

Finally it's summer! For many of us, this is the busiest time of year, with recording in full swing.

There are plenty of ways to get involved this summer, starting with the <u>Wildlife Trust's 30 Days</u> <u>Wild</u> (running all month), and the Natural History Consortium's <u>Festival of Nature</u> (10-18 June).

We saw plenty of lawns taking part in #NoMowMay last month. If #NoMowMay has you inspired by the meadow in your lawn, then you can look forward to National Meadows Day, which is just around the corner! This year it falls on Saturday, 2 July, and more information can be found on Plantlife's Meadows' Hub.

Also on Saturday, 2 July is the Parks Trust's <u>Love</u>
<u>Nature Day</u> in Milton Keynes. This event is free with family-friendly fun, including bug hunting, pond dipping, and guided walks through the ancient woodland, Howe Park Wood SSSI.

There's plenty happening in the south of the county too; the Chilterns AONB has events ranging from heritage walks and open gardens, to practical workshops and training in traditional skills such as scything: see the full programme on their website.

And do remember, if you are out and about in Buckinghamshire or Milton Keynes, we want your records! You can submit them to BMERC directly or through iRecord.

To keep up with BMERC between issues, you can find us on Twitter: @BucksMKERC or visit our website: www.bucksmkerc.org.uk

Buckinghamshire Council

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Would you like to write for our next issue? For more information, email erc@buckinghamshire.gov.uk



Annual Recorders' Seminar 2022: Connecting the Dots

After the success of the 2021 online seminar and with the ongoing uncertainty relating to Covid-19, BMERC decided to hold the seminar online again this year.

The theme, 'Connecting the dots,' had been the original title of the cancelled 2020 seminar and the 2022 line-up included some of the original speakers. This theme could be interpreted in many different ways: connecting recorders; linking habitats; the connection between species, their habitats and us as the observers.

Sadly, despite the popularity of last year's seminar when we had over 100 people attending, this year had lower attendance than average. Maybe people have just had enough of online events or the fact that it was slightly later than usual in the year had an impact on numbers. While attendance was disappointing, we were grateful to hear that those of you who did attend found the day enjoyable!

"Thank you so much for this really valuable conference. So many experts and such a great overview with all the links to get involved."

"Miss the lunch and the stalls but don't miss the driving. Still, even online it is all very friendly and one feels part of a community."

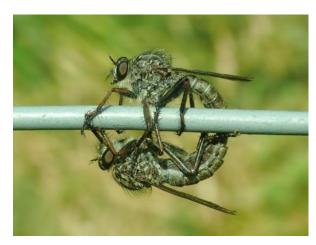
A lot of the feedback received mentioned the online/offline split. Next year we will be looking to return to an 'in person' event of some kind, perhaps something a little different to the standard seminar, with more focus on recorder updates and more interaction—something many of us have missed over the past two years.

For those who could not attend, the day included presentations on a range of topics from the Ancient Tree Inventory to Important Invertebrate Areas. There was also a useful demonstration on the importance of the records with a presentation on 'The Changing Flora of Urban Woodland.' Open University PhD student Holly Woo has used BMERC records to compare the flora of urban and rural woodland in and around Milton Keynes. It was good to see our records being used for research rather than just by developers!

City Girl in Nature was another popular presentation charting Kwesia's personal journey, a young woman from inner city London offered an unusual opportunity to visit a South American rainforest. This lead to her connecting with nature for the first time and began her mission to help others from her community find and experience the joy of nature.

We also bade fond farewell to Neil Fletcher who has decided to abandon us in favour of spending more time with his family and, probably more accurately, his moths, beetles and birds! We surprised him with a photographic tribute and would like to say a big 'Thank you' to all his friends who provided us with the photographic evidence of his fascination with little beasties. Everyone at BMERC would like to thank him for all his sterling work over the years, we look forward to the copious records he will now be submitting and wish him well for his 'retirement'.

