

Conserving Warwickshire's Geological Heritage



WGCG

Hidden wonders
in the landscape
of Warwickshire

In this issue:

Rob Holloway tribute

Building Stones

Jim Rose lecture

Oxfordshire field trip

Kenilworth Cutting

Summer field trips

*Kirtlington Quarry
Oxfordshire*

Newsletter
Spring 2012 Issue Number 23

Contents

<i>From the Chair</i>	<i>Ian Fenwick</i>	<i>3</i>
<i>Rob K. Holloway (1942 - 2010)</i>	<i>Ian Fenwick</i>	<i>4</i>
<i>The Holloway Rocks</i>	<i>Ian Fenwick</i>	<i>5</i>
<i>Field trip to Oxfordshire</i>	<i>Frank Wells</i>	<i>6 & 7</i>
<i>Building Stones - Book review</i>	<i>Frank Wells</i>	<i>8</i>
<i>Jim Rose Lecture</i>	<i>Brian Ellis</i>	<i>9</i>
<i>Kenilworth cutting update</i>	<i>Jim Passmore</i>	<i>10</i>
<i>Weekend field trip - Dorset</i>		<i>11</i>
<i>Summer field trip programme</i>		<i>12 & 13</i>
<i>Additional Summer events</i>		<i>14</i>
<i>Field trips with other groups</i>		<i>15</i>
<i>Atherstone exhibition</i>		<i>Rear cover</i>



WGCG

Hidden wonders
in the landscape
of Warwickshire

WGCG

c/o Warwickshire Museum
Market Place
Warwick
CV34 4SA

www.wgcg.org.uk

From the Chair

As I write, we are coming to the close of our 21st Anniversary Season. By common consent, it has been an eventful and a memorable few months.

The programme arranged by the Education Committee has proved to be a great success with speakers of great quality and repute coming to Warwickshire month after month – the last being Howard Falcon-Lang (Royal Holloway) who regaled us with his insight into the ecosystems of the Carboniferous. Although you will have listened to some of the lectures, what you will probably not know is that both Jim Rose and Chris Stringer expressed their pleasure in meeting up with ‘such a lively group’ and offered to return should we so desire. Quite a compliment! Many thanks to all who made this such a successful season.

But, there is more! The outstanding speakers have attracted many visitors to our meetings, some 20 of whom have joined the Group since last October.

But there have been other important happenings which will impact massively on our activities over the coming years. The settlement of the Holloway estate was finally completed in January, as was our registration as a charity. Colin Frodsham has been much involved in both of these processes and deserves the thanks of all in the Group. Since then, our three ‘holding trustees’ – David Coates, Brian Ellis and Jim Watts – have, on behalf of the Group, navigated the murky waters of investment management. This has been extremely challenging and their experience has been a precious asset which we have called upon massively.

The revision of our publications is now well under way. The revised edition of Hugh Jones’ great little handbook *A Ramblers’ Guide to Building Stones in Warwickshire* is now in the shops and starting to sell very briskly. To follow soon will be the revised *Warwick Building Stones Trail*.

Backing up all this activity is the newly formed Outreach & Publicity Working Group which has a series of events planned for the summer. First off will be an exhibition on Geology and Industrial Heritage in Atherstone which will run from 20th to 29th April. On June 2nd we shall be taking our exhibits to the Rugby Jubilee Festival and then we have the Stratford River Festival two day event on 30th June – 1 July. Again, we shall need as much help as you can possibly offer to make these a success. And, for a complete change, we have been encouraged by Coombe Abbey Country Park to run a Rock and Fossil Funday on Saturday 21 July. This will be primarily aimed at youngsters and – guess what – your help would be so much appreciated.

To all of you, I simply want to say ‘Thank you for joining us, thank you for participating in so many different ways – and thank you for making WGCG such an inspiring group to lead!’

Ian Fenwick

Rob K. Holloway (1942-2010)

Ian Fenwick

Over the past months, many of you will have seen and heard many references to Rob Holloway, one of our members who sadly died in May 2010. Born in Mombasa, where his father worked for the East African Railways, Rob's family soon moved back to England and settled in Shepton Mallett, Somerset. In the '60s Rob trained as a teacher and came to the Midlands to teach in Birmingham, firstly in Kitts Green and then in Erdington. He was one of those rare characters – a man who taught in a primary school. However, that provided him with an opportunity to provide a role model for many of his youngsters by conveying to them his enthusiasm for football. For many years he coached school teams and youth teams and ultimately became an FA qualified referee.

