

ESSEX MOTH GROUP ANNUAL NEWSLETTER 2024

COMPILED BY DOUGAL URQUHART



LIGHT CRIMSON UNDERWING, COCKAYNES WOOD, 28th July 2023, GAVIN PRICE



DARK CRIMSON UNDERWING, TIPTREE HEATH, 9TH August 2023, TOM LANTAFF

ESSEX MOTH GROUP
ANNUAL MEETING AND EXHIBITION
THE CORDITE ROOM, WAT TYLER C.P. VISITOR CENTRE
SATURDAY 2ND MARCH
2024 PROGRAMME

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

DONATION £10, PAY ON ARRIVAL

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

DOUGAL URQUHART, ESSEX MOTH GROUP COORDINATOR

11.00.....**CHRIS LEWIS** - MY NEW MOTHS IN 2023.

11.45.....**RICHARD DENNISON** – UK MOTH MEDLEY.

12.30.....**ANDREW RAYBOULD** – MOTHS OF DAVE BROWN COURSES IN DEVON, SOMERSET
AND FLATFORD MILL.

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

2.00.....**GRAHAM BAILEY** – MOTHS OF SOUTH ESSEX

2.30.....**JONATHAN NORGATE** – A YEAR IN THE LIFE OF AN INEXPERIENCED LEPIDOPTERIST!

3.00.....**FIONA HUTCHINGS** – MOTHS IN THE ARCHIVES.

3.30.....**DOUGAL URQUHART** – MOTHS OF ANDALUCIA

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!**

NEWSLETTER INTRODUCTION

DOUGAL URQUHART

Welcome to the annual newsletter of the Essex Moth Group. The Group was first formed in 1996 and is now entering its 28th year.

The newsletter is important to the Essex Moth Group and shows the important moth recording work that members carry out across the county of both the common species and the scarcer species too. Some reports detail interesting trends in populations. The newsletter also allows other members to share their account of the previous mothing season, to share their sightings as well as their moth images too.

As group co-ordinator, thank-you to all those members who have contributed an article for this newsletter. It's great to see the variety of reports from around the county ranging from the experienced members to the beginners to mothing. There are some fascinating accounts and some great moths described in the reports, illustrated with some excellent images. The newsletter is a helpful way of seeing various trends in moth populations as new species spread across the county, as well as reading about those species that are declining in numbers. All the reports from around the county in the newsletter are summarised each year in the Moth Highlights report published in the Essex Field Club's annual journal of the Essex Naturalist.

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. All images have been credited, usually to the right-hand side of the page with the initials of the photographer.

Apologies in advance for any spelling or grammar errors especially with the scientific names!

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;

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 2024, the Group had 470 members who had joined the Facebook group – nearly fifty new members joining in the last twelve months shows that interest in moths continues to grow.

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.

SUBMITTING MOTH RECORDS

Firstly, if you do not send in your records to Essex Field Club, PLEASE DO! All data is vitally important. Thus, for example local moth recorders have recently won a significant planning battle in north Essex in front of a Planning Inspector, resulting in an important precedent for amateur recording in the Planning System. The two best ways of submitting data are Mapmate (<https://www.mapmate.co.uk>) or by using the Essex Field Club Moth template which can be found on the website in the menu on the right hand side of the screen (see screen shot A).

Secondly, before recording and sending in your records please ensure that where necessary your data has been **VERIFIED BY A RECOGNISED EXPERT AND THAT THIS INFORMATION IS ADDED TO EACH RECORD**. To check out whether your record requires verification each species is graded. Verification grades can be viewed on the Essex Field Club website by searching and displaying the species account in question (see attached screen shot B). If you click on Verification Grade a link will take you to the Butterfly Conservation Verification Guidelines which explains each Grade in detail. For adult moths there are Grades 1, 2, 3 and 4 and a simplified description of each is given below.

Grade 1 species can, unless well out of range or recorded at an unusual time of year, be recorded without verification. Otherwise, it will be necessary to provide good photos or perhaps even retain a specimen

Grade 2 species are those easily confusable with other species. Good quality photos or even a specimen will be required if the observer is unfamiliar with the species. Worn examples may not be identifiable (unless retained for genital dissection (GD)). **PLEASE ADD TO YOUR DATA THE DETAILS OF WHO VERIFIED YOUR RECORD, ON WHICH PLATFORM** (e.g. Facebook, Twitter, private email etc.) **AND THE DATE**.

Grade 3, this will be a very scarce species and require either a very good set of photos and/or a specimen. **PLEASE ADD TO YOUR DATA THE DETAILS OF WHO VERIFIED YOUR RECORD, ON WHICH PLATFORM** (e.g. Facebook, Twitter, private email etc.) **AND THE DATE**.

Grade 4 moths require genital dissection (GD) . **PLEASE ADD TO YOUR DATA THE DETAILS OF WHO VERIFIED** (by microscopic examination) **YOUR RECORD AND THE DATE**.

If species specific verification is not received some species can none-the-less be recorded as ' aggregate' species, for example the Marbled Minor agg. (comprising Marbled, Tawny Marbled and Rufous Minors) and Common Rustic agg. (comprising Common and Lesser Common Rustics). This is still useful data. I can provide a full list of aggregates if required.


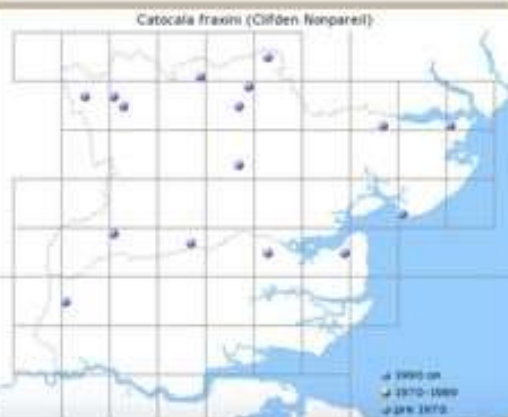
If you have any queries at all, please ask.

County Recorders
County Data
What's on now
Recorders partnership
Datasearch
Membership
Our Archive Project
Collections
Help the Club
Your surveys
Publications
Essex biodiversity
Essex geodiversity
Resources
Post your news

Clifden Nonpareil
Lepidoptera: macromoths: Erebidae

SCREEN SHOT A

Monthly/Weekly charts
create taxon report

Catocala fraxini (Clifden Nonpareil)

Records: 19
First Record: 2017
Latest Record: 2021

1992-on hectads: 14
Pre-1992 hectads: 0
Total hectads: 14
Additional Phenology Data


Images
Clifden Nonpareil



upload a new image


Amazon Donates

Visit Our Centre




We are closed due to the Covid-19 situation, but we are otherwise normally open to the public at our centre at Wat Tyler Country Park every **Saturday, Sunday and bank holiday 11am-4pm, check.** We are also normally open on **Wednesdays 10am-4pm.**

Submit Records
Download template



Moth template

Join with the T...



Main record what's

The Essex Field Club
the leading society for wildlife and geology enthusiasts in Essex, England, UK.

add new page edit this page view/cancel picture upload my stuff logoff now

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Categories
About us
County Recorders
County Data
What's on now
Recorders partnership
Datasearch
Membership
Our Archive Project
Collections
Help the Club
Your surveys
Publications
Essex biodiversity
Essex geodiversity
Resources
Post your news

Video about the Club

Species Account for *Mesapamea secalis*



previous species | next species

SCREEN SHOT B

Mesapamea secalis (Linnaeus, 1758) 73.169 ⓘ
Common Rustic
Lepidoptera: macromoths: Noctuidae

Missing records?

Monthly/Weekly charts
create taxon report


Mesapamea secalis (Common Rustic)

Verification Grade: Adult: 4
Adult: Dissection required

Records: 4011
First Record: 1992
Latest Record: 2021

1992-on hectads: 52
Pre-1992 hectads: 35
Total hectads: 87
Additional Phenology Data

Images
Common Rustic *Mesapamea secalis*




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Submit Records
Download template



GENITAL DETERMINATION SERVICE

The Essex Moth Group is grateful that Chris Lewis has agreed to offer a Genital Determination Service. I have set out in full his terms below which the EMG Panel feel are very reasonable and reflect the time necessary to carry out each determination. If you would like to contact him please see the email address below.

Genital determination service

Chris Lewis 2/7/2022

Charges:

- Identification only - £10
- Identification + slide preparation + photographic evidence - £25
- For return of specimen / slide add £5
- Payment using the 'Donate' button on the British Lepidoptera website (it is on the Home page and the Blog page) <https://britishlepidoptera.weebly.com/> <https://britishlepidoptera.weebly.com/blog>
- Send notification of payment by email to britishlepidoptera@gmail.com together with suspected identification of specimen and preferably also a photograph of the live moth.

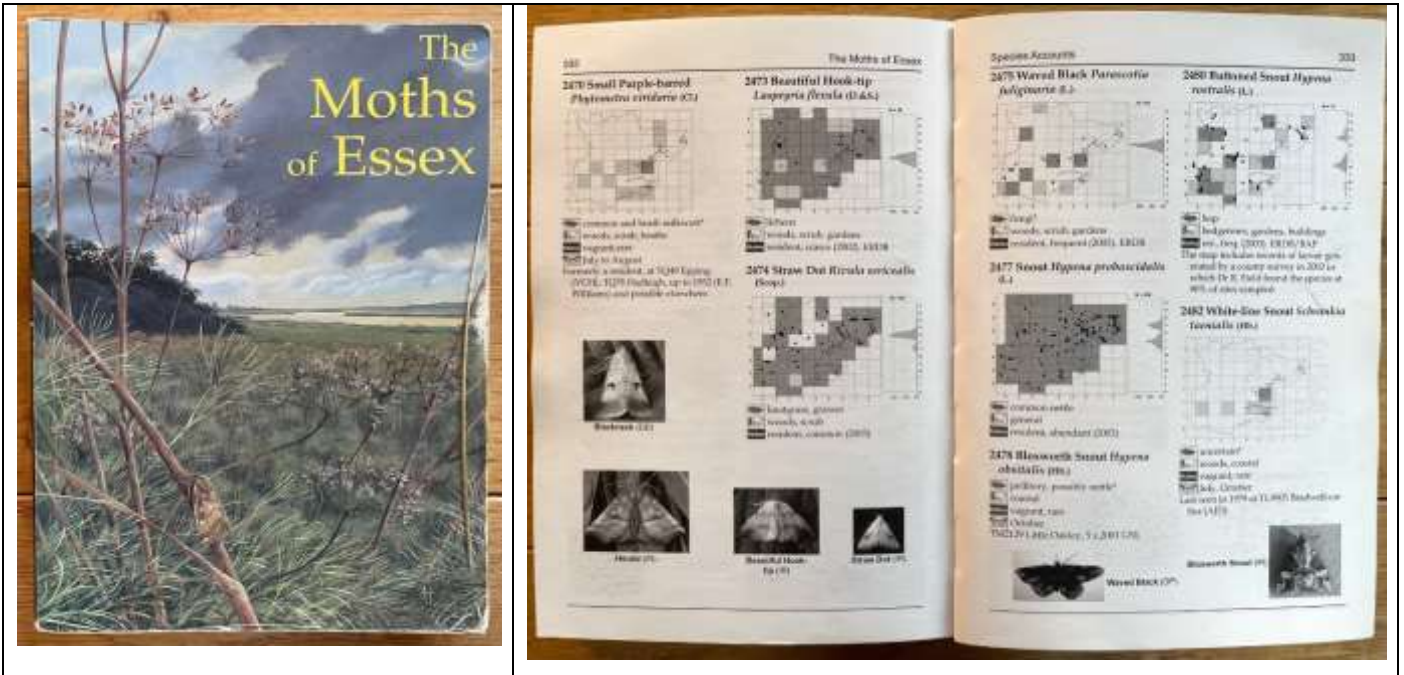
Notes:

- If photographic evidence / slide preparation is contingent on identity of specimen send identification only fee in first instance and state that photographic evidence / slide prep may be wanted for specified identities.
- If return of specimen / slide required remember to include return address with email and or specimen.
- If the specimen turns out to be an extreme rarity / first for Essex I will make a slide and provide photographic evidence free of additional charge. (For this purpose, I will be the sole arbiter of what constitutes an extreme rarity!)
- In the event that slide preparation / return of slide is not required by the sender, I reserve the right to prepare and retain a slide for my own collection.
- I reserve the right to present photographs taken by me of any specimen sent on the British Lepidoptera website or in any other publication.
- Whilst I will make some effort to keep turn-around times short, this will be somewhat dependent on the volume of work to be done and it is likely that most dissections will be done in the late autumn and winter.

ESSEX MOTH GROUP ANNUAL MEETINGS

This year's annual meeting is the 26th one held by the Essex Moth Group since the first one was held in Ian Rose's house in Lawford in 1996. The Group then held its meetings in the Anglian Water building at Horsley Cross for several years before then moving to the Venture Scout Centre in Lawford for about nine more years up until 2013. The Group then needed to find a new venue for 2014 and so we met at the Green Centre at Wat Tyler Country Park – the home of the Essex Field Club. Annual meetings were held there up to 2020 just before Covid struck and with the pandemic this meant no meetings were possible in 2021 or 2022. Since 2020 the Green Centre has not been available for us so we have been pleased to be gathering further along the road at the Wat Tyler CP visitor centre, in the Cordite Room firstly in 2023 and again 2024. Our thanks to Sandra Hulme, the Facilities Support Officer at Wat Tyler CP, Basildon Borough Council, for allowing us to meet here. Thanks also to Piccadilly Whip Catering for providing refreshments and the buffet lunch on the day.

COPIES OF THE MOTHS OF ESSEX BOOK



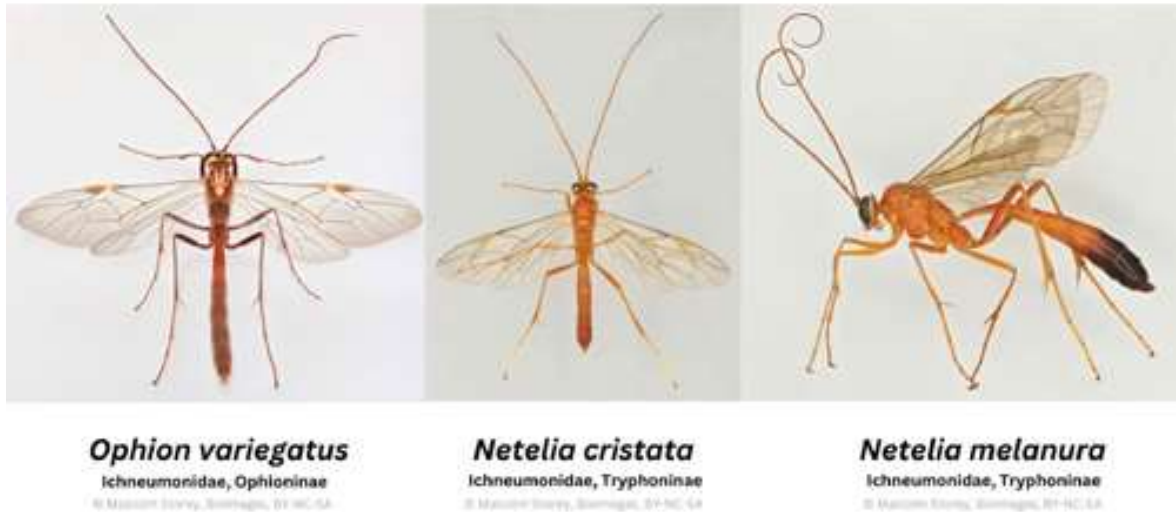
Brian Goodey's book written in 2004 is still an invaluable reference guide to the distribution of all moths that have been recorded in Essex. There has been a stockpile of spare copies stored over the years in the publisher's house of David Corke. He contacted me last summer asking to take the boxes of books off his hands. The books are free to anyone who wants one. Spare copies will be brought along to the annual meeting for members to take away. I still have more boxes in storage in West Mersea, so contact me if you'd like a free copy.

ESSEX FIELD CLUB EXHIBITION AND SOCIAL – DEC 2023



The Essex Moth Group again had a stand at the popular Essex Field Club's Annual Exhibition and Social event in the Green Centre at Wat Tyler CP on Saturday 2nd December 2023. Graham Bailey had his own moth stand alongside. It's always a worthwhile event, meeting and talking to many old and new moth enthusiasts.

Examples of *Netelia* and *Ophion* parasitoid wasps



Ophion variegatus
Ichneumonidae, Ophioninae
© Museum Storey, Bournemouth, DT1 1HG, UK

Netelia cristata
Ichneumonidae, Tryphoninae
© Museum Storey, Bournemouth, DT1 1HG, UK

Netelia melanura
Ichneumonidae, Tryphoninae
© Museum Storey, Bournemouth, DT1 1HG, UK

POSTED ON ESSEX FIELD CLUB FACEBOOK PAGE –

I am posting on behalf of Iona Cunningham-Eurich, a second-year PhD student at the Natural History Museum (NHM), London, and University College London (UCL), under the supervision of Dr. Gavin Broad (NHM) and Prof. Seirian Sumner (UCL). My research focuses on parasitoid wasps, specifically comparing generalist and specialist species.

I am reaching out to you to as the county recorder for Essex to find out if you (and/or any of the local moth-trapping community) would be interested in helping to collect wasp specimens.

We are aiming to collect geographically well-distributed nocturnal parasitoids belonging to the genera *Netelia* and *Ophion* between May and September of this year (2024). These wasps are attracted to light, including moth traps, and are easily recognisable given that they are relatively large and orange (see attached photos for some examples). For this reason, I am reaching out to experienced moth trappers across the UK to help collect these wasps.

The aims of this project are twofold: (1) to create a snapshot in time of the diversity and distributions of UK nocturnal parasitoids (information that is largely lacking) and (2) to perform a molecular genetics project.

The collection process would proceed as follows: we will send packs of tubes containing 70% ethanol to participants (the specimens must be collected in ethanol for genetics). After sampling, participants would send the tubes back to the Natural History Museum every month or so. All equipment and postage will be provided. Once we receive the wasps, we will identify them and they will be integrated into the NHM Hymenoptera collections (with credit to the collector). Some will also be used for the genetics study.

We would like to hear from anyone who is interested, but particularly from people who trap multiple times a month in one or multiple woodland sites between May and September.

Please feel free to share this email with a few expert moth-trappers who fulfil the above criteria and may be interested. However, please note that due to limited funding, participation may need to be capped.

Please include the email address nocturnalwasps@gmail.com (Cc'd in) in your response to this email and do not hesitate to get in touch if you have any questions. Thank you for your time and I hope to hear from you soon.

Kindest regards,

Iona Cunningham-Eurich

PhD Student, Natural History Museum and University College London

iona.cunningham-eurich.16@ucl.ac.uk | iona.cunningham-eurich@nhm.ac.uk

Supervisors:

Dr. Gavin Broad (Natural History Museum)

Prof. Seirian Sumner (University College London)

You may be interested in some additions I have made to the EFC website recently and some changes to scripts which had stopped working, either when we moved to a new server and which I had not noticed, or because of other changes to the way scripts function about which I was not aware that had meant some functions didn't work anymore. All these changes affected logged-on user functions only.

1/. I thought of a way of enabling users to view their own records in the website Records database regardless of whether their recorder names have been submitted in various multiple ways over the years, by themselves or other people - in your "My Stuff" page there is a link to "My Records" and "My Recorder names". The My Recorder names will list all names in the Records database table which match your last name, and you first need to select which ones are relevant to you. You will only have to do this once. The My Records page will then use the names selected to identify your records for the chosen options available.

2/. Clicking on the ID of each record will show you the full details recorded for the record, and there is a facility to report an error (this also exists on the general species account pages but had stopped working. I have now resolved this as well).

3/. There has long been a website Search page and also separately a Species Search page put in place by Mark Yeates. The Species Search page had stopped working because of some changes I had previously made, but I have now got these to work again and put a link to the Species Search page in the general website Search page to make it easier to find. It also suggests a good way into creating a separate functionality for the user submission of records for moths and other groups, where the records go into either a separate database table until they have been validated and verified or into the main Records database table but not used until they have been flagged as validated and verified.

Mark Yeates is currently working on some separate updates to the website for the Club: (1) to sort out the Locate map Leaflet functionality which he has now done, (2) to allow us to upload large file size Essex Naturalist journals to the website directly rather than have to use FTP access, which he has also done but is tidying up, and (3+) several more changes most of which are related to exporting GIS outputs from longitude / latitude polygon data and a replacement for the google bar and pie charts which we use on the species account pages, but which google deprecated many years ago now and which they could remove at any time without warning.

If you have any specific functionality requests, please let me know exactly what you want to be able to do, and I can look at developing it. This is the time of year when I have more time available.

MOTH GROUP MOTHING EVENINGS

There will be some mothing sessions this coming summer, although no dates have been arranged or venues firmed up yet. Provisional sites will include the usual Tiptree Heath, maybe Middlewick Ranges if access can be arranged, and potentially Cymbeline Meadows in Colchester following a request from the ranger for the site. Details of any mothing evenings will be posted on Facebook nearer the time.

Help with arranging the mothing evenings through the season would be much appreciated as Simon who has done it admirably for several years, is struggling to cover everything that he is involved with now. Simon says it is not a big job and that the biggest time consumer is the writing up reports at the end of the year!

NEW HERTS & MIDDLESEX MOTH WEBSITE

The Hertfordshire and Middlesex Moth Group launched a new website in January 2024. This is a hugely changed and updated site that has information on all the moths that occur, or once occurred in Hertfordshire & Middlesex, with distribution maps, photographs, descriptions, flight graphs, latest records and more.

[Herts & Middlesex Moths \(hertsmiddxmoths.uk\)](http://hertsmiddxmoths.uk);

OBITUARY - ROGER PAYNE

Bill George posted on the Essex Field Club's Facebook page, "the sad death of Roger Payne who passed away peacefully Wednesday morning 28th February in Birmingham. Roger served as Essex Field Club President 2015-2017 and was also County Recorder for Coleoptera (beetles) and Diptera: Syrphidae (Hoverflies). He worked for many years at Southend Museum and was a frequent contributor to our Facebook Group where he posted many spectacular pictures. In compliance with Roger's wishes his natural history collection has been passed to the Essex Field Club at Pitsea where it will be made available for research. Roger's interest in natural history goes back many years. In November 1965 he was awarded the John Mann Prize for Natural History at the King's Norton Grammar School for Boys and chose a copy of W. Keble Martin's book on The Concise British Flora in colour. May he rest in peace".



Roger was very involved with the Essex Moth Group for many years including giving a talk to the group at the 2016 annual meeting on the Gypsy Moth in the Southend area.



One of the original members of the Essex Moth Group when it first formed, Major Iain Grahame, sadly died on 4th September 2023. A man of determination and great character, he moved to Daws Hall, near Bures in north Essex in 1965 and established the Daws Hall Nature Reserve in 1981. The Daws Hall Education Centre was to open a few years later and since then it has welcomed and educated over 100,000 young people.

As Alan Titchmarsh noted in the foreword of Iain's final book (*Birds, Bees and Butterflies*, 2019); "Many people dream of owning a nature reserve, few of us can make it happen... but Iain Grahame has done just that, and this is the remarkable story of the patch of paradise he and his family have created in the English countryside."

His understanding of the natural world was second-to-none and he had a deep knowledge of it all; from moths to plants to badgers and everything in between. He was particularly passionate about roses, sometimes describing it as "a love affair" - and with 150 different varieties of old roses in the garden of Daws Hall, one can understand why. He leaves a wonderful and varied collection of trees, many of which have won awards and a collection of red-breasted geese that were his pride and joy.

Another person who influenced him at this time was Alec Douglas-Home, a close friend of his uncle, Denis Wigan. On summer days, the future prime minister and a small boy could be seen in alfalfa fields chasing yellow butterflies. They would then concoct an artificial nectar for attracting moths after dark. From an early age, he was passionately interested in natural history, and particularly ornithology and entomology.

Iain spent most of the 1950's and early 60's based in Uganda whilst serving in the King's African Rifles and became friends with the future president of Uganda Idi Amin who served under Iain.

Whilst in Uganda, one absorbing interest Iain had was making a study of what was then a little-known branch of Nymphalidae butterflies, the *Charaxes*. He carried his butterfly net, traps and bait consisting of fermented banana or leopard dung to whatever remote part of Uganda his company was sent. He also employed a full-time African collector and between them they identified one species new to science, subsequently named *Charaxes grahamei*, and five distinct subspecies of *Charaxes*. – Pictured right *C. grahamei* blue form.



FROM THE ARCHIVES OF THE ESSEX MOTH GROUP

I was recently passed many of the early EMG newsletters by Ben Fisher who was having a clear-out, which have all been interesting to read. Some interesting items worth sharing are –

Essex Moth Group Newsletter 1: Spring 1996

History - At a meeting held at the Mistley home of Ian Rose on 20th January attended by 14 operators of light traps or MV lamps it was agreed to set up an Essex Moth Group in line with other counties and to assist the national recording and mapping atlas projects being run by Dr Paul Waring for Butterfly Conservation (BBCS). The meeting was also attended by Arthur Watchman, leader of the Suffolk Moth Group which is run by the Suffolk Naturalist's Society. The inaugural meeting was arranged by Joe Firmin, chairman of the Essex Lepidoptera Panel which is the senior organisation in Essex recording butterflies and moths and monitoring invertebrate habitats; Brian Goodey, secretary of the Panel, is also Essex county recorder for butterflies and larger moths. Both Joe and Brian will organise the activities of the new group and Brian will as recorder, be pleased to receive regular records from members. Guidance on compilation of records and the system recommended to achieve uniformity of practice are given later in this newsletter. Present at the launch meeting was Bob Dewick of Bradwell on Sea, the doyen of the UK lepidopterists running light traps, whose giant moth trap at Curry Farm has yielded so many rare or unusual migrant and resident moth species over more than half a century and whose name is perpetuated in the UK reference books by Dewick's *Plusia*. Bob and son Stephen will host the group in the summer at Curry Farm.

