

Magpie Digest

March 2021



Welcome to the latest Digest of our website articles. After a long hard winter in lockdown those of us lucky enough to have gardens have the joy of watching them burst into life as Spring progresses so this month we have two articles on wildlife gardening which follow on from our members evening on the same subject earlier in the year. We also have a seasonal article on that enigmatic plant mistletoe. So plants dominate the newsletter for a change which will please our President Roy but we do touch on other topics such as a toadstool found in Salcey forest, a moth found in a porch and a butterfly species making a comeback into one of our local nature reserves. Enjoy the read and keep the articles coming.

Evolving your garden for wildlife – Joe Clinch

Some 41 years ago my wife Hilary and I had the opportunity to plan our garden from scratch: the area was an arable field growing barley immediately before development took place in the south west quadrant of Stony Stratford. The soil is a heavy loam over clay and is slightly alkaline. The original plan was not strongly influenced by the needs of wildlife but fortuitously it did include flower- and fruit-producing shrubs and trees (cotoneaster, pyracanthus, crab apple, holly, bird cherry, apple and plum) as well as buddleia and sycamores on one boundary (the last courtesy of MK Development Corporation). For the rest, it was planned as a conventional lawn with small flower beds and vegetable plot. The shrubs and trees are mostly still extant and have proven to be a good investment for wildlife providing cover and attracting winter bird species such as resident and winter visiting thrushes, tits, sparrows, finches, an occasional redpoll, and for one memorable period in spring 2017 a small flock of Waxwings. In spring and early summer, the blossom is also good for insects of all sorts particularly bees and bumble bees: the trees are visited by other common woodland garden birds all year round. Gardens evolve over time and ivy has established itself as an important additional species for wildlife. Planned changes have seen the vegetable plot added to the lawn and the flower beds reduce in area as the shrubs and trees become dominant. It is the lawn itself which has taken my main garden attention over the past 20 years.

From lawn to mini ‘meadow’

Garden lawns grown from seed are usually made up of a limited range of the coarser grass species. My aim in converting to a meadow ecosystem was to increase the biodiversity of the area with more species of flowering plants, which in turn would attract more invertebrates (butterflies, moths, bees, beetles, grasshoppers, spiders, snails, slugs, and more), and again in turn more vertebrates (frogs, toads, and newts), and their predators (I do not have a pond so I must thank two of my

neighbours for the semi-aquatic species). The main top predators to date have been birds, bats, Grass Snake (just once), and the occasional Hedgehog – a mini food chain. 'Meadow' is not a precise term but mine now provides some succession of flowering plants alongside the grasses over the early spring to September period: one area is in semi shade under fruit trees and the other in full sun with a mown lawn path between them.

Which new plants to introduce and how?

It is an option to just let nature take its course and see what happens once you stop mowing and fertilising the lawn. My first venture into creating a meadow area was driven by a wish to include Snakeshead Lily (Fritillaries) which were purchased in flower and put into the ground during April. Some ten plants in flower were dug into the lawn in semi shade and these have multiplied very successfully from their seed since then. I have had similar successes with planting flowering Cowslips and Primrose; less so with Ragged Robin and Meadow Cranesbill, but I keep trying. In other cases. I have introduced wild seed either in the autumn or early spring having first scraped the lawn with a rake. The one 'must have' species is Yellow Rattle which will help to control the dominance of the existing grasses on which it is semi-parasitic.

I have been surprised by the variety of what appears on its own account. For example, Ox-eye Daisy, Sweet Violet, Germander Speedwell, Bulbous Buttercup, Self-Heal, Black Meddick, Cut-Leaved Cranesbill, Common Vetch, Marjoram, Knapweed and Wild Carrot have all established themselves without intervention. Others have appeared and, disappointingly so far, then disappeared including Bee Orchid, Pyramidal Orchid, Twayblade and Lady's Bedstraw. The succession with



(Photo © Joe Clinch)

overlaps between them starts in early spring with Sweet Violet and Primrose; April, Snakeshead Fritillary; Cowslip in May; Ox Eye Daisy, Bulbous Buttercup, Yellow Rattle, Self-Heal and grasses through late May, June to early July; and finally, Wild Carrot and Knapweed through to September.

