



Special feature

Warwickshire RIGS

Warwickshire Geological Conservation Group

From the Chair

Our group has been very active over the winter. A team of volunteers coordinated by lan Fenwick has visited most of our Warwickshire Regionally Important Geological Sites (RIGS) and monitored their condition. This, and the writing of RIGS development plans was funded through the Geology Trusts (GT) and lan has ongoing plans for future geological conservation. The Warwickshire RIGS map was compiled by Jim Passmore from lan's spreadsheets. A work party cleared the exposure at Temple Grafton.

Hugh Jones, Julie Harrald, Nigel Harris and Maurice Rogers completed the building stones pilot project. Julie presented our project at BGS to English Heritage, Hopefully our ideas will be taken forward in their forthcoming countrywide surveys. John Crossling is continuing to encourage partners in North Warwickshire to develop a 'Ridge' project building on his work at Mancetter. We will visit 'Nuneaton Ridge' with some of Warwickshire's oldest rocks; Peter Homer's Quarryman's trail walk in July; and Boon's quarry with the Leicester Group in September. Their programme is on page 7, they welcome WGCG members at their meetings. There are also Geologist's Association meetings.

Peter Worsley, who gave us a Darwin talk last November is running a three day tour to some of Darwin's Mercia sites from 19-24th June. I am bringing the GA to Warwickshire by train on 20th September and also 'Rockwatch' children to Warwick in May. GA members will walk up the Parade in Leamington-hopefully using a new trail for which we have funding from Leamington Town Council and the GA's Curry Fund. I shall take the train to London, Marylebone on Saturday 19th September and would be pleased to give any WGCG members who would like to join me a preview of the geology on the route.

Christine and the Education committee arranged our winter programme, and you will now find full details of the summer programme on the following pages. As well as visiting speakers (Sanjev Gupta's 'Straits of Dover' talk filled our new Kenilworth venue), members contributed with presentations and displays. Brian Ellis and Hugh Jones told us about ancient rocks in Australia and building stones around Warwickshire. We look foward to seeing you on our forthcoming field trips. I am sorry that dates and tides did not fit for the proposed Norfolk weekend, it is being held ovet for 2010.

Colin Frodsham and Ian have been researching the possibility of WGCG becoming a charity or other options. They gave a volunteer group a presentation on this and asked for our feedback. Among other considerations we are looking at future plans for WGCG. After hearing our feedback suggestions they plan to put to members a proposal of possible ways foward. You will be sent this later in the year. Colin has also been looking after our finances while Jim Watts is away in New Zealand, and has been working with Tony our treasurer on the presentation of the accounts.

Many members help to keep WGCG activities running smoothly. Paul maintains our website, Jon with a small group has been working on Warwickshire's LGAP and Jane attends LBAP meetings. Hazel collects your subscriptions and, along with Jane, fill the envelopes for this newsletter. Moyra has taken on our library and team provide us with coffee at the evening meetings. If you are not involved and would like to help, just talk to one of the committee! I apologise to those not mentioned here, but thank you all for your contributions.

Martyn Bradley

Warwickshire Geological Conservation Group

Centre for Lifelong Learning University of Warwick Coventry CV4 7AL

Telephone: 024 7652 3533

eMail: martyn.bradley@warwick.ac.uk

Website: www.wgcg.co.uk



CONTENTS - Issue No. 17

Spring 2009

From the chair	Martyn Bradley 2
RIGS project	
Derbyshire Weekend September 2008	Hugh Jones 4 & 5
Now we know the state of our RIGS	Ian Fenwick 6 & 7
The Warwickshire RIGS sites map	8 & 9
Field trip May - North Somerset coast, Watchet,	Led by Eric Robinson
Doniford & Blue Anchor Point	& Jon Radley10
Field trip August/September - Colonsay	Organiser Maurice Rogers 11
Field trip 20th May - Building stones in Kineton	Led by Hugh Jones 12
Field trip 17th June - Ilmington Topography	Led by Jon Radley 12
Field trip 15th July - Quarryman's Walk	Led by Peter Homer13
Field trip 19th August - Temple Grafton	Led by Jon Radley 13
Field trip 26th September - Boons Quarry	Led by Martyn Bradley
	& John Crossling 14
Evening meetings location	
WGCG Program of field trips	
and meetings 2009	
Summer term at the	Tutors - Christopher King
Centre for Lifelong Learning	and Martyn Bradley 16

