



Buckinghamshire Earth Heritage Group

Newsletter No. 17 December 2011

Event: 'Nature surveys for our geology sites' - Jill Eyers

Wednesday October 26th & Sunday October 30th 2011

The group started the first of many nature surveys at Whiteleaf on 26th October. This was quickly followed by the second at Buckingham Sand Pit on October 30th. These were two training events which were led by Tom Hose.



Photo above: Tom (orange hat) explains the tasks to accurately count the number of species.

What are we doing and why are we doing it you may ask? As a geological group we are reviewing our sites with the intention of exposing the geology. This often results in cleaning up the faces and removing the very scrub that provides an important habitat for wildlife. We also have a legal duty to not disturb any protected species (e.g. bats, badgers, newts and many other species). The first step is therefore to survey the wildlife and see if we have anything special. So, this is where the 'add on' to the Rocks and You project has been born – called Rocks and Nature. The funding for this part of the project was limited so we will have to rely on volunteer help.

Tom, myself and some BEHG members have made a good start. We have also made contact with the local wildlife groups, who have responded with enthusiasm. We are very likely to set up some joint events next year at our sites – we will show them our geology and they will explain and find the wildlife on site – sounds a great symbiotic relationship! In addition we have also had a very enthusiastic response from Natural England, the landowners and the managers.

We now have a good database of natural history



Photo above: invertebrate survey at Whiteleaf.

knowledge for our sites. We have started to compile all the data known so far about the ecology to add to the geology, basic hydrogeology and soils reports. If we find anything of ecological interest, then we will call in an expert. As we have done for Buckingham Sand Pit where we noticed some interesting bryophytes (non-vascular plants such as liverworts. **Photo below**). These will be surveyed specifically with the assistance of a local wildlife group.



Where do we go now? This is where you come in; keep an eye on the events list. Coombs, Whiteleaf Quarry and nature reserve, Northmoor Hill, Buckingham Sand Pit and Stowe Pit will have surveys announced. Please join in – training and ID guides are provided and you do not need any specialist knowledge. Come and see what you can find!

Jill Eyers

Event: Festival of Geology
Saturday November 5th 2011

The 'Festival of Geology' is an annual event, free of charge, held by the Geologists' Association (GA) with the aim of promoting interest in geology. The BEHG is an affiliate member of the GA and was given space at this event to advertise the group's activities. In addition to the many stands there was also a large area run by [Rockwatch](#) the nationwide club for young geologists. Activities for the young included fossil plaster-casting, trilobite racing and making a Jurassic diorama. Throughout the day there were also a number of short talks given on subjects such as; amber, climate change, volcanoes and dinosaurs. A good deal of interest was received from the BEHG stand and many new contacts were made. All of the membership application forms were given out and we are hopeful that many new members will join. Many thanks to the BEHG members who volunteered to help.



Photo Above: BEHG stand receiving lots of interest.

Graham Hickman

GA Conference: Geo-conservation and Society
Friday & Saturday September 9th & 10th 2011



Photo above: BEHG poster gets some celebrity viewers, Phil Harding from the Time-team and Professor Danielle Schreve.

During September the GA held a two day conference at Worcester University to discuss the topics 'Geo-conservation and Society'. Graham Hickman attended and represented the BEHG at this conference. The first day was a series of talks and posters addressing the concerns and issues of geo-conservation. The second day was a field trip to the Lickey Hills to see the successful work of the Herefordshire & Worcestershire Earth Heritage Trust in restoring an old quarry. The afternoon of the second day was spent visiting Dudley Museum and the Wren's Nest to see how geo-conservation is managed in a heavily populated area.

The conference generated lots of new ideas which could be applied to projects in Buckinghamshire.

Graham Hickman

The conference details and abstracts can be found at:

http://www.geologistsassociation.org.uk/2011_Geoconservation_conferences.html

A call for Volunteers: Nature surveys –
On-going through the year.

