

# NEWSLETTER 67

October 2022



Weevil *Orchestes testaceus*,  
3 mm long, whose larva make  
a mine in Alder. See p. 19.  
Photo: Graham Finch.

## In this edition

LESOPS Diptera Status Reports	3	"Save Saffron Brook": <i>Sphenella marginata</i> revealed	14
Some plant gall finds	4	Megalegs in Leicester	15
Adrian Russell	6	Indoor Meetings Programme	12
Dave Budworth	7	New bugs for old?	17
Rutland Water Moth Night	8	Broughton Astley Garden Moths	18
Joint visit to Panter's Orchard with RNHS	8	Weevil <i>Orchestes testaceus</i> , new to VC55	19
Some unusual flies in VC55	9	Fungus gnats - a real challenge!	19
DIY Moth Genitalia Determinations	10	2022-3 Indoor Meetings Programme	20

## LEICESTERSHIRE & RUTLAND ENTOMOLOGICAL SOCIETY

Affiliated to:  
Leicestershire & Rutland Wildlife Trust

### Chairman & LRES Occasional Publications Editor:

Ray Morris  
16 Hinckley Road, Dadlington  
Leics. CV13 6HU  
Email: [ray@cactusbob.net](mailto:ray@cactusbob.net)

### Secretary:

Alan Cann  
17 Overdale Road, Leicester LE2 3YJ  
Email: [alan.cann@gmail.com](mailto:alan.cann@gmail.com)

### Treasurer:

vacant  
(Acting Treasurer: Ray Morris)

### Committee Members:

Sue Timms  
17 The Square, Bagworth, Leics. LE67 1DQ  
Email: [sue.timms@clara.co.uk](mailto:sue.timms@clara.co.uk)

Nicola Bashforth  
[Nicola.bashforth@btinternet.com](mailto:Nicola.bashforth@btinternet.com)

### Newsletter Editor:

Steve Woodward  
19 Highfield Road, Groby, Leicester LE6 0GU  
Email: [grobysteve@talktalk.net](mailto:grobysteve@talktalk.net)

### Publications downloadable from:

<https://www.naturespot.org.uk/content/leicestershire-rutland-entomological-society>

© 2022 Leicestershire & Rutland Entomological Society

The editor will be happy to receive articles, short notes and photos (in focus please!) about insects or other invertebrates in Leicestershire and Rutland, also news of members' activities further afield. Photos to be sent separately please at high resolution. Unless otherwise credited, photos are by the author of the article.

**Next Copy Deadline: 5 Jan 2023**

## Editorial

Since the last Newsletter, Anona Finch has retired as Secretary. I am sure that members would wish to join me in thanking her for sorting out the programme, writing up the AGM minutes and dealing with correspondence since 2007.

With just one article received by the deadline, the Editor was becoming concerned that this Newsletter might be very thin! Thanks to a bit of chivvying by Alan Cann, plenty of material eventually arrived and I have had to prune some articles to fit everything in. Thanks to all contributors. Another reason for the lateness of this edition is that I lost Internet and email for a week, after a wayward lorry demolished Groby's broadband connection cabinet! The unfortunate consequence is that you may have missed this entomological event at Long Clawson.



Our Chairman Ray Morris has been very productive over the last couple of years, as no less than ten volumes in our occasional publication series (LESOPS) bear his name (see p. 3). LESOPS are intended as in-depth studies, or articles that are too long for inclusion in the Newsletter. They form an important part of the Society's archive, as copies are sent as "legal deposit" to national libraries where they should be preserved for posterity. You may have noticed that every volume is marked "ISSN 0957-1019" – this is the International Standard Serial Number (see <https://www.issn.org/>), which uniquely identifies the series within international catalogues.

**Steve Woodward**  
Editor

## LESOPS Diptera Status Reports

The recent production of these reports in the *LESOPS* series (*LES Occasional Publication Series*) is meant to be as a baseline for future research of the large number of flies that should be expected to be found in Leicestershire & Rutland. Both current and historic records have been located and mapped where possible with a cut-off point of the end of 2020. Data sources have included LRERC, LRWT, NatureSpot, NBN Atlas, publications and Newsletters produced by VC55 natural history societies. To date, status reports have been produced for Conopidae (*LESOPS 38*), Tephritidae (*LESOPS 39*), families with up to ten species (*LESOPS 40*, 48 families), Pediciidae (*LESOPS 41*), Tipulidae (*LESOPS 43*), Sciomyzidae (*LESOPS 44*), families with 11-20 species (*LESOPS 45*, 16 families), Limoniidae (*LESOPS 46 & 51*) and Dolichopodidae (*LESOPS 50*) - a total of 72 of the current 107 British Diptera families. In preparation are reviews of Asilidae, Psilidae and Syrphidae. Thankfully, a few families will not be covered as even national and international experts have trouble with them!

It is accepted that these status reports are not totally definitive as records may have been overlooked or never submitted to recording schemes. However it is hoped that they will provide some stimulus for the lesser-recorded families in the two counties. Record submission for future updates of those already published are always welcome as is any data yet to appear in the county database. Once the 2020 status reports have been done perhaps somebody could volunteer to keep individual family databases up to date (i.e. sorted for correctness, duplication, etc) and perhaps even occasionally publish updates, say on a five year cycle? Here's hoping!

### References

N.B. New *LESOPS* (in electronic form) are sent to members as they are published. Old parts are available via NatureSpot (see p. 2).

Kramer, J. & Morris, R. 2021. The status of Diptera in VC55: Pediciidae. *LESOPS 41*.



*Physocephala rufipes* (Conopidae). Photo: Steve Woodward

Kramer, J. & Morris, R. 2021. The status of Diptera in VC55: Tipulidae. *LESOPS 43*.

Kramer, J. & Morris, R. 2022. The status of Diptera in VC55: Limoniidae: Chioneinae. *LESOPS 46*.

Kramer, J. & Morris, R. 2022. The status of Diptera in VC55: Limoniidae: Limnophilinae & Limoniinae. *LESOPS 51*.

Morris, R. 2021. The status of Diptera in VC55: Conopidae. *LESOPS 38*.

Morris, R. 2021. The status of Diptera in VC55: Tephritidae. *LESOPS 39*.

Morris, R. 2021. The status of Diptera in VC55: Families with up to 10 species. *LESOPS 40*.

Morris, R. 2021. The status of Diptera in VC55: Sciomyzidae. *LESOPS 44*.

Morris, R. 2022. The status of Diptera in VC55: Families with 11 to 20 species. *LESOPS 45*.

Morris, R. 2022. The status of Diptera in VC55: Dolichopodidae. *LESOPS 50*.

**Ray Morris**



## Some Plant Gall Finds

I am a relative "newbie" to the world of plant galls, having been encouraged by Helen Ikin to write the Plant Gall Report for *Heritage*, the quarterly Bulletin of Loughborough Naturalists' Club. I have done so since 2017. For this I needed to learn quickly. I am reporting here on some galls I have found particularly interesting for several and varied reasons. All are recent records from Leicestershire. They fall into five main groups, four of which are caused by animals, i.e. mites, bugs, flies and Hymenoptera (wasps and sawflies) and the last by fungi (which are omitted here). These galls have been identified using *British Plant Galls* (Redfern & Shirley, 2011) and mostly submitted to NatureSpot where they have been verified by Sue Timms. Some queries have been submitted to British Plant Galls Facebook which is very active with senior members of British Plant Gall Society, including our own Chris Leach, offering advice. A new edition of *British Plant Galls* is due out shortly and some of the advice covers changes in that new edition.

