

Backwell Environment Trust
Bulletin 39 - Autumn 2019
www.backwellenvironmenttrust.org



A Very Warm Welcome to our Latest Autumn Bulletin

The last six months have seen even more amazing discoveries made at the Warrener's Cottage site and we have also been busy restoring the old garden wall to the property. The BET volunteers have been hedgelaying, scything our fabulous wildflower meadows, building a reptile hibernaculum and uncovering yet more of our nationally-important limestone pavement.

BET AGM
Warrener's Cottage

New Species
Summer Walks



Woodland Report
Forked Ferns

Planet BET
Bee Survey

Well, it's that time of year again when BET holds its Annual General Meeting, this time on Saturday November 9th at 2pm in the Parish Hall. We hope you will be able to attend and find out just what your Trust has been up to over the past twelve months.





BET Annual General Meeting

Saturday November 9th 2019

Backwell Parish Hall

Your trustees will be on hand to serve refreshments and answer any questions you may have about BET and its activities, past, present or future.

The AGM will start at 2pm and after the short official business, there will be a break for tea, coffee and cakes.

After tea, there will be an illustrated talk by Ian Brewer, senior geologist at Stancombe Quarry on The Geology of Backwell Hill.




Agenda



AGM minutes from November 17th 2018
The Chair's Report Treasurer's Report
Secretary's Report Woodland Report
Election of Trustees Any other business



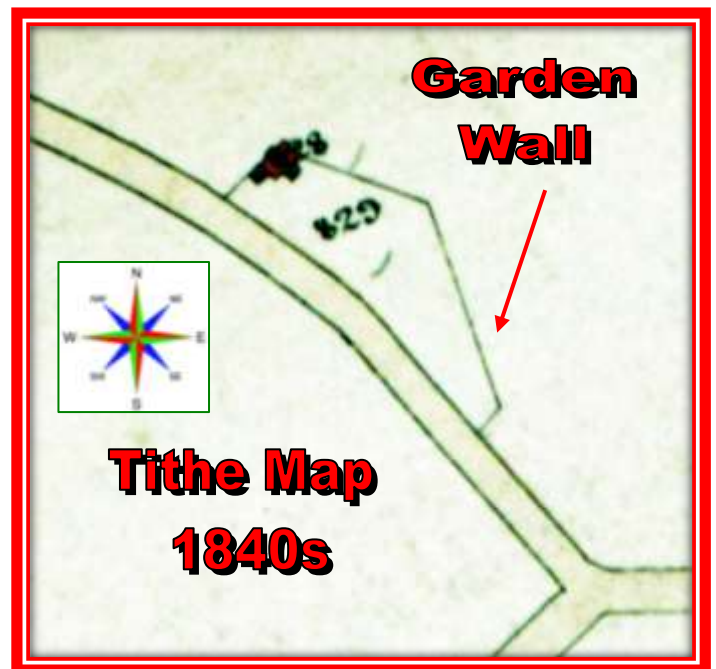
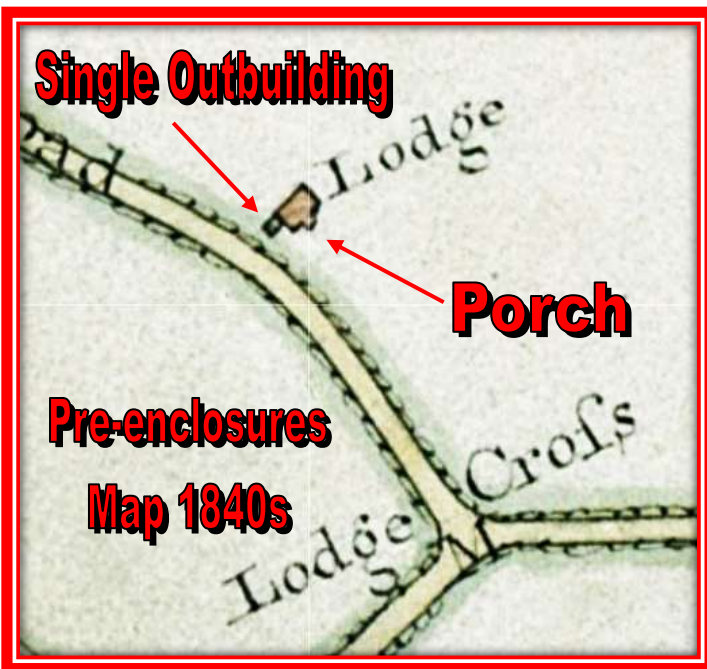
Printed copies of the minutes of our last AGM and the annual accounts will be available at the meeting. The minutes can also be found on the BET website under 'About BET' / 'AGM'. If you would like to consider becoming a trustee, please do get in touch via the website.



