



Research assistance from B&LGG

By Bev Fowlston



Martin being interviewed
by PhD student, Helen King.

Martin Whiteley was approached by a PhD student, Helen King, from Cranfield University to assist with research for her thesis. This involved visiting the very interesting Fuller's Earth Pits at Aspley Heath. Martin and myself met Helen at Aspley Woods and showed her around the depressions left by the 19th Century workings of the fullers.

I asked Helen about her research and she said "My research is for Cranfield University, for a PhD qualification in Natural Resource Management. The project working title is 'People in Nature: exploring the Information Function of a semi-natural environment'. The 'Information Function, or 'Cultural Service' of an area relates to the benefits people receive in terms of inspiration, recreation, education, spirituality and historic or scientific knowledge. It is a term now used by government and academia which comes from a framework called the 'Ecosystem Services Approach'.

This framework views the contributions ecosystems make to society as services, and attempts to account for, and value

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these services so that they may be included in management and policy making decisions. As such, it is closely related to the RIGS movement. Aspley Heath is a great study site for this work, it has a range of different recreational activities, interesting management, and extensive history that has been reasonably well documented. It is noteworthy for being placed on the Greensand Ridge and having a particular soil type which has influenced its land use considerably. It is also local enough for me to spend a great deal of time there and really get to know the area well, as I live in Central Bedfordshire."

Whilst at the site, we investigated an interesting outcrop Helen showed us which we had not been aware of before. This outcrop of Lower Greensand showed some interesting sedimentological features including bedding and the different colours of the sands in juxtaposition.



Bedding revealed in a new outcrop of
Lower Greensand

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 24th February 2010.

I hope you enjoy reading on.....

RIGS Update

Time to learn a new acronym...

By Martn Whiteley

Just in case you missed it, the Department for Environment, Food and Rural Affairs (defra) published guidance on the identification, selection and management of Local Sites in 2006. So what, you may ask, what does this mean for B&LGG?

One of the observations in the report is that there are currently a number of different terms in use to describe sites of local importance. For example, you may have heard of Regionally Important Geological Sites (RIGS) or County Geological Sites. In order to promote a better understanding of the kind of sites in question, defra suggest that adopting a common term would be sensible. They recommend using the generic term 'Local Site', which is the term used in the Government's planning policy advice. This term may be subdivided to describe an individual site as either a 'Local Wildlife Site' or 'Local Geological Site'.

At the heart of this guidance is the principle that whilst Local Sites may also provide other benefits, they contain features of substantive nature conservation value. Furthermore, the purpose of selection is to provide recognition of this value and to help conserve those features by affording the sites an appropriate degree of protection.

Defra's recommendation has been slow to develop, but the logic is appealing. As a county-based group we are primarily concerned with Local Sites and therefore we intend to phase out the old acronym (RIGS) and instead adopt the term 'Local Geological Site' (LGS). This will take time because RIGS are deeply embedded in our literature and website, but at least it provides us with some breathing space while we get used to the new acronym. Roll on LGS!

B&LGG News

2009-10 committee elected at the AGM!

This year's AGM was very well attended. The attendees enjoyed a captivating talk by Bernard O'Connor on the Coprolite industry that thrived throughout Bedfordshire in the 19th Century.

Following the wonderful AGM in September we were sorry to see three members of the committee leave, Richard Dowsett, Richard Cox and Corinne Calligan. A huge thank you to them for all their hard work during their time on the committee. We hope they will continue to be active members and enjoy the events put on by the new committee which is listed on the last page along with contact details.

A warm welcome was given to new committee member, Anne Williams, who will be a floating member assisting in areas as and when required. Two positions are still vacant on the committee: Secretary and Fundraising Officer. If you have the time and skills to help with these positions then please let a committee member know.

Good luck to the 2009-10 committee for the coming year!

Heritage Lottery Fund bid in progress.