Invertebrates swept the board in the photography competition: congratulations to the joint winners, Rachel Maytum for her gorgeous newly emerged Small Elephant Hawkmoth, and Sue Taylor for her wonderfully symmetrical image of two Robberflies, arguably not ordinarily the most photogenic of species! Paul Lund was a worthy third with his photograph of an Orange Tip butterfly emerging whilst a Springtail appears to look on. Well done to everyone who entered, we are glad it is a public vote as the standard is so high there is no way we would be able to choose from all the wonderful shots.



Above: Sue Taylor, Reflecting on the balance between the manmade and the natural. "These Robberflies (Tolmerus atricapillus) chose to mate on a wire fence, their bodies creating a sort of symmetry around a manmade structure."

Right: Paul Lund, *Butterfly egg hatching with Springtail*. "Taken in my Bancroft garden using a tripod, macro lens, twin flash and some patience."

Sadly, this year we had fewer than usual updates from our county recorders with several potential speakers unable to attend. If you have a project or survey that you would like to promote, you can email us and we can share it via the quarterly newsletter and on our website. And if you would like to speak at a future seminar do get in touch!

Thank you to all of our speakers, and as always, our excellent host, Mick Jones MBE.

The recording of the day is available on YouTube, and includes all the talks divided into the morning and afternoon sessions:

Morning Session
Afternoon Session

You can also find information about the day, including the programme and Q&A, on the BMERC website: www.bucksmkerc.org.uk/seminar

Whether it is online or in person, we look forward to welcoming you again next year and if you have any ideas or requests for future events do get in touch and let us know your thoughts!



Left: Rachel Maytum, Newly Emerged. "I captured this newly emerged Small Elephant Hawkmoth drying out on an Oxeye Daisy last summer in the car park at College Lake. It just goes to show you should be aware of what's around you the moment you step out of the car; you never know what wildlife gems you are going to discover!"





Glow worms in Buckinghamshire

Robin Scagell, UK Glow Worm Society

Buckinghamshire is one of the top counties where glow worms can be seen. Everyone has heard of them but few have seen one, and people are often surprised to hear that these amazing insects are to be found in the UK at all.

Glow worms (Lampyris noctiluca) are beetles that use light rather than pheromones or any other means to attract attention to themselves for mating purposes. They favour poor soils, so are particularly common in the Chilterns, although another favourite habitat is railway lines, both used and dismantled. Although the glow from the adult female glow worm can be seen from up to 50 metres away, she only glows after dark in June or July, usually later than 10:30 pm, which is not a time when most people are out and about on foot. The glow, although bright, can't compete with car headlights so even a lane lined with glow worms will not be noticed these days. As a result, many sightings come from late-night dog walkers and pub returnees or from nature watchers there for another purpose such as viewing badgers or foxes.

Streetlighting is another issue. It is the wingless adult females that glow, and the flying males search for the glow among the vegetation. Streetlighting reduces the visibility of the glow against the background, and in some cases the streetlights themselves create a distraction for the males. Glow worms are also attracted to house lights and, these days, solar lights in gardens. Curiously, although the light from a glow worm is greenish, there is a red

component as well, and male glow worms are also attracted to red lights.

As a result, glow-worm numbers are thought to be declining, although paradoxically the number of reports increases year on year. When I started the UK Glow Worm Survey in 1990 there was no Internet and anyone seeing one had no easy way of finding out more or of reporting their sighting. These days, a few taps on the phone will provide all the information you want and, often, a link to the Survey website, www.glowworms.org.uk, where people are encouraged to send in their reports. We use the excellent iRecord system for wildlife reporting, which can be used to report any wildlife sighting in the UK, from woodlice to walruses. We have a specific glow-worm reporting form, accessible via our website, which provides fields for information of particular relevance to glow worms, such as presence of nearby lighting, but we get records submitted on its app or the forms of other recording schemes.

The life of a glow worm

Most of the lifetime of a glow worm is spent at the larval stage. The larvae are predators, foraging mostly for snails and slugs. They attack these by nipping them and injecting a toxin which paralyses their victim while they feed. Occasionally they will feed on carrion such as dead birds. Hunting usually takes place at night, on the ground or on vegetation close to the ground. The larvae do actually have glowing organs, but they limit their glows to occasional flashes, lasting a second or so.