Management

Depending on the weather I usually mow over the meadow areas not later than early March on a high setting. During the growing season I try to balance the need for 'weeds' to be controlled while at the same time avoiding trampling on the species I am trying to encourage! So, what is a 'weed' in a garden meadow? Since the primary objective is biodiversity I consider as a weed any species that will dominate if not controlled. This includes some of the coarse grasses even with Yellow Rattle well established (e.g. Rye Grass and Cocksfoot), Ragwort, Common Cleavers, Dandelion, and tree seedlings. In fact the plant which has proved most difficult to control is a highly invasive garden geranium species!

I cut the meadow after the seeds have set. For early flowering plants like the fritillaries this may be mid-July but for others it will be from mid-August to early September. Before cutting I collect the seed of those plants which I want to spread elsewhere. As to cutting, my preferred method is with shears on hands and knees. This has a number of advantages: you can control the height at which you cut; there is less 'collateral' damage to wildlife in the meadow (e.g. resident frogs); and it also allows selective removal of the 'weeds' that I have been unable deal with during the growing period. I let the cut material dry off for further seed fall and then compost. I do a high cut mow over the area during September and October before winter sets in.

The joy of allotments and how I make mine wildlife friendly – Jenny Mercer

I have loved having my allotment over the past 10 years or so since I retired at 60, and during lockdown it's been my space for respite and recovery. It's a place for me to get away from the dreariness and despondency of lockdown, long days with long patches of thinking "how can I fill my time?". Actually I've always used my allotment to boost my mood; the only thing that changed during lockdown was that I decided not to plant up my greenhouse in 2020, just in case we were required to abandon visiting our plots (by government edict).

Also in my retirement I have always used my plot for ongoing exercise, in preference to housework, and in addition it has the advantage of being more productive! It's also an opportunity to be sociable and to be as creative as I can to help wildflowers and wild animals. For me that includes wildlife-friendly veg and flower growing – I mix them together.

When I visit my allotment I generally take a book or magazine with me and a flask of tea. If I need to go shopping in Stony I often buy a newspaper and walk home to my house, by a slightly longer route ... visiting my allotment on the way, pausing to read

the paper whilst I am there. So as you can see, I've used my plot for recreation for a long time before the Coronavirus pandemic.

Usually I have a designated allotment bag by my front door with stuff to take to the plot on my next visit, e.g. vegetable waste for the compost bin, seedlings or seeds and sometimes a tool or two that's usually kept at home. I frequently push a full wheelbarrow to and fro with potting compost, seedtrays and pots!

I operate a 'no chemicals' plot and have developed my own 'no dig' allotment project using green manure (especially *phacelia*) all the year round, and generally after clearing a crop. It stops the weeds and the insects love it. Some would say that the way I treat self-sown Swiss chard and Lambs lettuce are just like a green manure ... but hey! they are deliciously edible and free too.



I always have a 'fallow area' for wildlife around raspberry canes and/or my strawberry bed with its mulch of straw from last year. I also generally leave just the last few of last year's un-harvested parsnips and onions which have lovely flower heads and enhance insect life in spring.

Couch grass is a nuisance but I treat it as my rotation task each year; there is always a newly established area that it has invaded. I might put down cardboard to suppress it a bit and then I do have to dig or find a friend to help, as my back can't stand the strain.

I usually put early potatoes in the former couch grass/newly dug over areas. Then I choose an area for legumes and plant climbing French beans, a few runners and token peas (usually sugar snap, as my grandsons love them for eating on plot). I try sowing roots – just a few carrots and parsnips, plus a few salad crops and most years I grow maize/sweet corn and buy in tomato plants and aubergines if I'm using the greenhouse. In mid-summer I search for brassicas and plant-out purple sprouting broccoli and most years I plant broad beans in the autumn for an early spring crop.

(Photo © Jenny Mercer)

Flowers that I grow on the allotment to attract in the pollinators are self-sown chamomile and feverfew, borage (which grows like the plague but is wonderful for insects), sweet peas, dahlias, gladioli, verbena bonariensis, California poppy and nasturtiums. Oh and cardoons, a giant thistle-like plant that I grow in a dust bin!