In parallel with his interest in football, he also developed a passion for photography, as witnessed by the vast number of photographs and astonishing range of dark-room equipment which survived him. This extended to stereoscopic photography which led him to become a member of the Stereoscopic Society. From photography developed a desire to produce electronic gadgetry to enhance the performance of his equipment.

Although he had shown interest in landforms and geomorphology while at college, it was really in his latter years that he developed a passion for geology. He soon joined field-based classes in Staffordshire but joined WGCG, despite the fact that he lived in Tamworth! Rob became a regular attendee at our meetings and particularly relished the Group's field trips. By the time of his last trip – to Watchet in September 2009 - he was already a sick man, but still raised the energy and enthusiasm to wax enthusiastically to me about the gypsum mineralisation in the cliffs to the west of the town.

Knowing little of Rob's personal circumstances, for he was a very private person, it came as a huge shock to all concerned when he asked to meet up with a trio from the Group to discuss his will. He had, it transpired, been told that he might expect to live for up to a further 5 years. At this meeting, he insisted that he wished to leave the great bulk of his estate to the Group, especially to be used to encourage young geologists, to record our field excursions and to enable the Group to produce high quality interpretation panel materials.

In short, he sadly only lived for a further couple of months at which stage we discovered the extent of his magnanimity. Both his houses had to be sold and efforts made to ensure that his effects found their way to appreciative homes. When the estate was finally settled in January, it became clear that Rob had not only transformed the financial fortunes of the Group, but in the present economic climate, it has been truly providential..

None of us would, I think, have contemplated that a member would value the Group and its activities so much as to repay it with such generosity.

Holloway Rocks find a welcome home

Ian Fenwick

In the course of his two decades of geological field visits Rob Holloway built up a huge collection of rocks, fossils and minerals which came to the Group after his death. One of Rob's wishes was that we should encourage an interest in geology amongst children and young people. To this end, we have been seeking schools and colleges where a rock collection would help to stimulate interest. So far, packs of 50 or so specimens have been given on long-term loan to Solihull College and Kineton School.



Chris White of Kineton School with Ian Fenwick

Chris White, geography teacher at Kineton, said "I am quite moved by this donation, especially bearing in mind its connection with Rob Holloway. In our geomorphology teaching it will help to make the subject much more real to students who have had little real appreciation of the characteristics of the differing rock types".

Also taking advantage of the WGCG scheme has been the Atherstone Heritage Centre where one of our members, Mike Clarke, is working with Atherstone councillor, Lorna Dirveiks to establish a geological display relating to the Nuneaton Ridge. Lorna said "The history of Atherstone and the surrounding villages is strongly influenced by the Nuneaton Ridge, especially in relation to coal mining and quarrying. It will be a great advantage to be able to see and handle the actual rocks in our Centre, as well as in April's exhibition in the town".

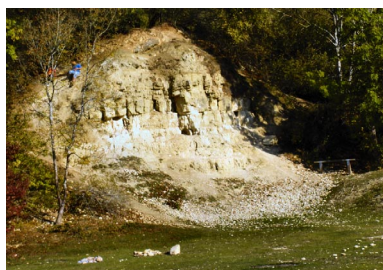
This exhibition, being prepared by Mike Clarke and Colin Frodsham, takes place between April 21st and April 29th at White Hart House situated at the western end of Long Street in Atherstone. See the rear cover for details.

Joint Field Trip to Oxfordshire

Frank Wells

The joint field trip with Leicester took us to Oxfordshire on a varied and extremely interesting day which started in Kirtlington quarry and finished at the Pitt Rivers Natural History Museum in Oxford.

Our leader, Paul Sergeant from the The **Oxford Geology Group**, had the skill to involve everyone, no matter their level of knowledge, in an active process of learning, without ever making any of us feel ignorant!.



The main Kirtlington Quarry face

Kirtlington Quarry exposes marls and clays which were deposited during the Middle Jurassic, about 170 million years ago. When the workings ended in the 1920's, a succession of beds could be seen from the White Limestone at the base to the Lower Cornbrash at the surface. The whole sequence is part of the Greater Oolite and the Bathonian stage, which gets its name from the Bath Oolite, used so much as a building stone.

