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NEWSLETTER

Spring 2011

Octogenarian dives Wookey Hole!

By Bev Fowlston

Our very own, jack-of-all-trades and King of the brushcutter, John Buxton has reached

the mighty age of 80! Not only is he still very active with BGG, The Greensand Trust and other voluntary groups, he is still diving. One of his ambitions was to dive Wookey Hole on his 80th birthday and he did it! Well done, John. You can view the video of his great achievement at John's video

A quote from John, via email, about the dive was "When I surfaced at the resurgence I have never been faced with so many cameras!! Dive time was 56 minutes. No infringements by Aladin. I did not get quite to 22 only to boulders at foot of slope. Air leak with the jacket of some kind.". Air leak, or not, we are all impressed with your energy and enthusiasm for life. Happy birthday, John, and keep diving!



Leighton Buzzard's Famous Quern Stone

By Bev Fowlston

BGG member, Bob Bennett, has been investigating the famous Quern Stone found on Leighton Buzzard Golf Course. After extensive research with experts from Oxford and Exeter Universities, the quern stone, an upper stone which weighs 23.9kg, has intricate carvings and an unusual off-centre hole through its centre, is thought to be late Roman or early Saxon in age.

Bob was unsure of the rock type used to make the stone and asked me to identify it. Immediately upon seeing the quern stone it was obviously made from local ironstone. A rock that is completely unsuitable for a grinding stone. The ironstone although very hard is also very friable. As many of you know, if you handle a piece of local Woburn Sands ironstone you WILL end up with orange hands! This is probably one of the reasons that this is the only ironstone guern stone found, as far as we know! It was probably thrown away after the 'miller' tasted sand in his

orange-coloured flour!



The biggest mystery is the construction of the stone. Its oval shape is unusual and is possibly due to the hardness and difficulty in shaping the rock into a flattened cylinder. The grooved design on one of the faces must have been made with something harder than iron, possibly flint tools which again would have been found relatively locally. The central hole is offset, oval rather than round and there is some debate as to whether this was an accident, a method of adding grain to the lower stone or a mistake by the driller of the hole.

If you wish to find out more about this fascinating relic then follow this weblink <u>BBC news report</u> that gives details of its discovery, or you can contact Bob Bennett via email on <u>bob.bennett.z@talktalk.net</u>

Edited by Bev Fowlston.

If you have any comment or wish to include an article in the next issue of this newsletter then please contact me on 01525 375353 or by email bev.fowlston@gmail.com Deadline for next issue is 25th August 2011.

I hope you enjoyed reading.



Sandhouse Lane, Heath & Reach Walk

By Lindsay Hiles

Images by BGG members, John Pitts, Ray Piercy and Wendy Corley

On March 12th, Greensand Trust representative and BGG member, Malcolm Oliver took a group of us on a guided circular walk encompassing the east side of Heath and Reach village and Stockgrove Park. We met at the 'Flying Fox' pub at 10am and, with the sun beaming down, we cheerfully set off, crossing the very busy and noisy A5, walking a short distance along Sandhouse Lane and into a very different, quiet world of trees, plants and birds. It is an area of subtly differing habitats that runs beside the A5 and down towards the village of Heath and Reach.



Malcolm Oliver imparting his extensive knowledge of the flora around Stockgrove Park.

Image by Wendy Corley.

At the start of the walk Malcolm told us that his general knowledge on geology wasn't particularly comprehensive (although I don't agree with him on that!). On the other hand, his general knowledge on all other things such as the local flora, the geomorphology, the recognition of ancient woodland, medieval settlements and so on, was second to none. Periodically along the route, with the aid of an auger, soil samples were taken and it was possible for us to feel the difference between the gritty sandy soils and sticky clay soils between our fingers.

We also passed alongside Stone Lane Quarry, where the once impressive sands of the working quarry are now covered with a thick veil of clay. The clay has started to slump in this now closed, barren looking quarry as there isn't anything to support its steep sides.