Each of our sites needs to have an on-going nature survey as different species come out at different times of the year. It is hoped that some of you may have an interest in one or more aspects e.g. butterflies, birds, fungus, trees, flowers, or many others. We also need to put out 'sand traps' to see who visits our sites at night - footprints are very useful! At Stowe they now have a camera to film wildlife at night. Please let Jill know if you want to help survey any of the sites. She has a list of sites and it need only be a very simple survey, nothing fancy- not even Latin names!

Contact Jill Eyers for more information at (j.eyers@bopenworld.com) or call 01494 881325

Talk: Livelihoods from Chalk in the Chilterns – Bev Fowlston

Saturday November 12th 2011

This was a joint meeting of the BEHG and the Buckinghamshire Archaeological Society and was held at Aylesbury Museum. The Speaker, Bev Fowlston (photo right) is the events coordinator from the Bedfordshire Geology Group. Bev helped to produce information leaflets on Chalk-based livelihoods as part of a wider project sponsored by The Chilterns Conservation Board and the neighbouring geology groups in the Chilterns. This talk introduced people to the wide variety of uses man has made of the Chiltern Hills from Neolithic times to the present. One of the older features described was Maiden Bower in Bedfordshire which was an Iron Age



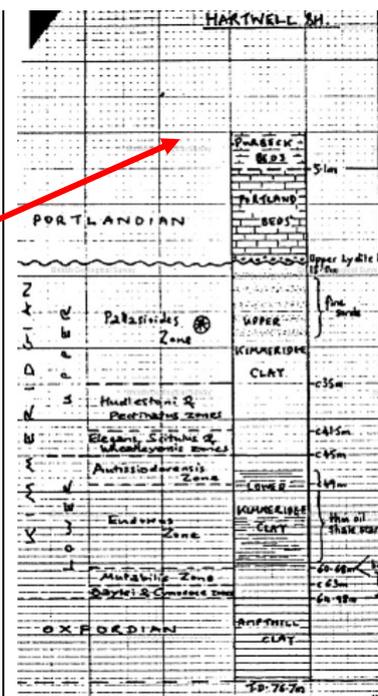
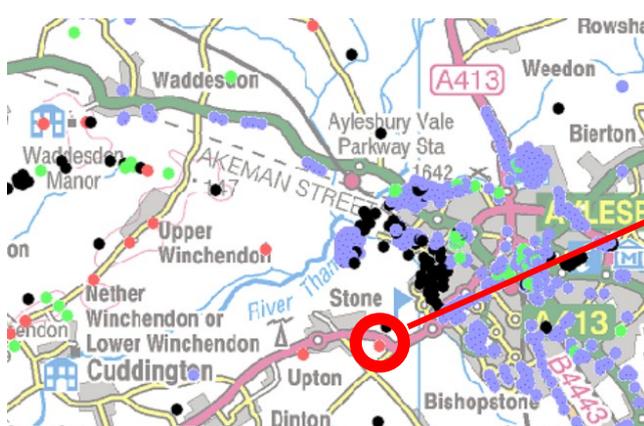
Camp built over a Neolithic hill fort. Bev shared photos of how the more recent Chalk extraction, close to the ancient monument, had to be stopped to prevent irreparable damage. During the Medieval period we learned how a man-made rabbit warren was established at Sharpenhoe Clappers. Rabbits were a source of protein in the past and their skins were used for garments. The old medieval rabbit warren can still be seen. During more recent times Chalk has been used in the Whiting industries and extracted for lime and cement. Harder beds such as Totternhoe Stone are still being extracted for restoration building stone. Present day recreational is the main use of the Chilterns.

The leaflets were produced with the support of the Chilterns Conservation Board and can be downloaded here: http://www.bucksgeology.org.uk/books_and_leaflets.html

News: Digging Deep – Free stuff during the government cut backs!

Enjoy it while it lasts

The government austerity measures are evident everywhere, with the constant erosion of benefits and stuff that used to be free or subsidised now being charged for. It was therefore a great surprise to discover something that used to cost £25 being given away...free! The British Geological Survey has digitised its large collection of borehole records and these are now downloadable at no charge. The example map above, shows the boreholes available around Aylesbury. The depths of the boreholes are shown by the different coloured dots. Blue: 0-10m, Green: 10-30m, Red: 30+m, Black is confidential and not available. The example to the right shows the Stone SP71SE1 bore hole which is 77m deep. These data are very useful for understanding our local geology. **G.Hickman**



Geindex link: <http://mapapps.bgs.ac.uk/boreholescans/boreholescans.html>

Did you know?

