>Grapholita funebrana</i>	12	28-Jun	01-Aug	FUN & MOL
<i>Grapholita tenebrosana</i>	4	25-Jun	29-Jun	FUN
<i>Pammene albuginana</i>	2	26-May	03-Jun	FUN
<i>Pammene fasciana</i>	9	30-Jun	16-Jul	MOL
<i>Pammene regiana</i>	1	14-May		GAM
<i>Cnephasia pumicana</i>	1	11-Jul		PRO
Raspberry Clearwing	3	29-Jul	03-Aug	HYL & VES
Red-tipped Clearwing	3	02-Jun	04-Jul	FOR
Orange-tailed Clearwing	15	24-Jun	14-Jul	VES & FOR
Red-belted Clearwing	9	25-Jun	03-Aug	MYO & CUL
Yellow-legged Clearwing	2	25-May	31-May	VES
Currant Clearwing	1	24-Jun		TIP
<i>Hypsopygia costalis</i>	2	01-Jul	05-Jul	HYL & PRO
<i>Hypsopygia glaucinalis</i>	1	10-Jul		NIG
Mother of Pearl	3	31-Jul	05-Aug	BOX
Box-tree Moth	11	29-Jul	06-Aug	BOX
Emperor Moth	8	19-Apr	02-May	EMP
Dwarf Cream Wave	1	15-Jul		TAB
Single-dotted Wave	1	09-Jul		IPS
Brimstone Moth	2	29-Jun	06-Aug	SCO & HYL
Gypsy Moth	11	03-Aug	08-Aug	GYP
Spectacle	1	31-May		LACE
Dewick's Plusia	1	18-May		IPS
Silver Y	1	21-May		LACE
Uncertain	25	26-Jun	12-Jul	IPS
Heart and Dart	14	16-May	03-Jun	H&D & POM
Turnip Moth	1	05-Aug		SCO
Broad-bordered Yellow Underwing	10	03-Aug	07-Aug	CAR

Several other lures were also deployed but caught no moths so are not listed below.

Code	Species	Code	Species
BOX	Box Moth	LACE	Lacewing Attractant
BRA	Cabbage Moth	MOL	Oriental Fruit Moth
CAR	Carnation Tortrix	MYO	Red-belted Clearwing
CUL	Large Red-belted Clearwing	NIG	Pea Moth
EMP	Emperor	OAK	Oak Clearwing
FOR	Red-tipped Clearwing	POM	Codling Moth
FUN	Plum Fruit Moth	PRO	Oak Processionary
GAM	Silver-Y	SCO	Welsh Clearwing
GYP	Gypsy	TAB	Dusky Clearwing
H&D	Heart & Dart	TIP	Currant Clearwing
HYL	Raspberry Clearwing	VES	Yellow-legged Clearwing
IPS	Dark Swordgrass		

		
CURRENT CLEARWING	ORANGE-TAILED CLEARWING	RED-TIPPED CLEARWING
		
<i>Argyresthia curvella</i>	<i>Coleophora amethystinella</i>	<i>Eana incanana</i>
		
<i>Euspilapteryx auroguttella</i>	<i>Mompha jurassicella</i>	<i>Pammene albuginana</i>

(Pics – T. Green)

Scythris potentillella (Zeller, 1847) new to Essex

HELEN M BANTOCK

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Abstract

A male and female specimen of *Scythris potentillella* were swept on Wanstead Flats from an area with abundant Sheep's Sorrel *Rumex acetosella*, on the 8th August 2019. This is a New County Record (NCR) for South Essex and the moth has so far not been reported in North Essex.