Sometimes, particularly in autumn, these flashes can be quite frequent, and the larvae become noticed. We think that the flashes are a sort of warning to predators, akin to the yellow bands of a wasp.

The larvae are quite distinctive, having a multi-segmented body with pinkish spots at the edges of the matt black segments. People sometimes confuse them with ladybird larvae, but those have a more jagged back. When hatched the larvae are only about 2 mm in length, but after two or maybe three years they have grown up to 25 mm long. There is no obvious difference between the sexes at this stage except that the larger larvae generally become females which are usually larger than the males. Although the larva has legs on its front segments, when moving its body may arch up rather like that of a caterpillar, helping itself along using its tail. This may be why they are called glow worms in many languages.

Typically in their second summer the larvae seek out a place to pupate. During April and May they can be seen by day, investigating hidey holes or crevices. We get a lot of reports of larvae at that time from places where the night-time glowing females have not previously been noticed, often from nature-lovers who spend their walks always glued to the ground.

After pupation the adults emerge, with the females climbing grass stems or just sitting on the ground, curling their abdomens upwards so as to reveal their glowing final segments on the undersides of their bodies. The glow is produced by mixing two chemicals, as in those glow sticks that you buy at carnivals. But contrary to myth they can't turn off the glow if danger threatens. The glow may indeed suddenly disappear, but this is because she wiggles her tail around so as to maximise its visibility to the flying males.

When the object of her desire arrives she promptly starts to make her way down into her hiding place, carrying him with her, turning off her glow slowly as she does so. This takes a matter of minutes. A day or so after mating she lays her eggs. Neither sex can feed as adults, so she will probably soon die, while the male may have another week or two of life left.



Above: On the left is an adult female glow worm (facing left) and right a larva (facing right). Photo: Robin Scagell.

Below: Glow worms mating, with the smaller, winged male on top. Notice his large eyes, to help him spot the glow of the female from a distance. Photo: John Tyler.



Where and when to look

So where should you look for glow worms? A glance at the distribution map (see next page) shows that they are common in the Chilterns but largely absent from the Vale of Aylesbury and Milton Keynes, although there are occasional pockets of them in that area. The precise locations of publicly accessible sites are kept up to date on a blog at ukglowworms.blogspot.com that has been running since 2009. Look through each year's sightings by searching on 'Bucks' to locate them. Good and reliable sites are Ivinghoe Beacon near Tring, Aston Rowant Nature Reserve near Stokenchurch, West Wycombe Hill and Spade Oak Nature Reserve near Marlow. Use the blog to find the exact spots. You need to start looking as it gets dark, when you can no longer see colour in the landscape by ambient light. The glow worms do tend to favour open areas where the flying males can find them, although they can also be in open woodland. The glowing lasts for up to two hours each night, so numbers seen decline after midnight.

Right: The distribution of glow worms in Bucks and surrounding areas. The green dots are from the UK Glow Worm Survey prior to 2017 (Bucks only), while the blue circles are from iRecord, mostly since 2017. Base map from Topomap.

But numbers do vary widely from year to year and from night to night. The glowing season extends from the first week in June to the end of July, and sometimes later, but you could search a known site in the middle of that period and not see one, then a week later or another year there could be dozens or even hundreds. But bear in mind that the glowing females are all unmated, so the sight of a whole hillside of glow worms is not necessarily a good thing. These are maiden ladies who have been left loveless, to be anthropomorphic. They will climb their grass stem night after night, particularly towards the end of the season, until they run out of energy and die. By contrast, on what is really a good night you might have to be quick to find any, as the girls get snapped up straight away soon after dark and all turn off their attractive lights as soon as they find a suitable beau.

There are probably many more glow-worm sites than those we know of. This year, a glow-worm larva was spotted in a community garden in Hitchin, Herts, not far from the middle of the town but near the railway line, so they are not necessarily all in remote spots. Even Milton Keynes may still have some hidden away – one was reported a number of years ago. They may be found along the verges of country lanes, usually quite localised. Footpaths alongside railway lines are worth checking, and of course disused lines as well. Rich arable land is not generally suitable, but every so often they turn up in unexpected places.

