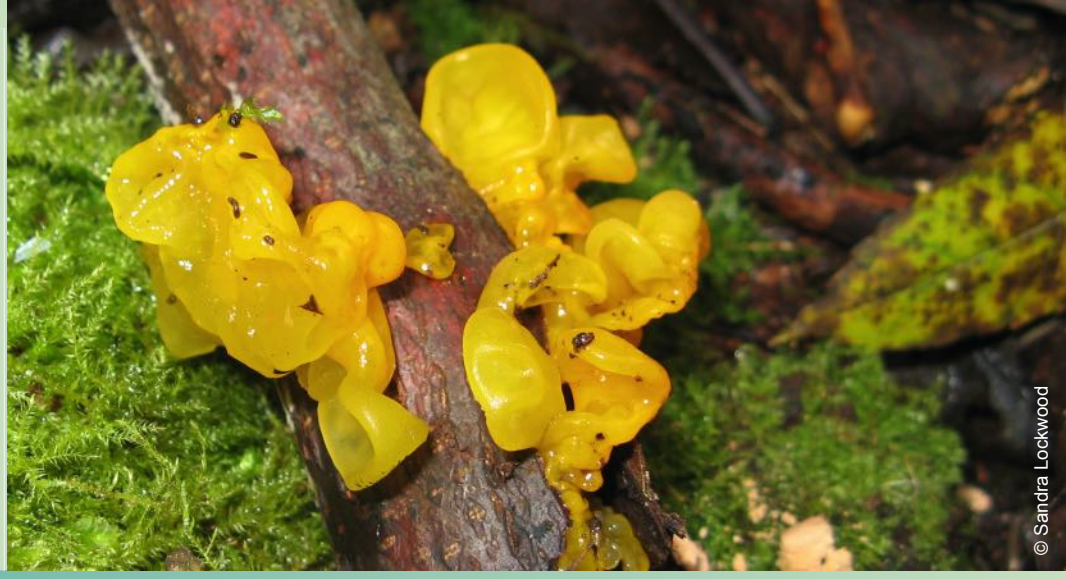
Friends of
Earlham cemetery



The newsletter for Friends of Earlham Cemetery Issue 13

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All our walks start by the Cemetery Office and gates at the Earlham Road entrance. Indoor meetings are held in the small room at the Belvedere Centre unless otherwise specified.

The following dates have been arranged:

Saturday 4th January 2020 (10.30am) – New year plant hunt.

Sunday 26th January 2020 (10am) – Big Garden Bird Watch.

Sunday 12th July 2020 (10am) – Insects. This will be a joint event with Norfolk & Norwich Naturlists' Society.

Christmas drinks at the Fat Cat
Sunday 15th December 2020 Meet at Cemetery gate at (2.30pm) or The Fat Cat, 49 West End Street, Norwich, NR2 4NA for (3.00pm)

The last issue of the year and my final issue as newsletter editor and creator. I think this is one of the best issues yet so it's good to be going out on a high. I'd like to say a big thank you to all the article contributors who have given their time, thoughts and photographs to help me produce an interesting read about the goings-on in Earlham Cemetery. Some good news is that Alysia Schuetzle has kindly volunteered to edit the next Cemetery newsletter.

On 10th August we had our first moth trapping event in the Cemetery and all went very well with new species adding to the ever increasing moth list. Speaking of lists, bat surveys were carried out in June by Dr. Vik Loveday and August by David Thomas to confirm the activity and evidence of bats using the Cemetery. The new information they gathered will help manage the area's habitats to support these mammals and other species and the introduction of bat boxes in the Cemetery may also be possible as a result.

With winter fast approaching it's a good time to do a spot of bird watching (they're easier to spot). Gary White has written a great article on what you can find in the Cemetery if you keep watch. If you live near the Cemetery, please don't forget to feed the birds if you can as this will give them a fighting chance in the cold months ahead.

The annual fungi hunt which was led in September by Ian Senior continues to grow every year. At least forty three people came along and both new and old fungi species were recorded helping to increase our fungi list.

Finally, Vanna Bartlett has supplied an interesting synopsis of some of the fauna found inhabiting the Cemetery throughout the years the Friends group has been active. Contributions of new sightings continue to grow showing what a wonderful green space this is and how the Cemetery acts as a mini oasis in the centre of Norwich for wildlife.

Sandy.

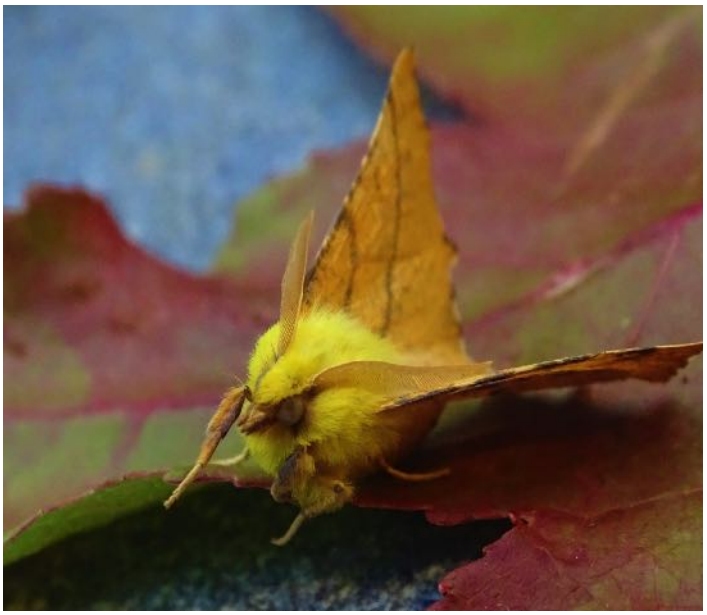
Moth Trapping in Earlham Cemetery - Jeremy Bartlett

Our website has lists of the plants and many of the animals we have found in Earlham Cemetery, including a substantial list of moths. But for years we have relied on chance observations of moths during the day time and for evidence such as leaf mines, for the Cemetery is locked every day at dusk.

We have also implied the presence of many moths by trapping in gardens backing onto Earlham Cemetery, including our own garden when we lived on Helena Road (1992 – 2013), in gardens on Earlham Road and St. Thomas' Road and, in recent years, in Gary White's garden, further up Helena Road.

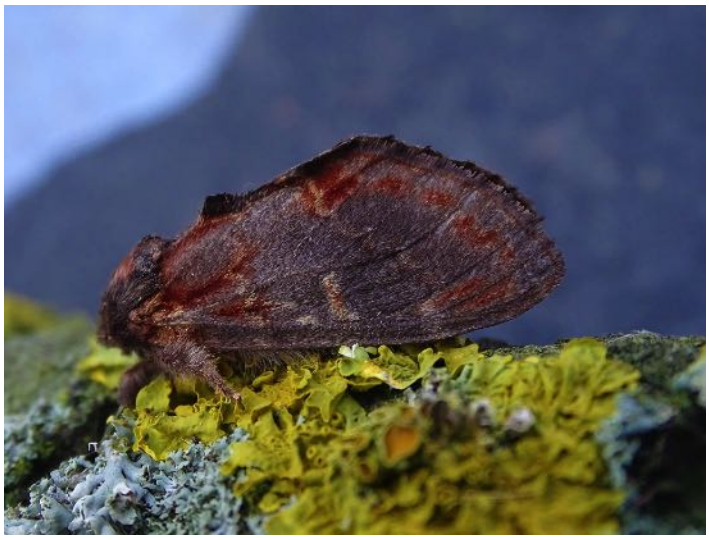
Black Arches. Photo by Matthew Casey.

In early March Ian and I met up with Susan Moore from Norwich City Council and she expressed an interest in holding a moth trapping evening. I leapt at the chance and immediately contacted Ken Saul, who my wife Vanna and I know from moth trapping back in the late 1980s and early 1990s.



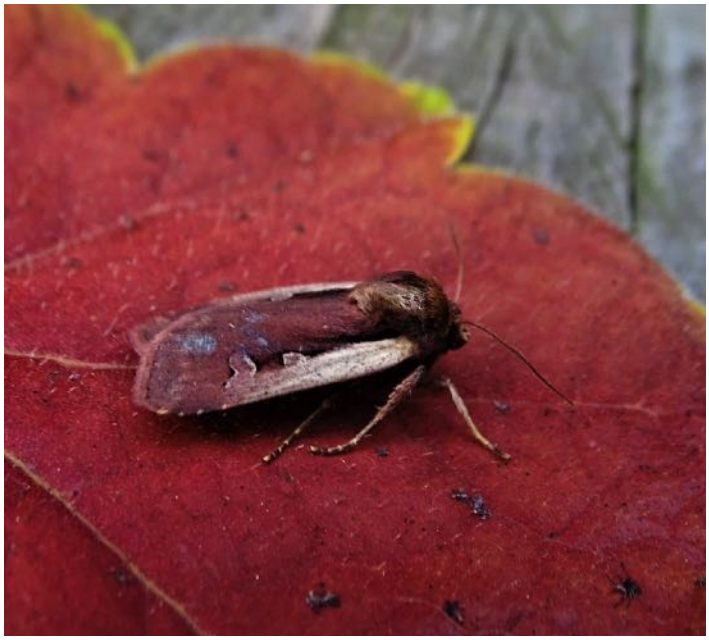
Canary-shouldered Thorn. Photo by Matthew Casey.

Ken was able to fit us into the busy Norfolk Moth Survey schedule and we arranged to have a moth trapping evening on Saturday 10th August. The event would be open to members of Friends of Earlham Cemetery, and attended by Susan and other Norwich City Council employees.



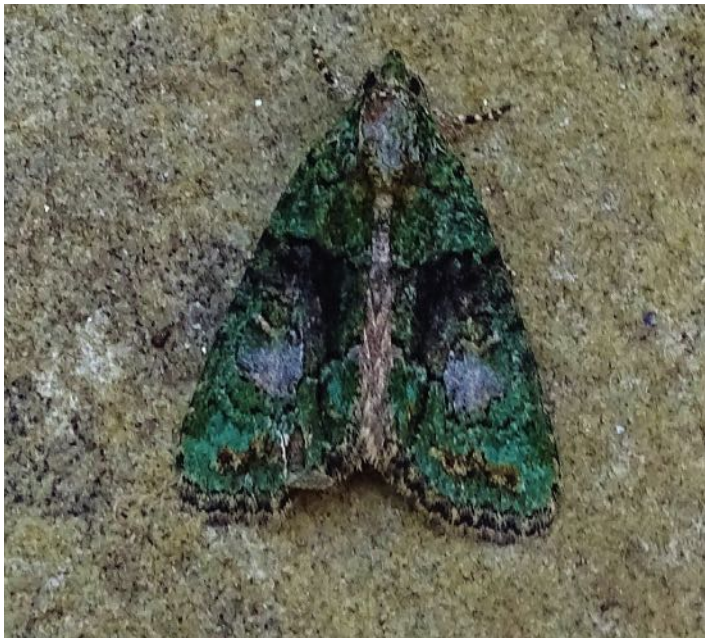
Iron Prominent. Photo by Matthew Casey.

Saturday 10th August was a cloudy and very windy day, with afternoon gusts of up to 48mph, which removed twigs and leaves from many trees. Fortunately the wind was forecast to subside by evening and by the time Ken, with his wife Joan, and Phil from Norfolk Moth Survey set up their traps it was a mild evening with only moderate winds and enough cloud to hide the nearly full moon.



