

NEWSLETTER

Summer 2010

A new look to Bedfordshire's geology!

By Bev Fowlston

Bedfordshire Geology Group's new look is revealed. The new modern logo of the renamed Bedfordshire Geology Group is now in use on all the Group's paperwork. With assistance from Grassroots the Group's website has been updated and given a complete overhaul. The intention is to unveil the new look at the Open Day at Marston Moretaine's Forest Centre on 3rd October 2010. This will be an opportunity to show how interesting and exciting the work of the Bedfordshire Geology Group is. There will be manned stalls showing the varied rocks and landforms throughout Bedfordshire along with many specimens of local rocks and fossils. Invitations are being sent out to many notable people countywide as well as the local media.

We want to make this the highlight of the environmental calendar BUT we need your help on the day. Come along and show your enthusiasm for Bedfordshire Geology Group. You do not need any expertise in geology just an enthusiasm for Bedfordshire and its landscape and a willingness to talk to people about the Group and the rocks around us. If you can help even for just an hour then please contact Lindsay Hiles in the usual way.

BGG and Bedford Museum

By Bev Fowlston

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Work at the museum is moving on a pace, but more help is required to keep the momentum going. Since work began in July, the cabinets of fossils and rocks are being systematically checked and verified. The next big task is to ensure that all the items are photographed. Peter Lally has made an excellent start but this is a big job that needs more manpower. If you are good with a digital camera and can spare a few hours on a Monday then please let Bev Fowlston know who will arrange to show you the ropes. It is very easy to do but time-consuming so the more the merrier!



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 November 2010.

I hope you enjoy reading on.....

BGG News

Walking with a purpose

By Martin Whiteley (LGS Manager)

Most of us enjoy a stroll through the Bedfordshire countryside, but I wonder if I can persuade you to take that walk with a purpose in mind. I'm keen to know where there may be exposures of rock in north Bedfordshire and the only reliable way to find out is to look.

I'm particularly interested in hearing about places where the distinctive limestone that has been so widely used as a building stone may appear at the surface. The limestone is officially known as the Middle Jurassic Great Oolite but that doesn't really matter – what's important is that it is pale grey to golden yellow in colour and usually full of fossil fragments. Look at the walls of any old cottage in Pavenham or Harrold and you'll see what I mean.

In the past many quarries were opened to supply this stone but, to my knowledge, none remain easily accessible today. However, if you look on the local Bedford & St Neots 1:25 000 map (Ordnance Survey Explorer Map 208) there are a few disused quarries marked that would be worth investigating. Other potential targets are isolated patches of woodland that sometimes mark where old quarries have been allowed to regenerate naturally.

The valley of the Great Ouse between Bromham and Turvey is another area worth visiting. Here the river has cut down through the overlying clay and sometimes very small patches of limestone are exposed in the valley sides, river bank or river bed. Other good places to look are on any break of slope and near fields where a lot of stones are found in the soil.

Further afield, some of the stream sections around Riseley and Pertenhall might reveal limestone or clay that has not been recorded previously.

Much of north Bedfordshire is criss-crossed by public footpaths so it should be an interesting exercise to devise a route that allows you to do some detective work. At the very least, it's also worth knowing that in a particular area there are definitely not any exposures to be found. If you're really being systematic about your search you may have to stray away from public footpaths and here I can only suggest that you proceed diplomatically. Most landowners will not object to you peering over a hedge or walking around a field boundary, but don't march into a private copse or farmyard without permission.

So, good walking and good hunting. I will be delighted to hear about any rocks or overgrown exposures that you find (and those areas where you don't) and will follow up your leads. Simply send me an email (mjwhiteley@yahoo.co.uk) or give me a ring on 07732 913 812. And please don't forget that temporary exposures such as drainage trenches, silo pits and building foundations can be an invaluable source of information in a county where rocks are rarely seen at the surface.