The Warrener's Cottage

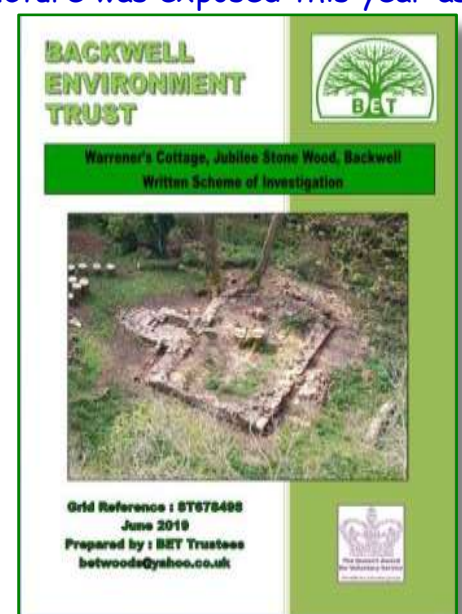
On the 10th June 1318, Sir Richard de Rodney was granted the right to free warren on Backwell Hill by King Edward II. The warrener would have had a cottage built for him when the warren was initially set up and the ruins visible today suggest that the cottage would have originally covered an area of about 45sq metres with the adjacent walled garden (located to the left of the cottage), about 1200sq metres.

To mark the 700 year anniversary, in April 2018, the BET volunteers started the delicate task of removing the accumulated soil and fallen stones from the outside of the cottage walls after seeking advice from Vince Russett, the (now retired) North Somerset County Archaeologist. This task was continued during the spring and summer of 2019 when we were thrilled to discover the remains of two outbuildings attached to the cottage and an additional garden wall.



Maps from the 1840s show the garden wall, the porch to the right of the cottage (shown as the 'lodge') and also an additional structure on the road side. This structure was exposed this year as well as another, previously unknown, outbuilding attached to the cottage on its north-western side. Both outbuildings have stone floors - one with flagstones and one with cobbles. The discovery of Nailsea pennant sandstone roof tiles indicated that the outbuildings would have had a stone rather than a thatched roof.

We were intending to start excavating the interior of the cottage this year, but with all the amazing discoveries unearthed around the outer walls, this has been postponed until next year. The excavation of the internal cottage will be of a greater archaeological importance than the outer structures, so we are required to prepare a 'Written Scheme of Investigation' which we have now completed and has been approved by The County Archaeologist.





Woodland Report

This summer's weather has been a bit up and down with a wet June, warm and sunny July and a mixed August. The weather though has suited most of our plants and the wildflower meadows have looked spectacular once again this year.

The past six months have seen the BET volunteers working on a wide range of projects including hedgelaying, the removal of soil from the outer Warrener's Cottage, building two superb dry stone walls, exposing more of our very rare limestone pavement, building a reptile hibernaculum as well as scything our wildflower meadows.



So what have those hard-working BET volunteers been up to over the past six months?

Hedgelaying



In spring, we embarked on a major project of re-laying the hedgerow in all three upper meadows of Badgers Wood. Now we wouldn't usually undertake this sort of activity during the bird nesting



season, but as the quarry is regularly patrolled by Peregrine Falcons, not surprisingly, no birds choose to nest in this exposed section of hedgerow. In all, we have re-laid around 400 metres of hedgerow and we now have a much thicker hedge as well as

restoring the fabulous views over Coles Quarry and the Severn Estuary beyond.



Dry Stone Walling



Restored Garden Wall

During the removal of the soil from the outside of the Warrener's Cottage, many tons of limestone blocks were also recovered at the same time. This stone would have once formed part of the cottage or its various external walls, but archaeological convention dictates that we are unable to use them to rebuild the cottage walls. So we decided to restore a 20 metre section of the old garden wall and also create a curved wall, planted up with sedums, to make a picnic area next to the cottage (see the picture on the front page).

Reptile Hibernaculum

Both of BET's nature reserves are home to reptiles, notably grass snakes and adders and so this year we started the construction of the first of two reptile hibernation pits which they will be able to use to see them safely through the winter months. Initially a pit is dug approximately one metre square and 60cms deep, which is then filled with



Stage 1: Dig Pit





Stage 2: Fill with Logs

stones and old tree branches/logs and finally topped with soil. Flexible plastic pipes are also added to allow access to the lower reaches of the pit. Because of the pit's depth and



Stage 3: Cover with Soil

insulation, any reptile using it for hibernation should be safe from frosts, most predators and the worst of the winter weather.