We spent some time on the two most prominent elements, the White Limestone and the Forest Marble. The White Limestone includes a highly fossiliferous layer which is the type site for the brachiopod, *Epithyrus oxonica*, and this is one reason why the quarry has been designated a SSSI.

The Forest Marble, found higher in the sequence has been used a great deal locally for fire places and other decorative elements.



The group at the base of the quarry face



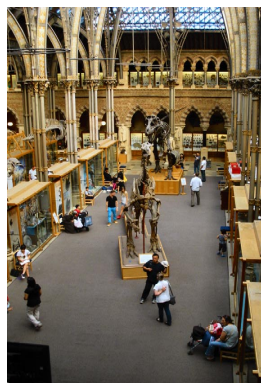
Epithyrus oxonica

Like the Purbeck Marble, it has not been metamorphosed and thus is not a true marble, but does take a polish and was highly sought after for decorative work. It is a hard 'sparite' limestone, in which the matrix is a clean, coarse grained calcite which gives a sparkly appearance and hardness.

From Kirtlington quarry we went to Oxford City for a building stones walk. This started at the Saxon tower of St Michael's,

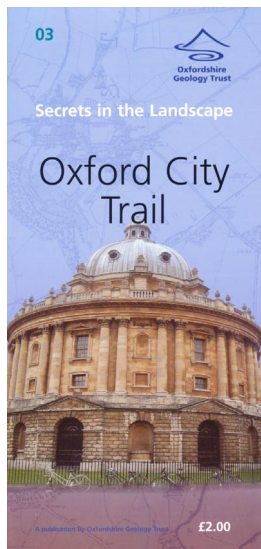
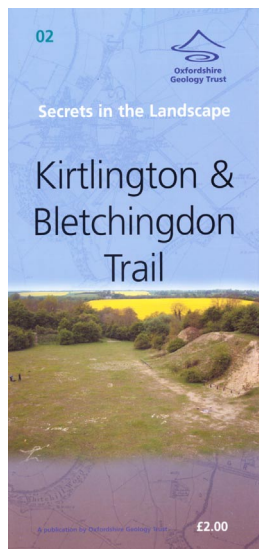
built between 1000 and 1050 of Coral Rag limestone quarried at Headington. This is a crude building stone, too hard to cut to shape, but it has weathered extremely well. Many of the College and University buildings built later used Headington Hardstone, which, over a period of time, belies its name by weathering badly, and repairs are frequently seen.

Our tour took us finally to the Pitt Rivers Natural History Museum and the outstanding, and newly refurbished, display of Oxford geology. The whole museum was designed as a teaching resource, with lines of pillars on the first floor being made of different stones from the British Isles, with the name and origin at the base, and the paving flags on the ground floor also chosen to be examples used in teaching. So our field trip started as a learning exercise in the field, and culminated in a building devoted to the teaching of Natural Science; an excellent day for our Group and our friends from Leicestershire.



Natural History Museum

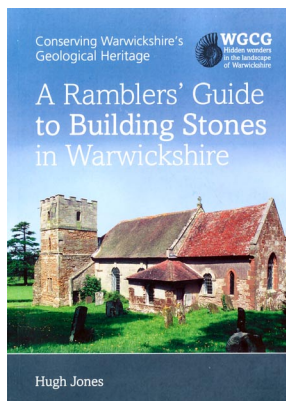
There are two Geological groups in Oxfordshire. The first of these, the **Oxford Geology Group** affiliated to the Geologists' Association, has strong links with the University of Oxford Earth Sciences Department and the Oxford University Museum of Natural History. Like the WGCG the group organises a programme of lectures, field meetings, and residential trips, including expeditions abroad. The group also works in partnership with the **Oxfordshire Geology Trust** in clearing and maintaining Local Geology Sites, recently having worked in Kirtlington Quarry.



The second, the **Oxfordshire Geology Trust**, is affiliated, like WGCG, to the Geology Trusts organisation for Geoconservation and Earth Heritage groups. Offering free membership the group protect the Local Geological Sites, (formerly known as RIGS), and send out details of all up-and-coming events, many of which are free to attend. The group also produces a series of trail guides. Those shown include details of our Oxfordshire field trip.