### Mites

Recording of some galls caused by mites is currently uncertain as changes are being made to identification following more research. Some of these changes will appear in the next edition of *British Plant Galls*.

For example, recent understanding of nail galls on lime has been that the lime tree species needs to be identified, which is not always straightforward and can make recording galls on lime difficult. However the latest information is that all nail galls on lime are caused by the same organism, *Eriophyes tiliae* (Fig. 1), so recording lime galls is now easier, and I suspect records will become more frequent.



Fig. 1. *Eriophyes tiliae* on lime



Fig. 2. *Aceria macrorhyncha* or *A. cephalonea* on Sycamore



Fig. 3. Gall on Field Maple Seed



Fig. 4. *Phyllocoptes populi*, top of Aspen leaf

Another example of change is in the identity of the mite galls on Sycamore which cause red pustules (Fig. 2), until recently considered as two separate species. *Aceria macrorhyncha* galls defined as up to 6 mm tall, with a pointed tip and *Aceria cephalonea* galls less than 3 mm tall with a rounded tip. This is difficult as how does one know when they have stopped growing? The current edition of *British Plant Galls* says that there are intermediates and that they may be just one species. I understand that they will be merged in the next edition, which will make recording much easier.

A gall on the seed wings of Field Maple intrigues me (Fig. 3). Attempts to key it out lead to the statement "causer to be determined". Very few people seem to have found this. It is thought that it could be caused by a mite, possibly *Aculops acericola*, that has been taken over by an inquiline (an animal other than the causer that lives and feeds within a gall), possibly a gall midge *Acumyia acericola*. No record can be made until this is resolved by the experts! I have found just one gall, two years running, on the same tree at Bagworth Heath.

I was pleased to see the mite gall *Phyllocoptes populi* on Aspen (Figs. 4 & 5), something I had not previously found in Leicestershire, but as for several of my other finds, I saw it in other parts of the country and went looking and found it, on this occasion in Jubilee Wood.



Fig. 5. *Phyllocoptes populi*, underneath



## Bugs

In January 2022 on the Lit & Phil Natural History Field Trip to Watermead Country Park I was shown the amazing sight of *Eriosoma lanigerum* Woolly Apple Aphid on the trunk of an apple tree (Fig. 6). *E. lanigerum* is native to North America but it is now found in all the regions of the world where apples are grown. It was first recorded from Great Britain in 1787. Woolly aphid infestation in commercial orchards, especially in NW USA, can cause many problems and its incidence is reported to be on the increase as orchard managers are reducing chemical pesticides in favour of using biological control for codling moth. Experiments are underway to find biological methods to control the aphids too.

Galls on Poplar caused by the aphid *Pemphigus spyrothecae* are spectacular (Fig. 7). Leaf petioles are thickened, lengthened, and spirally twisted. Aphids are released in the autumn through a slit when the coil loosens. Poplar trees near the Black Brook and Derby Road playing fields in Loughborough have hundreds of their petioles galled by these aphids. *Pemphigus spyrothecae* are social insects with defensive individuals guarding the slits through which the winged mature aphids exit.

## Flies

Flies that cause galls fall into two families. Cecidomyiidae, gall midges, all of which cause galls and Tephritidae, only a few cause galls and these are referred to as gall flies.

After seeing information about the Cecidomyid *Dasineura kiefferiana* causing a leaf roll gall on Rosebay Willowherb leaves (Fig. 8), I started to check this plant and found it several times.



Fig. 6. *Eriosoma lanigerum* on Apple



Fig. 7. *Pemphigus spyrothecae* on poplar



Fig. 8. *Dasineura kiefferiana* on Rosebay Willowherb



Fig. 9. Currant Galls on oak catkins, caused by the bisexual generation of the cynipid wasp *Neuroterus quercusbaccarum*. Photo: Steve Woodward.

## Wasps

In the spring, Currant Galls (Fig. 9), the bisexual generation of the cynipid wasp *Neuroterus quercusbaccarum* Spangle Gall Wasp, were found frequently. This was not unexpected because in the spring and summer of 2021 leaves of oak trees were supporting copious numbers of the galls of the asexual generation, Spangle Galls. In Spring 2022 my moth trap was again invaded by hundreds of what I thought might be *Neuroterus quercusbaccarum* from our garden's mature oak trees. Surprisingly, this year's crop of Spangle galls seems to be virtually non-existent. I understand that along with Silk Button galls, Spangle Galls have a boom and bust cycle over many years, differing by factors of millions. I am curious to know why. Do more galls lead to more parasites? Have the drought conditions of 2022 affected the nourishment the oaks are pumping into their leaves? Have the oaks, following on from last year's infestation mounted a heightened chemical defence mechanism?

I find leaf galls a fascinating field of study because of the variety. Some galls I find by continually randomly examining leaves, others I find by searching for a specific host in VC55 that I have seen galled in other parts of the UK, or by looking for galls on specific hosts noted from the keys and guidebooks, Facebook and what others are reporting to Loughborough Naturalists or NatureSpot. There are so many more to find!

## Reference

Redfern, M. & Shirley, P. 2011. *British Plant Galls*. Field Studies Council.

**Hazel Graves**

## Adrian Russell 1956-2022 County Moth Recorder



Adrian Russell (left) with Paul Palmer, Pete Leonard and Graham Finch, 2015. Photo: Lesley Mason.

It is with great sadness and shock that we learned of Adrian Russell's passing on 22 April, after a short illness. Adrian was the County Moth Recorder for VC55 Leicestershire and Rutland, a role that he had fulfilled in an exemplary manner across four decades.

In his working life, Adrian led the Environmental Health team at the Leicester City Council. It was through his role as County Moth Recorder and his active involvement with local groups, not least the Leicestershire Entomological Society and the East Midlands Butterfly Conservation Branch, that many formed long-lasting friendships with him.

Being a County Recorder is as much about people as recording wildlife, and Adrian epitomised this through his talks, events and demonstrations. He brought naturalists together and created an ever-growing community of moth recorders in Leicestershire and Rutland. He always welcomed and supported new recorders and shared his enthusiasm and experience freely, gently leading absolute beginners through the

minefield of identification with unfailing courtesy, patience and kindness.

So great was his desire and willingness to engage with new recorders, and to widen the recording coverage within VC55, that he turned his garage into a second-to-none moth trap workshop. His mechanical and electrical skills were remarkable, and he was constantly experimenting with innovative new ideas and prototypes. There are few recorders within VC55 today that have not owned one of his custom traps, which he often freely lent out to encourage records.

Adrian always celebrated the successes of others and was careful to avoid the sort of one-upmanship that had put him off birding in his younger years. If someone posted a particularly impressive catch on the county Facebook page, he would often reassure others that he had caught almost nothing that night and other recorders should not be disheartened.

