

Bedfordshire & Luton Geology Group

NEWSLETTER

Spring 2008

Filming in a quarry near you!or not!

Michael Kelk, a film producer, contacted the B&LGG to enquire about filming at one of our RIGS, Deepdale Quarry, near Potton in the east of the county. After research by John Comont, it was discovered that this disused quarry is still owned by Hanson. The film company contacted

Hanson, and after seeing recent pictures of this once beautiful geological site with its newly restored and planted faces, decided it didn't have the bleak deserted look that they wanted. They opted instead to cross the border into Cambridgeshire and film at Needingworth Quarry. Read more about the sad story of restoration that has taken place at this site on page 2.



Deepdale 2006



Deepdale after restoration 2008

Who felt the Earth move?

You must have all heard, or felt, the earthquake on Tuesday 26th February. News of it just missed the last edition of the newsletter, but you can read all about people's experiences inside.....

Our new range of leaflets are now available!

Following extensive research and a lot of hard work by Bev Fowlston and Sarah Wroot, the new leaflets are now available. You can get copies from Bev or by downloading them from the website, if you haven't already done so.

The leaflets include a series of five based on the geological industries that made Bedfordshire what it is today, one aimed towards children and adults who know very little about the rich fossil fauna that can be found in Bedfordshire's rocks and the last one is a leaflet showing a drive through Bedfordshire's geology.

RIGS updates
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News and Events
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Project News and
Dates for your Diary
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Also inside this issue:

Cross-stratification - a brief
introduction!

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 26th August 2008.

I hope you enjoy reading on.....

RIGS Updates

Deepdale's demise?

Deepdale Quarry is a RIGS. It was designated in 2006 for its excellent sedimentary structures and exposure of the Woburn Sands Formation (Lower Greensand).

On a recent visit, with a group of students from Bedford 6th Form College, it was shocking to see the almost complete restoration of the once wonderful exposures of large scale cross-stratification previously seen.

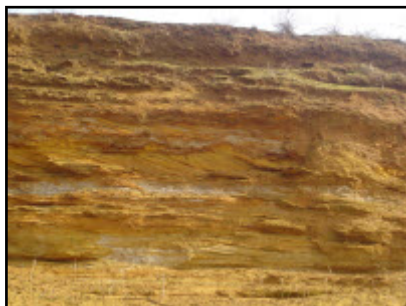
It was not just the man-made restoration but also the natural weathering and erosion of the small face, that has been left for posterity, that has changed.

As a geologist, Bev Fowlston, was horrified to see the once beautiful multi-coloured sands covered by new green grass (see the images on the front page). Hundreds upon hundreds of saplings have been planted on the now smooth slopes of this once beautiful quarry.



Deepdale's last remaining exposed face is crumbling under the weight of the overburden. It has been left by Hanson's as part of the restoration plan. These images are only part of the face, other

areas are in much worse condition and are dangerous. It would be nice if we could preserve some of the remaining section of Deepdale quarry for future generations.



Excitement at The Pinnacle

Richard Lawrence, of Bedfordshire & Rural Communities Charity based in Biggleswade, contacted the B&LGG to let us know of an outcrop of "clay-with-fossils" that has become exposed at The Pinnacle Recreation Ground in Sandy. Previously, this site was a SSSI for this horizon in the Woburn Sands Formation. Further investigation is required.

A Possible New RIGS at Pavenham?

Martin Whiteley and Jack Kirby have been investigating a new site at Pavenham. There is an old disused quarry on private land that is hopefully going to be reopened.

The site is very exciting as it will be the only exposure of Middle Jurassic limestones in Bedfordshire. It will be an opportunity to study this rare exposure in a similar way to that at Potton with the Woburn Sands Formation.

News and Events

Earthquake experiences

Following the exciting events back in February when the earthquake hit we received the following reports from people around the East of England.

Ray Piercy - B&LGG member via email "What earthquake? I was asleep!"

Jenny Gladstone - Norfolk RIGS Group, GeoNorfolk "Nothing special - but it did wake me in Norwich. There was the roaring noise, so I woke thinking it was a wind - then the bed shook from side to side. Quickly realised it was an earthquake and went back to sleep! My sister in Leicester who has been in severe earthquakes in Italy went out into the street in case of aftershocks. Several of her neighbours went out too, so they stood about talking for a while.

Best wishes

Jenny"

Bev Fowlston - B&LGG member. "I awoke fearing that Buncefield had exploded again! My husband told me it was just a juggernaut going along the road near our house and turned over and went back to sleep! The next morning he phoned me from work to tell me to turn the TV on as it was all over the news - an earthquake! How exciting!"

Goodbye to Jack Kirby

It was with great sadness that due to ill health Jack has had to resign his position on the committee.

The committee would like to thank Jack for all his hard work since taking up his position in September and wish him all the best for the future.

Cross-stratification - a brief introduction

There are a number of terms for cross-stratification that are used by geologists, e.g. cross-bedding, cross-stratification, cross-lamination. They all mean a similar thing, a lot depends on the scale. The definition given by The New Penguin Dictionary of Geology is "The characteristic bedding structure produced by the migration of bedforms with inclined depositional surfaces".

Maurice Tucker, in his book *Sedimentary Rocks in the Field*, describes cross-stratification being "formed as a result of deposition during the migration of ripples, dunes and sand waves." This is a very good description and gives a good mental image of the movement of sediments both in aeolian (windblown) and water-lain sediments.

Good examples of cross-stratification can be seen in many of Bedfordshire's quarries. We will be seeing lots during the Munday's Hill visit in August - don't forget to book your place!

Harrold-Odell Country Park

On Sunday 9th March a number of members joined committee member, Richard Dowsett, on a guided tour around Harrold-Odell Country Park.