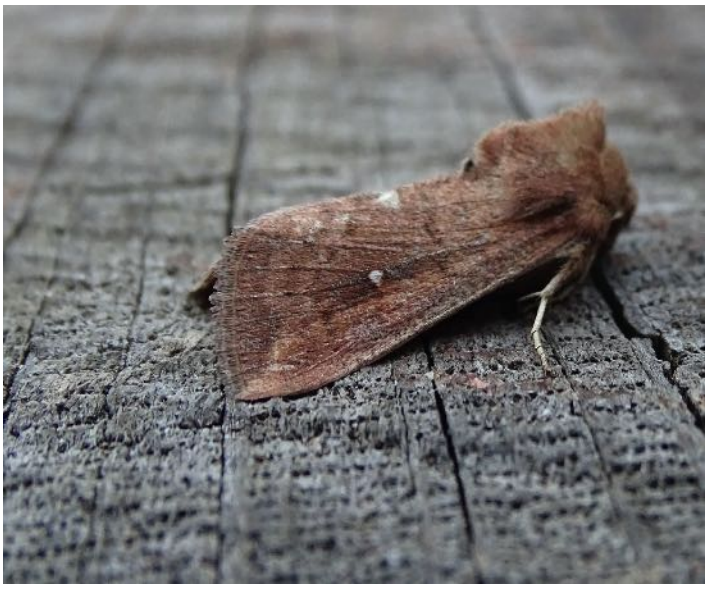
Flame Shoulder. Photo by Matthew Casey.

We chose a sheltered spot just west of the Catholic Chapel, hidden by trees from any nearby houses, and ran two traps powered by one portable generator.



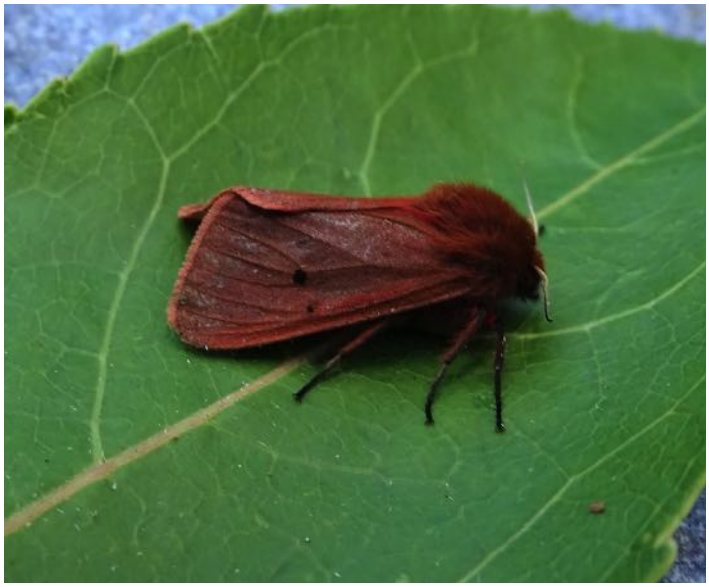
Tree-lichen Beauty. Photo by Matthew Casey.

While we waited for moths to arrive, David Thomas, who had brought his hand-held bat detector, took some of the City Council employees on a series of bat walks in the Cemetery. They encountered Common Pipistrelles and at least one larger bat, probably a Noctule. They also crossed paths with several Hedgehogs and we also saw two Muntjac as we set up Ken's trap. Susan saw a Roe Deer and a couple of us also heard the contact calls of juvenile Tawny Owls. (A pair nested in the Cemetery in the spring and raised three young.)



White-point. Photo by Matthew Casey.

We ran the traps until 1am and recorded 55 species of moth: a decent tally. Highlights included two Tree-lichen Beauty moths *(Cryphia algae)* – a first for me, although Gary has previously trapped the species in his Helena Road garden. It was lovely to see the visually stunning Black Arches *(Lymantria monacha)* and Canary-shouldered Thorn *(Ennomos alniaria)*. We also caught a good selection of micro moths, ranging from larger micros such as Mother of Pearl *(Patania ruralis)* to tiny species, such as the Horse-Chestnut Leaf-Miner *(Cameraria ohridella)*, evidence of which is very obvious in the leaves of the Cemetery's Horse Chestnut trees. The rarest sighting of the night were the leaf mines of the micro moth New Holm-Oak Pigmy *(Ectoedemia heringella)*, which was first recorded in Norfolk in 2011. But it wasn't a new species: James Emerson had already found the mines on our monthly walk on 19th November 2017 and on the New Year Plant Hunt on 2nd January 2018.



Ruby Tiger. Photo by Matthew Casey.

It was an enjoyable and interesting evening and time passed very quickly. Hopefully we can repeat the event in future years.

Many thanks to Ken, Phil and Joan for their trapping and expertise, and to Susan Moore and Norwich City Council for enabling this event to take place.

Thanks to Matthew Casey for supplying some of his superb moth photos to illustrate this article.

Jeremy Bartlett.

Full list of moths from the evening (55 species):

Species	Abundance	Stage	Status
Orange Swift Triodia sylvina	+	Adult	Common
Ectoedemia heringella (New Holm-Oak Pigmy)	+	Mine	Nationally Scarce B (<100 Norfolk records)
Coptotriche marginea (Bordered Carl)	+	Adult	Common
Lyonetia clerkella (Apple Leaf-miner)	1	Mine	Common
Cameraria ohridella (Horse-Chestnut Leaf-miner)	+	Mine	Common
Argyresthia goedartella (Golden Argent)	+	Adult	Common
Ypsolopha scabrella (Wainscot Smudge)	+	Adult	Common
Plutella xylostella (Diamond-back)	+	Adult	Migrant
Carcina quercana (Long-horned Flat-body)	+	Adult	Common
Bryotropha affinis (Dark Neb)	+	Adult	Common
Bryotropha terrella (Cinerous Neb)	+	Adult	Common
Aroga velocella (Dusky Groundling)	+	Adult	Local
Oegoconia quadripuncta (Four-spotted Obscure)	1	Adult	Common (<100 Norfolk records)
Blastobasis adustella (Dingy Dowd)	+	Adult	Common
Blastobasis lacticolella (London Dowd)	+	Adult	Common
Cochylidia implicitana (Chamomile Conch)	1	Adult	Local
Pandemis corylana (Chequered Fruit-tree Tortrix)	+	Adult	Common
Clepsis consimilana (Privet Tortrix)	+	Adult	Common
Epiphyas postvittana (Light Brown Apple-moth)	+	Adult	Common
Celypha lacunana (Common Marble)	+	Adult	Common
Cydia fagiglandana (Large Beech Piercer)	+	Adult	Common

Agriphila straminella (Straw Grass-veneer)	+	Adult	Common
Agriphila tristella (Common Grass-veneer)	+	Adult	Common
Agriphila geniculea (Elbow-stripe Grass-veneer)	+	Adult	Common
Catoptria pinella (Pearl Grass-veneer)	+	Adult	Common
Eudonia mercurella (Small Grey)	+	Adult	Common
Evergestis forficalis (Garden Pebble)	+	Adult	Common
Patania ruralis (Mother of Pearl)	+	Adult	Common
Endotricha flammealis (Rosy Tabby)	+	Adult	Common
Galleria mellonella (Wax Moth)	+	Adult	Common
Amblyptilia acanthadactyla (Beautiful Plume)	2	Adult	Common
Emmelina monodactyla (Common Plume)	1	Adult	Common
Common Carpet Epirrhoe alternata	+	Adult	Common
Double-striped Pug Gymnoscelis rufifasciata	+	Adult	Common
Canary-shouldered Thorn Ennomos alniaria	+	Adult	Common
Willow Beauty Peribatodes rhomboidaria	+	Adult	Common
Iron Prominent Notodonta dromedarius	+	Adult	Common
Black Arches Lymantria monacha	+	Adult	Local
Scarce Footman Eilema complana	+	Adult	Local
Buff Footman Eilema depressa	+	Adult	Local
Ruby Tiger Phragmatobia fuliginosa	+	Adult	Common
Turnip Moth Agrotis segetum	+	Adult	Common
Shuttle-shaped Dart Agrotis puta	+	Adult	Common

Flame Shoulder Ochropleura plecta	+	Adult	Common
Large Yellow Underwing Noctua pronuba	+	Adult	Common
Lesser Broad-bordered Yellow Underwing Noctua janthe	+	Adult	Common
Setaceous Hebrew Character Xestia c-nigrum	+	Adult	Common
Square-spot Rustic Xestia xanthographa	+	Adult	Common
White-point Mythimna albipuncta	1	Adult	Common
Tree-lichen Beauty Cryphia algae	2	Adult	Immigrant
Dun-bar Cosmia trapezina	+	Adult	Common
Cloaked Minor Mesoligia furuncula	+	Adult	Common
Spectacle Abrostola tripartita	+	Adult	Common
Straw Dot Rivula sericealis	+	Adult	Common

The full Earlham Cemetery moth list is on our website at http://www.friendsofearlhamcemetery.co.uk/Moths_of_Earlham_Cemetery.pdf.

Co-operative Presentation Day - Jeremy Bartlett

On Saturday 23rd November The managers at The Co-operative store, Earlham House Shopping Centre invited Friends of Earlham Cemetery to receive a cheque for £4116.68. This money was raised via Co-op members through the Local Community Fund. The money will go towards hay raking in the Cemetery.

Hay Raking

This year's hay raking took place at the very end of July and early August, earlier than in previous years. We decided to do this because an earlier cut, followed by removal of the arisings, removes more fertility from the grassland, giving wild flowers a better chance to grow.

Ideally the hay would have been cut a couple of days before the raking but mowing actually started on 15th July. I had to quickly mark out all our Yellow Rattle areas with plant hoops, which fortunately stopped the plants from being cut before they had finished flowering.

In 2020 we will ask for the mowing to take place later in August, to give plants longer to flower. This will also benefit many insects in the Cemetery.

Damage to Fungi Area

The Management Plan asks for grass cutting to cease at the start of October in areas with the best waxcap fungi, to allow the fungi to form their fruit bodies without damage from cutting.

However, this autumn Norse mowed these areas in mid October. More seriously, this took place in very wet weather, causing damage to the grass and, more importantly, the moss that fungi such as waxcaps rely on.

We received the following response from Norwich City Council:

"Apologies for the delay in response. I have caught up with the grounds maintenance supervisor at NNE and he has sincerely apologised for the errors. He has already had discussions with staff about how they ensure that it does not happen again including some clear maps and signage in the depot. This error occurred whilst he was pushing staff to complete tasks in both cemeteries, as well as other works at other sites. We have also

Chopped Waxcaps. Photo Jeremy Bartlett

placed additional demands on their time in recent weeks and months as we seek to develop the services provided in Earlham and particularly in the Rosary.

All of this is against a challenging back-drop of an ever-decreasing financial resource and a constant search for better-value options. Alongside this there is now a period of uncertainty for staff arising from the council's decision to insource all of the services currently provided by joint venture arrangements with the Norse group, including those provided by Norwich Norse Environmental.

For the avoidance of any doubt, the provisions of TUPE determine that all staff currently carrying out these tasks are protected employees and will therefore transfer to the new company on 1st April 2021.

The future cemetery management planning will continue to be based on the operational needs of the service, the financial position of the council and the Norwich 2040 City Vision. As ever we are always grateful for comments and suggestions from the 'Friends of' groups and will endeavour to accommodate these wherever possible and practicable."

