

## Magpie Digest November 2020

**Here is your Autumn edition of the Digest containing a selection of fine articles sent into the website by our members – I hope you find them an interesting read (some of the articles have been edited for this publication). You may not know that during these socially distancing times we are continuing our winters talks via an online facility called Zoom. If you don't have a computer you can still join us on these talks by telephone. You would obviously not be able to see the other participants or any slides shown during the talks but you might still enjoy being able to speak to other members and hear the talks themselves. If you are interested in joining us by phone please contact Joe Clinch on 01908 562475 and he will provide you with the support to make this possible.**

**Julie Lane**

### **Clearwing Capers – Andy Harding (July 2020)**

A few weeks ago I put in an appeal here to see if there were any extensive black or red currant bush plantings in or near MK, which I could access. The objective was to place a synthetic lure in prospective sites to see if Currant Clearwing moths *Synanthedon tipuliformis* were present. This was always a rare species, but as the growing of currant bushes in gardens has declined, it is presumed it has also decreased in numbers. I received two very positive responses.

The first was very local to me, where Jenny Mercer obtained permission for me to place a lure in Stony Stratford, Wolverton Road, allotments, under her supervision, only for that to be withdrawn by a 'jobsworth' at the last minute.

Undaunted, on Tuesday 23<sup>rd</sup> June, I decided to recce the allotments to see if the currant bushes were close enough to the fence to make it worthwhile to put up a lure outside. I decided to try, but was taken by the proximity of some old apple trees. So I first put up a Red-belted Clearwing *Synanthedon myopaeformis* lure (another nationally rare species) on a sapling outside the allotment fence, with

no expectation at all. By the time I had put up the Currant Clearwing lure on another sapling and turned round, there were two male Red-Belted Clearwings at the first lure. Once photographed, that lure was returned to its sealed and cold container in a 'cool bag', so that they would not be attracted again. They need to be attracted to real females.



Red-belted clearwing – Andy Harding

My second lead for the Currant Clearwings was provided by Julie Lane, who arranged for me to contact Mike Totton, the Chairman of the Olney allotment association. He was perfectly happy to allow me access, but finding a mutually convenient date with the appropriate weather conditions of sunshine and a light breeze was not easy.

In the period before we actually met, I discovered two relevant things. Firstly the Currant Clearwing 'season' in other areas had started early and could easily be 'over'. Secondly, during a Zoom meeting of the Beds moth group, I noted that Raspberry Clearwing *Pennisetia hylaeformis* had been found in north Bedfordshire. This is a fairly recent colonist which appears to be spreading west from Cambridgeshire, where it was first discovered in 2007.

By now the continuing inappropriate weather was making our lack of a rendezvous embarrassing. Therefore, despite poor conditions, I visited Mike on his allotment to explain what I wanted to do and why. I put up lures for both aforementioned species...but not for very long as conditions worsened.

However, Mike did give me *carte blanche* to visit whenever I wanted. In the next week only Friday 17<sup>th</sup> July seemed at all likely. So I gave it a go, placing a Currant Clearwing lure invitingly adjacent to a nice crop of currants. There were a few scattered raspberry bushes I could see, but placing a lure close to any of them meant watching with binoculars while attending the currant bushes. Given this tricky situation I simply hung the Raspberry Clearwing lure on a pole

close to where I was standing. To my amazement, ten minutes later a male Raspberry Clearwing turned up, and I was able to take a few pictures.

After a couple of minutes, I took the lure down for reasons noted above. Needless to say, no Currant Clearwings appeared in the next half an hour, but I think I got a great deal, since Raspberry Clearwing has only been formally recorded in Buckinghamshire on one occasion, in 2012, with, possibly, a not yet submitted sighting in 2019.



Raspberry clearwing – Andy Harding

### **Summer Wildlife around the area – Tony Wood (Sept 2020)**

The weather conditions this summer have been unpredictable, varying with spring being the sunniest for 100 years, the end of July and beginning of August presenting temperatures in excess of 30 degrees centigrade, and the month ending with strong winds from Storm Francis. But it did not deter our Society's members recording highlights of the local wildlife.