Should you see glow worms, please do send in a report <u>via iRecord</u>, even if it is a well-known site. We need to know how these delightful and endearing insects are faring, and their knack of signalling their presence to us makes them particularly useful to science.



Smallest Tiny Mouse—Micromys minutus—have you seen one?

Julia Carey

Several of the online Latin translation services for *Micromys minutus* (Harvest Mouse) cite it as "smallest tiny mouse" or variations on that theme, reflecting the true nature of this well-loved but diminutive species.

Fully grown adults are much smaller than other mouse species – at only 5-8 cm long half of which is its tail! Its almost bald prehensile tail and adapted hind feet aid its strong climbing habit. Their weight very much depends on food resources and where they are in the season, ranging from 5-11 g, so much of year adults weigh little more than a 20 pence piece (5 grams).

Once a common site on farms, wastes and wide lanes, our native Harvest Mouse is now very much a rarity in Buckinghamshire. BMERC only holds records for 12 sites from 2000 onwards, and just 5 sites from the last 5 years. Records for this millennium are scattered across the county from Stoke Goldington in the far north, through Milton Keynes and near Aylesbury out to Thame and Pitstone, and down to the Marlow area.

BMERC is keen to find out if anyone else has seen Harvest Mice in Bucks, even as literally something the cat dragged in, or by spotting the archetypal nests which appear to levitate, built well above ground in their favoured cereal crops, verges, hedgerow edges and reed beds. If anyone

has anecdotal information or records of this species, please do let us know; you can find our contact details on the last page of the newsletter or visit our website.

Additionally, the Mammal Society are looking to re-run the Harvest Mouse survey this autumn: "groups of Harvest Mouse volunteers will be searching up and down the country for Harvest Mouse nests so we can record where this species has and has not been found." Some of you may have taken part in Harvest Mouse nest searches before, but if you have not, the Mammal Society can put you in touch with survey coordinators and trainers near you, please use the links below.

Status: Harvest Mice sit on the GB Red List, as near Threatened, and are a Priority Species under the UK Post-2010 Biodiversity Framework. They are protected from deliberate cruelty under the Wild Mammals Protection Act.

More info on Harvest Mice can be found online:

Mammal Society Fact Sheet
Wildlife Trust Species Information

You can register your interest in the Mammal Society survey through their online form or contact their team at surveys@themammalsociety.org

Photo: Neil McIntosh. CC-BY-SA 2.0.



What on earth is that? The BMERC Team

Can you identify these species found in Bucks and/or Milton Keynes? Answers will be in the next issue!







Answers from last issue:



Scarlet Elf Cup (Sarcoscypha austriaca)



Mother Shipton moth (Callistege mi)



How should children learn about the natural world? A young naturalist's perspective Danny Sedgwick

Something which I, and many other young naturalists share, is a curiosity about the world. We have a desire to understand how and why things interact in the way that they do. In my case this curiosity about the natural world expresses itself in, what I've been told is, an innate ability to teach myself about the subject.

This ability has many advantages, for example I am more or less entirely self-taught, I've had no formal teaching in relation to natural history. This lack of formal teaching has allowed my interests to develop naturally, there has been no pressure to pursue or learn about specific subjects. This, I feel, has made my connection with the natural world stronger and more 'real'.

The idea of making children form a 'false' connection with the natural world is one of the reasons why I believe the proposed Natural History GCSE requires more scrutiny. How will it be taught? How can it be used to inspire a lifelong interest in the natural world? If children are examined on the subject, will they just treat it as yet another tick box qualification?

With my formal schooling giving me no grounding in the natural world, I have had the freedom to teach myself. But this has been challenging. For example, I would love to develop a greater understanding of entomology but due to the complexities of the subject access to an expert or an expensive key is often required. Having access to resources, like the ones just mentioned, is one of the things I find most

challenging about being a young naturalist. As well as this, finding a balance between external input, in the form of talking to experts, and leading my own learning by focusing on those things I have a particular interest in is also a major challenge.