Peter Lally, Bev Fowlston and Lindsay Hiles are in the process of preparing a 3 year funding bid to cover clearance works and to open up new geological sites in the south and north of the county. If we are successful in this bid we will need your help to implement the works. This will entail work similar to that carried out at Potton and Kensworth over the last couple of years. Also, assistance with producing educational and information documents will be required.

Initially, work will be centred around re-assessing our LGS (RIGS) sites and designating new ones that are currently being researched to a small degree for viability.

If you have skills in any of the following areas: organisation, research, clearance etc, then please let one of the three named members above.

Radio slot for B&LGG

By Martin Whiteley

Just to let you know that I did a bit of outreach on 27th October when I talked on BBC Three Counties Radio (the Stephen Rhodes Breakfast Show) about Bedfordshire's fossils. Originally the programme wanted to have a conversation about a press release that described a 'fossil of a giant sea monster called a pliosaur that was 150 years old and was found in Dorset' (no, honestly, that's what it said!).

With such bewildering inaccuracy around I was anxious to put the story right, but then moved on to talk about two or three local fossils and explained their significance. Have you ever tried to describe *Micraster* over the airwaves? I plumped for a 'heart-shaped bit of white rock about the size of a small doughnut'!

All in all, quite good fun, but a bit nerve-racking as the show was live, it was 7.30am in a studio in Luton and I met Stephen for just 20 seconds before going on air. You can be forgiven for not tuning in at such an unearthly hour!

Event reviews

Members enjoy the Mendips.

By John Wong



In October, members enjoyed a couple of days in the Mendips organised by Dr Martin Whiteley. During the two days we learnt about the geological structure and tectonic framework of the Mendips, stratigraphy and palaeogeography from the Silurian Period to the Pleistocene Epoch. We were also shown what geological features to look for on outcrops in situ, how to interpret depositional environments, and relationships between the overlying and underlying strata.

On the first day we visited Beacon Hill, the highest point and most eastern pericline on eastern Mendip. Martin had arranged a ploughman's lunch for us at the cottage and we were then given a guided tour of the cave.

After a walk up the hill and a climb to the top of Banwell Tower, we drove to Cheddar Gorge for a look at its asym-

metrical dry valley and the towering Carboniferous Limestone cliffs. We then stopped at Draycott Sleights, at the top of the hill we saw the panoramic view of the Somerset levels, and the relationship between the southerly dipping Carboniferous Limestone and the Triassic dolomitic conglomerate that overlies it, unconformably.

On the second day, we went to Doulling Village amenity area and examined the rejected blocks of the quarried Jurassic Doulling Stone. We also visited Moons Hill quarry at Vallis Vale where the Silurian andesitic lava is quarried, the most southerly outcrop of Silurian strata in Britain. The Somerset Earth Science Centre is also based here. This is a new education study centre and amenity for the county sponsored by local quarrying industries.



We ended the field trip at Tedbury Camp, a disused quarry near Frome.

A big thank you to Martin for his organisation and I am sure that we shall look forward to attending another weekend field trip in the not too distance future.

For a more detailed report by John, visit the website reports page or click here <http://www.bedsrigs.org.uk/reports.html>



Kensworth gleaming after a sterling effort.

By Jan Munro

On Saturday November 7th ten of our members descended on the nature reserve area at Kensworth Quarry. Our mission – to clean back the upper chalk exposure and reveal the strata once again.

The weather was glorious which made the job at hand so much nicer. We had brought along an array of weapons of mass destruction including scrapers, brushes, hammers & chisels and trowels. John Buxton brought his trusty brushcutter and soon had all the taller re-growth down while Rodney Sims tried to persuade the bonfire that it really did want to burn.



Image above taken in January 2008, image to the right taken following the clean up on 7th November 2009.



It was lovely to meet some of our newer members for the first time and lunch was a jovial affair. A big thank you to Lindsay Hiles for pinching her hubby's fishing stove to brew up the tea. The hard work was rewarded with the discovery of several interesting fossils. There were several sponges and some partially preserved echinoids (sea urchins) and these were scrutinised over sandwiches.