Limestone Pavement

We have continued to remove soil from the limestone pavement this summer and we now have cleared an area on the northern side of the Fern Way trail so the path runs, very dramatically, right through this rare geological feature. With the help of geologist Richard Kefford, we are in the process of getting the pavement classified as a Regionally Important Geological Site (RIGS).



Scything the Meadows

BET starts the scything of our 1.9 acres of restored wildflower meadows in the late summer to ensure that all the wildflower seeds have had ample time to set. The annual cut ensures that the invasive species such as bramble and tree seedlings are kept in check. Removing all the cut material will, in the long term, reduce the fertility of the soil which will ultimately benefit the wildflowers. BET's volunteers just get better and better at scything each year and are well on course for cutting the full 1.9 acres in just 3 months of Monday work mornings.



Ash Dieback Disease

When ash dieback disease was first identified in the UK, the prognosis for all our ash trees was initially pretty dire as it was thought most of the UK's ash trees would eventually die from the disease. After a few years though, the outlook became a bit more optimistic as the expected mass die-off seemed slow to materialise. However, over the past few years opinion has swung back to pessimism once again as more and more trees are showing signs of the disease.



On the BET reserves, many small trees have been affected but encouragingly, up to 2018, less than five large ash trees were showing signs of the disease. However this year, around 50% of all our large ash trees have started to show signs, which may have some significant financial implications for us if unsafe trees need to be professionally felled.

Visit from the Rare Plants Group

In July, BET had a visit from Liz McDonnell from the Somerset Rare Plants Group after a recommendation from a local botanist. The group is made up of highly experienced botanists who aim to continue the long tradition of plant recording and conservation in the county. During the visit, a number of previously unidentified rare plants were found in the BET meadows, so much so, that a full group visit has now been arranged for summer of next year.



Volunteer Time

Every year, the BET volunteers freely put in a staggering amount of time and effort, both in the day-to-day running of the Trust, as well as the huge amount of practical work needed to maintain our nature reserves. Over the last twelve months, the fantastic figure of 2,967 volunteer hours has been recorded. Since the Trust began, an astonishing 28,070 hours have been volunteered - so, once again, a **BIG BET** thank you to you all.



BET has two thriving volunteer groups that meet every Monday morning and on the third Saturday morning of each month. Absolutely no experience is necessary and it's also great fun, so why not come along and give it a try?



Forked Ferns

The Hart's-Tongue Fern is a common, hardy, evergreen fern found in shady places on both reserves, but especially along Badgers Wood's Fern Way trail. However, this year we noticed for the first time a strange forking of the leaves on some plants, an adaptation known as '*furcata*'. On closer inspection it seems to be present in about 1 in 100 leaves in the woodland and an internet search reveals that this variation has been exploited by plant breeders over the years to design all manner of weird and wonderful leaf shapes. So when you're next walking through the woodlands, keep an eye out for these strange forked leaves and see if you can spot any other unusual variations.



New Species found on the Reserves

Lesser Stag Beetle

The Lesser Stag Beetle may be smaller than its more famous larger cousin, but it is still a relatively large beetle with impressive jaws. Adults can be found in woodland and hedgerows during the summer months. They can often be seen resting in the sun on tree trunks. The larvae depend on old trees and rotting wood to live and feed and both adults and larvae can be found in the decaying wood of Ash, Common Beech and Apple. The nocturnal adults fly at night, feeding mainly on tree sap and rotting fruit. They mate and lay their eggs in decaying wood.



They can be found throughout the year but are mainly seen in summer. Length = 20 - 30mm

Common Morel

This uncommon spring to summer fruiting fungus is one of the most prized edible fungi in the UK. Although it is poisonous in its raw state, it becomes safe to eat when cooked. It can grow to 20cms high with a roughly circular head consisting of a series of irregular pits connected by ridges creating a honeycomb pattern. The stem is usually white or pale cream in colour with the head slightly darker. They are generally solitary and prefer open deciduous woodland, often under decaying trees, especially on calcareous soils. They have been used in medicine for their anti-tumour and anti-viral effects.



Ichneumon Wasp

Ichneumonids are wasps with a very narrow waist between the middle and hind body parts. They have powerful chewing mandibles, two pairs of usually transparent wings and long antennae. All ichneumonids are *parasitoids* of other insects, that is, their larvae infect and then kill a single host animal. This distinguishes them from parasites, which live off a host but usually don't kill them. The adult females often have a very long ovipositor which is capable of drilling into wood to lay its eggs. In the UK, we have approximately 2,500 species of ichneumonid, making up almost 10% of all British insects. The adult wasps feed on a diet of nectar and honeydew.



BET's Summer Guided Walks

Backwell Common



On the 18th May, nineteen members of BET and/or Friends of Trendlewood Park (FoTP) met at Backwell Lake for a fascinating guided tour to Backwell Common and beyond.

