



Buckinghamshire & Milton Keynes Environmental Records Centre

Newsletter—3rd Edition

August 2020

Welcome to the third edition of the BMERC newsletter. Since the June issue, we have been able to start getting back out on site visits—while following guidelines to stay safe, of course.

As restrictions ease, lots of people are once again able to visit nature, including many beautiful parks, nature reserves and local green spaces across Buckinghamshire & Milton Keynes.

If you're looking to get involved with conservation from your back garden (or from farther afield) why not take part in Butterfly Conservation's Big Butterfly Count? Be part of this nationwide survey and help take the pulse of nature:

⇒ [Visit their website for more information](#)

Last issue, we had an article on providing water sources in gardens. With the continuing hot and sunny weather, it's especially important to think about our water use, as well as providing water for wildlife. The Chilterns AONB has published some great tips to help us all conserve water at home:

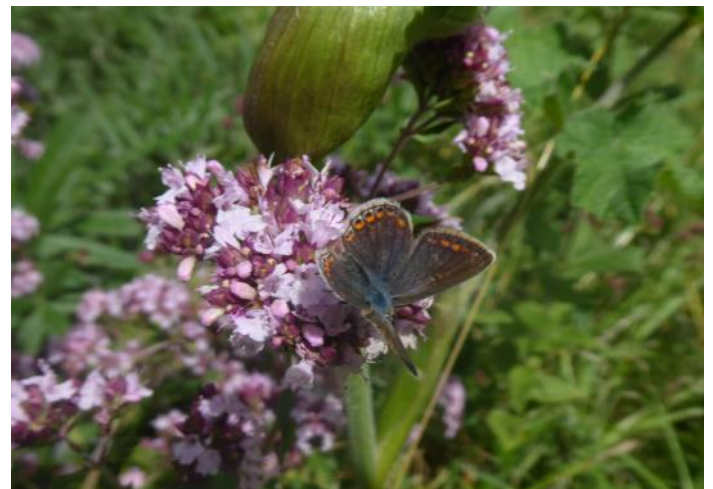
⇒ [Saving Water in the Chilterns](#)

For our August issue, we have put a focus on meadows. Some of the team has been able to participate in some social-distanced site assessment training, visiting sites in Pitstone and Bedgrove to survey different types of grassland. This training helps to increase skills across the team and will hopefully lead to more sites surveyed in the future.

We hope you enjoy this issue!

In this issue, we have updates from across the team, as well as projects and ways to get involved:

- **Meanderings in Meadows**
BMERC Team p. 2
- **What on earth is that?**
BMERC Team p. 4
- **New Buckinghamshire Mammal Group**
Kristin Thompson p. 5
- **South Bucks Ancient & Veteran Trees Project**
Claudia Bernardini p. 6
- **Identifying Weevils**
Emma Foster p. 8
- **What we've been up to since last issue**
BMERC Team p. 9
- **Resources Round-up**
BMERC Team p. 10
- **Our Final Thoughts**
BMERC Team p. 10





Meanderings in Meadows

The BMERC Team

It came as a bit of a surprise to most of us that Saturday the 4th July was National Meadows day, like with so many things this year several events have slipped past unnoticed. Undeterred, the BMERC team individually took on site visits, research online, looking at a garden lawn as an honorary meadow habitat and other small things linked to the general meadows theme anyway; the following sections are short summaries of our meanderings in early July.

Julia—Road Verge Nature Reserve

Generally when we think of meadows we seem to envisage flower and grass rich fields, perhaps bounded by a network of thick hedgerows and skylarks trilling overhead. It's likely we also associate them with some sort of bucolic management be it horse or tractor driven. This of course ties in loosely with the southern reality of these habitats in many places, but isn't always the case in Buckinghamshire.

