FRIENDS OF
EARLHAM CEMETERY

The newsletter for Friends of Earlham Cemetery Issue 2

Table of contents

Cemetery walks have been arranged for the following dates.

Sunday 20th July 2014 – 3pm

Saturday 16th August 2014 – 3pm

Saturday 13th September 2014 – 3pm

Saturday 18th October 2014 – 2pm

Saturday 15th November 2014 – 2pm

Sunday 14th December 2014 – 2pm

Meet up at the usual place outside the main Earlham cemetery office.

The header image in this issue is “Speckled wood”, photographed by © Thea Nicholls. Logo design © Vanna Bartlett. Layout design and editorial Sandy Lockwood.

Please send any articles, photographs and other images for inclusion in the next newsletter to sj.lockwood@ntlworld.com Please supply photographs as 300dpi jpegs if possible.

Editorial

Welcome to the second newsletter of this year. I hope everyone is surviving the manic weather we’re having - torrential downpours, tropical humidity and baking sunshine. Typically British really. According to recent reports in the news we can expect some unusual migrants, including insects, to arrive in Britain due to the mixed weather conditions. So it’s worth taking a stroll around the cemetery as you never know what could turn up.

As you’ll see in this issues newsletter, the group has made its mark at the Norfolk Biodiversity awards. Well done to everyone involved and a new habitat management plan for the cemetery is in the making.

Don’t forget to come along to the walks. The dates are listed on the left of the newsletter and if you haven’t tried it already why not download our walking tour leaflet which is on our Friends of Earlham Cemetery website.

The newsletter has a couple of new features this month. Anyone viewing it as a pdf can click on a title in the table of contents to go straight to that article. You can also click on the blue links to be taken to more information about that subject.

Last but not least, if you have enthusiasm for anything historical or natural history-wise relating to the cemetery and would be interested in sharing your knowledge we are always looking for people to lead walks. If you are interested please contact our secretary, Dr Jeremy Bartlett at the email address below

As usual thanks to everyone who sent contributions for the newsletter. Please keep them coming and enjoy reading all the articles as I hope you will.

Until next time,

Sandy

Hairstreaks - *Vanna Bartlett*

There are five species of hairstreak butterfly in Britain, all denoted by colour in their names – green, brown, black, purple and white-letter. The name “hairstreak” comes from the fine delicate lines that run across the underside of their wings. They are also characterised by a short projecting tail on the hind wing, with the exception of the green (which tends to be the exception to the rule in everything hairstreaky).

Although closely related to the blues and coppers, hairstreaks exhibit very different behaviour, preferring to hang about the tops of trees rather than dancing through meadows and grasslands and generally being very visible and obliging to the observer. They also tend to rest with their wings closed, making them even harder to spot.

The black hairstreak is the rarest of the five and is very restricted in its distribution, being confined to the Midlands where it requires large stands of mature blackthorn trees for its colonies to survive. The brown hairstreak also feeds on blackthorn and is less restricted but still only found largely in the south and west of the country. The white-letter hairstreak has a much wider distribution but suffered hugely after Dutch elm disease wiped out vast numbers of its food plant in the 1970s. Luckily, the caterpillars don’t need mature elm trees to survive, happily feeding on the suckering regrowth and the butterfly’s numbers have gradually built up and are actually spreading north.

The green and purple are by far the commonest and most widely distributed. The green inhabits scrubby/heathy areas with sunny open spaces and will lay its eggs on a variety of plants including broom, gorse, dogwood and bird’s foot trefoil.

Green and white-letter hairstreaks are found in Norfolk but it is the purple hairstreak that can be found in Earlham Cemetery. But, like all hairstreaks, it takes a bit of seeking out and a bit of knowledge to find...

The caterpillars of the purple hairstreak feed on oak (both sessile and pedunculate – our two native trees) and the species is relatively common where there is mature oak woodland or parkland with mature oaks. There are a few tall, mature oaks in the cemetery and they all seem to have their own small but viable population of purple hairstreaks.