**Mammals** – Paul Lund was fortunate in May to find a vixen fox and 2 cubs in his Bancroft garden, and a few days later photographed one inquisitive cub that had entered his house. In June John Prince created a box type platform with a trail camera installed and, with the help of two volunteers, this was lifted high into an oak tree in Little Linford Wood to see if it would attract any dormice. In June it was a success, with several images of a dormouse seeking the food provided. This is the first recording of a dormouse in the wood since 2015. During the May box survey beside the M1 Motorway near Gayhurst one dormouse was recorded and, to our surprise, a weasel inside a box with a nest of Great Tit chicks, sadly dead and partly eaten.

A species that tends to stay under the radar is the Harvest Mouse. Volunteers managed to find several old nests at Linford Lakes Reserve in 2018 -19. and this year Harvest Mice have been found on the nature reserve. Nests have also been found while clearing reeds at Stony Stratford Nature Reserve and Walton

Lake this year, and it appears that the species remains widespread, if elusive, in Milton Keynes.

Other records of mammals include a Water Deer at Magna Park, a Roe Deer at Little Linford Wood and a possible sighting of a Polecat in Bury Field, Newport Pagnell (?)

**Butterflies** – In May a Duke of Burgundy was seen at Blue Lagoon for the third year running. How it arrived there remains a mystery. Harry Appleyard found a Black Hairstreak near the bottle dump, Tattenhoe – a new location for this very rare butterfly, so it is encouraging to hear of two other records at Little Linford Wood and the North Bucks Way. The hairstreaks did well this year with both Purple and White-letter Hairstreak being recorded locally. A Chalkhill Blue was seen at Stonepit Field in late July and later on the same day a Clouded Yellow {variety *helice*, a pale form of the female} was discovered.

**Moths** – If you have been following Gordon Redford's monthly reports on the Society's website you will discover information on a variety of species caught in his two light traps at Linford Lakes Nature Reserve. In one month nearly 6700 moths were recorded and 236 species identified. Other members reported their findings and included unusual species such as the Blackneck, Jersey Tiger, Tree-lichen Beauty, Clifden Nonpareil, and a Raspberry Clearwing at Olney, only the 2<sup>nd</sup> or 3<sup>rd</sup> sighting in Bucks.

One new species I had this year was the Lobster Moth which when released was caught in mid-flight by a House Sparrow – I felt very guilty!!

After several years of recording hoverflies in my garden, I have found a paucity of both species and numbers the past two years. Have you experienced the same?

**Birds** – It has been a very good year for breeding birds at Linford Lakes Nature Reserve. During lockdown, a nest of Teal was found on the bund. This species was last recorded as breeding in Bucks in 1989 {although it did breed regularly at the Linford Reserve in the 1970s/80s}. As if this wasn't exciting enough, a pair of Great White Egrets also nested in the heronry this spring with at least one young fledged. Three adult birds had been present during the winter and courtship was observed in March. This makes Linford Reserve only the third known location for nesting Great White Egrets in the UK.

More recently, 2 juvenile Yellow Wagtails have been ringed on the bund and it is likely that this declining species has also bred. Cuckoos have had a fantastic year at the Linford Reserve with 11 birds ringed. Country-wide, over 100 calling cuckoos were recorded – an exceptional year for this species.

Over the local area the following birds were recorded. In June a Nightingale and a Goosander with 5 chicks were seen at Olney, and a pair of Peregrines reared three chicks at the MK Stadium. During July a female Mandarin Duck was recorded at Willen Lakes, a Redstart and 9 Crossbills seen at Tattenhoe, and in August a Black-tailed Godwit and Peregrine at the Forest Floodplain Reserve, and the month finished off with an Osprey seen and photographed at Linford Reserve.....

### **Ivy Bees in Oldbrook – Martin Kincaid (Sept 2020)**

Many of us have been enjoying wildlife in our own gardens this year with the restrictions that have been imposed on us. Perhaps you have found something unusual or uncommon in your garden that you were not aware of until now. We have been blessed with fantastic, settled weather in spring at the height of the Covid lockdown and again recently in September. For me, it was a sighting on 22<sup>nd</sup> September which has really caught my imagination.