"Lowland Meadow" as a Priority Habitat is broadly defined as most forms of unimproved neutral grassland including floodplain meadow across the enclosed lowland landscapes of the UK. They include both grasslands cut for hay, as well as neutral pastures where livestock grazing is the main usage as well as hay cropping. Perhaps the less predictable guidance is that they also include non-agricultural settings; such grasslands are less frequent but additional examples may be found in recreational sites, church-yards, roadside verges and a variety of other localities. Increasingly these small areas of meadow habitat which have been trapped or captured by non-agricultural land uses (including also



parks, private gardens, graveyards and orchards, etc) become more significant, acting as valuable reservoirs for all species associated with them.

Vaguely with all of that in mind, and as I was literally passing, I'd dropped in on an area of Road Verge Nature Reserve, to the south of Risborough where the Upper Icknield Way meets Shootacre Lane. A lovely little spot and the meadow-like area was looking great. The infrequent mowing and assorted other small items of care seem to be suiting it. Scented carpets of Lady's Bedstraw were in full flower as well as Greater Knapweed, Field Scabious, Yellow-rattle and Wild Marjoram. The lovely warm weather that day meant that many grasshoppers sung undiscovered in the longer grass areas and a good number of Marbled Whites skipped from flower to flower in tandem with many and various bees, beetles, moths and hoverflies to name but a few. It's not a large area but is still very much providing home for many species quite successfully; hopefully one of many within the county we have yet to discover.

Fiona—Future Meadow?

My site is less meadow and more of a 'wannabe', perhaps a meadow of the future? Olney Town Council own a lot of amenity grassland, mostly the usual bright green desert of sports pitches. One exception is a small, heavily dog-walked field sandwiched between the football pitches and the allotments. This area has had fewer fertiliser and herbicide applications but until this year was still being mown on a very regular basis leaving little of any wildlife value. Working with some wildlife-friendly Olney residents, together we developed a plan to try and increase the diversity and wildlife potential. The town council have taken that on board and this year have left the area to grow, only mowing pathways through the grassland. It is early days, but the results are looking promising. The numerous different grasses already give the field a softer, more appealing feel with a range of soft hues reflecting the different species. Despite the past treatment some of the more common wildflowers have managed to hang on. Ribwort Plantain, Yarrow, Field Bindweed, Meadow Buttercup, Red Clover and a variety of Speedwells might not set our pulses racing, but I am sure pollinators appreciate them. There is also a splendid display of Woolly Thistle which seems quite common in this part of Bucks. Managing the area like a hay meadow with a late summer cut and removal of all the cuttings will help lower the soil fertility and we shall see what emerges over the next few years – a work in progress!

Claudia—Is it even a meadow?

Earlier this year I agreed to take part in a project that allowed me to look at some interesting meadows in July. Tracking the Impact is a project that aims at recording the state of nature in the Chilterns, as part of the Chalk, Cherries and Chairs Landscape Partnership Scheme.

The project offers volunteers the opportunity to survey five plots in an area of one square km of their choice amongst fifty square kilometre sites selected across the Chilterns. The survey stage is at the very beginning with the first round having started in July. The project will last initially for four years with two surveys per year. Nick Marriner from the Chilterns Conservation Board and the other partners have been brilliant in providing virtual training and online material under lockdown.



Above: Fiona's meadow-in-progress at Olney.
Below: Claudia's survey site in the Chilterns.



My site lies near a charming little village at the foot of the Chiltern Hills. The site has a series of fields, pastures and meadows, separated by ancient hedgerows and linked by public footpaths. The meadows are quite diverse although not very rich in plant species: mostly grasses with patches of Lady's Bedstraw, Common Bird's-foot-trefoil and the occasional Pyramidal Orchid. Nevertheless, some corners that have been left uncut show quite a variety of grasses and wild flowers such as Woolly Thistle, Wild Marjoram and Musk Thistle that at the time of the survey were teeming with butterflies, bumblebees and other insects. A true delight!