A Rambler's Guide to Building Stones in Warwickshire by Hugh Jones

(revised and republished by WGCG in 2011)



This book is an enjoyable armchair read, and at the same time a practical field book. Its combination of practicality and good looks starts on the front cover with a new, stylish appearance and a title that could not be more accurate. For this book belongs in the car pocket or the rucksack, always available when you are wandering in Warwickshire. Whether you find yourself in Kineton, Mancetter or Kenilworth the book provides fascinating insights into the links between ancient buildings, local building materials and geology.

It holds equal attraction for the geologist and for the Rambler who just wishes to enjoy and understand the buildings encountered on a walk.

The latter will be intrigued by how much can be learnt of local geology from a study of structures built in the days when it was impracticable to use other than very local stone. Not only the nature of the stone, but interesting geological structures and fossils may be seen, often more easily than in the local rocks themselves, which, in this county are only rarely exposed. There is much detail for the more seasoned geologist to appreciate, but the writing style is never over-technical, and often humorous.

This is a new edition of a previous work, and, whilst no major changes have been made, the new version is a definite improvement, exemplifying the Group's aim of producing attractive literature in a recognisable house style. The layout and general appearance is stylish and attractive, benefitting from the professional design work. The section on terminology and the underlying geology of the county's landscape has been moved to the beginning of the book, which, I think, works well, especially for the less experienced geologist. The excellent and accessible writing remains untouched, with the illustrations well organised and carrying greater impact. Hugh Jones and the editorial group are to be greatly congratulated.

So make sure you get hold of a copy, and have at your finger tips fascinating information on the derivation and properties of the stones used in the ancient buildings of our County. It will enlighten you on the practical aspects of building and the basics of geology and perhaps most importantly, enable you, wherever you are, to look at our built heritage in a new light, as a window into the rocks of the local landscape.

Frank Wells

The Bytham River Story

a lecture by Prof. Jim Rose

Brian Ellis

It was a particular pleasure to welcome Professor Jim Rose for our November 2011 meeting as he has links of friendship with the Group and his research has involved our Local Geological Sites in the Bubbenhall area where extraction of Middle Pleistocene sands has occurred. His topic was the proposed pre-Anglian Bytham River that flowed north-eastward from the Jurassic hills of southern Warwickshire into Leicester, before swinging eastwards into East Anglia then entering the proto North Sea at about the latitude of Lowestoft. The Bubbenhall and Snitterfield pits provide some of the furthest upstream evidence for the Bytham River.

Professor Rose presented evidence of the composition of the sediments laid down by the river along its length, making a case that those sediments do indeed represent the trace of one continuous river, while acknowledging that there are gaps along the line where the evidence is buried by more recent deposits. He also showed how the river system was destroyed by the southward advance of the Anglian ice sheet some 450 000 years ago and was replaced in Warwickshire, once the ice decayed, by the present Avon system. He acknowledged that the Bytham River hypothesis is not universally accepted but showed he was ready to make a vigorous defence of his ideas.

All that you might expect in a conventional presentation. But Professor Rose gave an added insight by relating something of the history of how his research had developed. We learnt how chance opportunities play a role, how the needs of commercial aggregate producers can initiate research and open up new sites for research. Geological and geomorphological research can also lead to enquiries into historical human anthropology with the discovery of stone tools amongst the river deposits, as have been found in Warwickshire..

The lecture was presented with Professor Rose's usual verve and humour. It was received with enthusiasm, and many questions, by a large audience, including many visitors in the 'palatial' surroundings of the Lecture Theatre in the Cheshire Science Centre of Warwick School.

Kenilworth Cutting is opened - September 2011

Jim Passmore



On a lovely sunny day, 29th September 2011, the Mayor of Kenilworth stood on the new bridge and cut the ribbon to open this extension of the Kenilworth Greenway, now continuing into Kenilworth Common. Eventually this will form part of a cycleway from Kenilworth to Warwick University.

Joining the Mayor were local people together with members from different groups, walkers, cyclists and some from WGCG. This extension has proved to be extremely popular and allows many people to view the sandstone outcrop exposed by the Group.



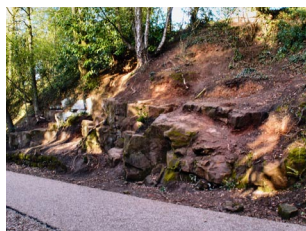
Two days earlier a band of volunteers from WGCG had completed the cleaning of the Sandstone outcrop, to be ready in time for this opening. Earlier in the year a considerable amount of material had been removed, some of it by JCB but a great part by our ever-willing WGCG volunteers. Plans are in hand for interpretation panels to be installed at the site but this is the subject of negotiation with the 'Friends of the Greenway' group.