Adrian was fascinated by distribution, abundance and phenology and had a particular passion for historical data - often going to great lengths to verify obscure



records or claims that he had come across. He had a very sharp and enquiring mind and would methodically go about researching and unravelling the details. His research skills were quite outstanding – he would have made an excellent historian. It is incredibly sad that his long-planned book: *The Butterflies and Moths of Leicestershire and Rutland* was not completed and published in his lifetime, his main focus and ambition during his retirement.

Many of us enjoyed sharing Adrian's company out and about doing what he enjoyed the most – revelling in moths coming to a sheet or enthusiastically emptying traps from multi-light overnight sessions, often with a gas-stove fuelling us with coffee and breakfast. Even the occasional tricky situation such as a completely flat Land Rover battery in the early hours of the morning in remote woodland, getting locked in at a site, or the Police turning up to investigate reports of bright lights, were always dealt with in his



Adrian Russell, 2014. Photo: Peter Sykes.

characteristically calm way and with his sense of humour intact.

It is sometimes said of someone that nobody had a bad word to say about them. In the case of Adrian, this is undoubtedly true. He is universally held in the very highest esteem by his friends and acquaintances for his generosity, thoughtfulness, and his considerate and sensitive nature.

We were incredibly lucky in VC55 to have such a hardworking, dedicated and encouraging County Moth Recorder. But above all, Adrian was a pleasure to spend time with. He will be sorely missed by all who knew him, the moth recording community will be

very much the poorer for his loss.

Our thoughts and condolences go to his wife Margaret, his son Ben, his daughter Kate and his wider family.

**Mark Skevington**

## Dave Budworth



Dave Budworth. Photo: Russell Nevin.

Dave passed away unexpectedly early this year - I had been having a cup of coffee with him only a week or so before. A long-term member of the Society, Dave was involved with entomology (amongst other things!) in our Society and was Treasurer in recent years carrying out the same function for DaNES, our neighbouring Society. He had also been involved nationally, serving as Treasurer for the Bees, Wasps and Ants Recording Society and on the Committee of the Amateur Entomologists Society for many years. He occasionally contributed notes on Heteroptera (Bugs) in VC55 and was Editor of the DaNES annual reports as well as their county recorder for several insect groups. He co-organised the annual Exhibition for DaNES to which our Society contributed by having a stand and many members attending - usually a most memorable entomological event. He was always ready for a chat about insects (and much more) and will be sorely missed.

**Ray Morris**

## Rutland Water Moth Night



On 20 August 2022 a moth recording event was held at the Lyndon Centre at Rutland Water. The headlines were:

- 18 volunteers and staff helped with the event
- 25 traps were run (along with sugar)
- A total of 3,081 moths were caught and identified
- A total of 158 species were recorded (amazing for the time of year)
- 9 species were new to the Reserve's Moth List

To put these figures into perspective, we ran a similar event in July 2021 and had 2,065 moths of 184 species. It was great to focus on the Lyndon side of the Reserve (although there were traps run in Cherry Wood and Lax Hill too), and due to the time of year was good to see some migrants, with records including: Rusty-dot Pearl *Udea ferrugalis*, Rush Veneer *Nomophila noctuella*, Bordered Straw *Heliothis peltigera* - new for the Reserve (see p. 18), Tree-lichen Beauty *Cryphia algae*, White-point *Mythimna albipuncta* and Dark Sword-grass *Agrotis ipsilon*. Eight species of Wainscot Moth was pretty awesome too!

The overall feedback has been really positive and people are keen to do the event again in late June next year - it would be good to combine it with a full 'Bioblitz' to coincide with the Wildlife Trust's *30 Days Wild* campaign. I hope all enjoyed the evening and once again thank you for coming.

**Tim Sexton**  
tsexton@lrwt.org.uk

## Joint visit to Panter's Orchard with RNHS

On the 8th September 2022 six members of LRES joined with members of the Rutland Natural History Society to visit Panter's Orchard (SK966054, Edith Weston parish), one of the oldest orchards in the east midlands. Now an island surrounded by quarrying, the site is just outside the Ketton Quarry SSSI and currently has no designation for protection. The site is not open to public access and has been neglected in terms of management. There has been no detailed survey work carried out. The Quarry Habitat Management Plan claims that this derelict orchard is a good example of biodiversity net gain. However without any full biodiversity survey over time, its changing biodiversity value cannot be judged. The technical guidance from Natural England would support this as traditional orchards are a Priority Habitat, especially for saprophagous and pollinator insects, birds, bats, lichens and mosses. During our visit we were guided by John Bristow, Leicestershire and Rutland Wildlife Trust Conservation Officer, who is knowledgeable about the site.

Members scattered to all corners of the site and within seconds most were only identifiable by their rear halves sticking out of hedges. Sadly, it was clear that the hot and dry weather of 2022 had depressed numbers of both specimens and species, some of which had shut up shop for the year and others were just starting to rebound after the drought and heat-waves. At the time of writing specimens are still being identified and records collated, but perhaps the most notable find was made by Graham Finch, a larval case of the micromoth *Coleophora kuehnella*, which is the first record of this species for VC55.

All records from the visit will be shared with RNHS and we hope to be able to arrange further recording trips to the site in 2023. On behalf of LRES I would like to thank RNHS for organizing this trip and for hosting us. We look forward to our next joint visit!

**Alan Cann**  
alan.cann@gmail.com



## Some unusual flies in VC55

The study of flies in our two counties is slowly gaining more input! A handful of recorders now take their interests beyond the usual culprits such as hoverflies and leaf-miners, to start noticing the less-reported species that are present locally.

The Chloropidae is a difficult family to work with. The British list of 178 species has received little interest from local entomologists until recently with many of the records for the family coming from consultant entomologists carrying out survey work as part of planning consents. *Elachiptera brevipennis* had only been seen at the Spearwort Fields (Aylestone) in 2017 by David Gould with a further record coming from survey work in the Lutterworth area in 2018 (Andy Gibbs). So the finding of this fly by Tim Sexton at Lagoon 2 Rutland Water in November 2021 was a welcome addition. Preparation of a *LESOPS* for this family is underway.

The Oestridae are very poorly recorded in Britain. This is mainly due to most of the 11 British species being serious parasites of stock animals. A record of the larva of *Dermatobia hominis* was recovered surgically from the arm of a traveller who had returned from Brazil to England (Hay, 1990). The fly is a native of central and southern America and thankfully is not usually encountered in Britain. However, other Oestridae do occasionally occur here, although rarely. Historically, *Gasterophilus intestinalis* (Horse Bot Fly) was noted by W.A. Vice at Mountsorrel (VCH, 1907) and also by P.A.H. Muschamp at Croft in 1930. The finding of many *Oestrus ovis* (Fig. 1) on the wall of the Volunteer Training Centre at Rutland Water by



Fig. 1. *Oestrus ovis*. Photo: Tim Sexton.

Tim Sexton in July 2022 was a new species for VC55 but would probably have been of concern to local sheep farmers, as the larvae of this fly have significant health and financial consequences for their flocks. The Oestridae are very briefly mentioned in *LESOPS* 45.



Fig. 2. *Bellardia polita* (to be confirmed). Photo: Dave Nicholls.