Cover photo

RIGS Temple Grafton

WGCG volunteers who cleaned the rockfaces

RIGS project

In the Autumn 2008 issue of the newsletter an appeal was made by Ian Fenwick for members willing to contribute some of their time to assist in a monitoring project for the RIGS sites within the WGCG area.



This was very well supported, and in November the volunteers met at Ryton Pools for training. Ian explained what was required on the monitoring form. In order to reinforce this knowlege field visits to local RIGS sites followed in the afternoon.

Pages 6 & 7 describe the fantastic progress that has been achieved with the project.

On pages 8 & 9 a map, showing all of the RIGS sites in Warwickshire, can be found.

Derbyshire Weekend September 2008

.....by Hugh Jones

For someone like me who can easily forget the score half way through a game of tennis it's quite a challenge to recollect any details of a trip, however enjoyable, nearly six months ago.

Every year has a few highlights, and excursions with WGCG are foremost among them in much the same way that the most memorable features of a university geology course, probably the only ones in fact, are the field trips.

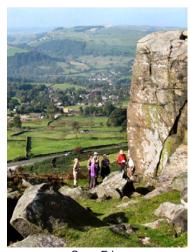


Field trip leaders - Brian Ellis and lan Fenwick

We assembled at the Old Smithy Café in Monyash, ate our refreshments

and had a preliminary briefing. I sampled the local ale called 'Pennine something' and it was disgusting.

The weather was kind and soon everyone was trailing after our leaders through a landscape of steep sided valleys carved into pale Carboniferous limestone which in places was crammed with crinoid fossils. At one point there was an intriguing piece of industrial archaeology in the shape of a string of bell pits where long-dead miners had searched out deposits of minerals along a vein in the rock known locally as a 'rake', that was lead I expect.



Curar Edge

After this exertion we were quite glad to retire to our accommodation which had been efficiently prebooked in the pleasant little town of Bakewell and then to enjoy a festive dinner all together.

On Saturday, bright and early, we drove first to Curbar Edge where the Millstone Grit is laid bare along a picturesque escarpment with a fine dip-slope behind it running off to the east. My camera tells me that it was still only 09.15 when we were on the top.

The view westwards was really spectacular, right across the White Peak district, so called because of the pale colour of the Carb. Limestone but, more immediately, the coarse gritty sandstone displayed some good sedimentary structures resulting from its origin in a shallow sea with strong currents stirring the sediment.

The rest of Saturday is a bit hazy in my memory but I remember we drove west and in one small town we parked in an old quarry then walked along a busy road cut into the limestone with huge rocky cliffs towering above us. Later there was more gently dipping limestone in Longstone Edge Quarry (where we ate lunch) and the great igneous mass in Tideswell quarry. I'm not sure of the time sequence but I said my memory is a vague on details didn't I?



Chrome Hill

Sunday, I think this was the day when it dawned really foggy but soon cleared up, which was just as well since we had another early start taking us to the Dowell Dale reef structures before ten a.m. then on to a lonely spot from which some of us climbed Chrome Hill in the sunshine whilst others took a less adventurous route around the base, a course which provided just as much geology but not the inspiring view.

After lunch on the sunny slopes it was cars again and off to Ecton where we saw some pretty impressive folding in the limestone and then huddled into a damp, dark chamber which is the sealed off top of a great shaft boring down into the defunct Ecton copper mine.

By now it was getting on for three o'clock and everyone agreed that we'd had a great weekend but it was time to head for home. Thanks to lan and Brian for their expert knowledge and to Christine for her administrative talents.