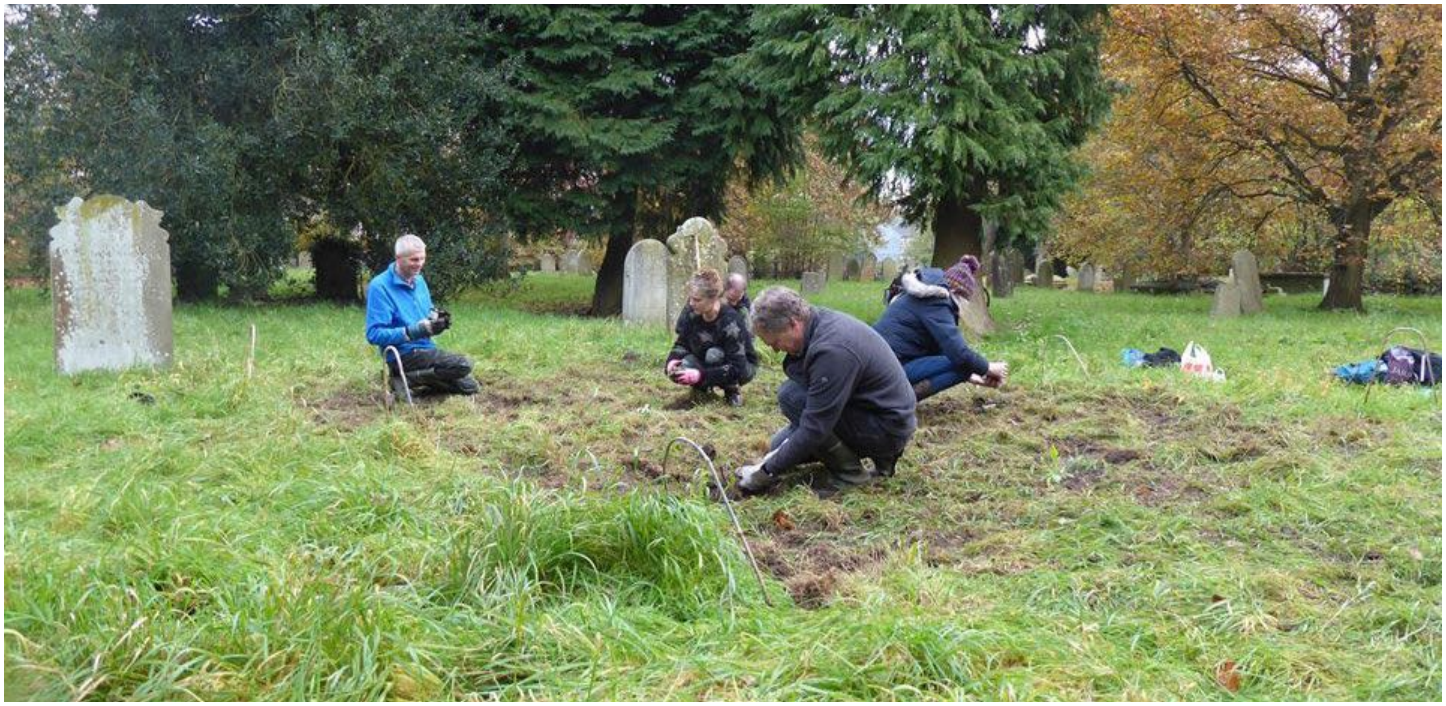
We have submitted a document with suggestions on how the Cemetery can be managed more sympathetically and some of us are meeting with Norwich City Council and Norfolk Wildlife Trust in mid December

Sowing Yellow Rattle and Planting Wild Flowers

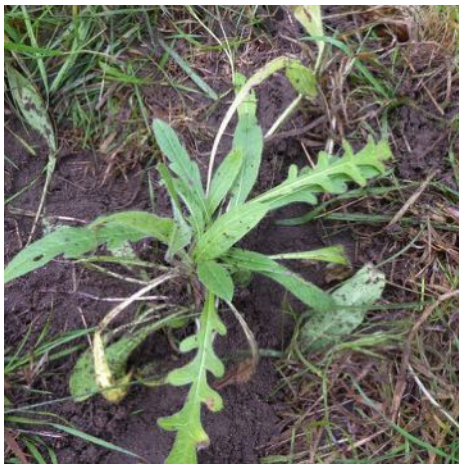
Finally, some much more positive news.

On Sunday 17th November 2019 we scarified the soil in two more areas (in Sections 4 and 5) and sowed Yellow Rattle (*Rhinanthus minor*) seeds here. We also planted container-grown

Preparing the ground. Photo Jeremy Bartlett

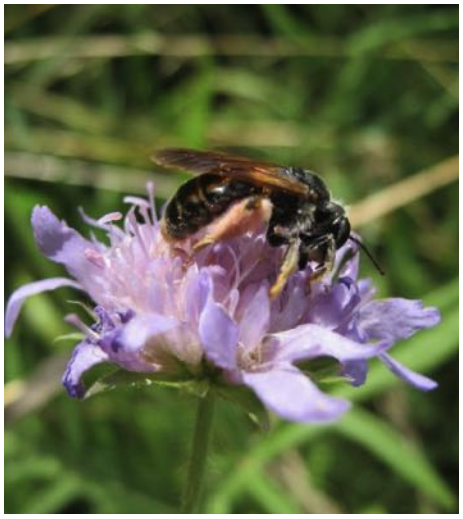


Planting wild flowers. Photo Jeremy Bartlett



Field Scabious. Photo Jeremy Bartlett

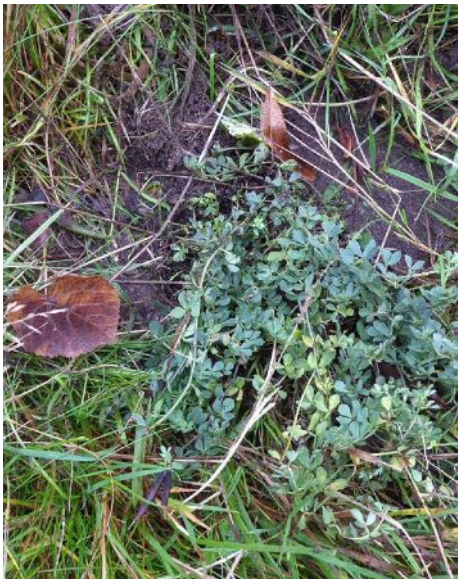
wildflowers: Field Scabious (*Knautia arvensis*), Wild Clary (*Salvia verbenaca*) and Bird's-foot Trefoil (*Lotus corniculatus*).



Large Scabious Mining Bee (*Andrena hattorfiana*) – female, with pink Field Scabious pollen. Photo: Jeremy Bartlett.

Field Scabious is required by the Large Scabious Mining Bee (Andrena hattorfiana). The existing patches of Field Scabious are in shady areas, so flower late.

The newly planted areas receive more sunshine, which should enable the plants to flower at the start of the bee's flight period (late June to late July).



Birds Foot Trefoil. Photo Jeremy Bartlett

Wild Clary used to grow in the Cemetery but grass mowing gradually destroyed the plants until only one plant was left. We marked this and it started to flower, until a kind member of the public pulled the plant up and destroyed it.

We planted the Bird's-foot Trefoil in an area of shorter, less lush grass, not far from the Jewish Cemetery. It is the foodplant of the Common Blue butterfly, which occurs in the Cemetery, and the Six-spot Burnet moth, which could be found in the Cemetery in until 2007, and still occurs nearby.

The larger Field Scabious plants came from Natural Surroundings at Bayfield Hall in North Norfolk (naturalsurroundings.info) and I grew the Bird's-foot Trefoil, Wild Clary and smaller Field Scabious plants from seed. As usual, the Yellow Rattle seeds came from Emorsgate Seeds (wildseed.co.uk).

Thanks to everyone who helped.

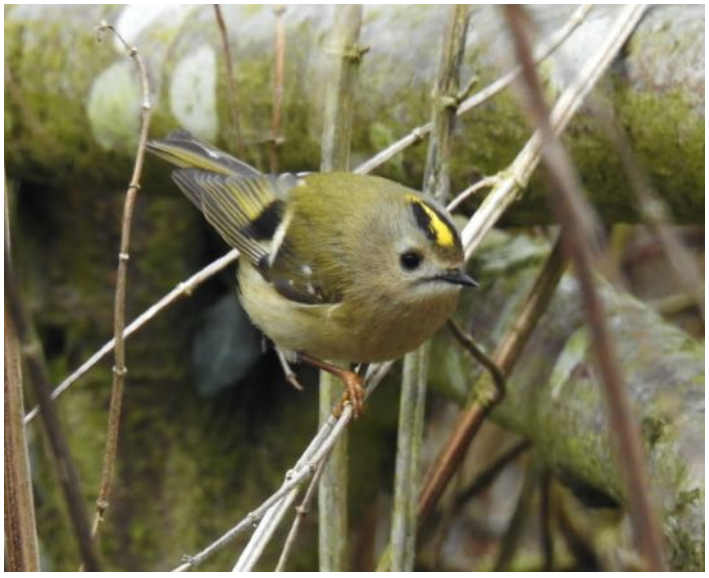
Jeremy Bartlett.

Birds To Look out For - Gary White and Alysia Schuetzle

It's hard not to enjoy walking into the Cemetery and hearing the busy noise of the traffic on Dereham Road dissipate, replaced by the sounds of birds calling. This is particularly lovely in spring, when bursts of jubilant song signify the start of the breeding season; always a great time to birdwatch anywhere - and Earlham Cemetery is no exception.

Firecrest. Photo by Gary White

On the morning of May 4th, we heard an out of place yet distinctive call within about 100 yards of stepping through the gate on the north-east side of the cemetery. A slightly frantic seep-seep-seep, more likely to be heard in coniferous areas of the The Brecks or the south of England, meant that straight away we knew what we were looking for. This was the call of a Firecrest (*Regulus ignicapilla*). Whilst similar in shape, size and song to a Goldcrest (Regulus regulus), the Firecrest's faster call, striking head pattern and bold eye stripe distinguish it from this more common cemetery resident.

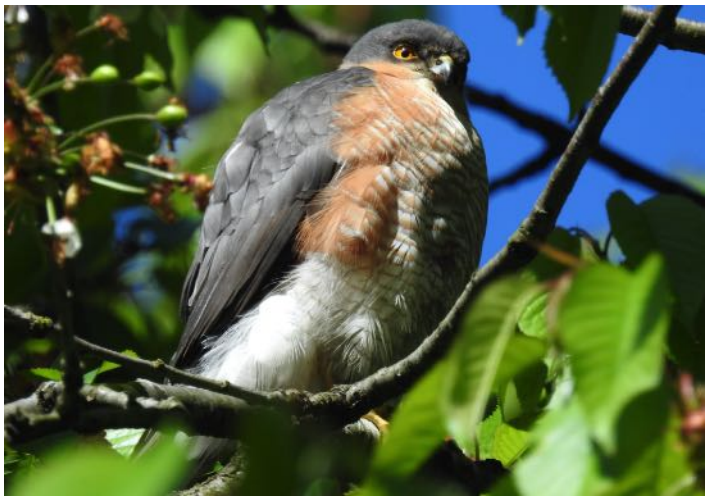


Goldcrest. Photo by Gary White

We watched the bird, a young male, flit from various trees around the military burial ground in the north-east corner of the cemetery for some time. Firecrests were last recorded in Earlham Cemetery in the early 1990s, so it's great to think they might be returning. It was fantastic to see and hear this young bird hopping from tree to tree and singing its heart out. A few other local birdwatchers also enjoyed seeing the Firecrest, and for some it was the first time they'd had the chance to watch one within the Norwich ring road. A great urban record!

Firecrest. Photo by Gary White

May 4th continued to be a good day for birdwatching in the Cemetery. Walking around, we saw Nuthatches (*Sitta europaea*), Great Spotted Woodpeckers (*Dendrocopos major*), a Green Woodpecker (Picus viridis), Treecreepers (*Certhia familiaris*) and even a flyover Grey Heron (Ardea cinerea). We then stumbled across a pair of Sparrowhawks (*Accipiter nisus*) - who took off from their new nest site, with this fine male landing in the cherry tree next to us and keeping a watchful eye on his patch.