To see them, you need to pick a hot sunny day in July or August, visit the cemetery in late afternoon or early evening and take a pair of binoculars and a lot of patience. First locate a mature oak, then find a (nicely mown...) grassy spot, sit back amidst the daisies and scan the tree tops. Female purple hairstreaks bask on the topmost leaves (with their wings open for a change), often in a sheltered ‘hollow’ of the crown where the wind can’t batter them too much. The males flit about to find them and it is they who you usually glimpse as a flash of palest silvery

blue (the underside of the wings). If you do manage to see one settled then you can appreciate the lovely iridescent purple colour of the upper side of the wings which are bordered with black in the female.

After mating, the female butterfly lays her eggs at the base of the leaf buds and they remain all through the winter with the caterpillars hatching in the spring. (All our hairstreaks overwinter in the egg stage, except the green which spends the winter as a chrysalis and is therefore the earliest hairstreak on the wing, the adults emerging in April). The tiny larvae feed inside the developing buds to start with and then on the new leaves. They have a characteristic flattened body shape, mottled greenish brown in the first instance but becoming reddish brown with darker markings after moulting, making them perfectly camouflaged when they rest among the old bud scales on the twigs. When fully grown, the caterpillars descend along the branches and trunk to pupate in the leaf litter at the foot of the tree, although sometimes they will find a crevice in the trunk instead. The adults emerge after about four weeks or so.

There are also holly blue butterflies in the cemetery and they sometimes can be seen high up in the oak canopy but they tend to be a lot more 'flighty' and will zip around and dart off unlike the purple hairstreaks that tend to flutter a little way and then settle again.

Probably the best place to view purple hairstreak butterflies in Norfolk is Sheringham Park. Visit in late July or early August on a hot, sunny, still day and climb up the observation tower. Ignore the panoramic view from the top that everyone else will be oohing and aahing at and instead focus your attention on the dappled canopy just a few feet below, searching out a flutter at the corner of your eye, or a pale silvery flash. When they bask with open wings, the butterflies appear dark brown but viewed through binoculars you can see varying amounts of purple iridescence. The undersides are lovely – very pale fawny grey with a white line across and a small orange eye spot with dark centre.

Like a lot of wildlife, the secret to seeing hairstreaks is to go out with a bit of knowledge (on their habits and habitat), a pair of binoculars, a bit of patience and a modicum of luck. And, like a lot of wildlife watching, be open-minded about what you're going to see – often you'll not see the target species but you'll be rewarded by something totally unexpected or just a lovely view of something pretty common but at a time/place you weren't expecting. Take whatever comes and treat it with the same admiration and all your wildlife views will be equally rewarding.

Good luck and happy hunting!

Norfolk Biodiversity Partnership Community Biodiversity Awards

Last night (Tuesday 22nd July 2014) Friends of Earlham Cemetery won the Group category of the Norfolk Biodiversity Partnership Community Biodiversity Awards 2014.

The award was given for our "work to conserve, enhance and record the biodiversity of the cemetery and to promote its value as a key wildlife site".

Ian, Stuart and Jeremy went to the awards ceremony at Carrow Abbey Conference Centre in Norwich. It was a warm, sunny evening and we enjoyed ourselves.

Proceedings started with a buffet and traditional music, followed by an introduction by Andrea Kelly, Chair of the Norfolk Biodiversity Partnership.

Steve Scott, the Regional Director of the Forestry Commission presented the awards, which included a Special Achievement award for Martin George for over fifty years' worth of work to protect the Norfolk Broads.

Ian and Stuart received special mention for their recording of plants, fungi and insects in the cemetery.

Paul Holley, Chair of the Norfolk Biodiversity Partnership's Communities and Nature Topic Group, made the closing remarks.

Previously we have won Royal Horticultural Society 'It's Your Neighbourhood' awards (in 2012 and 2013). It is good to see our hard work being recognised.

Jeremy Bartlett

Cemetery Superintendents - *Jeremy Bartlett*

If you look at a map of Earlham Cemetery, such as the one on our website, you'll notice that burial sections are given numbers or letters. The numbers signify Church of England (Conformist) burial sections and letters signify sections where Non-conformists (such as Methodists, Unitarians and Quakers) were buried.