We stopped for a short refreshment break at Stockgrove Park. After which, some of us decided to carry on the longer route around Stockgrove's perimeter, whilst others took a more direct route back to the A5 via the Greensand Ridge. For those of us that decided to carry on with a walk around the Park, Malcolm had us looking for changes in vegetation and for subtle differences in the soil composition to deduce whether we were walking across glacial till or not.



View across Stone Lane Quarry Image by John Pitts.



View of the beautiful countryside within Stockgrove Park Image by Ray Piercy.

The complete walk took about five hours and Malcolm did not stop imparting enormous amounts of information that was both informative and interesting during that time for which I have only given but a brief summary.

Thank you to Malcolm for organising and leading the trip around the village of Heath & Reach. It was lovely to have such a good turnout and good company to walk with. Having lived in Leighton Buzzard for the past 30 odd years, I didn't realise that the area around Sandhouse Lane existed and I'm please to have had the chance to visit it.

Visit to Kensworth Quarry April 30th 2011

By Jan Munro

The weather was kind for our chalk exploration day which included, a morning cleaning the exposure in the Nature Reserve in Kensworth Quarry, followed by visits to Landpark Quarry near Whipsnade Heath, Whipsnade Tree Cathedral and Dunstable Downs. The objective of this trip was to clear back our exposure at Kensworth then in the afternoon, look at the other interesting places in the immediate area, biodiversity in relation to the geology, landforms and Man's interaction with the landscape.

Although the face at Kensworth had degraded since our last visit in the Autumn of 2010 it wasn't as bad as I'd first feared. As well as the seven BGG members taking part, Mike Rainbow from the Bucks Group plus two U3A guests also took part. We got to work with a variety of brushes and scrapers. The vegetation had not become so invasive this time, largely due to the efforts of John Buxton and his brushcutter. Lindsay Hiles bravely allowed herself to be roped to the top fence to clean the top of the face – not a very comfortable position at all!

Several fossils were uncovered, mostly sponges and poorly preserved echinoids but a very nice urchin spine was revealed. When we first came in, we were struck by the sheer number of cowslips that had colonised the area. As I'd planned to look at the biodiversity on the chalk as part of the day, this was an excellent start. We also saw a Green Hairstreak Butterfly which was once a rarity but seems to be making a comeback. The site is managed by the Wildlife Trust and they are to be congratulated on the work they're doing both here and at nearby Totternhoe.



Clearance in progress with Lindsay dangling from a rope!

After lunch and a brief refreshment stop in the Gateway Centre on top of the Downs, we drove down to the car park at Whipsnade Heath for a short walk to Landpark Quarry. Again this is a Wildlife Trust reserve and many wild flowers and insects were observed. There is much scope for turning this site into an LGS and educational resource and, although we didn't have much time to hunt for fossils, there are great possibilities. Some very interesting flint nodules were observed that are not present in the Kensworth exposure and there is also a very interesting overgrown hollow to the left of the exposure that could give us access to a lower stratum if the Wildlife Trust was agreeable to the idea. Please look up Martin Whiteley's excellent article in the November 2010 newsletter.

From there we moved on to Whipsnade Tree Cathedral. Information about this is available from the Gateway Centre or National Trust website www.nationaltrust.org

It is a plantation of trees of many different species that was set out in a cruciform shape on the clay with flints layer overlying the chalk after the Ice Age. There are tree "towers" planted in what were once chalk extraction pits where chalk was cooked to produce lime for improving agricultural land. There is also a restored dew pond in the centre

which held a sizeable population of newts and it was an absolute haven for birds.

Our final tour took in the splendours of Dunstable Downs, the highest point in Bedfordshire. The view is one of the best in the country and on the clearest days you can see 5 counties. It is a wonderful place to view chalk landforms and the shape of the scarp and dip slopes could clearly be seen.