Fossil hunters

Anyone who would like to see more pictures may be able to access my website at this address:-

http://picasaweb.google.co.uk/HughLKJones/Derbyshire2008

Join an evening field trip to Kineton with Hugh Jones
Wednesday 20th May at 7.30pm

See page 12 for further details

.....The state of our RIGS

······by lan Fenwick ······

From a standing start in the early 90s, Warwickshire now has some 86 designated Regionally Important Geological Sites (RIGS). However, many of them have not been visited for a long time and we, like other counties, had very little idea of the state they were in - were they overgrown with brambles, buried under landfill or, just perhaps, in pristine condition.

Thanks to a project run by the Geology Trusts and part-funded by Natural England, we now have a much better idea. Virtually all of our sites have been visited over the past three months by a team of WGCG volunteers who have recorded, both on a pro-forma and photographically, the condition of the sites.



A422 quarry Hornton

Great as it is to know the condition of these important sites, this exercise has been by common consent stunningly successful in involving our members in practical conservation and in developing their skills so we have a firm foundation from which to move forward.

There have been some real surprises such as the really good condition of the A422 Hornton Stone Quarry on Edge Hill where excellent sections in the unweathered ironstone, in a very deep weathering layer and in the overlying soil are presently revealed.

On the other hand, some of our sites have all but disappeared. Motslow Hill on the outskirts of Stoneleigh is just such a case. Little evidence survives of the outcrop and, what's more, the busy road is a death-trap for any would-be researchers!



Motslow Hill

A survey is one thing, but action based on the findings is even more vital. As a first follow-up, a group of nine worthy souls tackled the rampant elder, brambles and willow at the Wilmcote Limestone quarry at Temple Grafton, west of Stratford.

The early March sun shone on us and in under three hours, we drove back the overgrowth over a long section and, with the considerable help of the owner and his mini-digger, cleared a large accumulation of talus from the foot of the face.



WGCG volunteers clear the Temple Grafton site

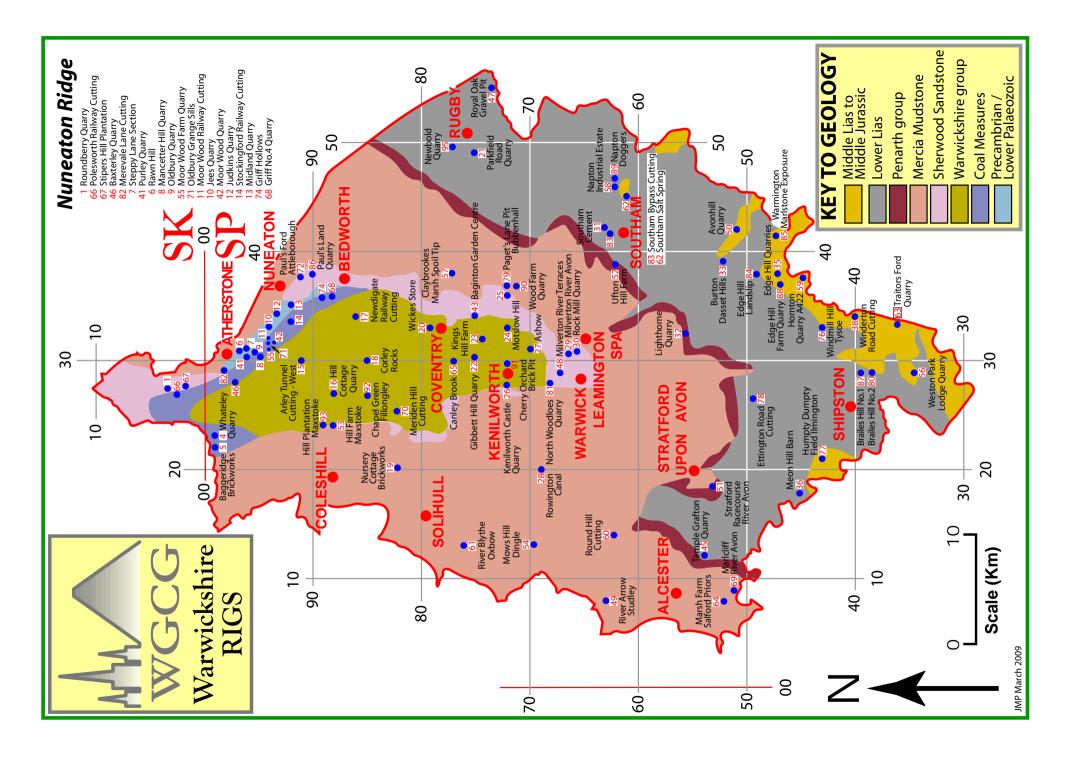
Hopefully, more conservation projects will follow during the summer - so please join the happy band and help build the Group into a conservation organisation that makes a real difference to the Warwickshire countryside.