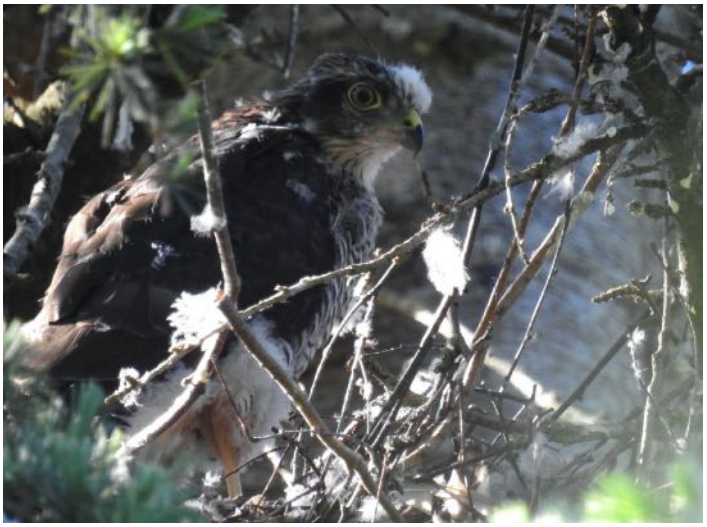


Sparrowhawk. Photo by Gary White

Their nest was well hidden, high in a pine tree and obscured from view at almost every angle. However, from certain positions (standing quite far back) we could just glimpse the top of the female sitting on the nest. Sparrowhawks typically lay 3 - 6 eggs and they are laid at intervals during May, with incubation lasting for 32 - 35 days, so we were hopeful that a brood of chicks might make an appearance soon. Over the next few weeks we monitored the nest, and on June 26th noticed the first fluffy white chicks had hatched, with two just visible over the top of the nest.

Sparrowhawk fledgling - Earlham Cemetery. Photo by Gary White

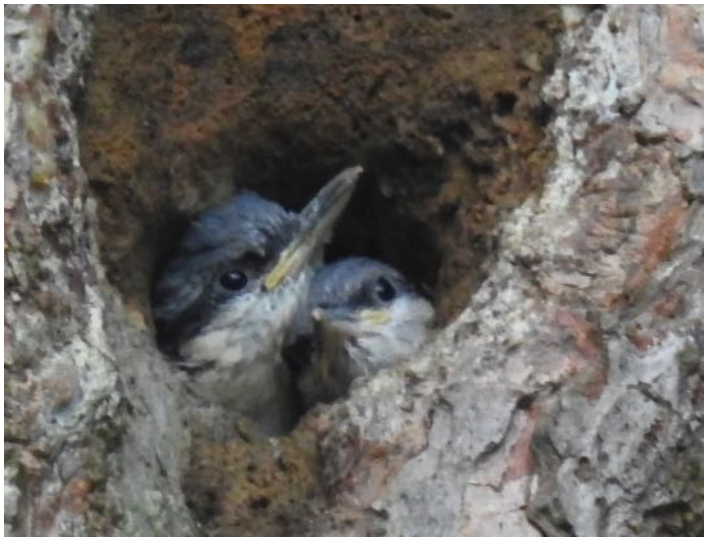
Chicks usually hatch at intervals so they're easier for the parents to feed, so we knew it was likely more chicks would soon appear. Young Sparrowhawk chicks cannot regulate their own body temperature, which implied that, as the female was regularly leaving the nest, these chicks were over a week old. Over the next few weeks we watched a total of four chicks grow bigger and start to lose their fluff, with the first chick leaving the nest on July 13th and only one chick remaining by July 15th. By the 25th, all four chicks had fledged properly and could be seen taking practice flights around the nearby trees and chasing their parents for food. Since this little family started flying, nearly every trip into the cemetery includes a flyover Sparrowhawk sighting!



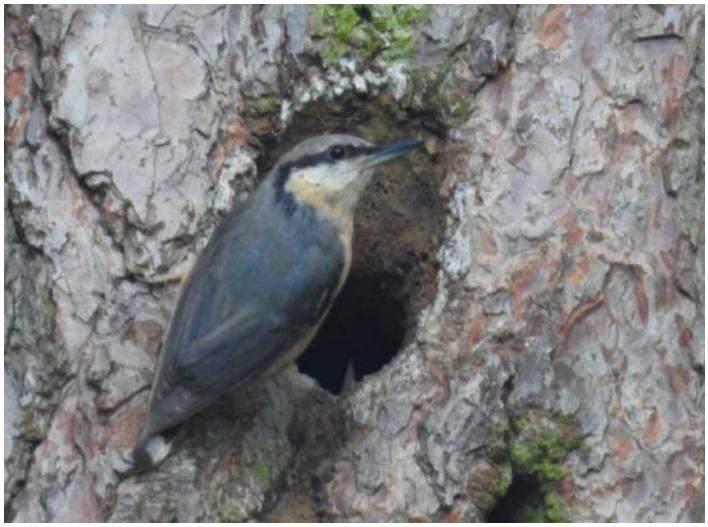
Sparrowhawk fledgling - Earlham Cemetery. Photo by Gary White

The Sparrowhawks were one of the 31 species that we recorded successfully breeding in the cemetery this year. And on 13th June, we confirmed two more.

You might remember that during May's Birdwatching Walk, we all visited an area where Nuthatches had been seen darting in and out of holes in a few different trees. After this, we continued to visit the site, and on May 4th managed to spot two fully grown chicks peering out! When looking for a nest, Nuthatches will try to find the best sized hole in a tree - often where a branch has broken off. A smaller hole helps stop predators getting in, so if the hole is too big or has cracks, birds will find clay-like soil to fill it in with (you can see from the photo how this pair has enclosed the hole from the top). Though we could see two chicks, it was near impossible to tell how many were really in the nest as the opening was only big enough for two heads to poke out of.



Nuthatch young - Earlham Cemetery. Photo by Gary White



Nuthatch Parent - Earlham Cemetery. Photo by Gary White

We watched this nest for around 40 minutes, and the parents regularly visited the chicks, bringing them snacks of caterpillars and bugs. When the parents were absent the chicks constantly peered out, as if ready to fledge.

A few days later the nest was deserted, but contact calls between the young and the parents could be heard in nearby trees.

Nuthatches are present all year round, incredibly territorial and rarely venture too far, so next time you visit the Cemetery keep your eyes peeled. In recent weeks at least one bird has taken up residence in the north-east corner, quite far from the original nest - this may well be one of those fledged young looking for its own territory.

Tawny owls (*Strix aluco*) have been regularly heard calling over the winter months from inside the Cemetery. They are a very early breeder and will often lay eggs in March, meaning much of their courtship takes place over winter. We felt sure that the owls were nesting somewhere in the cemetery, but had no idea where. This hunch was backed up when we heard a Tawny Owl call around midday towards the end of May, causing quite a commotion from a group of resident Jays (*Garrulus glandarius*) that must have disturbed the owl from its roost.

Then, on the evening of June 13th just after watching the Nuthatches, we heard a young Tawny Owl call. After some careful searching, we found one chick perched and then two further chicks huddled together in an adjacent tree.

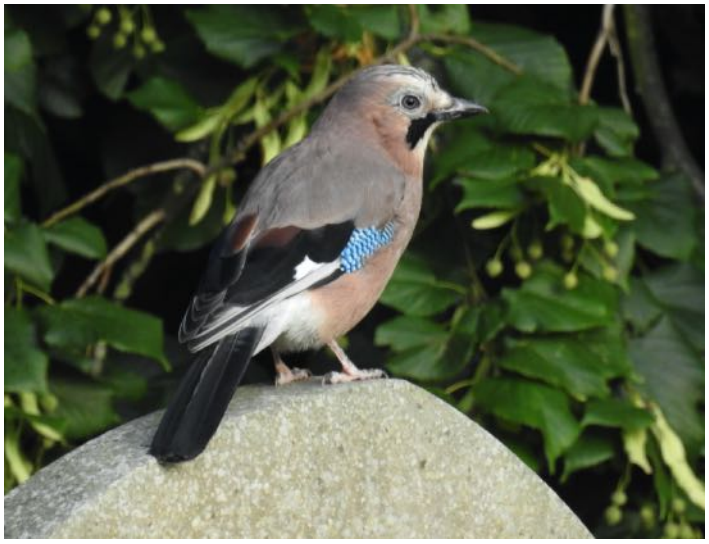
Tawny Owl chick - Earlham Cemetery. Photo by Gary White

As you can see from the photos, these chicks were very young. Tawny Owl chicks nearly always leave the nest before they can fly and will clamber around bushes and trees close to their nest until they are more mobile. Two days later, we went back for another look. There was no sign of the young birds (though we didn't look too hard, so as not to disturb them), but we did see one of their parents, standing guard near the nest area.

Tawny Owls chicks - Earlham Cemetery. Photo by Gary White

Tawny Owl adult - Earlham Cemetery. Photo by Gary White

By late June the young were present in the same area but were obviously bigger and less fluffy than before. At August's moth trapping event inside the cemetery, we could hear the whole family still together; three young and two adults all calling to each other. The young with their scratchy "pee-wick" call, and the adults with their famous "tu-wit-wu-woo". Both birds make different parts of this call; the female making the "tu-wit" and the male replying with the "wu-woo". It's a good idea to listen out for the owls - even during the day - but be warned, there is a Jay that can do a perfect Tawny Owl impression, "hooting" twice before lapsing into its normal raucous call.

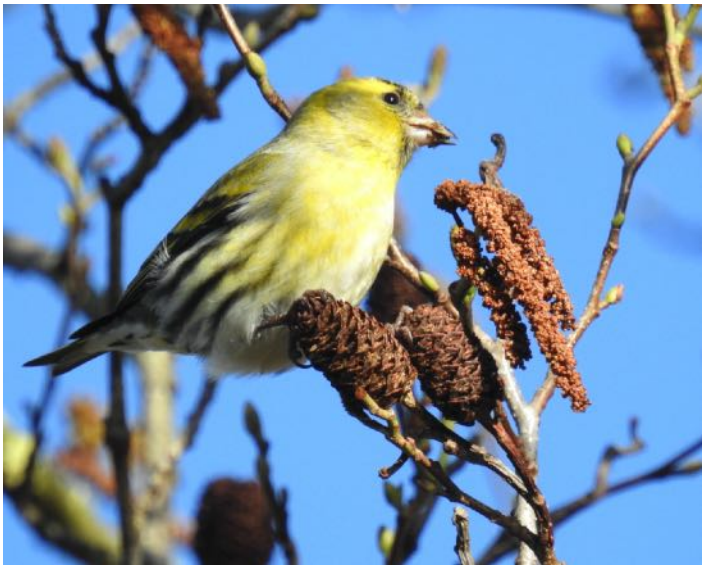


Jay - Earlham Cemetery. Photo by Gary White

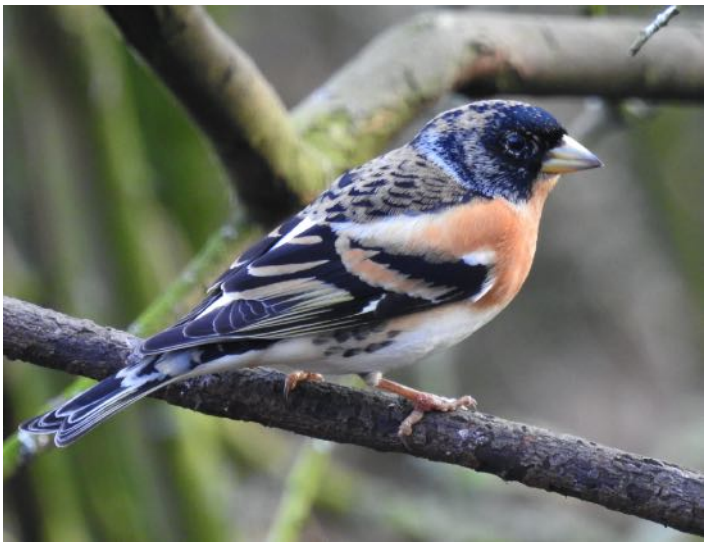
This winter, look out for thrushes like Redwing (*Turdus iliacus*) and Fieldfare (*Turdus pilaris*), and finches like Siskin (Carduelis spinus) or the scarcer Brambling (*Fringilla montifringilla*). Last year a few Blackcaps (*Sylvia Atricapilla*) also overwintered. If you're very lucky, you might even spot a Hawfinch (*Coccothraustes coccothraustes*): we saw one flying close by on October 28th (the last record was from 1991!) They love to eat the seeds of Yew trees, so be sure to check these thoroughly if you're enjoying a winter walk in the cemetery.