There were separate burial chapels as well, so effectively the cemetery was divided into two separate parts.

There were also two cemetery superintendents. Married men without families were preferred for the job. The Conformist Cemetery Superintendent lived in South Lodge and the Non-conformist Cemetery Superintendent lived in North Lodge.

Cemetery superintendents had a number of duties, which were outlined in the Norwich Burial Board Minute Books:

- To keep the ground and trees and shrubs thereon in order.
- To dig or superintend the digging of graves and vaults and give directions for and attendance upon all funerals.
- Should be allowed assistants in grave digging if required under the supervision of the [Burial Board] Committee.
- The wife of each Superintendent should keep the [burial] chapels clean and in neat order and give her attendance thereat during all funerals.
- The salary of the Superintendent and his wife was £1 per week with living in one of the Lodges rent free.
- In addition to the salary the Superintendent should be allowed two Shillings for each grave dug by him.

The first cemetery superintendents were appointed in November 1855, four months before the cemetery opened. Sixty-four men applied for the two jobs. Twenty-eight applicants were rejected at once and a shortlist of six names was drawn up for each role.

Cornelius Taylor was selected as the superintendent for the Conformist sections of the cemetery and James Self was selected for the Non-conformist sections. James Self was serving as a Sheriff's Officer in Norwich when he was appointed.

Both superintendents appointed assistants in February 1856 and the actual grave digging was carried out by a whole team of gravediggers, so the superintendent's role was more as an overseer and record keeper.

Accurate record keeping, including the exact location and occupants of grave plots, was essential to the job.

Cornelius Taylor was a cemetery superintendent for almost ten years. However, in May 1865 a Burial Board Sub-committee was appointed to investigate complaints against Taylor. At a special meeting in July 1865 the Sub-Committee was "unanimously of the opinion that Superintendent Taylor has conducted the business of his office with great carelessness" - he had not kept accurate records. In August 1865 Taylor was dismissed from his job and had to leave his home in South Lodge. By the time of the 1871 census he was working as a servant at Barningham Hall in North Norfolk, a sad reduction in his status.

Taylor was succeeded as cemetery superintendent for the Conformist sections by Robert Holmes, who was appointed on 17th October 1865.

James Self's grave © Jeremy Bartlett

James Self continued as cemetery superintendent for the Non-conformist sections until his death, aged 58, in March 1883. His polished red granite grave, which also includes the names of his wife and family, is near his former home, North Lodge.

When James Self died Robert Holmes became superintendent of the whole cemetery and after this there continued to be only one superintendent. Mrs Self was allowed to live in North Lodge for a short while, before William Large, Holmes' deputy moved into North Lodge.

Robert Holmes died on 18th February 1895 after almost thirty years' service and his small gravestone is just south of South Lodge, where he lived and worked.

Holmes was succeeded by James Robert Everett, who was superintendent until 1924. Lawrence Alan Jewell was appointed in 1924 and retired in 1963, when Herbert Howcroft took over the role. He was superintendent until at least 1975.

Nowadays there is no cemetery superintendent. South Lodge is currently empty and North Lodge has been a private residence since the early 1990s. The house at 191 Earlham Road, which was home of the cemetery superintendents from 1929 onwards, is now a private house.

Robert Holmes' grave © Jeremy Bartlett

Jeremy Bartlett.

The information in this article comes from a variety of sources, including the Norwich Burial Board Minute books, which can be found in Norfolk Record Office, various Norwich street directories, which can be found in The Forum and the 1871 census.

Do Spiders Eat Their Webs? - by *Jane Bouttell*

Autumn - 'season of mists and mellow fruitfulness' - is also the season when you are most likely to see the webs of *Araneus diadematus* - the garden cross spider. This large, beautifully marked spider is the author of the classic orb web slung across paths, woodland clearings, gaps in hedges or anywhere in the likely flight paths of its prey which is large insects - even wasps.