Mick Oates writes about an interesting discovery from Coombs Quarry, Buckinghamshire

About 10 years ago, during a trip by geologists to Coombs Quarry, palaeontologist Dr Adrian Rundle took home a bag of clay which he poked out from between the beds of limestone in the face. This he sieved at home to isolate any interesting microfossils. During his binocular microscope search, he discovered a mammal tooth, from the age of the dinosaurs.

Mammals only evolved at about the Triassic-Jurassic boundary and were a rare and inconspicuous element of the fauna throughout the Jurassic and Cretaceous Periods. The tooth belongs to an early class of mammals called Docodonts, an order of extinct Mesozoic proto-mammals which possessed a well-developed and sophisticated set of molar teeth.

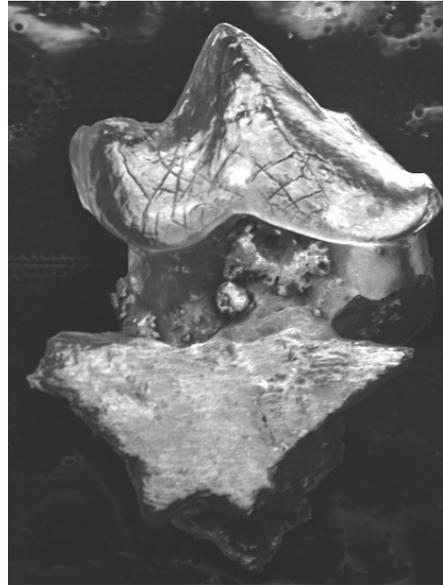
The illustration of the Coombs tooth (**photo right**), is in fact an electron micrograph, experimentally taken under atmospheric conditions. Normally such images are produced by gold-coating the specimen and creating the image in a vacuum. This was felt to be too risky for this unique (to Buckinghamshire at least) object.

The example from Coombs is of the species *Simpsonodon oxfordensis* (Kermack), the original of which was discovered in Jurassic rocks of the same age in Oxfordshire.

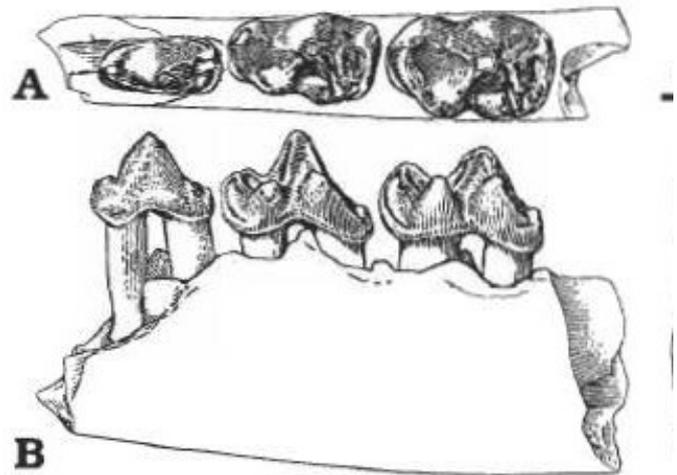
Quite a few teeth have been found by the bulk processing of a large amount of "Forest Marble", the beds exposed above the layer at Coombs which Adrian teased out, from Kirtlington Quarry in Oxfordshire. It seems that the rarity may be as much a product of under-sampling as a real effect. It is the first, and as far as is known, the only mammal discovered from Jurassic rocks of Buckinghamshire. A more complete jaw fragment, from the same age rocks of Kirtlington Quarry, is illustrated to the right.

An artist' impression of what this group of mammals looked like is illustrated (**photo right**). Perhaps even a direct ancestor of humans from 165 million years ago.