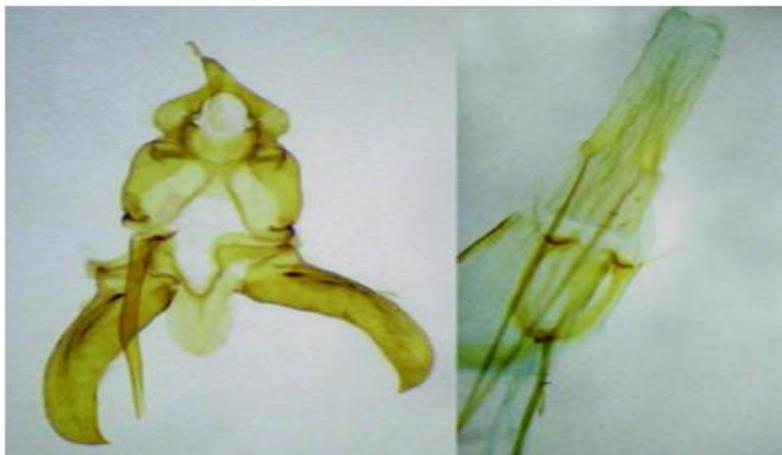
The *Scythridae* are a group of scarce micro moths and they usually occupy warm, dry and well-drained habitats. Twelve species have been recorded in the UK but only nine are thought still to occur.

Scythris potentillella was first reported in Britain in 1972 from Thorpness, East Suffolk VC25 by DJL Agassis but remained unidentified until 1982. Further specimens came from Hampton Court Park, Middlesex VC21 in 2003, Croxley Common Moor, Hertfordshire VC20 in 2005, Cooper's Hall, Bedfordshire VC30 in 2006, Grain, West Kent VC16 in 2007, Richmond Park, Surrey VC17 in 2011, Shortheath Common, Hampshire VC12 in 2015. On the 11th May 2014 a larva was found on Winterton Dunes, Norfolk VC27 (SDBeavan and RJHecksford) and subsequently, adults were reared and full descriptions of the larvae given (2016, Entomologist's Gazette, 67: 119-133). This article also contains full references to the earlier specimens.

The habitat at Wanstead is lowland acidic grassland and the area TQ 405 859 where the male and female specimens of *Scythris potentillella* were swept has abundant *Rumex acetosella* and Broom *Cytisus scoparius*. The moths were found within a few minutes of sweeping and it is likely that the species is widespread in the area.



Scythris potentillella. Photograph © Helen M. Bantock



Scythris potentillella male and female genitalia. Photograph © Helen M. Bantock

**The Starry Pearl *Cynaeda dentalis* new to Essex
and Kent Knot-horn *Moitrelia obductella* new to South Essex**

JAMES MCGILL¹ AND JOHN LITTLE²

¹ 13 Cresswell Avenue, Taunton, Somerset TA2 6LS

² Hilldrop, Latndon Road Horndon on the Hill, Essex SS17 8QB

A Robinson 125w mercury-vapour moth trap has been operated occasionally since 2006 at Hilldrop, the 4-acre garden of John Little (JL) and Fiona Crummay at Langdon Hills south-east of Basildon. The trap contents were recorded initially by Bob Hills, with contributions in later years from Rod Cole, and since 2016 James McGill (JM).

The garden is on a south-facing clay slope. Upon acquisition by JL in 1990, the site was mostly grassland, with approximately 2 acres managed for hay, and 1 acre grazed by horses. Since then JL has undertaken a major programme of substrate modification and planting. JL & JM regularly discuss the potential of the landscaping to support invertebrates, and to this end were considering plantings after the introduction of new recycled aggregate mounds in 2016. JM suggested that more Viper's-bugloss could be valuable, based on its attraction for Brown-banded Carder Bee *Bombus humilis*, workers of which are frequently seen at Hilldrop visiting Common Knapweed *Centaurea nigra* and Broad-leaved Everlasting-pea *Lathyrus latifolius*. Another potential attraction was the Viper's-bugloss Mason Bee *Hoplitis adunca*, a monolectic species which collects pollen only from Viper's-bugloss and recently added to the UK fauna at Greenwich, London (Notton *et al.* 2016).

JL seeded and plug planted Viper's-bugloss and by 2019 this was well established on ceramic fines and Thanet sand. In advance of JM visiting Hilldrop, JL set a moth trap on 19.vii.2019. Upon inspection the following morning, among 80 species was a single example of the Starry Pearl *Cynaeda dentalis*. JM thought this was a surprising record, as the species is usually associated with shingle beaches and sea-cliffs (Goater 1986). This impression was confirmed by Peter Harvey who could find no previous Essex records.