Leicester Literary and Philosophical Society
Summer Programme 2009

Saturday 4th April	Bardon Quarry
Saturday 9th May	Clipsham Quarry
Friday 5th - Sunday 7th June	Llangollen and Cheshire Basin
Saturday 11th July	Kirtlington Quarry/Headington Quarry/
	Magdalen Quarry
Wednesday 29th July	Tilton on the Hill Railway Cutting
Saturday 8th August (TBC)	Bradley Fen, Peterborough
Saturday 5th September	Whitmans Hill Quarry, Storridge,
	Malvern and the Abberley
	& Malvern European Geopark
Saturday 26th September	Boon's Quarry, Hartshill, Warks'
	(Joint visit organised by the WGCG)
Saturday 10th October	National Coal Mining Museum, Wakefield

For further details and to register your participation, please contact: Helen Jones at helen.jonesx@hotmail.com



......North Somerset Coast

Led by Eric Robinson and Jon Radley



The Somerset coast provides magnificent exposures through Upper Triassic to Lower Jurassic rocks ranging from 215 to 200 million years old.

Some of the earliest ammonites that are recorded in Great Britain are found here and Doniford Bay is famous for the first ammonite to appear in the Jurassic sequence. The Watchet fault can be traced across the bay, often marked by a belt of fine sand.

The programme is arranged from the Friday midmorning arrival in Watchet until the Sunday afternoon, the leaving time to depend on the weather and individual needs. We will be a party of twenty plus the leaders. The trip will involve a mixture of visiting specific locations by car (sharing as appropriate) and with walks, some along the seashore.

We are privileged that Eric Robinson, who has written the GA Guide No. 66 for the area and many local publications that we will use, has kindly agreed to share his expertise with us.

Currently the outline programme looks like this:

Friday: Drive to Watchet. After coffee we will follow the West Somerset Mineral Trail that also has local history interest, and return by steam train. In the town the 'Geology of Watchet Walls' walk includes the Jubilee Wall, and there is the museum to visit.

Saturday: A full day, from Watchet to Doniford a walk with fine views and lots of beach as the tides are right (low around lunchtime). Lots of time to fossil hunt in the sunshine, with another train ride or a return on foot for the energetic!

Sunday: Jon Radley will meet us mid morning at Blue Anchor Point to lead us round there, and if time permits we can visit St Audrie's Bay to see Triassic-Jurassic boundary transitions and local faulting.

Here there will be ample opportunity to discuss the depositional environments and broader significance of these remarkable rocks that demonstrate a transition from the essentially continental Mercia Mudstone to the shallow marine basal Lias Group.

There should also be plenty of fossils to see, including bone-beds at the base of the Westbury Formation, the rich mollusc faunas of the Westbury Formation and basal Lias, and some interesting trace fossils.

If you are interested in joining this trip please contact Christine Hodgson. email: cvhodgson@hotmail.com Telephone: 01926 511097

Colonsay - August/September 2009

Independently organised and led by Maurice Rogers

All plans are finalised and we are now hoping, with some trepidation, that the renowned Colonsay September weather will set fair for our visit.

The 2007 trip was marked by one cardinal feature. Other than myself not one of the party - including the leaders - had been to the island and we were thus afforded a wonderful opportunity of making real he rock display. Left behind on our departure, is on display in the island's

discoveries. The rock display, left behind on our departure, is on display in the island's museum and regularly seen by visitors.

The 2009 trip then will want to straddle two objectives. Since all but three of the party members will be new to the island all will want to see and savour the discoveries made in 2007, but there are large areas of the island still to be explored.