Purpose - The Group is conscious of the need to bring the county's recorders closer together. As well as the mapping schemes for butterflies and moths it will hopefully act as a vehicle for informing members of significant events, exchanges of opinions, observations, ideas, survey results, suggestions of future site surveys – anything you want really. We are particularly interested in promoting the micro-lepidoptera of which Maitland Emmet is of course County Recorder. A newsletter will be produced as and when enough information is available, which will require you to put pen to paper. Don't worry too much about style or presentation – let's be informal. Producing a newsletter will cost, alas a stamp or two – a couple of SAE's even better – will be needed to obtain future issues. Brian Goodey.

Newsletter Distribution List 1996

Martin Antony, Reg Arthur (*Lep. Panel*), Graham Bailey (*Lep. Panel*), Ted Benton, Paul Bergdahl, Jerry Bowdrey (*Col. Museum*), David Corke (*Lep. Panel*), Nigel Cuming, Bob Dewick (*Lep. Panel*), Stephen Dewick, Don Down (*Lep. Panel*), Maitland Emmet (*Micro-recorder*), Joe Firmin (*Lep. Panel Chair*), Ben Fisher, Chris Gibson (*English Nature*), Brian Goodey (*Macro-recorder*), Bon Gooding, Iain Grahame (*Daws Hall*), Jean Green, Basil Harley, Barbara Lock, Ray Marsh, Peter Merrett (*Rothamsted trap*), Iris Newbery (*BBCS*), Colin Plant (*Neuroptera recorder*), Geoff Pyman (*Lep. Panel*), Ian Rose (*Group Co-ord*), Gordon Sadler, Graham Smith, Peter Smith, Paul Waring (*Nat. Mapping Co-ord*), David Warner. Arthur Watchman (*Suffolk Moth Group*) Jon Young.



Essex Lepidoptera Panel
meeting in Don Down's house
1999.

Attendees pictured include from left; Geoff Pyman, Joe Firmin, Brian Goodey, Chris Gibson, Colin Plant, Don Down, Graham Bailey and Bob Dewick.
(unsure of ID's of two behind Joe and Chris)

Essex Moth Group Newsletter No. 4: Spring 1997

The Recorders

Quite why the southern vice-county is so poorly recorded remains both a mystery and a frustration, especially when considering the glorious past. Were it not for established recorders such as Don Down, Jean Green, Graham Bailey and Graham Smith together with more recent workers Clive Griffin and Bryon Pateman, the situation would be ridiculous. On the plus side, Jean's efforts at Theydon Bois are exemplary and she has provided such a wealth of data that her garden must be the best recorded in Essex. Don, incidentally has been the first to send a list of moths recorded during 1997, mostly of early spring species for which records are particularly scarce.

The north and west (TL) part of Essex is covered in parts but poorly elsewhere. Maitland Emmet has a lonely vigil at Saffron Walden but has provided the largest single site list: 981 species from his garden since 1960. Many thousands of micro records made in Essex by Maitland as county Microlepidoptera Recorder await being put onto the database. Iain Grahame has produced an impressive list from Daws Hall Nature Reserve, Lamarsh, of around 380 species dating from 1990. Goeff Pyman continues to monitor the entomologically-rich Danbury area and roving Joe Firmin, Ian Rose and Jerry Bowdrey have made important contributions here and elsewhere especially for the tetrad records of butterflies which would otherwise be poorly recorded.

North-east Essex (TM), holds the bulk of the county's recorders. The Harwich area has historically always been well covered and this tradition continues with Peter Smith and Chris Gibson, who send highly detailed yearly reports and observations on the whole range of Lepidoptera. Ben Fisher has provided me with many records from the Beaumont area and the important sites of Stour/ Copperas Woods. Relative newcomers Bob Gooding (Lawford), Barbara Lock (Frinton) and Paul Bergdahl all send lengthy summaries and Paul in particular has helped with our knowledge of micros in the area. Jon Young lives in a rather exposed site on the coast at Jaywick but has managed to beat the weather occasionally and has an impressive list which includes rare migrants. Perhaps the most active recorder in this part of the county is Reg Arthur who is able to identify most species he finds at St Osyth and elsewhere. His annual report is one of the most eagerly awaited since it contains details of many scarce resident species at several important localities.

There are many other people up and down the county who send records and whose efforts are much appreciated. The Moth Group has "found" several people new to the subject who are growing in confidence and who are extending the range of species they are able to do. As we head towards millennium the future looks good and I would expect the relatively small number of entries on the database at present to at least double by the year 2000 – hopefully with greater numbers coming from south Essex. - **Brian Goodey**

MIDDLEWICK RANGES – BUGLIFE LETTER TO COLCHESTER CITY COUNCIL

Middlewick Ranges is one of the largest Local Wildlife Sites in the eastern region and despite long-standing recognition as an important wildlife site, it is currently allocated for housing development within the Colchester Local Plan.



(DU)

Buglife – the Invertebrate Conservation Trust, have looked at the data and have told Colchester City Council that an outstanding 1480 species of invertebrate have been recorded at Middlewick Ranges, of which 167 species hold a conservation designation as “Species of Conservation Concern”, 11% of all species recorded. It is generally considered that sites supporting 10% Species of Conservation Concern are of national importance, indicating how valuable this site is for invertebrates. The entire Middlewick Ranges site is part of the revised Essex Coast Important Invertebrate Area (IIA). IIAs are nationally or internationally significant places for the conservation of invertebrates and the habitats upon which they rely.

Fifteen species under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 have been identified on the site. These include the Silky Gallows Spider (*Phycosoma inornatum*), Necklace Ground Beetle (*Carabus monilis*), Phoenix Fly (*Dorycera graminum*), Four-banded Weevil-wasp (*Cerceris quadricincta*), and Five-banded Weevil-wasp (*Cerceris quinquefasciata*).

The site supports an overall diverse assemblage of rare and threatened species, including several communities that are of Site of Special Scientific Interest (SSSI) quality according to the Pantheon tool designed by Natural England and Centre for Ecology and Hydrology. Assemblage recorded in favourable condition include those associated with bare sand & chalk, rich flower resource, scrub edge, scrub heath & moorland, bark & sapwood decay, open short sward, heartwood decay and epiphyte fauna. These assemblages illustrate the value of the mosaic of habitats present on site, enabling a wide diversity of species to be supported. As a LoWS, the Ranges are a key biodiversity site in the area, supporting one of the largest areas of the Priority Habitat Acid Grassland in Essex.

Buglife in December 2023 wrote to Colchester City Council and urged them to include Middlewick Ranges as an important green space within the Local Plan Review and protect it from development.

Thanks to Rob Smith for spending time arranging and carrying out surveys of the Wick and then collating the data, which highlighted the high importance of the site for invertebrates.

Essex Moth Group meetings were arranged for 3rd May, 28th June, 12th July, 23rd August and 20th September, although three of these were subsequently postponed due to bad weather (that said, some brave souls braved the poor conditions on the last date). The visits that did go ahead were on 28th June and 23rd August whilst I also visited during the day on 24th April.

In all, 350 species were recorded in 2023 with some 260 species on the 28th June and 162 on 23rd August with my 24th April recorded just five species, but including the highly localised and pRDB3 species, **Broom Case-bearer *Coleophora satoretella*** as well as **Speckled Holm Oak Dot *Ectoedemia heringella***. The following records are based on the combined lists of all mothers for both nights, so it is possible that individual recorders will also mention records in their own sections some of those listed below.



BROOM CASE-BEARER



SCARCE DARK CLOTHES MOTH

The tiny, but distinctive **Sycamore Seed Dot *Etainia decentella*** turned up to light on 24th August with, a specimen of what was probably the moth of the night, a **Scarce Dark Clothes Moth *Nemapogon falstriella***, the fourth Essex record within the week, of what is presumed to be a rare resident, all British records of which have been in Essex, apart from the first which was in Suffolk. A single **Scarce Spindle Ermine *Yponomeuta irrorella*** was also recorded on 28th June. **Broom Stem-miner *Leucoptera spartifoliella*** was noted on 28th June with the gorse feeding **Tawny Crescent *Batia lambdella*** recorded on both survey dates and **Tufted Oak Roller *Psoricoptera gibbosella*** on 24th August.



PIED GREY



PIED OAK MOTH

(SW)

One species of *Pseudotelphusa* is a good record but to attract both **Pied Oak Moth** *Pseudotelphusa scalella* and **Domino Groundling** *Pseudotelphusa paripunctella* on 28th June was impressive. A single **Citron Plume** *Hellinsia carphodactyla* was plucked off grass along one of the rides on 24th August. **Gorse Knot-horn** *Pempelia genistella* on 28th June was perhaps to be expected given the habitat but **Pine-blossom Knot-horn** *Vitula biviella* had perhaps travelled a little further. Three species of pyralid of note were recorded, with **Dark-bordered Pearl** *Evergestis limbata* occurring on both dates, **Pied Grey** *Eudonia delunella* on the later date and **Rolled Grass-moth** *Pediasia contaminella* on the latter.



CITRON PLUME



GREEN HAIRSTREAK LARVA

(SW)

Oak Hook-tip *Watsonalla binaria* was noted on 24th August and **Lackey** *Malacosoma neustria* on 28th June. As for Pugs, both **Tawny-speckled** (24th August) and **Grey Pug** (28th June) were noted whilst the site's speciality **Broom-tip** *Chesias rufata* was present on the latter date. It comes a surprise to raise that **Latticed Heath** *Chiasmia clathrata* is now classified Near Threatened due to significant long-term declines so it was pleasing that this species was noted in August, although it was not as numerous as I would have expected. **Dusky Thorn** *Ennomos fuscantaria* was recorded in August whilst **September Thorn** *Ennomos erosaria* was noted on both dates, the 28th June record seeming rather early. **Grass Emerald** *Pseudoterpna pruinata* at one of its few and fast-declining remaining Essex sites was noted on 28th June whilst a **Gypsy Moth** *Lymantria dispar* nest was found on a large ancient pollarded Pendunculate Oak on 24th August.

It was pleasing to see that the much declined **White-spotted Pinion** *Cosmia diffinis* turned up at one trap, set near elms, on 24th August. Both **Mouse Moth** *Amphipyra tragopoginis* and **Hedge Rustic** *Tholera cespitis* have shown signs of significant range declines so it was good to trap one of the former on 24th August with a total of 14 of the latter on the same date.

As far as traditional migrants are concerned, records of **Rusty Acorn Piercer** *Cydia amplana*, **Tufted Oak Knot-horn** *Acrobasis tumidana* and **Delicate** *Mythimna vitellina* all on 24th August were more likely residents now and there was little else to shout out about as far as 'true' migrants.

It was good to record **Green Hairstreak** *Callophrys rubi* caterpillars on the site during 2023.

A small group including Richard Dennison from south Essex, Neil Sherman and Paul Bryant from Suffolk, James Hunter from Kent, a couple from Royston and I, met at Old Hall Marshes RSPB reserve on the evening of Saturday 15th April 2023 to look for **Sloe Carpets**.



SLOE CARPET

Despite a chilly but still night, seven **Sloe Carpets** were recorded, including two found close to last summer's fire site which was encouraging. Generally however it was a very quiet night for other species although **Red Chestnut**, **Water Carpet**, **Hebrew Character** and **Streamer** made appearances. A Great Silver Water Beetle was also noted. Thanks to Kieren Alexander at the RSPB for allowing access.

An enjoyable and productive mothing evening at Tiptree Heath on Wednesday 9th - the annual joint Colchester Natural History Society, Essex Moth Group event for the Friends of Tiptree Heath. Many thanks for Joan Pinch for inviting us and providing us with cake and flapjacks and also arranging some dry weather too! Thanks to Andrew Raybould, Tom Lantaff, John Buchanan, we ran seven traps and while the final list is not complete yet, we should have logged about 100 species for the night. Thanks to Jonathan Norgate, Alec Undrill and Caroline Wilson for coming along.



MOTHING ON THE HEATH

JERSEY TIGER

(DU)

TRUE LOVER'S KNOT
(A.Raybould)

Our highlight the **Dark Crimson Underwing** has already been described earlier by Tom on FB. A first for the site, still a rare moth for Essex. Other highlights included a **Jersey Tiger**, one **True Lover's Knot**, **Leopard**, **Olive**, **Lunar Yellow Underwing**, **Rosy Footman**, **Small Phoenix**, **Small Rivulet**, **Bulrush Wainscot**, **Gypsy Moth**, **Poplar Hawkmoth** and *Metalampra italica*.

Well, 2023 proved to be a challenging year weatherwise for the moths and their observers alike.

Up here in North Essex near the coast we suffered from a prolonged period of cool weather with strong winds coming off the North Sea through most of May and early June as I recall, right in prime moth time. This was followed by some great mothing weather in June which peaked for me on the 28th when I broke through the 100 species in a night barrier for the first time on a field trap at Gt Holland Pits.

In total I trapped on 103 nights in my garden and 19 times out in the field at four different locations. Field trips this year were badly affected by the weather with several planned trips abandoned at the last moment. Some new sites I had planned to visit also fell by the wayside for a variety of reasons. They are back in the plans for 2024.

Despite all this I was lucky to see some great moths and make new records for me and various locations up here in the Northeast of the county.

In total across the year at all locations I recorded a total of 547 species, 83 of those were new lifetime records and included 13 macro species. This compares to 554 species in 2022 so not a great difference however there were many species previously seen that were absent this year. My life-list stands at 717 and garden list 583.

It is not possible here to list all the new species I have seen over the year so here are the highlights.

I trap throughout the year weather permitting and so was able to record the usual array of winter and spring moths, but **Brindled Beauty** still eludes me.

One record I wasn't expecting was a **Sloe Carpet** that appeared in a garden trap on 30th of April.



From the 9th of April the **Emperor Moths** that I had reared from eggs during 2022 started to emerge and I spent an entertaining few weeks taking the females out to various sites where they attracted males, mated and were released. I have eight live pupae remaining that have over-wintered for the second time, so I hope to repeat the process at least once again in 2024.

Jersey Tiger has finally made it to my garden with seven different individuals recorded between the 14th and 28th of August.



JERSEY TIGER



CONVOLVULUS H-MOTH



**CONVOLVULUS H-MOTH
(GP)**

An amazing ten **Convolvulus Hawk Moths** were recorded in the garden between the 23rd of August and the 20th of October, including three individuals in one night on the 17th of September. I have grown nicotiana for several years and I did spot a **Convolvulus Hawk Moth** feeding on one this year however I have also got a couple of Angel's Trumpets that are now in their third year and give off a very strong night-time scent, I think it may be these that are attracting the moths.

A tiny moth appeared on the sheet whilst I was field trapping in Weeley Hall Wood on 17th of July. Turned out to be a **Triangle**. It would have been easy to miss amongst the others circulating the light, so I was lucky to spot it. **Triangle** appears to be a species recorded only in the Tendring district of Essex, the majority of records being in Stour Wood and the adjoining Copperas Wood, so it was nice to record a new site for this species.



TRIANGLE



LIGHT CRIMSON UNDERWING



Aristotelia ericinella

On the 28th of July I was field trapping in Cockaynes Wood Alresford and was nearing the end of my intended stay at 1:30am when a large moth hit the sheet. This was subsequently identified as **Light Crimson Underwing**. I was present in 2022 when Simon Wood took the first Essex record of this moth in modern times at Wivenhoe. Cockaynes Wood is very close as the crow flies so hopefully this second record may indicate the species is breeding in the area.

Another great moth the same night was the third Essex site for the heather feeding micro **Aristotelia ericinella**. Cockaynes Wood has a large patch of heather, and I was trapping right next to it. Two individuals were seen. (G Ekins added another site near Chelmsford in August)

I finally managed to see a **Pearly Underwing** when one landed in the trap at Gt Holland Pits on the 25th of September and it was nice to record two **Oak Rustic** in the garden this year, the one on the 9th of October being a particularly nice example.



PEARLY UNDERWING



OAK RUSTIC



CHANNEL ISLANDS PUG (GP)

Another star garden moth was a **Channel Islands Pug** that arrived on the 15th of September.



Ancyliis leatana



Coleophora limoniella



Epinotia caprana (GP)

Some of the other less common micros I saw in 2023 include *Ancyliis leatana* at Weeley Hall Wood on the 23rd of May, *Coleophora limoniella* in the garden on the 26th June and *Epinotia caprana* (male) Cockaynes Wood 9th October, a third Essex record others being 1981 by the eminent A Maitland Emmet and 2020 by the equally eminent G Ekins.

So that's it for 2023. I'm sure I've missed a few in this report but 2024 is here so let's look forward to a good one.

LIGHT CRIMSON UNDERWING – THORPE-LE-SOKEN



Chris Williams visiting from Staffordshire, trapped this **Light Crimson Underwing** on 21st July 2023 in the Thorpe-le-Soken area of north east Essex.

Thanks to Chris Balchin for letting me see and photograph it (while visiting Colne Point for the Black-winged Kite!).

Gavin Price described in his report above, one being trapped seven days later in Cockaynes.

The one Simon Wood trapped in Wivenhoe Wood in 2022 was the first Essex record for over 120 years.

A single 125W MV Robinson trap was operated in the garden, with an additional 15W actinic trap operated from the beginning of April until the end of October. Regular species not recorded this year included **Sloe Carpet** *Aleucis distinctata*, **Small Mottled Willow** *Spodoptera exigua*, **Feathered Brindle** *Aprophyla australis* and **Waved Black** *Parascotia fuliginaria*. It seems likely that the poor weather conditions for flying contributed in part to some of the absences.

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	1	129	13	4	0	1	1	0	148
* European Corn-borer <i>O. nubilalis</i>	0	0	0	0	0	12	7	4	0	0	0	0	23
Rusty-dot Pearl <i>U. ferrugalis</i>	0	0	0	0	0	1	0	11	7	17	7	0	43
Rush Veneer <i>N. noctuella</i>	0	0	0	0	0	0	0	1	1	0	0	0	2
Humming-bird Hawk-moth <i>M. stellatarum</i>	0	0	0	0	0	0	0	1	1	0	0	0	2
Vestal <i>Rhodometra sacraria</i>	0	0	0	0	0	0	0	0	1	0	0	0	1
Gem <i>Orthonama obstipata</i>	0	0	0	0	0	0	0	2	0	5	0	0	7
Silver Y <i>A. gamma</i>	0	0	0	0	10	33	37	23	4	0	0	0	107
Bordered Straw <i>Heliothis peltigera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0
Scarce Bordered Straw <i>Helicoverpa armigera</i>	0	0	0	0	0	0	0	0	2	1	0	0	3
* Tree-lichen Beauty <i>C. algae</i>	0	0	0	0	0	0	3	2	1	0	0	0	6
Delicate <i>M. vitellina</i>	0	0	0	0	0	0	12	7	4	45	30	0	98
Pearly Underwing <i>Peridroma saucia</i>	0	0	0	0	0	0	0	0	0	1	0	0	1
Dark Sword-grass <i>A. ipsilon</i>	0	0	0	0	2	2	2	3	8	0	0	1	18

*Records likely to be associated with local breeding populations.

New Micros for site were as follows:

Cream-spot Bark Moth *Dascycera oliviella* Singles 9th July and 15th August.

Purple-shaded Brown *Agonopterix liturosa* One 11th July.

Spike-rush Borer *Monochroa lucidella* Single 19th July.

Blackthorn Gelechia *Gelechia scotinella* One 10th June.

Narrow Groundling *Caryocolum alsinella* Single 13th August.

White Crescent *Teleiodes luculella* One 28th June.



BLACKNECK BUFF



BLACKTHORN GELECHIA

(CA)

Notable Micros

- Maple Stilt** *Caloptilia semifascia* One 10th August.
Bindweed Sleeper *Bedellia somnulentella* One 16th August.
Least Brown *Agonopterix purpurea* Single 18th August.
Blackneck Buff *Agonopterix subpropinquella* One 20th August.
Powdered Buff *Agonopterix curvipunctosa* Six between 16th March and 24th July.
Estuarine Buff *Agonopterix putridella* Single 10th August.
Maple Snout *Anarsia innoxia* One 27th June.
Hollyhock Seed Moth *Pexicopsis malvella* Singles 22nd and 25th June.
Dock Streak *Monochroa palustrellus* Eleven between 19th June and 10th September.
Club-rush Miner *Monochroa moyses* Two 20th, eight 21st and one 25th June.
Grey Orache Miner *Scrobipalpa obsoletella* Single 9th August.
Coast Groundling *Caryocolum vicinella* One 23rd August.
Mouse-ear Groundling *Caryocolum marmorea* Singles 24th and 31st August.
Obscure Mompha *Mompha jurassicella* One 24th October.
Dingy White Plume *Merrifieldia baliodactylus* Two 29th June.
Viburnum Tortrix *Acleris schalleriana* One 29th October.
Aster Straw *Phalonidia affinitana* Singles 1st and 2nd August.
Short-barred Straw *Aethes dilucidana* Single 13th August.
Chamomile Straw *Cochylidia implicitana* One 3rd August.
Marsh Lance *Bactra furfurana* Single 14th August.
Tree-mallow Tortrix *Crociosema plebajana* Seven between 9th August and 19th November.
Mugwort Tortrix *Eucosma metzneriana* Singles 11th and 16th June, two 1st July.
Rusty Acorn Piercer *Cydia amplana* One 11th August.
Rosy Knot-horn *Oncocera semirubella* Single 2nd August.
Gorse Knot-horn *Pempelia genistella* Singles 26th June and 8th July.
Tufted Oak Knot-horn *Acrobasis tumidana* Singles 3rd and 17th August.
Saltmarsh Knot-horn *Ancylosis oblitella* Ten between 26th June and 19th August.
Box-tree Moth *Cydalima perspectalis* Twenty between 8th July and 28th September.
Marbled Yellow Pearl *Evergestis extimalis* Singles 1st and 7th September.
Dark-bordered Pearl *Evergestis limbata* Singles 7th July and 16th August.
Chequered Pearl *Evergestis pallidata* Single 19th August.
Bulrush Veneer *Calamotropha paludella* One 10th July.
Chequered Grass-moth *Caloptria falsella* Single 25th August, two 6th September.
Rolled Grass-moth *Pediasia contaminella* Single 6th September.
Saltern Grass-moth *Pediasia aridella* Singles 29th July, 1st August.
Hook-tipped Grass-moth *Platytes alpinella* Single 23rd August.



CHANNEL ISLANDS PUG



CHEQUERED PEARL

New Macros

Channel Islands Pug *Eupithecia ultimaria* Single 29th June, following on from two trapped nearby at Wall Street and Colne Point the previous year.

Notable Macros

Convolvulus Hawk-moth *Agrius convolvuli* A total of six between 8th and 22nd September.

Spurge Hawk-moth *Hyles euphorbiae* A total of eight between 22nd May and 2nd July. A brief search locally 13th July found 50 larva.

Rosy Wave *Scopula emutaria* Five 19th June

Sussex Emerald *Thalera fimbrialis* Three trapped at Colne Point 19th and 20th July.

Gypsy Moth *Lymantria dispar* Eight between 19th June and 18th August.

Red-necked Footman *Atolmis rubricollis* Single 9th June.

Plumed Fan-foot *Pechipogo plumigeralis* Singles 18th July, 14th and 15th September.

Dewick's Plusia *Macdunnoughia confusa* Singles 2nd August and 2nd September.

Star-wort *Cucullia asteris* Singles 8th, 10th and 24th July.

Clancy's Rustic *Caradrina kadenii* Singles 15th and 26th September.

Fisher's Estuarine Moth *Gortyna borelii* A total of 65 between 20th August and 2nd October, a similar number to the previous year.

Northern Drab *Orthosia opima* Three between 7th and 18th April.

Saltern Ear *Amphipoea fucosa* One 10th August.

Small Ranunculus *Hecatera dysodea* Single 16th July.

Obscure Wainscot *Leucania obsoleta* Sixteen between 10th June and 16th July.

Lunar Yellow Underwing *Noctua orbona* Ten between 10th and 18th September.

Langmaid's Yellow Underwing *Noctua janthina* Single 27th June.

Odonata recorded in trap.

Southern Migrant Hawker *Aeshna affinis* single 7th August.



CLUB-RUSH MINER



COAST GROUNDLING

(CA)

My wife was kind enough to get me a moth trap (a 125W MV Skinner) for my birthday over 20 years ago but work got in the way of trapping regularly. Until 2023 that is, my first full year of retirement! The light was on in the back garden 99 times between the 28th March and 11th December and a total of 455 species were identified, including 318 species of macro moth (the focus of this report). The garden is rural and has Donyland Woods to the north and Langenhoe Marshes to the south east. It has been an enjoyable (and challenging at times) learning experience with a lot of expert help with identification. The year threw up a few surprises and a brief summary follows.



The year started slowly with **Small, Common and Powdered Quakers, The Mullein, Early Grey, Frosted Green and Muslin Moth** amongst the highlights in March and April. There was much more variety in May including **Spruce Carpet, Waved Umber, Great Prominent (photo) Grey Pine Carpet** and the first **Turnip Moth** of the year. The variety continued in June with **The Spectacle, Cream-spot Tiger**, the first of 4 **Pine Hawk-moth, The Shears**, the first **Silver Y, Large Nutmeg, The Coronet, Bird's Wing, Freyer's, Foxglove, Grey, Green, Common, Sloe, Golden-rod, Toadflax, Shaded, White-spotted, Double-striped, Wormwood** and **Maple Pugs, Small Seraphim, Buttoned Snout, Purple Bar, Pale-shouldered Brocade**, the first wave of **Delicates** (recorded on 21 days so presumably breeding locally), **Shoulder-striped Wainscot**, the first of many **L-album Wainscot (photo), Marbled White Spot, Scarce Silver-lines, Orange Footman, Orange Moth, The Lychnis, July Highflyer** and **Poplar Lutestring**.