Redwing. Photo by Gary White

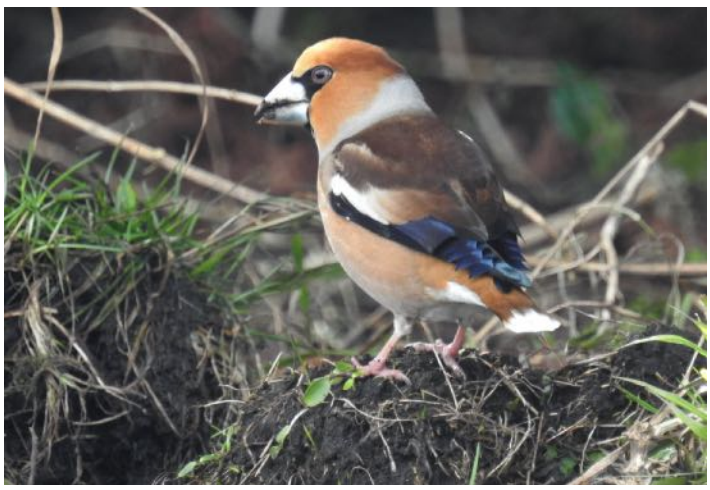
Fielfare. Photo by Gary White



Siskin. Photo by Gary White



Brambling. Photo by Gary White



Hawfinch. Photo by Gary White

Gary White and Alysia Schuetzle

Bats in Earlham Cemetery - Jeremy Bartlett

Bat Survey in Earlham Cemetery

In early June 2019 Dr. Vik Loveday took part in the Norfolk Bat Survey and recorded the bats in grid reference TG2109 over three consecutive nights. (This 1km grid square runs north and east of the Norwich Community Hospital on Bowthorpe Road and includes the northern edge of Earlham Cemetery by Bowthorpe Road and Dereham Road, and the area north of Dereham Road as far as the River Wensum.) The results are in an Adobe Acrobat file, on our website at http://www.friendsofearlhamcemetery.co.uk/Bat_survey_results_June2019.pdf.

Vik set up a bat detector overnight in Earlham Cemetery on 4th June 2019 and recorded the following species:

- Brown long-eared bat
- Common pipistrelle
- Daubenton's bat
- Leisler's bat or Noctule
- Natterer's bat
- Noctule
- Pipistrelle species
- Serotine
- Soprano pipistrelle.

Moth Trapping Night

On our Moth Trapping Night on 10th August 2019, David Thomas led three bat walks (between 21.00 and 23.00) to ascertain bat usage of the cemetery.

Susan Moore and other attendees from Norwich City Council were enthusiastic companions on David's walks.

David's Report

Walk one

DT plus 2 others at about 21.00.

Started by checking the Roman Catholic chapel on the main drive to the Crematorium. No bats picked up on detector. No evidence spotted of droppings at any potential ingress/egress points.

Walked round the crematorium to ascertain if any bats were using the area as a roost. None noted.

Then walked to the water feature to consider if it was suitable for Daubenton's. Conclusion – there wasn't sufficient square footage to sustain a Daubenton's Bat.

From there we walked to the Jewish building to check for evidence of bat activity. No droppings noted and no bats picked up on the detector.

We walked back towards the Cemetery and stopped short of the water feature in an open grassed area with a few trees. We detected a single Common Pipistrelle and stayed in the area for about 15 minutes. The bat persisted in the area. The typical peak of pulses which sound like raspberries confirmed the bat was foraging. There was also a single pass of a larger bat which was presumed to be a Noctule.

We walked back past the Crematorium to the mothing area past the disused Roman Catholic chapel. No more bats were located. We noted at least 3 hedgehogs in addition to one spotted earlier.

On our return one of the moth trappers reported seeing a Noctule several times whilst we were on the walk.

Walk two

DT plus 5 others about 22.30.

We followed the same route past the Roman Catholic chapel, Crematorium and water feature. We heard and saw evidence of Common Pipistrelles foraging around the same tree as noted on the earlier walk.

The bat detector picked up multiple signals of Common Pipistrelles perhaps as many as five. Bearing in mind the detector has directional microphones I would say that there were at least 10 bats close to the tree. I don't know the collective name for bats but a cacophony would be appropriate. The group stood entranced for quite a while. We then followed the same route back towards the Jewish building.

We walked as far as the former nursery compound, which gives access to the Jewish building. We were treated to at least one Common Pipistrelle on the left hand side which was silhouetted against the street lights by the hospital.

We then proceeded to walk around a loop which followed Bowthorpe Road, Helena Road and Winter Road and then walked back to the central area by the chapel and lodge and re-joined the moth group. The walk around what must be the eastern end of the cemetery only had fleeting bat contacts; all being pipistrelle sp.

It is possible that the tree was used as a roost. In which case the bats we detected were getting themselves ready to go to a foraging area. Bats would take advantage of prey items. Further work would be needed to confirm either hypothesis.

Walk three

DT plus 5 others about 23.00.

This walk was over a loop going west along the drive from the disused Roman Catholic chapel. North to the Julian Hospital and west as far as the ride one away from Farrow Road towards Earlham Road and then back to the drive by the chapel where the

moth traps had been set. Again only fleeting contacts (Pipistrelle sp) were noted.

From the time we returned until 1.00am I regularly picked up pipistrelles along the drive going west from the disused chapel. Say one every ten to 15 mins. Only a single bat each time.

I suggest that there is an opportunity for a study of bats in the Cemetery. I did not see evidence of bat activity in the three buildings inspected or around the central lodge. There was also a wide variation in bat activity in different parts of the cemetery. This could be down to the wind which was quite strong throughout the observation time. The cemetery also has many types of tree and a variety of woodland habitat types.

There is an opportunity to study bat usage of the Cemetery and then consider how to manage the site to enhance bat usage of the site. Possibilities include providing roost boxes and managing the different areas to stimulate insect/moth populations. The east side might benefit from more flowering plants.

Static bat boxes could be used for the study. Audiomoth bat boxes would be ideal. (can be purchased through groupget). They are also used for bird song etc.

Some (such as the Pipestrelles David detected) are probably permanent residents, whereas others could just be occasional fly-throughs. Brown Long-eared Bat is an especially good record.

Hopefully we can improve the habitat by encouraging more wild flowers, which will, in turn, improve the habitat for insects, giving more food for bats.

Thanks to Vik Loveday and David Thomas for their recent work looking at bats in Earlham Cemetery, to Norfolk Bat Survey for interpreting Vik's results, and to everyone who has contributed records.

Jeremy Bartlett

Earlham Cemetery Mammals List

I've also updated the Mammals list for Earlham Cemetery with the results of Vik and David's surveys. It is on our website at http://www.friendsofearlhamcemetery.co.uk/Mammals_Reptiles_Amphibians_Earlham%20Cemetery.pdf.

We have now recorded the following species of bats in Earlham Cemetery:

Species	Comments
Brown long-eared Bat, *Plecotus auritus*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday.
Daubenton's Bat, *Myotis daubentonii*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday.
Natterer's Bat, *Myotis nattereri*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday.
Serotine Bat, *Eptesicus serotinus*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday.
Leisler's Bat, *Nyctalus leisleri*	The Norfolk Bat Survey carried out by Dr. Vik Loveday on 4th June 2019 included the call signature of "Leisler's Bat or Noctule", so there is a possibility that this species also occurs in Earlham Cemetery.

Species	Comments
Noctule Bat, *Nyctalus noctula*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday and a large bat, possibly a Noctule, was detected on 10th August 2019 (David Thomas). 14/07/2018: seen along Cemetery edge by Helena Road (Gary White) and on 04/10/2018 by St. Thomas' Road (Thea Nicholls). "Not seen for years" (Thea Nicholls 2014). 22/08/2006: seen along Cemetery edge at top of Helena Road (Jeremy & Vanna Bartlett).
Pipistrelles, *Pipistrellus pipistrellus / Pipistrellus pygmaeus*	Seen every year, including over Helena Road back gardens (Jeremy & Vanna Bartlett) and by St. Thomas' Road Thea Nicholls). Recorded by sight only. A bat detector is needed to distinguish Common & Soprano Pipstrelle bats.
Pipistrelle, *Pipistrellus pipistrellus*	Detected in Cemetery on10th August 2019 (David Thomas) and on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday. Also detected in July 2015 by Norfolk Bat Survey on St. Thomas' Road.
Soprano Pipistrelle, *Pipistrellus pygmaeus*	Detected in Cemetery on 4th June 2019 by Norfolk Bat Survey, carried out by Dr. Vik Loveday. Also detected in July 2015 by Norfolk Bat Survey on St. Thomas' Road.
Nathusius' pipistrelle, *Pipistrellus nathusii*	Not recorded in Cemetery but occurred very close by in July 2015. Detected by Norfolk Bat Survey on Connaught Road.

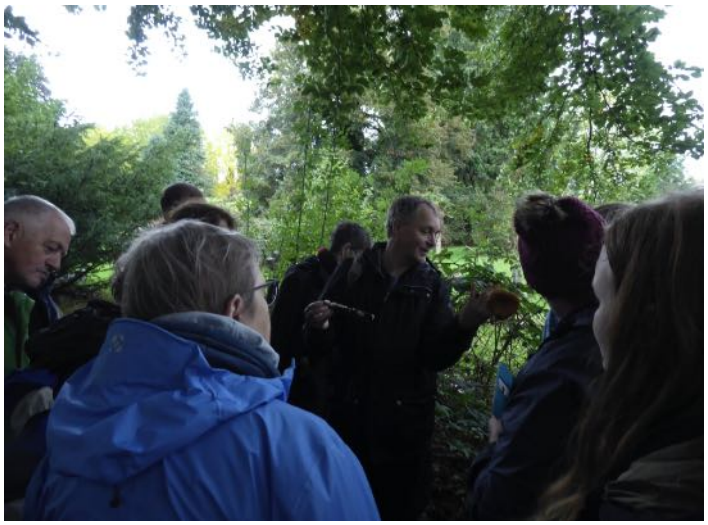
Some Fabulous Fungi - Jeremy Bartlett

The late summer of 2019 was very dry and it seemed likely that we wouldn't see many fungi in autumn. But then the rain started in the last week of September and for three weeks it rained at least every other day, sometimes heavily, and suddenly fungi started appearing.

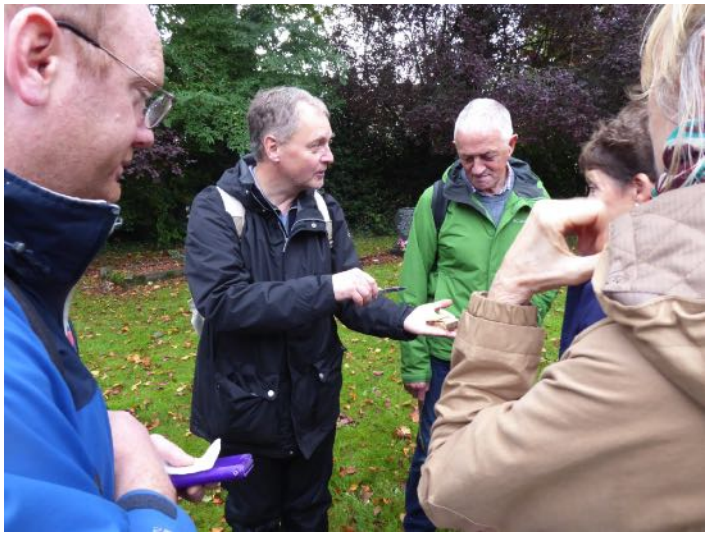
We had a very well attended fungi walk on Sunday 13th October – I counted at least forty-three people at the start, although numbers diminished later in the walk. Those of us who stayed to the end spent three and a half hours in the Cemetery.