Dave Nicholls found a Calliphorid at Bardon Hill in September 2021 and thought it may be a *Bellardia polita* (Fig. 2). The specimen has been passed to Olga Sivell (see Sivell, 2021) for confirmation by genitalia determination, after tentatively agreeing with Dave's identification. If confirmed definitively this is a first for VC55.

## References

- Hay, J. (1990). *Dermatobia hominis* myiasis in Leicestershire. *The Entomologist* **109**: 125-126.
- VCH (1907). *Victoria County History*: Leicester.
- Sivell, O. (2021). Blow Flies (Diptera: Calliphoridae, Polleniidae, Rhiniidae). *Handbooks for the Identification of British Insects* **10** (16). Royal Entomological Society.

**Ray Morris**

## DIY Moth Genitalia Determinations

### 1 Introduction

The identification of moths by examining their genitalia 'Gen Dets' seems to me to have reached almost mythical status in terms of the skills and kit needed to undertake it. While it is true that the tiniest micro-moths require a technician with a steady hand to dissect and manipulate sub-millimetre parts plus suitable microscopes to see them with, many larger moths can be identified in this way with only the most basic of tools.

Let me be clear here: if you wish to produce publication quality images of dissections you will need to acquire much equipment and master many skills that require patience and practice. However, if you just want to be able to separate common aggregates such as minors, common rustics or daggers, then you will need only the most basic equipment to get results from your first attempts. Just think, you could then support your record with: 'Confirmed by Gen Det.' (By the way, I prefer the overall term 'microscopic examination' since in very difficult species we often need to look at the whole moth, not just the genitalia.)

Before we move on, just a word of caution. Not every moth will look like the reference photographs, as sometimes deformities are encountered, and occasionally the internal organs are almost completely missing. Mites are sometimes present and leave frass all over the show and fungal growths can obscure all recognisable parts. Occasionally, no matter how expert you are, the dissection just goes wrong and you have to give up.

### 2 Equipment Required

Most instructions that you will find on the internet are based on Hardwick (1950) which you can download for a fee from the link in the reference section. This is worth getting if you decide to take up dissection more seriously. But here we are going to simplify the dissection process to the absolute basics (Fig. 1).

Below is a list of what you will need, all of which can be bought from microscope suppliers, e-bay or other online shops. You may be able to make or adapt some things from household items. For example, I like to make my own very small dissecting needles.

- A dissecting microscope with an effective magnification of about x7 and perhaps up to x20 for identification (this can be a USB type used with a computer - I started with one of these, so I know that it can be done).



Fig. 1. You will need to assemble a range of equipment before you can start your first dissection. Setting needles start off straight and must be bent to your preferred shape.

- 10% Sodium Hydroxide (NaOH). This is best bought ready mixed. 10% Potassium Hydroxide (KOH) works just as well.
- Small glass tubes.
- Small shallow glass or plastic dishes for dissection.
- Dissection needles in handles - you can make or buy these.
- A small 000 paint brush for removing scales (I usually trim the bristles to make the brush stiffer).
- Deionised water (a small squeezable wash bottle is useful).
- A scalpel.
- Fine forceps (household tweezers are fine to start with).
- Disposable pipettes.
- Disposable gloves.

If you want to make microscope slides then you will also need:

- Glass microscope slides.
- Cover slips (there are many types - use Number 2, 18 x 18 mm, 0.16 to 0.19 mm thick).
- Aqueous mount (also known as Hoyer's mount).

Always wear disposable gloves while working. The more you use microscopes the more you become aware of small hairs and creatures that can be transferred to your hands. Be careful not to get either the 10%



Sodium hydroxide or aqueous mount on your skin, and if you do, wash it off quickly with plenty of water. I always keep a large container of water to hand while I am working as dilution is the safest way to handle spills and to soak used glassware prior to proper cleaning. Remember that dilution is your friend if accidents happen.

### 3 Method

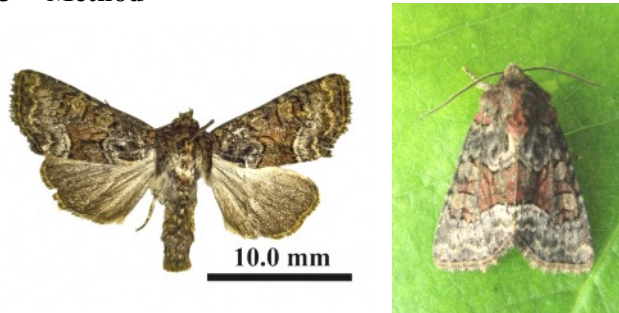


Fig. 2: We will use this Marbled Minor agg. as an example. A photograph from life is shown alongside the set specimen. Setting, although not essential, makes it easier to remove the body and also allows us to preserve the specimen for future examination. An indication of scale is always useful for identification.



Fig. 3: The body removed and soaking in 10% NaOH. Note the use of disposable gloves and the label in the tube. Good quality inkjet paper and pigment ink or a graphite pencil will survive 10% NaOH. Test your label separately because it will make a real mess if it dissolves.

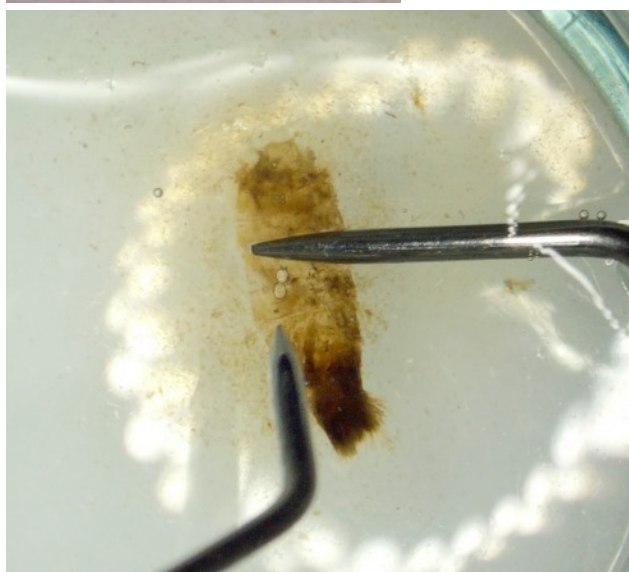


Fig. 4: Dissect the body under water. If it gets too murky then change it.

Experts and highly trained purists need to stop reading as the techniques described here are not how to produce museum grade permanent microscope slides. This is all about getting started with the dissection of larger moths. I have tried to keep each step simple, but if you get a copy of Hardwick (1950) or read the guide on the Moth Dissection UK website (Hall *et al.* 2021), you will appreciate the complexity of making permanent slides.