At this stage the moth seemed an unlikely vagrant, but JL set the trap again on 20.vii.2019 and two further Starry Pearl were captured. Based on wing wear, these were certainly different individuals to the specimen trapped the previous night. Without finding larvae it is not possible to say that the moth has established at Hilldrop, but in the absence of other Essex records around the same time this is a possibility. Goater (1986) describes the larvae as feeding internally in Viper's-bugloss stems in May and June, followed by pupation externally on leaves, which wither as a result of the stem-feeding. It is hoped that further observation may establish whether this species is now part of the resident Essex moth fauna.

Among 89 species in the trap from 21.viii.2019, another notable capture was 2 specimens of the Kent Knot-horn *Moitrelia obductella*. In recent years this has expanded its range from traditional localities in Kent, although there is only one previous Essex record at Magdalen Laver TL508081 (VC19) on 24 Jul 2006, at a 125W MV Skinner Trap (Green, T.W.). The foodplant of the Kent Knot-horn is Marjoram *Origanum vulgare*, which was introduced to a rubble swale at Hilldrop in 2005 and now forms large clumps in several places around the garden. Again, without observation of larvae this cannot be claimed as an Essex resident, but in this case the moth was also likely present in 2017, when one escaped capture from a moth trap. The larvae make a spinning in spring in terminal shoots of the foodplant (Goater 1986), and it is hoped that this may also be observed at Hilldrop.

As a more general point, these records demonstrate the potential value of habitat creation for the benefit of invertebrate conservation. Even if both species are not currently breeding at Hilldrop,

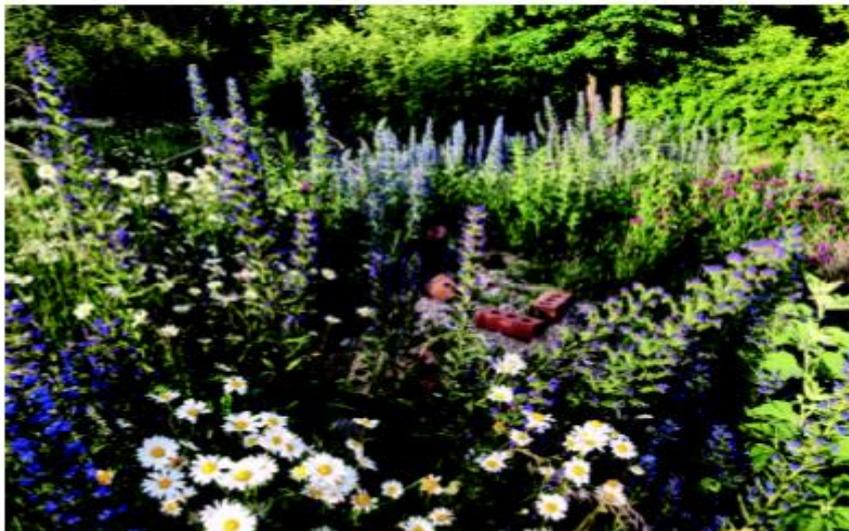
The Starry Pearl *Cynaeda dentalis* new to Essex and Kent Knot-horn *Motretia obductella* new to South Essex



Starry Pearl *Cynaeda dentalis*. Photograph © David Harper



Kent Knot-horn *Motretia obductella*. Photograph © David Harper



Created habitat at Hilldrop. Photograph © John Little

the garden is within the range of dispersing individuals and could therefore be colonised in future. Creative conservation has generally received less attention than conservation management of existing sites (Morris 1990) though with climate change a network of sites which enable species to move through the landscape may be important to facilitate range adjustments, particularly for less mobile taxa.