Some plots might still be available for next year. Information about the project is available on their website: www.chilternsaonb.org/tracking-the-impact

Emma—Wonders of our Urban Meadows

Scattered with Daisies, Common Birds-foot-trefoil and Smooth Tare underneath the over grown Cocks-foot, Perennial Rye-grass, Common Knapweed and Creeping Bent, who knew that there was a haven for wildlife in the urban settlement of Aylesbury.

Buckingham Park floodplain located on the outskirts of Aylesbury is a wonderful place to escape from the hustle and bustle of the busy streets. Primarily a man-man meadow, Buckingham Park floodplain main objective was to provide a suitable area for the River Thames to naturally flood during the winter seasons, also for the street run-off to be filter naturally through the Bulrush beds. From this creation we have a green belt providing a sustainable food source, shelter and other benefits for wildlife. The benefit to use is also high providing cultural, educational, recreational and scenic value. Managed as a meadow, the grass on this floodplain



is cut for hay by farmers around mid-late July every year in stages, providing an everlasting source of food for livestock as the meadow is kept fertile from the River Thames.

This is a beautiful place to get lost in throughout the different seasons, which is not too far away from many doorsteps.



What on earth is that?

The BMERC Team

Can you identify these species found in Buckinghamshire and/or Milton Keynes from these close-up photos?



Answers will appear in our next issue!

Answers from last issue:

1) Noble Chafer beetle



2) Peacock butterfly



3) Cowslip





New Buckinghamshire Mammal Group

Kristin Thompson

The Buckinghamshire Mammal Group was newly formed in June 2020. The group aims to raise awareness of the plight of the County's mammals, promote recording and study of mammals in Buckinghamshire, and to provide a forum for those interested in wild mammals and their conservation across the county.

We hope to bring together mammal recorders, enthusiasts, and those with an interest in mammal ecology and conservation across the country.

The group was founded by myself, Kristin Thompson, with the support of Joanne Makin. We both have an interest in mammal ecology and conservation. I am a Behavioural Ecologist with an interest in mammal behavioural responses to urbanisation and am in the very final stages of completing a PhD on urban grey squirrels. Joanne is an Ecologist at Buckinghamshire Council supporting a range of conservation projects within the county, with a particular fondness for dormice, water voles and hedgehogs.

We would love to bring together others interested in mammals and grow our community. We are looking to form a committee and are particularly keen to hear from you if you would like to join us. In the future, we are hoping to organise mammal related recording projects, training for recorders, as well as organising talks and other mammal related events. We hope to eventually become affiliated with the Mammal Society, and hope to share our mammal recording data with BMERC and the National Mammal Atlas Project (NMAP).

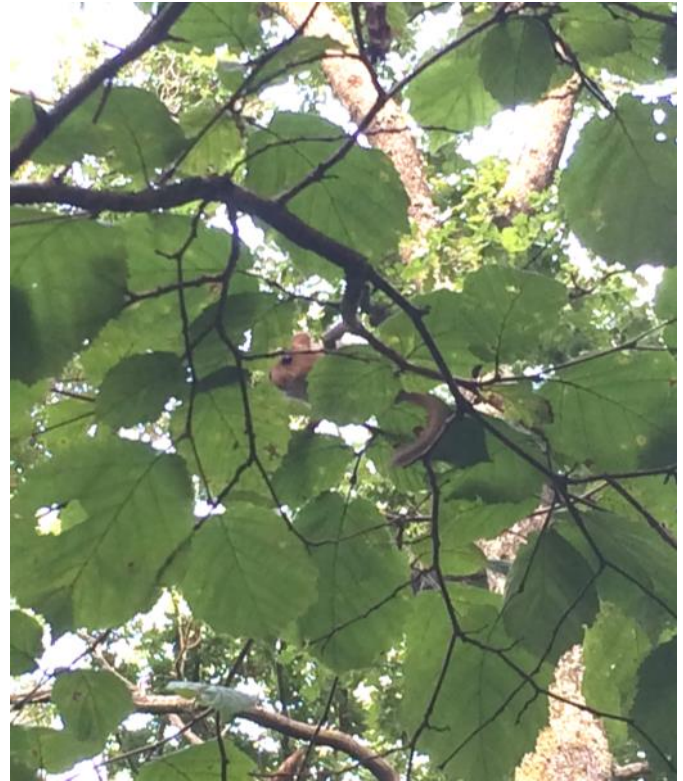
Join our Facebook page to find out more:

www.facebook.com/groups/bucksmammals

Follow us on twitter [@BucksMammals](https://twitter.com/BucksMammals) and take a look at the beginnings of our website:

bucksmammalgroup.wordpress.com

If you would like to know more, have ideas for projects, or would like to join the committee you can email: bucksmammals@gmail.com



Images provided by Joanne Makin. From top left: Dormouse in the hand; a dormouse in the trees; Water vole habitat; a dormouse nest.



South Bucks Ancient & Veteran Trees Project

Claudia Bernardini

In 2019 BMERC started a conservation project on ancient and veteran trees. Ancient and veteran trees support a large number of invertebrates, lichens, fungi, birds and mammals, some of which are rare and specialist species. Their branches, leaves, roots, decaying wood, hollows in the trunk, loose bark and water pools represent important habitats for wildlife. Even individual trees can be crucial to the survival of some rare species, and more and better-connected trees offer greater chances of survival.

THE LARGEST SPECIMENS

The largest maiden
716cm circumference



Sweetchestnut (*Castanea sativa*), Beaconsfield

The largest multi-stem specimen
807cm circumference



English Oak (*Quercus robur*), Lambourne © Claudia Bernardini

As many of these trees are under threat due to development pressure, poor management, farming practices, pests and diseases and climate change, the aim of the project is to assess and map them before they disappear and to support the land owners in their management.

After the spring and summer preparation the survey started in early autumn, with the objective to locate and survey three types of trees:

- **Ancient Trees:** trees that have passed maturity and are very old compared to trees of the same species
- **Veteran Trees:** trees that due to the harsh and adverse growing conditions show signs of ancientness, irrespective of their age; note that a veteran tree can have the characteristics of ancientness without being ancient
- **Notable Trees:** trees that might not be ancient or not have veteran features but they might be very large, mature and outstanding and also have some unique characteristics

As the trees age, they develop certain features such as large girth (circumference) for the tree species, hollowing of the central wood, presence of wood decay and reduction of the crown size, also known as retrenchment. In order to identify suitable trees, we looked at these key features and also recorded more information, such as surrounding habitat, presence of fungi or other wildlife, signs of damage, disease, etc.

The early days of autumn last year were sunny and warm, so we decided to start the survey from ancient woodlands and nature reserves. The first few days proved quite challenging; because of the dense vegetation we had to negotiate with mazes of brambles, walls of stinging nettles and masses of Burdock burrs.