- Photograph the live moth and make a small label. I always include something for scale as size always helps identification (Fig. 2).
- Kill the moth by keeping it at least 48 hours in a freezer. Also do this if you have first killed the moth using ethyl acetate as we are making sure that any mites are also killed.
- Desiccate the moth, which might take a couple of weeks or longer. Setting the moth museum style is ideal, but drying in an airing cupboard works too. Larger moths contain a lot of fluid when fresh, which makes the dissection process more difficult. As you are a beginner, do everything you can to make the task easier.
- When the moth is completely dry, separate the body and place in a tube. With very hairy moths you can use a paint brush to clean off the hairs. Alternatively, you can change the water several times when you get to the dissection.
- Add sufficient 10% hydroxide solution to completely cover the abdomen and leave for 24 to 48 hours. That's right, this is a cold process (Fig. 3).
- After this time remove the 10% sodium hydroxide solution using a pipette and dispose of carefully by diluting in a container of water.
- Add deionised water to the tube with the abdomen and tip the whole lot into your dish for dissection.
- Using dissecting needles flatten the abdomen by stroking it from the tail end (posterior) to the head end (anterior, Fig. 4). The female organs are internal so you tear the external layers away to reveal the internal organs. The specimen illustrated is a male as the "claspers" can clearly be seen. These can be torn free from the abdomen (Fig. 5). With both genders it often helps to change the water or move the dissected parts to a dish with clean water. If all goes well, you should now be able to make a determination of species.

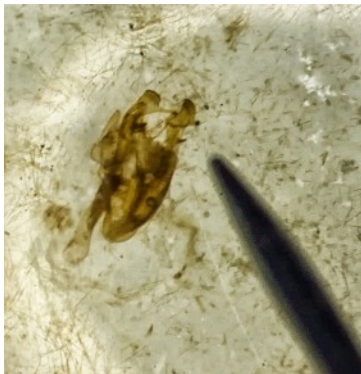


Fig. 5: The dissected parts floating in water are not squashed into the conventional flat layout, but with care, an identification can be made. It may be necessary to support your ID with a brief description of what you can see as the image is difficult to interpret.

#### 4 Preparing a Microscope Slide

The aqueous mount is slightly tacky and cures to a gel over time. It will eventually desiccate and crystallise, but this will take a year or so. Slides can be reworked by soaking in deionised water overnight, so do not be afraid if things go a bit wrong. The process steps are straightforward, but need practice because of the small sizes involved:

- Place a small drop of aqueous mount in the centre of the slide and spread into a thinner film that is larger than your specimen using a dissection needle.
- Using fine forceps or a dissection needle with a blob of aqueous mount, transfer the specimen to the centre of the slide. Try to shake off excess water.
- Using dissecting needles arrange the specimen. The tacky nature of the aqueous mount should help to stick parts into the desired arrangement. This takes practice as the dissected parts are fragile and you will break things at first, but an ID should still be possible.
- Place a drop of mount on a cover slip, invert and drop over the specimen. If all goes well, the specimen remains in the centre in a clear blob of mount. Bubbles move for a few hours, so be patient if you are attempting to photograph your slide. Store the slide flat or the coverslip and specimen will move (Fig. 6).



Fig. 6: The coverslip flattens the parts, so they may be seen and photographed more easily. Care is needed to get them to open into the desired arrangement.

#### 5 Identification

There are three stages to accurate identification of dissections which can be phrased as questions. Every time I make a mistake, it is because I rushed and did not properly consider each question in turn.

- Candidates: What are the possible species?
- Diagnosis: Which features can we see that confirm a particular species?
- Counterfactuals: Do the features we see eliminate all species other than our diagnosis?

Dichotomous keys take you through these stages in a very formal series of steps, and those in 'British and Irish Moths: an illustrated guide to selected difficult species' (Townsend, Clifton, and Goodey 2010) are short, well illustrated, and easy to use (Fig. 7.) This guide also helps with an introduction to the terminology of moth genitalia which you will need to learn, to progress to identifying more difficult species. Simply trying to 'picture match' will invariably end in discouraging mistakes possibly putting the lepidopterist off from developing skills in this useful extension of recording.

If you have separated a common species then a brief supporting comment covering all three ID stages should be sufficient for your record to be accepted. Avoid putting just 'Gen Det' – make it easy for the person verifying your records to see the care that you have

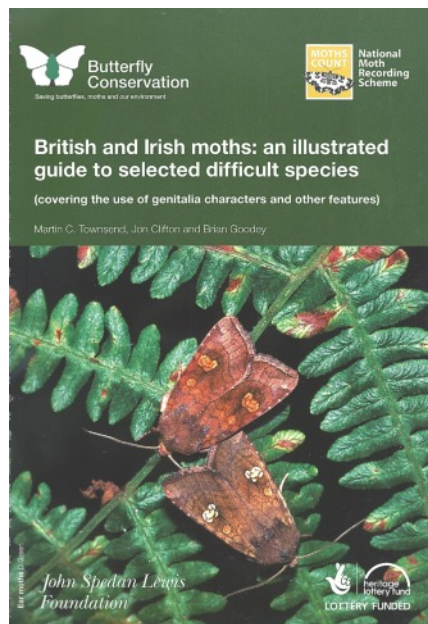


Fig. 7: *British and Irish Moths* is an excellent guide for beginners and experts alike. For the beginner it is especially useful as it clearly indicates the features needed for a safe ID. It is out of print, but available free online (see References below).



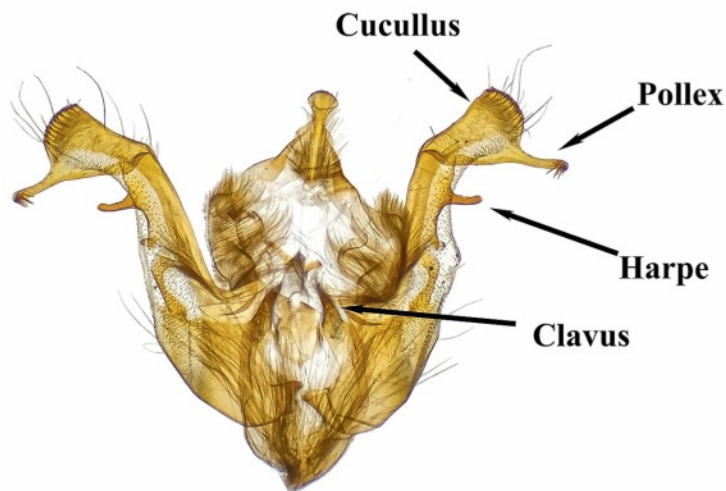


Fig. 8: A well-prepared microscope slide displays the dissected parts in a standard layout that allows comparison with other specimens. This image has been digitally developed to remove unwanted blemishes and align the dissection. The pollex is about about as long as the cucullus, the harpe are distinctly upturned, and the clavus are elongated giving a diagnosis of Rufous Minor *Oligia versicolor*.

taken, even if this is your first successful determination by dissection.

If it is not possible to produce a high quality image to support the identification you could include the following comment with the record:

Marbled Minor agg. separated by dissection. In this specimen the pollex about about as long as the cucullus eliminating *Oligia latruncula*; the harpe are distinctly upturned, and the clavus are elongated eliminating *Oligia strigilis*; giving a diagnosis of Rufous Minor *Oligia versicolor*.

A photograph of the flattened genitalia in a 'standard' position under a cover slip is the best way to support the record as demonstrated in Fig. 8 where digital development has been used to create a publication quality image. You will find it easier to get help with difficult identifications if you can produce good quality images, but you will have to decide if you want to invest time, money and effort in developing your skills.