We eventually finished at 3pm. We can now bring interested parties in once again and they can compare what's on the ground to the interpretation board.

To read a more in-depth report please go to the reports page on the website at <http://www.bedsrigs.org.uk/reports.html>

The Strategic Stone Study gathers momentum ...

By Martin Whiteley

During the last six months B&LGG has been involved in an exciting, practical project with English Heritage called the Strategic Stone Study. England has an incredibly rich and varied architectural landscape and this is due mainly to the variety of local stone used in buildings and other structures, giving character to our towns, villages and rural landscapes. The Strategic Stone Study aims to define distinctive building stones across the country, describe their use in representative buildings and identify the source quarries for them. Quite an ambitious project!

Four counties (Warwickshire, Oxfordshire, Herefordshire and Worcestershire), together with the Stone Centre in Derbyshire, initially participated in a pilot exercise, each producing data for the project by different methods. This enabled English Heritage to formulate the best procedure to be used as the project developed. Four more counties (Shropshire, Wiltshire, Gloucestershire and Bedfordshire) have just completed their contribution to the study and a further six counties are now being surveyed. This article describes our involvement ...

English Heritage sought experienced local geologists and historic buildings experts in each county to provide data on building stones, former stone quarries and representative stone architecture, both vernacular and grand. The information was gathered from their personal knowledge and existing archives, supplemented by some fieldwork. The data was then fed into spreadsheets and distilled into a written, illustrated account of that county's building stones. The output of the project will ultimately be made freely available on a website called EBSPits (England's Building Stone Pits), hosted by the British Geological Survey.

The new database will provide local authorities with the evidence they need to safeguard stone sources of historic importance. It will also enable heritage organisations to make sensitive repairs to buildings in their care, and it is hoped that it will encourage the use of indigenous stone for new builds, thereby supporting our stone industry and stone craftsmanship.



The boundary wall to Village Farm in Sutton is made of small, elongated blocks of Lower Greensand laid in a steep, sweeping diagonal pattern. The wall is braced by brick piers and capped with large slabs of sandstone laid vertically.

DSCO1847 © Martin Whiteley

Bedfordshire is not particularly well endowed with building stone and the principal types (Middle Jurassic limestone, Lower Greensand and Totternhoe Stone) are well known. However, the variety of stone buildings throughout the county is quite wide, ranging from the tiny lock-up on the green at Harrold, to the grand houses of Woburn Abbey and Southill Park. Ten examples of representative buildings or villages for each stone type were described in the database. More challenging was the detective hunt to identify which quarry supplied the original stone for a building. Most disused quarries are now infilled and many of the Jurassic limestones were transported into the county from neighbouring Lincolnshire and Northamptonshire.

The illustrated narrative that describes Bedfordshire's building stones will be reproduced on the B&LGG website in due course. Meanwhile, if you know of any stone buildings in your local area, particularly if they are humble, vernacular dwellings, I would be interested to hear from you because I am continuing to expand the county database.

This contribution is based on an article that appeared in the UKRIGS Newsletter, v.7.1 (2009).

For more images relating to this article please visit the website.

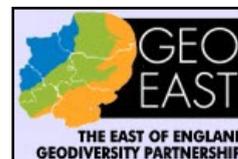
Regional News

Geo East

GeoEast has been granted £25,000 from Natural England to promote geodiversity across the six East of England counties. Bedfordshire has been awarded £1500 which may be used to create a walks leaflet covering an area in the north of Bedfordshire and to provide equipment for clearance work.

Should you require more details about, or wish to get involved with Geo-East, please let Peter Lally know.