Dr Michael Oates



Docodont tooth (?M1)
Bladon Member,
White Limestone
Formation,
Coombs Quarry,
Thornborough,
Buckinghamshire.



2012 Future Programme

Further trips and talks will be scheduled as the year progresses. Please check the BEHG website or email the organisers before any event for the latest update.

Sunday January 15th 2012, 10am-12.30pm 'Saxons and stones' Reading town centre walk.

A look at the fascinating history of this town from it's Saxon beginnings through the Abbey to the modern day - there is so much more of interest than just shops! For details and to reserve a place contact Jill Eyers: at (j.eyers@btopenworld.com) or call 01494 881325

Sunday Feb 5th 2011, 10am - 12.30pm: Winter Hill - a story of past climate change. Walk led by Jill Eyers followed by lunch in the Jolly Farmer in Cookham Dean. For details and to reserve a place contact Jill Eyers: at (j.eyers@btopenworld.com) or call 01494 881325

Saturday February 18th 2012: 1pm-4pm Burnham Beeches Geology Walk. Leader Graham Hickman. For details and to book a place: contact Graham Hickman at (hickmang@bp.com) or call 07763363266 for more information.

Saturday March 17th 2012, 10am to 4pm: Coombs Quarry - nature survey day. Followed by a light clean up of the section. Suitable for all. For details and to reserve a place contact Jill Eyers: at (j.eyers@btopenworld.com) or call 01494 881325

Saturday April 7th 2012, 10am - 4pm: Buckingham Sand Pit. Nature survey and quarry clean up day with a lunch time BBQ. For details and to reserve a place contact Jill Eyers: at (j.eyers@btopenworld.com) or call 01494 881325

Saturday April 21st 2012. AGM, combined with 'Be a geologist for the day'. Activities will include; making microscope slides, identifying samples under the microscope, mounting them onto labelled cards, identify a selection of sharks teeth - take your specimen home! Also use the drill to prepare a fossil from the rock. Demos on how to ID rocks, minerals and fossils. Venue to be confirmed. For details and to reserve a place contact Jill Eyers: at (j.eyers@btopenworld.com) or call 01494 881325

Saturday May 5th 2012, time tbd: Churchyard geology. Hurley, Berkshire. This is a half day workshop with an indoor session (talk) followed by a walk around the village churchyard. Graveyards are full of different rock types and fashions in memorials have changed over the years. This workshop will enable you to identify the main ornamental stones used and how to map out changes and styles in a churchyard. This will allow you to look at and assess your own local churchyard. To book contact Jill Eyers at (j.eyers@btopenworld.com) or call 01494 881325

May 18th to 20th 2012. Weekend field trip. The Ice Age in Norfolk. Leader: Jill Eyers. Some of the UK's finest ice age geology (Happisburgh, Overstrand, Cromer, Blakeney Quay and esker, plus West Runton and an elephant! Friday to Sunday with a nice hotel based in Mundesley. 3-course dinner, B&B. The price looks like being £190 for a single room, and between £230 to £260 for two people sharing twin or double room for the weekend. To book contact Jill Eyers at (j.eyers@btopenworld.com) or call 01494 881325

Friday June 1st 2012, 10am to 4pm. Whiteleaf Cross NNR. Two activities; light clean-up of quarry at Whiteleaf Cross Nature reserve, followed by a nature survey of quarry, woodland and grassland. The survey will include trees identification and age estimation, lichens identification, flowers and main invert groups. ID guides supplied to assist. Suitable for all. To Book contact Jill Eyers at (j.eyers@btopenworld.com) or call 01494 881325

Sunday 17th June 2012, 1pm to 3.30pm. Ivinghoe Beacon to Incombe Hole. A walk in stunning scenery with geology, archaeology and nature. Circular walk, one steep hill. To Book contact Jill Eyers at (j.eyers@btopenworld.com) or call 01494 881325

Saturday July 28th 2012, - 10.30am to 3.30pm Rock Art - a drop in event in Buckingham Sand Pit. Anyone can paint and we show you how. Come and have a go there will be two themes: rocks and trees. Suitable for all ages and all abilities. Stay as little or as long as you like. We also have geologists and biologists to take you round the site, including the 'bug man'. Just turn up. SP 699 344.