July proceeded in the same vein with new moths including **Small, Little and Large Emeralds, Broad-barred White, Herald, Small Scalloped, The Drinker, Dark Umber, Star-wort (photo), Plumed Fanfoot, Coxcomb Prominent**, the first **Old Lady and Gypsy Moth** of the year, **Lesser-spotted Pinion, Least Yellow Underwing, Small Clouded Brindle, Gold Spot, Waved Black (photo), Webb's** and **Bulrush Wainscot** and **Sallow Kitten**.



August produced some great moths despite the varied weather!

Dark Crimson Underwing

(photo) was a surprise, **Oak Processionary**, **Six-striped**, **Rosy**, **Hedge** and **Sandhill Rustics**, **Small Waved Umber**, **Tree-lichen Beauty**,



Tawny Speckled Pug, **White-spotted Pinion** (photo), **Dark Spinach** (photo), **Birch Mocha** (photo) and **Burnished Brass** (photo).



As well as the expected Autumnal moths, September brought the first of 4 **Clifden Nonpareil** (photo) (there are Aspen in Donyland, so perhaps from there?), **Small and Large Wainscot**, **Mallow** (photo), 4 **Lunar**



Underwing, **Figure of Eight**, and some definite migrants - 2 **Convolvulus Hawk-moth**, 2 **Gem**, 2 **Vestal** (photo), **Palpita vitrealis** (photo), **Scarce Bordered Straw** and **Pearly Underwing**.

I digress briefly here to mention 2 visits to Cudmore Grove Country Park in the early evening to look for **Fisher's Estuarine Moth** (photo). Dougal Urquhart had reintroduced eggs there a few years ago but no-one had looked for adults. It was a real privilege to see at least 18 there. October was punctuated with a trip to Scillies (88 species, including a third for Britain but that's another story! A big thanks to Chris Lewis). It included **Blair's** and **Grey Shoulder-knot** in the garden and **Marveille du Jour**. New moths kept coming in November and 4 hours with the light on in December! **Scarce** and **Mottled Umber** and **Winter Moth** were new. **November Moth** egg. reminded me that I need to try to get to grips with some very similar species next year.



A big thank you to the Essex Moth Group and, in particular, Dougal, Simon Wood, Graham Ekins and Glen Moore for their help and encouragement in my first year of dedicated trapping.

Moth-trapping took place in the back garden in the middle of West Mersea on 61 nights through 2023. Mothing during the winter months usually draws blanks, so the season runs from late February till early November. There were 184 species of macro recorded during the year, a slight increase on 2022 from a similar number of trapping nights. The spring was notable for being very cold at night with few moths about and little trapping done as a result.

A batch of about fifteen hand-reared **Emperor moths** hatched out and were released into the back garden between 16th and 19th April. These moths were the second generation from a female that first flew into the trap on 1st April 2021 and proceeded to lay some eggs. It didn't seem wise to have a third season of in-bred moths, so no eggs were retained in spring 2023.



EMPEROR MOTH



DEWICK'S PLUSIA



MARBLED GREEN

A **Small Ranunculus** on the 21st May was the third garden record and a **Lime Hawkmoth** on the 24th – the first for three years. The first **Dewick's Plusia** for the garden was finally noted on 7th June, a species that has been spreading across Essex in recent years, finally made it to Mersea Island. A **Toadflax Brocade** on the 8th is another recent colonist since 2020 as is the **Buttoned Snout** which was recorded on the 11th, was first noted just two years earlier. Also on the 11th was a peak count of 130 **Green Oak Tortrix**, an interesting sight, seeing so many inside and outside the trap. After a month's break, mothing resumed on 7th July with **Buttoned Snout**, **Clancy's Rustic**, **Orange Moth** and **Scarce Silver Lines**, *Pempelia genistella* and *Evergestis limbata*. The following night **Small Elephant Hawkmoth**, **Leopard** and **Orange Moth** were joined by the first garden record of *Oncocera semirubella* and there was a *Metalampra italica*. A **Marbled Green** on the 13th was the first Island record while on the 16th a **Festoon**, **Plumed Fan-foot** and **White Satin** were highlights.

The most notable moth of the year was the rare immigrant Pyralid, **New Poplar Knot-horn** *Sciota rhenella* on 18th July, seemingly the first record for Essex. A **Dusky Thorn** was on the 25th, **Plumed Fan-foot** on the 28th, **Ground Lackey** and **Gypsy Moth** on the 1st August with another **Gypsy Moth** and **Plumed Fan-foot** on the 8th then a **Toadflax Brocade** and *Evergestis limbata* on the 10th. There was the interesting sight on the 12th of the first garden record of **Jersey Tiger** beside the much declined **Garden Tiger**. Other late August highlights included **Scarce Bordered Straw**, **Dusky Thorn**, **Old Lady**, **Sandhill Rustic**, **Sallow Kitten**, **Leopard Moth**, **Toadflax Brocade**, **Gypsy Moth** and the second *Oncocera semirubella*.



JERSEY & GARDEN TIGERS



Sciota rhenella



WHITE-SPOTTED PINION (DU)

A **White-spotted Pinion** on the 4th September was an unexpected first record for the back garden and only the second record for the Island after one was recorded at the country park in 2015. A **Lunar Yellow Underwing** and **Clancy's Rustic** were on the 22nd September, **Delicate** on the 23rd and a **Gem** and peak count of seven **Clancy's Rustic** on the 25th. October highlights included **Merveille du Jour**, and **Delicate** on 5th, **Merveille** again on 6th, **Cypress Carpet** on 7th, **Lunar Yellow Underwing** on 10th, **Dark Swordgrass** on 17th, **Merveille du Jour** on the 22nd along with **Scarce Bordered Straw** and **Palpita vitrealis**, **Scarce Bordered Straw** on the 24th, then **Dark Sword-grass**, **Palpita vitrealis** and three **Udea ferrugalis** were signs of immigration.

CONVOLVULUS HAWKMOTH MERSEA ISLAND INFLUX – Five reported in first fortnight in September



WEST MERSEA, (A.Oliver)



WEST MERSEA (J. Rolfe Clark)



WEST MERSEA, (S.Wilson)



EAST MERSEA (S.Thorley)

All of my mothing time was taken up at either Hazeleigh Wood, Maldon or Middlewick Ranges, Colchester although I did get to trap once at Ironworks Meadow, Heybridge and also very intermittently in my Heybridge garden. I have restricted my write-up to those species considered to be more scarce nationally to keep the length of text down, but have also included some notable Essex records

Hazeleigh Wood

Despite the rather indifferent weather, we recorded a very respectable 565 species during the year, not far off the records year of 2023 when 595 species were noted. In all, 45 species were added to the site list in 2023 (some more were also added for previous years following GD, photographic ID etc) pushing the running total for the Wood to 858 species. Limited trapping took place whilst I was away for three weeks during late May and June.



DOGWOOD CUTTER



COAST DOT



SCARCE MAPLE STILT (SW)

Less 'leaf-mining' was carried out compared to recent years but a few commoner species were added to the site list. Of the scarcer species **Dogwood Cutter *Antispila petryi*** and **Coast Dot *Ectoedemia erythrogenella***, the latter making a vivid red mine in Bramble during late autumn, were the most notable. The former has only been found at five Essex sites but three of these I found locally round Maldon in 2023 so I suspect this will prove to be more common once people get their eye in. Occurring for its second year was the Tineidae, **Cyan Marbled *Stenoptinea cyaneimarmorella*** which has been found at just four Essex sites. Two well-marked Tineidae that turned up on 20th August proved to be **Scarce Dark Clothes Moth *Nemapogon falstriella*** (NFS), just the second Essex and third British site for the species but was quickly followed by another at Boreham the same night and at Middlewick (see below) a few days later. Chris Lewis has written a paper in support of the species being elevated to Appendix A of the British List as the first record in Suffolk in 2007 was considered to be an adventive, despite there being no evidence to support this (Neil Sherman *pers comm.*).

Probably the star moth of 2023 was **Scarce Maple Stilt *Caloptilia hemidactylella*** (GD and NFS) on 11th September, the first Essex record of this species which is rare in central English counties but may be spreading. Given the amount of Field Maple in the Wood, this may be its local food plant. Thank you to Chris Lewis to confirming my provisional identification. **Scarce Spindle Ermine *Yponomeuta irrorella*** was recorded on four dates between 25th June and 31st July inclusive, equalling 2022, the first site record coming as recently as 2021. **Blackthorn Blister Moth *Lyonetia prunifoliella*** was recorded just once this year, on 10th September. An Oegoconia in the trap on 2nd August proved to be **Straw Yellowneck *Oegoconia caradjai*** (GD and NFS) whilst **Cream-spot Bark Moth *Dasycera oliviella*** continues to be a common denizen of the Wood.

A single **Dock Streak *Monochroa palustrellus*** was caught on 10th August with a **Blackthorn Gelelechia *Gelechia scotinella*** (GD) on 7th July. It was a very poor year for **Beet Moth *Scrobipalpa ocellatella*** with just the one record all year, on 17th September, compared to the hundreds last year. A species that is common in the woods is **Banded Groundling *Caryocolum blandella***, Greater Stitchwort its food plant blanketing the Wood during spring and summer. It was recorded on nine dates between 7th July and 22nd August. Another two species that occur regularly in the Wood, although in small numbers are **Pied Oak**

Moth *Pseudotelphusa scaella*, and **Southern Apple Moth *Recurvaria nanella*** with 2023 no exception with records on just two dates for each on 25th June and 7th July for the former and 10th and 22nd August for the later.

Four notable species of Coleophora, or ‘cauliflowers’ as they get called in the tired delirium of a long moth trapping session, occurred this year - **Sloe Case-bearer *prunifoliae*** 7th July (GD and NFS), both the stitchwort feeders **Stitchwort Case-bearer *lithargyrinella*** (NFS) and **Southern Stitchwort Case-bearer *solitariella*** (found on the food plant during the spring as larvae) and **Glasswort Case-bearer *salicorniae*** (GD) noted on 9th August.

Tufted Oak Moth *Dystebenna stephensi* is another almost annual species which turned up on 30th June and 7th July whilst the 3rd site record of **Goosefoot Runner *Scythris limbella*** occurred on 25th June, Hazeleigh being one of only six sites that the species has been recorded.

The Wood is currently the only known site in Essex for **Wood Tortrix *Choristoneura diversana*** and its numbers vary significantly from year to year. 2019 was its best year with numbers much lower in subsequent years and none in 2022. There was a single record in 2023, on 22nd June. Some limited use of pheromone lures early in the season produced an impressive total of 25 **Early Oak Gall Moth *Pammene giganteana*** to a single lure.



MOCHA



STITCHWORT CASE-BEARER



BRUSSELS LACE (SW)

There were nine notable Pyralids recorded during the course of the year **White-barred Knot-horn *Elegia similella***, **Rosy Knot-horn *Oncocera semirubella***, **Gorse Knot-horn *Pempelia genistella***, **Saltmarsh Knot-horn *Ancylosis oblitella***, **Pine-blossom Knot-horn *Vitula biviella***, **Beautiful Pearl *Agrotera nemoralis***, **Dark-bordered Pearl *Evergestis limbata***, **Pied Grey *Eudonia delunella*** and **Rolled Grass-moth *Pediasia contaminella***. Of these, the rarest is Beautiful Pearl which appeared for its fourth consecutive year since the first on 24th June 2020. This Hornbeam feeder is steadily consolidating its position in the south-east of the county although there is a record from Stour Wood in 2022.

Oak Hook-tip *Watsonalla binaria* had a generally good year in the Wood with records on 16 dates between 14th May and 24th September. It is worth remembering that a very similar species *Watsonalla uncinula* was recorded at least twice in the UK last year so keep a careful eye out... **Oak Lutestring *Cymatophorina diluta*** had a reasonable year but **Frosted Green *Polyphoca ridens*** had a poor one, although the spring weather adversely affected recording effort. Both **Pale Eggar *Trichiura crataegi*** and **Lackey *Trichiura crataegi*** had generally poor years, the latter being almost completely absent with the typically obvious caterpillars being hard to find. **Mocha *Cyclophora annularia*** (NFS) burst onto the scene with a total of seven recorded on three dates - 10th August (one), 17th August (three) and 20th August (three) suggesting that the species has become resident in the Wood. **Grey Pug *Eupithecia subfuscata*** was not recorded from the Wood until 2021 but has been annual since then with two records this year.

Latticed Heath *Chiasmia clathrata* numbers were down but **Dusky Thorn *Ennomos fuscantaria*** had a good year.

Both **Oak Processionary *Thaumetopoea processionea*** and **Gypsy Moth *Lymantria dispar*** continue to consolidate the numbers, although we have yet to find any nests of the former in the Wood and nor could the Forestry Commission on a single visit they carried out.

Pale Brindled Beauty *Phigalia pilosaria* and **Mottled Umber *Erannis defoliaria***, the latter seemingly having a very poor year. Five **Sloe Carpet *Aleucis distinctata*** was a good, above average, total whilst a **Brussels Lace *Cleorodes lichenaria*** (NFS) on 10th September was only about the fifth recent Essex record. Maureen Bissell caught a **Rannoch Looper *Macaria brunneata*** in my absence on 14th June.



FOUR-DOTTED FOOTMAN



AUTUMNAL RUSTIC



HEDGE RUSTIC (SW)

Three **Four-dotted Footman** *Cybosia mesomella* was a good total for the year with two **Four-spotted Footman** *Lithosia quadra* about average. **Dark Crimson Underwing** *Catocala sponsa* continues to be turn up, having been recorded annually since 2018 (with **Clifden Nonpareil** *Catocala fraxini* notching up records on three dates in late September and early October) whilst **Sprawler** *Asteroscopus sphinx*, **Sallow** *Cirrhia icteritia* and **Beaded Chestnut** *Agrochola lychnidis* had average years at best.

Hedge Rustic *Tholera cespitis* was recorded for the first time in the Wood only last year but this year saw records on another two dates whilst **Autumnal Rustic** *Eugnorisma glareosa* having only previously been noted twice previously in the Wood since regular trapping began in 2018, turned up on three nights in 2023 - 17th and 25th September and 5th October. The total of 42 (over four nights) **Small Black Arches** *Meganola strigula* was the worst on record and was typical of many species this year which, although present, occurred in reduced numbers.

As far as those species traditionally thought of as migrants, some such as **Italian Bark Moth** *Metalampra italica*, (seven records), **Rusty Acorn Piercer** *Cydia amplana* (three records), **Tufted Oak Knot-horn** *Acrobasis tumidana* (11 records including a remarkable 100+ on 17th August), **Marbled Grass-moth** *Catoptria verellus* and perhaps even **Delicate** *Mythimna vitellina* (three records) would seem to be well-established residents in Hazeleigh. Other more traditional migrants were present in small numbers all year, but it wasn't a migrant year, at least around Hazeleigh, with relatively low numbers of the commoner species - **Diamond-back Moth** *Plutella xylostella*, 18 and **Silver Y** *Autographa gamma*, 24. Thirteen **Rusty-dot Pearl** *Udea ferrugalis* was, however, better than most years in the Wood whilst five **Vestal** *Rhodometra sacraria* was down on 2022. Also noted were a single **Gem** *Nycterosea obstipata*, a couple of **Small Mottled Willow** *Spodoptera exigua* and four **Dark Sword-grass** *Agrotis ipsilon*, the highest annual total for the Wood.

A summary of 2023 Hazeleigh records based on Conservation status -

Status	No. of species recorded in 2023
Endangered	1
Near threatened	8
Vulnerable	7
Least Concern	244
Common	181
pRDB1	4
pRDB2	2
pRDB3	1
Nationally Scarce A	4
Nationally Scarce B	19
Local	71
Migrant	13
Misc.	10
TOTAL	565

Heybridge Garden

I did not have much time for trapping in the garden and recorded just 142 species mostly to an actinic light, although I did have some pheromone lures out for extended periods with some notable success, albeit most produced extremely little. Nine NFS took the garden list to about 730 species. Best moth was **Hop Stilt *Caloptilia fidella*** which I found in a tent mine on the Hop in my garden on 18th August which, after Bill Crook's spring record of an adult, was the second Essex record and the first of confirmed breeding. Other NFS for the garden were **Hypericum Dot *Fomoria septembrella*** (mine, 18th November), **Variegated Fungus Moth *Nemapogon variatella*** (GD - several to Oak Clearwing lure in late July), **Hart's-tongue Moth *Psychoides verhuella*** (21st June), **Currant Clearwing *Synanthedon tipuliformis*** (to lure 22nd June), **Gem *Nycterosea obstipata*** (23rd October), **Jersey Tiger *Euplagia quadripunctaria*** (several), **Brick *Sunira circellaris*** (17th November) and **Lunar Yellow Underwing *Noctua orbona*** (12th September).



HOP STILT



VARIEGATED FUNGUS MOTH



COAST ORACHE MINER (SW)

Ironworks Meadow

As with Middlewick, some records mentioned here may be repeated elsewhere in this report. Apart from day time observations, a single moth trapping session took place on 8th July when over 200 species were recorded, an impressive total for such a small site.

The site yielded a number of very scarce micros - **Fen Snout *Brachmia inornatella***, **Blackthorn Gelechia *Gelechia scotinella*** (GD), **Coast Orache Miner *Scrobipalpa nitentella*** (GD), **Scarce Willow Marble *Apotomis lineana*** and the best of the bunch, and coming to Daniel Blyton's trap right next to the canal, **Chalk Hill Tortrix *Pelochrista caecimaculana***, plus **Pine-blossom Knot-horn *Vitula biviella***. Chalk Hill Tortrix was last seen in 1982 at Howe Wood which is west of Littlebury in the far north-west of the county. Surprisingly there were not really any notable macros recorded and no migrants of note.

YET MORE MOTHS AT EARLS COLNE AND ELSEWHERE

DANIEL BLYTON

The moths were very slow to show themselves in any number or variety with such a poor spring but when they finally did start in earnest it seemed that every time I trapped brought several 'new for year' species. I think this giddy excitement helped take the edge off the disappointing start!

I trapped a total of 111 times, from 2nd January to 30th December, with just six of these sessions resulting in 'blanks'. I only managed to trap a dozen times out and about in Essex, though two of these (Middlewick Ranges, Colchester and Ironworks Meadow, Maldon) were fantastic and resulted in many new species for me (as detailed later in this report). For the first time I moth 'trapped' on holiday (four nights in Yorkshire and four nights in Devon), though I only had enough space in the car for a battery pack and a 7W LED bulb. The remaining ninety-one sessions were in my Earls Colne garden.

Unbelievably, I bagged another first for Essex, my fourth in five years of moth trapping. Like the previous three, this was trapped in my garden. Caught in September, this moth was ***Clepsis peritana*** (confirmed by gen.det. by Chris Lewis), a species widespread in North America that has been accidentally introduced to Europe. It was first recorded in the UK in July 2023, in Staffordshire; mine was the second record for the UK. One to keep a look out for in the future. In addition to this, in June I caught what I had believed was also a first for Essex - I have now found that Stephen Rolls reared one in 2017 from citrus leaves collected from a North Essex garden centre. This moth, ***Prays citri*** (my individual again being confirmed by gen. det.), is a pest species of citrus species that was first recorded in the UK in 2000, in London.



Clepsip peritana



Prays citri

Although my garden has continued to produce a healthy crop of new moth species (see below for further details) two group field trips in particular were exceptional - Middlewick Ranges, Colchester in June and Ironworks Meadow, Maldon in July. New moth species I trapped at Middlewick Ranges were: **Small Scallop** (*Idaea emarginata*) [one was later trapped in my garden, in August], **Marbled Brown** (*Drymonia dodonaea*), ***Pseudotelphusa scalella***, ***Pseudotelphusa paripunctella***, ***Choristoneura hebenstreitella***, ***Batia lambdella***, ***Triaxomera parasitella***, ***Coleophora betulella***, ***Coleophora albidella***, ***Coleophora flavipennella*** and ***Acleris ferrugana***. The latter four were all confirmed by gen. det. The number of moths on the wing at this site on the night of the visit was terrific and I may well have had a few more new moths on my list if I hadn't been caught out by the heavy rain that arrived around midnight, just as I was about to start packing up. That said, I managed to record 43 macro species and 61 micro species in total. The second visit to Middlewick Ranges in September was at the other end of the spectrum with a very poor turnout of moths, though it did provide me with a moth very much on my 'wanted' list - **Antler Moth** (*Cerapteryx graminis*).



Small Scallop



Pseudotelphusa paripunctella



Pseudotelphusa scalella



Triaxomera parasitella



Antler Moth

The session at Ironworks Meadow, less than two weeks later, led to less species overall but was perhaps better as the rain was not as heavy and came at the beginning of the evening, for only a short spell. New species of moth I recorded on this visit were: **Dotted Fan-foot** (*Macrochilo cribrumalis*), **Fen Wainscot** (*Arenostola phragitidis*), **Dingy Shears** (*Fissipunctia ypsilon*), **Apotomis lineana**, **Clepsis spectrana**, **Brachmia inornatella**, **Lobesia abscisana**, **Pelochrista caecimaculana** (apparently last recorded in Essex in 1984), **Promalactis procerella**, **Anacampsis populella**, **Cnephasia genitalana** and **Cnephasia stephensiana**. The latter three were confirmed by gen. det. A further gen. det. on a **Gynnidomorpha sp.** (which would also be a new species for me) remains inconclusive at present. This small site of predominantly reedbed habitat had not had any moth surveying undertaken at it before but the results of all those who trapped there on this visit certainly indicates it is an important site.



Clepsis spectrana



Brachmia inornatella



Anacampsis populella



Pelochrista caecimaculana



Apotomis lineana



Gynnidomorpha sp.

Other new species trapped/caught on field trips were less numerous - **Dichrorampha plumbagana** at The Outback, Wakes Colne in May, **Piniiphila bifasciana** and **Ethmia quadrillella** at Marks Hall Arboretum, Coggleshall in July, and **Gelechia scotinella** (confirmed by gen. det.) at Brickfield & Long Meadow Nature Reserve, Earls Colne in August. Seeing my first living **Red Underwing** (*Catocala nupta*), at the riding school my son attends, was also a highlight for me, as the only previous sighting of this species was a dead one in a spider web in my garden a couple of years ago. Then I suppose I can't fail to mention the **Clifden Nonpareil** (*Catocala fraxini*) trapped at Chalkney in September. This was only my second, the first being trapped the year before, also at Chalkney and, in fact, very close to where this one was caught. Definitely worth the 45+ European Hornets I had to dance round, even with one of them managing to sting me on my elbow.



Piniiphila bifasciana



Ethmia quadrillella



Gelechia scotinella

Never one to be satisfied with half-hearted measures and always looking to expand my 'mothiness', 2023 saw two additions to my moth armoury: pheromone lures and determination by genitalia examination (aka gen. det.). Having only ever seen one Clearwing moth before (a Raspberry Clearwing, on the netting of my now defunct fruit cage) I was keen to see more. I purchased 'The Classic Six' with eagerness but uncertainty, and deployed them within my garden through the summer. Five of them worked, drawing in their target species - **Raspberry Clearwing** (*Pennisetia hylaeiformis*), **Currant Clearwing** (*Synanthedon tipuliformis*), **Orange-tailed Clearwing** (*Synanthedon andrenaeformis*), **Yellow-legged Clearwing** (*Synanthedon vespiformis*) and **Red-belted Clearwing** (*Synanthedon myopaeformis*). The only one that was not successful was Six-belted Clearwing, but there's always next Summer. I have also purchased a couple more for 2024, including Dusky Clearwing, as there was quite a buzz about this species last summer.



Clearwing parade: (L-R) **Raspberry, Currant, Yellow-legged, Orange-tailed, Red-belted**

Undertaking my own dissections of moths was not something I saw myself ever getting into but I have to say it has been very rewarding, albeit very challenging at times. As I write this report I have now done only about 40 gen. det.s., a few of which have not been successful. All those mentioned in the report above/below were done by me (except the *Clepsis peritana*). I would like to take this opportunity to thank all those that have helped with interpreting the genitalia I have dissected out, but special thanks go to Tim Green for his coaching of the process as well as the identifications and confirmations of identifications, including the **Pauper / Fletcher's Pug** (*Eupithecia egeneria*), which was one of a few trapped at Chalkney Wood, Earls Colne in June. This moth had not been recorded in Essex before but as Dave Cousins, who was also present at this field trip, got his gen. det. of one completed and confirmed by Tim before mine he has rightly claimed the 'first for Essex' title.