Many thanks to Ian for leading a very interesting walk.

Jeremy Bartlett.



13th October 2019 fungus walk. Photo by Jeremy Bartlett.

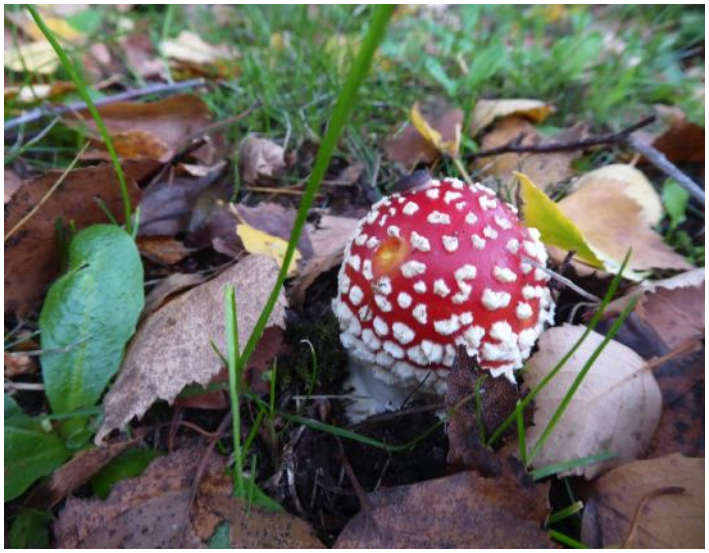


13th October 2019 fungus walk. Photo by Jeremy Bartlett.

Nut Disco – a small fungus that grows on fallen beech mast. Photo by Jeremy Bartlett.

Glistening Inkcaps. Photo by Jeremy Bartlett.

Fairy Inkcaps. Photo by Jeremy Bartlett.

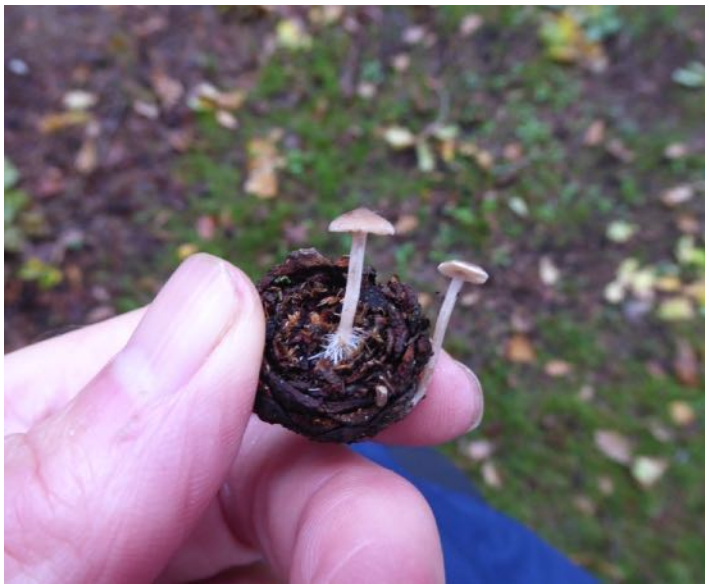


Fly Agaric. Photo by Jeremy Bartlett.

Fluted Bird's Nest. Photo by Jeremy Bartlett.

Oysterlings (*Crepidotus sp.*). Photo by Jeremy Bartlett.

Copper Spike. Photo by Jeremy Bartlett.



Conifer Cone Cap – grows on fallen pine cones. Photo by Jeremy Bartlett.

Blue Roundhead. Photo by Jeremy Bartlett.

This is the list of what we recorded on the day:

Scientific name	English name
Agaricus moelleri	Inky Mushroom
Agaricus xanthodermus	Yellow Stainer
Amanita muscaria	Fly Agaric
Armillaria mellea	Honey Fungus
Armillaria ostoyae	Dark Honey Fungus
Arrhenia retiruga	-
Arrhenia rickenii	-
Atheniella flavoalba	Ivory Bonnet
Baeospora myosura	Conifer Cone Cap
Chlorophyllum rhacodes	Shaggy Parasol
Chroogomphus rutilus	Copper Spike
Clitocybe dealbata	Ivory Funnel
Clitocybe fragrans	Fragrant Funnel
Clitocybe gibAgaricus moelleriba	Common Funnel
Collybia dryophila	Russet Toughshank
Coprinellus disseminatus	Fairy Inkcap
Coprinellus micaceus	Glistening Inkcap
Crepidotus sp.	Oysterlings
Cyathus olla	Field Bird's Nest
Cyathus striatus	Fluted Bird's Nest
Exidia thuretiana	White Brain
Geastrum striatum	Striated Earthstar
Geastrum triplex	Collard Earthstar
Hebeloma sp.	Poison Pie
Hygrocybe conica	Blackening Waxcap
Hymenoscyphus fructigenus	Nut Disco
Hypholoma fasciculare	Sulphur Tuft
Hypocrea pulvinata	Ochre Cushion

Scientific name	English name
Inocybe geophylla	White Fibrecap
Laccaria laccata	Deceiver
Lactarius blennius	Beech Milkcap
Lepiota cristata	Stinking Dapperling
Lepista flaccida	Tawny Funnel
Lepista nuda	Wood Blewit
Lycoperdon excipuliforme	Pestle Puffball
Lycoperdon pratense	Meadow Puffball
Macrocystida cucumis	Cucumber Cap
Macrolepiota procera	Parasol
Marasmius oreades	Fairy Ring Champignon
Paxillus involutus	Brown Rollrim
Piptoporus betulinus	Birch Polypore
Rhytisma acerinum	Tar Spot
Rickenella fibula	Orange Mosscap
Russula versicolour	-
Sawadaea bicornis	Acer Mildew
Stropharia caerulea	Blue Roundhead
Suillus bovinus	Bovine Bolete
Taphrina betulina	Witch's Broom
Trametes versicolor	Turkeytail
Tricholoma terreum	Grey Knight
Xerocomellus cisalpinus	-

Dumped Soil Brings Wildlife Benefits - Jeremy Bartlett

Back in April, we noticed that a quantity of soil had been dumped in the former nursery area, south of the Jewish Cemetery. We checked with Susan Moore at Norwich City Council and she confirmed that the soil had been fly-tipped. The City Council were carrying out checks to make sure the soil wasn't contaminated with anything nasty, such as asbestos. At the time of writing (October 2019) the soil is still there.

But what started off as an anti-social act turned out to be beneficial to wildlife.

Red Mason Bees

In late April we noticed lots of female Red Mason Bees, *Osmia bicornis*, flying in and out of holes in the heaped soil. They were collecting mud, rather than actually nesting in the bank.

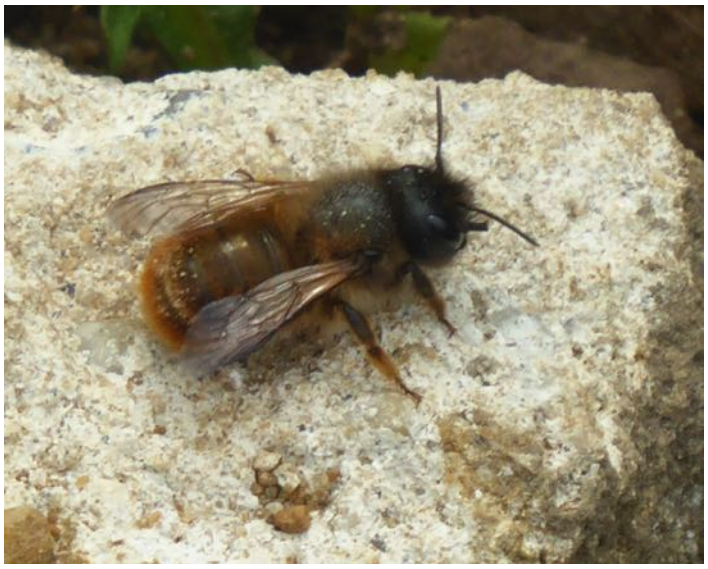
Red Mason Bees are about the size of a honeybee and nest in cavities such as in dead wood, beneath roof tiles, in holes in mortar and in existing cavities in the ground. (They will even nest inside a door lock.) They use mud to seal their nest cells.

Osmia bicornis is a common spring species of solitary bee, found in much of England and occurring as far north as Perthshire.

Females can be identified by two "horns" on their face. They are covered in bright orange hairs, with dark hairs on the *clypeus* ("face"). Pollen is collected on the underneath of the abdomen.

The BWARS website has more useful information about the species – see Beginners bees and wasps and the species account for Osmia bicornis. The latter includes a video of the bees collecting mud.

Female *Osmia bicornis* collecting mud in Earlham Cemetery. Photo by Vanna Bartlett.



Female *Osmia bicornis*. Note "horns", orange body hairs and black face. Photo by Vanna Bartlett.

Female *Osmia bicornis*. Photo by Vanna Bartlett..

There were also several smaller species of bees (including various Furrow Bees, *Lasioglossum*), using the soil as a nesting site.

Sharp-leaved Fluellen

The dumped soil was heavy clay, and very different from the naturally occurring soil in Earlham Cemetery, which is loam or sandy loam, becoming sandier in western half of the Cemetery.

Not only did it make good mud for Red Mason Bees, it contained seeds of Sharp-leaved Fluellen, *Kickxia elatine*. By the end of summer, the heap of soil was covered in the plant.

Sharp-leaved *Fluellen* is an annual plant which I had only seen once before, in 2014. It is usually found on

the margins of arable fields, and this is where I saw my first specimen, on clay soil in South Norfolk, following a tip-off from James Emerson.

Sharp-leaved Fluellen has a low-growing, spreading growth habit and its straggling growth and arrow-shaped, sharply pointed leaves could be mistaken for Lesser Bindweed from a distance. Close up, there are obvious differences: Sharp-leaved Fluellen is covered in sticky hairs and its flowers are like mini Snapdragon flowers, yellowish to bluish with a violet-purple upper lip.

Sharp-leaved Fluellen is a member of the Plantaginaceae (Plantain family), whereas Lesser Bindweed is in the *Convolvulaceae* (Bindweed family).

Kickxia is named after Jean Kickx (1775–1831), a Belgian botanist and mineralogist.

I wrote about the plant on my blog, at the end of July 2019.

Jeremy Bartlett

Sharp-leaved Fluellen in Earlham Cemetery. Photo by Jeremy Bartlett.

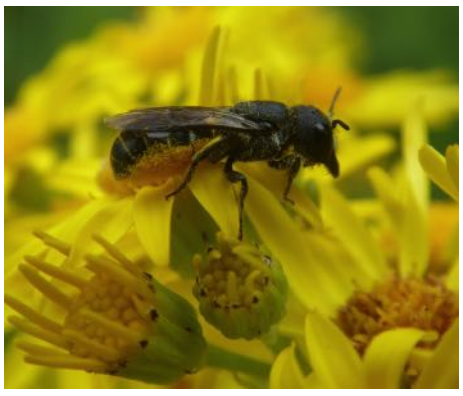
Additions to the Invertebrate Fauna of Earlham Cemetery, 2019 - Vanna Bartlett

One of the aims of the Friends of Earlham Cemetery is to document the wildlife which is found in the Cemetery. After more than eight years, with contributions pre-dating the group's formation, we have amassed some quite impressive species lists with new records added every year. New species are often found on our monthly walks but a lot of the new records are down to the diligent searching of a few members who make regular visits to the site as well as attending/leading the walks. 2019 has been no exception and we have had some interesting finds. Here are some of the highlights.