Of course, to catch and hold such sizeable prey, the web has to be really strong - stronger in fact than steel wire if it were of the same diameter. It is mainly composed of protein fibres and thus is a considerable investment for the spider to make. On feeling the first vibrations of the prey's struggle to escape the sticky entanglement, the spider will scuttle out of its lair under a leaf or other suitable shelter. It runs along the single strand whereby the spider keeps itself informed of developments and wraps the hapless insect in a silky shroud ready for storage, possibly even through the long, cold months of winter.

In drier, warmer weather, the spider will sit motionless but alert at the very centre of its web. You may wonder how the spider doesn't get stuck in its own web. This is because the long, lateral strands are not sticky like the orbital threads. A spider can make several kinds of webbing including the soft cocoon which emerges fan-like from its spinnerets and in which females wrap their egg masses ready to hatch the following May. (The unfortunate mother, however, does not live to see the result of her efforts as she dies in about November).

Thus it is a busy life for a female spider - she must eat a great deal to fuel her web spinning, her egg making and general running around. The huge web is not made daily in my observation but will be repaired until it is no longer viable. This may be up to a week but it will eventually be disposed of and a fresh web constructed.

And what happens to the old web or even a fresh one if it is accidentally destroyed? I was strolling nonchalantly out of my back door one dewy morning when I walked straight into a garden spider's web which it had built right across the doorway. I could feel the strong pull of the strands across my face. So could the spider. It rushed out from under a convenient roof tile above my ground floor bathroom to survey the damage. Evidently it decided that the ruined web was not worth salvaging because it proceeded to methodically and patiently gather all the loose strands into a ball which it then consumed. Afterwards it disappeared back into its lair and did not emerge for the rest of the day. So, yes - spiders do eat their webs.

Ash Dieback in Earlham Cemetery - *Jeremy Bartlett*

What is ash dieback?

Ash dieback is a serious disease of ash trees caused by the fungus *Chalara fraxinea*. The disease causes leaf loss and crown dieback in affected trees and often leads to the death of the tree. Older trees take longer to succumb than young trees, which can be killed in a single season.

Ash dieback in the cemetery © Ian Senior

Ash dieback symptoms were first seen in 1992 in Poland, but the fungus that causes the disease was only identified as a new organism in 2011. In Denmark, where ash dieback was discovered in 2003, between 60% and 90% of ash trees are affected. The disease is becoming widespread throughout central Europe.

The first British cases were found in 2012. In the February the disease was found in a batch of infected trees sent from the Netherlands to a nursery in Buckinghamshire. In the October, cases were found in southern and eastern England (including at Ashwellthorpe Wood, near Wymondham) and are thought to have been spread by the wind from infected trees on the continent.

We now have a confirmed case of ash dieback in Earlham Cemetery.

On Sunday 29th June Vanna was walking towards Earlham Road along the cycle path that runs north to south across the cemetery when she noticed dead leaves on a small ash tree to the right hand (west) side of the path. She looked more closely and saw that several branches had died back.

Late that afternoon Vanna took me to have a look at the tree and I took photographs, some of which showed what I thought were the beginnings of ash dieback scars. I wasn't certain, as I'd only seen photographs of the disease, rather than in the field.

I sent my photos to Ian Senior. He had seen ash dieback at Ashwellthorpe Wood and was able to go into the cemetery on the Monday to look at the tree. Ian also took some photos and sent them to Tony Leach, Norfolk's fungi recorder, and by the end of the afternoon (30th June) we had confirmation that the tree had ash dieback.

Ian has submitted the record to the ash dieback database at UEA and I have informed Norwich City Council and Norfolk Wildlife Trust.

What next?

The dry summer of 2013 prevented ash dieback from being as serious as first expected but this year has been wetter and this will probably help the disease to spread more rapidly.

On its website, the Forestry Commission offers comprehensive advice on ash dieback.

Landowners are not required to remove infected ash trees, but they should keep an eye on the trees as the disease progresses and prune or fell them if they or their branches threaten to cause injury or damage.