References

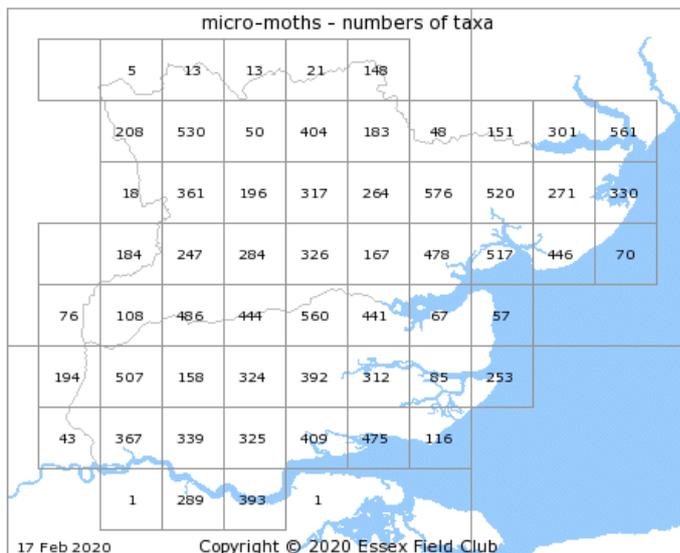
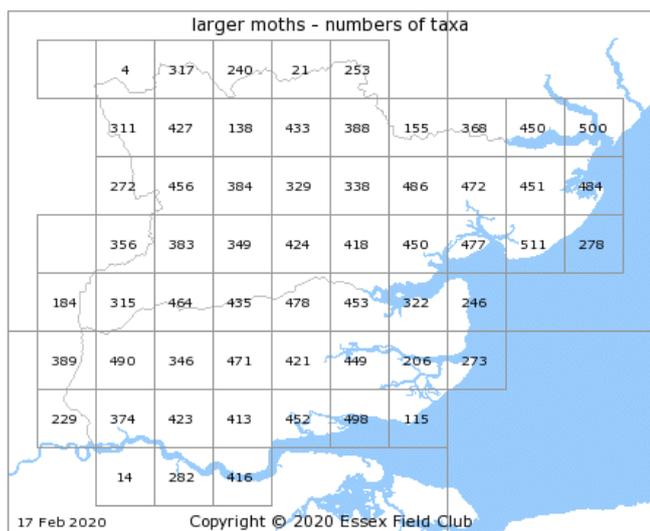
- GOATER, B. (1986) *British Pyralid Moths*. Colchester, Harley Books. 175 pp.
- MORRIS, M.G. (1990) The effects of management on the invertebrate community of calcareous grassland. In: Hillier, S.H., Walton, D.W.H. & Wells, D.A. (eds) *Calcareous Grasslands – Ecology and Management*. Bluntisham, Bluntisham Books. pp. 128–133.
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A COUNTY UPDATE ON ESSEX MOTH RECORDING - PETER HARVEY

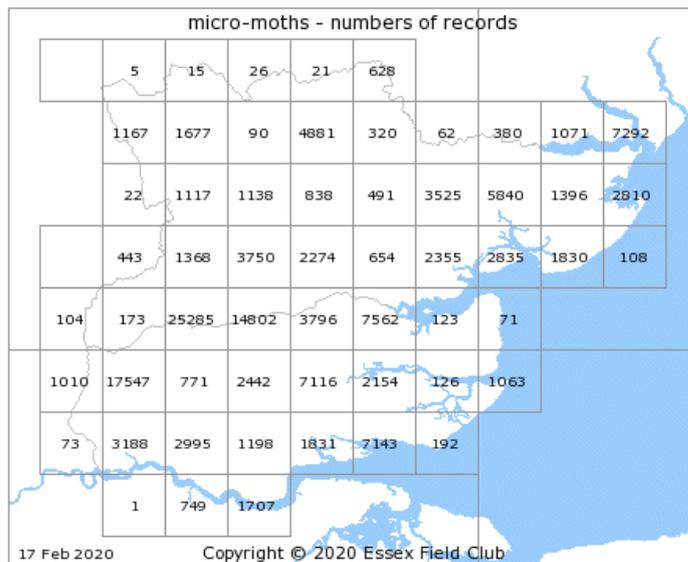
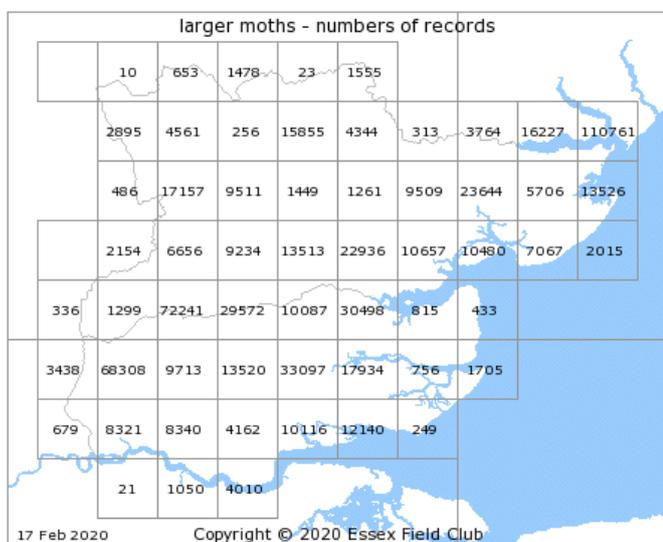
Numbers of Lepidoptera records and taxa for the county at February 2020