I aim to dead head the 'weed' flowers before they set seed to keep my neighbours happy. I use hedge clippers and sometimes a high cut with my strimmer to do this but I am very careful if I use the strimmer and often use a rake to clear a bit first to give any small mammals due warning.

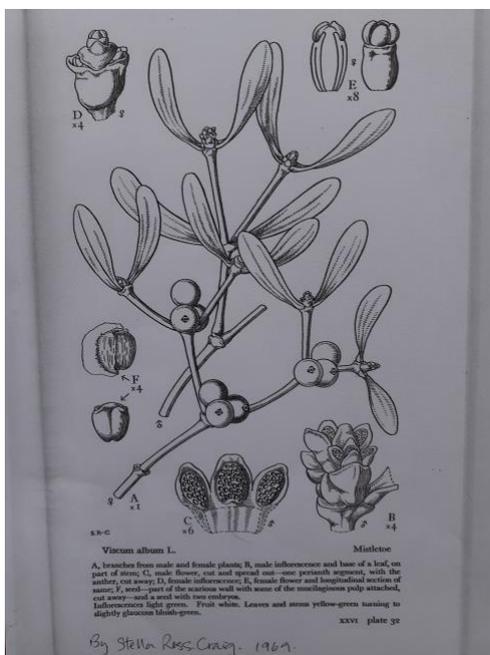
Last summer Andy Harding used pheromone traps in amongst the fruit bushes to lure in male clearwings with some good success (see previous article on this website). He says he will be back next year to hunt for more moths in the area of our old apple trees.

I often come across toads when I am working on the allotment and a young hedgehog was found on the site last year. Overhead we often see red kites and buzzards riding the thermals and we had a sighting of two ring-necked parakeets flying across the allotments this January.

During the first lockdown I donated quite a few plants to the Freebies table, near the Orchard. As my plot is so close to the table I often get first pick when other plot holders come over to donate and often they have a socially-distanced chat with me.

So my allotment helps me to keep positive at this difficult time, provides me with physical exercise, lovely organic food, company and the joy of knowing that it benefits wildlife as well.

Mistletoe, a seasonal favourite – Mary Sarre



My interest in this curious plant has been stimulated in the last couple of years, by coming across several occurrences locally, in Milton Keynes. This seemed to me quite odd, as I associate mistletoe with the apple orchards of the south-west, the orchards of Normandy, and poplar trees festooned with it in France (seen from the Autoroute).

So here is a little contribution to the botany of mistletoe, its distribution and association with certain birds, traditional beliefs and folklore, and some sightings here in MK.

Viscum album by Stella Ross-Craig, 1969 (see references below)

Viscum album, to give it its Latin name, is a good indicator of its characteristics – it has the well-known white berries, which are viscous (sticky), in winter, giving rise to its traditional association with mid-winter festivities. White-berried plants are unusual except in MK where the 'snowberry' (*symphoricarpus*) is used massively in grid-road plantings. Whether the snowberries are consumed by birds I don't know, but the

flowers do attract pollinating insects. Mistletoe is dioecious, i.e. having male and female parts on different plants. The leaves and stems are light green, typically branched at each node, producing a new 'fork' each year.

Mistletoe is semi-parasitic on a range of trees, but the main ones are Apple (*Malus*), Lime (*Tilia*), Pear (*Pyrus*), Hawthorn (*Crataegus*) and Poplar (*Populus*), occurring in orchards, hedgerows, parks and gardens. It is not generally found in dense woodland (Simon Harrap, 2013).

Mistletoe occurs chiefly in the south of England and Wales, in lowland areas. It is spreading from the old orchards of its Herefordshire heartland to different species of trees in parks and gardens in Hereford, Ledbury, Bridgnorth and Westbury-on-Trym (Mabey, *Flora Britannica*). South Bucks and Hampshire are also 'hot spots'.

Dispersal

In medieval times mistletoe seemed 'magical' in its appearance high in the host trees, evergreen and of a curious growth habit, appearing to spontaneously sprout from the tree. For centuries, mistletoe retained its magical, folkloric associations (see Richard Mabey for a wide-ranging account), and today its medicinal properties are still under investigation.