The spread of the disease can be slowed by removing infected trees and collecting up and burning, burying or composting their fallen leaves. However, older ash trees, even when dead, are very valuable for wildlife and unless they are dangerous, it may not be a good idea to fell them.

There is no known cure for ash dieback disease, but ash trees in the UK are genetically diverse and there is hope that some of our existing trees will be resistant. Field trials are currently taking place to identify resistant strains of ash and this, rather than the widespread felling of diseased trees, is the approach currently being taken to combat the disease.

Dieback of diseased ash tree in Earlham Cemetery © Ian Senior

Further reading

How to identify ash dieback - The Woodland Trust.

Advice on Ash Dieback - Forestry Commission.

Ash dieback - Royal Horticultural Society.

Ash dieback 'could affect 75% of trees in worst-hit areas' - The Guardian, 30th April 2014.

Ash dieback is now 'unstoppable', ecologists warn - The Telegraph, 7th June 2014.

Ash dieback Q&A - The Guardian, 29th October 2012.

Use the Ashtag App to report sightings of Ash dieback to build up a national picture of cases.

Chalara dieback - Managing ash trees - Forestry Commission.

Postscript

Nick Cooper, an Arboricultural Technician at Norwich City Council responded as follows:

"Thank you for the images and the report of Ash Dieback Disease (ADD). This sadly does not come as a surprise as I first became aware of ADD in the cemetery this time last year [i.e. summer 2013] with symptomatic trees noted on the driveway to the cemetery. These were reported through the Forestry Commission's online reporting system, along with a few others. The response was that as the disease is well established across the whole county, the locations of diseased trees would be noted but further inspection to confirm presence of the disease would not be undertaken.

The current recommendations for ADD management will be followed but with the disease already widespread, we will need to focus on safeguarding the public as and when trees decline and die. Any preventative measures are simply not feasible on a Citywide (or countywide) scale."

Jeremy Bartlett.

Trees and Hoverflies - *Stuart Paston*

The cemetery is a very good site for hoverflies with over 60 species recorded including a number of species that seem to be scarce elsewhere in Norfolk. One of the main reasons is the diversity of trees that are present, especially in the eastern section. Enter the cemetery by the small Dereham Road entrance on a fine day in spring, for example, and you will find a range of hoverflies sunning themselves on tree foliage or visiting umbels on the extensive stands of cow parsley.

Aphid infested leaves support hoverfly larvae but there are other breeding sites such as rot holes, sap runs and decaying wood.

Based on breeding records in the literature, beech, sycamore, lime and oak are important trees and all are present here with some very impressive specimens of beech. But pride of place should go to the sycamore, not the grandest of trees but one which supports large aphid colonies and also has flowers that are attractive to a range of hoverflies.

Other trees and shrubs whose flowers are a magnet for hoverflies are sallow early in the year followed by laurel, field maple, box, hawthorn, whitebeam and lime. Conifers also support some species of hoverfly associated with aphids with spruce perhaps being the most favoured. Grey poplar is another tree that is well represented in the north eastern part of the cemetery.

In late April this year a specimen of grey poplar affected by root decay fell down – a nearby spindle took a bit of a battering but the poplar trunk was soon sawn up and taken away leaving a stump with a gaping cavity at its base and a liberal amount of sawdust. Within a few weeks the site was occupied by *Xylota segnis*, a hoverfly known to breed in decaying wood and also wet sawdust.

During frequent visits I found significant numbers - evidence of how a species can quickly respond to favourable breeding conditions.

Criorhina ranunculi on horse chestnut, 2009 © Stuart Paston

I have only come across one sap run in the cemetery (on horse chestnut) but it proved significant in producing the first Norfolk record of *Brachyopa insensilis*.

This hoverfly, whose larvae develop in sap, has to date not been found elsewhere in the county. The same area, the chestnut and lime avenue west of the main Bowthorpe Road entrance, has also produced a sighting of *Criorhina ranunculi*, a convincing bumble bee mimic that breeds in decaying tree roots. This species is infrequently reported in Norfolk.