We have a generous covering of ivy along our garden fence, and when it is in flower, as now, it attracts a wealth of bees, hoverflies, moths and other insects. Whilst having a tea break in the garden, once again in glorious autumn sunshine, a bee caught my eye as it busied itself on ivy flowers. A closer look allowed me to confirm it was the Ivy Bee (or Ivy Plasterer Bee) *Colletes hederea* a species which has colonised the UK in the past few years. A second one soon appeared which I netted, and chilled in the fridge to allow closer inspection! I quickly added my sightings to the database of BWARS (Bees, Wasps and Ants Recording Society).

*C. hederea* was first recorded in this country in 2001 in the Dorset village of Langton Matravers. Since then it has spread, initially along the coast but in the past 4-5 years it has colonised many inland counties, as far north as Merseyside. I first saw these attractive bees, in good numbers, at Durlston Country Park, Swanage in October 2016. For those of you who know Durlston, the clifftop ivy thickets beneath the Globe sculpture are the best place to look. It has just about the latest flight season of any British bee species, flying between September and early November. Superficially, this species and others in the genus *Colletes* do resemble the Honey Bee *Apis mellifera* and they are similar in size. However, a close look shows that it is brighter than a honey bee and the yellow and black bands are cleaner and more defined. Honey bees generally have darker bodies and the bands are somewhat indistinct. Fresh specimens of *C. hederea* show a bright orange, furry thorax. If you can distinguish this species from honey bee

you can be fairly confident it is *hederea* as the other species in this genus are much smaller and generally confined to heathland and sandy habitats.

This mining bee can live in huge colonies of many tens of thousands and their mating behaviour can be quite alarming to behold, with many males mobbing unmated females in a frenzied attempt to mate with her. I have witnessed this in Dorset and it is quite a sight- and sound.

The specimens I found in our garden are the first I have seen in Milton Keynes and it is good to know that this species is now in our area. It may already be common. If you have flowering ivy in your garden or your local patch, do have a closer look at any honey bee sized insects buzzing around. They are not aggressive and are a welcome addition to any garden. Do let me know if you find it in our area.

### **Ivy Bees in Milton Keynes....an update. (Oct 2020)**

In late September, I wrote a piece about the discovery of the Ivy Bee *Colletes hederæ* (mis-spelt as *hederea* in earlier article) in our Oldbrook garden. I asked for fellow members to let me know if they had found this bee in their local patch and have since continued to look for it elsewhere in Milton Keynes.

Shortly after the article appeared on our website, Julie Lane contacted me to say that she too had found the ivy bee, at home in Olney. This is exciting news and suggests that this insect is already found widely across this area.

On 17<sup>th</sup> October, Helen and I went for a walk along the canal at Old Wolverton. I have known the towpath walk since childhood and was aware of the great masses of ivy which grow along the embankment – always a good place to look for insects in the autumn. Sure enough, not more than 50 meters from the Iron Trunk, there were several specimens of *C.hederæ* nectaring on the ivy right next to the path. They were in the company of honey bees and it was useful to be able to compare these two species, so similar in appearance at first glance.

Better still was to come – last Tuesday (20<sup>th</sup>) I stopped off at Stonepit Field in Great Linford in late morning. I wanted to see the scarlet wax caps that Martin Ferns had reported and was pleased to find plenty of these colourful fungi on the limestone scrape. As I crouched down to photograph one, I saw an ivy bee emerging from a small burrow. I looked closer and was pleased to see at least twenty or more ivy bees going in and out of their neat little burrows. One or two were killed by common wasps but I measured the length of the colony as around 31 meters. I was delighted to find a thriving colony of ivy bee – the first I have ever seen outside of Dorset.



Ivy bee at Stonepit Field – Martin Kincaid

Given a reasonably warm, sunny day, it should still be possible to see these bees between now and mid-November.