The main way I have developed an understanding about the natural world is through my local patch. My local patch is the Floodplain Forest Nature Reserve (*pictured above*), a former gravel pit located on the outskirts of Wolverton, Milton Keynes.

Over the last few years I have spent an increasing amount of my time at the Floodplain Forest Nature Reserve, immersing myself in the wildlife which the site has to offer. I have had countless brilliant wildlife encounters on the site, however the highlight so far this year, 2022, was finding a Grizzled Skipper (below).

This was the first record for the site and the first individual in Milton Keynes for many years. Finding this butterfly really made me appreciate the importance of local ecological recording.



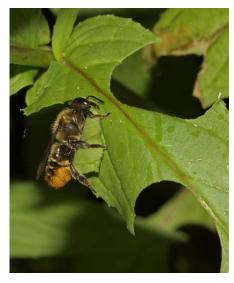
In no way would it be a stretch to say that the Floodplain Forest Nature Reserve is where I cut my teeth as a naturalist. My experiences at the site have only increased my desire to work in conservation. I want to do something which will give back to the thing which has given and will continue to give me so much joy – the natural world.



Another odd spring is now behind us, hot and dry, cold and dry, a splash of rain and then more of the same – a marked contrast to the cold and wet of last year. The new normal seems to be that there is no normal! Not easy for our native wildlife to adapt.

There have been spectacular displays of Bluebells throughout the glorious ancient woodlands across the county. Early Purple Orchids (*Orchis mascula*) are also in full bloom in some woodland and beginning to go over, along with Common Twayblade (*Neottia ovata*) and White Helleborine (*Cephalanthera damsonium*). If you are an orchid lover other species will be popping up across different habitats as the summer proceeds; we've spotted Bee Orchids (*Ophrys apifera*) and Pyramidal Orchids (*Anacamptis pyramidalis*) already on road verges and in parks. If you're looking for something more unusual, have a look at the BBOWT website to find a reserve near you and marvel at the diversity of nature as the year progresses.

Whether you're in the middle of a nature reserve or your own back garden, take part in the UK Pollinator Monitoring Scheme by doing a simple FIT Count! All it takes is ten minutes and good weather. A FIT Count asks you to identify only the basic groups of insects, meaning it's a great introduction to recording insects. The UK PoMS website has plenty of information and resources to help you, or download the app to your mobile device and FIT Count from anywhere.



A female Patchwork Leafcutter bee gathers nesting material, leaving behind the characteristic cut-outs. Photo: Line Sabroe CC-BY-SA 2.0.





Above: Tiny Pyramidal Orchids on a road verge. Left: Early Purple Orchid.

You can expect to see all of the "Big 8" bumblebees if you're doing a FIT Count in Bucks, but there's also a good range of solitary bee species in the county, so look out for Ashy Mining Bee (Andrena cineraria), Chocolate Mining Bee (Andrena scotica), and Red Mason Bee (Osmia bicornis), among others.

If you're out in the garden, you might notice the distinctive semi-circular holes on leaves that indicate Leafcutter bees have been to visit; up to 40 pieces of leaf are needed to build just one nesting cell! Of the seven Leafcutter species in Britain, in this area you're most likely to encounter the Patchwork Leafcutter (*Megachile centuncularis*) and the Woodcarving Leafcutter (*Megachile ligniseca*).

July will also see the annual Big Butterfly Count. This year it runs from Friday 15th July to Sunday 7th August, why not sign up and take part? It's a fun activity to do with children. There's more information on the Butterfly Conservation website. Three quarters of Britain's butterfly species can be found in our patch, as well as numerous moths; visit the Upper Thames Branch of Butterfly Conservation website to explore local species.

Whatever you're spotting this summer, we look forward to receiving your records!



What have we been up to?

Mark has been learning about the identification differences of newts and passed a course on how to survey for newts in the depths of a long Surrey evening. Whilst passing through Surrey I was able to explore Chobham Common and the biodiversity of the heathland. I found some very happy Roundleaved Sundew (*Drosera rotundifolia*) – the fascinating insect-eating plant which brightened my day!