The density of a diverse range of trees creates sheltered areas that become hotspots with males especially in evidence as they hover beneath trees or close to stands of hogweed in summer where they await the appearance of females. During periods of sunny, hot weather flower visits are often restricted to early morning and later in the day when conditions are cooler. Some species search out shadier areas and it is not unusual to find them hovering beneath yew trees deep in woodland.

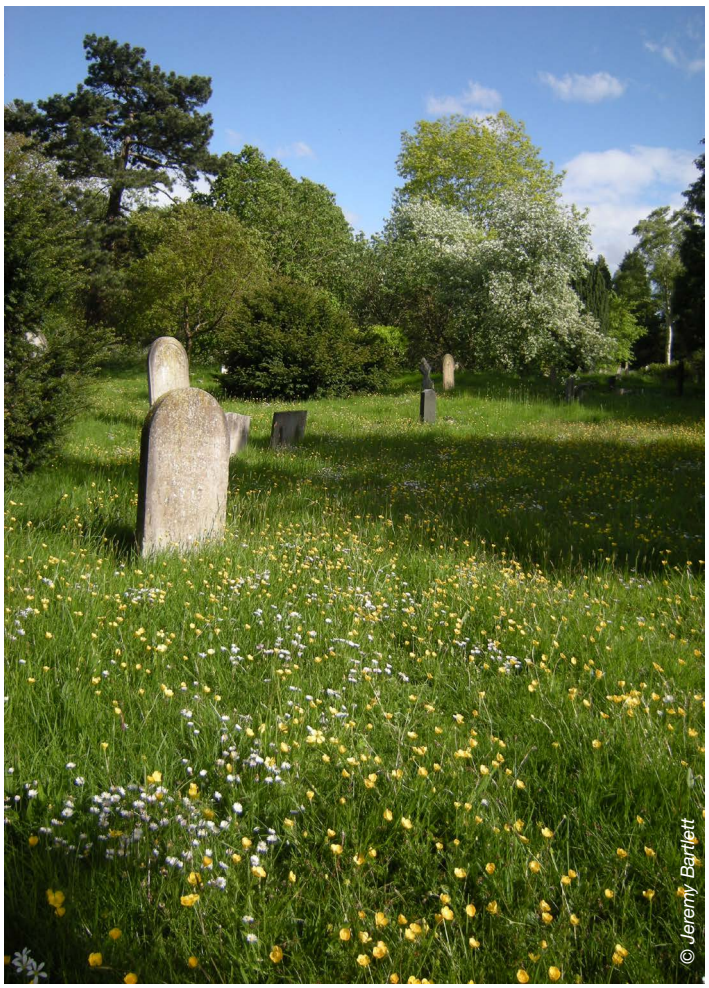
In the later part of the summer some non-native tree species play their part in supplementing the diminishing supply of nectar and pollen. In the area west of the Crematorium hoverflies can be found visiting eucalyptus and Chinese privet but sadly the only specimen of *Tetradium daniellii* (bee-bee tree), a great lure for a variety of insects, has succumbed to honey fungus.

Stuart Paston

A Habitat Management Plan for Earlham Cemetery - *Jeremy Bartlett*

One of the main reasons our group was formed back in January 2011 was concern over management of the cemetery by Norwich City Council.

Although the area of the cemetery to the east of Farrow Road is a County Wildlife Site, many of us noticed that the cutting of the grassland was haphazard, often too frequent and clearly not in the interest of the wild flowers growing there. Some areas are mown many times during the spring and summer and the cuttings are left to rot and enrich the soil, to the detriment of finer grasses and wild flowers.



Flowers in the cemetery this spring. This area was mown a week later.

As a result, several species on the cemetery's plant list appear to have diminished. Wild clary (Salvia verbenaca) has been reduced to one or two plants, which hardly ever flower, and pignut (Conopodium majus) and yellow rattle (Rhinanthus major) have been lost.