Brian inspects the site - March 2009



After clearance - June 2011



Final clearance - September 2011

Weekend field trip

Kingcombe Centre, Dorset 14th - 16th September

Our September weekend field trip will probably be unfamiliar territory for many of us. We shall be exploring the inland delights of the Dorset chalk and the coastal wonders of the World Heritage Jurassic Coast. It is an area with something for everyone - fossils, possibly oil shales and beautiful expansive chalk landscapes. Fortunately, to lead us we have secured the services of local expert, Alan Holiday.

The base for the visit will be the Kingcombe Centre, Toller Porcorum, just north west of Dorchester. In 2011 Brian Ellis spent a very enjoyable week at Kingcombe and returned full of enthusiasm for it.

Website: www.kingcombe.org/home.aspx

The booking forms should be with you in early May and it would be excellent if some of our newer members were able to come on this trip. So, give it some thought!

Additional WGCG Summer events

WGCG will have a presence at the following events:

Saturday 21st - Sunday 29th April: *The Great Atherstone Landscape Exhibition*

For full details see the rear cover.

Saturday 2nd June: *Rugby Jubilee Festival*

A 'spectacular' weekend of events has been organised for the extended Bank Holiday weekend from Saturday June 2 to Tuesday June 5, kicking off with a live Rugby FM broadcast in Caldecott Park before a parade through the town in the afternoon. Star Attraction – **WGCG** stand!!

www.rugby.gov.uk/jubilee

Saturday 30th June & Sunday 1st July: *Stratford River Festival*

A free family fun day in Stratford-upon-Avon with music, narrow boats on the River Avon, craft and food stalls, family zone, charity stalls, illuminated boat parade and spectacular fireworks.

www.stratfordriverfestival.co.uk

Saturday 21st July: *Coombe Abbey "Have Fun with Geology"*

A family day out for all the family at Coombe, one of the biggest free parks in the Midlands. It'll be open doors for anyone and everyone of all ages, focusing on children with geological activities like a sand box and hands on rocks/fossils. This event is being organised by WGCG in conjunction with Rockwatch.

www.rockwatch.org.uk

Summer 2012 field trips

Sunday 29th April

Lickey Hills

Meet 10.15 a.m. at Lickey Hills
Country Park Visitor Centre

Leaders: Julie Schroder and Andy Harrison

Joint meeting with Black Country Geology Society. We will be focusing on the Ordovician Lickey Quartzite formation, its relationship within the local landscape. After lunch we drive to the Clent Hills where we will see the Clent and Kidderminster Formations, progressing into the Bromsgrove sandstone.



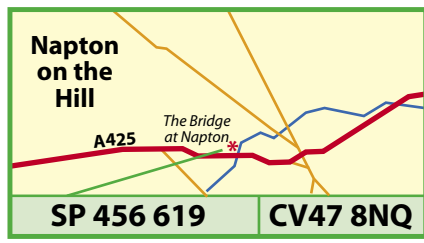
Wednesday 16th May

Napton Lower Quarry and Doggers

Meet 7 p.m. at Napton Canal Bridge.

Leaders: Jon Radley and Ian Fenwick

The lower part of the highly fossiliferous Charmouth Mudstone is well exposed in the Lower Quarry while upslope we shall see the large sandstone boulders, or Doggers, excavated from the Napton brick pit.



Sunday 10th June

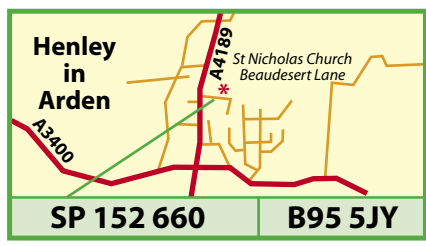
Henley in Arden

Building Stones & Beaudesert Walk

Meet 10 a.m. at St Nicholas Church

Leader: John Crossling

To explore the building stones used in what is largely a timber-framed town. We shall then walk to the east of the town to demonstrate the impact of the Arden Sandstone units within the Mercia Mudstone on the landforms of this part of Warwickshire.