butterflies: 353,069 records for 52 species
larger moths: 674,511 records for 676 species
micro-moths: 232,226 records for 1,135 species

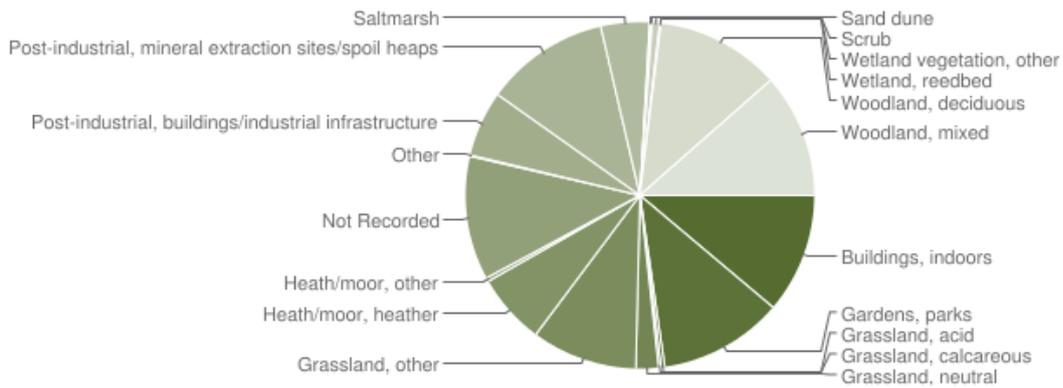
Coverage: numbers of species recorded per hectad



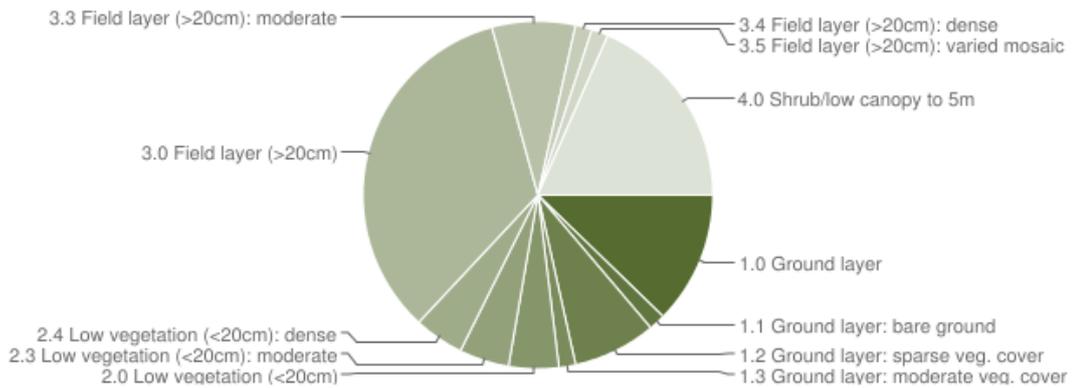
Numbers of records submitted per 10km square