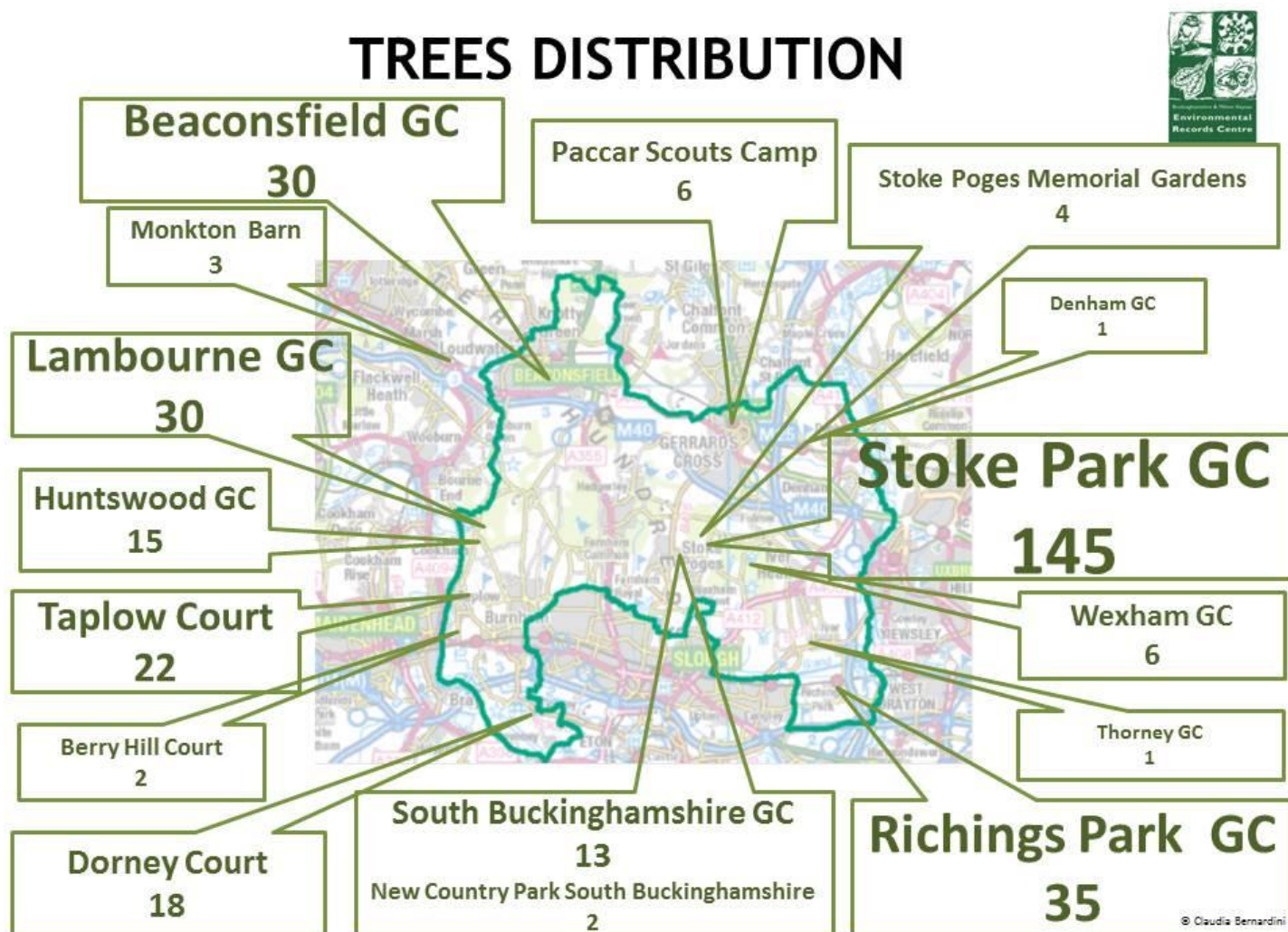
After a couple of visits we had to review our strategy as it was clear that without a machete or a chainsaw we wouldn't make much progress. We decided to look into open land where we could spot large trees

from a distance. Many pasture landscapes in the county fall in private properties. We approached large estates and golf clubs that seemed promising from aerial photographs. Most landowners and course managers were happy to meet us and let us survey the property. We were extremely pleased with the response and some of the sites proved to be exceptionally good for ancient trees.

Between September 2019 and February 2020 we contacted 65 sites and visited 15. We documented 23 different species and recorded a total of 335 ancient, veteran and notable trees. Despite all the hours spent in the cold and in the rain we were all very pleased with the results!

The field work abruptly stopped with the lockdown but the project is still going on. We are now entering the data into the database and digitising the records onto ArcGIS, but we can't wait to resume the field work. We hope to give you more news very soon and get some of you involved. Watch this space!

TREES DISTRIBUTION





If Life Gets in Your Way Always Choose the Lesser Weevil

Emma Foster

As part of my MSc and during lockdown I have taken up a new challenge: to study and identify weevils. This is a challenge for me as this will be the first time identifying weevils, I am using new guides and I am going to learn about their conservation.