We talked about the classic spring-line at Wellhead near Totternhoe and the Norman motte & bailey castle at the back of the village. At the dry valley now called Pascombe Pit (where the tradition of orange rolling once took place at Easter) we looked at how the Ice Age meltwater had modified the landscape. All the time we were examining flowers, insects and birds and discussing how centuries of sheep grazing had created the calcareous grassland habitat and talked about how modern management techniques were helping to preserve it.



Spectacular view from Dunstable Downs.

Lastly we visited the 5 Knolls burial mounds at the most northerly point before Dunstable and discussed how the geology had influenced Man's activities over the centuries. The panoramic view at that point made it an obvious choice as an important burial site as it could be seen for miles around. That's why it was also chosen during Medieval times as a site of a gallows.

If anyone is interested in finding out more about ancient man in the area there is a lovely booklet published by the Manshead Archaeological Society called Ancient Dunstable available from Luton Museum for about £5.

Many thanks to Lindsay for the morning refreshments and to all participants for their hard work.

Derbyshire Trip, 13th to 15th May 2011

By Peter Lally and Lindsay Hiles

Some of us arrived and met on the Friday night in preparation for the rigours of the following day. By Saturday at 10 am we were at our full complement of 10 members and assembled at Middleton Top, approximately 2 miles south of Matlock, where we met our guide for the day, Dr Roger Suthren. Roger is a Senior Lecturer in Geology at the University of Derby, where he is the Leader for Geology, Environmental Hazards, and Global Hazards.



Brachiopod found in life position at Middleton Top.

At Middleton Top there is a good view across the southern Peak District to the lowlands of south Derbyshire and on a clear day onto Leicestershire and Charnwood Forest. Staying in the same locality, we walked across to the disused Redhill quarry where we examined the marine platform facies of the Lower Carboniferous Limestone. The limestone was full of mainly brachiopods (some in 'life' position), corals and crinoids. With Roger's help we were able to deduce this was very likely to be a death assemblage in a high energy, shallow water environment. Apparently, the fossil crinoids are good indicators of salinity in the geological past. Before leaving the quarry we briefly inspected the disused railway line that still has the last surviving winding engine from the now defunct Cromford and High Peak Railway. In a convoy of cars we set off to our next destination, Fenny Bentley, near Ashbourne, south west of Matlock.

A short walk from a local hotel car park we inspected the Fenny Bentley landslide (looked on by a rather bemused sheep), that occurred in 2008-2009 and partially destroyed a short section of the B5056. This is a steep,

unstable slope on the Lower Carboniferous shales (Bowland Shale Formation) that has a history of land sliding. The road has subsequently been stabilised by a variety of engineering techniques. Then, onwards to Milldale.

Parking at Milldale, we walked by the River Dove southwards until we reached Raven's Tor. From a viewpoint on the slope opposite, we could see this massive Tor was a reef-like body – a carbonate 'buildup' developed on the early carboniferous sea floor in perhaps quieter, deeper waters than previously seen. In the same locality, Roger pointed out some distinctive layered limestones and suggested that these were stromatolites.

After a short break for a packed lunch and a tea and ice-cream break back at Milldale, we drove onwards into Staffordshire, near to Ecton to view a roadside section of the twisting forms of limestone stress of Apes Tor, Manifold Valley. These dark, organic-rich muddy limestones of the Lower Carboniferous were deposited in deeper water than the platform limestones. These rocks are also host for mineral deposits and we briefly stopped to peer into an old copper mine entrance.

For the final leg we drove across the county to the outskirts of Baslow, north east of Bakewell. After parking the cars close to Robins Hood pub,



Raven's Top, a massive carbonate reef structure.

we climbed upwards to Birchen Edge; an expanse of Millstone Grit. Roger told us that he regularly brought his undergraduate students up here to interpret the paleo-environment and calculate the direction of the paleo-current.



Dr Roger Suthren demonstrating how to deduce the paleo-current at Birchen Edge.