The bee list continues to grow (55 species at present), with Ian Senior finding *Dasypoda hirtipes*, the wonderfully-named Pantaloon Bee, in July in the Jewish Cemetery collecting pollen from *yellow Asteraceae* flowers. It is a large and attractive bee with bold white hair bands on the abdomen and distinctive long orange pollen-collecting hairs on the hind legs. Ian also found the diminutive *Chelostoma campanularum* (Small Scissor Bee) on Bellfower. In August I found at least two *Heriades truncorum* (Large-headed Resin Bee) on Ragwort flowers. This species seems to have undergone quite a dramatic range expansion this year, spreading out from its Breckland haunts. As well as the Cemetery, I have recorded them in my garden, on Bluebell Allotments and even at Holkham.

Dasypoda hirtipes on *Catsear*. (Photographed in Norwich).

The diminutive *Chelostoma campanularum* on a Campanula flower. (Photographed in Norwich).

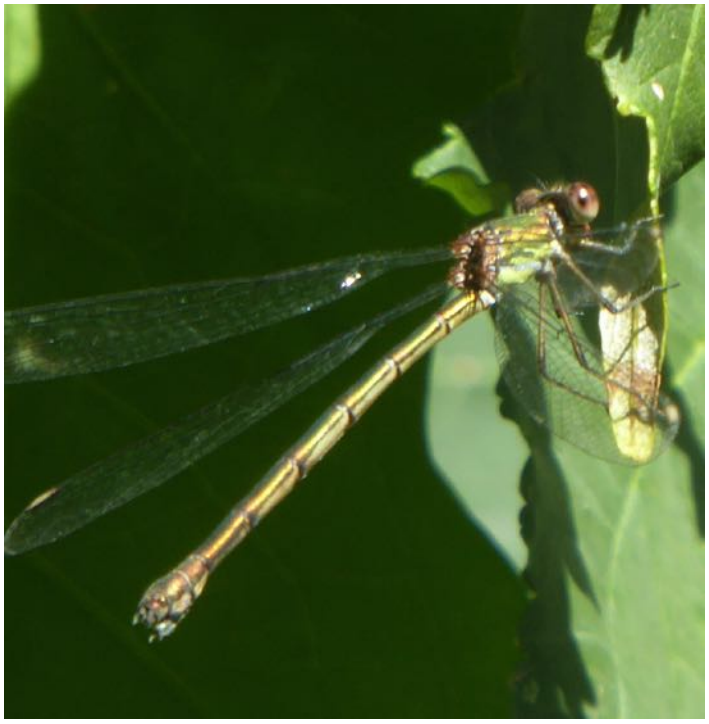


Heriades truncorum female on Ragwort.

The number of dragonflies and damselflies present is quite limited as there is just the one pond in the Cemetery. Despite this, it is surprising what does turn up. On our June walk looking at grasses, Mike Crewe spotted a Norfolk Hawker (*Aeshna isosceles*) dragonfly and in September I found a Willow Emerald. Norfolk Hawkers have been recorded in Heigham Park before and this species is expanding its range from its traditional stronghold in the Broads.

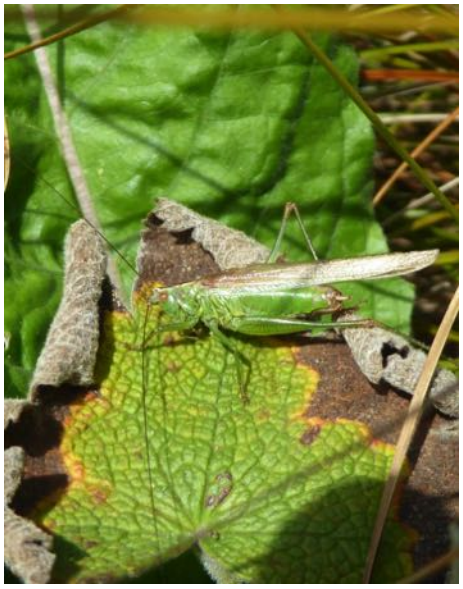
The Willow Emerald (*Lestes viridis*) is a fairly recent colonist which is spreading. It is unusual in that the female lays her eggs in twigs of bushes overhanging water. Ian Senior has seen them in his garden close to the Cemetery where he has a pond. It is quite likely that at least some of the species recorded are emerging from ponds in gardens neighbouring the Cemetery.

Norfolk Hawker, photographed at Strumpshaw Fen.

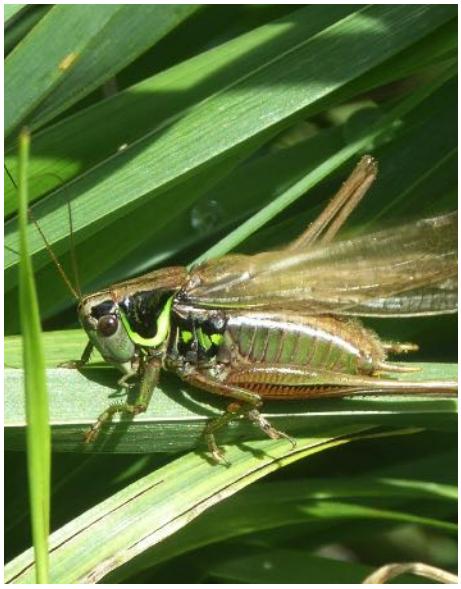


Willow Emerald.

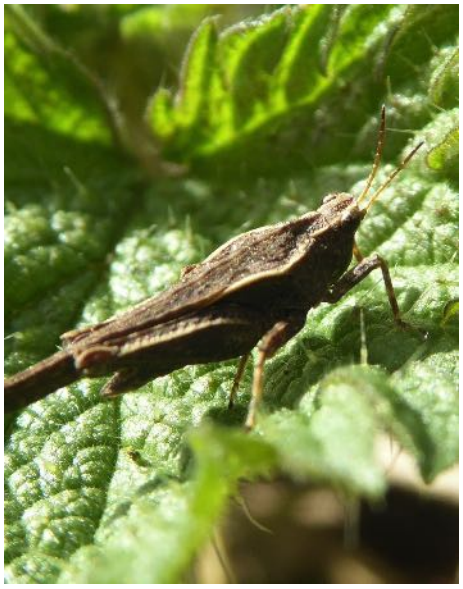
There aren't that many species of grasshopper and crickets on the Cemetery list so it was nice to add Long-winged Conehead (*Conocephalus discolor*) and Roesel's Bush-cricket (*Metrioptera roeselii*) this year. These are both species that have spread throughout the county in recent years, probably as a result of climate change. Also recorded for the first time was a Slender Groundhopper (*Tetrix subulata*) in the area of sparsely vegetated ground adjacent to the Jewish Cemetery.



Male Long-winged Conehead. (Photographed in Norwich).



Roesel's Bush-cricket. This macropterous (long-winged) male was found in long grass near the War Memorial Garden.



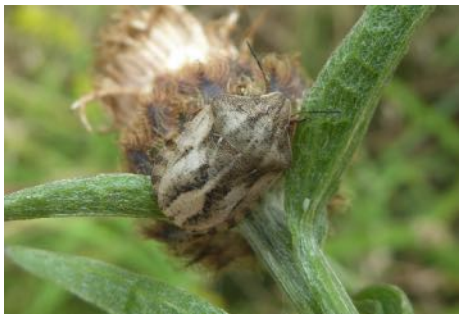
Slender Groundhopper on nettle leaf. (Photographed at Strumpshaw Fen).

The Ladybird list stands at 14 species of what are known as conspicuous ladybirds (the larger, more obvious species that most of us are familiar with) and a further two inconspicuous ladybirds which were new to the Cemetery in 2019. The latter are extremely small and require careful searching for to find or, in my case, plain luck! I found both species, *Nephus quadrimaculatus* and *Scymnus frontalis*, while looking for and observing solitary bees. Now I know they are present, I will be on the look-out for more. Spring is a good time to hunt for ladybirds when the adults emerge from hibernation and can be found sitting about warming up in sunny weather. (See issue no. 12 of this newsletter for more information on ladybirds in Earlham Cemetery.)

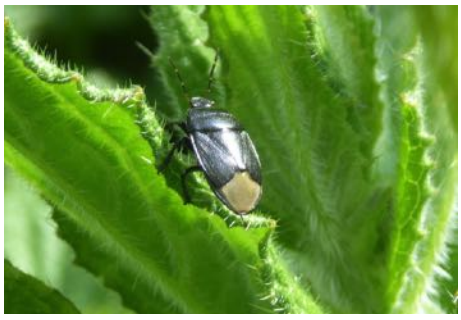
Nephus quadrimaculatus on ivy.

Scymnus frontalis on gravestone.

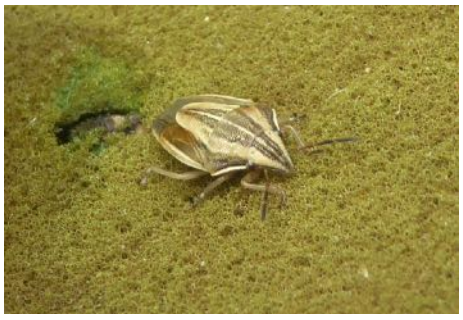
The true bugs (Hemiptera) are a very diverse and interesting group. Many of them are very small and require detailed examination with a hand lens to identify to species but others are a reasonable size and readily identified. The Shieldbugs and Leatherbugs are particularly nice and are a favourite of many people, myself included. (Jeremy wrote about them in a previous newsletter, issue no. 11). New additions in 2019 included a Tortoise Shieldbug (*Eurygaster testudinaria*) found by Ian Senior, Forget-me-not Shieldbugs (*Sehirus luctuosus*) on Green Alkanet and Bishop's Mitre (*Aelia acuminata*), both found by me and Jeremy. The impressive looking Western Conifer Seed Bug (*Leptoglossus occidentalis*) was found on the October fungi walk. This species originates from the USA and was initially accidently introduced into Europe and then turned up in Britain. There are a number of records from Norfolk and it seems to be spreading.



Tortoise Shieldbug (photographed in the Brecks).

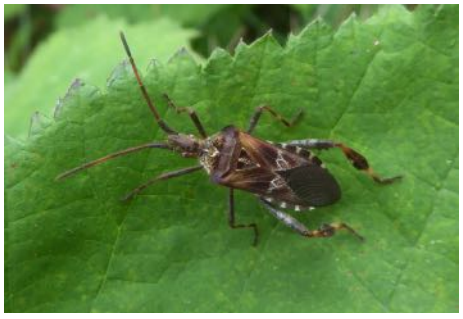


Forget-me-not Shieldbug.

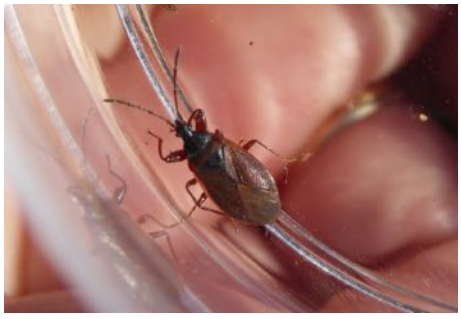


Bishop's Mitre Shieldbug.

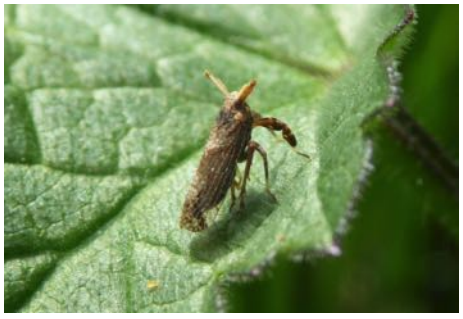
While out looking for ladybirds in late February, I found a single Pine-cone Bug, *Gastrodes grossipes*. Normally associated with Scots Pine, the one I found was on the trunk of a Larch tree. Considering the number of pines in the Cemetery, I would expect there to be more records of this fairly distinctive species.



Western Conifer Seed Bug.