The shoreline for the most part is bare and features such as igneous intrusions and dykes that criss-cross the island are easily identified. In 2007 we learnt that the dykes on Colonsay are of two distinct generations. The ones of a more recent age run straight across country and are more easily seen, but the older ones are seen with greater difficulty as they zigzag their way across the surface. We barely understood this at the time and will want to examine this more closely in September.



Ouachitite crystal

Another target is to examine the famous Pennant dyke. A huge dyke that runs across the middle of the island, best described as a rag bag of different minerals caught in a free flowing igneous melt. Found in this dyke are huge and perfectly formed Augite crystals (formally named "Ouachitite"). We will have the benefit of Professor Upton, the UK's expert, to assist our understanding of this dyke. Sadly we will have difficulty in retrieving samples since it is a Geoconservation site and of course we ourselves heartily approve of this being off limits to the geological hammer.

Hopefully there are fragments to be found in the nearby heather and bracken.

Last and not least a Scottish friend - a non geologist -will be joining the party and bringing his pipes and we guess that this will be much appreciated on the Saturday night at the Ceilidh.

For further information please contact Maurice Rogers directly.

maurice@mauricerogers.co.uk

NORFOLK TRIP:

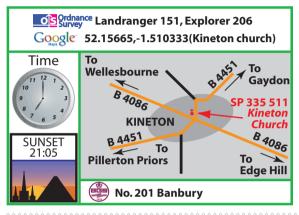
Hopefully this will run next year when tide times and Martyn's availablity coincide.

Field trip - Building stones in Kineton

.....Led by Hugh Jones.....



Meeting Point Kineton church Some years ago Hugh provided geological input into a local history day where he gave a talk on Building Stones, also learning a lot from listening to the others. This walk will further illustrate these talks.



We will enjoy the close up views of stone used in the village which stands on the Lower Lias.

There is a wealth of picturesque old houses and we will see excellent examples of the use of Rugby Limestone, White Lias and Hornton stone as well as some very colourful brickwork.

Field trip - Topography around Ilmington

Led by Jon Radley.....



Meeting Point Ilmington road fork This will be a landscape walk, taking in views over much of southern Warwickshire's Jurassic terrain including a visit to the 'Humpty Dumpty' field, one of Warwickshire's RIGS.



Ancient quarries exposing the top part of the Marlstone Rock Formation with traces of ammonite-bearing clay (Whitby Mudstone Formation) above.

The Marlstone is sandy and fossilliferous which is typical of the Ilmington area. It contrasts with the thicker, purer, less fosilliferous ironstone seen on Edge Hill, east of the Vale of Moreton Axis.

Led by Peter Homer



Meeting Point Reserve Car Park

Nuneaton Ridge, cancelled last year due Windmill Hill Nature to the awful weather, in which Peter explains the reasons for the numerous quarries in the area.



This walk forms part of the Arden Heritage Project, designed to promote the area's distinctive landscape and history.

Hard stone has been extracted from the Ridge for centuries. but the vast excavation that is Jees quarry took only 40 years, exploiting the Hartshill Sandstone. The million tons of waste removed is now Mount Jud.

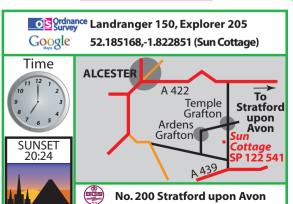
emple:

Led by Jon Radley



Meeting Point Temple Grafton Sun Cottage

Warwickshire recently cleared by WGCG members. This is a Blue Lias Formation which shows Holocene Tufa, perhaps the only exposure in the county.



A disused quarry in the Wilmcote Limestone Member so-called 'Lithographic Limestone') the basal of Jurassic Blue Lias Formation.

The section has vielded fossils from insect beds. Adiacent to the limestone exposure is an interesting deposit of currently forming tufa.

Field:trip::::Boons:Quarry

Led by Martyn Bradley & John Crossling



Meeting Point Boons quarry entrance

We will spend a couple of hours at the point where the basal Cambrian sandstone formation (formerly termed the Hartshill quartzite) overlies pre-Cambrian rocks.