Event reviews

Bedford Building Stones Walk

By Bev Fowlston; Images by Ray Piercy

June 27th was a beautiful Sunday morning and members met outside the Swan Hotel in Bedford. Anne Williams had organised a wonderful tour of the town looking at the many buildings made of stone that are dotted along the town centre's streets.

We began by looking at the facade of the Swan Hotel which is faced in Totternhoe Stone, or Clunch, to find out more about this unique building stone have a look at the leaflet on our website, just follow this link <http://www.bedfordshiregeologygroup.org.uk/leaflets/BLGGTotternhoeStone.pdf>.



Geologists! Queuing up to look at a rough old piece of stone! (The base of the John Bunyan statue in Bedford)



What is there to see in an old horse trough? Granite, of course!

The group snaked through Bedford town centre, being looked at in a very odd manner by the shoppers, as we peered interestingly at statues and shop fronts, whilst animatedly talking to each other about the significance of having serpentinite and Old Red Sandstone in Bedford!

Anne followed the trail depicted in the "Look at the building stones of BEDFORD: a town trail" booklet published by the Bedford Retirement Education Centre. If you wish to retrace the steps of the day and you cannot get hold of this booklet then our very own Building Stones booklet is still available to buy at £2.00, copies can be obtained from Lindsay Hiles on receipt of the relevant monies.

Harrold “Love Your Parks” Day

By Jan Munro

On July 24th as part of the national Love Your Parks week celebrations, I organised an event at Harrold Odell Country Park. The idea was to bring together representatives of as many user groups as possible to talk about what the park meant to them and promote the importance of good quality open spaces (the park is a 3 times winner of a Green Flag Award).

We had stalls representing the Wildlife Trust, Walking 4 Health, The Friends of the Park and Community Tree Trust to name but a few. Richard Dowsett, my colleague at the park, led a guided walk for all those wanting to know more about the geology, natural history and our management strategies.

The role of Beds Geology group was to provide relevant interesting exhibits and talk to the public about the fact that there would not have been a park at all if it wasn't for the geology. Without the rich deposits of the sands and gravels left behind by the River Ouse at the end of the last Ice Age, the area would now look very different, probably a housing estate tagged on to Harrold and Odell villages.

The quarrying, which ended in the early eighties also revealed Man's reliance on the landscape over thousands of years. A Romano British farmstead was uncovered adjacent to what is now Tea-zels Café and this was carefully excavated to reveal willow-lined wells, coins, pottery and burials. An exhibition related to this can be seen in the café annexe room and we recently received an £18,000 grant from the Aggregates Levy Sustainability Fund (ALSF) to pay for improved interpretation.

The older housing stock in the area exploited the underlying Jurassic Oolitic limestone. Nearby Pavenham village is as beautiful as many in the Cotswolds. The BGG is busy trying to find accessible exposures that we can use to demonstrate this important strata.

My thanks to everyone for their support on the day. It was quieter visitor-wise than I'd expected but everyone who attended said they'd had an excellent response. I've also received some lovely feedback from those that did attend. My walking 4 Health group has now doubled in size.

Another great day at Kensworth

By Anne Williams

At 9 o'clock on Saturday 7th August, a work party arrived at our site at Kensworth to repair the ravages of last winter's weather on the chalk face (previously cleared only last October) armed with an assortment of ladders, spades, trowels and brushes, as well as a large strimmer. We were grateful to the quarry manager for opening the gate and allowing us to use their car park.

In alternating bright sunshine and heavy rain, we managed to clean almost the whole length of the exposure, leaving it gleaming white and showing a number of important marker horizons and many interesting structures – small faults, a minor fold, and solution pipes filled with brown clay-with-flints and large black flint nodules. As well as some echinoid and gastropod fossils.

The vegetation encroaching on the top and the foot of the face was cleared, and the loose chalk was levelled into a walkway, with a ramp at one end to allow access to a higher level. As we had the right equipment it was also possible to cut back some vegetation and make a clearer path into the site. These improvements should make Kensworth an excellent educational resource, at least until the winter frosts! This site may need regular maintenance.