Richard has written a brief report:

“After an overview of the history of the park, a look at the possible Quaternary history of the park and the changes in the river course over the last 107 years using OS surveys it was out into the park. A possible old channel and levee were identified using evidence from the last flood. The flood layer identified on a previous visit was found to be discontinuous but occurred as discrete lenses at the same or similar stratigraphic level. A large number of freshwater mussels were found in these lenses. They are the same species with the same damage as the fresh shells we found on the river bank. Groups of opened shells appear overnight in the open with damage at one end as if they have been forced open. There was considerable discussion as to the likely predator but no conclusion. Otter spraint (dung) was also found.

The evidence for the recycling of the agricultural drainage system into the quarry washing system was examined briefly.”

The morning was interesting and made a nice change to have a geomorphological trip. One member, Anne Williams, commented that it was interesting on many levels, not just from the geomorphological side but also on an environmental level too.

A huge thank you goes to those members who turned out on the day and, of course, to Richard Dowsett for giving his time and expertise so freely.

Fullers' Earth Walk and Talk

This walk and talk was re-run due to requests from members unable to attend last year. Bev Fowlston led a group of members around Aspley Heath and gave an introduction to the fascinating subject of Fullers' Earth.

The day was a little overcast and a brief shower was



experienced, but with brollies to hand the group completed the walk and talk. Some members met up at a local public house for a refreshing drink afterwards.



A great morning spent in good company. Thank you to all those who came along.



Hands on Rocks Workshop

This was a wonderful day in April run by Martin Whiteley, RIGS Manager. There was an excellent turnout by members with many new members joining us for the first time.

Martin and others, including Jan Munro and John Wong, brought along many examples of Bedfordshire's rocks and fossils.

The workshop began with a morning session in Potton Library with a hands on approach. There were trays of rock samples from the five major rock types found in Bedfordshire. Members studied the rocks and looked at them with hand lenses before drawing and colouring an interpretative sedimentary graphic log. They also completed a simple geological map of the county - all under the expert tuition of Martin.



Following a successful and informative morning the group adjourned for a brief lunch before reconvening at our Potton Scout Hut Quarry site just up the road

from the town centre. Here the group embarked on a logging exercise that is often carried out by geologists in the field. The group again got out their pencils and hand lenses and, along with tape measures and grain size cards, drew up a sedimentary log from the excellent exposure at the site.

A great day was had by all who turned up on a lovely but chilly Spring day in Potton. Thanks go to Martin Whiteley for giving up his day to teach ordinary folk a little about the geology of Bedfordshire and how a geologist works in the field. Also, thanks to those who brought along rocks and fossils for everyone to oohh! and aahh! over.



Remember to check out the website
www.bedsrigs.org.uk

Project and Event News

Potton Scout Hut Quarry Project

The success of the Potton site is due to all the hard work done by various B&LGG members. The work is now complete on this small educational exposure of the Lower Greensand (now called the Woburn Sands Formation).

A huge thank you goes to John Buxton and Ray Piercy without whom the newly erected Interpretation Board would still be in Bev Fowlston's garage.

We are hoping to be involved in the re-opening of Potton Scout Hut after recent refurbishment. Information will be coming via email, but if anyone can lend a hand then please let Bev Fowlston know.

Also, if you know of any groups that would benefit from a visit to Potton then please let Bev Fowlston know, again, at the usual contacts.

Kensworth Nature Reserve Project

The digger has been in to Kensworth to clear the site of scree and the face is now ready for cleaning and the Interpretation Board is complete and ready to be erected. This should be done in early - mid June.

Jan Munro has agreed to take over the management of this clearance project. She is very knowledgeable about the chalk downland and its biodiversity and also has a keen interest in the geodiversity of Dunstable Downs especially. A day of cleaning the face will be organised in the near future and this date will be advised by email. If anyone can help, then please contact Bev Fowlston in the usual way or Jan Munro on jan.munro1@ntlworld.com



A new and exciting project in the pipeline

English Heritage's Strategic Stones Survey in partnership with The Geology Trusts - for more information, or if you want to get involved, please contact Martin Whiteley.

Don't miss the next event
Sun 8th June - Greensand Ridge Walk

Dates for your diary

Sunday 8th June

10.30 am - Greensand Ridge Walk

Saturday 21st June

Fossil Fun Day at Dunstable Downs

Sunday 29th June

Day trip to Charnwood Forest

Sunday in July (date to be confirmed)

Re-organised Sundon Hills Walk and Talk

Saturday 26th July

Leighton-Linslade Canal Festival

Saturday 23rd August

11am - Munday's Hill Quarry visit

Sunday 14th September

2pm - AGM

If there is an event you would like to see then please let the committee know and we will aim to organise it.

For more information on any of the events, then 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 B&LGG
2. Requesting and completing a Standing Order form

Both available through contacting:

Bev Fowlston, B&LGG Secretary, 38 Jupiter Drive, Leighton Buzzard, Beds LU7 3XA

*Remember without you - the members - this Group does not exist.
We need you!*

Committee Members 2007 - 08

Chairperson	"Awaiting a nominee"		
Secretary & Events Organiser	Bev Fowlston	e: bev.fowlston@gmail.com	tel: 01525 375353
Treasurer	Richard Cox		
Membership Secretary	"Awaiting a nominee"		
RIGS Manager & BNHS representative	Dr Martin Whiteley	e: mjwhiteley@yahoo.co.uk	
Education and Schools Liaison	Richard Dowsett		
Chalk Downs representative	Janet Munro		
Committee Member	Chris Andrew		
Beds CC & Biodiversity Forum rep	John Comont		