Why are weevils important?

The importance of weevils should not be underestimated. They are a significant group of herbivores and their tight relationships with some plants make them vulnerable to extinction. Weevils are an economically important group of beetles as nutrient recyclers, a food resource, pollinators and biological control. However, some are major crop pests.

Why is it important to correctly identify down to species?

Without being able to identify the species correctly we cannot monitor, conserve or manage them. Species records are used to inform and evaluate conservation actions and monitor populations. This is very important for rare species and helps manage pest species.

Classification and species

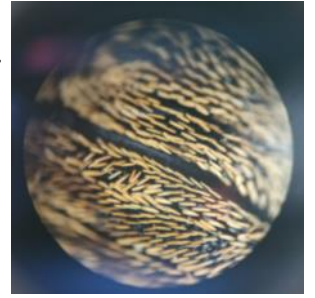
Weevils (Curculionoidea) are classified as one of the largest hyper-diverse superfamily of the animal kingdom a part of the beetle group (Coleoptera). Under the superfamily within this phylogenetic classification system there are 7 families described by Oberprieler (2007):

- Nemonychidae (flower weevils)
- Anthribidae (fungus weevils)
- Belidae (primitive weevils)
- Attelabidae (leaf rolling weevils)
- Caridae
- Brentidae (straight snout weevils)
- Curculionidae (true weevils)

Worldwide there are between 65,000 and 70,000 described weevil species, with possibly another 150,000 to be discovered. There are about 628 British and Irish species, with Curculionidae being the biggest family.

What makes a weevil a weevil?

Weevils are mainly identified using microscopes using their physical characteristics. One of the main characteristics of the weevil family, distinguishing them from other beetles is the tubular extension to the front of the head, called the rostrum. However, just to make identifying these beetles harder, some weevils, such as the bark beetles, don't have these extensions.



Why are weevils so successful?

Weevils are so successful because most species are plant eaters, all parts of plants are eaten by some species, so food is easily and readily available. They also inhabit parts of the world where there is terrestrial vegetation, making them one of the most successful forms of terrestrial life. They reproduce very successfully, potentially due to their long snouts which are used during mating and laying eggs.

Lockdown with the weevils

The weevils I have been studying over the last month have been collected from my garden. One species example of my slowly but steadily growing collection is the Nut Weevil, *Curculio nucum* found on my compost bin on 10th July 2020. This increased the difficulty of identifying the weevil as I cannot see which plant or tree the beetle is naturally found on.

At 8mm *Curculio nucum* has a long rostrum and 4 segments in the bulbous end of its antennae ruling out the potential for the beetle to be *C. glandium*. This species is very wide spread across Britain, but is most common in the central and southern England.

I have found great difficulty identifying weevils because of the terminology, different keys and the quantity of different types of weevils out there. With the help of the internet and identification books I have been slowly learning all about weevils found in Buckinghamshire.



What have we been up to since last issue?



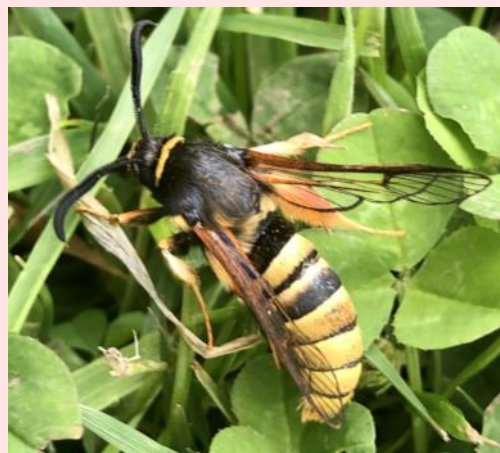
Fiona has been brushing up on her arable weed identification, with the much appreciated help of BSBI recorder Andy McVeigh, whilst surveying a lovely site in the middle of the county. The wonderful mosaic of wide, species-rich margins, frequent arable weeds and mixed hedges demonstrates that arable doesn't have to mean a wildlife desert.

