

**HEREFORDSHIRE & WORCESTERSHIRE EARTH HERITAGE TRUST**  
**MINI NEWSLETTER AUTUMN 2006**

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**MEMBERS' AND SUPPORTERS' FOSSIL FORAY DAY**  
**AT WHITMAN'S HILL**

**SUNDAY NOVEMBER 19TH**

You are warmly invited to join us for a day at Whitman's Hill on Sunday November 19th. As well as our first opportunity to show you the recently improved exposures of the Coalbrookdale Formation and the Much Wenlock Limestone Formation, we would very much appreciate your help in establishing a teaching/identification collection of fossils for future visitors. If everyone would be prepared to donate their fossil finds from this day to a central repository we have a good chance of establishing a picture of the total (or near total) fossil fauna at the site. There will of course be many opportunities in the near future to hunt for fossils for your personal collections.

We plan to meet at Storrige Village Hall car park at 11am, where plenty of parking is available. After we finish fossil hunting we will retire to Storrige Village Hall to examine our finds and consume tea and celebratory cakes. We plan to finish by 4pm at the latest. Storrige Village Hall is situated off the main Hereford to Worcester road, the A4103, a few miles north-west of Malvern. Coming from the Worcester direction, the village hall is on the left, on the corner of the junction between the A4103 and the B4219 (the Malvern road). Whitman's Hill Quarry is a few minutes' walk away. Please bring packed lunches, and suitable clothing and footwear - the engineering works have rendered the site very muddy!

Any queries please contact Dr Abigail Brown at the Trust.  
E-mail: [abigail.brown@worc.ac.uk](mailto:abigail.brown@worc.ac.uk).

**VOLUNTEERS NEEDED**

Rock and Fossil Roadshow Organiser(s) – to plan a few events to make up the 2007 programme and to organise venues and assistants.

So if you can spare a day or two per month please get in touch with Liz  
On: 01905 855184 and arrange to come in for a chat. Or e-mail: [eht@worc.ac.uk](mailto:eht@worc.ac.uk)  
All expenses will be covered.

## **THE GEOPARK WAY PROJECT**



In June 2006 the Trust was awarded a grant from DEFRA's Rural Enterprise Scheme, to fund a two year project called the 'The Geopark Way'.

The project is to write and research a long distance walking trail through the Abberley and Malvern Hills Geopark ([www.geopark.org.uk](http://www.geopark.org.uk)). The walking trail will start in Bridgnorth and follow established public rights of way all the way down to Gloucester.

Primarily the guide will interpret the landscape and geology found along the route, but will also focus on all that geology has influenced in the area, such as archaeology, wildlife, land use, social and industrial history. There are strong links between the geology beneath our feet and how man and nature has utilised the land throughout time. This project will explore these relationships; make the links; then bring the information together in a guide that will celebrate the character and distinctiveness of this region of rural England from the rocks upwards!

The guide will also include details on how to explore the area by public transport, cycle, water and bridle ways. Tourist amenities and attractions will feature in the guide with emphasis being placed on rural produce and local independent businesses. The guide will be printed at the end of the project in April 2008 and will come in the form of a 110 page A5 ring-bound booklet.

Would you like to have some input into this project? Maybe you have a story to share about your local area, know of a great trail, or are interested in the field research/trail testing aspect of this project.

If you are interested in finding out more about this project contact the project manager, Natalie Watkins, on 01905 855184 or e-mail [geoparkway@yahoo.co.uk](mailto:geoparkway@yahoo.co.uk).

## **NEWS FROM TOM RICHARDS**

As this is my first article, I'd better introduce myself and give you a little background to those who do not know me. My name is Tom Richards, and I hail from just down the road in Gloucester (boo, hiss you might say, for all you rugby fans). I graduated this summer with an MSci in Geology. This was a four-year degree, which enable me to spend my third year studying abroad at another institution. The University of Toronto was my final destination and, having never been to Canada before, was an amazing experience. But boy, do they make you work hard! I never realised that British University life was so easy!

Having only been working at the Trust since June, I have been involved in a number of projects already, and so shall briefly review them for you. I assisted Moira during the summer, in researching for the Frome Valley Discovery Guide, as well as taking on the Community Liaison role. We also embarked on many a fieldtrip mooching around the Herefordshire countryside, searching for the elusive Bishop's Frome Limestone (of which we have now found two potential RIGS).

The new trail guide, which is being produced around Midsummer Hill was researched and written by myself, and it is now at the trail tester stage, where I am preparing myself for the worst! I have also been aiding Abigail in a comprehensive audit of Whitman's Hill, from which we have found a few nice surprises, and many a brachiopod!