Wednesday 20th June

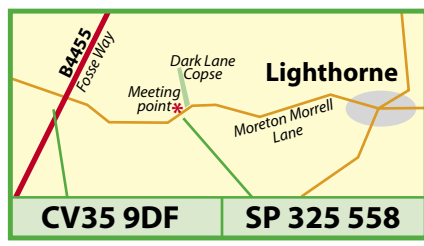
Dark Lane Copse Quarry,

Moreton Morrell Lane, Lighthorne

Meet 7 p.m. at the quarry.

Leader: Jon Radley

One of the few exposures of the Langport Member (White Lias) in the county. The quarry contains waste piles of highly fossiliferous limestone with especially bivalves.



Summer 2012 field trips

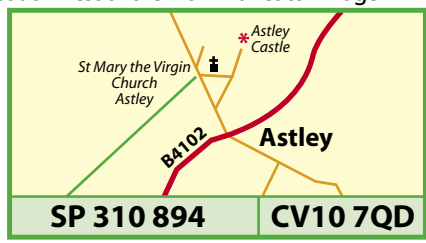
Saturday 7th July

Astley Castle, Church & Moorwood Trail

Meet 10 a.m. at Astley church.

Leader: Brian Ellis

Parking may be difficult since this is Open Day at the castle. Exploration of the building stones in some of the key buildings in Astley. After lunch a guided tour following the Moorwood Trail. Outcrops of the Ordovician sills, as well the impact on the local landscape of the rapid changes in outcrop in the area immediately south west of the main Nuneaton Ridge.



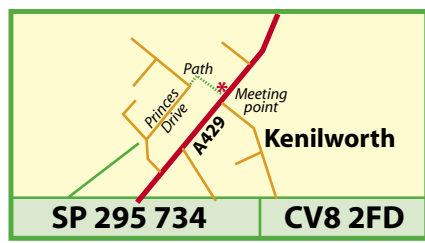
Wednesday 18th July

Kenilworth Cutting and Common

Meet 7 p.m. at the footbridge.
Park in Princes Drive.

Leaders: Brian Ellis and Ian Fenwick

A visit to the Kenilworth Sandstone exposure created by WGCG volunteers, followed by a walk around Kenilworth Common to discuss its relationship to other sand and gravel deposits in the Avon Valley.

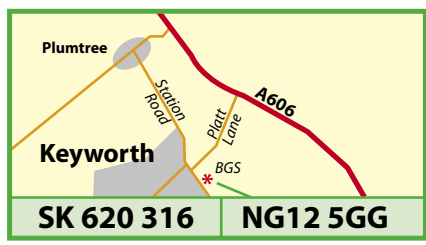


Saturday 11th August

Visit to BGS Keyworth

Meeting time to be confirmed

Joint meeting with Leicester Literary and Philosophical Society.



Saturday 1st September

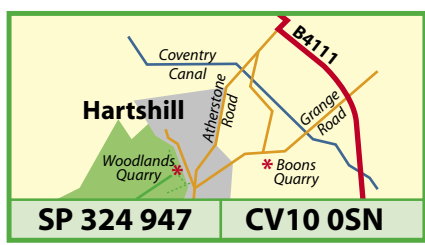
Woodlands & Boon's Quarries

Meet 10.30 a.m at Woodlands quarry.

Leader: Alan Cook

Joint meeting with N. Staffs. GA & Staffs. Geoconservation.

At Woodlands, an opportunity to see some of the earliest shelly fossils in the record, followed by a visit to Boons where some of the Precambrian Caldecote Volcanics are exposed.



Black Country Geological Society

www.bcgs.info

Programme - Summer 2012

Those wishing to attend BCGS field meetings please contact the Field Secretary, Andy Harrison, telephone: 01385 370 188, mobile: 07973 330706 or email: andrewcfharrison@yahoo.com

Sunday 29th April: (Joint Field Meeting with WGCG)

Visit to the Lickey Hills, 'Champions Project' Quarries and the Clent Hills. Led (in the Lickey Hills) by Julie Schroder and other members of the Lickey Hills 'Community Earth Heritage Champions' group.

See page 12 for details .

Tuesday 19th June: (Joint Field Meeting with the Geological Society of London) *Canal trip into Dudley Limestone Mine.*

Meet at 6pm, followed at 7.30pm by 'Grey Pays un Baercon' at the Park Tavern Woodsetton sponsored by BCGS. Further details to follow.