Fiona has been asking herself 'why have I bought a house in Lincolnshire??' She is now splitting her time between chicken wrangling in Lincs one week a month and relaxing working in Bucks the rest of the time. The survey season is well underway and recently she has been lurking in the shrubbery looking for White Helleborines (Cephalanthera damasonium) and giant Adder'stongue (Ophioglossum vulgatum).



Claudia has been busy day and night with amphibian and reptile surveys. Highlights of the season so far are a close encounter with an adder and the event with the New Shoots. If you were in the south of the county one Friday night you could spot around 20 people (half of which young adults) with torches, bottles, books, wellies, detectors, sheets and lamps wandering around ponds and trees looking for bats, moths and newts. Despite the chilly evening the event was a success with all three species of newts found in one pond and some happy young surveyors! Thanks to Nick Marriner, Neil Fletcher, Mike Jennings, Martin Albertini, Agni and Charley.

Matt has been getting stuck into his first survey season. In his spare time he has been on his traditional spring dawn chorus trip to Knepp to hear the Nightingales, Turtle Doves and to visit one of his favourite trees. Also look at this amazing blackthorn 'topiary' made by the grazing livestock!



Julia's focus has been on wildlife immediately around us, and how we affect it and it affects us. Given that her lettuces got battered by giant slugs and snails, field voles ate her orchids, and the frogs haven't been seen since a grass snake rolled by, she's helping *some* wildlife at least.

Rhiannon has been surveying road verges, planting wildflowers, and sadly preparing to leave BMERC in July—thank you for five years of fun & learning!





Resources Round-Up

This is a round up of all of the links in this issue, plus ways to get involved and items of general interest:

BMERC Annual Recorders' Seminar www.bucksmkerc.org.uk/seminar

Wildlife Trust: 30 Days Wild www.wildlifetrusts.org/30dayswild

The Natural History Consortium Festival of Nature www.bnhc.org.uk/festival-of-nature

National Meadows Day

meadows.plantlife.org.uk/national-meadows-day

The Parks Trust: Love Nature Day

www.theparkstrust.com/events/love-nature-day

Chilterns AONB: Upcoming events www.chilternsaonb.org/events.html

The UK Glow Worm Survey & Blog www.glowworms.org.uk ukglowworms.blogspot.com

iRecord irecord.org.uk

Mammal Society, Harvest Mouse Project www.mammal.org.uk/science-research/harvestmouse-project/ Wildlife Trust: Harvest Mouse Information

www.wildlifetrusts.org/wildlife-explorer/mammals/ harvest-mouse

BBOWT Nature Reserves

www.bbowt.org.uk/nature-reserves

Bumblebee Conservation: The Big 8

www.bumblebeeconservation.org/beethechange/wp-content/uploads/2021/03/Big-8-Common-Bumblebees.pdf

UK Pollinator Monitoring Scheme: FIT Counts

ukpoms.org.uk/fit-counts

Big Butterfly Count

bigbutterflycount.butterfly-conservation.org

In the news:

How to spot bark beetles & deadly fungus: the UK's new tree-saving lab needs your help (The Guardian) theguardian.com/environment/2022/may/13/new-58m-tree-disease-lab-sends-out-sos-for-public-to-report-pests-aoe

5,000-year-old giant: How long does the world's oldest tree have left? (EuroNews) www.euronews.com/green/2022/05/29/5-000-year -old-giant-how-long-does-the-world-s-oldest-tree-have-left



Our Final Thoughts

That's all from us for this issue; for the rest of the summer, you can find us out and about meandering in meadows, hiding in a hedgerow, or skipping along a stream (carefully, of course!)

Wherever you happen to find yourself recording this summer, enjoy yourself and keep safe! We look forward to receiving your records and we'll see you in the autumn.

If you have a project, recording scheme, or species group you would like to promote in our quarterly newsletter, we would love to include you. We're also open to general articles on any relevant natural or historic environment theme! Our contact information is below.

Best wishes from the BMERC Team, Claudia, Fiona, Julia, Mark, Matt & Rhiannon



Buckinghamshire & Milton Keynes Environmental Records Centre

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