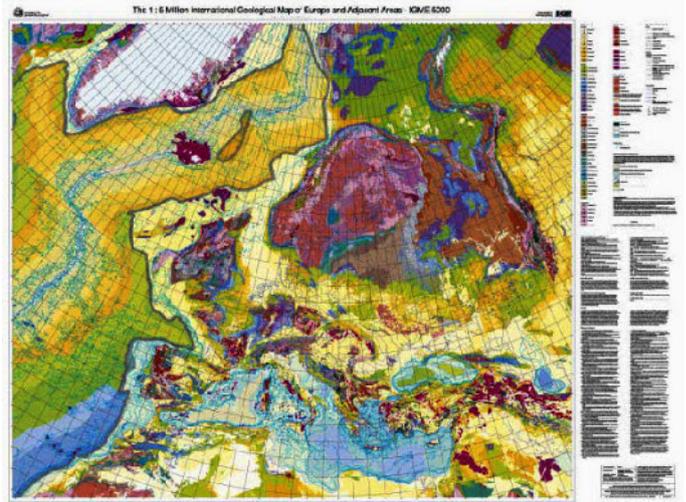
Check out the website at
www.geoeast.org.uk



International Geological Map of Europe. (1:5,000,000) By Graham Hickman

I recently came across this very interesting and large geological map of Europe while visiting the BGS (British Geological Survey) shop at the Geological Museum in South Kensington. The "1:5 Million International Geological Map of Europe and Adjacent Areas" is a major European geological GIS (Geographic Information System) project, which is being managed and implemented by the Federal Institute for Geosciences and Natural Resources (BGR) on behalf of the Commission for the Geological Map of the World.

The geological maps from each country across Europe have been harmonised to a common geological scheme and the coloured shading doesn't stop at country boundaries. The project was undertaken by 48 geological surveys and institutes from Europe and adjacent countries. As far as I can determine the work began around 2000 and the paper map was published in 2005.



The map also features for the first time the geology of the offshore areas of Europe as well as the land. Further more the map has been generated using GIS and has a related database that is free to access on the Internet.

http://www.bgr.de/app/igme5000/igme_frames.php

The map can be zoomed into and features identified. I have found this particularly useful to look at places I have visited in Europe where I have been unable to find a geological map and have never been really sure of the geological ages of the rocks I've seen.

At 14 pounds I think it is excellent value. It covers an area from the Middle East to Greenland and from North Africa to the Arctic. The copy I obtained is at a scale of 1:5,000,000 and is around 1m by 2m when unfolded. I believe it can also be purchased as a smaller scale poster or as two flat sheet maps.

Do you know your Bedfordshire? By Peter Lally

Some Geodiversity fun, do you know where these photographs were taken? They range throughout Bedfordshire to depict how we have used natural geology materials to transform our County. A couple of clues – the Pill Box overlooks our main Town, and one bridge was built on one other.

If you wish to let me know where you think they are, please email me, or if you wish to wait, the answers will be supplied at our Christmas Do at Husbourne Crawley on the 10th December.



Forthcoming Events and Contacts

**Don't miss the
next event**

**Thur 10th Dec - Members'
Annual Social Evening**

Dates for your diary

Thur 10th Dec 7.30pm

Members Social Evening, Husborne
Crawley Reading Rooms, contact Lindsay
Hiles for more information

Sat 30th Jan 1pm - 4pm

Bedford Museum; Rocks, Minerals and
Fossils Workshop - Ask an expert event.

Wed 24th Feb 2pm

BGS Keyworth visit to view samples etc of
Bedfordshire geology, contact John Wong
to register your attendance.

**A 12-month rolling programme of events is
being organised. 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.**

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

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

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

Editor's notes

Thank you to everyone who has submitted articles and
images for this quarter's newsletter which is going from
strength to strength. Keep them coming in!

Don't forget to bring along a raffle prize to the Member's
Social Evening.

Also, have a go at the Caption Competition. The images
will be on the website shortly. There are prizes this year
and the winning captions will be drawn from a hat on the
night.

We will have lots of lovely food and a tippie or two - so
bring along family and friends for a fun night.

Merry Christmas and a Happy New Year to you all.

Bev Fowlston - Editor.

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:
Lindsay Hiles B&LGG Secretary, 4 Phoenix Close
Leighton Buzzard, Beds LU7 3YW

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

We need you!

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

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