### **New Dragonfly Species for MK – Lesser Emperor (Anax parthenope) – Harry Appleyard (August 2020)**

While inspecting one of the ponds in Tattenhoe yesterday I spotted an Emperor that stood out from the rest nearby. With green eyes and a largely brown abdomen with a blue segment beneath the wings, it was almost immediately clear this was a male Lesser Emperor. Getting sharp, detailed pictures was a bit of a challenge as he spent several minutes patrolling the pond, occasionally getting into fights with the other male Emperors before disappearing over a meadow nearby. Fortunately, the few I did get, while blurry and a little distant, were clear enough to show the distinctive features.

After its first appearance in the UK in 1996, this species has slowly appeared throughout England and Wales, breeding across an increasing range of sites, becoming less of a vagrant and more established coloniser. They have already been present in Buckinghamshire for several years but this is the first one to have ever been recorded in Milton Keynes, verified by the British Dragonfly Society's Bucks County Recorder Alan Nelson.



Lesser Emperor - Harry Appleyard

Having skimmed past them in my odonata books over the past few years, it was amazing to finally see one, out the blue and virtually on my doorstep!

Unfortunately there was no sign of him today, 1<sup>st</sup> August 2020, in the same location or around any of the other ponds nearby. There is a good chance he may have just been passing by, especially with the strong southerly breeze from yesterday afternoon onwards. Still, with recent sightings of them at Tring and Wilstone Reservoirs over multiple days recently, it is worth keeping an eye out for them around MK's large ponds and lakes. If you find any in MK or any other part of Bucks, be sure to report them via The British Dragonfly Society: <https://british-dragonflies.org.uk/recording/submit-your-records/>

### **Bats in Churches – Sue Hetherington (Sept 2020)**

I've been working as a Bats in Churches volunteer, monitoring bat activity in 4 churches: – Gawcott, Hillesden, Tingewick and Wotton Underwood. Bats in Churches exists in large part "to address issues that bats can cause in churches while continuing to protect their roosts." See <https://batsinchurches.org.uk/>



## **Bats in Churches: News from Newton Blossomville – Julie Lane (Oct 2020)**

I recently attended a meeting at Newton Blossomville's St Nicholas Church with two ladies from the Bats in Churches organisation. The church does not have a major problem with bats but there are some droppings and evidence of staining from urine on some of the brass plaques in the church. The main problem seems to be the bad PR that bats have and people in the village are rather negative towards them.

The Bats in Churches people have therefore offered to organise a post-Covid bat walk from the church and down to the river nearby, which we think would be well received by the locals and schoolchildren in particular. They are going to provide some bat boxes for us to put up in the churchyard as there are some nice mature trees (although apparently they don't like yew trees as they don't provide an easy flight way into the box). Also they have offered to source some hay rattle seed for the new wild flower patch in the church yard which has been left unmown this year – this should improve the meadow flowers and attract the all-important insects for the bats to eat. All in all a very positive meeting and hopefully a brighter future for the local bats!

## **Birds by Night: Recording Nocturnal Migration in South MK – Harry Appleyard (August 2020)**

One of my long-term missions in my local birding has been to record as many species as possible from within the Tattenhoe area in the south of Milton Keynes. While there are many places I could visit across the rest of the city to generate a much longer species list, I prefer to base mine on a lower-carbon approach, through what I see and or hear close to home. Currently, my list of species for Tattenhoe and



Carrion crow – Harry Appleyard

the surrounding areas since 2008 sits at 128.

Having already listed the resident species, as well as frequent annual migrants, new additions come at a much slower pace now, but an increasingly talked-about area of birding that I'm hoping will help me, is 'nocmig', the recording of nocturnal bird migration. After some research with the aid of other birders on Twitter, I invested in the Tascam DR-05 last year. While I can't say it has added anything new to the list yet, it has been well worth getting into, having recorded several species I've never previously observed from my garden before, some of which have been rare or only occasional on my walks in this corner of MK in the past.....

.....The dawn chorus is often a mess of streaks and lines all over the spectrogram from typical garden visitors like the Wren, Robin and Crow, even more so earlier in the summer when warblers and other birds are in the mix. When the display starts to get crowded, it's worth listening closely for early morning flyovers, or birds you might not usually see in your garden, like the Bullfinch.