New species of moth in my garden were numerous. Apologies in advance for the following list, which are all new species for me unless stated otherwise: May - **Ochreous Pug** (*Eupithecia indigata*); June - **Lobster Moth** (*Stauropus fagi*) [new to garden], **Maple Prominent** (*Ptilodon cucullina*) [new to garden], **Crescent Plume** (*Marasmarcha lunaedactyla*), **Duponchelia fovealis**, **Celypha roseaceana**, **Dichrorampha petiverrela** (gen. det.), **Luquetia lobella**, **Coleophora anatipennella** (gen. det.), **Coleophora flavipennella** (gen. det), **Argyresthia curvella**; July - **Dewick's Plusia** (*Macdunnoughia confusa*),



Duponchelia fovealis



Celypha roseaceana



Dichrorampha petiverrela

Shaded Broad-bar (*Scotopteryx chenopodiata*) [new to garden], **Plumed Fan-foot** (*Pechipogo plumigeralis*), **Wormwood Pug** (*Eupithecia absinthiata*), **Apple-leaf Skeletoniser** (*Choreutis pariana*), **Fig-leaf Skeletoniser** (*Choreutis nemorana*) [later in the year, I found larvae and pupae on my Fig tree], **Epiblema foenella**, **Agonopterix propinquella**, **Chrysoclista linneella**, **Phyllonorycter ulmifoliella**; August - **Gem** (*Nycterosea obstipata*), **Small Scallop** (*Idaea emarginata*) [new to garden]; September - **Delicate** (*Mythimna vitellina*), **Lunar Yellow Underwing** (*Noctua orbona*), **Acleris emargana** [new to garden], **Approaerema anthyllidella**, **Zelleria hepariella**, **Cosmopterix pulchrimella**, **Phyllocnistis unipunctella**.



Argyresthia curvella



Dewick's Plusia



Wormwood Pug



Epiblema foenella



Chrysoclista linneella



Zelleria hepariella



Cosmopterix pulchrimella

Other notable moths I had in my garden were; **Water Carpet** (*Lampropteryx suffumata*) in April, only my second garden record for this species, the first one being in my first year of trapping (2019); a pair of **Assara terebrella** in June, only my 2nd and 3rd individuals of this uncommon species; **Phtheochroa rugosana** in June, not a species I'd seen for a few years; a **Blackneck** (*Lygephila pastinum*) in both June and July, a species previously only seen once the year before; my second garden record of **Pine Hawk-Moth** (*Sphinx pinastri*) in July, equally dishevelled as the previous one; and **Old Lady** (*Mormo maura*) in September, a favourite of mine which don't see every year. It was also nice to see a **Jersey Tiger** (*Euplagia quadripunctaria*) and several **Clancy's Rustic** (*Caradrina kadenii*), both species I recorded for the first time in 2022.

Leafmines remains a strong interest and amongst the successful rearings from larvae collected the previous Autumn were several species that were new to me, or at least new to me as an adult. These included: **Stigmella trimaculella**, **Phyllonorycter stettinensis** and **Phyllonorycter rajella** (all from mines on Black Poplar); **Phyllonorycter esperalla** and **Phyllonorycter tenerella** (from mines on Hornbeam); **Phyllonorycter joannisi** (from a mine on Norway Maple); **Parornix finitimella** (from a mine on Blackthorn); and **Mompha raschkiella** (from a mine on one of the Willowherbs). All these mines were collected locally except the Mompha which was actually collected on holiday in SW Wales (but it was reared and released in Essex!).



Stigmella trimaculella



Parornix finitimella



Mompha raschkiella

In addition to these I found the following new species as early stages, all locally: *Dyseriocrania subpurpurella* (larvae in mines on Oak), *Stigmella atricapitella* and *Stigmella roborana* (larvae in mines on Oak); *Stigmella samiatella* (vacant mines on Sweet Chestnut); *Phyllonorycter comparella* (larvae in mines on White Poplar, which emerged as adults before the year end); *Phyllocnistis xenia* (vacant mines on White Poplar); *Coleophora conspicuella* (larva in case on Knapweed); *Coleophora serratella* (larvae in cases on Silver Birch); *Gypsonoma dealbana* (vacant mines on Oak).



Coleophora conspicuella (occupied case)

And a final shout out goes to some of the non-leafminers that I reared through to adult this year. The most rewarding was a **Mottled Umber** (*Erannis defoliaria*). I have seen plenty of this species' very characteristic caterpillars before but never any in my garden, so it was a pleasant surprise to see one chomping on my ornamental Cherry in May. It emerged as an adult, as expected, in December. Some of the **Emperor Moth** (*Saturnia pavonia*) pupae from 2022 emerged in April and May, and one of the females was retained briefly to try and attract a male (which worked like clockwork - the first non-bred male in my garden). I also had an **Oak Eggar** (*Lasiocampa quercus*) emerge from one of the remaining pupae from 2021.

I even ended up accidentally rearing a moth species - *Eudonia angustea*. These emerged from moss that I had collected in my garden (clumps that had fallen or been dislodged from my outhouse slate roof). The moss was being used as substrate in a pot for a spider that had a parasitoid wasp larva attached to it, which I was attempting to rear. I did notice there were some 'wigglers' in the moss but had no idea some were moth larvae (others proved to be Dipteran).



A triplet of **Crescent Plume Moths** from June, a species that had a good year.

I think it's fair to say that 2023 was a very mothy year for me and I got to see a lot of new species. My last report noted two moths as being notable 'no shows' (both for that year and the year before) - **Tawny Speckled Pug** and **Canary-shouldered Thorn**. These are both moths I used to see each year when I started mothing. Once again, these moths were absent from my records. Hoping to catch up with them in 2024.

(Pictures by Daniel Blyton)

2023 continued the recent run of excellent migrant years with both **Rusty-dot Pearl** and **Delicate** both putting on unprecedented displays.

January got off to another great start with **Winter Moth**, **Pale Brindled Beauty**, **Mottled Umber**, **Satellite** and **Chestnut** all in the trap on the 1st.

Two **Red Admirals** and two **Peacocks** were seen on the 2nd with one or both of these species appearing on a further eight days by the end of the month.

Another ten butterfly days followed in February with the first **Comma** of the year on the 6th and a male **Brimstone** on the 17th.

Moths at light included **Small Brindled Beauty**, **Oak Beauty**, **Dotted Chestnut** and on the 16th a very early immigrant **Silver Y** was in the trap.

A trickle of immigrants began again towards the end of March with a **Blossom Underwing** on the 23rd and a **Dark Sword-grass** the following night.

The presence of **Light Orange Underwing** here was finally confirmed on the 4th April with the capture of a relatively sluggish individual in my butterfly net. Intriguingly in this area at least this elusive 'high flying moth' is always seen keeping low amongst the trees or dashing off when disturbed whilst basking in sunshine on the ground.

On the 5th May some time was spent watching a **Large Tortoiseshell** at the usual spot. At long last **Wall Browns** are clearly re-establishing themselves locally with the first of the season on the 18th and several others over the following months.

In complete contrast **Small Tortoiseshell** had a calamitous season with none seen until the 29th of June and only the occasional individual after that. It was also in June that the first major arrivals of immigrants began with a good diversity of species including **Rannoch Looper**, **Beautiful Marbled** and good numbers of **Delicate** coming in.

On the 1st July **Splendid Brocade** was added to the Bradwell list. As the month progressed **Small Mottled Willows** and **Scarce Bordered Straws** were also seen.

On the morning of the 9th August a male **Silver-washed Fritillary** was photographed just west of the house. Although it seems unlikely that violets are sufficiently widespread here for a colony to become established, it is curious that this species should appear in two consecutive years.

Conversely it seemed almost certain that **Clifden Nonpareil** is now breeding on our Aspens. There was a total of 19 between the 13th August and 21st October, making 2023 another record year.

September highlights included three **Four-spotted Footman** on the 7th, an astonishing count of 35 **Delicates** on the 25th and a **Radford's Flame-shoulder** the following night.

Rare immigrants seen in October included *Uresiphita gilvata* on the 8th, *Spolodea recurvalis* on the 10th and *Antigastra catalaunalis* on the 19th.

A single **Clouded Yellow** of the *helice* form was seen on the 13th at a time when there were also unusually high numbers of **Red Admirals** about.

During November and December a succession of unseasonal records was of interest with a fresh male **Small White** nectaring at Buddleia blossom on the 6th November, a pristine **Early Grey** in the trap on the 14th, an active **Speckled Wood** on the 20th and an **L-album Wainscot** on the 23rd. This unseasonal theme continued into December with **Large Yellow Underwings** on the 4th and 10th, **Brick** on the 17th and two **Yellow-line Quakers** on the 18th of the month. The season finally drew to a close with two **Red Admirals** on the 29th.

In 2022 I began setting light traps at the Othona Community, Bradwell-on-Sea. This coincided with the community kindly offering the use of one of their buildings as the new home for the Bradwell Bird Observatory. At the same time they were making plans to rewild land roughly south and west of Sales Point which had recently been used for agriculture. Surveying for moths fit right into their wider plans for the future environmental management of the site.

The property is set along the coast, just west of the seawall and alongside the North Sea, just south of where the Blackwater Estuary meets the sea. Saltmarsh with some vegetated shingle predominates on the seaward side, while there is a good mix of (mostly native) trees, shrubs, grasses and herbaceous plants on the landward side. Trapping took place on a total of 5 nights in 2022 and 17 nights in 2023, all months represented so far with the exception of January. The equipment used is a battery powered 20 Watt Skinner trap and a mains powered 60 Watt Skinner trap. The 20W trap, being more mobile, is generally set farther inland at various locations amongst the fields, hedgerows and trees. The 60W requires mains power so is set at the reedbed, within sight of the seawall. The reedbed serves as the tertiary sewage treatment plant for the community, and is also surrounded by trees, shrubs, grasses and herbaceous layers.

278 species of moths have been recorded for the period 1 January 2022 – December 31, 2023. The following tables were generated using data from Mapmate V2.4.0. 2024 Mapmate Ltd.

17 species are classed as Nationally Scarce B, Near threatened and Vulnerable, with no Essex Red Data Book species recorded. Good numbers of **Latticed Heath**, **Dusky Thorn** and **Beaded Chestnut** were recorded.

Nationally Scarce B, Near Threatened and Vulnerable moths trapped at Othona, Bradwell-on-Sea 2022&2023							
Agassiz Code	Scientific Name	Common Name	Records	Individuals	First Recorded	Last Recorded	Status
35.073	<i>Monochroa palustrellus</i>	a moth	2	3	2022	2023	Nationally Scarce B
35.118	<i>Scrobipalpa ocellatella</i>	Beet Moth	1	1	2023	2023	Nationally Scarce B
62.053	<i>Ancylosis oblitella</i>	a moth	3	4	2023	2023	Nationally Scarce B
65.002	<i>Watsonalla binaria</i>	Oak Hook-tip	1	1	2023	2023	VU
70.16	<i>Eupithecia tripunctaria</i>	White-spotted Pug	1	1	2023	2023	NT
70.218	<i>Chiasmia clathrata</i>	Latticed Heath	6	59	2023	2023	NT
70.232	<i>Ennomos autumnaria</i>	Large Thorn	2	6	2023	2023	NT
70.235	<i>Ennomos fuscantaria</i>	Dusky Thorn	4	14	2023	2023	NT
70.247	<i>Phigalia pilosaria</i>	Pale Brindled Beauty	1	3	2023	2023	VU
70.256	<i>Erannis defoliaria</i>	Mottled Umber	2	3	2023	2023	VU
73.064	<i>Amphipyra tragopoginis</i>	Mouse Moth	3	4	2023	2023	VU
73.065	<i>Asteroscopus sphinx</i>	Sprawler	2	5	2022	2023	VU
73.182	<i>Cirrhia icteritia</i>	Sallow	1	2	2023	2023	NT
73.186	<i>Agrochola lychnidis</i>	Beaded Chestnut	3	54	2022	2023	NT
73.252	<i>Tholera cespitis</i>	Hedge Rustic	1	1	2023	2023	VU
73.313	<i>Euxoa tritici</i>	White-line Dart	1	1	2023	2023	VU
73.365	<i>Eugnorisma glareosa</i>	Autumnal Rustic	1	2	2023	2023	NT



Large Thorn



White-line Dart



Autumnal Rustic

32 species are listed under the UK Biodiversity Action Plan (UK BAP), comprised of 30 species listed as 'Research Only' and 2 species listed as requiring a 'Species Action Plan'. These are the **Sloe Carpet** and **Lunar Yellow Underwing** moths. Aggregates, made up of UK BAP species, while not specifically on the UK BAP list as Aggregates, have been included.

UK Biodiversity Species for Othona, Bradwell-on-Sea 2022&2023								
Agassiz Code	Scientific Name	Common Name	UKBAP	Records	Individuals	First Recorded	Last Recorded	Status
73.365	<i>Eugnorisma glareosa</i>	Autumnal Rustic	Research Only	1	2	2023	2023	NT
73.186	<i>Agrochola lychnidis</i>	Beaded Chestnut	Research Only	3	54	2022	2023	NT
72.019	<i>Spilosoma lutea</i>	Buff Ermine	Research Only	3	6	2022	2023	LC
73.219	<i>Atethmia centrago</i>	Centre-barred Sallow	Research Only	3	19	2023	2023	LC
72.031	<i>Tyria jacobaeae</i>	Cinnabar	Research Only	2	2	2022	2023	LC
73.119	<i>Helotropha leucostigma</i> (old Genus <i>Calaena</i>)	Crescent	Research Only	2	5	2023	2023	LC
	<i>Acronicta tridens/psi</i>	Dark Dagger / Grey Dagger	Research Only	3	4	2023	2023	
73.231	<i>Aporophyla lutulenta</i>	Deep-brown Dart	Research Only	1	4	2023	2023	LC
70.235	<i>Ennomos fuscantaria</i>	Dusky Thorn	Research Only	4	14	2023	2023	NT
	<i>Amphipoea oculatea</i> agg.	Ear Moth agg.	Research Only	1	1	2023	2023	
73.253	<i>Tholera decimalis</i>	Feathered Gothic	Research Only	1	1	2023	2023	LC
73.068	<i>Allophyes oxyacanthae</i>	Green-brindled Crescent	Research Only	2	2	2022	2023	LC
73.252	<i>Tholera cespitis</i>	Hedge Rustic	Research Only	1	1	2023	2023	VU
73.045	<i>Acronicta rumicis</i>	Knot Grass	Research Only	4	11	2023	2023	LC
73.134	<i>Rhizedra lutosa</i>	Large Wainscot	Research Only	5	32	2022	2023	LC
70.218	<i>Chiasmia clathrata</i>	Latticed Heath	Research Only	6	59	2023	2023	NT
73.092	<i>Caradrina morpheus</i>	Mottled Rustic	Research Only	4	32	2022	2023	LC
73.064	<i>Amphipyra tragopoginis</i>	Mouse Moth	Research Only	3	4	2023	2023	VU
70.023	<i>Scopula marginepunctata</i>	Mullein Wave	Research Only	1	1	2023	2023	LC
65.002	<i>Watsonalla binaria</i>	Oak Hook-tip	Research Only	1	1	2023	2023	VU
73.247	<i>Orthosia gracilis</i>	Powdered Quaker	Research Only	2	2	2022	2023	LC
73.123	<i>Hydraecia micacea</i>	Rosy Rustic	Research Only	5	8	2023	2023	LC
73.182	<i>Cirrhia icteritia</i> (old Genus <i>Xanthia</i>)	Sallow	Research Only	1	2	2023	2023	NT
70.045	<i>Scotopteryx chenopodiata</i>	Shaded Broad-bar	Research Only	1	1	2023	2023	LC
73.301	<i>Leucania comma</i> (old Genus <i>Mythimna</i>)	Shoulder-striped Wainscot	Research Only	3	5	2022	2023	LC
73.334	<i>Diarsia rubi</i>	Small Square-spot	Research Only	4	18	2022	2023	LC
73.065	<i>Asteroscopus sphinx</i>	Sprawler	Research Only	2	5	2022	2023	VU
	<i>Hoplodrina octogenaria/blanda</i>	Uncertain/Rustic agg.	Research Only	6	72	2022	2023	
72.02	<i>Spilosoma lubricipeda</i>	White Ermine	Research Only	2	3	2023	2023	LC
73.313	<i>Euxoa tritici</i>	White-line Dart	Research Only	1	1	2023	2023	VU
73.344	<i>Noctua orbona</i>	Lunar Yellow Underwing	Species Action Plan	1	3	2023	2023	LC
70.281	<i>Aleucis distinctata</i>	Sloe Carpet	Species Action Plan	1	1	2022	2022	LC



Sloe Carpet Lunar Yellow Underwing

Species classed as Local are as follows, with the smaller moths predominating.

Moth species classed as 'Local' trapped at Othona, Bradwell-on-Sea 2022&2023							
Agassiz Code	Scientific Name	Common Name	Records	Individuals	First Recorded	Last Recorded	Status
16.005	<i>Yponomeuta rorrella</i>	Willow Ermine	1	7	2023	2023	Local
32.009	<i>Agonopterix purpurea</i>	a moth	2	2	2023	2023	Local
45.001	<i>Agdistis bennetii</i>	Saltmarsh Plume	1	2	2023	2023	Local
49.138	<i>Neocoehylis molliculana</i>	a moth	9	52	2022	2023	Local
62.005	<i>Achroia grisella</i>	Lesser Wax Moth	1	1	2023	2023	Local
62.036	<i>Acrobasis suavella</i>	a moth	2	2	2023	2023	Local
62.037	<i>Acrobasis marmorea</i>	a moth	1	3	2023	2023	Local
62.065	<i>Ephestia woodiella</i>	a moth	1	1	2023	2023	Local
62.07	<i>Synaphe punctalis</i>	a moth	3	16	2023	2023	Local
63.014	<i>Sitochroa palealis</i>	a moth	1	1	2023	2023	Local
63.028	<i>Ostrinia nubilalis</i>	European Corn-borer	3	3	2023	2023	Local
63.058	<i>Evergestis extimalis</i>	a moth	2	2	2023	2023	Local
63.075	<i>Eudonia pallida</i>	a moth	2	7	2023	2023	Local
63.077	<i>Chilo phragmitella</i>	a moth	6	8	2023	2023	Local
63.079	<i>Calamotropha paludella</i>	a moth	1	1	2023	2023	Local
63.092	<i>Agriphila selasella</i>	a moth	1	4	2023	2023	Local
63.12	<i>Schoenobius gigantella</i>	a moth	1	1	2023	2023	Local



Evergestis extimalis

Saltmarsh Plume

13 species are classed as Migrants, with two classed as Naturalised, one as an Adventive and one Accidental/Vagrant. It would be understated to say that I was very pleased to trap 4 **Beautiful Marbled** on 3 occasions, 2 **Convolvulus Hawk-moths**, 77 **Delicates** and also singles of **Porter's Rustic**, **Vestal**, **Gem** and **Small Mottled Willow**. Regarding the **Beautiful Marbled** it was more like hyperventilating and panic stations until they were potted on, photographed and the news shared.

Migrants, Adventives, Naturalised and Vagrant/Accidental moths trapped at Othona, Bradwell-on-Sea 2022&2023							
Agassiz Code	Scientific Name	Common Name	Records	Individuals	First Recorded	Last Recorded	Status
18.001	<i>Plutella xylostella</i>	Diamond-back Moth	4	18	2023	2023	Migrant
63.031	<i>Udea ferrugalis</i>	Rusty-dot Pearl	4	29	2022	2023	Migrant
63.052	<i>Nomophila noctuella</i>	Rush Veneer	5	93	2022	2023	Migrant
63.054	<i>Cydalima perspectalis</i>	Box-tree Moth	4	4	2023	2023	Adventive
69.004	<i>Agrius convolvuli</i>	Convolvulus Hawk-moth	1	2	2023	2023	Migrant
70.038	<i>Rhodometra sacraria</i>	Vestal	1	1	2022	2022	Migrant
70.047	<i>Nyctosea obstipata</i>	Gem	1	1	2023	2023	Migrant
71.001	<i>Thaumetopoea processionea</i>	Oak Processionary	1	2	2023	2023	NA
72.011	<i>Lymantria dispar</i>	Gypsy Moth	1	1	2023	2023	NA
72.074	<i>Eublemma purpurina</i>	Beautiful Marbled	3	4	2023	2023	Migrant
73.015	<i>Autographa gamma</i>	Silver Y	13	34	2022	2023	Migrant
73.076	<i>Helicoverpa armigera</i>	Scarce Bordered Straw	2	5	2022	2023	Migrant
73.087	<i>Spodoptera exigua</i>	Small Mottled Willow	1	1	2023	2023	Migrant
73.104	<i>Athetis hospes</i>	Porter's Rustic	1	1	2023	2023	Vagrant/Accidental
73.295	<i>Mythimna vitellina</i>	Delicate	5	107	2023	2023	Migrant
73.307	<i>Peridroma saucia</i>	Pearly Underwing	1	1	2023	2023	Migrant
73.327	<i>Agrotis ipsilon</i>	Dark Sword-grass	7	10	2023	2023	Migrant



Beautiful Marbled



Gem



Porter's Rustic

Other species of note include those whose larval foodplant include coastal plants. The **Sandhill Rustic** clearly has a good stronghold (at the moment) with 130 individuals trapped over 3 occasions, as does the **Ground Lackey** with 12 individuals over 3 occasions.

Moth species trapped at Othona, Bradwell-on-Sea 2022&2023 whose larvae require coastal foodplants									
Agassiz Code	Scientific Name	Common Name	Habitat	Larval foodplant	Records	Individuals	First Recorded	Last Recorded	Status
35.118	<i>Scrobipalpa ocellatella</i>	Beet Moth	Coastal on shingle, marshes, dunes	Buds, stems or leaves of Sea Beet	1	1	2023	2023	Nationally Scarce B
45.001	<i>Agdistis bennetii</i>	Saltmarsh Plume	Coastal saltmarshes of south-east England	Common Sea-lavender	1	2	2023	2023	Local
49.057	<i>Cnephasia longana</i>	a moth	Coastal dunes and vegetated shingle, chalk downland	Spun flowers and shoots of many herbaceous plants	1	5	2023	2023	Common
62.053	<i>Ancylosis oblitella</i>	a moth	Mainly coastal on dunes and saltmarshes	Goosefoots, sea-blites, glassworts	3	4	2023	2023	Nationally Scarce B
66.004	<i>Malacosoma castrensis</i>	Ground Lackey	Inhabits warm saltmarshes and coastal shingle	Herbaceous saltmarsh plants	3	12	2023	2023	LC
70.028	<i>Scopula emutaria</i>	Rosy Wave	Saltmarsh edges	Unknown	1	1	2023	2023	LC
70.212	<i>Macaria alternata</i>	Sharp-angled Peacock	In open woodland, scrubby heaths, vegetated coastal dunes	Willows, Blackthorn, Common Alder, Sea Buckthorn	6	9	2022	2023	LC
70.294	<i>Aspitates ochrearia</i>	Yellow Belle	Mainly coastal on dunes, shingle, saltmarshes, dry grassland and heaths inland	A wide range of low plants	3	4	2023	2023	LC
73.055	<i>Cucullia asteris</i>	Star-wort	On coastal saltmarsh and in woodland	Sea Aster and Sea Wormwood on marshes	3	3	2023	2023	LC
73.132	<i>Luperina nickerlii</i>	Sandhill Rustic	ssp. <i>Demuthii</i> inhabits saltmarshes in south-east England	Coastal grasses	3	130	2023	2023	LC
73.3	<i>Mythimna l-album</i>	L-album Wainscot	Found on coasts and rocky cliffs with rough grass	Marram and other grasses	3	5	2022	2023	LC
73.323	<i>Agrotis ripae</i>	Sand Dart	Common locally on coastal sand dunes, especially close to the high tide mark	Many strandline plants such as Sea Rocket, Prickly Saltwort, Sea Purslane, Annual Sea-blite, Sea Holly etc	1	1	2023	2023	LC

Habitat and Larval foodplant data taken from Manley, C. 2021. *British and Irish Moths*, 3rd Edition. Bloomsbury Wildlife.



Rosy Wave



Star-wort



Sandhill Rustic



Sand Dart

Considering those species which have been recorded at nearby Colne Point (just across the estuary) and Curry Farm (roughly 4 km southwest) the list of recorded moth species trapped at the Othona site can be expected to increase over time. It will be very exciting to watch this unfold in the coming years and many thanks go to the Othona Community for positively supporting my recording efforts, as well as the wider EMG community.

(Pictures – Cindy Lawes)

This was a fascinating year with 32 species added to the Boreham garden list, the highest figure since 2020, bringing the total to 949. Although challenging I am hoping to eventually reach the magic 1,000. It was great to record a new Essex species, **Knotgrass Gall Moth** *Augasma aeratella* and which had been thought extinct in the UK since the last record in Dorset in 1956. It was also a surprise to record **Channel Islands Pug** *Eupithecia ultimaria*, recorded for the first time in Essex in 2022. The few Essex records previously have all been coastal as its food plant is **Tamarisk** *Tamarix gallica*. After hoping for many years I finally trapped in September two of the superb "Blue Underwing", **Clifden Nonpareil**. Another interesting species was **Pale Maple Stilt** *Caloptilia honoratella*, new to Essex in 2020, a rare migrant and now thought to be possibly colonising the UK. **The Black Clothes Moth** *Nemapogon falstriella*, a scarce UK species with little known of its life cycle other than it is associated with bracket fungi. In Essex there are currently 4 other records from two sites with the first recorded in 2019. I also recorded **Dotted Rustic** an enigmatic and scarce species that I had long hoped to find. Two other species I was pleased to see after looking out for them for many years were **Apple Leaf Skeletoniser** *Choreutis pariana* and **September Thorn** *Ennomos erosaria*.