Fortunately, we didn't have to work this out; instead Roger explained the theory to us. On the top of the crag, we found Nelson's monument, a gritstone obelisk, and 3 large natural rocks shaped like the prows of ships inscribed with the names of Victory, Defiance and Royal Soverin.

After a day of sunshine, drizzle and blustery wind, black clouds appeared and we hurriedly descended. By 5pm we were out of the rain and into the local pub enjoying the refreshments and chatting over the day's events. Roger was an excellent guide and our thanks go to him for giving us a great insight to this part of Derbyshire.

Afterwards we returned to our various sleeping accommodations to refresh, change and get ready for the evening soiree at The Tavern, in Tansley, near Matlock. Good food, good company, and very enjoyable evening had by all.

On Sunday most of us went our separate ways, although one or two of us stayed on to enjoy a 2 hour casual morning walk with Peter. Starting and finishing in Harlington, (between Ashbourne and Buxton), their route

followed the upper parts of the River Dove, through the Dales of Beresford and Wolfscote, then leaving the river to enter Biggin Dale, and back to Hartington, where the walkers enjoyed a welcome drink and food, before a final farewell and return home.

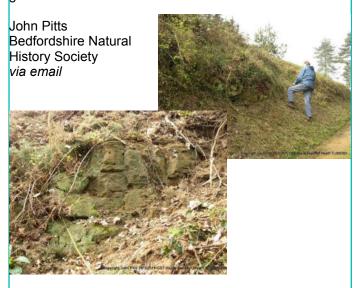
On behalf of our little troop (Frances, John, Simon, Neil, Jane, Malcolm, Jan & Steve), I would like to give thanks to Peter, for coordinating this trip – much appreciated. It was a super trip!

Members' Page

Dear Editor.

Following the Greensand Trust day at Maulden Heath.....

Hopefully a lot of people will be happy after the tidy up and this summer the bugs are truly brilliant. The Greensand exposure revealed looks pretty good too.



Dear John,

Thank you for sharing these images of the Greensand (Woburn Sands) with us.

Bev Fowlston

Editor

Dear Editor,

Following a presentation to The Friday Club (Youngevity) of Leighton Buzzard on 13th May 2011...

...... last night I had been at a meeting addressed by Bev Fowlston from the Bedfordshire Geology Group. Bev gave a sparkling presentation of a topic that I had previously imagined to be really boring, but it was nothing of the kind.

Gerry Sandison School Governor Cedars Upper School, Leighton Buzzard via email

Dear Gerry

Thank you for your warm gesture and I am glad that you enjoyed the presentation.

Bev Fowlston

Editor

Dear Jan (Munro),

Thanks very much for such a pleasant and informative afternoon on Saturday (30th April). I can see why you are so passionate about the work you do

Apologies for being a bit late with helping clean the face of Kensworth quarry but well done to Tony for finding the most fossils and to Lindsay for providing all the refreshments. We still have 3 lumps of chalk on my new kitchen work surface which Ray assures me he will do 'something' with, but I'm very proud of my cute little sea urchin spine. Thanks for showing us the hidden quarry that we can access as and when to hunt for more fossils and for pointing out the flora that is on show at this time of year and that being an ancient woodland it will also be a good place to visit in the Autumn to hunt for fungi. We had never heard of the tree cathedral before so that was a lovely new place of interest to be introduced to and one we shall definitely go back to take in more of the ethos behind it.

Likewise, we'd not really had the opportunity to explore the Downs. It truly is an amazing geological site and we are so lucky to be able to make use of it both for fun and learning. It was very helpful of you to explain how the landscape was formed and how man has modified it to suit his needs for farming and for pleasure. Not to mention it's importance during World War II and the more macabre side of being an ancient site of hanging and the burial grounds of the iron and bronze ages. You told us of the skeleton that is now in museum near Luton and who's remains were decorated with fossilised sea urchins to suggest a person of importance. If you hadn't brought our attention to reverence of these dips and bumps we would probably have no more respect for them than the young boy on his mountain bike. We would never have guessed that the elongated raised area was a holding ground for rabbits in Roman times either but it has got Ray searching the internet to learn more and now understands just how important this is.