Micro-photography is a topic in its own right and can get very complicated and expensive so it is not appropriate to mention it other than in passing here. Simply holding a mobile phone to the eyepiece can give good record shots of about the quality seen in Fig. 6 so is probably the best way to start. Many birders use a similar technique with telescopes, 'Digiscoping', and it can be adapted to work with microscopes. All my early micro-photographs were taken in this way, so I know it works. I did end up buying specialist microscope cameras, though.

## 6 Discussion

The motivation for this article has been to encourage more recorders to attempt 'Gen Dets' for themselves, and hopefully it has done something to remove the mystique that surrounds the process and place it in reach of the lepidopterist wishing to improve their skills.

The place to start is definitely with the Minors (*Oligia* sp.) and the Daggers (*Acronicta psi/tridens*). These are very common moths, but without dissection, they cannot be added to your list at species level.

The lepidopterist developing these skills will have to learn new terminology and will quickly find that the scientific names are useful in that closely related species usually have genitalia of similar appearance. The use of a microscope will also reveal the presence microscopic features on the adult moth invisible to the naked eye, and with this will come a greater expertise in quickly assigning live moths of all shapes and sizes to their correct family and genus, allowing you to take another step on the road of becoming an expert.

Finally, I am always happy to hear from, and help anyone trying to get started with 'Gen Dets'.

## References

- Hall, P., Clement, P., Clifton, J., Dale, M., & Terry, R. 2021. *Moth Dissection UK*. <https://mothdissection.co.uk>.
- Hardwick, D. F. 1950. Preparation of Slide Mounts of Lepidopterous Genitalia. *The Canadian Entomologist* **82** (11): 231-35. <https://doi.org/10.4039/Ent82231-11>.
- Townsend, Martin, Jon Clifton, and Brian Goodey. 2010. *British and Irish Moths: An Illustrated Guide to Selected Difficult Species*. <https://butterfly-conservation.org/moths/moth-resources-and-downloads/guide-to-difficult-species-online>.

**Dr. Paul J. Palmer**  
palmerpjp@gmail.com

## "Save Saffron Brook": *Sphenella marginata* revealed at Saffron Acres Bioblitz

Saffron Brook, also known as the Washbrook, flows from Oadby through Knighton and the environs of Knighton Fields, Saffron Lane and Aylestone Road joining the river Soar near Raw Dykes close to the Gas Works on Aylestone Road. With no deliberate strategy in mind, I have conducted gall searches more-or-less along the whole length of the brook over the 50 or so years since I first came to Leicester.

In the early days, these searches were largely confined to either end of the brook; I worked at one end and lived near the other. After the creation and development of Brocks Hill Country Park and Lucas Marsh in Oadby, these sites became honeypots for cecidologists (people who study plant galls). Over a hundred species of gall-causing organisms have been recorded at these two reserves. Rather special amongst these observations is that all four of the various morphologies of smooth spangle galls *Neuroterus albipes* have been seen at Brocks Hill (Leach, 2017). Just downstream from the other end of the brook, around Bede Island, further novel gall observations have been made. Perhaps the most spectacular of these was the observation that if the galls of the sawfly *Ura viminalis* L. (formerly *Pontania viminalis* and *Eupontania viminalis*) on Osier *Salix viminalis* are collected and stored on damp peat, they generate ancillary rootlets from internal tissues! Attempts, off and on since the 1980s, to coerce these galls to generate shoot and thereby create plants from galls have failed. Despite the ravages of "development", the area around the old Dunlop Factory site is still a good place to look for the galls of *U. viminalis*. Also, in the same stretch of waterway, I first found the galls of the tephritid

*Campiglossa misella* on Mugwort *Artemisia vulgaris* in the early 1970s. This fruit fly causes swelling of stems near their apices. By early July, the white larvae pupate with the pupa turning darkish tan as they mature. The beautiful pictured winged adults emerge during July and oviposit in flower heads where the emergent larvae feed without causing galls.

My gall hunts along the brook have been much more limited but have included excursions made jointly with the Botanical Society of Britain and Ireland to the Washbrook Reserve just off Knighton Park East, sections of the Washbrook that fall within the catchment area of Knighton Wild and to personal trips to Aylestone Meadows. The Washbrook Reserve is, in most years, an excellent source of the galls found in the female catkins of silver (and related) birch trees caused by three midge species *Semudobia tarda*, *S. betulae* and *S. skuhravae* and has provided material for further investigation (Leach, 2011; Leach, 2013; Leach & Redfern, 2012).

Over the years it is noticeable that the brook, as a "ribbon of nature", is under pressure resulting from human activities and neglect. Eroded banks, trampled and broken saplings, signs of oil, or similar, in the water, accumulation of discarded aluminium cans and polythene carrier bags seems to encroach on this potentially green corridor from the city's environs into its centre. In recognition of this, a number of local organisations, led by Leicester City Council, obtained almost a million pounds in funding to "Save Saffron Brook". Some of this is being spent on improving access, encouraging public engagement and, through working with NatureSpot, to encourage the recording of species along and in the brook. Two "bioblitzes" have been held, one in Knighton and one in Saffron Acres. It was from observations of the latter that a



Fig. 1. Normal Ragwort heads appear above and below a galled head, whose florets do not form properly.



Fig. 2. Normal head on the left and a galled head on the right, swollen at the base.



Fig. 3. The causer is revealed - a maggot of the Tephritid fly *Sphenella marginata*.



national stampede to examine ragwort was unintentionally initiated.

The bioblitz at Saffron Acres was held on Saturday 23 July at the Heath section of Saffron Acres. Very well attended, especially by young families, I found myself being out-competed by the attractions of being able to don beekeeping overalls to examine beehives, pond dipping and sowing wild flower seeds. Which was just as well, because the beginning of this summer's drought meant that galls on fleshy herbaceous plants were few in number and brittle in nature. Not the best of circumstances in which to recruit a potential audience. The larger bushes and trees were in a better state although they too were showing signs of water stress. Nevertheless, a list of 20+ gall causers were identified. The most interesting (at least to me) was the flower head galls of *Sphenella marginata* (a tephritid, Figs. 1 - 3) on Common Ragwort *Jacobaea vulgaris*. Until the day before the bioblitz, I was unaware that this existed. Photos of these galls (albeit of only mobile phone quality) were posted onto the British Plant Gall website (Fig. 1) and almost immediately stimulated many others to look, and find, this gall. Locally, for example, LRES member Hazel Graves began recording this gall in the more northerly areas of Leicestershire. This little flurry of activity resulted in this, hitherto neglected, species being reported in other areas including North Yorkshire, Greater Manchester, North East Cheshire, North Norfolk, Bedfordshire, Hampshire and the Isle of Wight. I doubt if this consequence was an anticipated outcome of the bioblitz agenda. Obviously *S. marginata* has been around for a while but has simply been under-recorded. I collected a number of these galls from Saffron Acres and elsewhere to see what might emerge. At Saffron Acres, I also looked for a very similar gall on Groundsel *Senecio vulgaris* caused by the midge *Contarinia jacobaeana*, usually regarded as very common. However, more-or-less all of the Groundsel on site was shrivelled or covered in a white mildew and no examples of this gall was found.