Clifden Nonpareil



Dotted Rustic

Knotgrass case Bearer *Augasma aeratella*Scarce Maple Stilt *Caloptilia hemidactylella*Black Clothes Moth *Nemapogon falstriella*Channel Islands Pug *Eupithecia ultimari*

The 32 new species for the garden in 2023

ABH No	Scientific Name	Common Name	Date	Comment
11.006	<i>Taleporia tubulosa</i>	Brown Bagworm	14/06/2023	Local
11.012	<i>Psyche casta</i>	Common Bagworm	20/06/2023	
12.020	<i>Nemapogon variatella</i>	Pale Corn Clothes M	11/07/2020	GD pRDB3
12.022 1	<i>Nemapogon falstriella</i>	Black Clothes Moth	21/08/2023	GD, 1 st Essex record 2019
12.023	<i>Triaxomasia caprimulgella</i>	Small Timber Clothes M.	24/06/2023	GD pRDB1
12.042	<i>Monopis fenestratella</i>	Brown Timber Clothes M.	24/06/2023	GD pRDB2 very scarce
15.001	<i>Parectopa ononidis</i>	Clover Slender	28/07/2023	ERDB2 ERDL/NSB
15.013	<i>Caloptilia hemidactylella</i>	Scarce Maple Stilt	29/07/2023	GD pRDB1
15.013 1	<i>Caloptilia honoratella</i>	Pale Maple Slender	19/07/2023	GD; New for Essex 2020
15.019	<i>Acrocercops brongniardella</i>	Brown Oak Slender	16/08/2023	Local
15.052	<i>Phyllonorycter corylifoliella</i>	Hawthorn Midget	10/08/2019	GD
15.082	<i>Phyllonorycter klemannella</i>	Dark Alder Midget	27/07/2023	GD
16.021	<i>Cedestis gysseleniella</i>	Gold Pine Ermine	21/06/2023	Local
18.007	<i>Eidophasia messingiella</i>	Bitter-cress Diamond-back	25/06/2023	Local
28.020	<i>Dasycera oliiviella</i>	Scarce Forest Tubic	20/08/2023	ERDL /NSA
37.001	<i>Augasma aeratella</i>	Knotgrass Case-bearer	27/06/2023	NFE; though Extinct since 1934
37.026	<i>Coleophora violacea</i>	Violet Case-bearer	28/06/2023	GD ERDL/NSB
37.051	<i>Coleophora kuehnella</i>	White-oak Case-bearer	26/06/2023	GD Local
39.004	<i>Dystebenna stephensi</i>	Oak Cosmet	29/07/2023	GD Local
48.007	<i>Choreutis pariana</i>	Apple-leaf Skeletoniser	28/07/2023	Local
49.164	<i>Celypha cespitana</i>	Thyme Marble	06/09/2023	Local
49.225	<i>Spilonota laricana</i>	Larch-bud Moth	11/07/2023	GD Local
49.231	<i>Epinotia brunnichana</i>	Large Birch Bell	02/08/2023	GD
49.274	<i>Eucosma metzneriana</i>	Mugwort Bell	14/06/2023	Recent colonist
49.278	<i>Gypsonoma minutana</i>	Brindled Shoot	18/07/2023	ERDL /NSB
63.041	<i>Agrotera nemoralis</i>	Beautiful Pearl	29/06/2023	pRDB1
65.001	<i>Falcaria lacertinaria</i>	Scalloped Hook-tip	02/06/2017	
70.152	<i>Eupithecia ultimaria</i>	Channel Islands Pug	09/09/2023	GD 1 st Essex record 2022
70.236	<i>Ennomos erosaria</i>	September Thorn	31/07/2023	
70.284	<i>Hylaea fasciaria</i>	Barred Red	28/06/2023	
72.076	<i>Catocala fraxini</i>	Clifden Nonpareil	01/09/2023	
73.339	<i>Rhyacia simulans</i>	Dotted Rustic	18/09/2023	ERDL

Overall I recorded 6 new macros and 26 new Micros, I am grateful to Chris Lewis for confirming several of the Micros by GD.



Clover Slender *Parectopa ononidis
brongiardella*



Brown Oak Slender *Acrocercops*



Gold Pine Ermine *Cedestis gysseleniella*



Oak Cosmet *Dystebenna stephensi*



Larch-bud Moth *Spilonota laricana*



Brindled Shoot *Gypsonoma minutana*



September Thorn



Scalloped Hook-tip



Scarce Forest Tubic
Dasycera oliviella

Nights trapped in our Boreham garden in 2023.

Month	Jan	Feb	March	April	May	June	July	Aug	Se	Oc	No	De	Total
Total nights	0	5	0	8	18	22	16	14	22	7	0	5	117

In 2023 I trapped for 117 nights, recorded 19,730 moths of 492 species and over last 7 years have entered garden data for 90,741 moths. This year I did not trap during January, March and November due to being away or other commitments.

Boreham garden statistics from the last 6 years

Year	2017	2018	2019	2020	2021	2022	2023
New Micro	22	38	37	31	17	17	26
New Macro	8	8	9	5	7	7	6
Total New	30	46	46	36	24	22	32
Year total	497	567	429	625	513	495	492
Garden total	731	777	835	871	893	917	949
Nights trapped	96	103	105	140	129	144	113
Moth total	7311	8105	8235	18,875	13,616	14,752	19,730

The number of moths recorded was bolstered by the large number of common species, particularly those from grassland. With so many gravel pits to the North of the village and grassland habitat to the south in the Chelmer Valley it was clear that some species such as **Common Wainscot**, **Garden Grass Veneer** and **Setaceous Hebrew Character** had an exceptional year. While recent colonists such as **Box Tree Moth** continue to increase as our box hedges in the garden testify. Presumed migrants also played their part with, for example, record numbers of **Large Yellow Underwing**, **Pale Mottled Willow**, **White-point** and **Silver Y**. I was also surprised to record 32 new garden species with some exceptionally scarce Micros amongst them. It was in fact the highest new species count since 2020.

The 10 most numerous species trapped during 2023

ABH Number as in Agassiz, D.J.L., Beavan, S.D., & Heckford, R.J. (2013) *A Checklist of the Lepidoptera of the British Isles*. Royal Entomological Society, St. Albans.

	ABH No	Latin Name	English Name	No. moths	Rank 2023	Rank 2022	Rank 2021
1	73.342	<i>Noctua pronuba</i>	Large Yellow Underwing	1956	1	1	2
2	73.291	<i>Mythimna pallens</i>	Common Wainscot	1425	2	7	6
3	63.054	<i>Cydalima perspectalis</i>	Box-tree Moth	1247	3		
4	63.080	<i>Chrysoteuchia culmella</i>	Garden Grass Veneer	1005	4		
5	73.359	<i>Xestia c-nigrum</i>	Set. Hebrew Character	724	5	4	1
6	73.317	<i>Agrotis exclamationis</i>	Heart and Dart	654	6	5	4
7	73.095	<i>Caradrina plavipalpis</i>	Pale Mottled Willow	539	7	6	-
8	73.297	<i>Mythimna albipunctata</i>	White-point	463	8		
9	73.325	<i>Agrotis puta</i>	Shuttle-shaped Dart	396	9	2	5
10	73.015	<i>Autographa gamma</i>	Silver Y	340	10		

I thought that 2022 was an interesting year but 2023 has eclipsed that with 4 species never having been in the top 10 before, **Box-tree Moth, Garden Grass Veneer, White-point** and **Silver Y**, the last two related to the exceptional numbers of presumed migrant moths recorded between May and October. The 1,956 **Large Yellow Underwing**, 463 **White-point** and 340 **Silver Y** are testament to this assumption.

Migrant summary

Species	ABH No	Apr	May	June	July	Aug	Sept	Oct	Dec	Total
Bird-cherry Ermine <i>Yponomeuta evonymella</i>	16.001			1	289					290
Diamond-back Moth <i>Plutella xylostella</i>	18.001		1	68	30	10	6	4		119
*Vagrant Piercer <i>Cydia amplana</i>	49.343					20	1			21
*European Corn Borer <i>Ostrinia nubilalis</i>	63.028			3	13	9	2			27
Rusty Dot Pearl <i>Udea ferrugalis</i>	63.031		2			1	9	8	1	21
Vagrant Piercer <i>Acrobasis tumidana</i>	62.033				2	4	2			8
Olive-tree Pearl <i>Palpita vitrealis</i>	63.048						4	1		5
Rush Veneer <i>Nomophila noctuella</i>	63.052						1			1
Hummingbird Hawk-moth <i>M. stellatarum</i>	69.010				1					1
Convolvulus Hawk-moth <i>Agrius convolvuli</i>	69.004						5	1		6
Vestal <i>Rhodometra sacraria</i>	70.038					3	3			6
Channel Islands Pug <i>Eupithecia ultimaria</i>	70.152						1			1
*Plumed Fan-foot <i>Pechipogo plumigeralis</i>	72.057			1	3		1	1		6
*Dewick's Plusia <i>Macdunnoughia confusa</i>	73.010	1	13	3	4		8	1		29
Silver Y <i>Autographa gamma</i>	73.015		17	135	103	26	39	20		340
Scarce Bordered Straw <i>Helicoverpa armigera</i>	73.076				3	1	4	3		11
Small Mottled Willow <i>Spodoptera exigua</i>	73.087			1	1	1		1		4
Delicate <i>Mythimna vitellina</i>	73.295			2	16	7				25
Pearly Underwing <i>Peridroma saucia</i>	73.307						1			1
Dark Sword-grass <i>Agrotis ipsilon</i>	73.327		1		4	2	2	1		10
*Tree-lichen Beauty <i>Cryphia algae</i>	73.082				49	14	2			65
*White-point <i>Mythimna albipuncta</i>	73.297			9	16	84	207	8		324
*Clancy's Rustic <i>Caradrina kadenii</i>	73.093				7	1	76	100		184
TOTALS										

*Some records may be associated with local breeding populations

The presumed migrants this year have broken several records, for example 6 **Convolvulus Hawk-moths** while over the previous 20 years I trapped just 3 and 25 **Delicate** with just 12 over the previous 20 years. Other record counts with last year in brackets included **Small Mottled Willow** 6(2), **Dewick's Plusia** 29(3), **Dark Sword-grass** 10 (7), **White-point** 324(225) and **Clancy's Rustic** 184(32) while the 340 **Silver Y** (81) was quite extraordinary for our garden. The differences from one year to the next are striking as the above figures testify but to record 227 **Rush Veneer** *Nomophila noctuella* in 2022 and only one in 2023 was remarkable.

Additional significant Boreham garden moth records during 2023.

Common Fern Moth *Psychoides filicivora* has been recorded for 3 of the last 4 years, likely colonised Evie's fern garden.

Burnished Copper *Roeslerstammia erxlebella* Only the 2nd garden record, the last was in July 2015.

Norway Maple Dot *Etainia sericopeza* 8th September; my 3rd garden record of this Nationally Scarce A species.

Pale Reed Beauty *Cosmopterix liengiella* 20th June, previous record 8th August 2020.

Common Thorn Leaf-miner *Phyllonorycter oxycanthae* 3rd September, previous record April 2016.

Small Elm Case-bearer *Coleophora badiipennella* 24th July, previous record 23rd July 2019.

Sloe Case-bearer *Coleophora prunifoliae* 26th June, previous most recent record 27th June 2021.

Knapweed Case-bearer *Coleophora conspicuella* 24th July, only previous garden record on 3rd July 2022.

Grey Rush Case-bearer *Coleophora glaucicolella* 7th July, previous most recent record 3rd July 2019.

Lead-coloured Yarrow Moth *Dichrorampha plumbagana* 5th June, previous record 29th May 2021.

Fig-leaf Skeletoniser *Choreutis nemorana* Adult 19th April with larvae on Fig Tree found 7th July; first garden record 19th May 2022.

Sloe Carpet *Aleucis distinctata* 17th April; this species has been recorded in 4 of the last 6 years.

Festoon *Apoda limacodes*, 20th June, only the 3rd garden record, all since 2019.

Gorse Knot-horn *Pempelia genistella* 25th July, previous record 7th July 2018.

Rolled Grass-moth *Pediasia contaminella* 24th July, only previous record 7th September 2021.

Cream-spot Tiger *Arctia villica* Only my 2nd garden record, the previous one was in June 2002.

Marbled White-spot *Protodeltote pygarga* 29th June, previous record 8th July 2018.

Clouded Bordered Brindle *Apamena crenata* 11th June, previous record 2nd June 2018.

Double Lobed *lateroligia ophiogramma* 24th July, previous record 27th July 2017.

Rosy Minor *Litoligia literosa* 4th August, previous record 7th August 2015.

Pale Lemon Sallow *Cirrhia ocellaris* 6th October, previous record 5th October 2011.

Oak Rustic *Dryobota labecula* 20th October, only previous record 14th November 2021.

Kent Black Arches *Meganola albula* 30th July, previous record 23rd July 2020.



Burnished Copper
Roeslerstammia erxlebella



Norway Maple Dot
Etainia sericopeza



Pale Reed Beauty
Cosmopterix liengiella



Small Elm Case-bearer
Coleophora badiipennella



Sloe Case-bearer
Coleophora conspicuella



Lead-coloured yarrow Moth
Dichrorampha plumbagana



Cream-spot Tiger



Double Lobed



Pale Lemon Sallow



Oak Rustic

Status of the species trapped in our Boreham garden in 2023

Essex Red Data List (ERDL)

With the Essex Red Data List (ERDL) species currently under review I will not include this table until this has been completed.

Nationally Local Species in 2023

Of the 492 species recorded in the garden, 117 were Nationally Local, the largest number ever recorded and far higher than the 94 in 2022 and 97 logged in 2021. Some of the more significant Essex species are listed below. The reasons for this high figure are unclear but extended periods of warm weather in late summer may well have encouraged dispersal. It was also a much wetter early summer which is likely to have encouraged vegetation growth making conditions ideal for larvae to survive.

ABH No	English Name	Scientific name
11.006	Brown Bagworm	<i>Taleporia tubulosa</i>
12.048	Fern Smut	<i>Psychoides filicivora</i>
13.002	Copper Ermel	<i>Roeslerstammia erxlebella</i>
14.002	Daisy Bent-wing	<i>Bucculatrix nigricomella</i>
16.021	Gold Pine Ermine	<i>Cedestis gysseleliella</i>
35.003	White-strap Sober	<i>Syncopacma larseniella</i>
37.011	Pale Elm Case-bearer	<i>Coleophora badiipennella</i>
48.007	Apple Leaf Skeletoniser	<i>Choreutis pariana</i>
49.052	Meadow Shade	<i>Cnephasia pasiuana</i>
49.164	Thyme Marble	<i>Celypha cespitana</i>
49.225	Larch-bud Moth	<i>Spilonota laricana</i>
49.304	Pine Leaf-mining Moth	<i>Clavigesta purdeyi</i>
49.322	Silver-lined Drill	<i>Dichrorampha plumbagana</i>
49.365	Blotched piercer	<i>Pammene albuginana</i>
62.037	Marbled Knot-horn	<i>Acrobasis marmoreal</i>
63.063	Base-line Grey	<i>Scoparia basistrigalis</i>
70.148	Maple Pug	<i>Eupithecia inturbata</i>
70.166	Plain pug	<i>Eupithecia simpliciatata</i>
72.027	Cream-spot Tiger	<i>Arctia villica</i>
73.036	Alder Moth	<i>Acronicta alni</i>
73.105	Bird's Wing	<i>Dypterygia scabriuscula</i>
73.168	Double Lobed	<i>Lateroligia ophiogramma</i>
73.213	Olive	<i>Ipimorpha subtusa</i>

Nationally Scarce A and B

18 species were within these categories and all were Micros, in 2022 it was 19 with similar numbers in 2020 and 2021. Seven of the 18 were also recorded last year, the highest proportion for 3 years and may suggest a local origin.

ABH No	CATEGORY	English Name	Scientific name
04.074	A	Norway Maple-pygmy	<i>Ecotedemia sericopeza</i>
15.001	B	Clover Slender	<i>Prectopa ononidis</i>
28.020	A	Scarce Forest Tubic	<i>Dasycera oliviella</i>
34.010	B	Fen Cosmet	<i>Cosmopterix lienigiella</i>

35.032	B	Hollyhock Seed Moth	<i>Pexicopia malvella</i>
35.099	B	*Cypress Groundling	<i>Gelechia senticetella</i>
35.156	B	Brindled Groundling	<i>Recurvaria nanella</i>
37.017	B	New Sloe Case-bearer	<i>Coleophora prunifoliae</i>
37.026	B	Violet Case-bearer	<i>Coloephora violacea</i>
39.004	A	Oak Cosmet	<i>Dystebenna stephensi</i>
49.278	B	Brindled Shoot	<i>Gypsonoma minutana</i>
49.303	A	*Small Pine Shoot	<i>Clavigesta sylvestrana</i>
49.356	A	*Kent Fruit Piercer	<i>Grapholita lobarzewskii</i>
49.362	B	*Early Oak Piercer	<i>Pammene giganteana</i>
62.010	B	*White-barred Knot-horn	<i>Elegia similella</i>
62.053	B	Saltmarsh Knot-horn	<i>Ancylosis oblitella</i>
63.059	B	*Dark Bordered Pearl	<i>Evergestis limbata</i>
63.109	B	*Waste Grass-veneer	<i>Pediasia contminella</i>

Lures

In 2023 I used 19 lures and like many others had some success in attracting interesting species. I still have a large number unused in the freezer thanks to Tim Green, I aim to experiment with these in 2024. The Clearwing lures were not used in 2022 but were again very successful in 2023.

Lure	Species Attracted 1	Species attracted 2	Species attracted 3
HYL	Raspberry Clearwing		
AND	Orange-tailed Clearwing	Marbled Orchard Tortrix <i>Hedya nubiferna</i>	
TIP	Currant Clearwing	Common Fern Moth <i>Psychoides filicivora</i>	
FOR	Red-tipped Clearwing		
CUL	Red-belted Clearwing	Raspberry Clearwing	
LUN	Lunar Hornet Clearwing		
HOR	Hornet Clearwing		
VES	Yellow-legged Clearwing		
MYO	Raspberry Clearwing		
EMP	Emperor Moth		
PLU	Dewick's Plusia	Silver Y	
SKI	Kent Fruit Piercer <i>Grapholita lobarzewskii</i>		
FUN	Plum Fruit Moth <i>Grapholita funebrana</i>	Scarce Oak gall Moth <i>Pammene albuginana</i>	Scare dark Fungus Moth <i>Nemapogon falstriella</i> (GD&NFS)
LOB	Small Fruit Moth <i>Grapholita lobarzewskii</i>		
GYP	Gypsy Moth		
BOX	Box-tree Moth		
NI	Silver Y	Dewick's Plusia	
GAMMA	Silver Y	Dewick's Plusia	
API	Variegated Fungus Moth <i>Nemapogon varietella</i> 11/07/2020 (GD &NFS)		

Blake's Wood is owned and managed by the National Trust and is located on Danbury Ridge, South Essex, VC18. It is an actively coppiced ancient woodland with compartments of Sweet Chestnut and Hornbeam with many Hornbeam, Ash and Oak standards. Re-growth Ash and Birch can be found scattered throughout each compartment. Due to coppicing there is a diverse mosaic of various aged re-growth with associated diverse ground flora.

Both Muntjac and Roe Deer are present and to protect some of the re-growth brush barriers have been constructed around some of the more recent coppicing.

After discussion with the NT Ranger it became clear that the moth data for this reserve was fairly limited including that held by the EFC.

I started to record moths for the NT with surveys in September and October 2022 with 91 species being recorded. I continued in 2023 with 13 surveys between the 23rd April and the 7th September. Each survey involved the use of 1kw and 2.2 Kw Honda generators linked to 7 different actinic and MV moth traps of Heath and Robinson design. These were located in 3 departments, in addition I deployed a battery trap using a 20watt actinic and 2X 2watt LEDS on the edge of a fourth recently coppiced Hornbeam compartment. Traps were set at dusk and emptied at dawn with the generators able to run for up to 10 hours unattended.

With little data on the moth species present it was very interesting checking the traps. Numbers were never high but some important species were recorded. By the last survey on the 7th September I had trapped 8,100 moths of 415 species.

I have listed below 55 species of Particular interest:

Key : Taxon No: National Status/ Essex: Common name: Scientific name: Date(s) recorded.

ERD-Essex Red Data; NSA/B-Nationally Scarce A or B Scarce-Nationally Scarce; - indicates no comment made.

- 04.062 **Local / ERD** Chestnut Dot *Stigmella samiatella* 3/10/2022 (GD)
07.014 **Local/ Scarce** Dark-dotted Longhorn *Nematopogon metaxella* 31/05/2023 & 05/06/2023 (GD)
11.006 **Local /-** Brown Bagworm *Taleporia tubulosa* 13th and 25th June 2023
18.007 **Local** White-barred Pointer *Eidophasia messingiella* 25th June 2023
19.001 **Local/Scarce** Reed Minor *Orthotelia sparganella* 19th July 2023
20.024 **Local/Scarce** Beech Tip Moth *Argyresthia semitestacella* 12th September 2022
28.008 **Italian Bark Moth** *Metalampra italica* 18th August 2023
28.020 **NSA/ ERD** Cream Spot Bark Moth *Dasycera oliiviella* 8th and 19th July and 18th August 2023.
30.003 **Local /Rare** Orange-headed Concealer *Agnoea josephina* 8th August 2023.
32.002 **Local/ Scarce** Black-marked Diviner *Semioscopis steinkellneriana* 8th May 2023
35.012 **Local/Scarce** Birch Roller *Anacampsis blattariella* 8th July and 18th August 2023 GD
35.107 **Local/ ERD** Tufted Oak Roller *Psoricoptera gibbosella* 18th August 2023
37.051 **Local/-** Cloaked Case-bearer *Coleophora kuehnella* 25th June 2023. GD
46.001 **-/Scarce** Blackberry Skeletoniser *Schreckensteinia festaliella* 18th August 2023.
47.006 **Local/Scarce** Streaked Ridge-back *Epermenia falciformis* 7th September 2023
49.086 **Local/-** White Birch Tortrix *Acleris logiana* 7th September 2023.
49.096 **Local/-** Small Bluebell Beauty *Hysterophora maculosana* 22nd May 2023.
49.237 **Local/-** Black-streaked Tortrix *Epinotia signatana* 25th June 2023.
49.243 **Local/ ERD** Blotched Tortrix *Epinotia demarniana* 13th and 25th June 2023.
49.343 **Migrant/Scarce** Rusty Acorn Piercer *Cydia amplana* 25th August 2023
53.001 **-/ERD** Festoon *Apoda limacoles* 13th, 25th June & 8th August 2023.
62.010 **NSB/ERD** White-barred Knot-horn *Elegia similella* 25th June and 8th July 2023.
62.022 **NSB/-** Gorse Knot-horn *Pempelia genistella* 19th July and 18th August 2023.
62.024 **-/ERD** Beautiful Knot-horn *Rhodophaea formosa* 8th July 2023.
62.038 **-/ERD** Pine Knot-horn *Dioryctria abietella* 25th June 2023.
62.033 **Colonist** Tufted Oak Knot-horn *Acrobasis tumidana* 8th July, 18th August and 7th September 2023.
62.053 **NSB/-** Saltmarsh Knot-horn 25th June 2023.

- 63.041 PRDB1/Scarce **Beautiful Pearl** *Agrotera nemoralis* 25th June 2023
 63.092 Local/- **Pale-streaked Grass-moth** *Agriphila selasella* 18th August 2023.
 63.119 -/- **Marbled Fern** *Musotima nitidalis* from 30th April continuously until 7th September 2023.
 65.014 Scarce/- **Oak Lutestring** *Cymatophorina luteana* 12th September 2023 and 7th September 2023.
 70.055 -/- **Large Twin-spot Carpet** *Xanthorhoe quadrifasciata* 8th July 2023.
 70.103 -/- **Water Carpet** *Lampopteryx suffumata* 23rd April 2023
 70.162 **Dwarf Pug** *Eupithecia tantillaria* 8th and 31st May 2023.
 70.212 -/- **Sharp-angled Peacock** *Macaria alternata* 18th August 2023.
 70.229 -/- **Speckled Yellow** *Pseudopanthera macularia* 22nd and 31st May 2023.
 70.267 -/ERD **Great Oak Beauty** *Hypomecis roboraria* 25th June 2023
 70.273 **Brindled White-spot** *Parectropis similaria* 31st May to 25th June 2023.
 71.007 -/- **Poplar Kitten** *Furcula bifida* 19th July 2023.
 71.009 -/- **Lobster Moth** *Stauropus fagi* 25th June 2023
 72.027 -/- **Cream-spot Tiger** *Arctia villica villica* 5th June 2023.
 72.042 -/ERD **Red-necked Footman** *Atolmis rubricollis* 13th June 2023.
 72.047 -/ERD **Hoary Footman** *Eilema caniola* 18th August 2023.
 72.061 **Pinion-streaked Snout** *Schrankia costaestrigalis* 7th September 2023.
 72.066 -/ERD **Waved Black** *Prascotia fuliginaria* 13th June to 8th July 2023.
 72.076 Colonist **Clifden Nonpareil** *Catocaia fraxini* 8th September 2022.
 72.081 Nationally Rare/ERD **Dark Crimson Underwing** *Catocaia sponsa* 7th September 2023
 73.036 -/- **Alder Moth** *Acronicta alni* 22nd May to 13th June 2023.
 73.063 -/- **Svensson's Copper Underwing** *Amphipyra Berbera Berbera* 25th June and 8th July 2023.
 73.151 -/ERD **Webb's Wainscot** *Globia sparganii* 18th August 2023.
 73.160 -/- **Slender Brindle** *Apamea scolopacina* 8th and 19th July 2023.
 73.221 -/- **Suspected** *Parastichtis suspecta* 13th & 25th June and 8th July 2023.
 73.261 -/- **Grey Arches** *Polia nebulosi* 13th & 25th June and 8th July 2023.
 73.302 -/- **Obscure Wainscot** *Leucania obsoleta* 8th July 2023.
 73.347 -/Scarce **Langmaid's Yellow Underwing** *Noctua janthina* 8th July and 7th September 2023

I was pleased to record many Broad-leaved Woodland species including **Great Oak Beauty, Suspected, Grey Arches, Waved Black, Lobster Moth, Red-necked Footman** and **Oak Lutestring**. In addition recent colonists such as **Italian Bark Moth** *Metalampra italica*, **Clifden Nonpareil, Dark Crimson Underwing, Hoary Footman, Tufted Oak Knot-horn** *Acrobasis tumidana* and **Rusty Acorn Piercer** *Cydia amplana*.