August 13th to 18th 2012, time tbd. Geology week at Stowe. In partnership with the National Trust. The BEHG will be setting up activities such as hands on fossils, minerals, rock ID at the New Inn visitor centre. Plus guided walks down into the Home Farm Quarry. More details or to volunteer contact Jill Eyers at (j.eyers@btopenworld.com) or call 01494 881325

Membership

During 2011 the BEHG continued to have strong membership and the committee would like to thank everyone on the list below for their continued support throughout the year:

Susan Baker	Graham Hickman	George Lewis
Peter Banham	Lindsay Hiles	Colin Mills
Joy Blake	Julie Hopton	Brian Moseley
Tony Britten	Tom Hose	Michael Oates
Julia Carey	Trevor Hussey	Steven Packer
Patricia Carter	Joe Ibbett	Mike Palmer
David Chalkley	Jan Jones	David Parish
Phillip Clapham	Robert Jones	Alan Robertson
Annette Connors	Elizabeth Jones	Mavis Robertson
Joel Connors	Margaret Keeton	Clive Rodgers
John Connors	Alice Graddol	Rodney Sims
Nathan Connors	Clare Graddol	Andrew Still
Paul Dottridge	David Graddol	Jenny Syred
Jill Eyers	Katherine Graddol	Roy Valentine
Mike Farley	Elizabeth Lerry	
Karen Gresswell	Roger Lerry	

We would also like to welcome and thank our newest members who joined the Group during this year. They are:

Neil Adams	Ellen Hawes	Harry Luck
Patricia Carter	Karen Philbin	Elinor Luck
Helen Durrant	Fran Sturley	James Luck

Subscriptions are due for renewal at the end of December. Annual membership runs from 1st January. As agreed at the AGM Individual membership will be **£7.50** and family membership is **£12** for the 2012 calendar year. Please forward a cheque for the correct amount to BEHG Membership Secretary, Lindsay Hiles, 4 Phoenix Close, Leighton Buzzard, Beds LU7 3YW (email: behg.membership@btinternet.com). Alternatively, you can pay your subscription direct to the **BEHG** account at :

Lloyds TSB (White Hart Street, High Wycombe)
Sort code: 30-94-28 Account no. 0744003

Confirmation of receipt will either be by email or by post.

A copy of the membership form is available on our website: www.bucksgeology.org.uk
If you would like to join please complete and send the application form together with payment to:
Membership Secretary, Lindsay Hiles 4 Phoenix Close, Leighton Buzzard Beds LU7 3YW email:
behg.membership@btinternet.com

The Buckinghamshire Earth Heritage Group aims to record, conserve and promote the geology of Buckinghamshire and Milton Keynes.

Website: www.bucksgeology.org.uk

For general enquiries please contact:

Mike Palmer, Tel: **01296 624519** email: mpalmer@buckscc.gov.uk

Bucks County Museum Resource Centre, Tring Road, Halton, Aylesbury, Bucks HP22 5PN

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Membership Subscription due 1st January 2012

Individual membership £7.50

INDIVIDUAL/PRINCIPLE MEMBER (Please use BLOCK CAPITALS):

In order to keep costs to a minimum, correspondence will be forwarded via email wherever possible.

TITLE: NAME:

ADDRESS:

..... POSTCODE :

TELEPHONE: MOBILE:

EMAIL:

Family membership £12.00

2nd MEMBER – NAME:.....

3rd MEMBER - NAME:.....

4th MEMBER - NAME:.....

I/We hereby apply for membership of the Bucks Earth Heritage Group

A cheque/PO for £..... is enclosed (cheques payable to BEHG)

Signature :

Date :

How did you hear about the BEHG?.....

Please send this completed form together with payment to:

BEHG Membership Secretary,
Lindsay Hiles,
4 Phoenix Close,
Leighton Buzzard
Beds. LU7 3YW
behg.membership@btinternet.com

For general information about the Bucks Earth Heritage Group and for an up to date programme of events please visit:

www.bucksgeology.org.uk