It was Philip Miller, curator of the Chelsea Physic Garden, who discovered that mistletoe could be established by smearing the sticky seed onto a suitable branch.

However, it is famously resistant to propagation by human hands ("none of the seeds placed on 14 different apple species in Kew Gardens in 1996 'took' but one grew on an adjacent Hawthorn". (Dr Ken Thompson, *Gardening Which?*, December 2020).

For long it has been assumed that the Mistle Thrush (*Turdus viscivorus*) was the primary disperser of the berries, as it attempts to remove the mucilaginous outer coat of the berry, raking its beak along a branch of the tree, and leaving its droppings in the tree.

To quote Dr Ken Thompson again, it appears that the Blackcap may now be a more effective distributor of mistletoe. He notes that the mistle thrush swallows the berries whole, and ejects the seeds randomly in its droppings. The Blackcap however eats only the skin and pulp of the seeds, wiping the sticky seeds off their beaks onto a branch. Once the seed is attached to a suitable branch, it sends out a 'root', a '*haustorium*' which penetrates the xylem of its host. The seeds are photosynthetic, so they need to be in the light.

Blackcaps, formerly mostly a summer visitor, are now frequently spotted in UK in winter (MKNHS sightings, November 2020). According to an article by Helen MacDonald, in *Vesper Flights*, German Blackcaps that have started spending winters here rather than in Africa may be directly responsible for spreading mistletoe to new areas of the British Isles. Which brings us back to our local area.

Local distribution

My notes cannot claim to be exclusive, and I would welcome any sightings from members. The first time I saw any mistletoe was in Great Linford Manor Park, a couple of years ago, in the venerable old lime tree near the canal. There are two balls/orbs high in the tree, obviously more visible in winter time (the park is open all year round). Julian Lambley drew my attention to another occurrence – in Simpson village – several orbs in two old Lime trees. This made me wonder if the canal and the Ouzel valley could be the ‘corridor’ for extending the range of the Blackcap or Mistle Thrush.

A last sighting, in Central Milton Keynes, possibly on a young lime tree gave me pause – perhaps the mistletoe was ‘injected’ on a limb before planting, or a human hand was involved?

A moth in the porch – Andy Harding



(Photo above of a – but not **the** – Red-Green Carpet. © Andy Harding)

In early March 2018 I ‘penned’ a short note to *Magpie*¹ about a moth, a Pale Brindled Beauty *Phigalia pilosaria*, which stayed in and around our porch from February 16th to March 3rd, sometimes exposed to inclement weather, but ignoring better days to fly off, until a definite thaw precipitated its departure.

This interesting (to me at least!) sequence of events has been paralleled in recent days by a different species, which stayed for 15 nights. The specific identity of this moth may give a clue to the reason for apparent inactivity, even if conditions seemed conducive to night time flight.

This year’s moth was first seen on the morning of February 21st: a Red-green Carpet *Chloroclysta siterata*, again adjacent to the outside porch light at around head height. Despite its strikingly vibrant green colour, I didn’t photograph it, since I have

plenty of photos of the species. Had I known I was going to write this note, I would have done so!!

This individual, we can be sure, was a female. Males of this species do not survive beyond autumn, but females hibernate and expect to mate with males emerging from mid-March onwards. However this one was three weeks earlier than any I have encountered in Old Stratford in the last 12 years. So early, in fact, that when I entered the record in the 2020/2021 winter Garden Moth Survey spreadsheet, it gave me a warning that it was outside the normal flight period and the record should be checked again before confirmation.

The moth seemed not to have moved at all from night 1 to night 2, but for the next 4 nights moved a few centimetres in different directions and ended up in different attitudes on the same area of brickwork. A bright sunny afternoon then was presumed to force it inside the small porch, where it again moved nightly to different pieces of the brickwork and then to the glass on the front door. Then on March 2nd it moved to the solid (PVC) part of the front door and as far as I could tell it remained in precisely the same spot for 4 nights. After a single night back on the brickwork inside the porch, it disappeared. A check of the porch confirmed it had not simply succumbed in the porch.