Since I started the recordings, the Moorhen has been one of the more frequent night-time flyovers, interestingly regarded as a common nocturnal migrant across the UK but it's hard to be sure whether I have caught true migrants travelling long distances or resident birds disturbed from their territories nearby, perhaps flushed from their roosts by foxes or cats in the early hours of the morning.

Having seen them only once in the garden before, Tawny Owls have also been a pleasant surprise, occasionally perched and calling nearby. From the night of 23<sup>rd</sup> October and into the morning of 24<sup>th</sup> October 2019, the recording picked up at least a dozen flight calls from Redwings and a Blackbird. 2020 has been much more productive in variety of species so far, largely thanks to already having the recorder ready for use through the peak migration period in spring. Of the 59 bird species I've recorded from the garden so far this year, 5 of them have been picked up exclusively on the overnight recordings. 26<sup>th</sup> March produced a Coot at around 2.54am, an infrequent visitor to Tattenhoe's waterways rather than established resident like its close relative the Moorhen. 5<sup>th</sup> April produced my first garden record of Oystercatcher, an occasional flyover here in recent years, calling as it passed over at 00.50 am, with another a few weeks later at around 1.13 am on 15<sup>th</sup> June.

By far the most exciting bird I've recorded since starting this and the least expected one for my suburban garden was a male Nightjar, churring for a few minutes somewhere nearby at 3.55am on 31<sup>st</sup> May, just as the dawn chorus was starting to kick off. Surrounded by houses with a few deciduous thickets nearby, this isn't the sort of place where I would have actively been looking out for

them initially, however in research and speaking to other birders online, I found out that they have been known to travel several kilometres away from their heathland- and woodland-based breeding grounds while hunting. He could have also been a passing migrant, albeit a late arrival, like the one I found hawking around an oak tree further along the Tattenhoe valley on 2<sup>nd</sup> October last year.

Two other firsts for my garden since the Nightjar have been the Little Grebe, calling at around 1.16 am on 11<sup>th</sup> June and 3 am on 21<sup>st</sup> July and another rare flyover for the Tattenhoe area, the Little Ringed Plover, making two calls at 1.34am on 15<sup>th</sup> July. Small passerines have also made brief callouts in the dead of night, with single bursts of song from a Blackcap at 23.49 on 14<sup>th</sup> April and a Lesser Whitethroat just after midnight on 21<sup>st</sup> May

### **Conclusions**

A typical night usually starts with traffic noise, with the last two hours ending with a gradual build-up of garden birds. The fleeting flight calls of passing migrants have been few and far between so far but nonetheless, it's a small project that has proven well worthwhile, helping to record several species I've rarely come across within this locality in the daytime, plus more locally common species that I haven't previously heard at night.

This is a field of birding I would love to hear about more people in Milton Keynes getting into. With such a diverse range of habitats across the city, there are near countless possibilities for what might get recorded along the way. It has proven to be a great way of picking up rarities and local scarcities across the UK, such as the Ortolan Bunting, Bittern and Quail.

### **Autumn Trees – Alan Birkett (Sept 2020)**

What's the most striking thing about trees in autumn? It is not that they shed their leaves. It's the fact that the leaves on some trees change their colour before they fall. Why does this happen - the leaves have been green all spring and summer? Why don't the green leaves just drop off without changing colour and why on some trees do the leaves turn red.

After reading recently published papers on the subject it became clear that, although it has been discussed for many years, it is still a source of debate. At least 10 hypotheses were reported in a paper published in 2009. Eventually I found that there are now two main evolutionary explanations - autumn colours could have evolved in plants to protect them against the physical damage induced

by intense light at low temperatures (photoprotection hypothesis) or to avoid parasites by signalling the defensive commitment of the tree (coevolution hypothesis).

A leaf is the main photosynthetic organ of a tree. This is a process in which carbon dioxide from the air is combined with water in the presence of light to produce sugars and oxygen. The molecule that carries this out is called chlorophyll. It absorbs red and blue wavelengths of light and reflects green so that the leaf appears green to us. It is a complex molecule with a ring of nitrogen at its centre surrounding an atom of magnesium. Shorter days and lower temperatures trigger leaf fall but this is a multi-step controlled shutdown process. Instead of the green leaves just being discarded, the chlorophyll and proteins in the leaf are broken down and essential nutrients, such as nitrogen, re-absorbed and stored in the shoots and roots until spring. Plants generally re-absorb half their total leaf nitrogen.