Results from these initial surveys indicate that Blake's Wood N.T. has a number of rare or less common Essex moth species as well as several that are Nationally Local or Scarce. So far no surveys have been carried out between January and March or Mid-October to December. One of the issues in late summer onwards is the high density of **Hornets** *Vespa crabro* with 100+ trapped on warmer nights.



Streaked Ridgeback
Epermenia falciformis



Small Bluebell Beauty
Hysterophora maculosana



White-barred Knot-horn
Elegia similella



Oak Lutestring



Great Oak Beauty



Beautiful Pearl *Agrotis nemoralis*



Grey Arches



Lobster Moth



Dark Crimson Underwing



Dark-dotted Longhorn
Nematopogon metaxella



Reed Minor
Orthotelia sparganella



Orange-headed Concealer
Agnoea josephina

Lingwood Common National Trust is located on Danbury Ridge, South Essex, VC18. Considerable effort has been made to encourage Heathers (*Calluna:sp*) and Broom. Like Blake's Wood little information is available on the moths species while information on vertebrates is quite extensive, especially Reptiles and bats.

I managed 2 surveys in August 2023 using 4 traps powered by Honda generators, 3 traps were actinic and one was a 125MV. Two were located amongst *Calluna :sp* and Broom while the other two were in the adjacent oak woodland.

I logged 148 species with an additional 12 aggregates. One of the first moths I found was a fresh **DARK CRIMSON UNDERWING** alongside a **BIRCH MOCHA**. Others of interest included **DARK UMBER**, **ANTLER**, **CLAY TRIPLE-LINES** and **NARROW-WINGED PUG**. Amongst the Micros the most significant was heather specialist **HEATHER ELDER** *Aristotelia ericinella*, I had only seen this species before at Tiptree Heath. Other moths of note included **SMALL PHOENIX**, **MAPLE PUG**, **SALLOW MARBLE** *Apotomis capreana*, **DOCK STREAK** *Monochroa palustrellus*, **TUFTED OAK ROLLER** *Psoricoptera gibbosella*, **PALE SEEDHEAD MOTH** *Ptocheuusa paupella*, **GORSE KNOT-HORN** *Pempelia genistella*, **HONEYSUCKLE MOTH** *Ypsolopha dentella*, **LONG-LEGGED TABBY** *Synaphe punctalis*, **SCARCE WILLOW MARBLE** *Apotomis lineana* , **LARGE BIRCH ROLLER** *Epinotia brunnichana* and **MARBLED FERN MOTH** *Musotima nitidalis*.

The second survey added the following important records, **CLIFDEN NONPAREIL**, **SHORT-BARRED OCHRE** *Ypsolopha alpella*, **RUSTY ACORN PIERCER** *Cydia amplana*, **ORANGE SALLOW**, **FEATHERED GOTHIC** and **OLD LADY**. The two most common species on this night were **BIRCH MARBLE** *Apotomis betuletana* and **COMMON GRASS-VENEER** *Agriphila tristella*. One of the woodland traps attracted over 100 **HORNETS** *Vespa crabro* which resulted in few moths in those traps. Luckily they were pretty docile so I opened the trap and over the next hour they dispersed.

These two surveys show that Lingwood Common has an interesting and diverse moth population. I aim to carry out further surveys in spring and early summer.



Birch Mocha



Antler



Dark Umber



Narrow-winged Pug



Heather Elder *Aristotelia ericinella*



Scarce Willow Marble *Apotomis lineana*



Honeysuckle Moth *Ypsolopha dentella*



Gorse Knot-horn *Pempelia genistella*



Citron Plume



Large Birch Roller *Epinotia brunnichana*

Fourteen nights of trapping during 2023 (18 – 2022) led to 361 species being recorded (2022 – 447 species). Generally 4 traps were run most nights and the Garden List now stands at 796.

Amongst the 361 species recorded were 12 new for the garden. 5 were macros, **Dewick's Plusia** (*Macdunnoughia confusa*), **Clancy's Rustic** (*Caradrina kadenii*), **Pinion-streaked Snout** (*Schrankia costaestrigalis*), **Orange Sallow** (*Tiliacea citrigo*) and **The Delicate** (*Mythimna vitelline*). Among the micros a **Large Tabby** was found in the greenhouse which was a nice surprise as it was not a moth I had encountered anywhere before.



CLANCY'S RUSTIC



DUSKY-LEMON SALLOW

Over 100 species for the night occurred 3 times (147 (27/6), 133 (7/7) and 123 (11/8)). The most ever for one night is 155 species (12/7/2019).

My impression for the last couple of years is that the traps are generally not as busy as I have seen them since starting to trap in 2013, however a quick look at the maximum daily counts over the last 5 years for the 10 most recorded macros in the garden does not support this (I obviously need to adjust my expectations).



FOUR-SPOTTED FOOTMAN

*Ypsolopha sequella*

(AR)

<u>Top 10 recorded macros by total moths (2013-2023)</u>	<u>2023 highest daily total</u>	<u>2022 highest daily total</u>	<u>2021 highest daily total</u>	<u>2020 highest daily total</u>	<u>2019 highest daily total</u>
Setaceous Hebrew Character	283 (6/9)	74 (26/8)	337 (18/9)	108 (17/8) 108 (13/9)	452* (12/9)
Common Wainscot	300 (6/9)	37 (17/6)	71 (18/9)	343* (10/8)	14(29/6)
Small Quaker	83 (18/3)	56 (10/3)	106 (31/3)	38 (5/4)	159* (30/3)
Uncertain/Rustic agg.	67 (24/7)	51 (29/7)	73 (16/7)	33 (23/7)	89 (12/7)
Treble Lines	18 (17/6)	10 (8/6)	51 (14/6)	49 (25/5)	62 (1/6)
Common Quaker	83 (9/4)	24 (10/3)	44 (31/3)	27 (5/4)	160* (30/3)
Common Footman	36 (7/7)	67 (29/6)	13 (4/8)	55 (17/7)	85 (12/7)
Large Yellow Underwing	44 (12/9)	34 (22/9)	16 (18/9)	48 (14/9)	31 (21/9)
Hebrew Character	40* (16/3)	15 (30/4)	16 (31/3)	34 (11/4)	24 (30/3)
Square-spot Rustic	81* (6/9)	58 (12/9)	25 (18/9)	63 (13/9)	29 (12/9)

*All time high



DARK DAGGER LARVA



FEATHERED GOTHIC (AR)

Three Essex group sessions at Middlewick Ranges, Tiptree Heath and Chelmer Ironworks NR were all good evenings with good moths and great company. Additionally I spent 5 days trapping in Somerset and took a small travelling trap to The Gambia on a Birding tour.

In 2023 we trapped on 22 nights and also recorded moths from pheromone lures and chance encounters. In total we recorded 4573 moths of 365 species. The total number of species recorded on the site since joining the Moth Group in 2019 is now 565.

The Migrant activity was down on 2022 but in common with others we had a new moth for us **Rannoch Looper** on 17th June.



RANNOCH LOOPER

Pheromone traps attract non target species. With this in mind we left some out overnight hoping for particular species. Very successful was the Lunar Hornet Moth lure which also attracts *Triaxomasia caprimulgella* the **Tree Hollow Moth** a proposed pRDB1 species. Our first attempt on the 26th June produced 2 of these and 2 **Lunar Hornet Moths**. I suspect more of these moths will be found nationally due to the lure. We also had success on the 21st June with 2 *Nemapogon ruricolella* the Rufous Fungus moth to the VES lure for the **Yellow-legged Clearwing**. This is a Nationally Scarce B moth not much recorded in Essex.



Triaxomasia caprimulgella



Nemapogon ruricolella

There were only 2 lures that did not attract their target species (these species were unlikely to be found in our area). But the STR (*Cydia strobilella*) lure attracted a far rarer moth *Cydia pactolana* the **Scarce Spruce Bark Moth**, the highlight of our year. As the moth was new for Essex it had to be confirmed by gen det which Chris Lewis did. It is a nationally scarce moth proposed as a pRDB1. First found in coniferous woodland in Hampshire in June 1965 and 4 more specimens were found there between June 1975 and June 1985. More recently there have been a few records in Buckinghamshire and Hertfordshire. One of these was found in a single Norway spruce tree. We have a handful of Norway spruces. The one the lure was in was away from the others. So any Norway spruces might be worth trying with the STR lure. The moth could be under recorded as it flies in the afternoon in the tree canopy. Our lure was hung from the bottom branch between 1pm and 6pm. The first moth was found on the 23rd May and we put the lure out again on the 26th May hoping for a *C. strobilella* and caught a 2nd *Cydia pactolana*. After that we put the lure away so we didn't disrupt this rare species.



***Cydia pactolana* 23rd May**



***Cydia pactolana* 26th May**

On the 27th June we had a new moth for us **Reddish Light Arches**. A common moth nationally but not much recorded in Essex. The light trap on the 27th of July produced a moth we couldn't identify. After posting it on the Essex Moth Group Facebook page Simon Wood suggested it might be ***Eudemis porphyrana*** the **Apple Marble**. Tim Green and Bill Crooks agreed so another new moth for us, Nationally Scarce A and with few records in Essex.



Reddish Light Arches



Eudemis porphyrana

Also new for us in 2023 were **Indian Meal Moth**, **Clancy's Rustic**, **Cypress Pug** and the **Lobster Moth**. All of which we had admired when posted by others on the Essex Moth Group Facebook site and finally got to see them ourselves.



LOBSTER MOTH



CYPRESS PUG

(RL)

2023 was another interesting year. We are indebted to the panel and all the members of the Essex Moth Group Facebook site for their help, useful advice, support and interesting posts throughout the year. Hoping for a good year's mothing in 2024 for everyone.

In 2023 moth-trapping occurred on 9 nights:
6560 moths of 355 species were observed, including day-flyers.

3 Red Data Book species and 6 scarce migrant species were recorded this year.
1 of these scarce migrants, Beautiful Marbled, was new for me.

Notable this year was the large number of Silver Barred (a RDB species), 10 on 8th July; and this is the first year in which I have recorded second generation examples of this species. Silver Barred is stated (Waring & Townsend) to be resident in the UK only at Chippenham and Wicken Fens in Cambridgeshire, but the frequency of its occurrence on Foulness surely implies that it is also breeding here.

Date	Site	Grid ref	No. of moths	No. of species
1 st April	Rugwood	TR011912	21	5
27 th May	Rugwood	TR011912	32	17
7 th July	Rugwood	TR011912	1159	144
8 th July	Bennetts Butt	TR041944	2037	181
12 th August	Sharpsness Head	TQ989887	298	73
18 th August	Bennetts Butt	TR041944	1427	142
26 th August	Rugwood	TR011912	506	55
2 nd September	Bennetts Butt	TR041944	261	68
9 th September	Sharpsness Head	TQ989887	819	85



Figure 1: Beautiful Marbled, Foulness 09/09/2023 (left) and Silver Barred, Foulness 08/07/2023

24 species were new for Foulness (this compares with only 8 new species in 2022). 16 of these were found on the spectacularly good weekend of 7th and 8th July. This brings the total number of species of Lepidoptera for which I have a record of occurrence on Foulness to **726**.

The new species were:

- 19.001 *Orthotelia sparganella* – common resident – 1 on 18/08/2023
20.012 *Argyresthia goedartella* – common resident– 1 on 18/08/2023
20.021 *Argyresthia pruniella* – common resident – 1 on 07/07/2023
35.032 *Pexicopia malvella* – nationally scarce B – 1 on 08/07/2023
37.017 *Coleophora prunifoliae* – nationally scarce B – 1 on 07/07/2023
38.046 *Elachista albidella* – common resident – 1 on 07/07/2023
46.001 *Schreckensteinia festaliella* – common resident – 1 on 02/09/2023
49.040 *Lozotaenioides formosana* – common resident – 1 on 08/07/2023
49.128 *Aethes rubigana* – common resident – 1 on 07/07/2023
49.283 *Gypsonoma aceriana* – common resident – 1 on 08/07/2023
49.306 *Rhyacionia pinicolana* – common resident – 1 on 18/08/2023
49.359 *Grapholita janthinana* – common resident – 1 on 08/07/2023
53.001 *Apoda limacodes* (Festoon) – nationally scarce B – 1 on 07/07, 3 on 08/07/2023
62.048 *Euzophera pinguis* – common resident – 1 on 26/08/2023
62.061 *Vitula biviella* – recent colonist – 1 on 07/07/2023
63.099 *Catoptria pinella* – common resident – 2 on 08/07/2023
69.007 *Sphinx pinastri* (Pine Hawkmoth) – common resident – 1 on 08/07/2023
70.084 *Plemyria rubiginata* (Blue-bordered Carpet) – common resident – 1 on 07/07/2023
70.302 *Hemistola chrysoprasaria* (Small Emerald) – common resident – 1 on 08/07/2023
72.074 *Eublemma purpurina* (Beautiful Marbled) – rare migrant – 1 on 09/09/2023
73.104 *Athetis hospes* (Porter's Rustic) – rare migrant – 1 on 18/08/2023
73.168 *Lateroligia ophiogramma* (Double Lobed) – common resident – 2 on 07/07/2023
73.347 *Noctua janthina* (Langmaid's Yellow Underwing) – recent colonist – 1 on 18/08/2023
74.009 *Nycteola revayana* (Oak Nycteoline) – common resident – 1 on 08/07/2023



Figure 2: *Coleophora prunifoliae*, Foulness 07/07/2023



Figure 3: Blue-bordered Carpet, Foulness 07/07/2023 and Oak Nycteoline 08/07/2023

All the scarcer species recorded in 2023 are listed below.

Scarce migrants

62.017 *Sciota adelphella* – 1 on 08/07/2023

62.061 *Vitula biviella* – 1 on 07/07/2023

69.004 *Agrius convolvuli* (Convolvulus Hawkmoth) – 1 on 18/08, 1 on 09/09/2023

70.047 *Nycterosea obstipata* (Gem) – 2 on 09/09/2023

72.074 *Eublemma purpurina* (Beautiful Marbled) – 1 on 09/09/2023

73.104 *Athetis hospes* (Porter's Rustic) – 1 on 18/08/2023

Recent Colonists (migrants that are probably now breeding in UK)

49.343 *Cydia amplana* - ~100 on 18/08/2023

70.296 *Aplasta ononaria* (Rest Harrow) – 2 on 18/08/2023

72.011 *Lymantria dispar* (Gypsy Moth) – 7 on 18/08, 1 on 02/09/2023

72.057 *Pechipogo plumigeralis* (Plumed Fan-foot) – 1 on 08/07/2023

63.054 *Cydalima perspectalis* (Box-tree Moth) – 1 on 02/09, 6 on 09/09/2023

73.082 *Cryphia algae* (Tree-lichen Beauty) – 1 on 12 /08/2023

73.093 *Caradrina kadenii* (Clancy's Rustic) – 1 on 07/07/2023

73.347 *Noctua janthina* (Langmaid's Yellow Underwing) – 1 on 18/08/2023

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

35.082 *Oxypteryx immaculatella* – 1 on 18/08/2023

37.091 *Coleophora deviella* – 1 on 18/08/2023

73.027 *Deltote bankiana* (Silver Barred) – 10 on 08/07, 1 on 18/08, 1 on 02/09/2023

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

35.112 *Scrobipalpa suedella* – 1 on 08/07/2023

37.082 *Coleophora asteris* – 1 on 02/09/2023

45.022 *Cnaedimorphus rhododactyla* – 6 on 08/07/2023

66.004 *Malacosoma castrensis* (Ground Lackey) – 1 on 12/08/2023

73.132 *Luperina nickerlii* (Sandhill Rustic) – 3 on 18/08, 1 on 26/08, 1 on 02/09, 3 on 09/09/2023



Figure 4: *Oxypteryx immaculatella*, 18/08/2023 and *Coleophora asteris*, 02/09/2023



Figure 5: *Cnaedimophorus rhododactyla*, 08/07/2023



Figure 6: Ground Lackey, 12/08/2023 and Sandhill Rustic, 18/08/2023

Nationally Scarce B (31-100 10km squares of the National Grid)

- 27.002 *Oegoconia caradjai* - 1 on 07/07
- 32.044 *Depressaria douglasella* – 2 on 18/08/2023
- 35.032 *Pexicopia malvella* – 1 on 08/07/2023
- 35.073 *Monochroa palustrellus* – 1 on 08/07/2023
- 37.017 *Coleophora prunifoliae* – 1 on 07/07/2023
- 49.112 *Eupoecilia ambiguella* – 1 on 18/08/2023
- 49.122 *Aethes dilucidana* – 8 on 12/08/2023
- 49.197 *Bactra robustana* – 1 on 07/07, 2 on 08/07, 1 on 18/08/2023
- 49.275 *Eucosma conterminana* – 1 on 07/07/2023
- 53.001 *Apoda limacodes* (Festoon) – 1 on 07/07, 3 on 08/07/2023
- 62.021 *Oncocera semirubella* – 1 on 07/07, 8 on 08/07, 15 on 12/08, 2 on 18/08, 1 on 09/09/2023
- 62.053 *Ancylosis oblitella* – 1 on 07/07, 4 on 08/07, 1 on 12/08, 1 on 18/08, 1 on 26/08, 1 on 09/09/2023
- 63.109 *Pediasia contaminella* – 1 on 12/08/2023
- 70.232 *Ennomos autumnaria* (Large Thorn) – 1 on 26/08/2023
- 72.052 *Macrochilo cribrumalis* (Dotted Fan-foot) – 1 on 07/07, 4 on 08/07/2023
- 73.055 *Cucullia asteris* (Star-wort) – 1 on 12/08/2023
- 73.161 *Apamea oblonga* (Crescent Striped) – 6 on 08/07/2023
- 73.291 *Mythimna pallens favicolor* (Matthew's Wainscot) – 1 on 07/07, 2 on 08/07/2023
- 73.300 *Mythimna l-album* (L-album Wainscot) – 2 on 07/07, 1 on 08/07, 1 on 02/09/2023
- 74.002 *Meganola albula* (Kent Black Arches) – 2 on 07/07, 12 on 08/07, 1 on 09/09/2023
- 74.011 *Earias clorana* (Cream-bordered Green Pea) – 1 on 08/07, 2 on 18/08/2023



Figure 7: Crescent Striped, 08/07/2023

2023 was an interesting year for moths. The year started with my garden list at 379 species, a number I didn't expect to add a great deal to given my location in the middle of Benfleet at least a mile from the nearest quality habitat. I was pleasantly surprised then to add another 84 to that list, taking my total to a respectable 463 species by close of play in 2023.

Notable species to grace me with their presence during the year included, in chronological order: **Pine Beauty**, **Lime Hawkmoth**, **Light Brocade**, *Platyedra subcinerea*, **Red-necked Footman**, **Varied Coronet**, **Poplar Kitten**, **Sallow Kitten**, **Spinach**, **Small Elephant Hawkmoth**, **Bordered Sallow**, **Bulrush Wainscot**, **Dog's Tooth**, **Saltmarsh Plume**, *Cydia amplana*, **Small Rufous**, **Clifden Nonpareil**, **Dusky Lemon Sallow** and **Delicate**. Several days hanging various clearwing pheromone lures around the garden produced three new for site – **Currant Clearwing**, **Red-tipped Clearwing** and **Orange-tailed Clearwing**, the latter of which I found an example of in the kitchen, presumably attracted to remnants of pheromone either on me, my bag or the freezer! I look around and can still see some notable garden absentees although I definitely think new species will be harder to come by in 2024. I must admit however that I am quietly optimistic of reaching the 500 species mark!



BORDERED SALLOW



DUSKY-LEMON SALLOW



DUSKY-LEMON SALLOW



DELICATE



SALLOWS



CYDIA AMPLANA



IRON PROMINENT



LIGHT BROCADE



POPLAR KITTEN



PINE BEAUTY



RED-NECKED FOOTMAN



RED-TIPPED CLEARWING



SPINACH



VARIED CORONET



VARIED CORONET, SMALL RANUNCULUS AND BROAD-BARRED WHITE

Unfortunately due to getting a second job carrying out dawn and dusk bat surveys during the summer, my time for substantial all-nighter field traps was limited. I failed to push on from my exploits on Benfleet Downs in 2022, not helped by the fact my trapping area was cleared and is now being used for grazing – although I still managed to record both **Lappet** and **Sloe Pug**, two of the site’s star species, on hour-long sessions with just my 160w blended bulb. In fact, apart from four excellent group traps with other members of the Essex Moth Group, I only managed two closer to home – once at my original haunt in Belfairs Nature Reserve and once at a new site, Thundersley Common. The latter is a superb patch of heathland enclosed by urbanisation with many rare specialist plants and plenty of mature Oaks and Aspens and, while we failed with our target of **Clifden Nonpareil**, a **Dark Crimson Underwing** was a quality find. This site holds great potential for revisits during 2024.

The two evenings at Middlewick Ranges produced some memorable moths – **Grass Emerald**, **Broom-tip**, **Shark**, **Hedge Rustic**, **Antler Moth**, *Batia lambdella* and both *Pseudotelphusa scalella* and *Pseudotelphusa paripunctella*. Both nights were also memorable in other ways – firstly how wet we got while packing up on the June evening, and how I missed seeing a **White-spotted Pinion** by minutes by dipping out early to head home. Thanks to Rob Smith for arranging these, and hopefully our ‘work’ makes a difference with regards to the proposed development of the site.



ANTLER MOTH



Pseudotelphusa paripunctella



Pseudotelphusa scalella

Some more quality moths came outside of Essex – I was able to spend two nights trapping in rich areas of the Surrey Hills, and a night near the Quantocks in Somerset. The former ticked one off the moth ‘bucket list’ in the form of a **Netted Pug**, as well as **Satin Lutestring**, **Fern** and **Lace Border**. A wet and windy night in Somerset was less busy but **Scallop Shell**, **Purple Clay** and **Bordered Beauty** made it worthwhile. A few days in Norfolk with Andy Wallis also produced some quality – among huge numbers of Wasps and Hornets were **Frosted Orange**, **Pinion-streaked Snout** and **Pale Eggar**, all new for me.



CLIFDEN NON PAREIL & DARK CRIMSON UNDERWING



DARK CRIMSON UNDERWING



Platyedra subcinerea



LIME HAWKMOTH



SMALL ELEPHANT HAWKMOTH



SLOE PUG

Having just completed my 5th year of moth recording I am beginning to build up a recognition of trends, so I was conscious that the heatwave and associated drought during late summer 2022 followed by the cold, wet spring of 2023 had the potential to wreak havoc with moth populations. Unsurprisingly, the year was very slow to really get going, and it wasn't until the 14th May that I had what I would call a 'good' garden catch for the time of year. The year had some notable winners and losers, and let's start with the most conspicuous – the **Hawkmoths**. I don't see either particularly regularly but I dipped both **Privet Hawkmoth** and **Eyed Hawkmoth** altogether, yet on the other hand I had several **Small Elephant Hawkmoth** (a lifer for me) and more **Pine Hawkmoth** than I have ever had before.

Without having any statistical grounding, my observations of the commoner pair of **Poplar Hawkmoth** and **Elephant Hawkmoth** was that frequency was on-par but overall numbers were down – often with just singles per night. Additional species that really came to the fore were members of the **Varied Coronet**, **Bulrush Wainscot**, **Light Brocade** and **Small Elephant Hawkmoth**; all were new for me and ended up appearing on several nights and, in the case of **Bulrush Wainscot**, in all but one location I recorded in during the year. The **Catocala** all did very well for me too. Conversely some other big 'dips' were **Coxcomb Prominent**, **Chocolate-tip** and **Gold-spot**, hopefully these make a comeback in 2024.



SCARCE SILVER LINES



MILLERS



Ypsolopha sequella

At the time of writing this, as the beginning of 2024 starts my 6th year of moth recording, I am also finding some of my equipment getting less reliable. My garden traps started tripping the RCD on two consecutive wet nights, a problem which thankfully hasn't re-occurred. My battery pack finally gave up the ghost at Tiptree Heath in July (although, as fate would have it, my resultant relocation caught the star moth - a **Dark Crimson Underwing**). My expensive torch has been faltering, my generator has had several false starts, I broke another synergetic bulb, and some of my wires have been chewed. It can be an expensive hobby this!

I conclude by looking forward to what 2024 brings and I hope to see many other like-minded people at meetings and events through the summer. Once again I also thank the members of the panel for supplying I.D advice and confirmations, and as always I will enjoy reading everybody's reports on the Facebook page.

(Pictures by Tom Lantaff)

SOUTH ESSEX MOTH REPORT FOR 2023

GRAHAM BAILEY

It seems like it's becoming a bit of a habit to have relatively poor spring weather, especially with regard to cool or unsettled nights. The unrelenting easterly wind which endured for several weeks through May and beyond was most unwelcome to those of us disposed to moth recording, and I'm sure I wasn't alone in abandoning my trap whilst these inclement conditions prevailed. No trapping was carried out for two weeks in mid-April, a further fortnight in mid-July and also ten days in mid-October.

For me, the first decent night was on the 10th June with new micros in attendance, namely *Plodia interpunctella* (Indian meal moth) and *Assara terrebella*. Thankfully the weather improved through the month, both by day and night and I had the opportunity to explore locally for a few weeks following a surgical procedure in late May. The night of 28th June proved to be a bonanza for my garden trap as I garnered at least 130 species, a record total for a single night on our small plot. These included the likes of **Four-spotted footman**, **Dotted fan-foot**, **Brown scallop** (2), *Acleris kochiella*, *Yponomeuta irrorella* (2), and a new micro for me, *Anarsia spartiella*, apparently last noted in VC18 in the Epping Forest area in 1935!