The inside of the porch has a light on all night to accompany the exterior light to which it was first attracted. Maximum daytime temperatures varied from 9C to 13C and night-time minima from 5C to 0C, with frosts on three nights. During the period a very modest number of moths visited the two moth traps in the back garden (max of 4) so conditions were not entirely inimical to night-time moth flight.

So why didn't she move any real distance. Of course, I don't know, but here is my sixpennyworth, and this may be rubbish. Well, there are two lights very close to her position, so these might be so attractive as to ensure she did not go very far. However moths frequently pitch up adjacent to the lights in and around the porch but usually stay for just one or two nights. So I prefer the idea that this female moth instinctively 'felt' she had to move very little. Flight takes up energy which can be better used for egg production, so she may have been pumping out pheromones waiting to attract males, which sadly this early in the year were not likely to have emerged, or so I assume. As I complete this on March 12th we are not quite at mid-month, but soon male Red-green Carpets will be emerging. I like to think she can hang on somewhere for a few more days!

Duke of Burgundy Butterfly and Blue Lagoon LNR – Martin Kincaid



(Photo: Duke of Burgundy at Blue Lagoon Local Nature Reserve © Martin Kincaid)

The Duke of Burgundy *Hamearis Lucina* is the only European member of a large family of butterflies known as metalmarks – the Riodininae. In South America, these butterflies can be found in great diversity and numbers and species typically have iridescent, metallic colouring or patches on their upper wings. By contrast, the Duke of Burgundy is a rather modest insect with its chequered brown and black wings.

In England, this is an insect of sheltered, sunny hillsides and woodland clearings with abundant primrose or cowslip, which are its two larval foodplants. It has suffered a serious decline in Britain and is now considered a very rare species thinly distributed across southern England. However, a strong population is present at Totternhoe Knolls and Totternhoe Quarry and there are several populations in the Chiltern Hills. The species was lost at BBOWT's Dancersend reserve but a re-introduction project, led by Mick Jones, is underway.

In early Summer 2018, a local naturalist told me that he had seen several Dukes (the popular shorthand) at Blue Lagoon LNR. Although I know Kevin to be knowledgeable about butterflies, I was sceptical at first and failed to find any when I visited Blue Lagoon in good weather. I did find the Latticed Heath moth, which is quite similar in appearance from a distance. I didn't forget though and was delighted to find 3 Duke of Burgundy here on 26th May 2019 (rather late in their short flight season). One of these was clearly a male, typically aggressive towards any other passing butterflies and insects. They are pugnacious little creatures and will defend their favourite perch from anything that flies past. I was able to photograph both male and female Duke of Burgundy on this visit. The flight season in 2020 coincided with the first national Covid lockdown and although the weather was good throughout April I did not visit. Eventually, I did get to Blue Lagoon on 21st May. I did wonder if I might be too late

given the high temperatures last spring, but fortunately I was able to locate two butterflies quite quickly. The area favoured by the Dukes seems to be the scrubby grassland to the south-east of the main pit.

Sadly, much of the habitat at Blue Lagoon has suffered in recent years from a lack of management. Several plant species have declined or been lost and with them some of the butterflies for which the site was known. The Green Hairstreak is still present but hard to find, the Small Blue much less frequent than in the past and the Grizzled Skipper has possibly disappeared. The discovery of the rare Duke of Burgundy is at least some compensation for these declines but it is crucial that management of the scrub resumes in the near future if one of Milton Keynes' best spots for Lepidoptera is to recover.

There are no records for Duke of Burgundy for Milton Keynes before 2018. It is possible that the species found its way here naturally from Totterhoe but we can't rule out an unlicensed release.

Identifying a mystery fungus – Julie Lane



(Photo © Julie Lane)

On 11th December whilst walking in Salcey Forest I saw a toadstool that was a bit different to others I had seen around the place. On closer inspection I realised that it was attracting large numbers of gnats (probably a type of fungus gnat). I took some photos and sent them to a very helpful lady at Bucks Fungus Group.