One final factor to ponder that was initiated, at least as far as I am concerned, at the bioblitz, was what will be the consequence of this year's drought (and excessive heat) on our gall causers and gall populations (and any other components of wildlife for that matter), in subsequent seasons? It was noticeable, at the Heath, that the more delicate and shallow-rooted plants had already shrivelled or were stunted. Even deeper-rooted plants such as thistles and knapweeds were showing stress and, those in shallower soil, such as areas bordering pathways, were more-or-less dead. Although I took no measurements, the galls of another tephritid, *Urophora jacaenae* on knapweed *Centaurea nigra* were rather scarce on the site and those that were found were small and extremely hard. Incumbent larvae were extremely small. Since the bioblitz, the drought has continued so the difficulties faced by these species will have intensified. From samples collected from other sites locally I guesstimated that the volumes of larvae are, on average, less than a sixth of those of larvae from previous years at the same stage. Perhaps we should be optimistic and anticipate that we might be able to write about the resilience of these species next year.

## References

- Leach, C. 2011. An invitation to contribute to the study of *Semudobia* galls. *Cecidology* 26 (2): 73-77.
- Leach, C. 2013. *Semudobia* project update. *Cecidology* 28(1): 11-22.
- Leach, C. 2017. Is Millenium Wood, Oadby an Incubator of Sibling Species? *LES Newsletter* 57: 7-8.
- Leach, C. & Redfern, M. 2012. *Semudobia* galls in birch catkins; a guide to the British Plant Gall Society's project. *Cecidology* 27(1): 12-25.

**Chris Leach**

## Megalegs in Leicester

In January 2022 I was clearing out my garden pond in Leicester which had become completely overgrown with Yellow Iris. I removed a plastic planting trough holding Marsh Marigold at the edge of the pond and between the trough and the butyl pond liner found a medium sized brownish spider. At that point, freezing cold, up to my knees in stinking pond water and sliding all over the place, I didn't pay it too much attention. But a spider is a spider, so I took the inevitable

collecting tube out of my pocket and potted it for later examination.

My initial thought was that this was a small *Metellina merianae* as they seem to favour plastic planters in my garden. However this was not the case, so I then assumed it was probably *Leptyphantes minutus*. I took a few photographs (Fig. 1) and the markings on the prosoma led me to *Megaleptyphantes*. *Megaleptyphantes nebulosus* is moderately common in VC55, but the epigyne (female genitalia) did not look quite right. Male *Megaleptyphantes* are easier

Fig. 1. "Megalegs" *Megalephyphantes* sp. near *collinus*



to distinguish from each other than females, but I only had a single female specimen, making life difficult.

Previously only one species of *Megalephyphantes* was known from the UK, *M. nebulosus*. In 1999 a similar spider was discovered in Kent, since when it seems to have increased its range along the Thames corridor, through south-eastern England and has now been found as far west as Cornwall. While closely related to the European species *M. collinus*, the new specimens appear to be sufficiently different to be treated as a good species in its own right. Although it has not yet received a formal scientific description, this spider is being recorded by the British Arachnological Society Spider Recording Scheme as *Megalephyphantes* sp. near *collinus*. Richard Gallon of the BAS was kind enough to confirm the spider as *Megalephyphantes* sp. near *collinus* from the specimen. Without a formal description and a name that is quite a mouthful, this spider has become popularly known as "Megalegs".

This record represents a considerable northwards range expansion for this synanthropic spider, although the

possibility exists that some earlier records, particularly females, may have been misidentified as *M. nebulosus*. In previous days, I had added the contents of some plastic sacks of topsoil around the margin of the pond so it is possible that the spider came to me via a large DIY chain. Unless further specimens turn up it is impossible to know if this species is now established in Leicestershire. I am always happy to receive spider specimens - you never know what might turn up.

#### Reference

British Arachnological Society Spider Recording Scheme summary for *Megalephyphantes* sp. near *collinus*

<https://srs.britishspiders.org.uk/portal.php/p/Summary/s/Megalephyphantes+sp.+near+collinus>

**Alan Cann**  
alan.cann@gmail.com



## New bugs for old?

2022 has continued to see a parade of "new" bugs (Hemiptera) not previously recorded in VC55. A productive trip to Saddington Reservoir in April yielded two unfamiliar species, *Orius laevigatus* (Fig. 1, no previous VC55 records) and *Teratocoris saundersi* (Fig. 2, one previous record, 2018). While *T. saundersi* is something of a nondescript, green Mirid, we have plenty of other records for similarly undistinguished bugs, so it does seem that this species is a new arrival. *Orius* is a rather different case. Female specimens are impossible to identify beyond genus level (without DNA analysis), and in some years of reasonably diligent searching, this was the first male *Orius* I had ever found! These admittedly tiny (2 mm) bugs have something of an invisibility cloak, but once you've got your eye in, they start popping up everywhere. The genus is actively exploited as a biological control for a range of insects, most commonly thrips but also aphids, whiteflies and mites. I started finding them on all the fruit trees in my garden once I had tuned in to their presence.

At Great Merrible Wood in July I found a female *Mecomma ambulans*, another species with no previous VC55 records (Fig. 3). These bugs are sexually dimorphic, the males macropterous and the females usually brachypterous. Fortunately, *M. ambulans* is one of the more distinctive females in the genus so it wasn't too difficult to identify. Given that this is a common species of woodland edges there can only be

Fig. 1: *Orius laevigatus*Fig. 2: *Teratocoris saundersi*

one plausible explanation for the lack of records - under-recording of Hemiptera.

After the August heatwave, with everything parched and brown, the eastern quarries supplied my entertainment. At Stonesby Quarry in mid-August I found lots of the distinctive stiltbug *Gampsocoris punctipes* (Fig. 4, one previous VC55 record, 2021). This species feeds on Restharrow *Ononis* and so is limited to where the foodplant grows. However there are plenty of sites in VC55 with Restharrow where it has never been recorded. A week later at Brown's Hill Quarry, Holwell, I collected the groundbug *Taphropeltus contractus* (Fig. 5, one previous record, 2021).

So what does it all mean? There can be no question that the parade of new species being recorded in VC55 is connected to changing climate and the resulting

Fig. 3: *Mecomma ambulans* (female)Fig. 4: *Gampsocoris punctipes*Fig. 5: *Taphropeltus contractus*Fig. 6: *Plagiognathus arbustorum* on my roses.

north-westward march of many species. However with the smaller, sometimes rather cryptic Hemiptera, we clearly have a paucity of data compared with more charismatic taxa such as Lepidoptera. This has serious consequences. When a new species is recorded in the County, the finder rejoices and publicizes the find on their social media accounts or an article in this Newsletter! However, with such incomplete data due to under-recording of bugs we really have no idea of what species we may be losing. Due to the under-recording of Hemiptera, a lack of records does not necessarily indicate the absence of a species - we simply don't know. Species loss may have serious ecological consequences. In the absence of data, let me resort to anecdote. Earlier this summer, the rose bushes in my garden were liberally covered in aphids. One week later, each rose shoot had its own resident *Plagiognathus arbustorum* (each one seemingly guarding its tiny territory), and no aphids (Fig. 6). Where would we be if these bugs went away?