Assara terrebella



Anarsia spartiella



Yponomeuta irrorella

Unable to do any field excursions with my traps, I concentrated on the garden moths and I was fortunate to have some excellent new records, and possibly three new for Essex. These were *Delplanqueia inscriptella* (24th June – GD), *Tebenna micalis* (31st August) and *Hellula undulis* (**Old World Webworm** - 26th September).

Other notables from the garden were **Light Crimson Underwing**, **Clay Triple Lines**, **Lunar Yellow Underwing**, *Argyresthia glaucinella*, *Scythris limbella* and *Merrifieldia baliodactylus* (**Dingy White Plume**).

In addition to those mentioned above, I had a reasonable selection of migrants arriving to our Rayleigh garden, the more worthy including **Delicate** (4), **Gem** (4), *Palpita vitrealis* (3), **Vestal** and **Scarce Bordered Straw**. It appears the **Delicate** had a superb year as many were recorded in Essex, particularly near the coast.



BROWN SCALLOP



FOUR-SPOTTED FOOTMAN



Delplanqueia inscriptella

Improving Hawks After the very poor showing of 2022, the **Hawk** moths were generally improved in numbers, at least as regards species. A couple of **Pine** and several **Privet Hawks**, a **Small Elephant**, and singles of both **Lime** and **Eyed** were long awaited. However, the **Elephant Hawks** fared quite poorly despite the warm evenings, and I trapped no more than two individuals on any one night throughout the summer, a most disappointing story that hopefully will be corrected this year.

Chasing Clearwings I already had the MYO lure for the **Red-belted Clearwing** from 2022, but had rarely used it. However, last year I purchased more lures for several of the smaller species and used these extensively over a number of weeks at sites local to me in SE Essex. I used **Red-tipped**, **Yellow-legged**, **Orange-tailed** and **Six-belted** and was very pleasantly surprised by how well represented all five of these species are in my vicinity. A few hours at Hockley Woods on 26th June allowed me to discover all five there, with a nice colony of **Six-belted** on set aside land on the south side of the woods, thus highlighting the potential of this reclaimed arable land if managed sympathetically. Sweyne Park in Rayleigh also had all of them present, but only realised after several attempts! The totals of Clearwings recorded are recorded as follows from 10th June when sixteen **Red-belted** were in a pheromone trap in the garden.

Red-belted Clearwing – 67+

Red-tipped Clearwing – 66+

Six-belted Clearwing – 36+

Yellow-legged Clearwing – 20

Orange-tailed Clearwing – 15



RED-BELTED CLEARWING



RED-TIPPED CLEARWING



HORNET MOTH EXUVIAE

These are encouraging numbers, and I found it especially pleasing to find so many **Orange-tailed Clearwings** in my corner of the county, and at a number of sites such as Wheatley Wood just a stones throw from our house.

Other Sites

I only managed four trips out with my traps in 2023, and even then not until late in the season. Following my surgery I needed to take it easy for a couple of months and my first excursion was not until 6th September at Thundersley Great Common, a potentially wonderful site for Lepidoptera as it partly comprises an area of unimproved heathland along with well-established woodland. I had Tom Lantaff and a Ranger from Castle Point Council (who own the site) with me on this occasion, and this was possibly the first time any nocturnal moth recording had taken place here. We hoped to find a certain well-known aspen-feeding *Catocala* species, but instead had a **Dark Crimson Underwing** which is presently the scarcer species in Essex. With my three traps on the go we managed 73 species in all, a very respectable total for the time of year. Also present were **Hedge Rustic** (2), *Pempelia genistella*, *Acrobasis tumidana*, *Stenolechia gemmella*, *Hypatima rhomboidella*, and *Psoricoptera gibbosella*. It was also pleasing to note four *Ypsolopha* species, namely *sequella*, *parensthella*, *sylvella* and *alpella* (4). There is surely much more to be discovered at this site, and hopefully this year will reveal further surprises when the opportunity arises.

An evening visit to a privately owned section of Hockley Woods on 8th October turned out to be a 'Little and Large' show due to the nature of the insects attracted to my two traps. At last I had a **Clifden Nonpareil** at this site, possibly the first ever record for Hockley Woods. The paucity of moths made it rather tedious, but the appearance of this wonderful creature flapping its mighty wings around the lamp lifted my spirits considerably! Also new here were a **Mallow** and a pair of *Caloptilia honoratella*, kindly identified for me by 'gen det' by Colin Plant.

All being well, I intend to get out and about rather more in 2024, and I have some hitherto unrecorded locations that I'd like to explore, both by day and also with the lamps and traps. Perhaps I might even get to do some trapping in the garden this spring if the prevailing weather conditions remain benign. Otherwise I'm just staying put and my moth paraphernalia can stay gathering dust for a little longer!



CARPATOELECHIA FUGITIVELLA



COLEOPHORA THERINELLA



PSORICOPTERA GIBBOSELLA



SCYTHRIS LIMBELLA

MICRO MOTH HIGHLIGHTS – RAYLEIGH GARDEN - (GD – genitalia dissection)

Depressaria radiella (**Parsnip Moth**) – 16th March (2)
Plodia interpunctella (**Indian Meal Moth**) – 10th June
Assara terebrella – 10th June
Choristoneura hebenstreitella – 10th, 11th (7), 17th, 19th, 23rd and 27th June.
Agdistis bennetii – 11th June
Coleophora artemisicolella – 13th June (GD)
Elegia similella – 17th June
Pexicopia malvella – 17th and 24th June
Endothenia oblongana – 17th June (GD)
Coleophora therinella – 19th June (GD)
Coleophora discordella – 19th June (GD)
Evergestis limbata – 22nd and 27th June, 7th July, 29th August.
Coleophora conspicuella – 23rd June, 2nd July
Acleris kochiella – 23rd and 28th June
Delplanqueia inscriptella – 24th June (GD). Possibly new for Essex.
Carpatolechia fugitivella – 24th June (GD)
Bryotropha senectella – 28th June (GD)
Grapholita lobarzewskii – 28th June (GD)
Yponomeuta irrorella – 28th June (2)
Anarsia spartiella – 28th June (GD)
Recurvaria nanella – 28th June
Coleophora saxicolella – 2nd July, 8th and 20th August (all GD)
Vitula biviella – 7th and 8th July – different moths
Scythris limbella – 7th July (GD)
Coleophora striatipennella – 7th July (GD)
Argyresthia glaucinella – 8th July
Blastobasis rebeli – 8th, 27th (4), 28th and 30th July, 9th August.
Pediasia contaminella – 8th July
Merrifieldia baliodactylus (**Dingy White Plume**) – 10th July
Coleophora prunifoliae – 9th and 13th July (GD)
Acrobasis tumidana – 9th, 13th (2), 15th, 17th and 23rd August
Coleophora lineolea – 11th August
Ypsolopha alpella – 18th August
Acleris cristana – 18th August
Coleophora spinella – 20th August (GD)
Ypsolopha sylvella – 29th August, 11th September, 6th October.
Tebenna micalis – 31st August. Possibly new for Essex.
Palpita vitrealis – 17th September, 2nd and 31st October
Hellula undulis (**Old World Webworm**) – 26th September (GD). Possibly new for Essex.
Choreutis nemorana (**Fig-leaf Skeletoniser**) – 18th November



INDIAN MEAL MOTH



CLAY TRIPLE LINES



GEM



RUDDY CARPET



YPSOLOPHA ALPELLA



SANDHILL RUSTIC



SCARCE BORDERED STRAW



SMALL ELEPHANT HAWKMOTH



DINGY WHITE PLUME



ACROBASIS TUMIDANA



ENDOTHENIA OBLONGANA



ARGYRESTHIA GLAUCINELLA

(Pictures – Graham Bailey)

MACRO MOTH HIGHLIGHTS – RAYLEIGH GARDEN

- Pine Carpet – 10th June**
- Pine Hawkmoth - 11th June, 8th July**
- Clay Triple-lines – 13th June**
- Sharp-angled Peacock – 15th June**
- Obscure Wainscot – 17th June, 7th and 8th July**
- Buttoned Snout – 17th June**
- Blackneck – 19th, 25th (2), and 30th June**
- Small Elephant Hawkmoth – 19th June**
- Ruddy Carpet – 20th June**
- Dotted Fan-foot – 28th June**
- Four-spotted Footman (male) - 28th June**

Brown Scallop – 28th June (2), 8th July
Dark Umber – 7th and 27th July
Waved Black – 26th July
Webb's Wainscot – 27th and 28th July (different moths)
Light Crimson Underwing – 28th July
September Thorn- 28th July
Gem – 10th and 15th August, 21st September, and 12th October
Jersey Tiger – 11th, 15th, 17th (2), 18th, 21st and 23rd August
Pale Eggar – 17th, 18th, 23rd, 25th (3), 27th (4) and 29th (2) August
Delicate – 21st August, 7th, 10th and 11th September
Sandhill Rustic – 23rd and 31st August, 1st and 4th September
Lunar Yellow Underwing – 10th September
Scarce Bordered Straw – 16th September
Autumnal Rustic – 21st September, 2nd, 5th and 6th October
Dewick's Plusia – 24th and 27th September
Merveille du Jour – Total of 22 moths between 26th September and 18th November, with a max. of six on 10th October.
Vestal – 6th October
Figure of 8 – Total of 32 moths between 5th October and 12th November, with a max. of seven on 12th October. Two nearly full grown larvae noted on small blackthorn bush in garden in late May.

CORRINGHAM GARDEN

KEN LABAN

A few personal highlights from my Corringham garden. I run a single M/V home made Skinner type trap. The surrounding gardens are quite open with few trees. The nearest stand of trees is One Tree Hill which is c1mile away as the moth flies.

I don't do very well here for Micros, small numbers with many repetitions. I've mentioned three here. Firstly for me had to be *Batia lunaris* (pictured), barely 4mm long and little more than a pencil line thick, but has exquisite detail and colouring. A *Synaphe punctalis* deserves a mention as does my first Tachystola Acroxantha (both pictured). I had five new Macros this year bringing my Macro total for the garden to 312. They were a long overdue **March Moth**, **Bordered Sallow** (both pictured) **Middle-barred Minor** and **Dark Umber**, both of which were very pale and worn.



Bata lunaris



BORDERED SALLOW



Tachystola acroxantha (KL)



MARCH MOTH



MARbled GREEN



MOCHA

Last and certainly not least the star of the show, a cracking **Mocha** (pictured) June brought the first **Clancy's Rustic**, but it was when the second generation arrived numbers really came to life, peaking at 18 on October 8th. Other notables were my second record of **Marbled Green** in July and **Black-spotted Chestnut** in November. I had drawn a blank with these last season for the first time in four. (both pictured). My second record of **Buttoned Snout**, and an unprecedented 12 **Plumed Fan-foot** far and away my best year for these.



BLACK-SPOTTED CHESTNUT



EMPEROR MOTHS

(KL)

I had my first try at using an **Emperor** lure on the 8th and 16th April with great success, netting 4 and 5 respectively. On both occasions the moths were netted within an hour of putting the lure out (pictured).

Mothing in 2023 got off to a very slow start compared to 2022 and it wasn't until June that things really took off. Even then, figures were well below recent years, which made for a fairly disappointing year. It was, perhaps the fact that 2022 was such a hot and dry year, with more moths than average that there were comparably fewer moths around in 2023. Pupae may have baked during the hot summer months and there may not have been the abundance of foodplants around. I did however manage to record 43 new species for the garden and many more species new to me on field trips and holidays, so it was an interesting year if nothing else. With the garden total standing at 589 I'm confident that 2024 will see the total exceed 600.

SUMMARY

Year	2023	2022
Number of times trapped	200	242
Total moths either trapped or observed	10932	15398
Total micro species recorded	229	267
Total macro species recorded	153	180
New for garden	43	111
Total garden species up to end of year	589	546
Number of known garden species not seen in year	217	97
Species trapped/observed only once during year	98	106
Highest number of moths in one night	306	326
Highest number of different species in one night	88	106

TOP 10 SPECIES IN 2023 BY NUMBERS

Pale Mottled Willow	1243
Emmelina monodactyla	654
Light Brown Apple Moth	556
Heart and Dart	529
Vine's Rustic	445
Tachystola acroxantha	325
Shuttle-shaped Dart	239
Riband Wave	222
Small Dusty Wave	221
Double-striped Pug	208

TOP 10 RECORDED SPECIES IN 2023

Pale Mottled Willow	127
Light Brown Apple Moth	116
Double-striped Pug	105
Emmelina monodactyla	90
Tachystola acroxantha	85
Amblyptilia acanthadactyla	71
Shuttle-shaped Dart	67
Large Yellow Underwing	67
Monopis crocipitella	64
Endrosis sarcitrella	64

MONTHLY TOTALS FOR 2023

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species	3	13	20	41	83	193	175	186	120	29	17	10
Individuals	3	35	128	233	779	2811	1811	1833	1505	169	64	32

MOTHING HIGHLIGHTS OF 2023 IN MY DAGENHAM GARDEN

During June I had *Triaxomasia caprimulgella* (Tree Hollow Moth) turn up at LUN (Lunar Hornet Moth) lure on several occasions. Previously quite a scarce moth, the wider use of pheromone lures seems to show it may have been hiding in plain sight, under-recorded and particularly attracted to LUN lure. That said, I had none in 2022 despite using LUN for most of June.

On the 10th July I had a *Parectopa ononidis* (Clover Stilt) turn up in my actinic trap. An attractive and easily-identifiable micro but with few Essex records.

I was extremely pleased to record a *Caloptilia fidella* (Hop Stilt) on the 19th May. This was the first Essex record though increasing Suffolk records and the discovery of C fidella mines by Simon Wood in his garden suggest there may be numerous records to come in the coming year or two.

I was surprised to get a *Brachmia inornatella* (Fen Snout) on the 11th June. Not only are there very few Essex records but the species is associated with wetland areas.

On the 24th June, after removing all the moths from my actinic trap, I turned it upside down to remove any detritus then sprayed the inside with the garden hose to clean it. I then turned it on its side to wash the outside and there sat, what I initially thought was a Common Plume but quickly realised it was in fact a *Gillmeria pallidactyla* (Yarrow Plume), a new one for me and the garden. Why it stayed put while I shook, rotated, and washed the trap I don't know but I'm glad it did.

I had another first for Essex on 19th June; *Phtheochroa schreibersiana* (Gold Cloak). An unusual micro with a sparkly dressing. This rare moth has very few UK records.



Triaxomasia caprimulgella



Parectopa ononidis



Caloptilia fidella



Phtheochroa schreibersiana



Brachmia inornatella



Gillmeria pallidactyla



Dusky Clearwing



Druid



Rannoch Looper

(B.C.)

The biggest surprise of the year was getting a **Dusky Clearwing** (*Paranthrene tabaniformis*) to TAB lure on 10th July. Having been considered extinct in the UK before 2021 a few individuals turned up to TAB lures in

the UK during 2023. This was the first Essex record but with lures being more widely used there may well be more to come. Another Essex first was a **Druid** (*Aedia funesta*), which came to my MV trap on 10th June. A rare migrant or adventive with very few UK records per year.

Rannoch Looper (*Macaria brunneata*) made a sizeable influx into south-east UK during 2023. A first for me turned up in my MV trap on 16th June. Nationally, resident moths are restricted to the mature woodland areas of central Scotland, but it also occurs occasionally as a migrant, mostly in eastern England.

I was pleased to get my first **Red Underwing** (*Catocala nupta*) on 17th August, though I nearly missed it. It was on my front door, and I spotted it just as I was leaving for the day.

Two other new moths for my garden during 2023 were a **Black Arches** (*Lymantria monacha*) on the 18th July and a **Gem** (*Nycterosea obstipata*) on the 5th October



Red Underwing



Gem



Black Arches

(B.C.)

MIGRANTS, NATURALISED AND ADVENTIVES DURING 2023

Taxon	Common Name	Status	Records	Individuals
<i>Caloptilia honoratella</i>	Pale Maple Stilt	Migrant/Resident	11	12
<i>Plutella xylostella</i>	Diamond-back Moth	Migrant	40	95
<i>Cydia interscindana</i>	Beautiful Juniper Piercer	Adventive/Resident	5	11
<i>Cadra cautella</i>	Dried Currant Moth	Adventive	1	1
<i>Cydia amplana</i>	Rusty Acorn Piercer	Migrant	1	1
<i>Udea ferrugalis</i>	Rusty-dot Pearl	Migrant	15	16
<i>Udea fulvalis</i>	Rufous Pearl	Migrant	6	7
<i>Nomophila noctuella</i>	Rush Veneer	Migrant	2	2
<i>Cydalima perspectalis</i>	Box-tree Moth	Adventive	53	151
<i>Musotima nitidalis</i>	Marbled Fern	Adventive	2	2
<i>Rhodometra sacraria</i>	Vestal	Migrant	1	1
<i>Nycterosea obstipata</i>	Gem	Migrant	1	1
<i>Thaumetopoea processionea</i>	Oak Processionary	Naturalised	4	6
<i>Lymantria dispar</i>	Gypsy Moth	Naturalised	27	89
<i>Autographa gamma</i>	Silver Y	Migrant	56	111
<i>Peridroma saucia</i>	Pearly Underwing	Migrant	1	1
<i>Aedia funesta</i>	Druid	Vagrant/Accidental	1	1
<i>Agrotis ipsilon</i>	Dark Sword-grass	Migrant	2	2

NATIONALLY SCARCE AND RED DATA BOOK

Taxon	Common Name	Status	Recs	Indiv
<i>Etainia decentella</i>	Sycamore Seed Dot	Nationally Scarce B	13	19
<i>Nemapogon granella</i>	Corn Moth	Nationally Scarce B	6	16
<i>Nemapogon variatella</i>	Variiegated Fungus Moth	pRDB3	1	1
<i>Triaxomasia caprimulgella</i>	Tree Hollow Moth	pRDB1	1	1
<i>Bucculatrix cristatella</i>	Yarrow Tuft	Nationally Scarce B	1	1
<i>Parectopa ononidis</i>	Clover Stilt	Nationally Scarce B	1	1
<i>Caloptilia cuculipennella</i>	Privet Stilt	Nationally Scarce A	5	5
<i>Cosmopterix pulchrimella</i>	Pellitory Beauty	Nationally Scarce A	3	3
<i>Brachmia inornatella</i>	Fen Snout	Nationally Scarce A	1	1
<i>Pexicopia malvella</i>	Hollyhock Seed Moth	Nationally Scarce B	4	4
<i>Platyedra subcinerea</i>	Mallow Seed Moth	Nationally Scarce B	27	34
<i>Monochroa palustrellus</i>	Dock Streak	Nationally Scarce B	1	1
<i>Monochroa hornigi</i>	Persicaria Borer	Nationally Scarce A	1	1
<i>Athrips rancidella</i>	Cotoneaster Webworm	pRDB2	1	1
<i>Gelechia senticetella</i>	Cypress Gelechia	Nationally Scarce B	22	34
<i>Recurvaria nanella</i>	Southern Apple Moth	Nationally Scarce B	29	61
<i>Blastodacna atra</i>	Apple-pith Moth	Nationally Scarce B	2	2
<i>Dystebenna stephensi</i>	Oak Cosmet	Nationally Scarce A	1	1
<i>Scythris limbella</i>	Goosefoot Runner	pRDB3	1	1
<i>Coleophora sternipennella</i>	Goosefoot Case-bearer	Nationally Scarce B	4	4
<i>Phtheochroa schreibersiana</i>	Gold Cloak	pRDB1	1	1
<i>Grapholita lobarzewskii</i>	Small Fruit Moth	Nationally Scarce A	3	11
<i>Pammene giganteana</i>	Early Oak Gall Moth	Nationally Scarce B	2	2
<i>Pammene suspectana</i>	Ash Bark Tortrix	pRDB2	4	4
<i>Paranthrene tabaniformis</i>	Dusky Clearwing	Nationally Rare	1	1
<i>Pempelia genistella</i>	Gorse Knot-horn	Nationally Scarce B	1	1
<i>Macaria brunneata</i>	Rannoch Looper	Nationally Scarce	1	1

Of the garden species that visited during 2023, 98 paid just a single visit and many of those were only observed outside the traps. Some of the single visitors that are new to my garden are illustrated below. The earliest of these was my first **Pearly Underwing** (*Peridroma saucia*), which I found perched on the gazebo roof on 12th Feb.

On the evening of 18th May a **Light Brocade** (*Lacanobia w-latinum*) made a brief visit to the actinic trap but never ventured inside and was gone by the next morning. The gazebo I have next to the back of the house has white panels and I run a single actinic lamp next to the side panel. This brings in several moths that often don't end up in the traps, but it requires regular checking through the evening.

On 10th June I spotted a small, brightly coloured micro on the panel that has eluded me up till now; **Alabonia geoffrella** (Hedge Beauty). 'Geoff' is normally found in woodland and hedgerows, so I was delighted to find that it had paid me a visit. While not uncommon, it is a stunning moth and has been on my wish-list from the start.

A rather unassuming Gelechiid trapped on the 7th July and sent off to Chris Lewis for determination turned out to be a very scarce moth on the Essex RDB list; **Monochroa hornigi** (*Persicaria* Borer). The following day another Gelechiid turned up that is also scarce; **Exoteleia dodecella** (Tufted Pine Moth). Another micro that Chris determined for me was **Elachista freyerella** (Dark Meadow Grass-miner), which came to my MV trap on 7th September.

Some moths may well be under-recorded due to the requirement to send them off for gen det. **Batrachedra praeangusta** (Poplar Needle-moth) is a distinctive micro that has a posture as though it's just about to take off. I had my first one come to the MV trap on 9th July. Phyllonorycter species are tiny and often difficult to determine down to species, so when I spotted one on the evening of 2nd September that was a little worse for wear, I didn't recognise it. Luckily, I managed to get a photo and with a little research identified it as **Phyllonorycter rajella** (Common Alder Leaf-miner). Despite its vernacular it is quite a scarce moth in the county.

The briefest visit of a new moth was made by a **Pempelia genistella** (Gorse Knot-horn). The micro flew in on the evening of 10th July as I was checking the traps and landed just to my left. I managed a quick photo before it took off, not to be seen again.



Pearly Underwing



Light Brocade



Alabonia geoffrella



Monochroa hornigi



Elachista freyerella



Batrachedra praeangusta



Phyllonorycter rajella



Pempelia genistella



Bucculatrix cristatella



Brachmia blandella



Exoteleia dodecella



Beaded Chestnut

(B.C.)

Another scarce moth that was new for me and visited only once in 2023 was **Bucculatrix cristatella** (Yarrow Tuft) that was attracted to the actinic lamp under the gazebo on 7th September. A glossy-coated micro with a shock of orange hair. An easily identifiable micro turned up on 9th July. This triangular moth with distinct markings was **Brachmia blandella** (Gorse Wanderer), a relatively common moth in Essex but one that hadn't graced my garden traps before. **Beaded Chestnut** (*Agrochola lychnidis*) is another moth that is common in Essex but until 2023 had passed me by, though just the single visit.

PHEROMONE TRAPPING

I deployed nine pheromone traps around the garden throughout the Spring, Summer and Autumn months using a variety of lures, producing 149 records of 263 moths. Lures deployed that produced results: AND, API, ARG, BOX, COS, CUL, EMP, FOR, FUN, HOR, HYL, JAN, LUN, LYM, MOL, NI, POM, RAY, SKI, SOF, STR, TAB, TIP, VES, VIT. Lures deployed that produced no results: ABS, CAP, FAG, LEEK, MYO, NIG, OAK, PIN.

SPECIES TRAPPED BY LURE 2023

SPECIES	LURE(S)
<i>Achroia grisella</i>	SOF
<i>Aphomia sociella</i>	TAB
<i>Argyresthia cupressella</i>	POM
<i>Argyrotaenia ljugiana</i>	MOL
<i>Autographa gamma</i>	NI
<i>Bembecia ichneumoniformis</i>	API
<i>Caradrina clavipalpis</i>	NI
<i>Crocallis elinguaris</i>	RAY
<i>Cydalima perspectalis</i>	BOX
<i>Cydia interscindana</i>	POM
<i>Cydia pomonella</i>	POM, TAB, TIP
<i>Epiphyas postvittana</i>	CUL
<i>Esperia sulphurella</i>	POM
<i>Grapholita funebrana</i>	ARG, FUN, HOR MOL, RAY, STR
<i>Grapholita janthinana</i>	JAN
<i>Grapholita lobarzewskii</i>	SKI
<i>Hedya nubiferana</i>	COS
<i>Hoplodrina ambigua</i>	HYL
<i>Hypsopygia costalis</i>	NI, TAB
<i>Idaea rusticata</i>	TIP
<i>Lymantria dispar</i>	LYM
<i>Lyonetia clerkella</i>	CUL, TAB

SPECIES	LURE(S)
<i>Macdunnoughia confusa</i>	NI
<i>Monopis crocicapitella</i>	LUN
<i>Nemapogon cloacella</i>	API, HOR, TAB
<i>Nemapogon granella</i>	API, HOR, TAB
<i>Pammene argyrana</i>	MOL, SKI
<i>Sesia bembeciformis</i>	LUN
<i>Pammene giganteana</i>	MOL, SKI
<i>Pammene regiana</i>	ARG, FUN
<i>Pammene suspectana</i>	ARG, MOL
<i>Paranthrene tabaniformis</i>	TAB
<i>Phalera bucephala</i>	API
<i>Psychoides filicivora</i>	SOF
<i>Saturnia pavonia</i>	EMP
<i>Pammene aurita</i>	HOR, HYL, TIP, VIT
<i>Synanthedon andrenaeformis</i>	AND
<i>Synanthedon formicaeformis</i>	AND, FOR
<i>Synanthedon myopaeformis</i>	CUL
<i>Synanthedon tipuliformis</i>	COS, LUN, RAY, TIP
<i>Synanthedon vespiformis</i>	AND, VES
<i>Triaxomasia caprimulgella</i>	LUN
<i>Xanthorhoe fluctuata</i>	TAB

VALENTINE'S PARK

During 2023 I agreed to help survey the moths at Valentine's Park, Ilford monthly from May to September with Tajinder Lachhar of Vision Redbridge Culture and Leisure, who are responsible for the parks in the London Borough of Redbridge.