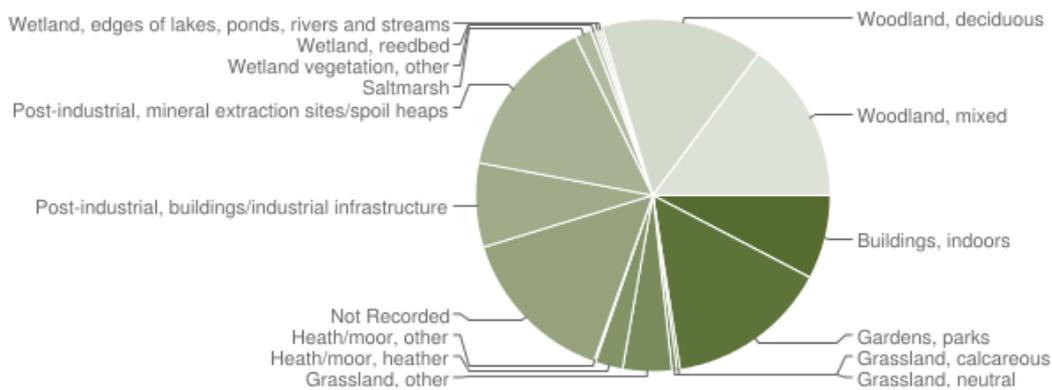
Broad Habitat Data for: *Lepidoptera: macromoths* based on 71,576 records and 451,714 individuals



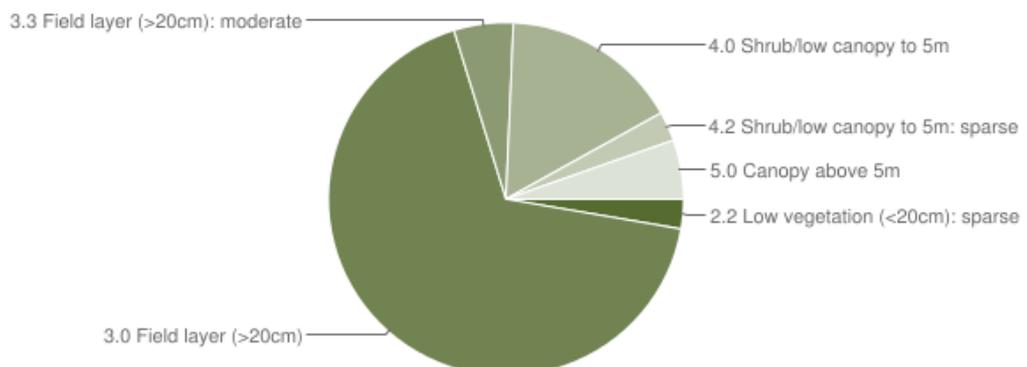
Structural Habitat Data for: *Lepidoptera: macromoths* based on 65 records and 107 individuals



Broad Habitat Data for: *Lepidoptera: micromoths* based on 33,153 records and 198,259 individuals



Structural Habitat Data for: *Lepidoptera: micromoths* based on 37 records and 87 individuals



A PLEA TO SUBMIT YOUR DATA IF YOU HAVE NOT ALREADY DONE SO. AND DO YOU USE ESSEX MOTH DATA?

Everyone can see the latest Essex distribution maps, phenology charts, habitat and other autecological information which has been provided to the County Recorder by recorders on the Essex Field Club website. Essex Moth Group members who provide records can also ask to be given access to the record data behind the dots on the maps, so that clicking on a dot then reveals the details of the records involved (ask Peter Harvey, grayspeterharvey@gmail.com).

If you use these maps or any information provided by the county records but do not provide your own data, please be aware that this is unhelpful - information in the database comes from those who provide data, not from those who do not, and it is unreasonable to expect to use information if you are not prepared to provide your own.

SUBMITTING YOUR RECORDS

Using the MapMate sync process, or an Excel record template provides much the best way to submit records. The template is available to download from [http:// www.essexfieldclub.org.uk/portal/p/ Providing+Moth+Records](http://www.essexfieldclub.org.uk/portal/p/Providing+Moth+Records)

This is an Excel file which includes a reference taxon list and drop-down entries for some MapMate fields where consistency will help make use of the data in structured analyses. Your taxon entry is done by entering the 4-digit Bradley number or the "new" decimal-style 2013 checklist number* - this helps ensure that typos are not created and that importing the records is a relatively painless process. This provides information on the last year recorded in Essex and also provides a direct link to the Essex Field Club Species Account page with map etc. Please make sure you are using an up-to-date template so that taxon names are up to date. The 2019 template should be fine to use for 2020.