More recently, I have just begun the initial stages of a desk study, as part of a drift baseline data survey of Worcestershire, funded by the County Council. Through all of the above, the initial reason for my employment (beginning the process of producing a Geodiversity Action Plan for Worcestershire) has been steadily bubbling away, with many groups declaring an interest in being involved in the process. It is hoped that, in conjunction with the Herefordshire GAP, a consultation document will be produced by the end of the year, with a view to undertaking an audit of the county next year as part of the first stage of writing an Action Plan.

### **RIVER LANDSCAPE DISCOVERY GUIDE FOR THE FROME VALLEY**

This project is half way through. Many members of the local community have been helping with field surveys, gathering information and taking photos. These will be used to produce a Discovery Guide of the Frome Valley to describe the geology, landscape and glacial features of the area. This will describe the area in a way that is easy to understand. The guide will be colourful with pictures, maps, and diagrams. The Frome Valley is a beautiful, peaceful part of the county. On either side of the lower part of the valley are the Silurian rocks of Shucknall Hill and the Woolhope Dome. The lowlands are underlain by the Raglan Mudstone Formation and the hilly land in the north by the St Maughans Formation of the Old Red Sandstone. The Bishop's Frome Limestone was named after the village in this area. There are many magnificent views and interesting geological features which are tucked away and are relatively little known.

Involvement of the local community is an important part of the project. The next stage will be to organise a walk and a talk. A provisional date for the walk is Sunday 4<sup>th</sup> March. We will meet at Bishop's Frome Village Hall car park at 10am. Dr Andy Richards will show us the glacial deposits at Hewitt's Pit near Much Cowarne and tell us what happened in Herefordshire during the Ice Age. After this we will also visit some older geological sites nearby. Would anyone who is interested please contact Moira Jenkins at the Trust office for further details of the walk and the talk?

Tel:01905 8555184 or e-mail: [m.jenkins@worc.ac.uk](mailto:m.jenkins@worc.ac.uk)

### **A V.P.'S CORNER (OLD WINE IN A NEW BOTTLE!)**

In the last Newsletter, I commented upon the curious course taken by the lower Teme River. If this river phenomenon is strange, then the case of the middle section or the Leigh Brook is even more bizarre. From Longley Green to Knapp Farm, Alfrick, this small stream crosses the Silurian escarpments and hills on its eastwards journey to join the River Teme. As one would expect, the brook is manifestly though unobtrusively underfit in its valley, a condition which applies to most of the drainage

in our area. Downstream of Mousehole Bridge however, in the vicinity of Papermill Coppice, and beyond nearly to Knapp Mill, valley/stream relationships become truly astonishing. For here the stream occupies a monumental incised meander valley. Moreover, its course lies directly across a heavily faulted anticline in the Silurian Cowleigh Park Formation. Now, as every "A" level student of physical geography knows, this should not happen in the normal course of drainage development. Special explanation is required which involves using the principle of "superimposition" or that of "antecedence". Unfortunately, matters are not so simple in this case and there is, as yet, no full and satisfactory explanation for the development of the Leigh Brook, its curious course and unusual valley. Tentative proposals involve a range of ideas and concepts as follows:- speculation on the nature of Tertiary drainage systems in the area and superimposition; drainage adjustment to structure and the development of the "Mathon River" strike vale west of the Silurian ridges; deep crustal flow and uplift in the late Tertiary and early Quaternary; the nature of the Anglian glaciation and deglaciation on both the west and east sides of the Malvern Axis; glacio-isostatic crustal rebound; and finally, post-glacial drainage diminishment. This fluvial curiosity, then, is a complex puzzle that still awaits a solution.

*Editors Note: This was formerly "Idle Chatter from the Chair". Les Morris is now a Vice President of the Trust. The Chairman's post is occupied by John Payne.*

### **OLCHON VALLEY TRIP. 14.9.06**

About a dozen people attended the Olchon valley on a wet day, which was sandwiched between fine days. Fortunately the weather and cloud lifted in time for us to get up to Black Darren. The party quickly dispelled any ideas previously put forward as to the nature of the site

Dick Bryant demonstrated that the form we could see between Black Darren and the mountain was a nirvation ridge/protalus ridge. This is a glacial landform caused by talus from above glissading across a glacial ice/snow bank piled against the scarp face. The rocks accumulate at the far edge of the ice sheet. This is borne out by considering the broken rocks as imbricated. The beddings are planar in form and so the sheets of rock invariably rest on the flat sidet. At the edge of the debris ridge some of the blocks are tilted vertically seeming to show that with the subsequent melt they then rotated downwards from the imbricate position.