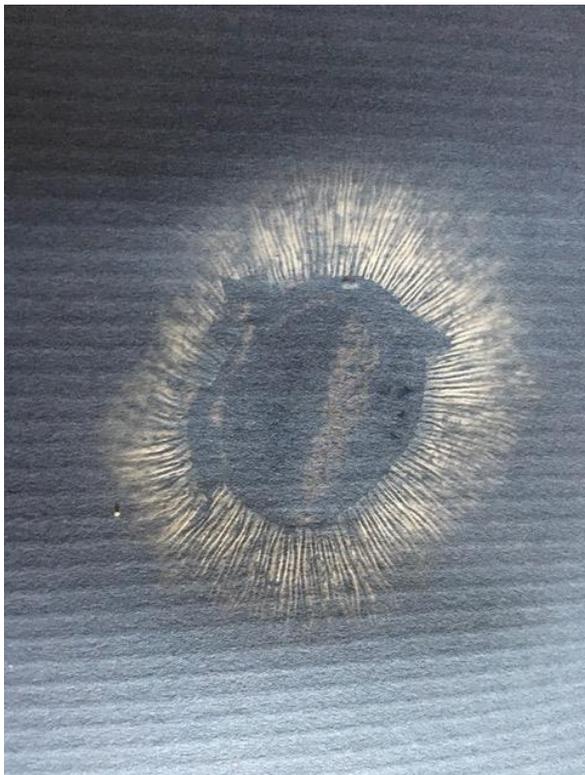
Penny Cullington very kindly had a go at identifying several fungi that I have photographed but she always makes it clear that she cannot identify a fungus from a

photo and would need the actual specimen to make a definite identification. I am always rather loath to uproot anything as even a toadstool, which is only the fruiting body of the fungal mycelia underground, is still providing a habitat for something even if it's only a tiny gnat!

Penny was interested in the darker spots around the rim of the cap and thought that it might be something rather rare, as there have been quite a few unusual fungi around this year, but she needed to know when the photo was taken, what trees were nearby, did it have gills or spores and if gills what colour they were, etc. After providing her with this information, she was still only guessing so on our next visit to Salcey I finally relented, uprooted it and took it home.

Once I had harvested the toadstool you could see the white spores actually tucked inside the gills of the cap (see below). Interestingly, I also noticed two little parasitic wasps on the cap which I assume were parasites of the gnat larvae (?) – another link in the chain of woodland life.

On Penny's advice I carried out the following two procedures.



Sporeprint: Cut off the cap from the stem at the top. Set the cap gills-down on a piece of dark paper and cover it with a pot / bowl/ whatever to keep air currents out and leave it overnight somewhere cool (not in the fridge!). Next day, check to see if you have a thick deposit (we're guessing it's going to be pale cream to white, hence putting it on dark paper otherwise you won't be able to see it!)

Drying: Now cut the cap into quarters and, together with the stem, put it spread out a bit gills up in the airing cupboard over the top of the hot water tank is ideal. The air needs to circulate around it so it's best put on wire mesh – something like a cake-cooling rack as long as it's not going to fall through! Then forget about it till after Christmas!

(Photo © Julie Lane)

I managed to get a lovely sporeprint. I then cut it all up and dried it as requested and sent it to Penny.

Disappointingly, on receiving the sporeprint with its white spores and the dried material Penny now thinks it is most likely to be *Clitocybe geotropa*, the very common Trooping Funnel, and not the *Clitocybe alexandri* (now *Clitopaxillus alexandri*) which has only been recorded a few times in the country. She still says

that she might send it off for DNA sequencing which is the next step for a definite diagnosis but I doubt that will change anything.

To be honest, it was what I suspected all along so I wasn't surprised but I did find the whole process fascinating, from seeing the gnats swarming round the toadstool, to the process of getting a sporeprint and the final drying of the toadstool in my partner's airing cupboard!! I will definitely try the sporeprints again in the future but still baulk at harvesting too many toadstools as they look so fabulous nestled amongst the leaf litter where they should be.

With many thanks for the help and advice from Penny Cullington of the Bucks Fungus Group. She's the Secretary of the group and also the county recorder for fungi, so if you'd like more information about the group and its activities visit their website at www.bucksfungusgroup.org.uk/index.html.