**Alan Cann**  
alan.cann@gmail.com

### Broughton Astley Garden Moths

2022 has certainly been an interesting year for moths. We have had a lot of decent dry periods to keep the traps out. I have also had so many species that were new to me and for my Broughton Astley Garden (SP5293). Here are some of the highlights:-



Blue-bordered Carpet *Plemyria rubiginata*



Green Arches *Anaplectoides prasina*



Pine Hawk-moth *Sphinx pinastri*



Sandy Carpet *Perizoma flavofasciata*



Bordered Straw *Heliothis peltigera*

**Adam Poole**



## Weevil *Orchestes testaceus*, new to VC55



Fig. 1. Leaf mine in Alder caused by *Orchestes testaceus*.

On 3 June this year I was checking for leaf mines in the trees bordering the B581 in Broughton Astley, when I found leaf mines on Alder that I wasn't familiar with (Fig. 1). I took a mined leaf home to photograph, and when I checked it out further, was surprised, and very pleased, to find that the causer appeared to be the weevil *Orchestes testaceus*, new to VC55 and a UKBAP species. My first step was to seek the opinion of Rob Edmunds who runs the British Leaf miners website, and he agreed that this was the mine of *Orchestes testaceus*. However, while this correspondence was taking place I discovered a pupa in the pot containing the mined leaf.

On 8 of June this hatched and an adult weevil appeared (Fig. 2). At 3 mm this was too small for me to get any decent photographs - so my next port of call was to Graham Finch who kindly agreed to card it and photograph it for me - hence the excellent images (see front cover).



Fig. 2. Weevil *Orchestes testaceus*, 3 mm long. Photo: Graham Finch.

**Graham Calow**

## Fungus gnats - a real challenge!



The fungus gnats, as a grouping, comprise the families Diadocidiidae (3 species), Ditomyiidae (3), Bolitophilidae (16), Keroplatidae (51), Sciaridae (267) and Mycetophilidae (497). The latter family includes the sub-family Mycetophilinae which, with the exception of four species that are only associated with slime moulds, are associated with fungal fruiting bodies - hence their colloquial name. A few months ago, the Royal Entomological Society published a key for the identification of this sub-family (consisting of 27 genera and 334 species) and it is an amazing piece of work! Apart from keys for identification the book is liberally illustrated with adult images, wing patterns and genitalia preparations along with notes on distribution, habitat and, where known, biology. In addition, a list of fungal hosts and their fungus gnat inhabitants is included which may, perhaps, help reduce the amount of work needed to identify species. It also helps if you either have knowledge of fungi or have a friendly mycologist who can put you on the right track. This volume will attract those with little else to do and I suspect it could be all-consuming!

### Reference

Chandler, P. 2022. Fungus Gnats (Diptera: Mycetophilidae, Mycetophilinae). *Handbooks for the Identification of British Insects* 9 (8). Royal Entomological Society/Field Studies Council. ISBN-978-1-910159-07-1. £55.

**Ray Morris**

## Looking for help?

---

The following are willing to act as an initial point of contact for providing advice and information to members.

**Arachnids (Mites & Ticks):-** Ivan Pedley, 48 Woodlands Drive, Groby, Leicester LE6 0BQ. 0116 287 6886. [ivan.pedley@gmail.com](mailto:ivan.pedley@gmail.com)

**Arachnids (Opiliones, Harvestmen):** - Ray Morris, see page 2.

**Arachnids (Spiders):-** Paul Palmer  
[palmerpjp@gmail.com](mailto:palmerpjp@gmail.com).

**Arachnids (Pseudoscorpions):-** Ed Darby 01509 569670 [lboro.ecols@ntlworld.com](mailto:lboro.ecols@ntlworld.com)

**Biological Recording:-** Sue Timms, Leics & Rutland Environmental Records Centre; Room 400, County Hall, Glenfield LE3 8RA. 0116 3054108  
[Sue.timms@leics.gov.uk](mailto:Sue.timms@leics.gov.uk)

**Chilopoda:-** Helen Ikin, 237 Forest Road, Woodhouse, Woodhouse Eaves, Leics LE12 8TZ. 01509 890102. [helen.canids@btinternet.com](mailto:helen.canids@btinternet.com)

**Coleoptera:-** Graham Finch, 14 Thorndale, Ibstock, Leics. LE67 6JT: [finchgraham1@gmail.com](mailto:finchgraham1@gmail.com)

**Collembola:** Alan Cann, 17 Overdale Road, Leicester LE2 3YJ. [alan.cann@gmail.com](mailto:alan.cann@gmail.com) Online identification guides:  
<https://collembolla.blogspot.com/p/identification-guides.html>

**Diplopoda:-** Helen Ikin (see Chilopoda).

**Diptera (Some families):-** Ray Morris (see page 2).

**Diptera (Nematocera - Mosquitoes, Blackflies & Craneflies):-** John Kramer, 31 Ash Tree Road, Oadby, Leicester LE2 5TE. 0116 271 6499.  
[john.kramer@btinternet.com](mailto:john.kramer@btinternet.com)

**Hymenoptera (Symphyta - Sawflies):-** Dave Nicholls, 69-71 Church Lane, Ratby, LE6 0JF.  
[davidnicholls125@gmail.com](mailto:davidnicholls125@gmail.com)

**Hymenoptera (Bumblebees):-** vacant.

**Hymenoptera (Other aculeates - Bees, Wasps & Ants):-** Helen Ikin (see Chilopoda).

**Hemiptera:-** vacant.

**Isopoda (Woodlice):-** Helen Ikin (see Chilopoda).

**Lepidoptera:-** County Moth Recorder Team:-  
[VC55CMR@gmail.com](mailto:VC55CMR@gmail.com)

**Mecoptera, Neuroptera, Plecoptera :-** Steve Woodward, see page 2.

**Mollusca:** - Dave Nicholls (see Hymenoptera (Symphyta)).

**Odonata:-** Ian Merrill [i.merrill@btopenworld.com](mailto:i.merrill@btopenworld.com)

**Orthoptera:-** Helen Ikin, see Chilopoda.

**Psocoptera:-** Helen Ikin, see Chilopoda.

**Thysanoptera:** - Ivan Pedley, see Arachnids - Mites.

**Trichoptera (adults):-** Ray Morris, see page 2.

---

## 2022-3 Indoor Meetings Programme

---

All meetings 7-9 pm in St Bart's Community Hall, Main Street, Kirby Muxloe, LE9 2AL (unless otherwise stated). Guests are welcome to join us at meetings.

- Friday 21 October 2022: Members Evening (guests welcome).
- Friday 18 November: Graham Finch: *How to Find Rare Beetles*.
- Friday 9 December: Steve Woodward: *More than Meets the Eye - Grace Dieu*.
- Friday 20 January 2023: Ray Morris: *Flies - what, where and when?*.
- Friday 17 February: Tim Sexton: *The Underwater World of Rutland Water*.
- Wednesday 1 March: Richard "Bugman" Jones: *Wasps - much more interesting than boring old bees*. (Joint Meeting with Leicester Lit & Phil Natural History Section at Leicester Museum).
- Friday 17 March: AGM & Members' Evening.

**Alan Cann**  
**Secretary**

---