The walk was led by local historian Richard Ivens, a member of both BET and FoTP, and long-time resident of Backwell Common. Richard shared with us the amazing history of the local area,

including the development of Backwell Lake, the railway station, the local farms and the very numerous coal mines.

The variety of features along the 2-mile walk was remarkable and was brought to life by Richard's comprehensive knowledge and lively story-telling! In perfect walking conditions, we headed towards Backwell Common and the old cider farm before passing through the Forest of Avon plantation and on to the old Backwell Deer Park. The group returned to the Lake after stopping for well-earned refreshment at The George!

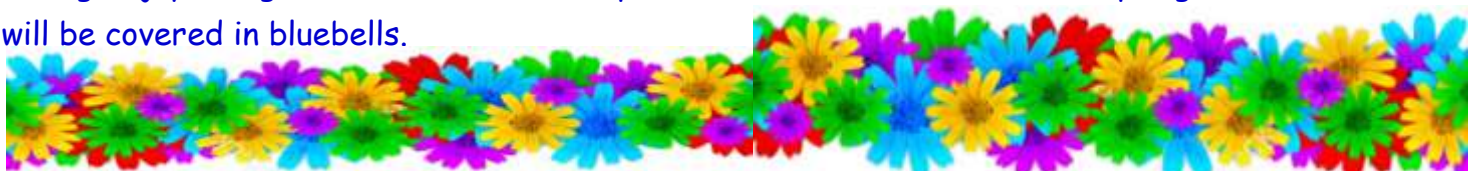
Felton Common



On the 7th July, sixteen BET members and friends headed to Felton Common for a guided tour - plus tea and cakes! The walk was led by warden and local resident Debbie Johnson, supported by BET member and Felton Commoner, Pete Longden. The common covers approximately 100 acres and is mainly unimproved mixed acidic and calcareous grassland. It has a fascinating history, with two scheduled ancient monuments and signs of mining.

The Common lies on the other side of the A38 from Bristol Airport, so our walk and talk were interrupted at intervals by passing planes, seemingly just overhead. Despite the occasional noise we were able to learn about the management plan for the Common and the challenges of keeping down the bracken and

encroaching scrub, now that grazing has ceased. Our route took us past the Bronze Age barrow, the rare double conjoined Neolithic barrows and the ancient 'Suck Stone'. At the end of the walk, Debbie very kindly invited us to her house, just south of the common, for copious tea and home-made cakes! Suitably refreshed, we headed back under the flight path, having enjoyed a great afternoon. We hope to make a return visit in the spring when the common will be covered in bluebells.



Planet BET

Recently, Peter has been taking aerial photos of our two nature reserves which have turned out to be a great help in monitoring our various projects and management activities throughout the seasons. However, the imaging technology used can also do some fun things, such as this amazing composite picture taken in July with Peter's small drone. The picture was taken some 330 feet above the top corner of Badgers Wood with Coles Quarry to the left and the BET reserves running diagonally from 11o'clock to 5o'clock. To make the panorama, the drone stays stationary and slowly rotates, taking 46, twelve-megapixel photos which are digitally stitched together afterwards. The stitching software can then produce this 'Little Planet' view which presents an interesting global perspective of the surrounding landscape. If you would like to see more, higher resolution pictures of this and some other aerial shots of the reserves, they can be found on the BET website and Flickr photo album.



Peter Speight

Bumblebee Surveys are Buzzing into Action

Hardy and willing BET volunteers have spent a number of years creating small glades and meadows in both Badgers Wood and Jubilee Stone Wood nature reserves. The resulting increase in pollen-rich plants and other flora now offer a haven for many animals and insects and these gradual changes in biodiversity can then be assessed by taking regular surveys.

Bumblebees are not an insect you might automatically think of in connection with woodlands, attracted as they are to sunshine and colourful plants such as clover, gorse, pussy willow and lavender. However, many species of bumblebees seek out wooded areas

for nesting and

enjoy the safe harbour and the variety of plants the BET woods have to offer. Both the Forest Cuckoo bumblebee and the Tree bumblebee have been spotted around the BET woods this year, together with the better known White-tailed bumblebee and the Common Carder bee.

As bumblebees are nationally in decline, feeding only on flowers and often only foraging within 1 km of their

nest, they make an excellent species to survey. Starting this March and ending in October, monthly surveys have been undertaken along a selected route, cross-crossing both reserves, noting the numbers of bumblebees and,



Forest Cuckoo Bumblebee



Tree Bumblebee



White-tailed Bumblebee



Common Carder Bee

where possible, species and gender. These records are then logged on the Bumblebee Conservation Trust website which will then provide the Trust with essential information with which to improve land management for all insects.

Viv French