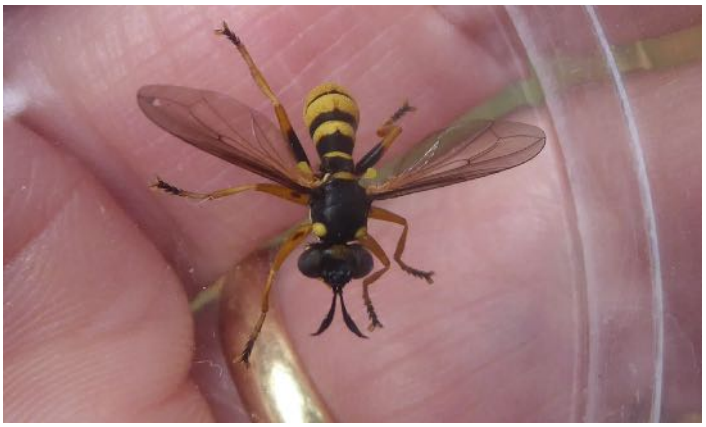
Pine-cone Bug.



Asiraca clavicornis.

I was greatly pleased to find a specimen of *Asiraca clavicornis* while carrying out bee-survey work in April. This small species is one of the planthopper bugs and is quite striking. It used to be quite widespread in southern Britain but then its range contracted to the Thames estuary area and around London. It seems to be increasing again though, or perhaps has been overlooked. I have previously found it in my garden and this year also on my allotment so it was good to record one in the Cemetery.

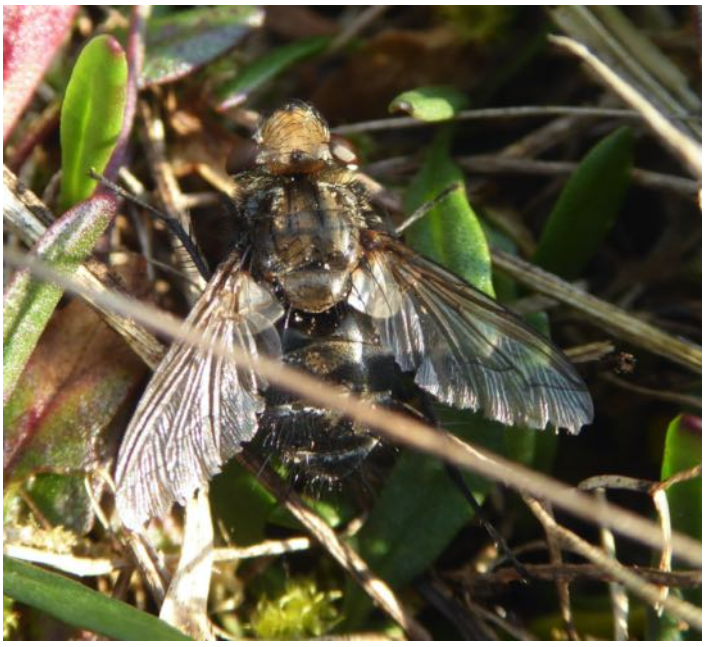
When it comes to flies and hoverflies, it is very difficult to find new species to add to the list because of the outstanding recording work undertaken by Stuart Paston over the years. However, many of Stuart's records are from several years ago or of single individuals so it is worth noting a few species that have been recorded again in 2019. Most notable are *Leopoldius signatus*, an uncommon Conopid fly that is a parasitoid of social wasps (*Vespula sp.*) and *Phasia hemiptera*, a parasitoid of shieldbugs. Both species were found on ivy flowers in September.



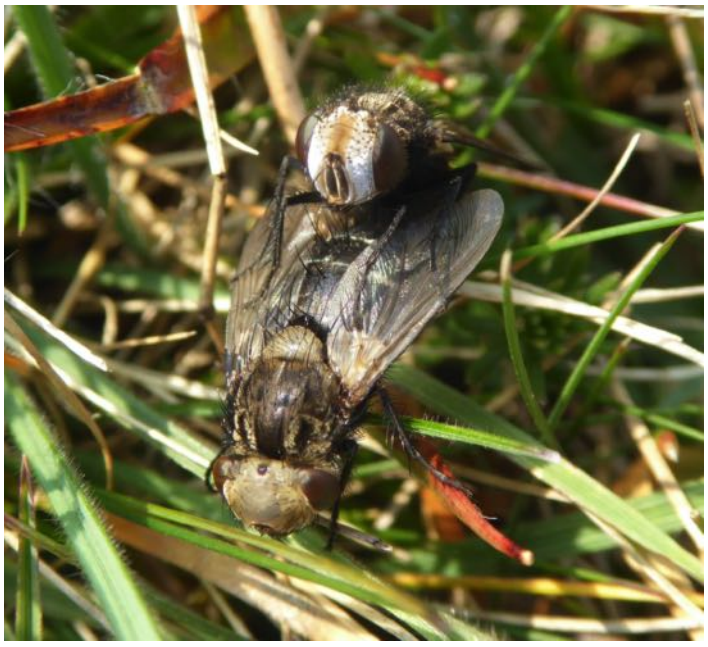
Conopid fly *Leopoldius signatus*.

Phasia hemiptera on ivy.

Will Nash managed to add a species to the list when he found the *Tachinid* fly *Gonia picea* in April. This is an unusual record for, although this is a grassland species, most Norfolk records are from the Brecks. It isn't exactly the most attractive fly, indeed some on encountering it for the first time have said that only its mother could love it with those looks! I, however, rather like them for all that. Like many other *Tachinids*, it is a parasite on moth larvae.



Tachinid fly *Gonia picea*, photographed in the Brecks.

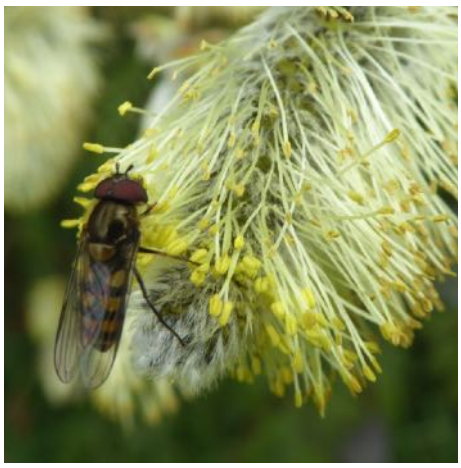


Gonia picea, mating pair, Norfolk Brecks.

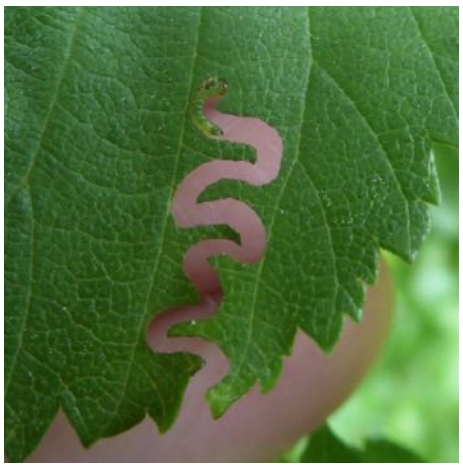
Hoverflies of note in 2019 included a single record of *Criorhina* ranunculi, seen on cherry blossom in early April. There is just one previous record for the Cemetery. A few males of *Parasyrphus punctulatus* were on sallow catkins (pussy willow) in March.

Spring species such as these two are often poorly recorded due to the vagaries of the weather at this time of year.

Hoverfly Criorhina ranunculi (photographed in Norfolk).



Parasyrphus punctulatus on Pussy Willow.



Zig-zag Elm Sawfly with characteristic feeding pattern.

Zig-zag Elm Sawfly larvae were recorded in the Cemetery for the first time in May. This is an invasive species that is fast colonising Britain, feeding exclusively on elms. It was recorded along Waterworks Road in Norwich in 2018 and seems to be spreading quite rapidly.

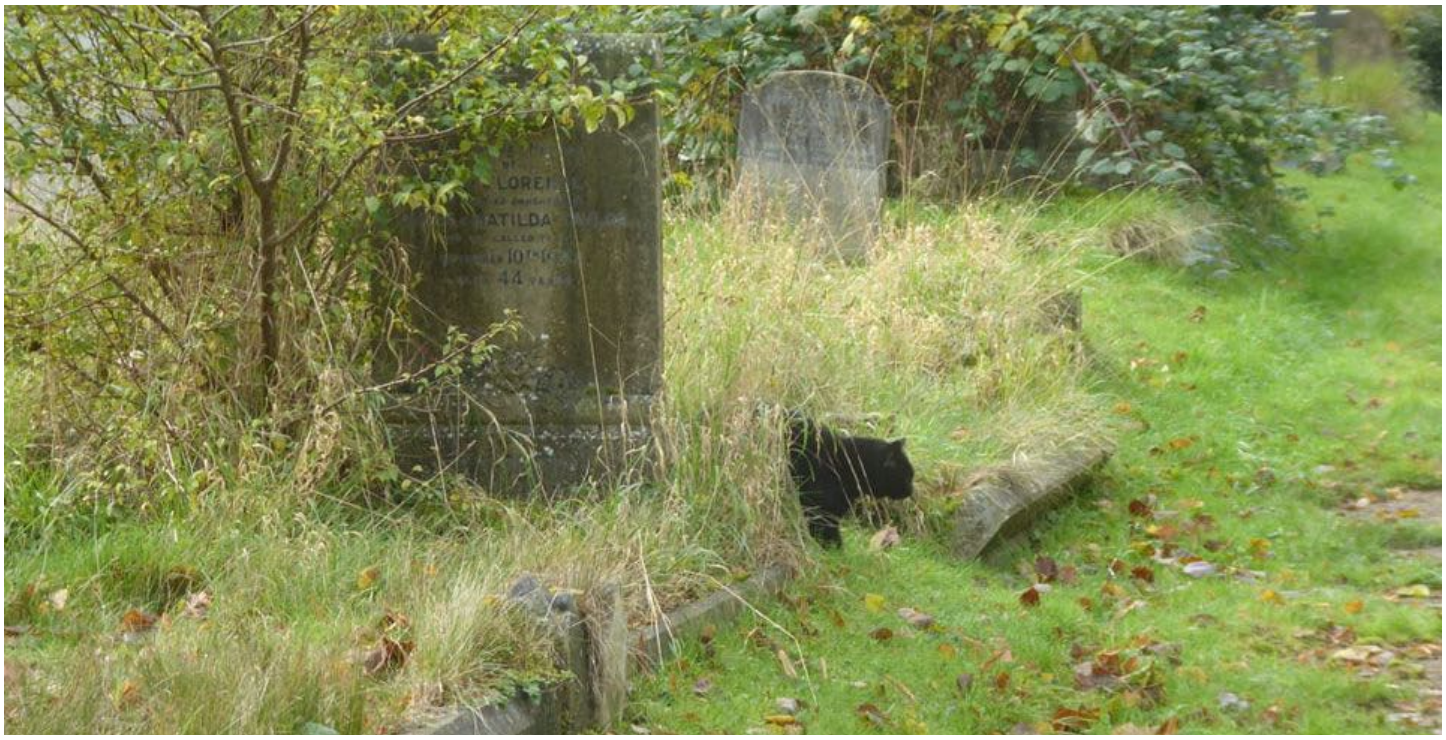
Gary White continues to add species to the moth list from regular light-trapping in his garden which backs onto the Cemetery, and more species were added when Norfolk Moth Survey ran moth traps in the Cemetery on 10th August 2019. A list of moth species can be found on the website, along with other species lists which are updated as and when time allows.

I would like to stress that all records are 'new' to the best of our knowledge. They may well have been recorded before but we haven't been made aware of them. So, if you have any records of wildlife in the Cemetery please do pass them on to us.

I was going to add some spiders to this list but have run out of space, so they will have to await a future newsletter for an article dedicated to them.

Vanna Bartlett.

All photos by Vanna Bartlett and taken in Earlham Cemetery unless otherwise stated.



While out on an insect hunt Vanna also managed to photograph the very rare "Beast of Earlham". All sightings should be reported to "The large wild cats loose in Norfolk Society" ;)