Saturday 30th June: (Field Meeting)

Visit to Haughmond Hill Quarry (nr. Shrewsbury) and The Ercall (nr. The Wrekin) Led by Bob Bucki.

Locality 1: Meet at Haughmond Hill Quarry car park SJ 543 149 at 8.40am. All attending must have helmets, boots and Hi Viz jacket or jerkin as this is a working quarry and the manager will not allow access unless we follow the safety procedures. We will look at the Precambrian sediments of the Stretton and Wentnor Groups that comprise the Longmyndian Supergroup. Localities 2 and 3: Meet around 1.00pm after a lunch stop (at a local pub maybe? or packed lunch)) at Forest Glen car park on the south side of Lawrence Hill, SJ 639093. We shall be looking here at the Uriconian Volcanics of the Upper Precambrian and the unconformity that marks the base of the Cambrian marine transgression.

Leicester Literary and Philosophical Society

www.charnia.org.uk

Programme - Summer 2012

To keep you up to date of any changes to a particular field trip, please contact our Field Secretary, Helen Jones, email: helenjonesx@hotmail.com to register your participation.

Saturday May 5th Warwickshire - Baddesley Clinton Manor House & local churches - Looking at local building stones - Maurice Rogers

June evening trip, 6.15pm Mountsorrel Quarry TBC

Saturday July 7th Bantock Quarry - Andrew Swift

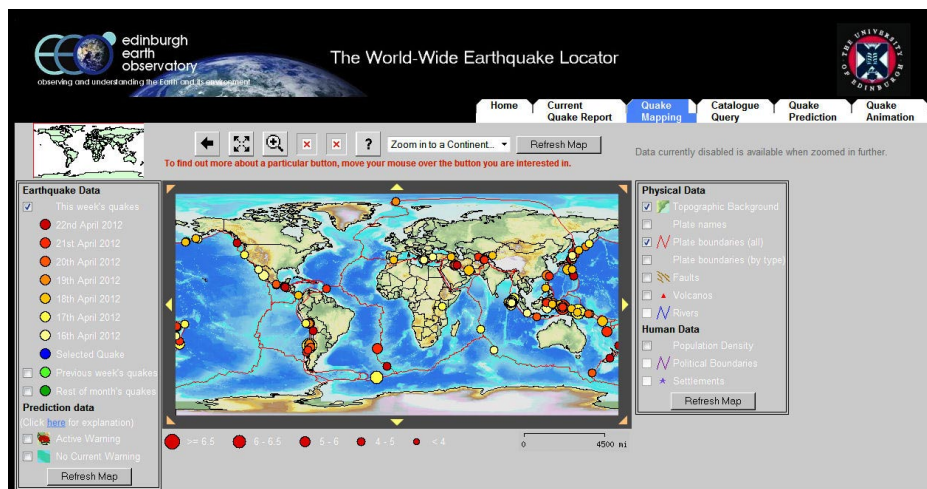
Saturday August 11th British Geological Survey - Charnia material - Phil Wilby (Joint Field Meeting with WGCG)

Saturday September 8th Volcanics of Derbyshire TBC - Mike Allen

The World-Wide Earthquake Locator

Since 1995 the World-Wide Earthquake Locator, run by the Edinburgh Earth Observatory (EEO), has been available online. Its aims to provide up-to-date information and detailed dynamic maps of earthquakes across the world within a maximum of 24 hours of their occurrence. This web site also includes a database of past earthquakes, an animation of the past month's earthquakes, and statistical earthquake prediction.

tsunami.geo.ed.ac.uk/local-bin/quakes/mapscript/home.pl



**The Warwickshire Geological Conservation Group
is pleased to present -**

The Great Atherstone Landscape Exhibition

April 21st - April 29th
Monday - Saturday 10am to 4pm
Sunday 2pm to 4pm

Admission free

How Geology has fueled industry and changed the landscape

The exhibition is a celebration of North Warwickshire's amazing 600 million year old geology that has created spectacular landscapes and provided raw materials to fuel the area's industries over many centuries.

The rocks of the Ridge and surrounding area have revealed evidence of extreme climates, ancient earthquakes, volcanic events and seas that invaded the land and shaped North Warwickshire's landscape.



Exhibition venue:

The Volunteer Centre
White Hart House
Long Street
Atherstone
Warwickshire
CV9 1AX

Parking is available in the
Co-op store opposite the
Centre.