So thanks Jan for a lovely afternoon and for inspiring us!

Best wishes, Val & Ray (Piercy) via email

Dear Val and Ray.

Thank you for your lovely email. Jan is a true inspiration to us all with her passion for the countryside. A huge thank you to her for all her hard work for BGG.

Bev Fowlston **Editor**

If you have any interesting images or just want to voice your opinion on a geological issue, events or how the group is run then this is your page. Just send your images, in jpeg format, or any letters or comments as a Word .doc document via email to the editor at bev.fowlston@gmail.com

Forthcoming Events and Contacts

Don't miss the next event

Dates for your diary

Jun - 19th - Seeking the Jurassic Walk

Jul - 17th - The Making of Bedford Day at Priory Country Park

Jul - 23rd - Walk around College Lake, Tring

Aug - Livelihoods of the Chalk event, t.b.c.

Sep - 11th - AGM and Walk

Oct - 15th - Visit to Sedgwick Museum, Cambridge 2pm

Nov - Site clearance (Potton or chalk site, t.b.c.)

Dec - Annual Social Eve

A 12-month rolling programme of events is being organised - check the website for further details. Further events will be confirmed via email and in the next newsletter. Watch this space!

If there is an event you would like to see then please let Bev Fowlston know and she will aim to organise it.

For more information on any of the events, please contact Bev Fowlston at the details below.

Membership information

Individual membership is £7.50 per annum. Group membership is £25.00 per annum (Available to organisations that have 4 or more employees or members wishing to join B&LGG)

To continue to receive this newsletter by email or post then you must renew your membership. This newsletter is not the only benefit of remaining a member of the B&LGG; all our events for members are free of charge, non-members must pay £2.00 to attend.

You can renew now by either:

- 1. Sending a cheque made payable to BGG
- 2. Requesting and completing a Standing Order form

Both available through contacting: Lindsay Hiles BGG Secretary, 4 Phoenix Close Leighton Buzzard, Beds LU7 3YW

Remember without you - the members - this Group does not exist.

We need you!

It's getting to that time of year when the BGG needs to form it's new committee.

Please consider if you can spare some time to sit on the committee and help to run our excellent group.

Bedford Museum update By Lindsay Hiles

In preparation of the refurbishment of the Bedford Museum, over the past year, we have been assisting the Museum by reviewing their complete geology collection. The work entailed making sure that each and every specimen was correctly identified, catalogued, photographed and the information logged onto the museum's computer system.

On the whole we have been successful and had almost completed this mammoth task (excuse the pun), but with time against us we had to stop for the collection to be moved into temporary storage. Once this move is complete we can complete this important task. At this point I would like to thank those members who have helped in this process: Mike Kingdon, Martin Day, Peter Lally (photographers), Glynda Easterbrook, Martin Whiteley (specimen identification), Anne Williams, Tony Britten and Bev Fowlston (cataloging specimens etc).

Having built a good working relationship with the Museum we will soon move on to perhaps the more exciting part of the refurbishment; designing and rebuilding the displays. The Museum will be influenced by our recommendations as to which geological specimens we believe should be exhibited and best way to display them for the greatest effect.

Committee Members 2010 - 11

Chairperson Secretary Treasurer/Membership Secretary RIGS Manager & BNHS representative **Events Coordinator** Chalk Downs rep/Events Organiser Beds CC & Biodiversity Forum rep **Events Organiser**

The Greensand Trust representative PR/Promotions/Fundraising Officer Committee member

Peter Lally Vacant Lindsay Hiles Dr Martin Whiteley Bev Fowlston Janet Munro Vacant

John Wong Malcolm Oliver Vacant Anne Williams

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