The location was the walled garden adjacent to Valentine's Mansion. There are borders of Box hedging within the location that have been devastated by Box-tree Moth. The lake is around 50m away and caddisflies were a constant problem, sometimes numbering in their hundreds.

May, we had 15 moths of 8 species. Notable Macros: **Brindled Pug, Lime Hawk-moth, Silver Y**

June, we had 41 moths of 17 species. Notable Micros: **Enarmonia formosana, Pandemis cerasana, Plutella xylostella, Tortrix viridana**. Notable Macros: **Heart and Dart, Large Yellow Underwing, Lime Hawk-moth, Middle-barred Minor, Green Pug, Pale Mottled Willow, Riband Wave, Willow Beauty**

July, we had 77 moths of 44 species. Notable Micros: **Plutella xylostella, Tortrix viridana, Gypsonoma sociana, Eudemis profundana, Lozotaeniodes formosana, Caloptilia rufipennella, Recurvaria nanella, Archips xylosteana, Epiblema foenella**. Notable Macros: **August Thorn, Broad-bordered Yellow Underwing, Cloaked Minor, Dark Arches, Dun-bar, Heart and Club, Jersey Tiger, Lesser Broad-bordered Yellow Underwing, Lesser Yellow Underwing, Oak Hook-tip, Tree-lichen Beauty**

August, we had 78 moths of 39 species. Notable Micros: **Agriphila inquinatella, Box-tree Moth, Pandemis corylana, Evergestis forficalis, Acrobasis advenella, Agonopterix alstromeriana, Patania ruralis, Zeiraphera isertana, Phycita roborella, Cydia amplana**. Notable Macros: **Brimstone Moth, Dun-bar, Gypsy Moth, Large Yellow Underwing, Least Carpet, Oak Processionary, Ruby Tiger, Satin Wave, Scarce Footman, September Thorn, Shuttle-shaped Dart, White-point, Yellow Shell**

September, we had 94 moths of 34 species. Notable Micros: **Pandemis corylana, Agriphila geniculea, Celypha lacunana, Hypsopygia glaucinalis, Cameraria ohridella, Cydia splendana, Acentria ephemerella**. Notable Macros: **Centre-barred Sallow, Crescent Dart, Cypress Pug, Dark Sword-grass, Dewick's Plusia, Light Emerald, Oak Hook-tip, Square-spot Rustic, White-point, Willow Beauty**.

The highlight was the three Crescent Dart in September. Not only is this a rare moth in Essex, it is also a coastal species, inhabiting rocky seaside cliffs, so getting three inland in Ilford was very intriguing. It would suggest that there may be a local population and possibly something to follow up on.



Crescent Dart

(B.C.)

HAINAULT FOREST (WOODLAND)

On 16th August I surveyed a woodland spot in Hainault Forest, along with Tajinder Lachhar and Raymond Small. We recorded 69 moths of 38 species. Hainault Forest is over 280 acres and its habitats include ancient woodland pasture, native broadleaf woodland, mature scrub and open grassland, heathland and former arable fields. Wetland habitats include streams, drainage ditches and woodland ponds.

Micros: **Apotomis betuletana, Agapeta zoegana, Monopis weaverella, Catoptria falsella, Blastobasis adustella, Emmelina monodactyla, Eudonia mercurella, Scythropia crataegella, Rhopobota naevana, Metalampra italica, Patania ruralis, Ditula angustiorana, Agriphila straminella**.

Macros: **Barred Hook-tip, Black Arches, Brimstone Moth, Broad-bordered Yellow Underwing, Clay Triple-lines, Cloaked Minor, Common Carpet, Copper Underwing agg., Dark Spinach, Dingy Footman, Dun-bar, Green Carpet, Jersey Tiger, Large Yellow Underwing, Lesser Broad-bordered Yellow Underwing, Maiden's Blush, Riband Wave, Ruby Tiger, Six-striped Rustic, Straw Dot, Tree-lichen Beauty, Vapourer, Vine's Rustic, Yellow Shell, Yellow-barred Brindle**.

Another interesting year with a dramatic increase in **Clancy's Rustic** from its first appearance of 2 last year to 26 between 17 Sep – 10 Oct. **White-points** also increase from 12 to 22 between 21 June – 7 Nov and **L-album Wainscots**, a rarity some years ago, increased from 10 to 56 between 27 Jun – 13 Oct.

Cypress Carpets are still regulars with 77 in 2 batches from mid-May – mid Sept up from 31 last season and, at long last, recently started getting **Cypress Pugs** in last few years. The colourful **Merveille du Jour** has also increased over the last few years with 20 being taken this year between 2 Oct – 6 Nov and **Sprawlers** also now regular in November.

One of my favourites since its first appearance here in 31 Aug 2007 is the **Jersey Tiger** which didn't disappoint as trapped 138 (109 last year) from mid Jul to late Aug and even found a nearly full grown larva under a broken flower pot earlier in the year.

The **Box Moth** *Cydalima perspectalis* is another I regularly report which totalled 244 up from 61 last year but with slightly more black forms than usual.

Gypsy Moths 11 and **Oak Processionary** 17

Tree-lichen Beauties were down in numbers with only 37 between 10 Aug – 8 Sept and sadly still only a handful of **Hawk moths**, an **Eyed** 23 June, **Lime** 7 May, **Poplar** 19 Aug and **Large Elephants** 25 June and 10 July

Several new macro species for site include **Delicate** 12 Sept and 27 Oct, **Small Angle Shades** 21 & 22 July, common but elusive here, **Small Dotted Buff** 1 July and a couple of the very attractive **Dewick's Plusia** 27 Sept & 3 Oct, **Silky Wainscot** 16 Jul, and **Feathered Ranunculus** 1 Oct.

Large numbers of new micros including several *Caloptilia* sp? *Honoratella* look-alikes which have gone for further identification. Confirmed in past here but wanted these investigated. Plenty of others including *C. azeleella* 12 Sept, which is a regular and breeds in my garden. Other new sp include, *Paranorix torquillella* 13 Aug, *Clavigestis purdeyi* 19 Aug, *Roeslerstammia erxebella* 10 Sept, *Zelleria oleastrella* 19 Oct, *Musotima nitidalis* 20 Oct



CLANCY'S RUSTIC



L-ALBUM WAINSCOT



MERVEILLE DU JOUR



DELICATE



SMALL DOTTED BUFF



JERSEY TIGER LARVA (RB)



DEWICK'S PLUSIA



Musotima nitidalis



Caloptilia azaleella



Psychoides filicivora



Roeslerstammia erxebella



Zelleria sp (RB)

SUMMARY OF MOTH RECORDING IN ESSEX 2023

TIM GREEN

Tim Green, timgreen2201@outlook.com;

2023 was the 27th year of recording moths in my garden in Magdalen Laver, near Harlow, Essex since moving to the village in 1996. The garden is purposefully unkempt with a large area of lawn and mature shrubs. A diverse hedgerow was planted some 20 years ago, and a small area of grass and wildflowers was established in 2020. There are several fruit trees and herbaceous borders. The garden is one of a row of twelve and is surrounded by arable farmland with hedgerows, a variety of mature trees and a few small areas of woodland. During the year, most recording took place in the garden where light traps were operated on most nights as has been the case since 2004. Casual recording of moths at windows, outside lights and in outbuildings has been augmented by observations of early stages and leaf mines. A significant programme of trapping with pheromone funnel traps were carried out to record many of those light trap-shy species.

The garden list now stands at 933 species of moth. Of these, 113 have been recorded only once with a further 150 only being recorded twice. 185 species have not been recorded in the last 5 years and 114 species not for the past 10 years.

From all sites, using all recording methods and recording all life stages, just 470 species of moth were logged in 2023. This was well down on 2022 (590 species).

Light Trapping

A variety of light traps (MV Skinner, MV Robinson, 2x24w Actinic Skinner, 2x20W Compact Actinic Robinson) were operated in the garden on 234 nights, ranging between 1 and 3 traps per night to give a total of 468 'trap-nights'. Altogether, 12,408 moths of 428 species were recorded in light traps. This was less than in 2022, where 14,758 of 485 species were recorded. This is probably a reflection of the poorer year in general and a slightly reduced trapping regime over the summer months. From the light trapping activities, there were just 5 species new for the garden.

Table 1 – Light Trapping regime and summary results (2022 data in brackets)

Month	Nights trapped	Nights missed	Traps x Days	Species recorded	Total Moths
January	17 (29)	14 (2)	34 (87)	0 (7)	0 (14)
February	28 (10)	0 (18)	56 (54)	15 (4)	48 (31)
March	21 (22)	10 (9)	42 (66)	22 (21)	316 (357)
April	18 (28)	12 (2)	36 (84)	15 (40)	118 (359)
May	21 (13)	10 (18)	42 (39)	52 (106)	197 (686)
June	11 (18)	19 (12)	22 (54)	188 (203)	2,699 (3,119)
July	17 (12)	14 (19)	34 (36)	186 (250)	2,433 (3,188)
August	15 (14)	16 (17)	30 (42)	181 (198)	2,588 (3,429)
September	17 (18)	13 (12)	34 (49)	132 (127)	3,173 (2,663)
October	26 (23)	5 (8)	52 (59)	71 (75)	760 (826)
November	17 (19)	13 (11)	34 (37)	14 (23)	54 (65)
December	26 (20)	5 (11)	52 (40)	8 (10)	22 (22)
Total	234 (226)	131 (139)	468 (647)	485 (428)	12408 (14758)

The results in Table 1 show that January was a bad start to a generally poor year with no moths recorded at all for the whole month. February and March were comparable to 2022, but April to July produced consistently much fewer species and less total moths in all months. The late summer and autumn saw catches return to 2022 levels with September seeing the largest total of moths recorded for the year. I believe this to be consistent with other recorders' experiences.

Pheromone Trapping

After the successes over the last 5 years, I carried out pheromone lure trapping on most days that I was in the UK. With a wide range of lures available and the high probability of non-target captures, many lures were deployed outside the flight-time of the intended target. Trapping was carried out using commercially available funnel traps in the garden between February and August on a total of 139 days. In all, 82 different lures were deployed during the year. As lures were used in separate traps simultaneously, a total of 3,605 'trap days' were achieved. The traps were checked in the early morning and then subsequently several times each day.

A total of 418 individual moths of 75 species were recorded in pheromone traps and a monthly summary is shown in Table 2. The total moths recorded in 2023 was slightly less than in 2022 but slightly more species were logged (544 of 67 in 2022). Only one new species for the garden was recorded in the pheromone traps.

Table 2 - Pheromone trapping regime and summary results

Month	Days Trapped	Traps x Days	Species recorded	Total Moths
February	14 (0)	28 (0)	0 (0)	0 (0)
March	31 (29)	334 (297)	5 (5)	18 (33)
April	26 (30)	800 (1,058)	7 (20)	55 (179)
May	21 (16)	919 (800)	17 (23)	44 (124)
June	18 (17)	422 (840)	35 (32)	123 (142)
July	14 (10)	532 (298)	28 (20)	129 (66)
August	15 (0)	570 (0)	17 (0)	49 (0)
Total	139 (102)	3,605 (3,293)	75 (67)	418 (544)

Some selected records from the pheromone trapping are shown in Table 3 below. Tortricids and Tineids are well represented, but I have also included species from some of the other families as examples. The numbers of records of each species are shown and split by the lure target.

Table 3 – Selected records from pheromone trapping

Family	Species recorded	Qty	Qty per lure	Lure target species
Heliozelidae	<i>Antispila petryi</i>	11	9	Prays oleae
Heliozelidae	<i>Antispila metallella</i>	1	1	Prays oleae
Gracillariidae	<i>Phyllonorycter blancardella</i>	16	6 8 2	<i>Phyllonorycter blancardella</i> <i>Epinotia nanana</i> <i>Cydia nigricana</i>
Gracillariidae	<i>Phyllonorycter hostis</i>	11	8 3	<i>Epinotia nanana</i> <i>Cydia nigricana</i>
Gracillariidae	<i>Phyllonorycter corylifoliella</i>	10	10	<i>Phthorimaea operculella</i>
Gracillariidae	<i>Phyllonorycter oxyacanthae</i>	8	1 2 2 2 1	<i>Argyrotaenia spheropa</i> <i>Phyllonorycter blancardella</i> <i>Epinotia nanana</i> <i>Cydia nigricana</i> Prays oleae
Gracillariidae	<i>Phyllonorycter joannisi</i>	1	1	<i>Endothenia quadrimaculana</i>
Argyresthiidae	<i>Argyresthia cupressella</i>	13	13	<i>Palpita vitrealis</i>
Argyresthiidae	<i>Argyresthia trifasciata</i>	2	2	<i>Argyresthia trifasciata</i>
Glyphipterigidae	<i>Glyphipterix simpliciella</i>	9	3 5 1	<i>Argyresthia goedartella</i> <i>Mamestra brassicae</i> <i>Phyllonorycter blancardella</i>
Lyonetidae	<i>Lyonetia clerkella</i>	31	31	<i>Lyonetia clerkella</i>
Gelechiidae	<i>Scrobipalpa costella</i>	12	2 2	<i>Mamestra brassicae</i> <i>Synanthedon andrenaeformis</i>

			8	Scrobipalpa ocellatella
Tineidae	Triaxomasia caprimulgella	7	7	Sesia bembeciformis
Tineidae	Nemapogon koenigi	5	1 3 1	Synanthedon formicaeformis Synanthedon spuleri Synanthedon vespiformis
Tineidae	Nemapogon clematella	3	3	Nemapogon granella
Tineidae	Nemapogon ruricolella	1	1	Synanthedon vespiformis
Tineidae	Niditinea fuscella	1	1	Sesia bembeciformis
Tortricidae	Grapholita funebrana	28	14 12 1 1	Grapholita funebrana Grapholita molesta Grapholita lobarzewskii Pammene argyrana
Tortricidae	Grapholita lobarzewskii	6	6	Grapholita lobarzewskii
Tortricidae	Grapholita janthinana	3	2 1	Grapholita funebrana Grapholita janthinana
Tortricidae	Grapholita tenebrosana	1	1	Grapholita funebrana
Tortricidae	Pammene giganteana	14	3 1 1	Grapholita funebrana Grapholita molesta Cydia nigricana
Family	Species recorded	Qty	Qty per lure	Lure target species
Tortricidae (cont.)	Pammene giganteana (cont.)		2 5 1 1	Pammene argyrana Pammene suspectana Cydia pomonella Grapholita lobarzewskii
Tortricidae	Pammene suspectana	2	2	Grapholita funebrana
Tortricidae	Dichrorampha petiverella	13	9 3 1	Platynota stulatana Evergestis forficalis Endothenia quadrimaculana
Tortricidae	Endothenia nigricostana	6	6	Endothenia quadrimaculana
Tortricidae	Endothenia quadrimaculana	1	1	Syngrapha ain
Tortricidae	Cnephasia pumicana	10	8 2	Recurvaria nanella Rhyacionia buoliana
Sesiidae	Pennisetia hylaeiformis	15	10 1 1 3	Pennisetia hylaeiformis Nemapogon inconditella Synanthedon conopiformis Synanthedon spuleri
Sesiidae	Sesia bembeciformis	15	15	Sesia bembeciformis
Sesiidae	Synanthedon andrenaeformis	9	9	Synanthedon vespiformis
Sesiidae	Synanthedon myopaeformis	12	1 7 2 1	Synanthedon culiciformis Synanthedon myopaeformis Nemapogon granella Synanthedon polaris

Sesiidae	Synanthedon vespiformis	11	11	Synanthedon vespiformis
Noctuidae	Mesoligia furuncula	39	39	Sesamia nonagrioides
Noctuidae	Oligia latruncula	1	1	Synanthedon tipuliformis
Noctuidae	Oligia strigilis	2	2	Mamestra brassicae
Noctuidae	Noctua interjecta	4	4	Plodia/Ephestia
Erebidae	Orgyia antiqua	20	20	Orgyia antiqua
Saturnidae	Saturnia pavonia	7	7	Saturnia pavonia

Other records in the garden

A total of 68 species of moth were encountered without targeted trapping attempts. This year, there were none that were new to the garden but quite a number that were not recorded in either light or pheromone traps, often as early stages.

The total of 12,913 adult moths and 470 species recorded in the garden using all methods was comparable to the 12-year average (2011-2022) of 15,084 moths of 460 species. See Table 4 below. The 6 new species added to the garden list is much reduced from 2022 (17) and the 12-year average (18) and one of the lowest over this period.

Table 4 – Annual totals of adult moths recorded in the garden.

Year	Species recorded (All methods)	Total Moths	New species for garden	New species from lures	Lure % of additions
2023	470	12,913	6	1	17%
2022	529	15,393	17	3	18%
2021	482	14,885	15	3	20%
2020	572	20,494	49	20	41%
2019	432	14,270	17	7	41%
2018	461	17,032	18	5	28%
2017	414	10,943	6	0	
2016	381	13,597	11	0	
2015	418	12,173	10	0	
2014	420	13,942	2	0	
2013	519	19,435	21	0	
2012	400	9,993	11	0	
2011	494	18,849	39	0	
Average 2011-2022	454	15,056	18		

New Species for the Garden

Of the 6 new species for the garden, all were micros. Dates and methods are shown for all the new species in Table 5 below.

Table 5 – New species recorded in the garden for the first time in 2023.

Code	New species	Qty	Dates	Method
4.090	<i>Ectoedemia subbimaculella</i> *	1f	18 Jul	Light Trap
4.074	<i>Etainia sericopeza</i> *	1f	9 Sep	Light Trap

15.085	<i>Phyllonorycter joannisi</i> *	1m	20 May	ENQUA lure (<i>Endothenia quadrimaculana</i>)
35.071	<i>Monochroa lucidella</i> *	1m	28 Jun	Light Trap
43.007	<i>Scythris limbella</i>	1	24 Jun	Light Trap
49.305	<i>Rhyacionia buoliana</i> *	1f	28 Jun	Light Trap

Species marked with * have had at least one example confirmed by GD.

4.090 *Ectoedemia subbimaculella* (Broken-barred Oak Dot). A widespread and generally common species in the county. Although I have recorded the species as leafminers at various sites nearby, this was the first time one had strayed into the garden as an adult.

4.074 *Etainia sericopeza* (Norway Maple Dot). A new species for me and only the 7th Essex site with most records being in the last 5 years indicating recent expansion. A Notable A species. There is a n avenue of Norway Maple around 100m from the garden.



Ectoedemia subbimaculella



Etainia sericopeza



Phyllonorycter joannisi

15.085 *Phyllonorycter joannisi* (Norway Maple Leaf-miner). Another leafminer that feeds on Norway Maple has made it into the garden. It was found in a lure trap with the ENQUA (*Endothenia quadrimaculana*) lure although this may well have entered the trap passively as I'm not aware of any other records of this species at lures. It is quite a widespread species in the county with 17 recorded sites. I have previously found mines on fallen leaves from the avenue of the host trees nearby.

35.071 *Monochroa lucidella* (Spike-rush Borer). This is the 12th Essex site for this local species that feeds on Common Spike-rush (*Eleocharis palustris*). It is clearly a wanderer from a nearby wetland habitat. Most of the county records are in the west of the county although it appears to be relatively widespread in Hertfordshire.

43.007 *Scythris limbella* (Goosefoot Runner). A single specimen of this relatively scarce moth came to the Robinson trap in the garden on 24th June. It is a pRDB3 species and there are just 6 recent sites but I suspect that this is an often overlooked species.

49.305 *Rhyacionia buoliana* (Smooth Pine Shoot Moth). I have recorded the closely related species, *Rhyacionia pinicolana* 7 times in the garden and I suspected that this was another. On closer inspection it looked a good candidate for *R. buoliana* and this was confirmed when it was dissected. Both species appear to be quite widespread but not commonly recorded in the county. There are 67 records for *buoliana* and 108 for *pinicolana* in the Essex database.



Monochroa lucidella



Scythris limbella



Rhyacionia buoliana (TG)



Antispila metallella



Antispila petryi



Argyresthia cupressella



Argyresthia trifasciata



Cnephasia pumicana



Dichrorampha petiverella



Endothenia nigricostana



Endothenia quadrimaculana



Glyphipterix simpliciella



Grapholita janthinana



Grapholita lobarzewskii



Grapholita tenebrosana



LUNAR HORNET MOTH



Nemapogon clematella



Nemapogon koenigi

(Pictures Tim Green)



Nemapogon ruricolella



Niditinea fuscella



ORANGE-TAILED CLEARWING



Pammene aurita



Pammene giganteana



Pammene suspectana



Phyllonorycter blandcardella



Phyllonorycter corylifoliella



Phyllonorycter hostis



Phyllonorycter oxyacanthae



RED-BELTED CLEARWING



Scrobipalpa costella



Scythris limbella



Triaxomasia caprimulgella



YELLOW-LEGGED CLEARWING

(Pictures Tim Green)

New species recorded elsewhere in Essex for the first time in 2023.

Only one species new for me in Essex was recorded away from the garden in 2023. A single specimen of *Pammene aurita* (**Tawny Sycamore Piercer**) was trapped during a group survey of Sheering Churchyard on 28th July. It was very worn and a reliable identification wasn't possible without dissection. This is a relatively widespread and common moth in the county but is another that has hitherto avoided me. As part of an informal annual survey carried out with Dave Cousins, Dave Perry and Roy Hargreaves, 144 species were recorded at this site on the night.

Winners and Losers

The top 30 species recorded as totals in 2023 are shown in Table 6. *Chrysoteuchia culmella* (**Garden Grass-veneer**) had the highest total with 921 specimens recorded. This was a big increase from 2022 where only 224 were recorded. Other winners in 2023 were **Rustic**, **Diamond-back Moth**, **Heart & Dart**, **Garden Straw**, **Willow Beauty**, **Heart & Club**, **Least Carpet** and **Ruby Tiger**. Species ranked significantly lower in 2023 were both **Common** and **Smoky Wainscot** and **Large Nutmeg**. High-ranking species in 2022 that were outside the top 30 in 2023 include **Large Yellow Underwing** and *Blastobasis adustella* (**Common Masoner**) which were the 5th and 6th most abundant in 2022 and *Scrobipalpa ocellatella* (**Beet Moth**) and **Snout**, the 11th and 12th most abundant last year.

Table 6 – 2023 Top 30 and comparison with 2022

Code	Taxon	Vernacular	2023 Total	2023 Rank	2022 Rank
63.080	<i>Chrysoteuchia culmella</i>	Garden Grass-veneer	921	1	13
73.359	<i>Xestia c-nigrum</i>	Setaceous Heb. Character	888	2	2
73.342	<i>Noctua pronuba</i>	Large Yellow Underwing	714	3	4
73.357	<i>Xestia xanthographa</i>	Square-spot Rustic	679	4	3
-	<i>Mesapamea secalis</i> agg.	Common Rustic agg.	651	5	7
73.291	<i>Mythimna pallens</i>	Common Wainscot	435	6	1
73.097	<i>Hoplodrina blanda</i>	Rustic	347	7	18
18.001	<i>Plutella xylostella</i>	Diamond-back Moth	315	8	19
73.096	<i>Hoplodrina octogenaria</i>	Uncertain	289	9	8
73.317	<i>Agrotis exclamationis</i>	Heart and Dart	217	10	23
49.109	<i>Agapeta hamana</i>	Garden Straw	207	11	48
73.099	<i>Hoplodrina ambigua</i>	Vine's Rustic	198	12	15
73.172	<i>Mesoligia furuncula</i>	Cloaked Minor	172	13	21
73.297	<i>Mythimna albipuncta</i>	White-point	154	14	20
73.345	<i>Noctua comes</i>	Lesser Yellow Underwing	153	15	31
70.258	<i>Peribatodes rhomboidaria</i>	Willow Beauty	145	16	58

73.249	<i>Orthosia gothica</i>	Hebrew Character	141	17	10
73.162	<i>Apamea monoglypha</i>	Dark Arches	136	18	54
73.320	<i>Agrotis clavis</i>	Heart and Club	136	19	97
70.016	<i>Idea aversata</i>	Riband Wave	133	20	35
70.011	<i>Idea dimidiata</i>	Single-dotted Wave	124	21	28
73.293	<i>Mythimna impura</i>	Smoky Wainscot	124	22	17
63.093	<i>Agriphila straminella</i>	Straw Grass-moth	122	23	26
70.004	<i>Idea rusticata</i>	Least Carpet	120	24	65
73.244	<i>Orthosia cerasi</i>	Common Quaker	118	25	14
73.348	<i>Noctua janthe</i>	Lesser B-bd.Yell. U'wing	108	26	30
35.040	<i>Bryotropha terrella</i>	Brown Moss-moth	102	27	50
73.334	<i>Diarsia rubi</i>	Small Square-spot	97	28	16
73.157	<i>Apamea anceps</i>	Large Nutmeg	95	29	9
72.024	<i>Phragmatobia fuliginosa</i>	Ruby Tiger	93	30	98