It was also demonstrated that with the trends of Caledonian faulting over the Black Mountains, and secondary conjoining faults that it was unlikely that Black Darren was separated by development along a fault plane, and neither had it moved sideways from the main mountain side. The presence of landslips along the mountain base was most likely the result of slumping of lateral maraines and there are several episodes of this forming a complex pattern to interpret. That section of the trip also showed we needed to get to Red Darren in the future and look at that site.

In the afternoon we walked the Holloway to the upper notch of Olchon Valley. It was plain that the old papers were by and large descriptive and the area bore no relationship to the written word. However we were able to confirm the presence of pedogenic limestones/cornstones. The geology of the rocks up here was completely different to those in Black Darren, being calcareous bands separating the more normal fine sandstones and fine silty bedding and with fluvial wadi lags forming brecciated

beds often containing fragments of reworked evaporitic calcite. A specimen brought back shows bedded evaporitic/pedogenic limestone overlying a breccia containing rhyolites, reworked pedogenic calcitic deposits, sandstones, mudstone rip up clasts and vein quartzes.

The outcome is that we have at least two Geomorphological RIGS with the upper valley also being a geological RIGS as well. A further detailed account will be written for the next newsletter

### **10 YEAR ANNIVERSARY CELEBRATIONS AT WITLEY COURT**

On 25 May, after 2 weeks of rain, we were blessed with a wonderfully sunny day for our celebrations at Witley Court. Consultants at the Trust were joined by funders and associates of the Trust who have been involved with key projects over the last 10 years.

The day began with a leisurely stroll through the Witley Court gardens to the Church Tea Rooms where Dr Peter Oliver and Professor David Dineley, President of the Trust, made everyone welcome. We were introduced to Eric Robinson who is a retired lecturer from University College London and a geologist who gains his greatest pleasure from teaching geology through buildings and building stones. As such Eric was an ideal person to bring Witley Court to life through his enthusiastic commentary on the building stones, which had been used in its construction. Armed with hand lenses we examined the ruins of the building and watched in awe as the Perseus and Andromeda fountain fired up. The fountain was once the biggest in Europe and, in recent years, has been restored to its former glory.

Following a very relaxed lunch in the Tea Rooms, those members of the party who were able to stay into the afternoon enjoyed a tour of the beautiful Baroque church of Great Witley. This tour was enhanced by the enthusiasm of our guide Dr Paul Jonson, who I am sure only had time to impart a small amount of his extensive knowledge of the church.

We hope that the day served to both thank our sponsors and associates, without whose support and funding our work would be severely curtailed, and to raise awareness with them of the difficulties faced by voluntary non-profit making organisations such as ourselves. We hope too that they will continue to offer us their invaluable support in the future.

### **GEODIVERSITY ACTION PLAN FOR HEREFORDSHIRE**

Geodiversity Action Plans for Herefordshire and Worcestershire are being set up. These will aim to look after the geology and landscape of the two counties. For each county a consultation document will be circulated as widely as possible. Clear aims, objectives and action for each county will be set out to ensure that the earth heritage is recorded and conserved for future generations.

A précis of the plan for Herefordshire is included in this newsletter. We would be grateful if you would fill in the questionnaire. If you would like further information please contact Moira Jenkins. Tel:01905 8555184 or e-mail: [m.jenkins@worc.ac.uk](mailto:m.jenkins@worc.ac.uk)

# Geology and Landscape for the Future: Creating a Geodiversity Action Plan for Herefordshire: Have your say.

## Proposed Aim

To look after Herefordshire's special natural environment by conserving, enhancing and managing the county's geology and landscape diversity for the benefit of all.

Geodiversity means "the variety of rocks, fossils, minerals, landforms and soils along with the natural processes which shape the landscape"

1. Audit sites, resources and skills in Herefordshire
2. Develop geological education programmes
3. Protect conserve and enhance special sites
4. Increase awareness and understanding
5. Involve local communities
6. Provide guidance for planners, landowners, individuals and organisations
7. Promote geotourism
8. Maintain the momentum of geoconservation and ensure long term sustainability
9. Augment/upgrade county's Regionally Important Geological and Geomorphological Sites (RIGS)

## Geodiversity Action Plan Questionnaire

Help to look after the special landscape and geology of Herefordshire.

\* Do you enjoy Herefordshire's beautiful countryside?

\* Would you like to learn more about how the landscape has evolved and how the rocks tell the history of the earth?

1. Would you like to receive a copy of the full consultation document?
2. Do you know of other groups or individuals who would like to be partners or consultees in the project?
3. Do you know of special sites in your area?
4. What issues are of most importance to you and your group?

Would you like to volunteer to be involved in this project? If yes, please state in which capacity and supply your contact details.

Name:

Organisation/responsibility:

Address:

Telephone Number:

E-mail address:

For further information contact Moira Jenkins

H&WEHT wishes to acknowledge the financial support of English Nature.