Emma enjoyed her first time kayaking, exploring the River Thames from a different angle: "the River Thames amazed me, from previously listening to the history of how polluted the river was to seeing first-hand how clean the water is now, containing many different forms of life."



Rhiannon has been improving her habitat survey skills and wildflower identification—but admittedly is more interested in the invertebrates!

Neil has been using the new pheromone for Lunar Hornet Moth *Sesia bembeciformis*, this one came to his garden within 20 minutes of putting it out. This moth is common



but very under-recorded. A few people have been using the new pheromone (from Anglian Lepidoptera supplies) with impressive results. We hope to receive a lot more records soon.

Claudia has been watching her caterpillars turn into beautiful butterflies while waiting for the survey work to resume. Some training on site assessment with Fiona and the survey for the Chalk, Cherries & Chairs project provided the opportunity to get back on the field, refresh some ID skills and get some records in.



Julia has been helping to locate old sites scattered around Bucks for unusual plants which haven't been recorded there for decades, or in some cases 50 years plus: "It's an odd hobby, but supports the BSBI's new plant atlas which is in preparation currently. It's a great way to make yourself go to all sorts of odd places you might not otherwise explore, and allows me to indulge in a pet interest of looking at unusual architectural features."



Resources Round-Up

To help you keep track of all the links and resources included in this issue, here's a quick reference guide to the projects we've mentioned, as well as some other relevant information that might interest you:

The Big Butterfly Count

bigbutterflycount.butterfly-conservation.org/

Chilterns AONB Tips to Save Water

www.chilternsaonb.org/chalk-streams/save-water.html

Tracking the Impact

www.chilternsaonb.org/tracking-the-impact.html

Buckinghamshire Mammal Group

www.facebook.com/groups/bucksmammals

bucksmammalgroup.wordpress.com

www.twitter.com/bucksmammals

To learn more about Ancient Trees

www.ancienttreeforum.co.uk

RHS Slug Survey

www.rhs.org.uk/sluggsurvey

The Big Hedgehog Map

bighedgehogmap.org/

British Dragonfly Society: White-Legged Damselfly Investigation

british-dragonflies.org.uk/recording/white-legged-damselfly-investigation/

More ways to get involved can be found on the BMERC website

www.bucksmkerc.org.uk/get-involved/



Our Final Thoughts

We hope you have enjoyed this issue of the BMERC newsletter. Thank you for all your feedback on our previous two issues, we're really pleased that so many of you are enjoying these issues. We are going to keep producing the newsletter, but going forward we will be switching to a quarterly schedule.

Thank you to Kristin Thompson for her guest article in this issue. Do you have a great idea for an article? We welcome submissions to our next issue, so please get in touch if you'd like to be included in a future newsletter. Our contact information is below.

You can keep up to date with our team and ways to get involved on our website. The next issue of our newsletter will be in the autumn, so until then happy recording!

*Best wishes from the BMERC Team,
Claudia, Emma, Fiona, Julia, Neil & Rhiannon*

A last remembrance

We regret that we have some sad news to share: the recent death of our colleague and friend Alan Holmes. Alan was one of the Milton Keynes Ecologists, as well as a fount of local knowledge particularly regarding Black Poplar. He was a true naturalist with a depth of knowledge across a range of habitats and subjects, including real ales! Alan was not only a very knowledgeable and experienced colleague, to many of us he was also a dear friend. He was a delight to spend time with both in and out of the office, his gentle humour and his generosity of spirit will be very much missed by all at BMERC and beyond.



Buckinghamshire & Milton Keynes Environmental Records Centre

Buckinghamshire Council, 6th Floor, Walton Street Offices, Walton Street, Aylesbury HP20 1UY
erc@buckinghamshire.gov.uk • 01296 382431 • www.bucksmkerc.org.uk