We stopped when the southern end appeared to be 'just a lot of chalk' (pace Malcolm) and the rain really came down! It was then possible to make a log and field sketches and take photos so that an accurate description of the site could be done for the formal designation as a Local Geological Site.

Thank you very much to Tony and Janet, Bev, Martin, Malcolm, Tony and John for all the hard work. More images of the day can be seen on the website.



One of the fossils found at Kensworth by Tony Britten.



Members hard at work: Bev posing for Anne; Tony Britten studying a fossil; Tony Baker and Martin Whiteley, digging for all they're worth!

Members' Page

In the last newsletter **Graham Bellamy** posed an interesting question about the life cycle of oil and gas resources. He asked ...

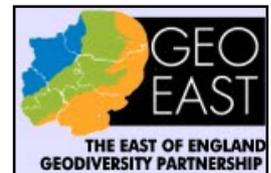
“We worry about oil running out ... do we know what would happen to oil and gas pockets over geological time ... would they always migrate and be kept below ground in a basin, or would they eventually be likely to be part of an uplift and so brought to the surface ... just wondered if there was an easy answer?”

Martin Whiteley replies: “*Unfortunately the answer isn't entirely straightforward, but in the world of geology few things are! When organic matter is deposited along with mud particles on the seabed or on the floor of a lake, it is progressively buried as deposition continues. As a result it gets hotter and hotter because temperatures increase towards the centre of the Earth. When the organic matter reaches about 100°C it is converted to liquid oil under very high pressure.*

Because oil is less dense than the surrounding rock it tries to rise towards the surface and that's what happens most of the time – a natural seepage occurs. The huge tar pits of California and Trinidad are good examples of active oil seeps. Only if the oil is trapped by an impermeable layer of rock will it remain deeply buried. Even then, over the course of tens of millions of years there is a high probability that Earth movements, such as uplift or faulting, will breach the trap and allow the oil to reach the surface. So, the best place to explore for oil is in relatively young sedimentary basins that have not been disrupted. Just occasionally, in very stable parts of Africa and the Middle East, oil has remained trapped for hundreds of millions of years, which is why these areas are popular exploration targets for oil companies.”

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

Regional News



Geo East Report

By **Martin Whiteley, LGS Manager**

We reported in the last issue that we were about to receive £2,000 from Natural England to undertake a site clearance project and designate new Local Geological Sites. Just as this award was about to be made the new Government announced a freeze on spending in this particular sector. We are optimistic that the money will reach us eventually, but for the time being these projects have been put on hold.

Should you require more details about, or wish to get involved with Geo-East, please let Peter Lally know. Check out the website at www.geoeast.org.uk

For more detailed reports on recently held events, go to the Events page on the website at

<http://www.bedfordshiregeologygroup.org.uk/reports.html>

You can see written reports and images of some of our past events.

Forthcoming Events and Contacts

**Don't miss the
next event**

**Sun 12th September
AGM at Wilstead village hall**

Dates for your diary

Sep 12th - 2.30pm - 4.30pm

AGM at Wilstead Village Hall

Oct 3rd - 11am - 3pm

Grassroots Project day at Marston Vale
Forest Centre

Nov 7th - 11am - 2pm

Potton site clearance and visit to
Deepdale Quarry

Dec 9th - 7.30pm - 9.30pm

Annual Social eve at Husborne Crawley
Reading Rooms

Jan - t.b.a.

Feb - t.b.a.

**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!

**This Group does not exist without the committee, with the AGM
coming up - please consider standing on the committee because
some committee members have been working for you for many years
and we need new bodies on the committee to continue the good
work.**

Committee Members 2009 - 10

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

John Comont

John Wong

Malcolm Oliver

Vacant

Anne Williams

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