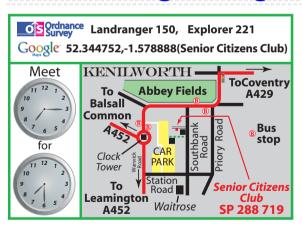


Recently the quarry has been used by Daw Mill colliery for their unwanted barren coal measures.

These are fossiliferous so there should be good collecting opportunities.

In the afternoon it is hoped we may be able to visit the nearby Jees quarry to see more of the Cambrian rocks exposed at this part of the Nuneaton Ridge inlier.

Winter evening meeting venue in Kenilworth



Held at the **Senior Citizens Club** in Southbank Road unless otherwise stated. Meet at 7.15pm for tea or coffee with a 7.30pm start.

Car parking

Parking at Abbey End car park. Free after 6pm. A footpath joins the car park with Southbank Road.

Bus routes

Route **12** (Travel Coventry) Coventry - Kenilworth - Leamington

Route **X17** (Stagecoach) Coventry - Kenilworth - Warwick

LOCATING THE VENUES IN WEB MAPS

OS maps at: http://getamap.ordnancesurvey.co.uk/getamap/frames.htm Enter the grid reference given in the map and click on **GO**

Google Maps at : http://maps.google.com/

Enter the coodinates and text given in the map and click on **SEARCH** Whe the map is displayed click on **SATELLITE** to see a satellite image.

Weekend field trip - Friday 8th to Sunday 10th May North Somerset coast with Eric Robinson & Jon RadleySee page 12
Evening field trip - Wednesday 20th May Building stones in Kineton with Hugh JonesSee page 14
Evening field trip - Wednesday 17th June Topography around Ilmington with Jon RadleySee page 14
Evening field trip - Wednesday 15th July Quarryman's walk - Nuneaton with Peter HomerSee page 15
Evening field trip - Wednesday 19th August Temple Grafton with Jon RadleySee page 15
Day field trip - Saturday 26th September Boons quarry with Martyn Bradley & John CrosslingSee page 16
Evening meeting - Wednesday 18th September - For venue see opposite Diatoms and the Quaternary by Dr Jason Jordan Details to follow in Autumn newsletter
Evening meeting - Wednesday 21st October - For venue see opposite AGM and field trip displays Details to follow in Autumn newsletter
Evening meeting - Wednesday 18th November - For venue see opposite TBA Details to follow in Autumn newsletter
Evening meeting - Wednesday 16th December - For venue see opposite Christmas soiree & displays Details to follow in Autumn newsletter
Weeklong field trip - Sunday 30th August to Sunday 6th September Colonsay - independantly organised and led by Maurice Rogers See page 13
Charnia - Geology Section of the Leicester Literary and Philosophical SocietySee page 7 Summer Programme 2009

Arrangements for the unexpected cancellation of field trips:

An email will be sent to all members, and phone calls to those not on line.

The WGCG mobile phone will be answered on the day:

For Wednesday evening field trips from 11am on the day of the trip. For Saturday field trips from 8am on the day of the trip.

The number to ring is 0752 7204184

Earth Science and Geology

Summer Term 2009

LANDSCAPE AND SCENERY IN WARWICKSHIRE

Tutors: Christopher King and Martyn Bradley Reference: 1837/SU09

Modern Warwickshire landscapes reflect underlying rocks and structures formed in very different ancient environments: volcanoes, tropical swamps, deserts, a marine Jurassic Park and the Ice Age.

Interpret and visit local scenery through geological eyes and geological maps.

Six classes plus four field visits (cost of travel not included in fee).

Courses start on Monday 20th April Times: 7 - 9pm Lifelong Learning Building WCE0.9a, Westwood

To enroll please go to the **centre for lifelong learning** website:

www.warwick.ac.uk/cll/courses/openstudies/bysubject/earth/

Martyn Bradley
Centre for Lifelong Learning
University of Warwick
Coventry CV4 7AL
martyn.bradley@warwick.ac.uk
024 7652 3533