Last year we contacted Norfolk Wildlife Trust and met up with Andrina Walmsley, one of the Trust's officers responsible for County Wildlife Sites. A Habitat Management Plan is now being produced on behalf of the Trust by Aaron Brown and Stuart, Ian and I have met with Aaron and Andrina, and Paul Holley from Norwich City Council, to provide input to the Plan.

We hope that the Habitat Management Plan will be completed in late July or early August, in time for next year's cutting regime. Recommendations in the plan include cutting less frequently, at more suitable times and removal of grass cuttings. (A team from the Probation Service may be able to help with raking up cut grass.) A small number of trees may be removed in the richest areas of grassland, to prevent shading and deposition of leaf litter.

As Earlham Cemetery is a working cemetery, there has had to be a compromise. The area to be managed is not as large as I would have liked, but it covers most of the best grassland in the cemetery. If implemented, the plan will ensure that Earlham Cemetery becomes an even better green oasis in the heart of Norwich.

Jeremy Bartlett.

Approximate extent of area covered by the Habitat Management Plan

A Bee Safari - by *Thea Nicholls*

Andrena hattorfiana showing pink pollen baskets, 2014 © Thea Nicholls

Several years ago I heard that the scabious mining bee (*Andrena hattorfiana*) could be found in the cemetery. This bee is a Red Data Book species (the Red Data Book lists species whose existance is threatened) and there are only a handful of other sites in Norfolk where this bee can found. As I'm a bit of a wildlife geek, I was quite keen to see this 'rare' bee. I have spent the past four or five years trying, and failing, to find *Andrena hattorfiana* because it seems *A hattorfiana* was not at all keen to see me. In fact, some years I didn't even manage to find any scabious!

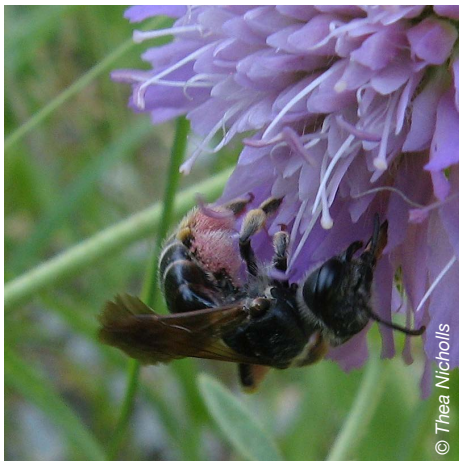
However, this story has a happy ending because, thanks to Vanna, I have now seen the elusive scabious mining bee and she's beautiful. At first glance she (and she was a she because she had pollen baskets) looks very similar to a honey bee. Up close, though, she is a dark blue/grey colour with rings of pale grey on her abdomen. Her real 'wow factor', though, are her pollen baskets. These curved hairs which she uses to collect pollen (strangely) are the most stunning salmon pink and orange colour. They really are amazing.

Once I'd seen one bee I saw another, then another until about half-a-dozen had been spotted on the scabious heads along with a single essex skipper and several gatekeeper butterflies. Meadow grasshoppers were also making their characteristic 'szzz szzz' noise and sunning themselves on the gravestones. All-in-all, it was a very successful safari.

Meadow grasshopper Chorthippus parallelus

More information about the scabious mining bee can be found on our website at http://www.friendsofearlhamcemetery.co.uk/Insects_of_Note_in_Earlham_Cemetery.pdf.

There is also a very good species account on the Bee, Wasp and Ant Recording Society's website at http://www.bwars.com/index.php?q=bee/andrenidae/andrena-hattorfiana.



Postscript

Vanna seems to have become my official Graveyard Guide now. A week or so after I had my first sighting of scabious mining bees I saw my first purple hairstreak butterflies which was all thanks to Vanna again.

Essex skipper Thymelicus lineola

A circuit of the eastern side of the cemetery staring at the tops various oak trees finally came up trumps near the memorial garden. The walk also included sightings of a southern hawker dragonfly, a rather stunning male sparrowhawk, a flock of goldcrests, ash dieback and blackberries - which are still a bit tart at the moment. Overall, I would say late summer is a great time for a wildlife geek to take a walk round the cemetery.