As the chlorophyll breaks down, the leaf loses its green colour and other pigments can be seen. Carotenoids are yellow and orange and are already present. Anthocyanins, which give the leaf a red colour, are newly made. Carotenoids are needed to keep the cells going during the re-absorption stage so most trees have yellow leaves in autumn but 14% have red leaves. Why then do some trees go to the expense of making Anthocyanins before the leaves fall? This is where the 2 main hypotheses compete.

Anthocyanins protect the leaf from light damage during the period of re-absorption. This is the basis for the photoprotection hypothesis - it extends the leaf life during shut-down and enables it to send more nutrients back to the tree before the leaf drops. If this is true, trees with yellow leaves should drop their leaves earlier.

Another idea is that the red coloration may be a signal to parasites, such as aphids, that have a strong preference for green leaves, to not lay their eggs on red leaves in autumn. This avoids future damage and is the basis for the co-evolution hypothesis. Red colour may be correlated with the level of herbivore defence in the tree, and therefore plants investing more in defences show more autumn colours. If insects adapt to avoid red leaves in autumn, this will lead to a co-evolutionary process in which both preference for green in aphids and intensity (or duration) of red in trees increase.

I have no idea which theory is correct but when you go out this autumn look out for yellow leaves and red leaves, admire their beauty and think how complicated life can be!

Here are some trees to watch out for in Milton Keynes.

2 species that go yellow in autumn

The Norway Maple *Acer platanoides* is native to Europe, from Scandinavia to the Caucasus. It was introduced to Britain in 1683 and is now commonly found in gardens, streets and parks. It is one of the first trees to look green in spring, when its green flowers open before the leaves. It has the 5-lobed leaf typical of the Maple family but differs from the Field Maple and Sycamore in that its lobes and teeth have finely pointed tips. It has a winged fruit like all maples but the wings hang down at an angle whereas on the Field Maple they are flat. This tree is at the south end of Furzton Lake in Milton Keynes



The Aspen *Populus tremula* is a Poplar that tolerates cold conditions. It is a smaller tree than most Poplars. It is a species that grows in cool regions across the whole of Europe and west Asia. (The American Aspen is a different species). It is more likely to be found in the north and west of Britain and is common in the Scottish Highlands. It is typically found in oak or birch woodland. It can spread by sending suckers up from its roots. Male and female flowers are on separate trees. Flowers are in the form of catkins. Aspens are quite common in Milton Keynes, these are on the east side of Furzton Lake.



Here are 2 trees with red leaves in autumn

The Persian Ironwood *Parrotia persica* is a small deciduous tree native to northern Iran. It was introduced to Britain in 1841. It is related to the Witch-Hazel. Its wood is extremely hard, hence the name ironwood. It has red flowers which appear before the leaves in late winter and the leaves turn bright red in autumn. There is a huge tree in the Cambridge Botanical Garden and a small tree on the east side of Furzton Lake in Milton Keynes.



The Sweet Gum (*Liquidambar styraciflua*) is a deciduous tree native to south-eastern USA and the cloud-forest mountains of Mexico and Central America. It was introduced to Britain in 1681. It is an ornamental tree planted in many parks and gardens in warmer areas. It has red autumn foliage and unusual fruit, similar to that of the London Plane. In its native habitat the tree was grown commercially for its aromatic gum, originally known as 'liquid amber', hence its scientific name. This tree is in the Emerson Valley of Milton Keynes.



Other trees you may come across, that have red leaves in autumn, include the Sugar Maple, Red Maple and Red Oak from Eastern North America and the Japanese Maple variety 'Osakazuki' which is spectacular in autumn in the Cambridge Botanic Garden.

To find out more about trees and how to identify them go to my website. The website address is <https://www.treeguideuk.co.uk/> and if you have any comments or observations about trees my e-mail is alan@treeguideuk.co.uk